



# CALL FOR BIDS

**BID NO: ECDC ECDC/INFRA/29/012024**

**BID SUBJECT: ALTERATIONS AND REFURBISHMENT OF CLAINLIEGH COURT IN QUEENSTOWN**

## Consisting Of:

- The Tender (Returnable) - This Document**
- The Bills of Quantities - This Document**
- Annexures – This Document**

**BIDDER NAME:** .....

**CSD No.:** .....

**CRS No.:** .....

<b>CLOSING DATE:</b>	<b>23 FEBRUARY 2024</b>
<b>CLOSING TIME:</b>	<b>12h00</b>

.....

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**Board Members: V Jarana (Chairperson) • S Somdyala (Deputy Chairperson)**  
**N Pietersen • S Siko • M Makamba • P Bono • T Cumming • B Mhlubulwana • A Wakaba (CEO)**

**www.ecdc.co.za**

<b>INDEX</b>		
<b>Nr</b>	<b>DETAILS</b>	<b>PAGE</b>
<b>SECTION A</b>		
A	Abbreviations	3
B	Definitions	3
<b>PART T1 – TENDERING PROCEDURES</b>		
T1.1	Tender Notice and Invitation to Bid	8
T1.2	Tender Data	11
<b>PART T 2 – RETURNABLE DOCUMENTS</b>		
T2.1	List of Returnable Documents	19
	Standard Conditions of Tender	29
T2.2	Returnable Schedules	45
<b>PART C1 – AGREEMENTS AND CONTRACT</b>		
C 1.1	Form of Offer and Acceptance	90
C 1.2	Contract Data	95
C 1.3	Form of Guarantee	105
<b>PART C2 – PRICING DATA (Attachment)</b>		
C2.1	Pricing Instructions	109
C2.2	Bill of Quantities	111
<b>PART C3 – SCOPE OF WORK</b>		
C3.1	Scope of Works	113
	Conditions of Scope of Work	116
C3.2	Health and Safety Specification	119
<b>PART C4 – SITE INFORMATION/DRAWINGS</b>		

**SECTION A:  
ABBREVIATIONS AND ACRONYMS**

CIDB	Construction Industry Development Board
DTI	Department of Trade and Industry
ECDC	Eastern Cape Development Corporation
EME	Exempt Micro Enterprise
IRBA	Independent Regulatory Board of Auditors
PCCA	Prevention and Combating of Corrupt Activities Act 12 of 2004
PFMA	Public Finance Management Act (Act 1 of 1999)
PPPFA	Preferential Procurement Policy Framework Act (Act 5 of 2000)
QSE	Qualifying Small Enterprise
SABS	South African Bureau of Standards
SANAS	South African National Accreditation System
SARS	South African Revenue Service
SASAE	South African Standard on Assurance Engagements
SCM	Supply Chain Management
SMME	Small, Medium and Micro Enterprises
ToR	Terms of Reference
CSD	National Treasury Central Supplier Database for South African Government

**B: DEFINITIONS**

Acceptable tender	Means any tender which, in all respects, complies with the specifications and conditions of tender as set out in the tender document.
Accreditation Body	Means the South African National Accreditation System or any other entity appointed by the Minister from time to time whose function it is to: Accrediting verification agencies Developing, maintaining and enforcing of Verification Standards
Affordable	Means (in terms of a PPP-Agreement) that the financial commitments to be incurred can be met by funds: Designated within ECDC's existing budget for the function to which the agreement relates; and Destined for ECDC in accordance with the relevant Treasury's future
All applicable taxes	Includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.
Bid	Means a written offer or proposal to supply goods and/or provide services, submitted in response to the ECDC's invitation to quote or submit proposals which includes advertised competitive bids, written price quotations or proposals.
Bid Specification	A specification that lays down the characteristics of goods to be procured or their related processes and production methods, or the characteristics of services to be procured or their related operating methods, including the applicable administrative provisions, and a detailed requirement relating to conformity assessment procedures

	Include TOR for specialised services.
Black People	means 'African', 'Indian' and 'Coloured' people who are citizens of the Republic of South Africa by birth; or are citizens of the Republic of South Africa by naturalisation before the commencement date of the Constitution of South Africa Act (1993); or became citizens of the Republic of South Africa after the commencement of the of the Constitution of South Africa Act (1993), but who for the Apartheid policy that has been in place to that date, would have been entitled to acquire citizenship by naturalisation prior to that date.
Specific goal	<p>2.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table in SBD 6.1 as may be supported by proof/ documentation stated in the conditions of this tender:</p> <p>2.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—</p> <p>(a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or</p> <p>(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,</p>
Close Family Member	Shall mean: - member of the same household, parent (including adoptive parent), parent-in-law, son (including adoptive son), son-in-law, daughter (including adoptive daughter), daughter-in-law, step-parent, step-son, step-daughter, brother, sister, grandparent, grandchild, uncle, aunt, nephew, niece, the spouse or unmarried partner with relation to any of the person's above.
Code of Ethics	refer to the ECDC Code of Ethics for Management and Staff as may be amended from time to time.
Comparative Price	Means the price after the factors of a non-firm price and all the unconditional discounts that can be utilised have been taken into consideration.
Consortium or Joint Venture	Means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a
Contract	Means the agreement that results from the acceptance of a bid by ECDC.
Designated Sector	Means a sector, sub-sector or industry that has been designated by the DTI in line with national development and industrial policies for local production, where on local produced goods or locally manufactured goods meet the stipulated minimum threshold for local
Duly Sign	means a document 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).
Exempt Micro Enterprise (EME)	means an enterprise with a specified total annual revenue as per Department of Trade and Industry Codes of Good Practice on Broad Based Black Economic Empowerment
Family Member	Means a husband or wife, any partner in a customary union according to indigenous law or any partner in a relationship where the parties live together in a manner resembling a marital partnership or a customary union; and any person related to either one or both persons referred above within the second degree through a marriage, a customary union or a relationship or the third degree of consanguinity.

Firm Price	Means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract.
Fronting	Means a deliberate circumvention or attempted circumvention of the B-BBEE Act and the Codes. Fronting commonly involves reliance on data or claims of compliance based on misrepresentation of facts, whether made by the party claiming compliance or by any other person.
Functionality	Means the measurement according to predetermined norms, as set out in the tender documents, of a service or commodity that is designed to be practical or useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of the tenderer.
Imported Content	Means that portion of the tender price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the bidder or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour or intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African port of entry.
In the service of the state	means: an employee of any municipality who has a performance contract with the municipality and is employed on a permanent, temporary or short term basis. an employee or public servant of any national or provincial government as defined in terms of Public Services Act. a member who – is a councillor of any municipal council as defined in the Local Government Municipal Structures Act (Act No 117 of 1998); is a politician serving in any provincial legislature; or is a politician serving in the National Assembly or the National Council of Provinces; a member of the board of directors of any municipal entity; an employee and a member of a government owned entity as defined in the Public Finance Management Act (Act No 1 of 1999); and / or such other meaning ascribed to it by National Legislation from time to time.
Local content	Means a portion of the tender price which is not included in the imported content, provided that local manufacture does take place.
Non-firm	Means all prices other than “firm” prices
Person	Includes a juristic person.
Price Quotation	An estimate describing the product, stating its price, time of shipment, and specifies the terms of the sale and terms of the payment.
Property	Includes all movable and immovable property and intellectual property belonging to ECDC.
Public Private partnership	Means a commercial transaction between ECDC and a private party in terms of which: the private party either performs a function o.b.o. ECDC for a specified or indefinite period, or acquires the use of state property for its own commercial purposes for a specified or indefinite period; the private party receives a benefit for performing the function or by utilizing state property, either by way of: compensation from a revenue fund charges or fees collected by the private party from users or customers of a service provider to them; or a combination of such compensation and such charges or fees

Qualifying Small Entity	means an enterprise with a specified total annual revenue as per Department of Trade and Industry Codes of Good Practice on Broad Based Black Economic Empowerment
Rand value	means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties.
Related enterprise	Means an entity controlled by a measured entity whether directly or indirectly controlled by the natural persons who have direct or indirect control over that measured entity or the immediate family of those natural persons.
Service Level Agreement	Shall have the same meaning assigned as "Contract"
Shareholder	Means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.
State	Means: any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the PFMA any municipality or municipal entity national Assembly or the national Council of Provinces; or parliament
Stipulated minimum threshold	Means that portion of local production and content as determined by the DTI
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.
Tender	The same meaning is assigned as 'Bid" above.
Threshold	Shall mean the financial limits on the value of goods or services to be procured as set and prescribed in this policy which shall determine the manner in which these goods and services will be procured
Total revenue	Means the total income of an entity from its operations as determined under South African Generally Accepted Accounting Practice.
Trust	Means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person.
Trustee	Means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.
Value for Money	Means that the item (public-private partnership agreement) results in a net benefit to ECDC defined in terms of cost, price, quality, quantity, or risk transfer, or a combination thereof.

## **Part T1: Tendering procedures**

**T.1.1**  
**TENDER NOTICE AND INVITATION TO BID**

**1. Invitation to Bid**

Eastern Cape Development Corporation (ECDC) wishes to engage with a suitable contractor with a CIDB Grading of 7 GB or Higher for the alterations and refurbishment of the Clanleigh Court Building, situated at 25 Grey Street in Queenstown. (Erf 7457)

The site is in Queenstown, Eastern Cape, South Africa.



**CLAINLEIGH COURT QUEENSTOWN - GPS co-ordinates of the site are Latitude: -31.8940979, Longitude 26.8756926**

A Detailed scope of services is described in Scope of Work Section Below.

**2. Eligibility to Bid**

- a) Bidders should meet the Mandatory Requirements in in order be evaluated T2.1 (**Mandatory List of Tender Returnable**)
- b) **It is estimated that bidders should have a CIDB grading of 7GB or Higher.**
- c) Only those tenderers who are registered with the CIDB prior to submissions of bid with a contractor grading equal in accordance with the sum tendered, or a value determined in accordance with Regulation **25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for the above-mentioned grading classes of construction work, are eligible to have their tenders evaluated.**

**3. Payment of Bid Document**

No payment is due to obtain tender documents.

**4. Collection /Availability of Documents**

Documents will be available for downloading from the ECDC website at [www.ecdc.co.za](http://www.ecdc.co.za) .

**5. Queries on Bid Document**

Queries relating to the issue of these documents may be addressed to Ms N. Norexe  
E- Mail at [tenders@ecdc.co.za](mailto:tenders@ecdc.co.za) cc [nnorexe@ecdc.co.za](mailto:nnorexe@ecdc.co.za)

## Estimated Timeline

Activity	Date	Time
1. <b>Placing of Advert</b>	Daily Dispatch, E-Tender Portal, CIDB, Load on ECDC Website	N/A
2. <b>Compulsory Briefing Meeting</b>	A compulsory briefing meeting to be held at Clainliegh Court in Queenstown on the <b>13 February 2024 starting at 11h00.</b>	
3. <b>Last day of questions</b>	<b>7 days before closing date</b>	<b>16H00</b>
4. <b>Final date of submission of bids</b>	<b>23 February 2024</b>	<b>12h00</b>
5. <b>Bid Validity</b>	<b>90 days</b>	

### 5.1. Briefing Session and Site Location

A compulsory briefing meeting to be held at Number 25 Grey Street - Clainleigh Court Apartment, Queenstown on the 13 February 2024 starting at 11h00.

For any enquiries relating to this Bid please email the procurement department at [tenders@ecdc.co.za](mailto:tenders@ecdc.co.za), attention N. Norexe

Communication with the Bidders and any clarity on Queries Bid will be posted on the website at [www.ecdc.co.za](http://www.ecdc.co.za) and will also be communicated to the bidders via email where the Bidder has indicated to ECDC that they are interested in submitting a bid.

**Bidders must visit the site to ensure that their proper assessment of the site is done and that the Bill of Quantities is Priced Correctly.**

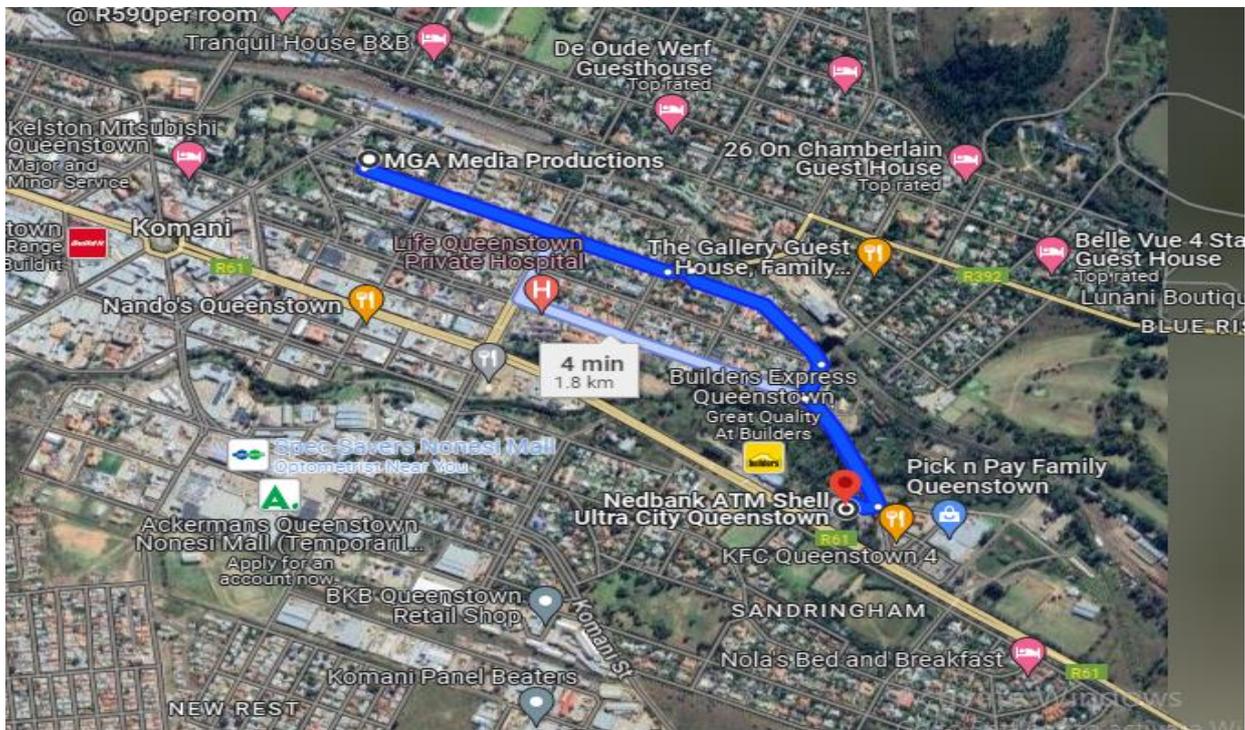
**Bidders must acquaint themselves of the current site conditions, works complexity and associated safety risks.**

**ECDC will only consider bidders that have attended the briefing meeting.**

## Geographical Site Layout

## Geographical Site Layout

**Clainleigh Court:** Latitude: -31.8940979  
Longitude: 26.8756926,81



**Telephonic, emailed, telexed, facsimile, and late tenders will not be accepted.**

Tenders may only be submitted on the tender documentation that is issued.

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the **Tender Data**.

## T1.2 Tender Data

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement (January 2019) as published in Government Gazette No 42622, Board Notice 423 of 2019 on the 8<sup>th</sup> of August 2019 (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 mainly applies.

Clause number	Tender Data
A.1.1	The employer is <b>Eastern Cape Development Cooperation (ECDC)</b>
A.1.2	<p>The Tender Documents issued by the Employer comprise the following documents:</p> <p><b>THE TENDER</b></p> <p><b>Part T1: Tendering procedures</b></p> <p>T1.1 - Tender notice and invitation to tender T1.2 - Tender data</p> <p><b>Part T2 : Returnable documents</b></p> <p>T2.1 - List of returnable documents T2.2 - Returnable schedules</p> <p><b>THE CONTRACT</b></p> <p><b>Part C1: Agreements and Contract data</b></p> <p>C1.1 - Form of offer and acceptance C1.2 - Contract data C1.3 - Performance Bond C1.4 - Adjudicator’s contract</p> <p><b>Part C2: Pricing data</b></p> <p>C2.1 - Pricing instructions C2.2 - Bill of Quantities</p> <p><b>Part C3: Scope of work</b></p> <p>C3 - Scope of work</p> <p><b>Part C4: Site information</b></p> <p>C4 - Site information</p> <p><b>Part C5: Annex C – Local content declaration</b></p> <p>C5 - ANNEX C – Local content declaration – summary schedule</p>

A.1.4	<p><b>During Tender stage all communication shall be through the Procurement Department for attention:</b>  <b>Name: Ms. N. Norexe,</b>  Address: ECDC Head Office at ECDC House  Ocean Terrace Park  Moore Street  Quigney,  East London</p> <p>Tel: 043 704 5600  E-mail: <a href="mailto:tenders@ecdc.co.za">tenders@ecdc.co.za</a> cc <a href="mailto:nnorexe@ecdc.co.za">nnorexe@ecdc.co.za</a></p>
A.2.1	<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, or a value determined in accordance with CIDB Regulations are eligible to have their tenders evaluated</p> <p><b>Joint ventures are eligible to submit tenders provided that:</b></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 <b>GB (General Building)</b> class of construction work; not lower than one level below the required grading designation in the class of works construction works under considerations and possess the required recognition status.</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 a GB class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.</li> </ol>
A.2.1	<p><b>Not Applicable for this Bid</b></p> <p>The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated:</p> <ol style="list-style-type: none"> <li>a) contractors who have a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a ..... or .....*. class of construction work; and</li> <li>b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above and who satisfy the following criteria: .....**</li> </ol>
A.2.2	<p><b>Not Applicable for this Bid</b></p> <p>The employer will compensate the tender as follows</p>

A.2.7	<p>The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender.</p> <p><b>Paragraph Below is Not Applicable. Bidder to refer to Tender Notice</b></p> <p>Tenderers must sign the attendance list in the name of the tendering entity. Addenda will be issued to and tenders will be received only from those tendering entities appearing on the attendance list.</p>
A.2.12	<p><b>Not Applicable for this Bid</b></p> <p>Main tender offers are not required to be submitted together with alternative tenders.</p>
A.2.12	<p>No alternative tender offers will be considered.</p>
A.2.12	<p><b>Not Applicable for this Bid</b></p> <p>If a tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.</p> <p>Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.</p> <p>Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.</p> <p>The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs in confirming the acceptability of the detailed design.</p>
A.2.13. 3	<p><b>One original duly signed (by authorised representative) and completed bid document (hardcopy) MUST be submitted inclusive of the terms and conditions of this bid document with any attachments/annexures /returnable required for this Bid.</b></p> <p>A PDF soft copy of the duly signed and completed original bid (e.g., PDF format in Flash drive/disc) should be submitted with the Original duly signed and completed hardcopy bid document however non-submission of a soft copy will not result in the Bid being disqualified.</p> <p>ECDC will not be responsible if your bid is not submitted on time.</p> <p>All bid documents are to be <b>completed in permanent ink.</b></p> <p><b>No alterations of the Bid Document will be allowed.</b></p> <p><b>No correction fluid will be allowed. Corrections should be initialled.</b></p>

<p>A.2.13.5 A.2.15.1</p>	<p>Valid originally firmly bound signed complete tender document (by authorized representative) must be placed in the Bid Box on or before the final date and time of submission.</p> <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>a) <b>Location of tender box:</b>  Bid Reference Number: <b>ECDC/INFRA/29/012024</b></p> <p>Project Name: <b>ALTERATIONS AND REFURBISHMENT OF CLAINLIEGH COURT IN QUEENSTTOWN</b></p> <p>Delivered at Physical Address: <b>ECDC Head Office at ECDC House, Ocean Terrace Park, Moore Street, Quigney, East London,</b></p> <p>Bids/Tender offers must be submitted on or before the final date and time of submission of bids as indicated in the Tender Notice and invitation to Tender</p> <p><b>It is the Bidders responsibility to ensure that all the documents are received on time.</b></p> <p><b>The bid box is open on weekdays between 08h00 and 16h30</b></p>
<p>A.2.13.6 A.3.5</p>	<p><b>Not Applicable for this Bid</b></p> <p>A two-envelope procedure is required.</p>
<p>A.2.13.9</p>	<p>Telephonic, email, telegraphic, telex, email, or facsimile tender offers <b>will not</b> be accepted.</p>
<p>A.2.15</p>	<p>The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.</p>
<p>A.2.16</p>	<p>The tender offer validity period is 90 days.</p>
<p>A.2.18</p>	<p>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.</p> <p><b>Tenders to submit the associated names being part of the returnable documents failure to submit</b></p>
<p>A.2.19</p>	<p>Access shall be provided for the following inspections, tests and analysis:</p> <p>The site is available for viewing the location of the works.</p>
<p>A.2.20</p>	<p>The tenderer is required to submit with his tender a letter of intent from an approved insurer undertaking to provide the Performance Bond to the format included in Contract Data/Contract of this procurement document</p>
<p>A.2.22</p>	<p><b>Not Applicable for this Bid</b></p> <p>Return all retained tender documents within 28 days after the expiry of the validity period</p>

A.2.23	<p>The tenderer is required to submit with his tender:</p> <p><b>1) Tax Compliance</b>  Bidders must ensure compliance with their tax obligations.</p> <p>In Bids where Consortia/Joint venture/Sub-Contractors are involved; each party must submit a separate proof of Tax Compliance Status.</p> <p>The bidders' Tax status will be verified on the CSD prior to the bid award and where the preferred bidders is not compliant, <b>7 working days</b> will be granted for remedy, failing which the bidder will be disqualified</p>
A.3.1.1	<p>The Employer will respond to requests for clarification received up to 7 working days before the tender closing time.</p>
A.3.4	<p><b>Opening of the Bids</b></p> <p>Tenders will be opened immediately after the closing time for tenders at 12h00 hrs</p> <p>There will be <b>NO PUBLIC OPENING</b> of the Bids received; however, the list of bids received may be published on the ECDC website and will be sent to the Bidders that have submitted bids via email.</p> <p>There will be no discussions with any Bidder/Interested Party that Submitted Proposals/ Bids until evaluation have been complete. Any subsequent discussions shall be at the discretion of ECDC.</p>
A.3.11.1	<p>The financial offer will be reduced to a comparative basis.</p>
A.3.11.2	<p><b>Not Applicable for this Bid</b></p> <p>The procedure for the evaluation of responsive tenders is Method 1</p>

### A.3.11.3 Evaluation Criteria

This bid is subject to the Preferential Procurement Policy Framework Act and the Preferential Procurement Regulations 2022 as applicable to provincial government business enterprises as listed under schedule 3(D) of the Public Finance Management Act and the ECDC Procurement Policy as amended from time to time.

The procedure for evaluation of tenders is as follows:

<p><b>Stage 1</b></p>	<p><b>Mandatory Tender Returnable</b> Service Providers are to meet all the Mandatory Requirements in order to be evaluated further. Failure to submit the Mandatory Requirements as required will result in the bid being disqualified.</p> <p><b>Local Content</b> Stage 1 also involves a valuation of local production and content (goods) only. At this stage Bidders must meet the minimum threshold for local production and content as determined by the DTI for local content before they will be evaluated in terms of preferential procurement points.</p> <p>Bidders to complete the Declaration for Local Production and Content for Designated Sectors and Local Content Declaration: <b>Summary Schedule (Annex C)</b></p>
<p><b>Stage 2</b></p>	<p><b>Functionality:</b> Involves an evaluation of Functionality only – At this stage Bidders must score a minimum score of <b>70%</b> for functionality (services) in order to be evaluated for stage 2 (Preferential procurement points).</p>
<p><b>Stage 3</b></p>	<p><b>Preferential Procurement points:</b> <b>Price:</b> Points will be calculated for price on the relevant prices in accordance with the preference point system, 80/20.</p>

A.3.11.3 The evaluation criteria and maximum score in respect of each of the criteria are as follows: (Details on Functionality Evaluation are on T2.1)

Functionality Criteria	Maximum number of points
Completed Similar Projects	30
Experience and Qualifications of the Key Personnel	30
Submission of proposed methodology and construction program	10
<b>Maximum possible score for functionality (M<sub>s</sub>)</b>	<b>70</b>

Functionality shall be scored by not less than three evaluators in accordance with the Functionality Criteria Evaluation below

The minimum percentage to be achieved for functionality is **70%**

A.3.13	<p>Tender offers will only be accepted if:</p> <ul style="list-style-type: none"> <li>a) the tenderer is Tax Compliant <ul style="list-style-type: none"> <li>✓ tenderers must ensure compliance with their tax obligations.</li> <li>✓ in Bids where Consortia/Joint venture/Sub-Contractors are involved; each party must submit a separate proof of Tax Compliance Status.</li> <li>✓ the tenderer Tax status will be verified on the CSD prior to the bid award and where the preferred bidders is not compliant, <b>7 working days</b> will be granted for remedy, failing which the bidder will be disqualified</li> </ul> </li> <li>b) the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation;</li> <li>c) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement;</li> <li>d) the tenderer has not: <ul 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> </ul> </li> <li>e) the tenderer is able, in the opinion of the employer, to perform the contract free of conflicts.</li> <li>f) the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2003, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.</li> <li>g) the tenderer can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract.</li> <li>h) the tenderer has the legal capacity to enter into the contract;</li> <li>i) the tenderer is not; insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act No. 2008, bankrupt or being wound up, has his/her affairs administered by a court or a judicial officer, has suspended his/her business activities or is subject to legal proceedings in respect of any of the foregoing;</li> <li>j) the tenderer complies with the legal requirements, if any, stated in the tender data; and</li> </ul>
A.3.17	The number of paper copies of the signed contract to be provided by the employer is one (1).

**Part T2 : Returnable documents**  
T2.1 - List of returnable documents  
T2.2 - Returnable schedules

## T2.1 - List of returnable documents

### 1. Evaluation Criteria

This bid is subject to the CIDB and Preferential Procurement Policy Framework Act and the Preferential Procurement Regulations 2022 as applicable to provincial government business enterprises as listed under schedule 3(d) of the Public Finance Management Act and the ECDC Procurement Policy as amended from time to time.

The procedure for evaluation of tenders is as follows:

<b>Stage 1</b>	<b>Mandatory Tender Returnable</b> Service Providers are to meet all the Mandatory Requirements in order to be evaluated further. Failure to submit the Mandatory Requirements as required will result in the bid being disqualified.  <b>Local Content</b> Stage 1 also involves an evaluation of local production and content (goods) only. At this stage Bidders must meet the minimum threshold for local production and content as determined by the DTI for local content before they will be evaluated in terms of preferential procurement points.  Service provider to complete the Declaration for Local Production and Content for Designated Sectors and Local Content Declaration: <b>Summary Schedule (Annex C)</b>
<b>Stage 2</b>	<b>Functionality:</b> Involves an evaluation of Functionality only – At this stage Bidders must score a minimum score of <b>70%</b> for functionality (services) in order to be evaluated for stage 3 (Preferential procurement points).
<b>Stage 3</b>	<b>Preferential Procurement points:</b> <b>Price:</b> Points will be calculated for price on the relevant prices in accordance with the preference point system, 80/20.

**1.1. MANDATORY LIST OF TENDER RETURNABLES**

Service Providers are to meet all the Mandatory Tender Requirements in order to be evaluated further for Stage 1. Failure to submit the Mandatory Requirements as required will result in this bid being disqualified.

<b>Description</b>	<b>Disqualification if not submitted with Bid Document or Bidder is found to be Non-Compliant at the Time of Bid Close</b>	<b>Mandatory Requirement for Award</b>
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<p>1.</p>	<p><b>Bidders must be registered on the National Treasury Central Supplier Database (CSD).</b> The following information will be verified on the National Treasury Central Supplier Database:</p> <ul style="list-style-type: none"> <li>• Business Registration including details of directorship and membership, - The bidders' Business Registration Status will be verified on the CSD prior to the bid award and where the preferred bidders status is under deregistration, <b>7 working days</b> will be granted for remedy, failing which the bidder will be disqualified.</li> <li>• ID Number,</li> <li>• Government Employee</li> <li>• Tender Defaulting and Restriction Status. Should the Tender be a restricted supplier or a defaulting supplier they will be disqualified.</li> </ul> <p><b><u>Onus on the Service Provider</u></b></p> <p>Onus is on the Service Provider to make sure that all these are active and compliant on the CSD at the time of bid closing and tender award.</p> <p>ECDC will verify if the Service Provider has been registered on CSD. Service Provider to submit CSD Number as required in the Cover Page. <b>It is the responsibility of the Service Provider to ensure that the correct CSD Number is provided.</b></p> <p>If Service Provider is not registered on CSD by the time of closing of the bid they will not be considered for evaluation.</p> <p><b><u>Directors in the Service of State</u></b></p> <p>Where a person within the Bidding Entity is an Employee of the State, Bidder should</p> <ol style="list-style-type: none"> <li>submit a signed letter on a letter head from their Accounting Officer/Accounting Authority (AO/AA of the Government Institution where they are employed) stating that they are not prohibited from conducting business with the State in terms of Section 8 of the Public Administration Management Act, 2012 (Act No.11 of 2014- "The PFMA")</li> <li>submit a signed letter on a letter from their AO/AA granting permission to perform other remunerative work outside of their employment where the PAMA does not apply to such an employee</li> </ol> <p><b>ECDC reserves the right to verify such information from their AO/AA</b></p>	<p>Yes</p>	<p>Yes</p>
	<p><b><u>JV's and Consortium</u></b></p> <p>Where the Bidder is a JV/Consortium, each firm must be registered on the CSD.</p>		

2.	<p><b>Tax Compliance Requirements:</b></p> <ul style="list-style-type: none"> <li>Bidders must ensure compliance with their tax obligations.</li> <li>The bidders' Tax status will be verified on the CSD prior to the bid award and where the preferred bidders is not compliant, <b>7 working days</b> will be granted for remedy, failing which the bidder will be disqualified.</li> <li><b>In Bids where Consortia/Joint venture/sub-contractors are involved, each party must submit a separate proof of Tax Compliance Status Certificate/SARS Pin Number/CSD Number.</b></li> </ul>	No	Yes
3.	<p><b>CIDB Requirements:</b></p> <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, or a value determined in accordance with <b>Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations</b>, for a GB (General Building) class of construction work, are eligible to have their tenders evaluated.</p> <p><b>Joint ventures are eligible to submit tenders provided that:</b></p> <ol style="list-style-type: none"> <li>every member of the joint venture is registered with the CIDB;</li> <li>the lead partner has a contractor grading designation in the <b>GB (General Building)</b> class of construction work; not lower than one level below the required grading designation in the class of works construction works under considerations and possess the required recognition status.</li> <li>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 a GB class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.</li> </ol>	Yes (Evaluation Stage)	Yes <b>7GB or higher</b>
4.	<p><b>Annexure C – Supplier Information (Completed and Signed by the Delegated Authority) Attach Delegation of Authority</b></p>	Yes	Yes
5.	<p><b>Annexure L.– C.1.1 Form of Offer and Acceptance Offer; (Completed and Signed by the Delegated Authority) Attach Delegation of Authority</b></p>	Yes	Yes
7.	<p><b>ANNEXURE K (which includes annex C): Declaration of Local Content (SBD 6.2) (Completed and Signed by the Delegated Authority) Attach Delegation of Authority</b></p>	Yes	Yes

8.	<b>Annexure G: BIDDER'S DISCLOSURE (SBD4) (Completed and Signed by the Delegated Authority) Attach Delegation of Authority</b>	Yes	Yes
9.	<b>ANNEXURE J: STATEMENT OF CONSENT TO DATA PROCESSING</b>	Yes	Yes
11.	<b>Annex C – Local Content Declaration (Summary Schedule) (Completed and Signed by the Delegated Authority) Attach Delegation of Authority</b>	Yes	Yes
12.	<p><b>Declaration with regards to Company /Firm Location</b></p> <p><b>Attach</b> a proof of address to claim points for the Eastern Cape base locality as the specific goal as advised in the tender / quotation qualifies the company/firm for the PPR of 2022 preference points claim.</p> <p><b>Failure to submit the declaration and proof of address for each JV /Consortium member may result in awarding of 0 (zero) points preference points under Eastern Cape Locality.</b></p> <p>This information will be verified from the FICA documents (Physical Address, Utility Bill, Telephone, Tax Clearance, lease agreement submitted by the bidder.</p> <p><b>Failure to submit the declaration and proof of address may result in awarding of 0 (zero) points preference points under Eastern Cape locality.</b></p>	No	No
	<p><b>Annexure I – (SBD 6.1.): Preferential Points Claim in terms of the Preferential Procurement Regulations 2022 (Signed and Completed).</b></p> <p><b>CSD report will be used to confirm other specific goals listed in Table 1 of the SBD 6.1 document.</b></p> <p><b>Failure to submit the preference points claim and proof of address may result in awarding of 0 (zero) points preference points under Eastern Cape locality.</b></p>	No	No
13.	<p><b>Duly signed Letter of Authority MUST be submitted authorising the individual to sign</b> on behalf of the bidder if:</p> <p><b>a) If there are more than one Owner/ Director / Shareholder / Member / Trustee etc. OR</b></p> <p><b>b) If there is only one Director / Shareholder / Member / Trustee / Owner etc. and they are not the one completing the bid document.</b></p> <p><b>Note:</b> The Letter of Authority MUST be signed by all directors of the Bidder (or a signed Board Resolution authorising the signatory will be accepted).</p>	Yes	Yes

14.	<b>Priced Bills of Quantities completed in black ink.</b>	Yes	Yes
<b>The following will be applicable to Joint Ventures/Consortium</b>			
Consortium/Joint Venture Agreement to enter in a Consortium / Joint Venture signed by all Consortium Members who are Duly Authorized.		Yes	Yes
Resolution of the Board of Directors to enter into a Consortium or Joint Venture from each member firm of the Consortium/Joint Venture for this Bid.		Yes	Yes
Letter of Authority of Signatory(individual) authorizing the Signatory to sign on behalf of the Consortium/JV.  The Letter of Authority should be from each member firm and must be signed by all directors of each member firm (or Board Resolution will be accepted).		Yes	Yes
<b>Declaration with regards to Company /Firm Location</b>  <b>Attach</b> a proof of address to claim points for the Eastern Cape base locality as the specific goal as advised in the tender / quotation qualifies the company/firm for the PPR of 2022 preference points claim. <b>Failure to submit the declaration and proof of address for each JV /Consortium member may result in awarding of 0 (zero) points preference points under Eastern Cape Locality.</b>		No	No
<b>Annexure I – (SBD 6.1.): Preferential Points Claim (Signed and Completed).</b>  <b>CSD report will be used to confirm other specific goals listed in Table 1 of the SBD 6.1 document.</b>  <b>Failure to submit the preference points claim and proof of address may result in awarding of 0 (zero) points preference points under Eastern Cape locality.</b> It must be noted that the scoring of joint ventures/consortia on a proportional basis applies to bids for both the acquisition of goods and services and income generating contracts.		No	No

**KINDLY NOTE THAT, FAILURE TO SUBMIT THE REQUIRED MANDATORY DOCUMENTATION WITH THE BID WILL RESULT IN YOUR BID BEING DISQUALIFIED WITHOUT FURTHER CONSIDERATION.**

**Bidders shall take note of the following conditions:**

1. The successful bidder will be required to submit a Letter of Good Standing from the Compensation Commission within 14 days after award and before the contract can be signed
2. Performance Guarantee to be submitted within 14 days after award.
3. The Bid Validity period is 90 days.
4. An approved and project specific Health and Safety file within 14 days upon appointment.
5. An Approved Construction Methodology to proceed to work in phases.
6. No correction fluid to be used and all errors to be initialled.

**Queries relating to the issue of these documents may be addressed in writing to:**

Ms N. Norexe

[tenders@ecdc.co.za](mailto:tenders@ecdc.co.za) or [nnorexe@ecdc.co.za](mailto:nnorexe@ecdc.co.za)

## 1.2. Stage 1 - Local Production and Content for Designated Sectors and Local Content Declaration

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably). Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the ECDC Supply Chain Management Policy, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition I) 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. ECDC Supply Chain Management policy makes provision for the promotion of local production and content.
- 1.2. ECDC Supply Management Policy prescribes that in the case of designated sectors, tenders must be advertised with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for tenders referred to in paragraph 1.2 above, a three stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage functionality with a minimum threshold of 60% and third stage of price and specific goals.
- 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) as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = 1 - \left[ \frac{x}{y} \right] \times 100$$

Where

- x        imported content  
y        bid price excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date, one week (7 calendar days) prior to the closing date of the bid as indicated in paragraph 4.1 below.

**The SABS approved technical specification number SATS 1268:2011 is accessible on <http://www.thedti/industrialdevelopment/ip.jsp> at no cost**

- 1.6. A bid will be disqualified if this Declaration Certificate and the Annex C ( Local Content Declaration : Summary Schedule) are not submitted as part of the bid documentation;

y is the bid price in Rand excluding value added tax (VAT) Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated in paragraph 4.1 below.

The SABS approved technical specification number SA TS 1286:2011 is accessible on <http://www.thdti.gov.za/industrialdevelopment/ip.jsp> at no cost.

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid: Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated in table 1 below.

Bidder that fails to meet the minimum stipulated threshold for local production and content will be unacceptable and will not proceed to stage 2.

- 3.3 Table 1 provides the stipulated minimum threshold for local content and production for steel products and components for construction (as described in 3.2)

**Table 1a: Minimum local content for Steel Value-added Products**

Steel Construction Materials	Components	Local Content Threshold
Fabricated Structural Steel	Latticed steelwork, reinforcement steel, columns, beams, plate girders, rafters, bracing, cladding supports, stair stringers & treads, ladders, steel flooring, floor grating, handrailing and balustrading, scaffolding, ducting, gutters, launders, downpipes and trusses	100%
Joining/Connecting Components	Gussets, cleats, stiffeners, splices, cranks, kinks, doglegs, spacers, tabs, brackets	100%
Frames	Doors and Windows	100%
Roof and Cladding	Bare steel cladding, galvanised steel cladding, colour coated cladding	100%
Fasteners	Bolts, nuts, rivets and nails	100%
Wire Products	All fencing products: all barbed wire and mesh fencing, fabric/mesh reinforcing, gabions, wire rope/strand and chains, welding electrodes, nails/tacks, springs and screws	100%
Ducting and Structural Pipework	Non-conveyance tubing fabricated from steel sheeting and plate with structural supports	100%
Gutters, downpipes & launders	Fabricated materials made from sheeting associated with roof drainage systems	100%

**Table 1b: Minimum local content for Primary Steel Products**

Steel Construction Materials	Local Content Threshold
Plates (>4.5mm thick and supplied in flat pieces)	100%
Sheets (<4.5mm thick and supplied in coils)	100%
Galvanised and Colour Coated Coils	100%
Wire Rod and Drawn Wire	100%
Sections (Channels; Angles, I-Beams and H-Beams)	100%
Reinforcing bars	100%

.....  
SIGNATURE(S) OF BIDDERS(S)

DATE: .....

ADDRESS: .....

.....  
 .....

WITNESSES:

1. ....
2. ....

**1.3. STAGE 2 - FUNCTIONALITY**

Involves an evaluation of Functionality only – At this stage Bidders must score a minimum score of **70%** for functionality (services) in order to be evaluated for stage 3 (Preferential procurement points).

**Bidder to note the following for Functionality Evaluation:**

- a) Adequate proof supporting the points claimed must be provided. (e.g. documents, agreements, qualifications, previous experience, certifications, etc.)
- b) Failure to submit relevant information with supporting document and adequate proof may result in ECDC not being able to allocate points for the Evaluation Criteria outlined below.

**Table 1: Functionality Evaluation Criteria – Stage 2**

<b>EXPERIENCE (Read with Schedule T.2.2.2(a) requirements)</b>	Allocated Points
Reference letter for building/refurbishments/maintenance projects completed as stipulated below: (Bidder to submit a reference letter for each project completed.)	
5 or more reference letters	30
4 reference letters	20
3 reference letters	15
2 reference letters	10
Less than 2 reference letters	0
<b><u>Document to be submitted for points allocation</u></b>	
<b>The Bidder must demonstrate that they have the relevant experience in general building works submitting completed T.2.2.2 (a) reference forms or reference letters of completed general building works (Read with Schedule T.2.2.2(a) requirements)</b>	
Reference letters should indicate the following.	
<ul style="list-style-type: none"> <li>• Signature of the client</li> <li>• Client’s Letter head or Client Stamp</li> <li>• Company name, contact person, contact details (telephone number and email address)</li> <li>• Value of the project</li> <li>• Works carried out</li> <li>• Works have been completed on time /within the stipulated contract period</li> <li>• Good or better quality of workmanship</li> <li>• Assessment of the quality of work performed</li> </ul>	

<b>EXPERTISE (CV's and certified qualifications of the Key Personnel to be included in Returnables)</b>	
<b>Construction Manager with a National Diploma or higher in the Built Environment</b>	
More than 10 years experience on general building contracts	15
Between 6 - 10 years' experience on general building contracts	10
Between 3 - 5 years' experience on general building contracts	5
Less than 3 years' experience on general building contracts	0
<b>Construction Supervisor (Minimum of National Certificate -N6 or higher in The Built Environment Qualifications to be supplied with CV)</b>	
More than 10 years' experience on general building contracts	10
Between 6 - 10-years' experience on general building contracts	5
Between 3 – 5 years' experience on general building contracts	3
Less than 3 years' experience on general building contracts	0
<b>Health and Safety Officer (Professionally registered CHSO with the SACPCMP)</b>	
More than 5 years post registration experience on building projects	5
From 4 -5 years post registration experience on building projects	3
From 1-3 years post registration experience on building projects	2
Less than 1 year of post registration experience on building projects	0
<b>PROJECT IMPLEMENTATION PLAN</b>	
Project implementation plan that clearly details the execution on building projects	10
Project implementation plan with no detailed execution on building projects	0
<b>TOTAL MAXIMUM ACHIEVEABLE POINTS</b>	<b>70</b>
<b>MINIMUM POINTS REQUIRED</b>	<b>49</b>

- a) Only bids that have achieved the minimum qualifying score for functionality will be evaluated further in terms of preferential procurement points (stage 3).
- b) All bids that fail to achieve the minimum score will be disqualified.
- c) The minimum qualifying score (in a percentage) for functionality shall be calculated as follows:

$$P_s = \frac{S_o}{M_s} \times 100 \text{ Where:}$$

$P_s$  = percentage scored for functionality by bid under consideration

$S_o$  = Total score for bid under consideration

$M_s$  = Maximum possible score

The percentages of each panel member shall be added and divided by the number of panel members to establish the average percentage obtained by each bidder for functionality.

#### 1.4. Stage 3 – Preference Procurement Point - Evaluation Criteria

**Preference points for this bid shall be awarded for price and the specific goal. The maximum points for this bid are allocated as follows:**

CRITERIA	POINTS
Price	80
Specific goal	20
<b>TOTAL POINTS</b>	<b>100</b>

- a) Points awarded for price based will be based on the 80/20 Preference point systems
- b) The points scored by the tenderer/bidder for Price will be added to the points scored for ECDC specific goal to obtain the bidder's total points scored out of 100 points.
- c) In the event that two or more bids have scored equal total points, the successful bid will be the one scoring the highest number of preference points for ECDC specific goal
- d) However, when functionality is part of the evaluation process and two or more bids have scored equal points including equal preference points for specific goal, the successful bid must be the one scoring the highest score for functionality.
- e) Should two or more bidders/tenderers be equal in all respects, the award shall be decided by the drawing of lots.
- f) The bidder obtaining the highest number of total points will be awarded the contract.
- g) Points scored will be rounded off to the nearest 2 decimal places.

**h) Price**

- (i) The lowest acceptable bid will score 80 points for price.
- (ii) The following formula will be used to calculate the points out of 80 for price in respect of the bid/tender.
- (iii) Preference points for price shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts;

DETAILS	80/20 PREFERENCE POINT SYSTEM
Rand value (competitive bids or quotations) all applicable taxes included.	<ul style="list-style-type: none"> <li>• Equal and above R30 000 to R50 million, inclusive of all applicable taxes.</li> <li>Below R30 000 if and when considered to be appropriate</li> </ul>
Formulae	$P_s = 80 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$ <p>Ps = Points scored for comparative price of bid / offer under consideration</p> <p>Pt = Comparative price of bid / offer under consideration</p> <p>Pmin = Comparative price of lowest acceptable bid / offer</p>

## Annex A

### Standard Conditions of Tender

*The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement (January 2019) as published in Government Gazette No 42622, Board Notice 423 of 2019 on the 8<sup>th</sup> of August 2019 (See [www.cidb.org.za](http://www.cidb.org.za)).*

#### A.1 General

##### A.1.1 Actions

A.1.1.1 The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in A.2 and A.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.

A.1.1.2 The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

*Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.*

*2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.*

A.1.1.3 The employer shall not seek, and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

##### A.1.2 Tender Documents

The documents issued by the employer for the purpose of a tender offer are listed in the tender data.

##### A.1.3 Interpretation

A.1.3.1 The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.

A.1.3.2 These conditions of tender, the tender data and tender schedules which are required for tender evaluation purposes, shall form part of any contract arising from the invitation to tender.

A.1.3.3 For the purposes of these conditions of tender, the following definitions apply:

**a) conflict of interest** means any situation in which:

- i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially.
- ii) an individual or tenderer is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
- iii) in compatibility or contradictory interests exist between an employee and the tenderer who employs that employee.

**b) comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration.

**c) corrupt practice** means the offering, giving, receiving, or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process.

**d) fraudulent practice** means the misrepresentation of the facts to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels.

#### **A.1.4 Communication and employer's agent**

Each communication between the employer and a tenderer shall be to or from the employer's agent only, and in a form that can be readily read, copied, and recorded. Communications shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a tenderer. The name and contact details of the employer's agent are stated in the tender data.

#### **A.1.5 Cancellation and Re-Invitation of Tenders**

A.1.5.1 An employer may, prior to the award of the tender, cancel a tender if-

- a) due to changed circumstances, there is no longer a need for the engineering and construction works specified in the invitation.
- b) funds are no longer available to cover the total envisaged expenditure; or
- c) no acceptable tenders are received.
- d) there is a material irregularity in the tender process.

A.1.5.2 The decision to cancel a tender invitation must be published in the same manner in which the original tender invitation was advertised

A.1.5.3 An employer may only with the prior approval of the relevant treasury cancel a tender invitation for the second time.

#### **A.1.6 Procurement procedures**

##### **A.1.6.1 General**

Unless otherwise stated in the tender data, a contract will, subject to A.3.13, be concluded with the

tenderer who in terms of A.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

### **A.1.6.2 Competitive negotiation procedure**

**A.1.6.2.1** Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of A.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of A.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

**A.1.6.2.2** All responsive tenderers or at least a minimum of not less than three responsive tenderers that are highest ranked in terms of the evaluation criteria stated in the tender data shall be invited to enter into competitive negotiations based on the principle of equal treatment, keeping confidential the proposed solutions and associated information.

Notwithstanding the provisions of A.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.

**A.1.6.2.3** At the conclusion of each round of negotiations, tenderers shall be invited by the employer to revise their tender offer based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.

**A.1.6.2.4** The contract shall be awarded in accordance with the provisions of A.3.11 and A.3.13 after tenderers have been requested to submit their best and final offer.

## **A.2 Tenderer's obligations**

### **A.2.1 Eligibility**

**A.2.1.1** Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.

**A.2.1.2** Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.

### **A.2.2 Cost of tendering**

**A.2.2.1** Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

**A.2.2.2** The cost of the tender documents charged by the employer shall be limited to the actual cost incurred by the employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.

### **A.2.3 Check documents**

Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.

#### **A.2.4 Confidentiality and copyright of documents**

Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

#### **A.2.5 Reference documents**

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

#### **A.2.6 Acknowledge addenda**

Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

#### **A.2.7 Clarification meeting**

Attend, where required, a clarification meeting at which tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data.

#### **A.2.8 Seek clarification**

Request clarification of the tender documents, if necessary, by notifying the employer at least five (5) working days before the closing time stated in the tender data.

#### **A.2.9 Insurance**

Be aware that the extent of insurance to be provided by the employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

#### **A.2.10 Pricing the tender offer**

**A.2.10.1** Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable fourteen (14) days before the closing time stated in the tender data.

**A.2.10.2** Show VAT payable by the employer separately as an addition to the tendered total of the prices.

**A.2.10.3** Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.

**A.2.10.4** State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

#### **A.2.11 Alterations to documents**

Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations.

#### **A.2.12 Alternative tender offers**

A.2.12.1 Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.

A.2.12.2 Accept that an alternative tender offer must be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.

A.2.12.3 An alternative tender offer must only be considered if the main tender offer is the winning tender.

### **A.2.13 Submitting a tender offer**

A.2.13.1 Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.

A.2.13.2 Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.

A.2.13.3 Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.

A.2.13.4 Sign (Signature by authorized personnel) the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.

A.2.13.5 Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.

A.2.13.6 Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.

A.2.13.7 Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.

A.2.13.8 Accept that the employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.

A.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

### **A.2.14 Information and data to be completed in all respects**

Accept that tender offers, which do not provide all the data or information requested completely and, in the form, required, may be regarded by the employer as non-responsive.

## **A.2.15 Closing time**

A.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.

A.2.15.2 Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

## **A.2.16 Tender offer validity**

A.2.16.1 Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.

A.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.

A.2.16.3 Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2.16 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).

A.2.16.4 Where a tender submission is to be substituted, a tenderer must submit a substitute tender in accordance with the requirements of C.2.13 with the packages clearly marked as "SUBSTITUTE".

## **A.2.17 Clarification of tender offer after submission**

Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

**Note:** *Sub-clause C.2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.*

## **A.2.18 Provide other material**

A.2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment.

Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.

A.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

## **A.2.19 Inspections, tests and analysis**

Provide access during working hours to premises for inspections, tests and analysis as provided for in the tender data.

## **A.2.20 Submit securities, bonds and policies**

If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

#### **A.2.21 Check final draft**

Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.

#### **A.2.22 Return of other tender documents**

If so, instructed by the employer, return all retained tender documents within twenty-eight (28) days after the expiry of the validity period stated in the tender data.

#### **A.2.23 Certificates**

Include in the tender submission or provide the employer with any certificates as stated in the tender data.

### **A.3 The employer's undertakings**

#### **A.3.1 Respond to requests from the tenderer**

A.3.1.1 Unless otherwise stated in the tender Data, respond to a request for clarification received up to five (5) working days before the tender closing time stated in the Tender Data and notify all tenderers who collected tender documents.

A.3.1.2 Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:

- a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements.
- b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

#### **A.3.2 Issue Addenda**

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until three (3) working days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who collected tender documents.

#### **A.3.3 Return late tender offers**

Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.

#### **A.3.4 Opening of tender submissions N/A**

A.3.4.1 Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be

opened.

A.3.4.2 Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices, number of points ECDC specific goal and time for completion for the main tender offer only.

A.3.4.3 Make available the record outlined in A.3.4.2 to all interested persons upon request.

### **A.3.5 Two-envelope system**

A.3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.

A.3.5.2 Evaluate functionality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any points claimed on BBEE status level. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for functionality.

### **A.3.6 Non-disclosure**

Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.

### **A.3.7 Grounds for rejection and disqualification**

Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

### **A.3.8 Test for responsiveness**

A.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:

- a) complies with the requirements of these Conditions of Tender,
- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the tender documents.

A.3.8.2 A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

- a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or
- c) affect the competitive position of other tenderers presenting responsive tenders, if it were

to be rectified.

Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

### **A.3.9 Arithmetical errors, omissions and discrepancies**

A.3.9.1 Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.

A.3.9.2 Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with A.3.11 for:

- a) the gross misplacement of the decimal point in any unit rate.
- b) omissions made in completing the pricing schedule or bills of quantities; or
- c) arithmetic errors in:
  - (i) line-item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
  - (ii) the summation of the prices.

A.3.9.3 Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.

A.3.9.4 Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:

- a) If bills of quantities or pricing schedules apply and there is an error in the line-item total resulting from the product of the unit rate and the quantity, the line item total shall govern, and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line-item total as quoted shall govern, and the unit rate shall be corrected.
- b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

### **A.3.10 Clarification of a tender offer**

Obtain clarification from a tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

### **A.3.11 Evaluation of tender offers**

The Standard Conditions of Tender standardize the procurement processes, methods and procedures from the time that tenders are invited to the time that a contract is awarded. They are generic in nature and are made project specific through choices that are made in developing the Tender Data associated with a specific project.

Conditions of tender are by definition the document that establishes a tenderer's obligations in submitting a tender and the employer's undertakings in soliciting and evaluating tender offers. Such conditions establish the rules from the time a tender is advertised to the time that a contract is awarded and require employers to conduct the process of offer and acceptance in terms of a set of standard procedures.

<b>The CIDB Standard Conditions of Tender are based on a procurement system that satisfies the following system requirements:</b>	
<b>Requirement</b>	<b>Qualitative interpretation of goal</b>
Fair	The process of offer and acceptance is conducted impartially without bias, providing simultaneous and timely access to participating parties to the same information.
Transparent	The only grounds for not awarding a contract to a tenderer who satisfies all requirements are restrictions from doing business with the employer, lack of capability or capacity, legal impediments and conflicts of interest.
Competitive	The system provides for appropriate levels of competition to ensure cost effective and best value outcomes.
Cost effective	The processes, procedures and methods are standardized with sufficient flexibility to attain best value outcomes in respect of quality, timing and price, and least resources to effectively manage and control procurement processes.

**The activities associated with evaluating tender offers are as follows:**

- a) Open and record tender offers received.
- b) Determine whether or not tender offers are complete.
- c) Determine whether or not tender offers are responsive.
- d) Evaluate tender offers
- e) Determine if there are any grounds for disqualification.
- f) Determine acceptability of preferred tenderer
- g) Prepare a tender evaluation report.
- h) Confirm the recommendation contained in the tender evaluation report.

**A.3.11.1 General**

The employer must appoint an evaluation panel of not less than three persons conversant with the proposed scope of works to evaluate each responsive tender offer using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

**A.3.12 Insurance provided by the employer**

If requested by the proposed successful tenderer, submit for the tenderer’s information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the

employer to provide.

### **A.3.13 Acceptance of tender offer**

Accept the tender offer; if in the opinion of the employer, it does not present any risk and only if the tenderer:

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement;
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract.
- c) has the legal capacity to enter into the contract.
- d) is not; insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act No. 2008, bankrupt or being wound up, has his/her affairs administered by a court or a judicial officer, has suspended his/her business activities or is subject to legal proceedings in respect of any of the foregoing;
- e) complies with the legal requirements, if any, stated in the tender data; and
- f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

### **A.3.14 Prepare contract documents**

A.3.14.1 If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents and other revisions agreed between the employer and the successful tenderer.

A.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

### **A.3.15 Complete adjudicator's contract**

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

### **A.3.16 Registration of the award**

An employer must, within twenty-one (21) working days from the date on which a contractor's offer to perform a construction works contract is accepted in writing by the employer, register and publish the award on the CIDB Register of Projects.

### **A.3.17 Provide copies of the contracts**

Provide to the successful tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

### **A.3.18 Provide written reasons for actions taken**

Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.

## ANNEXURE B

### ADDITIONAL CONDITIONS OF TENDER OF ECDC

*Where the CIDB standard condition of tender does not address the following, clauses on the ECDC standard conditions of tender, the ECDC Standard condition of tender will be additional.*

#### 1.1 Alteration or withdrawal of Proposals

Bidders may withdraw their proposal by written notification on or before the date Specified for the evaluation of Bids.

#### 1.2 Alternative Bid

Alternative Bids will not be accepted

#### 1.3 Costs for preparation of Proposals/presentations

The costs incurred by Bidders in respect of the attendance of any briefing or presentation meetings if necessary or costs incurred in preparing any proposal will be borne by the Bidder and the ECDC shall in no way be liable to reimburse such costs incurred.

#### 1.4 Ownership of Proposals and presentations

The ECDC shall on receipt of any proposal relating to this request and submitted in accordance with the procedure set out herein, shall become the owner thereof and the ECDC shall not be obliged to return any proposal.

#### 1.5 Tax Clearance Certificate requirement

It is a condition of all bids inclusive of foreign bidders / individuals) that the South African taxes of the successful bidder must be in order.

The bidders' Tax status will be verified on the CSD prior to the bid award and where the preferred bidders is not compliant, **7 working days** will be granted for remedy, failing which the bidder will be disqualified.

In Bids where Consortia/Joint venture/Sub-Contractors are involved, each party will be verified separately for proof of Tax Compliance Status.

In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate. Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website [www.sars.gov.za](http://www.sars.gov.za)

#### 1.6 Confidentiality

The entire process of calling for Bids was initiated by the ECDC in terms of its procurement policy and is confidential. All deliberations in respect of the acceptability or otherwise of the proposals shall be conducted in closed sessions and members of the Evaluation and Procurement Committee and prospective service providers are bound to treat all discussions as highly confidential.

The service provider shall not divulge directly or indirectly to any other person than a person employed by ECDC, make copies or extracts of any of the information obtained during this assignment, while they may have access to ECDC's trade secrets, confidential information which may include, specifications, plans, drawings, pattern, samples, written instructions, notes, memoranda, technical information, know-how or process or method or any other records of whatsoever nature without the

written consent of ECDC and shall surrender all these items to ECDC on termination of the assignment or on demand of ECDC.

The service provider shall not be entitled to make use of the information whether for its own benefit or that of others, to make available or derive any profit from any of the information or knowledge specifically related to the business or affairs of ECDC.

Any document shall remain the property of ECDC and shall be returned (all copies) to ECDC on completion of the contract if so required by ECDC.

## **1.7 Inventions Patent and Copy-Rights**

The service provider cedes, assigns and transfers to ECDC all rights, title and interest in and to any and all copyright in all works and inventions which relates to the business of ECDC (which includes, but is not limited to, methodologies and products) which arises within the course and scope of this services will be assigned to ECDC.

The Service Provider shall Provide ECDC the sole and exclusive right to alter and adapt the work.

The service provider shall indemnify ECDC against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by ECDC.

## **1.8 Ethics**

Any attempt by an interested Bidder to obtain confidential information, or enter into unlawful agreements with competitors or influence the various ECDC Procurement Committee's or the ECDC during the process of examining, evaluating and comparing Bids/Proposals or Proposals will lead to the rejection of its bid/quotation/proposal in its entirety.

The Bidder must declare any business or other interests it has with the ECDC or any employee of the ECDC, as per the declaration of interest form annexed hereto marked in Section D; failing which the Bidder shall be automatically disqualified from further participation in the Bid or call for proposals. The disqualification will be applicable at any stage of the bidding and / or engagement process.

## **1.9 Competition**

Bidders and their respective officers, employees and agents are prohibited from engaging in any collusive action with respect to the bidding process which serves to limit competition amongst bidders.

In general, the attention of bidders is drawn to Section 4(1) (b) (iii) of the Competition Act 1998 (Act No. 89 of 1998) (the Competition Act) that prohibits collusive bidding.

An agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder/s is / are or a contractor(s) was / were involved in collusive bidding.

If bidders have reason to believe that competition issues may arise from any submission of a response to this bid invitation they may make, they are encouraged to discuss their position with the competition authorities before submitting response.

Any correspondence or process of any kind between bidders and the competition authorities must be documented in the responses to this invitation to bid.

In this regard bidders are required to complete the Certificate of Independence Bid Determination, failing which the Bidder shall be automatically disqualified from further participation in the Bid or call for proposals. The disqualification will be applicable at any stage of the bidding and / or engagement process.

If a bidder (s) or contractor (s), based on reasonable grounds or evidence obtained by ECDC, has /have engaged in the restrictive practice referred to above, ECDC may refer the matter to the Competition Commission for investigation and possible imposition of an administrative penalty as contemplated in Section 59 of the Competition Act 89 of 1998.

If a bidder(s) or contractor(s) has / have been found guilty by the Competition Commission of the restrictive practice referred to above, ECDC may in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such an item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) for conducting business with the public sector for a period of not exceeding 10 (ten) years and / or claim damages from the bidder(s) / contractor(s) concerned.

#### **1.10 Cancellation of Bid Process**

The ECDC shall be entitled, within its sole and entire discretion, to cancel this Bid/Call for Proposals and/or Quotations at any time and shall notify the interested service providers accordingly. The ECDC shall in no way be liable for any damages whatsoever, including, without limitation, damages for loss of profit, in any way connected with the cancellation of this bid. The publication of the bid does not commit the ECDC to appoint any of the qualifying Bidders.

#### **1.11 Interviews**

In terms of the bid evaluation process short listed bidders may be interviewed. This will entail the bidder being invited to a venue as determined by the bid committee. All transport and accommodation costs incurred by the bidder will be for the bidders account and will not be reimbursed in any way. Failure to attend a scheduled interview will lead to immediate disqualification from the bid process. The ECDC reserves the right to appoint a bidder without conducting interviews.

#### **1.12 Contract award**

The successful bidder will be notified of the bid award in writing by the Procurement Department.

The acceptance of any proposal shall only be confirmed with the conclusion of a final written signed service level agreement or any other appropriate agreement between the ECDC and the successful Bidder, in terms of which the rights and duties of the parties are recorded, which agreement shall regulate the relationship between the ECDC and the Successful Bidder.

**2.**

As a guideline regarding the content of the service level agreement, the bidder is referred to the JBCC PBA (6.2 May 2018 edition).

**3.**

Until such time that an appropriate agreement has been concluded in writing between the ECDC and the successful Bidder, no rights shall be conferred nor shall any legitimate expectations be conferred to the successful Bidder to carry out the works or services provided for in this Bid.

**4.**

The ECDC, the Accounting Officer and the Bid Committee (as the case may be) does not bind itself to accept either the lowest (price), highest (points) or any other bid and reserves the right to accept the bid which it deems to be in the best interest of the Institution even if it implies a waiver by the ECDC, the Accounting Officer, or the Bid Committee, (as the case may be) of certain requirements which the ECDC, the Accounting Officer, the Bid Committee, (as the case may be) considers to be of minor importance

and not complied with by the bidder.

**5.**

The ECDC will not entertain any request of feedback before the final awarding of the contract.

**1.13 Supplier Due Diligence**

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

**1.14 Disclaimer**

This Bid document has been prepared for the purpose of providing information to interested Bidders. The provision of any additional information about the organization to Bidders, are disclosed and will be made available to enable the prospective Bidders to submit comprehensive proposals.

Interested Bidders are accordingly required to conduct their own due diligence in respect of the ECDC and its business operations and the nature and scope of the services required.

The ECDC accepts no responsibility for the fairness, accuracy or completeness of any information or opinions, for any errors, omissions or misstatements, negligent otherwise, made by any person in this Bid document or at any Compulsory briefing session.

The ECDC accepts no liability for any loss incurred by any person(s) due to events or action taken as a consequence of the preparation and dissemination of this bid request.

Except in cases of criminal negligence or wilful misconduct, and in the case of infringement the bidder shall not be liable to ECDC, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the bidder to pay penalties and/or damages to ECDC; and

The aggregate liability of the bidder to ECDC, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

**1.15 Contact and Communication**

A nominated official of the bidder(s) can make enquiries in writing, to the specified person on the table below. Bidder(s) must reduce all telephonic enquiries to writing and send to the above email address.

The delegated office of ECDC, Procurement Department, may communicate with Bidder(s) where clarity is sought in the bid proposal.

Any communication to an official or a person acting in an advisory capacity for ECDC in respect of the bid between the closing date and the award of the bid by the Bidder(s) is discouraged.

All communication between the Bidder(s) and ECDC must be done in writing.

Details	Bidding Procedure
Department	Procurement Department
Contact person	Ms N. Norexe
Telephone number	043 704 5600
E-mail address	<a href="mailto:tenders@ecdc.co.za">tenders@ecdc.co.za</a>



**HOTLINE DETAILS**

HOTLINE DETAILS	
Hotline Name:	ECDC Ethics & Fraud Hotline
Contact Number:	0800 116 665
WhatsApp Number:	0860 004 004
Dedicated Email Address:	<a href="mailto:ecdc@behonest.co.za">ecdc@behonest.co.za</a> <a href="mailto:aidc@behost.co.za">aidc@behost.co.za</a>
SMS Number:	48691
Free Post	BNT165, Advance Call Pty (Ltd), Brooklyn Square, 0075
Website Link	<a href="http://www.behonest.co.za">www.behonest.co.za</a>
Chat	<a href="http://www.behonest.co.za">www.behonest.co.za</a>

Whilst all due care has been taken in connection with the preparation of this bid, ECDC makes no representations or warranties that the content of the bid or any information communicated to or provided to Bidder(s) during the bidding process is, or will be, accurate, current or complete. ECDC, and its employees and advisors will not be liable with respect to any information communicated which may not be accurate, current or complete.

If Bidder(s) finds or reasonably believes it has found any discrepancy, ambiguity, error or inconsistency in this bid or any other information provided by ECDC (other than minor clerical matters), the Bidder(s) must promptly notify ECDC in writing of such discrepancy, ambiguity, error or inconsistency in order to give ECDC an opportunity to consider what corrective action is necessary (if any).

Any actual discrepancy, ambiguity, error or inconsistency in the bid or any other information provided by ECDC will, if possible, be corrected and provided to all Bidder(s) without attribution to the Bidder(s) who provided the written notice.

All persons (including Bidder(s)) obtaining or receiving the bid and any other information in connection with the Bid or the Tendering process must keep the contents of the Bid and other such information confidential, and not disclose or use the information except as required for the purpose of developing a proposal in response to this Bid. All persons (including Bidder(s)) obtaining or receiving the bid and any other information in connection with the Bid or the Tendering process must keep the contents of the Bid and other such information confidential, and not disclose or use the information except as required for the purpose of developing a proposal in response to this Bid.

## **T2.2. - Returnable schedules**

T2.2.1 – Declarations:

T2.2.2 – Functionality Evaluation Schedules

**ANNEXURE C: SUPPLIER INFORMATION/COMPANY ENTERPRISE QUESTIONNAIRE**

**Note:** Mandatory Requirement. Failure to complete and Sign this document will result in the bid being non responsive.

**Important Note:** The following particulars must be furnished. In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted.

<b>Legal Name of Bidder:</b> (Same as CSD)	
<b>Trading Name of Bidder:</b> (Same as CSD)	
<b>Registration Number</b> (Same as CSD)	
<b>Physical Address</b>	
<b>Postal Address</b>	
<b>Contact Person (of the JV if a the Bidder is a JV)</b>	
<b>Title/Position in the Firm</b>	
<b>Mobile Number (of the JV if a the Bidder is a JV)</b>	
<b>Bidder Telephone Number (of the JV if a the Bidder is a JV)</b>	
<b>Facsimile Number</b>	
<b>Email Address of Contact Person (of the JV if a the Bidder is a JV)</b>	
<b>Email Address of Bidder(of the JV if a the Bidder is a JV)</b>	
<b>VAT Registration Number</b> (Same as CSD)	
<b>Central Supplier Database Number</b>	<b>MAAA</b>

<b>CIDB Registration Number</b>			
<b>Are the Accredited Representative in South Africa for the Goods/Services/Works Offered?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes enclose Proof)	<b>Are you a foreign based supplier for the Goods/Services/Works Offered?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, answer the questionnaire Below)
<b>QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS</b>			
Is the Entity a resident of the Republic of South Africa (RSA)		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Does the Entity have a branch in the RSA?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Does the Entity have a permanent establishment in the RSA?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Does the Entity have any source of income in the RSA		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>If the answer is "No" to all of the above, then it is not a requirement to register for a Tax Compliance Status system pin code from the South African Revenue (SARS) and if not register</b>			
<b><u>VERY IMPORTANT</u></b>			
Where a person within the Bidding Entity is an Employee of the State, Bidder should			
a. submit a signed letter on a letter head from their Accounting Officer/Accounting Authority (AO/AA of the Government Institution where they are employed) stating that they are not prohibited from conducting business with the State in terms of Section 8 of the Public Administration Management Act, 2012 (Act No.11 of 2014- "The PFMA")			
b. submit a signed letter on a letter from their AO/AA granting permission to perform other remunerative work outside of their employment where the PAMA does not apply to such an employee			
<b>ECDC reserves the right to verify such information from their AO/AA</b>			

**SERVICE PROVIDER ACKNOWLEDGEMENT OF REQUEST AND TERMS AND CONDITIONS:**

I..... (NAME) HEREBY ACCEPT THE TERMS OF THIS REQUEST FOR BID AND ACKNOWLEDGE THAT I AM APPROPRIATELY DELEGATED TO RESPOND ON BEHALF OF (ATTACH DELEGATION OF AUTHORITY)

.....

**(NAME OF BIDDER).**

Print Name

Date

Designation

Signature

**Annexure D: Location**

1	Where is the Bidder's main office?	
	Other offices:	

**Annexure G: BIDDER'S DISCLOSURE (SBD4)**

**Note:** Mandatory Requirement. Failure to complete and Sign this document will result in the bid being non responsive.

**1. PURPOSE OF THE FORM**

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

**2. Bidder's declaration**

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest<sup>1</sup> in the enterprise, employed by the state? **YES/NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2. Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:

.....  
.....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:

.....  
.....

<sup>1</sup> the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

### 3 DECLARATION

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 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>2</sup> will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 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.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 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.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....  
Signature Date  
.....  
Position Name of bidder

<b>SIGNATURE OF BIDDER OF DELEGATED AUTHORITY</b>		<b>DATE</b>	
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<sup>2</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

**ANNEXURE H: STATEMENT OF CONSENT TO DATA PROCESSING**

**In terms of the provisions of the Protection of Personal Information Act, 2013 (Act No. 4 of 2013)**

1. I, \_\_\_\_\_(full names of the **client/applicant**),  
 Identity number \_\_\_\_\_(**“the applicant”**)  
 do hereby grant my consent to the Eastern Cape Development Corporation (“the ECDC”) and its appointed processor to process my personal data for the purpose of any or all of the undermentioned actions, being the legitimate reasons for processing and/or using my personal data.
2. I accept that my personal information will only be utilized for the purposes it was collected, that the information will only be retained for as long as is necessary and required by law, and that I have the right to view such information at any time, as well as requested correction or deletion of my personal information held by the ECDC.
3. I am aware that I may withdraw my consent at any time by using the relevant Data Subject Consent Withdrawal Form.
4. I herewith consent to the ECDC official / staff member / employee or agent collecting and having access to my personal information.
5. I expressly consent to the ECDC official / staff member / employee or agent to collect and process this information for the purpose of **considering my application for funding / leasing / employment alternatively for considering our bid document.**
6. I expressly consent to the ECDC or its official / staff member / employee or agent having access to my personal information contained in my application for lease, employment, funding, my bid document or any other administrative document required by the ECDC for processing.
7. I expressly consent to the ECDC or its official / staff member / employee or agent using my personal information to communicate with me in person / via telephone / email / video call / fax / WhatsApp / any form of social media.
8. I expressly consent that the ECDC or its official / staff member / employee or agent may discuss any of my personal information with any of its officials / staff members / employees or agents that may at any stage of my application be involved in considering same and forward any such information to any ECDC relevant committee or forum.
9. I expressly consent to the ECDC or its official / staff member / employee or agent **handing over any outstanding accounts to debt collection third parties (applicable to properties/development finance and business support unit).**
10. I expressly consent to the ECDC or its official / staff member / employee or agent handing over my personal information for purposes of verification of my credit profile or record, references or any purpose required in terms of the law.

<b>SIGNATURE of the DELEGATED AUTHORITY</b>		<b>DATE</b>	
---	--	-------------	--

**SBD 6.1**

**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022**

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

**NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022**

**1. GENERAL CONDITIONS**

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 **Principle applicable for this tender /quotation is:**

- a) The value of this bid is estimated not to exceed R50 000 000 (all applicable taxes included) and therefore the applicable preference point system for this tender is the **80/20** preference point system.

1.3 Points for this tender shall be awarded for:

- (a) Price; and  
(b) Specific Goals.

1.4 The maximum points for this tender are allocated as follows:

	<b>POINTS</b>
<b>PRICE</b>	<b>80</b>
<b>SPECIFIC GOALS</b>	
51% and above black owned enterprise	10
Eastern Cape Based Supplier	05
51 % and above woman owned enterprises.	03
51 % and above youth owned enterprises	02
<b>Total points for Price and SPECIFIC GOALS</b>	<b>100</b>

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

## 2. DEFINITIONS

“**tender**” means a written offer in the form determined by an organ of state in response to an invitation to

- (a) provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) “**price**” means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) “**rand value**” means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) “**tender for income-generating contracts**” means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) “**the Act**” means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

## 3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

### 3.1. POINTS AWARDED FOR PRICE

#### 3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc}
 \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\
 \\
 Ps = 80 \left( 1 - \frac{Pt - Pmin}{Pmin} \right) & \mathbf{or} & Ps = 90 \left( 1 - \frac{Pt - Pmin}{Pmin} \right)
 \end{array}$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

---

### 3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

#### 3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

**80/20**

**or**

**90/10**

$$Ps = 80 \left( 1 + \frac{Pt - Pmax}{Pmax} \right) \quad \text{or} \quad Ps = 90 \left( 1 + \frac{Pt - Pmax}{Pmax} \right)$$

Where

- Ps = Points scored for price of tender under consideration  
Pt = Price of tender under consideration  
Pmax = Price of highest acceptable tender

#### **4. POINTS AWARDED FOR SPECIFIC GOALS**

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (c) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
  - (d) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

**Table 1: Specific goals for the tender and points claimed are indicated per the table below.**

*(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.*

*Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)*

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
<b>SPECIFIC GOALS</b>				
51% and above black owned enterprises		10		
Eastern Cape Based Supplier		05		
51 % and above woman owned enterprises.		03		
51 % and above youth owned enterprises		02		

**DECLARATION WITH REGARD TO COMPANY/FIRM**

4.3. Name of company/firm.....

4.4. Company registration number: .....

4.5. TYPE OF COMPANY/ FIRM

- Partnership/Joint Venture / Consortium
- One-person business/sole propriety
- Close corporation
- Public Company
- Personal Liability Company
- (Pty) Limited
- Non-Profit Company
- State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;

- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
  - (a) disqualify the person from the tendering process;
  - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
  - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
  - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
  - (e) forward the matter for criminal prosecution, if deemed necessary

.....  
**SIGNATURE(S) OF TENDERER(S)**

**SURNAME AND NAME:** .....

**DATE:** .....

**ADDRESS:** .....  
 .....  
 .....  
 .....

**ANNEXURE K: SBD 6.2 – Declaration Certificate For Local Production And Content for Designated Sector**

**Note:** Mandatory Requirement. Failure to complete and Sign this document will result in the bid being non responsive.

**1.2. STAGE 1: EVALUATION Of LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS AND LOCAL CONTENT DECLARATION**

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably). Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the ECDC Supply Chain Management Policy, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition I) 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)].

**3. . General Conditions**

- 3.1. ECDC Supply Chain Management policy makes provision for the promotion of local production and content.
- 3.2. ECDC Supply Management Policy prescribes that in the case of designated sectors, tenders must be advertised with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 3.3. Where necessary, for tenders referred to in paragraph 1.2 above, a three stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage functionality with a minimum threshold of 60% and third stage of price and specific goals.
- 3.4. 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.
- 3.5. The local content (LC) as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = 1 - \left[ \frac{z}{aa} \right] \times 100$$

Where

- z imported content
- aa bid price excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date, one week (7 calendar days) prior to the closing date of the bid as indicated in paragraph 4.1 below.

**The SABS approved technical specification number SATS 1268:2011 is accessible on <http://www.thedti/industrialdevelopment/ip.jsp> at no cost**

3.6. A bid will be disqualified if this Declaration Certificate and the Annex C ( Local Content Declaration : Summary Schedule) are not submitted as part of the bid documentation;

y is the bid price in Rand excluding value added tax (VAT) Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated in paragraph 4.1 below.

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

4. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid: Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated in table 1 below.

Bidder that fails to meet the minimum stipulated threshold for local production and content will be unacceptable and will not proceed to stage 2.

**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**

**Table 1**

Designated Sector /Sub-sector/ Industries	Minimum threshold for local content

For more details on the designated sectors for local production and their minimum threshold and any amendment from time to time, please visit the following website [http://www.thedt.gov.za/industrial\\_development/ip.jsp](http://www.thedt.gov.za/industrial_development/ip.jsp)

2. **Does** any portion of the services, works or goods offered have any imported content?  
(Tick Applicable Box)

<b>YES</b>		<b>NO</b>	
------------	--	-----------	--

2.1. If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency at 12:00 on the date, one week (7 calendar days) prior to the closing date of the bid.

The relevant rates of exchange information is accessible on [www.reservebank.co.za](http://www.reservebank.co.za).

Indicate the rate(s) of exchange against the appropriate currency in the table below:

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

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

**3. Where, after the award of a Bid, challenges are experienced in the meeting the stipulated minimum threshold for local content, the DTI must be informed accordingly in order for the DTI to verify and consultation with the AO/AA provide directive in this regard.**

.....  
SIGNATURE(S) OF BIDDERS(S)

DATE: .....

ADDRESS: .....

.....

.....

WITNESSES:

1.....

2.....

**LOCAL CONTENT DECLARATION 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)**

**IN RESPECT OF BID No.**

.....

**ISSUED BY:** (Procurement Authority / Name of Institution):

.....  
.....

**NB**

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.

Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on [http://www.thdti.gov.za/industrial\\_development/ip.jsp](http://www.thdti.gov.za/industrial_development/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.**

Declaration D and E should be kept by the Bidder 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:

The facts contained herein are within my own personal knowledge.

I have satisfied myself that

- 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

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

Bid price, excluding VAT (y)	R
Imported content (x)	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 / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011

(e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

**NAME:** \_\_\_\_\_

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

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

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

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

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

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

The below listed declarations are attached in the next three pages that follow;

- **Declaration C SATS 1286.2011**
  - Local Content Declaration – Summary Schedule
- **Declaration D SATS 1286.2011**
  - Imported Content Declaration – Supporting Schedule to declaration C
- **Declaration E SATS 1286.2011**
  - Local Content Declaration \_- Supporting Schedule to declaration C
- Bidders should first complete annexure D, after completing annexure D, bidders should complete annexure E and then consolidate the information on annexure C.
- Annexure C should be submitted with the with the bid documentation on the closing date in order to substantiate the declaration made on annexure J.
- The successful bidder is required to continuously update annexures C, D and E with the actual for the duration of the contract.
- Bidders should obtain copies of certificates of trading the subject materials from manufactures/suppliers and attach them in the bid document in order to substantiate annexure J above.

**NB: Tenderers to complete and sign annexures C, D and E even if they claim 100% of local content.**

**Templates of Declarations C, D and E follow:**

## Annex C

### Local Content Declaration - Summary Schedule

<b>Bid No.</b>	ECDC/INFRA/29/012024			<b>Note:</b> VAT to be excluded from all calculations
<b>Bid description:</b>	ALTERATIONS AND REFURBISHMENT OF CLAINLEGH COURT IN QUEENSTOWN			
<b>Designated product(s)</b>	Reinforcement, roofsheets, upvc and eletrical cables			
<b>Tender Authority:</b>	ECDC			
<b>Bid Entity name:</b>				
<b>Bid Exchange Rate:</b>	Pula <input style="width: 50px;" type="text"/>	EU <input style="width: 50px;" type="text"/>	GBP <input style="width: 50px;" type="text"/>	
<b>Specified local content %</b>				

Bid item no's	List of items	Calculation of local content						Bid summary			
		Bid price - each (excl VAT)	Exempted imported value	Bid value- net of exempted imported content	Imported value	Local value	Local content % (per item)	Bid Qty	Total Bid value	Total exempted imported content	Total Imported content
<i>item 8, page 48</i>	10mm/12mm/16mm Steel Diameter Bars							4 Tonnes			
<i>item 14, page 49</i>	Fabric Reinforcement Mesh							1020 m2			
<i>item 1, page 68</i>	60 mm steel tubes for balustarde and bolts							42 m			
<i>item 24, page 89</i>	100 mm steel rectangular tubes for carport							100m			
<i>item 46-49, page 92</i>	Fence ingluding gates and key post							45m			
<i>item 1, page 55</i>	0,58mm Thick Metrolite Roofing Solutions IBR							1020m2			
<i>item 2, page 68</i>	Steel door frames							60			
<i>item 1, 2 and 9, page 48</i>	Cement							1000 bags			
<i>item 14, page 56</i>	Steel Burglar doors and vehicle gate							146			
<i>item 6-18, page 69 and 70</i>	Aluminium windows										
<i>item 18-52, page 77</i>	Plumbing pipes							340			
<i>item 1, page 81</i>	Electrical supply cables and fitting							700m			

<b>Signature of Bidder</b>		<b>Total bid value R</b>	
		<b>Total Exempt imported content R</b>	
		<b>Total bid value net of exempt imported content R</b>	
		<b>Total Imported content R</b>	
		<b>Total local content R</b>	
<b>Date:</b>		<b>Average local content % of tender</b>	<b>%</b>

## Annex D

### Imported Content Declaration - Supporting Schedule to Annex C

(D1) Tender No.					
(D2) Tender description:					
(D3) Designated Products:					
(D4) Tender Authority:					
(D5) Tendering Entity name:					
(D6) Tender Exchange Rate:	Pula		EU		GBP

Note: VAT to be excluded from all calculations

#### A. Exempted imported content

Calculation of imported content										Summary	
Tender item no's	Description of imported content	Local supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Exchange Rate	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Exempted imported value
(D7)	(D8)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)
(D19) Total exempt imported value										R	0

This total must correspond with Annex C - C 21

#### B. Imported directly by the Tenderer

Calculation of imported content										Summary	
Tender item no's	Description of imported content	Unit of measure	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Total imported value
(D20)	(D21)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)
(D32) Total imported value by tenderer										R	0

#### C. Imported by a 3rd party and

Calculation of imported content										Summary	
Description of imported content	Unit of measure	Local supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Quantity imported	Total imported value
(D33)	(D34)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
(D45) Total imported value by 3rd party										R	0

#### D. Other foreign currency pay

Calculation of foreign currency payments					Summary of payments	
Type of payment	Local supplier	Overseas beneficiary	Foreign currency value paid	Tender Rate of Exchange	Local value of payments	
(D46)	(D47)	(D48)	(D49)	(D50)	(D51)	
(D52) Total of foreign currency payments declared by tenderer and/or 3rd party						

Signature of tenderer from Annex B \_\_\_\_\_

(D53) Total of imported content & foreign currency payments - (D32), (D45) & (D52) above R 0

Date: \_\_\_\_\_

This total must correspond with Annex C - C 23



## **Guidance Document for the Calculation of Local Content**

### **1. DEFINITIONS**

Unless explicitly provided in this guideline, the definitions given in SATS 1286:2011 apply.

### **2. GENERAL**

#### **2.1. Introduction**

This guideline provides tenderers with a detailed description of how to calculate local content of products (goods, services and works) by components/material/services and enables them to keep an updated record for verification requirements as per the SATS 1286:2011 Annexure A and B.

The guideline consists of two parts, namely:

- a written guideline; and
- three declarations that must be completed:
  - Declaration C: “Local Content Declaration – Summary Schedule” (see Annexure C);
  - Declaration D: “Imported Content Declaration – Supporting Schedule to Annex C” (see Annexure D); and
  - Declaration E: “Local Content Declaration – Supporting Schedule to Annex C” (see Annexure E).

The guidelines and declarations should be used by tenderers when preparing a tender. A tenderer must complete Declarations D and E, and consolidate the information on Declaration C.

Annexure C must be submitted with the tender by the closing date and time as determined by the Tender Authority. The Tender Authority reserves the right to request that Declarations D and E also be submitted.

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

#### **NOTE:**

Annexure A is a note to the purchaser in SATS 1286:2011; and  
Annexure B is the Local Content Declaration IN SATS 1286:2011.

#### **2.2. What is local content?**

According to SATS 1286:2011, the local content of a product is the tender price less the value of imported content, expressed as a percentage. It is, therefore, necessary to first compute the imported value of a product to determine the local content of a product.

#### **2.3. Categories: Imported and Local Content**

The tenderer must differentiate between imported content and local content.

- Imported content of a product by components/material/services is separated into two categories, namely:
- products imported directly by the tenderer; and
  - products imported by a third party and supplied to the tenderer.

### **2.3.1. Imported Content**

Identify the imported content, if any, by value for products by component/material/services. In the case of components/materials/services sourced from a South African manufacturer, agent, supplier or subcontractor (i.e. third party), obtain that information and Declaration D from the third party.

Calculate the imported content of components/materials/services to be used in the manufacture of the total quantity of the products for which the tender is to be submitted.

As stated in clause 3.2.4 of SATS 1286:2011: "If information on the origin of components, parts or materials is not available, it will be deemed to be imported content."

#### **2.3.1.1 Imported directly by the tenderer:**

When the tenderer import products directly, the onus is on the tenderer to provide evidence of any components/materials/services that were procured from a non-domestic source. The evidence should be verifiable and pertain to the tender as a whole. Typical evidence will include commercial invoices, bills of entry, etc.

When the tenderer procures imported services such as project management, design, testing, marketing, etc. and makes royalty and lease payments, such payments relating to the tender must be included when calculating imported content.

#### **2.3.1.2. Imported by a third party and supplied to the tenderer:**

When the tenderer supplies components/material/services that are imported by any third party (for example, a domestic manufacturer, agent, supplier or subcontractor in the supply chain), the onus is on the tenderer to obtain verifiable evidence from the third party.

The tenderer must obtain Declaration D from all third parties for the related tender. The third party must be requested by the tenderer to continuously update Declaration D. Typical evidence of imported content will include commercial invoices, bills of entry etc.

When a third party procures imported services such as project management, design, testing, marketing etc. and makes royalty and lease payments, such payments relating to the tender must be included when calculating imported content.

#### **2.3.1.3. Exempt Imported Content:**

Exemptions, if any, are granted by the Department of Trade and Industry (**the dti**). Evidence of the exemptions must be provided and included in Annexure D.

### **2.3.2. Local Content**

Identify and calculate the local content, by value for products by components/materials/services to be used in the manufacture of the total quantity of the products.

### **3. ANNEXURE C**

#### **3.1. Guidelines for completing Annexure C: Local Content Declaration –**

##### **Summary Schedule**

*Note: The paragraph numbers correspond to the numbers in Annexure C.*

##### **C1. Tender Number**

Supply the tender number that is specified on the specific tender documentation.

##### **C2. Tender description**

Supply the tender description that is specified on the specific tender documentation.

##### **C3. Designated products**

Supply the details of the products that are designated in terms of this tender (i.e. buses).

##### **C4. Tender Authority**

Supply the name of the tender authority.

##### **C5. Tendering Entity name**

Provide the tendering entity name (for example, Anybody Bus Builders (Pty) Ltd).

##### **C6. Tender Exchange Rate**

Provide the exchange rate used for this tender, as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

##### **C7. Specified local content %**

Provide the specified minimum local content requirement for the tender (i.e. 80%), as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MDB) 6.2.

##### **C8. Tender item number**

Provide the tender item number(s) of the products that have a local content requirement as per the tender specification.

##### **C9. List of items**

Provide a list of the item(s) corresponding with the tender item number.  
This may be a short description or a brand name.

##### **Calculation of local content**

##### **C10. Tender price**

Provide the unit tender price of each item excluding VAT.

##### **C11. Exempted imported content**

Provide the ZAR value of the exempted imported content for each item, if applicable. These value(s) must correspond with the value(s) of column D16 on Annexure D.

##### **C12. Tender value net of exempted imported content**

Provide the net tender value of the item, if applicable, by deducting the exempted imported content (C11) from the tender price (C10).

**C13. Imported value**

Provide the ZAR value of the items' imported content.

**C14. Local value**

Provide the local value of the item by deducting the Imported value (C13) from the net tender value (C12).

**C15. Local content percentage (per item)**

Provide the local content percentage of the item(s) by dividing the local value (C14) by the net tender value (C12) as per the local content formula in SATS 1286.

**Tender Summary**

**C16. Tender quantity**

Provide the tender quantity for each item number as per the tender specification.

**C17. Total tender value**

Provide the total tender value by multiplying the tender quantity (C16) by the tender price (C10).

**C18. Total exempted imported content**

Provide the total exempted imported content by multiplying the tender quantity (C16) by the exempted imported content (C11). These values must correspond with the values of column D18 on Annexure D.

**C19. Total imported content**

Provide the total imported content of each item by multiplying the tender quantity (C16) by the imported value (C13).

**C20. Total tender value**

Total tender value is the sum of the values in column C17.

**C21. Total exempted imported content**

Total exempted imported content is the sum of the values in column C18. This value must correspond with the value of D19 on Annexure D.

**C22. Total tender value net of exempted imported content**

The total tender value net of exempt imported content is the total tender value (C20) less the total exempted imported content (C21).

**C23. Total imported content**

Total imported content is the sum of the values in column C19. This value must correspond with the value of D53 on Annexure D.

**C24. Total local content**

Total local content is the total tender value net of exempted imported content (C22) less the total imported content (C23). This value must correspond with the value of E13 on Annexure E.

**C25. Average local content percentage of tender**

The average local content percentage of tender is calculated by dividing total local content (C24) by the total tender value net of exempted imported content (C22).

**4. ANNEXURE D**

#### **4.1. Guidelines for completing Annexure D: “Imported Content Declaration – Supporting Schedule to Annexure C”**

*Note: The paragraph numbers correspond to the numbers in Annexure D.*

##### **D1. Tender number**

Supply the tender number that is specified on the specific tender documentation.

##### **D2. Tender description**

Supply the tender description that is specified on the specific tender documentation.

##### **D3. Designated products**

Supply the details of the products that are designated in terms of this tender (i.e. buses).

##### **D4. Tender authority**

Supply the name of the tender authority.

##### **D5. Tendering entity name**

Provide the tendering entity name (i.e. Anybody Bus Builders (Pty) Ltd).

##### **D6. Tender exchange rate**

Provide the exchange rate used for this tender, as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

#### **Table A. Exempted Imported Content**

##### **D7. Tender item number**

Provide the tender item number(s) of the product(s) that have imported content.

##### **D8. Description of imported content**

Provide a list of the exempted imported product(s), if any, as specified in the tender.

##### **D9. Local supplier**

Provide the name of the local supplier(s) supplying the imported product(s).

##### **D10. Overseas supplier**

Provide the name(s) of the overseas supplier(s) supplying the exempted imported product(s).

##### **D11. Imported value as per commercial invoice**

Provide the foreign currency value of the exempted imported product(s) disclosed in the commercial invoice accepted by the South African Revenue Service (SARS).

##### **D12. Tender exchange rate**

Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

##### **D13. Local value of imports**

Convert the value of the exempted imported content as per commercial invoice (D11) into the ZAR value by using the tender exchange rate (D12) disclosed in the tender documentation.

**D14. Freight costs to port of entry**

Provide the freight costs to the South African Port of the exempted imported item.

**D15. All locally incurred landing costs and duties**

Provide all landing costs including customs and excise duty for the exempted imported product(s) as stipulated in the SATS 1286:2011.

**D16. Total landed costs excluding VAT**

Provide the total landed costs (excluding VAT) for each item imported by adding the corresponding item values in columns D13, D14 and D15. These values must be transferred to column C11 on Annexure C.

**D17. Tender quantity**

Provide the tender quantity of the exempted imported products as per the tender specification.

**D18. Exempted imported value**

Provide the imported value for each of the exempted imported product(s) by multiplying the total landed cost (excl. VAT) (D16) by the tender quantity (D17). The values in column D18 must correspond with the values of column C18 of Annexure C.

**D19. Total exempted imported value**

The total exempted imported value is the sum of the values in column D18. This total must correspond with the value of C21 on Annexure C.

**Table B. Imported Directly By Tenderer**

**D20. Tender item numbers**

Provide the tender item number(s) of the product(s) that have imported content.

**D21. Description of imported content:**

Provide a list of the product(s) imported directly by tender as specified in the tender documentation.

**D22. Unit of measure**

Provide the unit of measure for the product(s) imported directly by the tenderer.

**D23. Overseas supplier**

Provide the name(s) of the overseas supplier(s) supplying the imported product(s).

**D24. Imported value as per commercial Invoice**

Provide the foreign currency value of the product(s) imported directly by tenderer disclosed in the commercial invoice accepted by the South African Revenue Service (SARS).

**D25. Tender rate of exchange**

Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

**D26. Local value of imports**

Convert the value of the product(s) imported directly by the tenderer as per commercial invoice (D24) into the ZAR value by using the tender exchange rate (D25) disclosed in the tender documentation.

**D27. Freight costs to port of entry**

Provide the freight costs to the South African Port of the product(s) imported directly by the tenderer.

**D28. All locally incurred landing costs and duties**

Provide all landing costs including customs and excise duty for the product(s) imported directly by the tenderer as stipulated in the SATS 1286:2011.

**D29. Total landed costs excluding VAT**

Provide the total landed costs (excluding VAT) for each item imported directly by the tenderer by adding the corresponding item values in columns D26, D27 and D28.

**D30. Tender quantity**

Provide the tender quantity of the product(s) imported directly by the tenderer as per the tender specification.

**D31. Total imported value**

Provide the total imported value for each of the product(s) imported directly by the tenderer by multiplying the total landed cost (excl. VAT) (D29) by the tender quantity (D30).

**D32. Total imported value by tenderer**

The total value of imports by the tenderer is the sum of the values in column D31.

**Table C. Imported by Third Party and Supplied to the Tenderer**

**D33. Description of imported content**

Provide a list of the product(s) imported by the third party and supplied to the tenderer as specified in the tender documentation.

**D34. Unit of measure**

Provide the unit of measure for the product(s) imported by the third party and supplied to tenderer as disclosed in the commercial invoice.

**D35. Local supplier**

Provide the name of the local supplier(s) supplying the imported product(s).

**D36. Overseas supplier**

Provide the name(s) of the overseas supplier(s) supplying the imported products.

**D37. Imported value as per commercial invoice**

Provide the foreign currency value of the product(s) imported by the third party and supplied to the tenderer disclosed in the commercial invoice accepted by SARS.

**D38. Tender rate of exchange**

Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

**D39. Local value of imports**

Convert the value of the product(s) imported by the third party as per commercial invoice (D37) into the ZAR value by using the tender exchange rate (D38) disclosed in the tender documentation.

**D40. Freight costs to port of entry**

Provide the freight costs to the South African Port of the product(s) imported by third party and supplied to

the tenderer.

**D41. All locally incurred landing costs and duties**

Provide all landing costs including customs and excise duty for the product(s) imported by third party and supplied to the tenderer as stipulated in the SATS 1286:2011.

**D42. Total landed costs excluding VAT**

Provide the total landed costs (excluding VAT) for each product imported by third party and supplied to the tenderer by adding the corresponding item values in columns D39, D40 and D41.

**D43. Quantity imported**

Provide the quantity of each product(s) imported by third party and supplied to the tenderer for the tender.

**D44. Total imported value**

Provide the total imported value of the product(s) imported by third party and supplied to the tenderer by multiplying the total landed cost (D42) by the quantity imported (D43).

**D45. Total imported value by third party**

The total imported value from the third party is the sum of the values in column D44.

**Table D. Other Foreign Currency Payments**

**D46. Type of payment**

Provide the type of foreign currency payment. (i.e. royalty payment for use of patent, annual licence fee, etc.).

**D47. Local supplier making the payment**

Provide the name of the local supplier making the payment.

**D48. Overseas beneficiary**

Provide the name of the overseas beneficiary.

**D49. Foreign currency value paid**

Provide the value of the listed payment(s) in their foreign currency.

**D50. Tender rate of exchange**

Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

**D51. Local value of payments**

Provide the local value of each payment by multiplying the foreign currency value paid (D49) by the tender rate of exchange (D50).

**D52. Total of foreign currency payments declared by tenderer and/or third party**

The total of foreign currency payments declared by tenderer and/or a third party is the sum of the values in column D51.

**D53. Total of imported content and foreign currency payment**

The total imported content and foreign currency payment is the sum of the values in column D32, D45 and

D52. This value must correspond with the value of C23 on Annexure C.

## **5. ANNEXURE E**

### **5.1. Guidelines to completing Annexure E: “Local Content Declaration- Supporting Schedule to Annexure C”**

*The paragraph numbers correspond to the numbers in Annexure E*

#### **E1. Tender number**

Supply the tender number that is specified on the specific tender documentation.

#### **E2. Tender description**

Supply the tender description that is specified on the specific tender documentation.

#### **E3. Designated products**

Supply the details of the products that are designated in terms of this tender (for example, buses/canned vegetables).

#### **E4. Tender authority**

Supply the name of the tender authority.

#### **E5. Tendering entity name**

Provide the tendering entity name (for example, Anybody Bus Builders (Pty) Ltd) Ltd).

### **Local Goods, Services and Works**

#### **E6. Description of items purchased**

Provide a description of the items purchased locally in the space provided.

#### **E7. Local supplier**

Provide the name of the local supplier that corresponds to the item listed in column E6.

#### **E8. Value**

Provide the total value of the item purchased in column E6.

#### **E9. Total local products (Goods, Services and Works)**

Total local products (goods, services and works) is the sum of the values in E8.

#### **E10. Manpower costs:**

Provide the total of all the labour costs accruing only to the tenderer (i.e. not the suppliers to tenderer).

#### **E11. Factory overheads:**

Provide the total of all the factory overheads including rental, depreciation and amortisation for local and imported capital goods, utility costs and consumables. (Consumables are goods used by individuals and businesses that must be replaced regularly because they wear out or are used up. Consumables can also be defined as the components of an end product that are used up or permanently altered in the process of manufacturing, such as basic chemicals.)

#### **E12. Administration overheads and mark-up:**

Provide the total of all the administration overheads, including marketing, insurance, financing, interest and mark-up costs.

**E13. Total local content:**

The total local content is the sum of the values of E9, E10, E11 and E12. This total must correspond with C24 of Annexure C.

## **T2.2 .2- Functionality Evaluation Schedules**

**T2.2.2a: SIMILAR PROJECTS COMPLETED SUCCESSFULLY WITH REFERENCE LETTERS**

**Note:** Mandatory Returnable Schedule. Failure to submit as required will result in the bid being nonresponsive.

<b>Project title:</b>	<b>ALTERATIONS AND RERFUBSHMENT OF CLAINLEIGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/01202429/012024</b>

**Bidders are required to provide a schedule of similar work in complexity that was successfully completed with contactable references as per the attached forms below.**

**OR**

**Submit a reference letter that indicates the following**

*Signature of the Client*

*On Clients Letter Head or Client Stamp*

*Company Name, contact person, contact details (telephone number and email etc)*

*Value of the Project*

*Scope of works carried out*

*Works have been completed on time/within stipulated contract period*

*Good or better workmanship*

Reference No 1



<b>Project title:</b>	<b>ALTERATIONS AND REFURBISHMENT OF CLIANLIEGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/012024</b>

Sir/Madam,

We are in the process of evaluating \_\_\_\_\_ for the above project.

**Tenderers Company Name**

They have listed you as a reference. Please evaluate the contractor's performance on the criteria listed below by ticking the appropriate boxes. This form to be submitted with the bid. If you have any questions, please do not hesitate to contact us.

NAME OF EMPLOYER	NAME OF PROJECT	CONTRACT PERIOD	VALUE OF WORK

**1. KNOWLEDGEABLE IN THE FIELD IN WHICH THIS BID RELATES TO**

<b>EXCELLENT</b>	<b>VERY GOOD</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
5	4	3	2	1

**2. TIME PERFORMANCE**

<b>EXCELLENT</b>	<b>VERY GOOD</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
5	4	3	2	1

**3. FINANCIAL PERFORMANCE**

<b>EXCELLENT</b>	<b>VERY GOOD</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
5	4	3	2	1

**4. WAS THE WORKS COMPLETED SATISFACTORY?**

YES / NO (please circle)

If no, please provide details below:

\_\_\_\_\_

\_\_\_\_\_

Project Manager/Principal Agent: \_\_\_\_\_ **Place company stamp below:**

Tel: \_\_\_\_\_

E-mail Address \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Reference No 2



<b>Project title:</b>	<b>ALTERATIONS AND REFURBISHMENT OF CLIANLIEGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/012024</b>

Sir/Madam,

We are in the process of evaluating \_\_\_\_\_ for the above project.

**Tenderers Company Name**

They have listed you as a reference. Please evaluate the contractor's performance on the criteria listed below by ticking the appropriate boxes. This form to be submitted with the bid. If you have any questions, please do not hesitate to contact us.

NAME OF EMPLOYER	NAME OF PROJECT	CONTRACT PERIOD	VALUE OF WORK

**1. KNOWLEDGEABLE IN THE FIELD IN WHICH THIS BID RELATES TO**

<b>EXCELLENT</b>	<b>VERY GOOD</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
5	4	3	2	1

**2. TIME PERFORMANCE**

<b>EXCELLENT</b>	<b>VERY GOOD</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
5	4	3	2	1

**3. FINANCIAL PERFORMANCE**

<b>EXCELLENT</b>	<b>VERY GOOD</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
5	4	3	2	1

**4. WAS THE WORKS COMPLETED SATISFACTORY?**

YES / NO (please circle)

If no, please provide details below:

\_\_\_\_\_

\_\_\_\_\_

Project Manager/Principal Agent: \_\_\_\_\_ Place company stamp below:

Tel: \_\_\_\_\_

E-mail Address \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Reference No 3



<b>Project title:</b>	<b>ALTERATIONS AND REFURBISHMENT OF CLIANLIEGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/012024</b>

Sir/Madam,

We are in the process of evaluating \_\_\_\_\_ for the above project.

**Tenderers Company Name**

They have listed you as a reference. Please evaluate the contractor's performance on the criteria listed below by ticking the appropriate boxes. This form to be submitted with the bid. If you have any questions, please do not hesitate to contact us.

NAME OF EMPLOYER	NAME OF PROJECT	CONTRACT PERIOD	VALUE OF WORK

**1. KNOWLEDGEABLE IN THE FIELD IN WHICH THIS BID RELATES TO**

<b>EXCELLENT</b>	<b>VERY GOOD</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
5	4	3	2	1

**2. TIME PERFORMANCE**

<b>EXCELLENT</b>	<b>VERY GOOD</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
5	4	3	2	1

**3. FINANCIAL PERFORMANCE**

<b>EXCELLENT</b>	<b>VERY GOOD</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
5	4	3	2	1

**4. WAS THE WORKS COMPLETED SATISFACTORY?**

YES / NO (please circle)

If no, please provide details below:

\_\_\_\_\_

\_\_\_\_\_

Project Manager/Principal Agent: \_\_\_\_\_ Place company stamp below:

Tel: \_\_\_\_\_

E-mail Address \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Reference No 4



<b>Project title:</b>	<b>ALTERATIONS AND REFURBISHMENT OF CLIANLIEGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/012024</b>

Sir/Madam,

We are in the process of evaluating \_\_\_\_\_ for the above project.

**Tenderers Company Name**

They have listed you as a reference. Please evaluate the contractor's performance on the criteria listed below by ticking the appropriate boxes. This form to be submitted with the bid. If you have any questions, please do not hesitate to contact us.

NAME OF EMPLOYER	NAME OF PROJECT	CONTRACT PERIOD	VALUE OF WORK

**1. KNOWLEDGEABLE IN THE FIELD IN WHICH THIS BID RELATES TO**

<b>EXCELLENT</b>	<b>VERY GOOD</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>

**2. TIME PERFORMANCE**

<b>EXCELLENT</b>	<b>VERY GOOD</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>

**3. FINANCIAL PERFORMANCE**

<b>EXCELLENT</b>	<b>VERY GOOD</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>

**4. WAS THE WORKS COMPLETED SATISFACTORY?**

YES / NO (please circle)

If no, please provide details below:

\_\_\_\_\_

\_\_\_\_\_

Project Manager/Principal Agent: \_\_\_\_\_ **Place company stamp below:**

Tel: \_\_\_\_\_

E-mail Address \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Reference No 5



<b>Project title:</b>	<b>ALTERATIONS AND REFURBISHMENT OF CLIANLIEGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/012024</b>

Sir/Madam,

We are in the process of evaluating \_\_\_\_\_ for the above project.

**Tenderers Company Name**

They have listed you as a reference. Please evaluate the contractor's performance on the criteria listed below by ticking the appropriate boxes. This form to be submitted with the bid. If you have any questions, please do not hesitate to contact us.

NAME OF EMPLOYER	NAME OF PROJECT	CONTRACT PERIOD	VALUE OF WORK

**1. KNOWLEDGEABLE IN THE FIELD IN WHICH THIS BID RELATES TO**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

**2. TIME PERFORMANCE**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

**3. FINANCIAL PERFORMANCE**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

**4. WAS THE WORKS COMPLETED SATISFACTORY?**

YES / NO (please circle)

If no, please provide details below:

\_\_\_\_\_

\_\_\_\_\_

Project Manager/Principal Agent: \_\_\_\_\_ Place company stamp below:

Tel: \_\_\_\_\_

E-mail Address \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### T2.2.2 b – Construction Method Statement

<b>Project title:</b>	<b>ALTERATIONS AND RERFUBSHMENT OF CLAINLEIGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/01202429/012024</b>

### Work Organization Program and Scheduling

**Bidder to provide a Detailed Gantt Chart (Works Breakdown Structure Program) Showing:**

- **Summary tasks**
- **Indicating a Critical Path**
- **Time-lines within the project period**

Work organization program and scheduling to be attached here

**T2.2.2 c – Key Personnel Qualifications  
(Construction Manager)**

<b>Project title:</b>	<b>ALTERATIONS AND RERFUBSHMENT OF CLAINLEIGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/01202429/012024</b>

Attach document here

**T2.2.2 d – Key Personnel Qualifications  
(Construction Supervisor)**

<b>Project title:</b>	<b>ALTERATIONS AND RERFUBSHMENT OF CLAINLEIGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/01202429/012024</b>

Attach document here

**T2.2.2 e – Key Personnel Qualifications  
(OHS Safety Officer)**

<b>Project title:</b>	<b>ALTERATIONS AND RERFUBSHMENT OF CLAINLEIGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/01202429/012024</b>

Attach document here

**T2.2.2 f – Key Personnel Qualifications  
(Skilled Staff)**

<b>Project title:</b>	<b>ALTERATIONS AND RERFUBSHMENT OF CLAINLEIGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/012024</b>

Attach document here

**T2.2.2 g – Key Personnel Experience**  
**(Semi-Skilled Support Staff)**

<b>Project title:</b>	<b>ALTERATIONS AND RERFUBSHMENT OF CLAINLEIGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/012024</b>

Attach document here

**T2.2.2 h – Contactable References**

<b>Project title:</b>	<b>ALTERATIONS AND RERFUBSHMENT OF CLAINLEIGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/012024</b>

**Provide a schedule of contactable references**

Attach document here

**T2.2.2 i – Scope of Works and Detailed Specifications**

**Note:** Mandatory Returnable Schedule. Failure to submit as required will result in the bid being non-responsive.

<b>Project title:</b>	<b>ALTERATIONS AND RERFUBSHMENT OF CLAINLEIGH COURT IN QUEENSTOWN</b>
<b>Bid No:</b>	<b>ECDC/INFRA/29/012024</b>

**Tenderer herewith confirms by signing below that he has read and understand the full scope of works and associated detailed specifications of this contract.**

**The client will not entertain any additional amount claimed due to a lack of understanding the full spectrum of the works.**

Company Name:

.....

Tenderer

Name:.....Signature.....Date.....

Company Authorised/

Accountable Person Name:.....Signature.....Date.....

Company Stamp:

## **THE CONTRACT**

### **Part C1: Agreements and Contract data**

C1.1 - Form of offer and acceptance

C1.2 - Contract data

C1.3 - Form of Guarantee

## C1.1 - Form of offer and acceptance

**Annexure L:**

**C.1.1 FORM OF OFFER AND ACCEPTANCE OFFER**

**Note:** Mandatory Requirement. Failure to complete and Sign this document will result in the bid being non responsive.

**OFFER**

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

**PROJECT: ALTERATIONS AND RERFUBSHMENT OF CLAINLEIGH COURT IN QUEENSTOWN**

**Bid No : ECDC/INFRA/29/012024**

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 authorized, 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:**

**R** ..... (in figures)

.....

.....

.....

**Rand (in words)**

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the Tender data, whereupon the tenderer becomes the party named as the Service Provider in the conditions of Contract identified in the Contract Data.

**THIS OFFER IS MADE BY THE FOLLOWING LEGAL ENTITY:** (cross out block which is not applicable)

Company or close corporation:  
 .....  
 And: whose registration number is:  
 .....  
 And: whose income tax reference number is:  
 .....

Trading under the name and style of:  
 .....

**AND WHO IS:**  
 Represented herein, and who is duly authorized to do so,  
 by:  
 Mr/Mrs/Ms:  
 .....  
 In his/her capacity as:  
 .....  
 .....

**Note:**  
 A resolution/power of attorney, signed by all the directors/ members/ partners of the legal entity must accompany this offer, authorizing the representative to make this offer.

**SIGNED FOR THE TENDERER:**

<b>Name of Representative</b>	<b>Signature</b>	<b>Date</b>

**SIGNED BY WITNESS:**

<b>Name of Representative</b>	<b>Signature</b>	<b>Date</b>

The tenderer elects as its *domicilliumcitandi et executandi* in the Republic of South Africa, where any and all legal notices may be served, as (physical address)  
 .....

.....

.....

.....

Other contact details of the tenderer are:

Telephone no

.....

Cellular phone no

.....

Fax no

.....

Postal address

.....

Banker

.....

Branch

.....

**ACCEPTANCE**

By signing this part of this form of offer and acceptance, ECDC accepts the bidder's offer. Acceptance of the bidder's offer shall form an agreement between the ECDC and the bidder 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 the contract to be concluded.

- Agreements and Contract Data, (which includes this Agreement)
- Pricing data
- Scope of work.
- Site information and drawings

and documents or parts thereof, which may be incorporated by reference into the volumes above.

Deviations from and amendments to the documents listed in the bid data and any addenda thereto as listed in the bid schedules as well as any changes to the terms of the offer agreed by the bidder and ECDC 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 agreed by both parties.

The bidder shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the ECDC's Legal Department to arrange documentation to be provided in terms of the conditions of contract identified in the contract. 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 bidder

receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the bidder 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.

**Signed for the ECDC:**

<b>Name of representative</b>	<b>Capacity</b>	<b>Date</b>
..... ..... ..... .....		
<b>Address</b>	<b>Signature</b>	

**Witnessed by:**

<b>Name of witness</b>	<b>Signature</b>	<b>Date</b>

**Schedule of deviations**

Notes:

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
2. A Tenderer’s covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid becomes the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender document and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.
4. Any change or addition to the tender document arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.

1	<b>Subject</b>	
	<b>Details</b>	
2	<b>Subject</b>	
	<b>Details</b>	
3	<b>Subject</b>	
	<b>Details</b>	

By the duly authorised representative signing this agreement, the Employer and the Bidder agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the bid data and addenda thereto as listed in the bid schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Bidder and the employer during this process of acceptance.

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

**Signed for the ECDC**

Name of Representative	Capacity	Signature

**Signed by Bidder:**

Name of Representative	Capacity	Signature

## C1.2 - Contract data

### C.1.2 Contract Data

The Conditions of Contract are the **JBCC Series 2000 Principal Building Agreement (Edition 6.2, May 2018)**, published by the Joint Building Contracts Committee Inc. Copies of these documents may be obtained from the **Association of South African Quantity Surveyors (011) 315 4140**, the **Master Builders Association (011)205 9000**, the **South African Association of Consulting Engineers (011) 463 2022** or the **South African Institute of Architects (011) 486 0684**.

Each item of data given below is cross-referenced to the clause in the JBCC Principal Agreement to which it mainly applies.

#### Part 1: Data provided by the Employer

<b>JBCC Clause</b>	<b>Data</b>	
A 1.0 [1.1]	<b>Works :</b>	
	Project Name :	<b>ALTERATIONS AND FURBISHMENT OF CLAINLIEGH COURT IN QUEENSTOWN</b>
	Reference Number:	<b>ECDC/INFRA/29/012024</b>
	<b>Works</b> Description :	Alterations and refurbishment scope:; replacement of the existing floors, roof, floor tiles, sanitary fittings, and repainting of the interior and exterior of the entire building. In addition, the scope will cover the replacement of all the windows and upgrading of the electrical installations, replacing all the geysers, and placing the new geysers on top of the concrete roof
A 2.0 [1.1]	<b>Site :</b>	
	Erf/ Stand Number	Erf 7457
	Township/ Suburb	Queenstown
	Site Address	Coordinates: 31°53'37.58"S and 26°52'32.13"E
	Local Authority	Enoch Mgijima Local Municipality
A 3.0 [1.1]	<b>Employer :</b>	
	Official Name of Organ of State /Public Sector Body	<b>Eastern Cape Development Corporation (ECDC)</b>
	Business registration number	Co.Act 2 of 1997
	VAT/GST number	446 018 0955

Country	South Africa
Employer's representative Name	Ms. Ziyanda Mpalala
Telephone number	043 704 5600
E-mail	zmpalala@ecdc.co.za
Mobile number	081 211 7935
Postal address	P.O Box 11197, Southernwood, 5213
Physical address	ECDC, Ocean Terrace Park, Moore Street, Quigney, East London, 5201

A 4.0 [1.1]	<b>Principal Agent :</b>		
	Name	<b>Sky High Consulting Engineers</b>	
	Legal entity of above	Sky High Consulting Engineers	
	Practice number		
	Country	South Africa	
	Contract Person	Cladius Nhawu	
	Telephone number	043 721 1996	
	Mobile Number	083 706 9666	
	E-mail	<a href="mailto:cladiusn@shconsulting.co.za">cladiusn@shconsulting.co.za</a>	
	Postal address	1A Stockton Road, Berea, East London ,5201	
	Physical address	1A Stockton Road, Berea, East London ,5201	
A 5.0 [1.1]	<b>Agent (1) :</b>	Discipline :	Quantity Surveyor
	Name	<b>BNLS Quantity Surveyors</b>	
	Legal entity of above	BNLS Quantity Surveyors	
	Practice number		
	Country	South Africa	
	Contract Person	Buyisiwe Ndungane	
	Telephone number		
	Mobile Number	084 524 8810	
	E-mail	<a href="mailto:bnlsgroup@gmail.co.za">bnlsgroup@gmail.co.za</a>	
	Postal address	Unit 8, CK Business Centre, 2 Merriman Lusiti Street, Mbeqe Ext Mthatha 5100	
	Physical address	Unit 8, CK Business Centre, 2 Merriman Lusiti Street, Mbeqe Ext Mthatha 5100	
A 6.0 [1.1]	<b>Agent (2) :</b>	Discipline :	Civil Engineer
	Name	<b>Sky High Consulting Engineers</b>	
	Legal entity of above	Sky High Consulting Engineers	
	Practice number		
	Country	South Africa	
	Contract Person	Cladius Nhawu	
	Telephone number	043 721 1996	

	Mobile Number	083 706 9666
	E-mail	<a href="mailto:cladiousn@shconsulting.co.za">cladiousn@shconsulting.co.za</a>
	Postal address	1A Stockton Road, Berea, East London ,5201
	Physical address	1A Stockton Road, Berea, East London ,5201

A 7.0 [1.1]	<b>Agent (3) :</b>	Discipline :	Structural Engineer
	Name	<b>Sky High Consulting Engineers</b>	
	Legal entity of above	Sky High Consulting Engineers	
	Practice number		
	Country	South Africa	
	Contract Person	Cladius Nhawu	
	Telephone number	043 721 1996	
	Mobile Number	083 706 9666	
	E-mail	cladiousn@shconsulting.co.za	
	Postal address	1A Stockton Road, Berea, East London ,5201	
	Physical address	1A Stockton Road, Berea, East London ,5201	
A 8.0 [1.1]	<b>Agent (4) :</b>	Discipline :	Mechanical Engineer
	Name	<b>Thokomela Trading</b>	
	Legal entity of above	Thokomela Trading	
	Practice number		
	Country	South Africa	
	Contract Person	Bongani Boo	
	Telephone number		
	Mobile Number	064 951 3521	
	E-mail	bongani@nduluka.co.za	
	Postal address	2 Greyling Street Pietermiztberg 3201	
	Physical address	2 Greyling Street Pietermiztberg 3201	
A 9.0 [1.1]	<b>Agent (5) :</b>	Discipline :	Electrical Engineer
	Name	<b>Thokomela Trading</b>	
	Legal entity of above	Thokomela Trading	

	Practice number	
	Country	South Africa
	Contract Person	Bongani Booï
	Telephone number	
	Mobile Number	064 951 3521
	E-mail	bongani@nduluka.co.za
	Postal address	2 Greyling Street Pietermaritzburg 3201
	Physical address	2 Greyling Street Pietermaritzburg 3201

A 10.0 [1.1]	<b>Agent (6) :</b>	Discipline :	Health & Safety Agent
	Name	<b>Newground Projects</b>	
	Legal entity of above	Newground Projects	
	Practice number		
	Country	South Africa	
	Contract Person	Tessa Jacobus	
	Telephone number	043 722 5864	
	Mobile Number	081 324 5147	
	E-mail	tessa@newground.co.za	
	Postal address	17 St Andrews roads, Selborne, East London 5201	
	Physical address	17 St Andrews roads, Selborne, East London 5201	

A 11.0 [1.1]	<b>Agent (7) :</b>	Discipline :	Architect
	Name	<b>Timocraft</b>	
	Legal entity of above	Timocraft	
	Practice number	21248	
	Country	South Africa	
	Contract Person	Igeny Shone	
	Telephone number	043 732 1586	
	Mobile Number		
	E-mail	timocraftconsulting@gmail.com	
	Postal address	16 2 <sup>nd</sup> Avenue, Gonubie	
	Physical address	16 2nd Avenue, Gonubie	

## PART B - CONTRACT INFORMATION

JBCC Clause	Data	
B 1.0 [1.1]	<b>Definitions :</b>	
	Bills of quantities: System/Method of measurement	The <b>Bills of Quantities</b> were drawn up in accordance with the Standard System of Measuring Builders Work, Sixth Edition (Revised) 1999
B 2.0 [2.1]	<b>Law, regulations and notices :</b>	
	Law applicable to the works, state country [2.1]	The governing <b>law</b> is the law of the Republic of South Africa The parties consent to the jurisdiction of the Grahamstown High Court Office for the purposes of this clause.
B 3.0 [3.2]	<b>Offer and Acceptance :</b>	
	Currency applicable to this <b>agreement</b> [3.2]	South African Rand (ZAR)
B 4.0 [5.0] [5.2]  [5.6]	<b>Documents :</b>	
	The original signed <b>agreement</b> is to be held by the <b>principal agent</b> [5.2], if not, indicate by whom	Employer
	Number of copies of <b>construction information</b> issued to the <b>contractor</b> at no cost [5.6]	3 Sets of complete documents
	<b>Documents comprising the agreement</b>	The documents forming the agreement are to be taken as mutually explanatory of one another and for the purpose of interpretation, the priority of the documents shall be in accordance with the following sequence: the Form of Offer and Acceptance (a) The Schedule of Deviations (b) This Contract Data; (c) The standard JBCC building agreement Ed 6.2 May 2018 (d) The Drawings (e) The Specifications (f) The Bills of Quantities. If an ambiguity or discrepancy is found in the documents, the Principal Agent shall issue any necessary clarification or instruction
	<b>Contract drawings</b>	<b>Contract drawings</b> are contained in Part C3.2 (Book 1).
B 5.0	<b>Employer's Agent :</b>	

[6.0] [6.2]	Authority is delegated to the following <b>agents</b> to issue <b>contract instructions</b> and perform duties for specific aspects of the <b>works</b> [6.2]	Principal Agent- Professional Construction Project Manager	
[6.3]		Civil Engineer; Structural; Electrical and Mechanical Architect Health & Safety Consultant	
	<b>Principal agent's</b> and <b>agents'</b> interest or involvement in the works other than a professional interest [6.3]	N/A	
<b>B6.0</b> [10.0]	<b>INSURANCES :</b>		
	Insurances by <b>Contractor</b> Yes/No   Yes	Amount including <b>tax</b>	Deductible amount including <b>tax</b>
[10.1.1]	Contracts works insurance to be effected by: <b>CONTRACTOR</b>	<b>Contract sum</b> plus 20%	with deductible of 5%
[10.1.2]	Supplementary/special insurance to be effected by: <b>CONTRACTOR</b>	<b>Contract sum</b> plus 20%	with deductible of 5%
[10.1.3]	Public liability insurance to be effected by: <b>CONTRACTOR</b>	<b>R 20 000 000.00</b>	
[10.1.4]	Removal of lateral support insurance to be effected by: <b>Not applicable</b>	<b>N/A</b>	<b>N/A</b>
[10.1.5]	Other insurances to be effected by: <b>Not applicable</b>	<b>N/A</b>	<b>N/A</b>
<b>B7.0</b> [12.1] [12.1.2]	<b>Obligations of the employer:</b>		
	Existing premises will be in use and occupied [12.1.2]	Yes/No	No
	If Yes, description	N/A	
[12.1.2]	Restriction of working hours [12.1.2]	Yes/No	No
	If Yes, description	N/A	
[12.1.3]	Natural features and known services to be preserved by the <b>contractor</b> [12.1.3]	Yes/N	No
	If Yes, description		
[12.1.4]	Restrictions to the <b>site</b> or areas that the <b>contractor</b> may not occupy [12.1.4]	Yes/No	No
	If Yes, description	N/A	
[12.1.10]	Supply of <b>free issue</b> [12.1.10]	Yes/No	No
	If Yes, description	N/A	
<b>B8.0</b> [14.0]	<b>Nominated Subcontractor's:</b>		
	Yes/no   No	If yes, description of specialisation	
	Specialisation 1	N/A	
<b>B9.0</b>	<b>Selected Subcontractor's:</b>		

[15.0]	Yes/no	Yes	If yes, description of specialisation	
	Specialisation 1		Electrical Installation and Mechanical Installation	
<b>B10.0</b> [16.0]	<b>Direct Subcontractor's:</b>			
	Yes/no	No	If yes, description of extent of works	
[12.1.11]	Extent of works [12.1.11]		N/A	
<b>B11.0</b> [20.1]	<b>Description of sections:</b>			
	Sectional work completion		No	If yes, description of sections
	Section No.1		N/A	
	Section No.2		N/A	
	Section No.3		N/A	
	Section No.4		N/A	
<b>B12.0</b> [12.1.5]	<b>Possession of site:</b>			
	Intended date of possession of the site Refer B17.0 [12.1.5; 12.2.22]		Possession of site shall be given to the Contractor after submission by the Contractor of the documents indicated in the Form of Offer and Acceptance and approval of the Contractor's Safety, Health, and Environmental Plan.	
[19.0]	<b>Practical Completion (Works as a whole):</b>			
[19.3]	Yes/No		Yes	
[12.2.7]	The date for <b>practical completion</b> shall be the period as indicated below from the date of possession of the <b>site</b> by the <b>contractor</b> . [12.2.7; 24.1]		<b>18 (Eighteen) Calendar months</b> from possession of site (excluding annual builders' holiday)	
[24.0]	<b>Penalty:</b>			
[24.1]	<b>Penalty</b> for late completion [24.1]		<b>1,75 Cents per R100</b> of Contract Sum excl. VAT per calendar day	
[19.0]	<b>Practical Completion (Sectional):</b>			
[19.3]	Yes/No		No	
	Period for inspection by the <b>principal agent</b> [19.3]		N/A:	
[12.2.7]	The date for <b>practical completion</b> shall be		N/A	

	the period as indicated below from the date of possession of the <b>site</b> by the <b>contractor</b> [12.2.7; 24.1]				
[24.0]	<b>Penalty:</b>				
[24.1]	<b>Penalty</b> for late completion [24.1]	N/A			
[12.2.7]	Criteria to achieve <b>practical completion</b> not covered in the definition of <b>practical completion</b>	N/A			
<b>B13.0</b> [21.0]	<b>Defects liability period:</b>				
	Extended defects liability period: Refer B17.0 [21.13]		Yes/No    No		
	If yes, description of applicable elements	13.1 13.2 13.3 13.4 13.5			
<b>B14.0</b> [25.0] [25.2]	<b>Payments:</b>				
	Date of month for issue of regular <b>payment certificates</b> [25.2]	The interim payment certificate is to be issued by the <b>25<sup>th</sup></b> day of each month			
[25.3.4;26.9.5]	Contract price adjustment / Cost fluctuations [25.3.4; 26.9.5]	Yes, the contract value shall be adjusted according to CPAP. The base month for the application of CPAP is the month of closing of the tender.			
	If yes, method to calculate	Haylett Formula			
	<b>Employer</b> shall pay the <b>contractor</b> within: [25.10]	Thirty (30) <b>Calendar days</b>			
<b>B15.0</b> [30.0] [30.3.1;30.10]	<b>Dispute resolution:</b>				
	Adjudication [30.6.1; 30.10] Name of nominating body	N/A			
[30.6.2]	Applicable rules for adjudication [30.6.2]	N/A			
[30.7.4;30.10]	Arbitration [30.7.4; 30.10] If Yes, name of nominating body * If No, then dispute will be referred to litigation	<table border="1"> <tr> <td>Yes/No</td> <td>Yes</td> </tr> </table> The dispute resolution body shall be the Association of Arbitrators (Southern Africa).		Yes/No	Yes
Yes/No	Yes				

[30.7.5]	Applicable rules for arbitration [30.7.5]	N/A		
<b>B16.0</b>	<b>JBCC® General Preliminaries - Selections:</b>			
[P2.2]	Provisional bills of quantities [P2.2]	Yes/No	No	
[P2.3]	Availability of construction information [P2.3]	Yes/No	Yes	
[P3.1]	Previous work - dimensional accuracy - details of previous contract(s) [P3.1]	N/A		
[P3.2]	Previous work - defects - details of previous contract(s) [P3.2]	N/A		
[P3.3]	Inspection of adjoining properties - details [P3.3]	N/A		
[P4.1]	Handover of site in stages - specific requirements [P4.1]	N/A		
[P4.2]	Enclosure of the works - specific requirements [P4.2]	Hoarding must be priced for under this clause in the Preliminaries Bill and no claims for additional hoardings will be entertained.		
[P4.3]	Geotechnical and other investigations - specific requirements [P4.3]	Yes		
[P4.5]	Existing premises occupied - details [P4.5]	Yes , there are tenants in the building.		
[P4.6]	Services - known - specific requirements [P4.6]	N/A		
[P8.1]	Water [8.1]	By Contractor	Yes/No	Yes
		By Employer	Yes/No	No
		By Employer - metered	Yes/No	No
[P8.2]	Electricity [8.2]	By Contractor	Yes/No	Yes
		By Employer	Yes/No	No
		By Employer - metered	Yes/No	No
[P8.3]	Ablution and welfare facilities [8.3]	By Contractor	Yes/No	Yes
		By Employer	Yes/No	No
[P8.4]	Communication facilities - specific requirements [P8.4]	N/A		
[P11.1]	Protection of the works - specific requirements [P11.1]	N/A		
[P11.2]	Protection / isolation of existing <b>works</b> and <b>works</b> occupied in <b>sections</b> - specific requirements [P11.2]	N/A		

[P11.5]	Disturbance - specific requirements [P11.5]	N/A
[P11.6]	Environmental disturbance - specific requirements [P11.6]	N/A

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### C1.3 – Form of Guarantee

## **Part C2: Pricing data**

### C2.1 - Pricing instructions

## C2.1.1 PREAMBLE TO THE SCHEDULE OF PRICES

- C2.1.1.1 **All** prices shall be quoted in the currency of the Republic of South Africa and will be held to be firm unless otherwise stated, in which case sufficient information must be afforded at the time of tendering to indicate the basis on which payment shall be adjusted.
- C2.1.1.2 The Tenderer shall enter a price against each item in the schedule of prices. If the Tenderer fails to enter a price against any item in the schedule of prices the relevant cost for such item shall be regarded as being covered by other prices in the schedule of prices. **Should an item specifically be excluded from the offer submitted, such tender will be regarded as non-responsive and not be considered.**
- C2.1.1.3 The prices quoted against each item of these schedules shall cover the full inclusive cost of everything required for the execution of the work under the item plus an apportionment of any cost involved in meeting the obligations and liabilities imposed by the conditions of contract and in complying with the specifications.
- C2.1.1.4 The prices quoted for the supply of plant and equipment shall include for all handling, loading, transporting and off-loading required for the delivery of the plant and equipment to the site, including in the case of off-site storage for double handling at the store.
- C2.1.1.5 The prices quoted for erection and installation shall include for all handling, loading, transporting and off-loading, to take plant and equipment to place on site where required, erection, installation, painting, commissioning, operating, testing, adjusting, handing over in proper working order and upholding for a period of 12 months, all as specified.
- C2.1.1.6 Any additional charges in connection with off-site storage which there may be over and above the prices quoted in the various sections of these schedules of prices shall be set out in detail by the Tenderer.
- C2.1.1.7 The tendered rates and amounts must exclude Value Added Tax (VAT) but must include all levies, other taxes and duties on items to which they apply. Separate provision has been made in the Tender Summary for the purpose of VAT.
- C2.1.1.8 Amounts allowed for contingencies will be spent in part or as a whole at the sole discretion of the Principal Agent.
- C2.1.1.9 Schedule of Prices shall be completed and signed in **black ink**. Corrections must be done by deleting, rewriting and initialling next to the amendment.
- C2.1.1.10 **The Bills of Quantities are not to be used for the purpose of ordering materials.**

DAYWORK SCHEDULE

This Day work Schedule shall be used at the discretion of the Principal Agent for the valuation of extra work, which cannot conveniently be valued at the rates submitted in the Schedule of Quantities.

The rates entered for labour and materials shall not be inclusive of overhead charges and profit, site supervision of staff, insurance, holidays with pay, use and maintenance of small hand tools and non-mechanical plant, travelling allowances, other emoluments and allowances, provision being made for the insertion of percentage, to cover all these items which are henceforth termed "on-costs". The rate used in the deduction of the value of the day work being thus the basic rate plus the percentage "on-costs".

In the case of plant no "on-cost" item is provided. The rate entered shall include any of the above "on-costs" which are pertinent and shall include operator's costs, consumable stores, maintenance, etc.

The Tenderer must fill in each item listed below, or his tender may be rejected as being incomplete.

**A LABOUR**

- 1. Labourers ..... per hour plus .....% "On-Cost"
- 2. **Gangers ..... per hour plus .....% "On-Cost"**
- 3. Tradesmen ..... per hour plus .....% "On-Cost"

**B EQUIPMENT** (where not listed in scheduled items)

Description of Work	Rate per hour
.....	.....
.....	.....
.....	.....

Rate for standing time: ..... % of working rate

**C MATERIAL**

The Tenderer shall state here the percentage "On-Cost" he will add to the basic price of materials:  
.....%

TENDERER'S NAME: .....COMPANY STAMP:

SIGNATURE: .....

DATE: .....

## C2.2 - Bill of Quantities

**PROVISIONAL BILLS OF QUANTITIES**  
**FOR**  
**RENOVATION OF GLAINLEIGH COURT**  
**FOR**  
**Eastern Cape Development Corporation**

**ARCHITECTS**

SKYHIGH  
1A Stockton Road  
East London

5200

Tel. 0437211996

Fax:

e Mail:

**Principal Agent**

SKY High Consulting Engineers

Tel. 043 721 1996

Fax: 086 540 1430

e Mail: [cladiousn@shconsulting.co.za](mailto:cladiousn@shconsulting.co.za)

**QUANTITY SURVEYORS**

BNLS QUANTITY SURVEYORS

Quantity Surveyor

Unit 8 , CK Business Centre 2 Merriman Lusiti  
Mbuqe Ext Mthatha

Tel. 0662004509

Fax:

e Mail: [bnlsgroup2019@gmail.com](mailto:bnlsgroup2019@gmail.com)

**SECTION NO. 1**  
**BUILDING WORKS**

**SECTION NO. 1**

**BUILDING WORKS**

**BILL NO. 1**

**PRELIMINARIES**

**SECTION NO 1**

BILL NO. 1

**PRELIMINARIES**

**MEANING OF TERMS "TENDER / TENDERER"**

Any reference to the words "Tender" or "Tenderer" herein and/or in any other documentation shall be construed to have the same meaning as the words "Bid" or "Bidder"

**BUILDING AGREEMENT AND PRELIMINARIES**

The JBCC Principal Building Agreement (Edition 6.2 - May 2018) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described to be read in conjunction with the Contract Data issued with the tender.

The JBCC General Preliminaries (May 2018) published by the Joint Building Contracts Committee for use with the JBCC Principal Building Agreement (Edition 6.2 - May 2018) shall be deemed to be incorporated in these bills of quantities / lump sum document, amended as hereinafter described.

The contractor is deemed to have referred to the abovementioned documents for the full intent and meaning of each clause.

The clauses in the abovementioned documents are hereinafter referred to by clause number and heading only.

Where any item is not relevant to this agreement such item is marked N/A signifying "not applicable".

Where standard clauses or alternatives are not entirely applicable to this agreement such

amendments, modifications, corrections or supplements as will apply are given under each

relevant clause heading and such amendments, modifications, corrections or supplements shall take precedence notwithstanding anything to the contrary contained in the above mentioned documents.

**TENDERER'S SELECTIONS**

Before submission of his tender the contractor is to complete the tenderer's selections in the contract data for organs of state and other public sector bodies.

**STRUCTURE OF THIS PRELIMINARIES BILL**

Section A : A recital of the headings of the individual clauses in the aforementioned JBCC.

Principal Building Agreement

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries

Section B : A recital of the headings of the individual clauses in the  
aforementioned JBCC.

General Preliminaries

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

**PRICING OF PRELIMINARIES**

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

**PRICING OF BILLS OF QUANTITIES**

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

Items left unpriced will be deemed to be covered in prices against other items  
throughout these bills of quantities and no claim for any extras arising out of  
the contractor's omission to price any item will be entertained Prices for all  
construction equipment, temporary works, services and other items shall  
include for the supply, maintenance, operating cost and subsequent removal  
and making good as necessary.

**VALUE ADDED TAX**

Provision is made in the summary page of these bills of quantities / lump sum  
document for the inclusion of Value Added Tax (VAT).

**SECTION A: PRINCIPAL BUILDING AGREEMENT**

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries

**INTERPRETATION**

**DEFINITIONS AND INTERPRETATION** **Clause**

**1.0.**

**The following definitions replace corresponding definitions or are added to the definitions in the JBCC PRINCIPAL BUILDING AGREEMENT (Edition 6.2 of May 2018), whatever the case may be**  
**ADVERSE WEATHER CONDITIONS: Adverse weather and inclement weather has the same meaning and used interchangeably and means any weather conditions i.e.: Rain, wind, snow, frost, temperature (cold or heat) that are not in the norm for the area where the construction takes place and during which no work is possible on site.**

**AGREEMENT: The completed Form of Offer and Acceptance, the completed JBCC® Principal Building Agreement and contract data for organs of state and other public sector bodies, the contract drawings, the priced document and any other documents reduced to writing and signed by the authorised representative or representatives of the parties.**

**CONSTRUCTION PERIOD: The period commencing on the date of possession of the site by the contractor and ending on the date of practical completion.**

**CONTRACT PERIOD: The period commencing on the date of the letter of acceptance and ending on the date of final completion.**

**COST FLUCTUATION shall mean contract price adjustment provision ( CPAP ) for the adjustment of fluctuation in the cost of labour, plant, material and goods as stated in the schedule**

**DEFAULT INTEREST: No Clause.** **GUARANTEE FOR CONSTRUCTION: A security in terms of the DPWI’s Guarantee for Construction form/s, obtained by the contractor from an institution approved by the employer.**

**INTEREST: The interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be the rate as determined by the Minister of Finance from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No 1 of 1999) as amended, calculated as simple interest, in respect of debts owing to the State, and will be the rate as published by the Minister of Justice and Correctional Services from time to time, in terms of section 1(2) of the Prescribed Rate of Interest Act, 1975 (Act No 55 of 1975) as amended, calculated as simple interest, in respect of debts owing by the State.**

**LETTER OF ACCEPTANCE: The letter of formal acceptance of the Contractor's or Service Provider’s Tender / Bid, issued and signed by the Employer.**

**PAYMENT CERTIFICATE: A certificate issued at regular agreed intervals by the principal agent to the parties certifying the amount due and payable in terms of Clause 25.3.**

Carried to Collection

R

**PRINCIPAL AGENT: The person or entity appointed by the employer and named in the contract data for organs of state and other public sector bodies. In the event of a principal agent not being appointed, then all the duties and obligations of a principal agent as detailed in the agreement shall be fulfilled by the employer’s representative as named in the contract data for organs of state and other public sector bodies.**

**TARGETED SUBCONTRACTORS: Subcontractors that must be appointed to a total of 30% or more of the contract sum, by the contractor, projects with a contract sum of the amount determined by the Minister in terms of the latest Preferential Procurement regulations, as may be amended from time to time.**

1 **LAW, REGULATIONS AND NOTICES**

Clause 2.0

Item

2 **OFFER AND ACCEPTANCE**

Replace Clause 3.3 with the following:

This agreement shall come into force on the date of letter of acceptance and continue to be of force and effect until the end of the latent defects liability period [22.0] notwithstanding termination [29.0] or the certification of final completion [21.0] and final payment [25.0].

Item

3 **CESSION AND ASSIGNMENT**

Clause 4.0

Ref Clause 6.7 - Clause 4.2

Replace Clause 4.3 with the following:

Where a contractor cedes any right or any monies due to or to become due under this agreement as security in favour of a financial institution, the prior written consent of the employer, which consent shall not be unreasonably withheld, must be obtained.

Item

4 **DOCUMENTS**

Clause 5.0

Replace last sentence of Clause 5.2 with the following:

The original signed agreement shall be held by the Employer.

Replace Clause 5.4 with the following:

The Bills of Quantities shall not be used as a specification of material and goods or methods

unless so instructed by the Principal Agent. The contractor may not use the Bills of Quantities

for purpose of ordering material. All dimensions and quantities must be determined on site before ordering. In the event of discrepancy between the drawings and Bills of Quantity, the drawings shall take preference.

Replace Clause 5.5 with the following:

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries

	<p>The parties may publish or disclose on any platform only the contract scope and contract amount.</p> <p>5 <b>EMPLOYER'S AGENTS</b></p> <p>Clause 6.0</p> <p>Replace Clause 6.5 with the following:</p> <p>Where the principal agent and/or an agent fails to act or is unable to act or ceases to be the principal agent or an agent in terms of this agreement, the employer shall appoint another principal agent and/or an agent.</p> <p>Add the following as Clause 6.7:</p> <p>In terms of the clauses listed hereunder, the employer has retained its authority and has not given a mandate to the principal agent, notwithstanding other provisions in the contract. The employer shall sign all documents in relation to clauses 4.2, 14.1.4, 14.4.1, 14.6, 15.1.4, 15.4.1, 23.1, 23.2, 23.3, 23.7, 23.8, 26.1, 26.7, 26.12.</p> <p>6 <b>DESIGN RESPONSIBILITY</b></p> <p>Clause 7.0</p> <p>Replace first sentence of Clause 7.2 with the following:</p> <p>Any design responsibility undertaken by a subcontractor shall not devolve on the contractor</p> <p>except for items that require specific component design and or compatibility design and or shop drawings and or the assembly thereof.</p> <p>7 <b>INSURANCES AND SECURITIES</b></p> <p>A8.0 WORKS RISK</p> <p>Clause 8.0</p> <p>Replace Clause 8.4 with the following:</p> <p>The contractor shall bear the full risk of damage to and/or destruction of the works by whatever cause during construction of the works and hereby indemnifies and holds harmless the employer against any such damage. The contractor shall take such precautions and security measures and other steps for the protection and security of the works as the contractor may deem necessary.</p> <p>8 <b>INDEMNITIES</b></p> <p>Clause 9.0</p> <p>Add the following to the end of the first sentence of Clause 9.2.7:</p> <p>".... due to no fault of the contractor</p> <p>9.2.9 No Clause</p> <p>9.2.10 No Clause</p> <p>Add the following as clause 9.3:</p>	<p>Item</p> <p>Item</p> <p>Item</p> <p>Item</p> <p>Item</p> <p>R</p>	<hr/> <hr/>
<p>Section No. 1 Bill No. 1 Preliminaries</p>	<p>Carried to Collection</p>	<p>R</p>	<hr/> <hr/>

The employer's rights to claim damages for the contractor's omissions and actions will not be affected.

Item

9 **INSURANCES**

Clause 10.0

Replace Clause 10.1 with the following:

The party responsible shall effect and keep the respective insurances in force, in favour of the employer as beneficiary , from the date of possession of the site until the issue of the certificate of practical completion and with an extension to cover the contractors obligations after the date of practical completion [8.2.2].

Add the following as Clause 10.1.5.1:

High Risk Insurance

In the event of the project being executed in a geological area classified as a "High Risk Area", that is an area which is subject to highly unstable sub-surface conditions that might result in catastrophic ground movement evident by sinkhole or doline formation the following will apply.

Add the following as Clause 10.1.5.1.1 Damage to the works.

The contractor shall, from the date of possession of the site until the date of the certificate of practical completion, bear the full risk of and hereby indemnifies and holds harmless the employer against any damage to and/or destruction of the works consequent upon a catastrophic ground movement as mentioned above. The contractor shall take such

precautions and security measures and other steps for the protection of the works as he may deem necessary.

When so instructed to do so by the principal agent, the contractor shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the works and to rebuild, restore, replace and/or repair the works, at the contractor's own costs 10.1.5.1.2 Injury to persons or loss of or damage to property.

The contractor shall be liable for and hereby indemnifies and holds harmless the employer against any liability, loss, claim or proceeding arising at any time during the period of the contract whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above.

The contractor shall be liable for and hereby indemnifies the employer against any and all

liability, loss, claim or proceeding consequent upon loss of or damage to any moveable, or immovable property, or personal property, or property contiguous to the site, whether belonging to or under the control of the employer or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the period of the contract

10.1.5.1.3 Replace Clause with the following:

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries

Amount

It is the responsibility of the contractor to ensure that he has adequate insurance to cover his risk and liability as mentioned in 10.1.5.1.1 and 10.1.5.1.2. Without limiting the contractor's obligations in terms of the contract, the contractor shall, within twenty-one (21) calendar days of the date of letter of acceptance, but before commencement of the works, submit to the employer proof of such insurance policy.

10.1.5.1.4 Replace Clause with the following:

The employer shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the contractor's default of his obligations as set out in 10.1.5.1.1; 10.1.5.1.2 and 10.1.5.1.3. Such losses or damages may be recovered from the contractor or by deducting the same from any amounts still due under this contract or under any other contract presently or hereafter existing between the employer and the contractor and for this purpose all these contracts shall be considered one indivisible whole

10.2 Replace Clause with the following:

Where practical completion in sections is required [20.0], or where the works is for alterations and additions, the contractor shall effect and keep in force contract works insurance [10.1.1], supplementary insurance [10.1.2], public liability insurance [10.1.3] and where applicable, removal of lateral support insurance [10.1.4] and other insurances [10.1.5] in favour of the employer as beneficiary.

10.6 No Clause

Add the following as Clause 10.11

In the event that an insurer dispute the amount of the claim to be paid to the employer, the contractor shall be liable to the employer for the difference between the claim (as determined by the employers QS appointed on the project) made by the employer and the amount that the insurer is willing to pay.

Item

10 **SECURITIES**

Add the following as to the relevant related Clauses as follows:

Add the following to Clause 11.1:

In respect of contracts with a contract sum up to R1 million, the security to be provided by the

contractor to the employer will be a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT).

In respect of contracts with a contract sum above R1 million, the contractor shall have the right to select the security to be provided in terms of C 1.0 Securities, as stated in the schedule. Such security shall be provided to the employer within fifteen (15) working days from commencement date. Should the contractor fail to select the security to be provided or

should the contractor fail to provide the employer with the selected security within fifteen (15)

working days from commencement date, the security in terms of C 1.0 Option C shall be deemed to have been selected.

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries

The payment reduction of the value certified in a payment certificate shall be mutatis mutandis

in terms of 25.12.1 - 25.12.5.

11.1.1 No Clause

11.1.2 No Clause

11.2.2 No Clause

11.3 No Clause Replace Clause 11.4.1  
with the following:

Hand over the site to the contractor and withhold an amount equal to ten per cent (10%) of each interim payment certificate until practical completion is achieved. The value certified shall be subject to the adjustments in terms of 25.12.6 to 25.12.10.

11.5 No Clause

11.6 No Clause

11.7 No Clause

11.8 No Clause

11.9 No Clause

11.10 No Clause

Add the following as Clause 11.11:

Where the security as a cash deposit of ten per cent (10%) of the contract sum (excluding VAT) has been selected:

Add the following as Clause 11.11.1:

The contractor shall furnish the employer with a cash deposit equal in value to ten percent (10%) of the contract sum (excluding VAT) within fifteen (15) working days from commencement date. Failure to furnish the employer with a cash deposit within fifteen (15) working days Clause 11.4 will apply mutatis mutandis.

Add the following as Clause 11.11.2:

The employer shall be entitled to recover expense and loss from the cash deposit in terms of Clause 27.0 provided that the employer notifies the Contractor in which event the employer's

entitlement shall take precedence over his obligations to refund the cash deposit security or

portions thereof to the contractor.

Add the following as Clause 11.11.3:

Within fifteen (15) working days of the date of practical completion of the works the employer shall reduce the cash deposit to an amount equal to three per cent (3%) of the contract value (excluding VAT) and refund the balance to the contractor.

Add the following as Clause 11.11.4:

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries

Within fifteen (15) working days of the date of final completion of the works the employer shall reduce the cash deposit to an amount equal to one per cent (1%) of the contract value (excluding VAT) and refund the balance to the contractor.

Add the following as Clause 11.11.5:

On the date of payment of the amount in the final payment certificate, the employer shall refund the remainder of the cash deposit to the contractor.

Add the following as Clause 11.11.6:

The parties expressly agree that neither the employer nor the contractor shall be entitled to cede the rights to the deposit to any third party.

Add the following as Clause 11.12:

Where security as a variable construction guarantee of ten percent (10%) of the contract sum (excluding VAT) has been selected:

Add the following as Clause 11.12.1:

The contractor shall furnish the employer with an acceptable variable construction guarantee equal in value to ten per cent (10%) of the contract sum (excluding VAT) within fifteen (15)

working days after issuance of the letter of acceptance. Failure to submit an acceptable variable construction guarantee within fifteen (15) working days Clause 11.4 will apply mutatis mutandis.

Add the following as Clause 11.12.2:

The variable construction guarantee shall reduce and expire in terms of the Variable Construction Guarantee form included in the invitation to tender.

Add the following as Clause 11.12.3:

The employer shall return the variable construction guarantee to the contractor within fourteen (14) calendar days of it expiring.

Add the following as Clause 11.12.4:

Where the employer has a right of recovery against the contractor in terms of 27.0, the employer shall issue a written demand in terms of the variable construction guarantee.

Add the following as Clause 11.13:

Where security as a fixed construction guarantee of five per cent (5%) of the contract sum (excluding VAT) and a five per cent (5%) payment reduction of the value certified in the payment certificate (excluding VAT) has been selected:

Add the following as Clause 11.13.1:

The contractor shall furnish a fixed construction guarantee to the employer equal in value to

five per cent (5%) of the contract sum (excluding VAT).

Add the following as Clause 11.13.2:

The fixed construction guarantee shall come into force on the date of issue and shall expire on the date of the last certificate of practical completion.

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries

Add the following as Clause 11.13.3:

The employer shall return the fixed construction guarantee to the contractor within fourteen (14) calendar days of it expiring.

Add the following as Clause 11.13.4:

The payment reduction of the value certified in a payment certificate shall be mutatis mutandis

in terms of 25.12.1 - 25.12.5.

Add the following as Clause 11.13.5:

Where the employer has a right of recovery against the contractor in terms of 27.0, the employer shall be entitled to issue a written demand in terms of the fixed construction guarantee or may recover from the payment reduction or from both.

Add the following as Clause 11.14.1:

Where security as a cash deposit of five per cent (5%) of the contract sum (excluding VAT) and a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT) has been selected:

Add the following as Clause 11.14.2:

The contractor shall furnish the employer with a cash deposit equal in value to five per cent (5%) of the contract sum (excluding VAT) within fifteen (15) working days from commencement date. Failure to submit a cash deposit within fifteen (15) working days Clause 11.4 will apply mutatis mutandis.

Add the following as Clause 11.14.3:

Within fifteen (15) working days of the date of practical completion of the works the employer

shall refund the cash deposit in total to the contractor.

Add the following as Clause 11.14.4:

The payment reduction of the value certified in a payment certificate shall be mutatis mutandis in terms of 25.12.1 - 25.12.5.

Add the following as Clause 11.14.5:

Where the employer has a right of recovery against the contractor in terms of 27, the employer may recover from the payment reduction or cash deposit or from both.

Add the following as

Clause 11.15:

Where security as a payment reduction of ten per cent (10%) of the value certified in the payment certificate (excluding VAT) has been selected.

Add the following as Clause 11.15.1:

The payment reduction of the value certified in a payment certificate shall be mutatis mutandis in terms of 25.12.6 to 25.12.10.

Add the following as Clause 11.15.2:

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries

The employer shall be entitled to recover expense and loss from the cash deposit in terms of 27.0 provided that the employer notifies the Contractor in which event the employer's entitlement shall take precedence over his obligations to refund the cash deposit security or portions thereof to the contractor.

Add the following as Clause 11.16:

Payments made by the guarantor to the employer in terms of the fixed or variable construction guarantee shall not prejudice the rights of the employer or contractor in terms of this agreement.

Add the following as Clause 11.17:

Should the contractor fail to furnish the security in terms of 11.2 the employer, in his sole discretion, and without notification to the contractor, is entitled to change the contractor's selected form of security to that of a ten per cent (10%) payment reduction of the value certified in the payment certificate (excluding VAT).

Item

**EXECUTION**

11 **OBLIGATIONS OF THE PARTIES**

Clause 12.0

12.1.1 No Clause

Replace Clause 12.1.5 with the following:

Give possession of the site to the contractor within ten (10) working days after approval of the Health and Safety Plan or the issue of a construction permit by the Department of Labour, if applicable, after the contractor complied with the terms of 12.2.22.

12.1.6 No Clause

12.1.8 No Clause

Replace Clause 12.2.2 with the following:

The priced Bills must be submitted to the Employer within fourteen (14) calendar days from date of request. Where the priced document contains errors or discrepancies and/or prices considered by the employer or principal agent to be imbalanced or unreasonable the employer or principal agent and the contractor shall adjust such prices without any change to the contract sum.

Replace Clause 12.2.5 with the following :

Effect and keep in force insurances in favour of the employer as beneficiary where the contractor is responsible for providing insurances [10.0)

Replace Clause 12.2.13 with the following:

Designate a competent person full time on site to continuously administer and control the works on site and to receive and implement notices and contract instructions on behalf of the contractor.

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries

	<p>Add the following as Clause 12.2.22:                      Within fourteen (14) working days of the date of the letter of acceptance submit to the principal agent an acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993).</p>		
	<p>Add the following as Clause 12.2.23: The contractor shall within reasonable time inform the agents regarding inspection of the works before covering / closing [B 12.0]</p>	Item	
12	<p><b>Offices</b> The contractor shall provide, maintain and remove on completion of the works an office for the exclusive use of the principal agent, minimum size 4 x 3 x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times [12.2.18]</p>	Item	
13	<p><b>Main notice board</b> The contractor shall provide, erect where directed, maintain and remove on completion of the works a notice board size 3 x 3m as type Drawing GEN 063, constructed of suitable boarding with flat smooth surface and with edging bead 19mm thick round outer edges and projecting 12mm from face of boarding and rounded on front edge. The board shall be securely fixed to hoarding, where hoarding is provided, or fixed to and including a suitable supporting structure of timber or tubular posts and braces. The board is to be painted ivory white and the bead and 12mm wide dividing lines dark green. All wording shall be inscribed in dark green as per the coat of arms for SA. All wording shall be inscribed in dark green painted sans serif lettering [12.2.18]</p>	Item	
14	<p><b>SETTING OUT</b> Clause 13.0</p>	Item	
15	<p><b>NOMINATED SUBCONTRACTORS</b> Clause 14.0 Ref Clause 6.7 [CD] - Clause 14.1.4 14.1.5 No Clause Replace "principal agent " with "employer" [6.7 in Clause 14.4.1 Ref Clause 6.7 - Clause 14.6</p>	Item	
16	<p><b>SELECTED SUBCONTRACTORS</b> Clause 15.0 Ref Clause 6.7 - Clause 15.1.4 &amp; Clause 15.5    15.1.5 No Clause Replace Clause 15.1.2 with the following:</p>		
<p>Section No. 1 Bill No. 1 Preliminaries</p>	<p>Carried to Collection</p>	<p><b>R</b></p>	<hr/>

	<p>The principal agent shall call for tenders from a list of tenderers agreed between the contractor and the employer Replace "principal agent " with "employer" [6.7 in Clause 15.4.1</p>	Item	
17	<p><b>DIRECT CONTRACTORS</b></p>	Item	
	<p>Clause 16.0</p>	Item	
18	<p><b>CONTRACT INSTRUCTIONS</b></p>	Item	
	<p>Clause 17.0                  Replace Clause 17.4 with the following:                  The contractor shall comply with and duly execute all contract instructions except any contract instruction for additional work issued after the date of practical completion other than making good physical loss and repairing damage to the works in terms of 8.0 and 21.                  Add the following clause as Clause 17.6:                  Minutes of meetings shall not constitute a site instruction unless reduced to a written contract                  instruction issued by the principal agent in terms of this contract / agreement.</p>	Item	
	<p><b><u>COMPLETION</u></b></p>	Item	
19	<p><b>INTERIM COMPLETION</b></p>	Item	
	<p>Clause 18.0</p>	Item	
20	<p><b>PRACTICAL COMPLETION</b></p>	Item	
	<p>Clause 19.0                  Replace Clause 19.5 with the following:                  On issue of the only or last certificate of practical completion the employer shall be entitled to possession of the works and the site. On issue of the certificate of practical completion for a section, the employer shall be entitled to possession of such section.                  Add the following as Clause 19.8:  <b>WORKS COMPLETION</b> (1) Within seven (7) calendar days of the date of practical completion the principal agent shall issue to the contractor a works completion list defining the outstanding work and defects apparent at the date of practical completion to be completed or rectified to achieve works completion.                  (2) Where, in the opinion of the contractor, the works completion list has been completed the contractor shall notify the principal agent who shall inspect within seven (7) calendar days of receipt of such a notice. Where, in the opinion of the principal agent, the Works Completion list:                  (2)(a) Has been satisfactorily completed, the principal agent shall forthwith issue a certificate of Works Completion to the contractor with a copy to the employer</p>	Item	
<p>Section No. 1                  Bill No. 1                  Preliminaries</p>	<p>Carried to Collection</p>	<p><b>R</b></p>	

(2)(b) Has not been satisfactorily completed, the principal agent shall forthwith identify the works completion list items that are not yet complete and inform the contractor thereof. The contractor shall repeat the procedure in terms of 19.8(2)

(3) Should the principal agent not issue a works completion list, in terms of 19.8 (1) or 19.8

(2)(b), within seven (7) calendar days from the end of the inspection period, the contractor shall notify the employer and principal agent. Should the principal agent not issue such Works Completion list within seven (7) calendar days of receipt of such notice, the employer may within seven (7) calendar days issue to the contractor a Works Completion list. Should the employer:

(3)(a) Not issue such works completion list within seven (7) calendar days, then the certificate of Works Completion shall be deemed to have been issued on the date of expiry of the initial notice period and works completion shall be deemed to have been

achieved on such date.

(3b) Issue a works completion list and the work on Works Completion list not have been completed or where further defects have become apparent, the employer shall forthwith identify such items on the updated works completion list and notify the

contractor. The contractor shall repeat the procedure in terms of 19.8(2)(b) until such items have been completed to the satisfaction of the employer

(4) Should the works completion list not be completed to the satisfaction of the employer

within a period of twenty one (21) working days of the issue first works completion list the contractor shall be liable to a daily penalty as described in B12.0

(5) The defects liability period in terms of 21.1 shall commence with the issue or deemed issue of the certificate of Works Completion in terms of 19.8(2)(a) or 19.8(3).

Item

21 **COMPLETION IN SECTIONS**

Clause 20.0

Add the following as Clause 20.2.1.A

A certificate of Works Completion [19.8]

Item

22 **DEFECTS LIABILITY PERIOD AND FINAL COMPLETION**

Clause 21.0

Replace Clause 21.1 with the following:

The defects liability period for the works shall commence on the calendar day following the

date of works completion and end at midnight (00:00) ninety (90) calendar days from the date

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries

of works completion or when work on the list for completion has been satisfactorily attended to [21.6), whichever is the later (if we use works completion)  
 Replace Clause 21.6 with the following:  
 On the expiry of the ninety (90) calendar days defects liability period [21.1] for items not indicated as items with an extended liability as indicated in B14 and on receipt of the contractor's notice to the principal agent  
 And/or  
 On the expiry of the defects liability period as indicated in B14, for items indicated in B14 and on receipt of the contractor's notice to the principal agent, the principal agent shall: (1) inspect the works And within ten (10) working days either issue a list for final completion detailing all outstanding work or defects that must be attended to, or rectified to achieve final completion or (2) issue the certificate of final completion to the contractor with a copy to the employer for that part of the works where defects liability period has expired  
 21.6.1 Omit Clause  
 21.6.2 Omit Clause  
 Add the following as Clause 21.13:  
 The ninety (90) calendar days defects liability period for the works [21.1] is replaced with an extended defects liability period of three hundred and sixty-five (365) calendar days in respect of the listed applicable elements in B14  
 Add the following as Clause 21.14:  
 Penalties will be applied if the items on the completion list have not been attended to within a period of ninety (90) calendar days [21.1]. If additional defect items have being added to the list during this period, then the Principal Agent and Contractor will agree on a revised completion date. Failing in achieving the revised date will result in penalties being applied.[B12.0]

23 **LATENT DEFECTS LIABILITY PERIOD**

Clause 22.0  
 22.3.2 No Clause

Carried to Collection

Section No. 1  
 Bill No. 1  
 Preliminaries

Item

Item

**R**

24 **REVISION OF THE DATE FOR PRACTICAL COMPLETION**  
 Clause 23.0  
 Ref Clause 6.7 – Clause 23.1  
 Ref Clause 6.7 – Clause 23.2  
 23.2.13 No Clause  
 Replace Clause 23.3 with the following:  
 Further circumstances that delays practical completion due to any other cause beyond the contractor's reasonable control that could not have reasonably been anticipated and provided for which the contractor may be entitled to a revision of the date for practical completion, with or without an adjustment of the contract value as determined by the Employer [6.7],  
 Ref Clause 6.7 - Clause 23.7.  
 Ref Clause 6.7 - Clause 23.8.

Item

25 **PENALTY FOR LATE OR NON-COMPLETION**  
 Clause 24.0  
 Replace Clause 24.1 with the following:  
 Where the contractor fails to bring the works, or a section thereof, to practical-, works-, or final completion by the applicable completion date, or the revised applicable completion date, the contractor shall be liable to the employer for the penalty.  
 Replace Clause 24.2 with the following:  
 Where the employer elects to levy such penalty the employer, or the principal agent on instruction from the employer, shall give notice thereof to the contractor. The principal agent shall determine the penalty due from the later of the date for practical- works-, or final completion, or the revised date for practical- works-, or final- completion, up to and including the earlier of:  
 Replace Clause 24.2.1 with the following:  
 The actual or deemed date of practical- works-, or final- completion, of the works, or a section thereof [23.7.1]

Item

26 **PAYMENT**  
**PAYMENT**  
 Clause 25.0  
 Replace Clause 25.2 with the following:  
 The principal agent shall issue at regular agreed intervals payment certificates, to the contractor with a copy to the employer, up to and including practical completion. Interim Payment certificates may be issued to the contractor between practical completion and the final payment certificate. A payment certificate may be for a nil or negative amount.  
 Add the following to Clause 25.3:

Carried to Collection

R

Section No. 1  
 Bill No. 1  
 Preliminaries

Amount

25.3.12 Monthly Local content report,  
 25.3.13 EPWP / NYS payment register, labour reports and certified ID document of EPWP/NYS beneficiaries, Contract between Contractor and EPWP/ NYS beneficiaries, attendance register. (if applicable)  
 25.3.14 Tax Invoice,  
 25.3.15 Labour intensive report.  
 25.3.16 Contract participation goal reports.  
 25.5 No Clause.  
 Replace Clause 25.6 with the following:  
 Materials and goods will only be certified and paid for upon providing proof of full payment to the supplier and proof of transfer of ownership from the supplier to the contractor by the contractor. Once paid, material and goods shall become the property of the employer and shall not be removed from site without the written authority of the Employer.  
 25.7.5 No clause.  
 Replace Clause 25.10 with the following:  
 The employer shall pay the contractor the amount stipulated in an issued payment certificate, correct in all material respects, within thirty (30) calendar days from the date of receiving the payment certificate, invoice and all other substantiating documentation for items certified in the payment certificate.  
 Replace Clauses 25.12 to 25.12.3 with the following:  
 The value certified shall be subject to the following percentage adjustments:  
 (Clauses 25.12.1 to 25.12.5 shall be applicable to a contract sum up to R1 million. In the event of a contract sum more than R1 million for Options D & E (C 1.0 Securities [11.0]).  
 Clauses 25.12.1 to 25.12.5 shall be applicable) 25.12.1 Where a security is selected in terms of C 1.0 Securities [11.0], the value of the works in terms of 25.1 and of the materials and goods in terms of 25.4 shall be certified in full. The value certified shall be subject to the following percentage adjustments:  
 25.12.2 Ninety-five per cent (95%) of such value in interim payment certificates issued up to the date of practical completion.  
 25.12.3 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion 25.12.4 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms of  
 26.  
 25.12.5 One hundred per cent (100%) of such value in the final payment certificate in terms of 26 except where the amount certified is in favour of the employer. In such an event the payment reduction shall remain at the adjustment level applicable to the final payment certificate.  
 (Clauses 25.12.6 to 25.12.10 shall be applicable to a contract sum more than R1 million for Option C (C 1.0 Securities [11.0]).

Carried to Collection

R

Section No. 1  
 Bill No. 1  
 Preliminaries

	<p>25.12.6 Where security is a payment reduction in term of C 1.0 Option C, value of the works in terms of 25.1 and materials and goods in terms of 25.4 shall be certified in full. The value certified shall be subject to the following percentage adjustments:</p> <p>25.12.7 Ninety per cent (90%) of such value in interim payment certificates issued up to the date of practical completion</p> <p>25.12.8 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion</p> <p>25.12.9 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms of 26.</p> <p>25.12.10 One hundred per cent (100%) of such value in the final payment certificate in terms of 26 except were the amount certified is in favour of the employer. In such an event the payment reduction shall remain at the adjustment level applicable to the final payment certificate</p>	Item	
27	<p><b>ADJUSTMENT OF THE CONTRACT VALUE AND FINAL ACCOUNT</b></p> <p>Clause 26.0</p> <p>Ref Clause 6.7 – Clause 26.1</p> <p>Omit Clause 26.4.3</p> <p>Ref Clause 6.7 – Clause 26.7</p> <p>Replace Clause 26.10 with the following:</p> <p>The principal agent shall prepare the final account in consultation with the employer and issue the final account, to the contractor within sixty (60) working days of the date of practical completion</p> <p>Ref Clause 6.7 – Clause 26.12</p>	Item	
28	<p><b>RECOVERY OF EXPENSE AND/OR LOSS</b></p> <p>Clause 27.0</p> <p>Replace Clause 27.1.2 with the following:</p> <p>Interest due to late payment only.</p> <p>Replace Clause 27.1.4 with the following:</p> <p>Interest due to late payment only.</p> <p>27.1.5 No Clause</p> <p>Replace Clause 27.5 with the following:</p> <p>Where the employer decides to recover an amount due in terms of 27.2 from a construction guarantee, cash deposit or retention money held as security, the employer shall issue a written demand to the contractor before recovering the amount. Should such amount not be paid to the employer within fourteen (14) calendar days of the date-of notice by the employer, the employer may recover such an amount from the security.</p> <p>Add the following as Clause 27.6:</p>		
<p>Section No. 1 Bill No. 1 Preliminaries</p>	<p>Carried to Collection</p>	<p><b>R</b></p>	

Where a provisional sequestration or provisional liquidation order has been granted or where an order has been granted which commences sequestration, liquidation, bankruptcy, receivership, winding-up or any similar effect, against the contractor or this agreement is cancelled in terms of 29, the employer may issue a demand to the guarantor in terms of the construction guarantee or advance payment guarantee held as security.

Item

**SUSPENSION AND TERMINATION**

29 **SUSPENSION BY THE CONTRACTOR**

- Clause 28.0
- 28 No Clause
- 28.1 No Clause
- 28.1.1 No Clause
- 28.1.2 No Clause
- 28.1.3 No Clause
- 28.1.4 No Clause
- 28.1.5 No Clause
- 28.2 No Clause
- 28.3 No Clause
- 28.4 No Clause

Item

30 **TERMINATION**

Clause 29.0  
 Add the following as Clause 29.1.4:  
 The contractor's estate has been sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa  
 Add the following as Clause 29.1.5:  
 The contractor has engaged in corrupt or fraudulent practices in competing for or in executing the contract  
 Add the following as Clause 29.1.6:  
 Honour his obligations in terms of Clauses 10.1.5.1.3, 11.4.1 and 12.2. sub Clauses 5, 6, 8, 9, 10, 11, 12, 13, 15, 16, 19, 20, 22.  
 Replace Clause 29.7 with the following:  
 The employer, on notice to the contractor, may recover damages from the contractor from the date of termination including, but not limited to, additional costs incurred in the completion,

Carried to Collection

R

Section No. 1  
 Bill No. 1  
 Preliminaries

consultant cost, rental of alternative accommodation, invitation of completion tenders, salaries

of officials and safeguarding the site, of the remaining work [25.3.7; 27.1.3]

Replace Clause 29.9 with the following:

The employer has the right of recovery against the contractor, where applicable, [CD] from:

The guarantee for construction (variable) until the final payment has been made;

or

The guarantee for construction (fixed) until the date of practical completion;

or

The payment reduction until the final payment is made;

or

The cash deposit made as security until the final payment is made

29.14.1 No Clause

29.14.3 No Clause

29.14.4 No Clause

29.14.5 No Clause

29.14.6 No Clause

29.14.7 No Clause

29.15 No Clause

29.16 No Clause

29.17.3 No Clause

29.17.6 No Clause

29.21.5 No Clause

29.22 No Clause

29.23 No Clause

29.25.3 No Clause

29.25.4 No Clause

29.27 No Clause

Item

**DISPUTE RESOLUTION**

31 **DISPUTE RESOLUTION**

Clause 30.0

Replace Clause 30.2 with the following:

Where such disagreement is not resolved within ten (10) working days of receipt of such notice it shall be deemed to be a dispute and shall be submitted to Mediation as a first method of dispute resolution failing which the parties will resort to Litigation

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries

30.3 to 30.7.7 No Clauses.

Replace Clause 30.8 with the following:

The parties may, by agreement and at any time before Litigation, refer a dispute to mediation, in which event:

30.8.1 No Clause

Replace Clause 30.8.2 with the following:

The appointment of a mediator, the procedure, and the status of the outcome shall be agreed between the parties.

Replace Clause 30.8.3 with the following:

Regardless of the outcome of a mediation the parties shall bear their own costs concerning the

Mediation and equally share the costs of the mediator and related expenses.

Replace Clause 30.9 with the following:

Institution of Litigation shall be commenced and process served within three (3) year from the

date of existence of the dispute, failing which the dispute shall lapse.

30.10 No Clause

30.12 No Clause

Item

**SECTION B: GENERAL PRELIMINARIES**

**B1.0 DEFINITIONS AND INTERPRETATION**

32 B1.1 Definitions

Item

33 B1.2 Interpretation

Item

**B2.0 DOCUMENTS**

34 B2.1 Checking of documents

Item

35 B2.2 Provisional bills of quantities

Item

36 B2.3 Availability of construction information

Item

37 B2.4 Ordering of materials and goods

Item

**B3 PREVIOUS WORK AND ADJOINING PROPERTIES**

38 B3.1 Previous work - dimensional accuracy

Item

39 B3.2 Previous work - defects

Item

40 B3.3 Inspection of adjoining properties

Item

**B 4.0 THE SITE**

41 B4.1 Handover of site in stages

Item

42 B4.2 Enclosure of the works

Item

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries

43	B4.3 Geotechnical and other investigations	Item	
44	B4.4 Encroachments	Item	
45	B4.5 Existing premises occupied	Item	
46	B4.6 Services - known	Item	
	<b><u>B5.0 MANAGEMENT OF CONTRACT</u></b>		
47	B5.1 Management of the works	Item	
48	B5.2 Progress meetings	Item	
49	B5.3 Technical meetings	Item	
	<b><u>B6.0 SAMPLES, SHOP DRAWINGS AND MANUFACTURER'S INSTRUCTIONS</u></b>		
50	B6.1 Samples of materials	Item	
51	B6.2 Workmanship samples	Item	
52	B6.3 Shop drawings	Item	
53	B6.4 Compliance with manufacturer's instructions	Item	
	<b><u>B7.0 DEPOSITS AND FEES</u></b>		
54	B 7.1 Deposits and fees	Item	
	<b><u>B8.0 TEMPORARY SERVICES</u></b>		
55	B8.1 Water	Item	
56	B8.2 Electricity	Item	
57	B8.3 Ablution and welfare facilities	Item	
58	B8.4 Communication facilities	Item	
	<b><u>B9.0 PRIME COST AMOUNTS</u></b>		
59	B9.1 Responsibility for prime cost amounts	Item	
	<b><u>B10.0 ATTENDANCE ON SUBCONTRACTORS</u></b>		
60	B10.1 General attendance	The contractor shall at his own expense provide the following general attendance on the subcontractors:	
	<p>Access to the site and places where the subcontract work is to be carried out, including the reasonable use of any temporary personnel hoists erected by the contractor.</p> <p>The provision of water and lighting and single phase electric power to a position within 50 metres of the place where the subcontract work is to be carried out but excluding water, fuel and power for commissioning of any installation.</p>		
		Carried to Collection	
	Section No. 1		
	Bill No. 1		
	Preliminaries		

		Amount
	The provision of an area for the subcontractor to establish temporary office accommodation and workshops and for the storage of plant and materials	
	The use of erected scaffolding belonging to the contractor, in common with others having the like right, while it remains erected on the site.	
	The use, at reasonable times by arrangement of the contractor's erected hoisting equipment	Item
61	B10.2 Special attendance	Item
	<b><u>B11.0 GENERAL</u></b>	
62	B11.1 Protection of the works	Item
63	B.11.2 Protection/isolation of existing works and works occupied in sections	Item
64	B11.3 Security of the works	Item
65	B11.4 Notice before covering work	Item
66	B11.5 Disturbance	
	The contractor shall keep the site, structures, etc well watered during operations to prevent dust and shall provide and erect and remove on completion of the works all necessary temporary dust screens all to the satisfaction of the principal agent.	Item
67	B11.6 Environmental disturbance	Item
68	B11.7 Works cleaning and clearing	Item
69	B11.8 Vermin	Item
70	B11.9 Overhand work	Item
71	B11.10 Tenant installations	Item
72	B11.11 Advertising	Item
	<b><u>SECTION C: SPECIFIC PRELIMINARIES</u></b>	
	<b><u>Section C contains specific preliminary items which apply to this contract except where N/A (Not Applicable) appears against an item</u></b>	
73	<b>C1.0 CONTRACT DRAWINGS</b>	
	* Select relevant paragraph and delete whichever is not applicable depending on whether the contract is based on a bills of quantities or lump sum document.	
	* The drawings issued with the tender documents do not comprise the complete set but serve as a guide only for tendering purposes and for indicating the scope of the work to enable the tenderer to acquaint himself with the nature and extent of the works and the manner in which they are to be executed.	
	Carried to Collection	R
	Section No. 1	
	Bill No. 1	
	Preliminaries	



	<p>As the works falls within a security area the contractor must give the unit commander or other responsible officer notice before commencement of the works. Should the contractor fail to make such arrangements, admission to the site may be refused and any additional costs will be for the contractor's account.</p>	Item	
79	<p><b>C7.0 ENTRANCE PERMITS TO SECURITY AREAS</b></p>		
	<p>As the works falls within a security area the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under the control of the Defence Force, Police or chief security officer</p>	Item	
80	<p><b>C8.0 SECURITY CHECK OF PERSONNEL</b></p>		
	<p>The principal agent may require the contractor to have his personnel and workmen, or a certain number of them, security classified in the event of the principal agent requesting the removal of a person or persons from the works for security reasons, the contractor shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the works and the site and/or to any document or information relating to the works</p>	Item	
81	<p><b>C9.0 PROHIBITION ON TAKING OF PHOTOGRAPHS</b></p>		
	<p>In terms of article 119 of the Defence Act, 44 of 1957, it is prohibited to sketch or to take photographs of any military site or installation or any building or civil works thereon or to be in possession of a camera or other apparatus used for taking of photographs except when authorized thereto by or on behalf of the Minister.</p>		
	<p>The same prohibition is also applicable to all correctional institutions in terms of article 44.1( e )of the Correctional Services Act 8 of 1959.</p>	Item	
82	<p><b>C10.0 HIV/AIDS AWARENESS</b> It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document. Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained. The contractor must take note that compliance with the HIV/AIDS Specification is compulsory.</p> <p>In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of Clause A 25.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.</p>	Item	
	<p>Carried to Collection</p>	<b>R</b>	
<p>Section No. 1 Bill No. 1 Preliminaries</p>			

83	<b>C10.1 AWARENESS CHAMPION</b>	Selection, appointment, briefing and making available of an Awareness Champion including  provision of all relevant services, all in accordance with the HIV/AIDS Specification.	Item	
84	<b>C11.1 AWARENESS WORKSHOPS</b>	Selection and appointment of a competent Service Provider approved by the principal agent,  provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness  workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification	Item	
85	<b>C12.1 POSTERS, BOOKLETS, VIDEOS, ETC.</b>	Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the construction period, all in accordance with the HIV/AIDS Specification.	Item	
86	<b>C13.1 ACCESS TO CONDOMS</b>	Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the construction period, all in accordance with the HIV/AIDS Specification.	Item	
87	<b>C14.1 MONITORING</b>	Monitoring HIV/AIDS awareness of workers, providing the principal agent with access to  information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the construction period and close out, all in accordance with the HIV/AIDS Specification.	Item	
88	<b>C15.1 OCCUPATIONAL HEALTH AND SAFETY ACT</b>	The contractor shall comply with all the requirements as set out in the Construction Regulations, 2014 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993).		
Carried to Collection			<b>R</b>	
Section No. 1 Bill No. 1 Preliminaries				

It is required of the contractor to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document. The contractor must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of Clause A25.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance.

The contractor shall not be entitled to any compensation of whatsoever nature, including

interest, due to such delay of payment Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained

Item

89 **C16.1 EMPLOYMENT AND TRAINING OF YOUTH WORKERS ON THE EXPANDED PUBLIC**

**WORKS PROGRAMME (EPWP) INFRASTRUCTURE PROJECTS: NATIONAL YOUTH SERVICE (NYS)**

The contractor shall comply with all the requirements as set out in the "Additional Specification SL: Employment and Training of Youth Workers on the Expanded Public Works Programme (EPWP) Infrastructure Projects: National Youth Service (NYS)" as attached to these bills of quantities / lump sum document.

The contractor shall identify a minimum number of youth workers from a priority list, and shall employ them at the statutory labour rates for a minimum period and train them, all as per the aforementioned specification and as elsewhere measured in these bills of quantities / lump sum document.

The contractor shall liaise and co-ordinate with the employer and the EPWP Training Service Provider with regard to the priority list, the selection of youth workers, and the employment and training of the identified youth workers.

The contractor shall avail the services of an adequately qualified foreman specifically for the

EPWP-NYS youth workers, to act as their construction supervisor. The foreman will be responsible for continually monitoring the progress of the youth workers and for addressing questions and issues that may arise from the youth workers. Separate items which will be subject to remeasurement have been included elsewhere in these bills of quantities / lump sum document to cover the direct costs associated with the employment and training of the youth workers. Any additional requirements in respect of the aforementioned specification are deemed to be priced hereunder and no additional claims in this regard shall be entertained

Item

90 **C15.1 IMPLEMENTATION OF LABOUR-INTENSIVE INFRASTRUCTURE PROJECTS UNDER**

Carried to Collection

R

Section No. 1  
Bill No. 1  
Preliminaries

CLAINLEIGH COURT  
Amount

91 **THE EXPANDED PUBLIC WORKS PROGRAMME (EPWP)**  
**C16.1 COST OF EMPLOYING AND MANAGING SMME**  
 The main contractor has to be compensated for the selection, employment and managing SMME on site on a day to day.

Item

Item

Carried to Collection

R

Section No. 1  
 Bill No. 1  
 Preliminaries

CLAINLEIGH COURT  
Amount

**BILL NO. 1**  
**PRELIMINARIES**  
**COLLECTION**

Page No

Brought Forward from Page

- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24

Carried to Next

**R**

Section No. 1  
Bill No. 1  
Preliminaries

CLAINLEIGH COURT  
Amount

Brought from Previous

R

25

26

27

28

29

Carried To Section Summary

R

Section No. 1  
Bill No. 1  
Preliminaries



	Unit	Quantity	Rate	Amount
<b><u>Taking out and removing piping, including cutting off as necessary, holderbats and making good floor and wall finishes (making good tiling and paintwork elsewhere)</u></b>				
14	PVC piping for external and internal diameter consider all pipe sizes	m	260	
15	Steel piping exceeding 50 mm and not exceeding 100 mm external and internal diameter	m	400	
16	Suspended floor covering including draining water in the surface bed	m <sup>2</sup>	650	
17	Stainless steel sink and drainer including timber cupboard roughly 2000 x 350 x 510 mm high with top cupboard above	No	27	
18	Vitreous china bathig tub supported by the wall on one side and brick on the other side	No	27	
19	Vitreous china WC pan with cistern and flush pipe	No	28	
20	Vitreous china wash hand basin with pipes	No	28	
21	200 Litre geyser from wall in all the units	No	27	
<b><u>Taking out/off and removing carpets</u></b>				
22	Floor carpets	m <sup>2</sup>	1 800	
23	Mirror 450 x 450 mm high from wall	No	27	
<b><u>CUTTING THROUGH FLOORS AND CEILINGS</u></b>				
24	Stainless steel wash hand basin	No	35	
<b><u>Taking out and removing sanitary fittings, tanks, geysers, etc, including disconnecting from pipes, traps, etc and making good floor and wall finishes (making good tiling and paintwork elsewhere)</u></b>				
25	110 mm steel pipe	m	56	
26	50 mm PVC pipe	m	180	
27	Taps, Valves etc	No	81	
<b><u>Taking out and removing ironmongery</u></b>				
28	Towel rail not exceeding 700 mm long from wall	No	27	
<b><u>Taking out/off and removing sundry metalwork</u></b>				
29	Steel pipe handrails from walls, including brackets, and making good plaster finish	m	36	
Carried to Collection				
Section No. 1				
Bill No. 2				
Alterations				
			<b>R</b>	

	Unit	Quantity	Rate	Amount
30 Steel balustrades 1300 mm high from concrete stairs, including making good granolithic finish	m	36		
31 Toilet paper holder from wall	No	28		
32 Steel balustrades	m <sup>2</sup>	49		
<b><u>Hacking up/off and removing granolithic, screeds, plaster, etc from concrete or brickwork and preparing surfaces for new screed, plaster, tile finishes, etc</u></b>				
33 Steel wire mesh burglar proofing with frame 830 x 2100 m high bolted to brickwork, including making good face brickwork	No	27		
34 Window cills	m	180		
35 Mortice lockset from timber door	No	120		
<b><u>Cutting through:</u></b>				
36 120 mm reinforced concrete slab on the second floor to allow geyser pipes and connection	m	11		
<b><u>Making good face brickwork</u></b>				
37 Clean face brick and apply smooth paint finish	m <sup>2</sup>	436		
<b><u>Making good untinted granolithic</u></b>				
38 30 mm Thick on floors in patches	m <sup>2</sup>	400		
<b><u>Scrape internal and external walls</u></b>				
39 30 mm Thick plastered wall	m <sup>2</sup>	4 800		
<b><u>Making good internal cement plaster</u></b>				
40 Walls in patches	m <sup>2</sup>	456		
41 Concrete ceilings in patches	m <sup>2</sup>	50		
Carried to Collection				
Section No. 1				
Bill No. 2				
Alterations				
			<b>R</b>	

CLAINLEIGH COURT  
Amount

**BILL NO. 2**  
**ALTERATIONS**  
**COLLECTION**

Page No

Brought Forward from Page

32

33

34

Carried To Section Summary

R

Section No. 1  
Bill No. 2  
Alterations

	Unit	Quantity	Rate	Amount
<p><b><u>SECTION NO. 1</u></b></p>				
<p><b><u>BUILDING WORKS</u></b></p>				
<p><b><u>BILL NO. 3</u></b></p>				
<p><b><u>EARTHWORKS</u></b></p>				
<p><b><u>PREAMBLES</u></b></p>				
<p>The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades (2014; 2.1 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.</p>				
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>				
<p><b><u>Nature of material to be excavated</u></b></p>				
<p>The material to be excavated is assumed to be predominantly of a composition that will allow excavation in 'earth' as specified, but including a percentage of excavation in 'soft rock' and 'hard rock'</p>				
<p>Should the contractor consider that any of the excavations are more difficult in nature than excavations in 'earth" he shall immediately notify the Quantity Surveyor in writing. Failing such notification the excavations shall be deemed to be in "earth" and shall be measured and valued accordingly</p>				
<p><b><u>Carting away of excavated material</u></b></p>				
<p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations, or alternatively, from stock piles situated on the building site</p>				
<p><b><u>Dewatering of excavations</u></b></p>				
<p>The Contractor shall allow for removing seepage and other water from subterranean sources from the excavations by pumping, baling or otherwise Accurate records of all such dewatering shall be kept to determine the total volume of water so removed and a clear distinction shall be made between water from subterranean sources and other water</p>				
<p><b><u>Density testing on filling</u></b></p>				
<p>Rates of filling, etc. shall include for all density and soil type testing to prove that the specified compaction is achieved When additional testing is done on instruction of the Architect and these tests are successful, they will be paid for additionally</p>				
<p>Section No. 1 Bill No. 3 Earthworks</p>				
<p>Carried to Collection</p>				
			R	

	Unit	Quantity	Rate	Amount
<b><u>Proprietary products in descriptions</u></b>				
Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Architect				
<b><u>SITE CLEARANCE, ETC</u></b>				
<b><u>Site clearance</u></b>				
1				
	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m <sup>2</sup>	189	
<b><u>REMOVAL OF TREES ETC</u></b>				
<b><u>Taking out and removing, grubbing up roots and filling in holes</u></b>				
2	Tree stump not exceeding 1m high, exceeding 200mm and not exceeding 500mm girth	No	1	
3	Tree stump not exceeding 1m high, exceeding 1 000 mm and not exceeding 2000 mm girth	No	1	
<b><u>Taking out and removing, grubbing up roots, filling in holes and compacting to 90% Mod AASHTO density</u></b>				
4	Tree stump not exceeding 1m high, exceeding 200mm and not exceeding 500mm girth	No	1	
5	Tree stump not exceeding 1m high, exceeding 1000 mm and not exceeding 2000 mm girth	No	1	
<b><u>Cutting down and removing, grubbing up roots and filling in holes</u></b>				
6	Hedge not exceeding 1000 mm high	m	18	
<b><u>EXCAVATIONS ETC</u></b>				
<b><u>Digging up topsoil</u></b>				
7	Digging up topsoil to an average depth of 100 mm and preserving for use as filling	m <sup>2</sup>	1 020	
<b><u>FILLING ETC</u></b>				
<b><u>Earth filling supplied by the contractor, compacted to 95% Mod AASHTO density</u></b>				
8	Over site to make up levels	m <sup>3</sup>	1 224	
Carried to Collection				
Section No. 1				
Bill No. 3				
Earthworks				
			R	



CLAINLEIGH COURT  
Amount

**BILL NO. 3**  
**EARTHWORKS**  
**COLLECTION**

Page No

Brought Forward from Page

36

37

38

Carried To Section Summary

R

Section No. 1  
Bill No. 3  
Earthworks

	Unit	Quantity	Rate	Amount
<p><b><u>SECTION NO. 1</u></b>  <b><u>BUILDING WORKS</u></b>  <b><u>BILL NO. 4</u></b>  <b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p>				
<p><b><u>Test blocks:</u></b></p>				
<p><b><u>PREAMBLES</u></b></p>				
<p>The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades (2014; 2.1 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.</p>				
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>				
<p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Architect.</p>				
<p>The costs of making, storing and testing of concrete test cubes as required under clause 7 'Tests' of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Architect. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Architect. (Test cubes are measured separately).</p>				
<p><b><u>Formwork:</u></b></p>				
<p>Descriptions of formwork shall be deemed to include use and waste only (except where described as left in or permanent), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use.</p>				
<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p>				
<p>Formwork to soffits of solid slabs etc., shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described.</p>				
<p style="text-align: right;">Carried to Collection</p>				
<p>Section No. 1                      Bill No. 4                      Concrete, Formwork And Reinforcement</p>				
			<b>R</b>	

	Unit	Quantity	Rate	Amount
<p>Formwork to sides of bases, pile caps, ground beams, etc., will only be measured where it is prescribed by the Engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks.</p>				
1	Slab	m <sup>3</sup>	231	
2	Building aprons and ramps	m <sup>3</sup>	15	
<b><u>CONCRETE SUNDRIES</u></b>				
<b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>				
3	Surface beds, slabs, etc	m <sup>2</sup>	237	
<b><u>Finishing top surfaces of concrete to an evenly ribbed no-slip surface</u></b>				
4	Apron slabs, paving, etc to slight falls	m <sup>2</sup>	148	
5	Making and testing set of three 150 x 150 x 150mm concrete strength test cubes (Provisional).	Sets	8	
<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II) (CPAP Work Group 111)</u></b>				
<b><u>General formwork:</u></b>				
6	Edges not exceeding 300mm high	m	112	
<b><u>MOVEMENT JOINTS ETC</u></b>				
<b><u>Saw-cut joints</u></b>				
7	8mm x 40mm Saw-cut joints in top of concrete, apply sika primer no.3 or equal approved to exposed concrete surface in joint, seal joint using 8mm wide x 10mm deep "sikaflex 11FC" or equal approved, flush with concrete surface with 8 x 10mm sonda jointex backing strip.	m	48	
<b><u>REINFORCEMENT (PROVISIONAL)</u></b>				
<b><u>Fabric reinforcement</u></b>				
8	Type 193 fabric reinforcement in concrete surface beds, slabs, etc.	m <sup>2</sup>	1 020	
<b><u>REINFORCED CONCRETE CAST ON/IN FORMWORK</u></b>				
<b><u>25 Mpa 19 mm concrete with penetron mixture</u></b>				
9	Slabs including beams and inverted beams (ring beams)	m <sup>3</sup>	49	
Carried to Collection				
Section No. 1				
Bill No. 4				
Concrete, Formwork And Reinforcement				
			<b>R</b>	

	Unit	Quantity	Rate	Amount
<b><u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
<b><u>(CPAP WORK GROUP NO. 111)</u></b>				
<b><u>Smooth formwork to sides</u></b>				
10	Inverted beams	m <sup>2</sup>	16	
<b><u>Smooth formwork to soffits</u></b>				
11	Slabs propped not exceeding 1.5m and not exceeding 3.5m	m <sup>2</sup>	165	
<b><u>Boxing in smooth formwork to form</u></b>				
12	50mm Diameter opening through 150 mm slab	No	30	
13	Opening exceeding 1m and not exceeding 2m girth through 150 mm wall or beam	No	100	
<b><u>Steel reinforcement to structural concrete work</u></b>				
14	8mm Diameter bars	Tonnes	1.00	
15	12 mm Diameter bars	Tonnes	3.00	
Carried to Collection				
Section No. 1				
Bill No. 4				
Concrete, Formwork And Reinforcement				
			<b>R</b>	

CLAINLEIGH COURT  
Amount

**BILL NO. 4**  
**CONCRETE, FORMWORK AND REINFORCEMENT**  
**COLLECTION**

Page No

Brought Forward from Page

40

41

42

Carried To Section Summary

R

Section No. 1  
Bill No. 4  
Concrete, Formwork And Reinforcement



	Unit	Quantity	Rate	Amount
2 One brick wall	m <sup>2</sup>	860		
<b><u>BRICKWORK SUNDRIES</u></b>				
<b><u>Brickwork sundries:</u></b>				
3 150 mm Wide reinforcement built in horizontally (provisionally).	m	1 078		
4 12mm Fibre board built in vertically through brick wall.	m <sup>2</sup>	180		
<b><u>Turning pieces :</u></b>				
5 110mm Wide turning piece to lintels etc.	m	25		
6 230mm Wide turning piece to lintels etc.	m	40		
<b><u>Precast lintels:</u></b>				
7 230 x 110mm Lintels in lengths not exceeding 3m long	m	101		
Carried to Collection				
Section No. 1				
Bill No. 5				
Masonry				
			<b>R</b>	

CLAINLEIGH COURT  
Amount

**BILL NO. 5**  
**MASONRY**  
**COLLECTION**

Page No

Brought Forward from Page

44

45

Carried To Section Summary

R

Section No. 1  
Bill No. 5  
Masonry

	Unit	Quantity	Rate	Amount
<p><b><u>SECTION NO. 1</u></b>  <b><u>BUILDING WORKS</u></b>  <b><u>BILL NO. 6</u></b>  <b><u>WATERPROOFING</u></b></p> <p><b><u>PREAMBLES</u></b>                      The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades (2014; 2.1 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b>  <b><u>Proprietary products in descriptions:</u></b>                      Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p><b><u>DAMP-PROOFING OF WALLS AND FLOORS</u></b>  <b><u>One layer of 375 micron Consol Plastics Brikgrip DPC embossed damp proof course:</u></b></p>				
1	m <sup>2</sup>	170		
<p><b><u>One layer of 250 micron Consol Plastics Gunplas Black waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape:</u></b></p>				
2	m <sup>2</sup>	1 040		
<p><b><u>JOINT SEALANTS ETC (Provisional)</u></b>  <b><u>Mastic sealing compound including backing cord, bond breaker, primer, etc:</u></b></p>				
3	m	55		
<p>Carried To Section Summary</p>				
<p>Section No. 1                      Bill No. 6                      Waterproofing</p>				
			<b>R</b>	

	Unit	Quantity	Rate	Amount
<p><b><u>SECTION NO. 1</u></b>  <b><u>BUILDING WORKS</u></b>  <b><u>BILL NO. 7</u></b>  <b><u>ROOF COVERINGS</u></b></p> <p><b><u>PREAMBLES</u></b>                      The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades (2014; 2.1 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.</p> <p><b><u>STEEL ROOF SHEETING AND ACCESSORIES</u></b>  <b><u>0.58mm plain silver galvanised Diamondek 407 cover clip lock in single length on 50 x 76mm SA pine purlins @ 750mm/ c/c on engineer designed trusses on 114x38mm wallplate &amp; ceiling mesh on underside of trusses</u></b></p>				
1	m <sup>2</sup>	629		
<p><b><u>ROOF AND WALL INSULATION (CPAP WORK GROUP NO. 122)</u></b>  <b><u>Single-sided aluminium foil sheeting in accordance with SANS 428:2007</u></b></p>				
2	m <sup>2</sup>	685		
<p>Carried To Section Summary</p>				
<p>Section No. 1                      Bill No. 7                      Roof Coverings</p>				
			<b>R</b>	

	Unit	Quantity	Rate	Amount
<p><b><u>SECTION NO. 1</u></b></p>				
<p><b><u>BUILDING WORKS</u></b></p>				
<p><b><u>BILL NO. 8</u></b></p>				
<p><b><u>CARPENTRY AND JOINERY</u></b></p>				
<p><b><u>PREAMBLES</u></b></p>				
<p>The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades (2014; 2.1 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.</p>				
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>				
<p><b><u>Proprietary products in descriptions:</u></b></p>				
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>				
<p><b><u>Prefabricated roof trusses:</u></b></p>				
<p>Prefabricated timber roof trusses shall be constructed of South African pine by a firm of specialist designer manufacturer's as approved by the Architect.</p>				
<p>Prices must include for all cross and windbracing according to the manufacturer's instruction.</p>				
<p>Prices must include for the design, plans and approval of all timber trusses and no claim shall be considered.</p>				
<p>Pre-fabricated timber roof trusses shall comply with the requirements of SABS Specification 0163 and be constructed of South African pine as described in clause 8.5 to the designs shown on the Manufacturer's detail drawings. The timber shall be of cross-sectional dimensions shown, cut to correct lengths with ends square or at the required angle.</p>				
<p>Trusses shall be assembled in truss fabricating jigs with the truss having the proper camber, all tightly clamped together with joints secured using approved connector plates of galvanised steel sheet. Connector plates shall be pressed into the timber simultaneously from both sides of the truss with a hydraulic press capable of exerting such pressure as will ensure complete penetration of the teeth into the timber.</p>				
<p>The connector plates shall be of such size as will ensure that the joints so made will adequately withstand the forces exerted on the joints.</p>				
<p style="text-align: right;">Carried to Collection</p>				
<p>Section No. 1 Bill No. 8 Carpentry And Joinery</p>				
<p style="text-align: center;">49</p>				

R

	Unit	Quantity	Rate	Amount
<p>In coastal areas connector plates in buildings without ceilings shall be painted with two coats of epoxy tar complying with SABS Specification 801 Type 2, or rust neutralising paint.</p> <p>Approval of pre-fabricated roofing systems, whether measured as an alternative or not, shall be subject to the following requirements:</p> <p>(a) The Manufacturer of the pre-fabricated trusses shall hold a certificate of competence issued by the Insitute for Timber Construction.</p> <p>(b) A polyester print, size A1 having a minimum thickness of 0,5mm, shall be submitted by the Contractor to the Regional Representative at an early stage for approval by the Directorate: Structural Engineering Services.</p> <p>(c) The drawings shall be signed by a Registered Professional Engineer whose name appears on the Departmental panel for structural work.</p> <p>(d) In the case of systems buildings, approval shall be given with submission of the contract drawings on acceptance of the tender.</p> <p>The following minimum information shall be shown on the drawings:</p> <p>(a) Details of the roof system with the position of the rafters and purlins indicated thereon as well as typical elevations.</p> <p>(b) Bracing as recommended by the Institute for Timber Construction.</p> <p>(c) Sizes and grading of the timber components.</p> <p>(d) Truss sizes, e.g. height of ridge or angle of pitch.</p> <p>(e) Plate sizes for every construction point. (Code numbers only are deemed insufficient).</p> <p>(f) Seperate connection details for hip, valley and jack rafters.</p> <p>(g) Maximum spacing for purlins and brandering to ceilings shall be according to Subclauses 7.6.1 and 7.6.2 and Clauses 7.8, 7.9 and 9.5.</p> <p>(h) The type of roof covering as well as the design load. Over and above the supervision undertaken by the Representative / Agent, the Truss Fabricator or his Design Engineer shall inspect the completed roof structure and issue a certificate of confirmation to the Department that:</p>				
<p>Carried to Collection</p>				<b>R</b>
<p>Section No. 1                  Bill No. 8                  Carpentry And Joinery</p>				

	Unit	Quantity	Rate	Amount
<p>'The roof structure(s) has (have) been erected in accordance with the Design Engineer's drawings, as accepted by the Department, and the relevant details given in the manual 'THE ERECTION AND BRACING OF TIMBER ROOF TRUSSES' issued by the National Timber Research Institute and the Institute for Timber Construction'.</p> <p><b>Joinery</b></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc.</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes.</p> <p><b>Fixing:</b></p> <p>All nailing of timber roof trusses, purlins, etc shall be done with galvanised nails. In coastal areas, copper, aluminium or stainless steel nails shall be used.</p> <p>Items described as 'nailed' shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.</p> <p>Where items are described as 'bolted' the bolts have been measured elsewhere.</p> <p><b>Sawn softwood:</b></p> <p><b>ROOF CONSTRUCTION</b></p> <p><b>Everite Flexit pressed nutec-cement:</b></p> <p><b>Pressed fibre-cement:</b></p>				
1	m	138		
2	m	120		
<p><b>STRUCTURAL TIMBERWORK ETC</b></p> <p><b>Sawn softwood grade A</b></p>				
3	m	1 200		
4	m	559		
5	No	30		
Carried to Collection				
Section No. 1				
Bill No. 8				
Carpentry And Joinery				
			<b>R</b>	

	Unit	Quantity	Rate	Amount
<b><u>Hardwood Timber doors - Toilet Doors</u></b>				
6				
Van Acht 40mm thick 2 Panel HB hardwood door, overall size 813 x 2032mm high. Sand down timber surface to a fine smooth surface and apply quality timber sealant prior to installation, all in accordance with manufacturer's recommendations, overall size 813 x 2032mm high. Sand down timber surface to a fine smooth surface and apply quality timber sealant prior to installation, all in accordance with manufacturer's recommendations.				
	No	31		
<b><u>Multipurpose Doors - Meranti</u></b>				
7				
Swartland PD 1 (813 x 2031mm) 40mm thick hardwood door, overall size 813 x 2032mm high, Sand down timber surface to a fine smooth surface and apply quality timber sealant prior to installation, all in accordance with manufacturer's recommendations. GEZE brass two ball bearing butt hinge with polished brass finish (Code: 95/71), size 100 x 75 x 3mm.				
	No	111		
8				
Van Acht 40mm thick 2 Panel HB hardwood door, overall size 813 x 2032mm high. Sand down timber surface to a fine smooth surface and apply quality timber sealant prior to installation, all in accordance with manufacturer's recommendations. GEZE brass two ball bearing butt hinge with polished brass finish (Code: 95/71), size 100 x 75 x 3mm.				
	No	2		
<b><u>SKIRTINGS</u></b>				
9				
70 x 19 mm meranti skirting				
	m	2 202		
<b><u>Kitchen cupboards</u></b>				
10				
Counter top of approximate length 3550 x 350 mm high one end and 2500 x 350 on the other end with stainless sink compartment according to the fixed furniture drawing provided				
	No	27		
Carried to Collection				
Section No. 1				
Bill No. 8				
Carpentry And Joinery				
			R	

CLAINLEIGH COURT  
Amount

**BILL NO. 8**  
**CARPENTRY AND JOINERY**  
**COLLECTION**

Page No

Brought Forward from Page

49  
50  
51  
52

Carried To Section Summary

R

Section No. 1  
Bill No. 8  
Carpentry And Joinery

	Unit	Quantity	Rate	Amount
<b><u>SECTION NO. 1</u></b>				
<b><u>BUILDING WORKS</u></b>				
<b><u>BILL NO. 9</u></b>				
<b><u>CEILING PARTITIONS AND ACCESS FLOORING</u></b>				
<b><u>PREAMBLES</u></b>				
The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades (2014; 2.1 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.				
<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
<b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b>				
<b><u>Ceilings</u></b>				
Unless otherwise described ceilings shall be deemed to be horizontal				
<b><u>Fixing</u></b>				
Items described as nailed shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as bolted, the bolts have been given elsewhere				
<b><u>Bulkheads</u></b>				
Unless otherwise described bulkheads shall be deemed to be horizontal along the length				
<b><u>Steel components</u></b>				
All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121				
<b><u>CEILING TIMBERS, BEADS, INSULATION, ETC</u></b>				
<b><u>Sawn softwood</u></b>				
<b><u>100 mm insulation</u></b>				
1		100 mm Insulation in blanket form closely fitted and laid on top of brandering between roof timbers	m <sup>2</sup>	629
<b><u>Gypsum</u></b>				
2		30mm lamdaboard ceiling with concealed clips by specialist according to drawings. Ceiling to be painted	m <sup>2</sup>	629
3		Extra over ceiling opening size 600 x 600 mm for	No	10
Carried To Section Summary				
Section No. 1				
Bill No. 9				
Ceilings Partitions And Access Flooring				
			<b>R</b>	



	Unit	Quantity	Rate	Amount
<b><u>SECTION NO. 1</u></b>				
<b><u>BUILDING WORKS</u></b>				
<b><u>BILL NO. 11</u></b>				
<b><u>IRONMONGERY</u></b>				
<b><u>PREAMBLES</u></b>				
The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades (2014; 2.1 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.				
<b><u>HINGES, BOLTS, ETC</u></b>				
<b><u>Union:</u></b>				
1	No	307		
Butt hinge EN1905GRD13				
<b><u>HINGES, FLOOR SPRING HINGES,BOLTS, PANIC, BOLTS,ETC.</u></b>				
<b><u>Bolts, indicator bolts, etc.:</u></b>				
2	No	27		
Toilet door closer				
<b><u>PUSH PLATES AND KICKING PLATES</u></b>				
<b><u>Push plates, etc:</u></b>				
3	No	2		
Kick plate 250 x 800mm works				
<b><u>LOCKS</u></b>				
<b><u>Union:</u></b>				
4	No	32		
Padlock.				
5	No	146		
Four lever mortice lockset for rebating meeting stiles complete with approved chromium plated handles.				
<b><u>DOOR CLOSERS</u></b>				
<b><u>LETTERS, NAMEPLATES, ETC.</u></b>				
<b><u>Name plates countersunk screwed and epoxy glued with signs engraved and filled in with red or green epoxy:</u></b>				
6	No	27		
Flat number labelling				
Carried to Collection			R	
Section No. 1				
Bill No. 11				
Ironmongery				

	Unit	Quantity	Rate	Amount
<b><u>BATHROOM FITTINGS</u></b>				
<b><u>Bathroom fittings:</u></b>				
7				
32mm diameter standard stainless steel grade 304 satin polished rear side grab around the cistern (code SR 2) fixed to wall with stainless steel screws and plastic wall plugs for fitting, fixed strictly according to supplier specification.	No	27		
8				
32mm diameter standard stainless steel grade 304 satin polished side grab around the cistern (code DL 3) fixed to wall with stainless steel screws and plastic wall plugs for fitting, fixed strictly according to supplier specification.	No	28		
9				
Recessed toilet paper roll holder manufactured from 0.8 mm thick 18/10 stainless steel with a single piece pressed lid, welded container and cylinder lock with a Franke standard key - SATIN finish. FSA Code: 359809 or similar approved	No	28		
10				
20x210x112 mm Stainless steel liquid soap dispenser (Code 0475) or similar approved to be read in conjunction with architect drawings	No	27		
<b><u>SUNDRIES</u></b>				
<b><u>Union:</u></b>				
11				
Brass hat and coat hook.	No	35		
12				
20mm Diameter chromium plated key ring with and including plastic keytag.	No	27		
<b><u>Union:</u></b>				
13				
38mm Diameter rubber door stop.	No	138		
Carried to Collection				
Section No. 1				
Bill No. 11				
Ironmongery				
			R	

CLAINLEIGH COURT  
Amount

**BILL NO. 11**  
**IRONMONGERY**  
**COLLECTION**

Page No

Brought Forward from Page

56

57

Carried To Section Summary

R

Section No. 1  
Bill No. 11  
Ironmongery



	Unit	Quantity	Rate	Amount
<b><u>Welded screens and gates to entrance doors</u></b>				
4	No	32		
900 x 2100 mm Steel Burglar door with 60 mm galvanised steel bars with galvanised mesh				
5	No	81		
12 mm Expansion bolt				
<b><u>ALUMINIUM WINDOWS, DOORS, ETC (CPAP WORK GROUP NO. 140)</u></b>				
Refer to attached window schedules for details of windows				
6	No	27		
Aluminium Window type 2 500 mm x 1500 mm high, 36mm Thick Charcoal Powder coated frame.Aluminium with 6.38 mm Clear safety glass				
7	No	12		
Aluminium Window type 2 000 mm x 1200 mm high, 36mm Thick Charcoal Powder coated frame.Aluminium with 6.38 mm Clear safety glass				
8	No	33		
Aluminium Window type 1 500 mm x 900 mm high, 36mm Thick Charcoal Powder coated frame.Aluminium with 6.38 mm Clear safety glass				
9	No	6		
Aluminium Window type 1 000 mm x 460 mm high, 36mm Thick Charcoal Powder coated frame.Aluminium with 6.38 mm Clear safety glass				
10	No	15		
Aluminium Window type 500 mm x 460 mm high, 36mm Thick Charcoal Powder coated frame.Aluminium with 6.38 mm Clear safety glass				
11	No	4		
Aluminium Window type 600 mm x 600 mm high, 36mm Thick Charcoal Powder coated frame.Aluminium with 6.38 mm Clear safety glass				
<b><u>Welded screens on windows</u></b>				
12	No	27		
2500 x 1500 mm Steel Burglar door with 60 mm galvanised steel bars with galvanised mesh				
13	No	12		
2000 x 1200 mm Steel Burglar door with 60 mm galvanised steel bars with galvanised mesh				
14	No	33		
1 500 x 900 mm Steel Burglar door with 60 mm galvanised steel bars with galvanised mesh				
15	No	6		
1 000 x 460 mm Steel Burglar door with 60 mm galvanised steel bars with galvanised mesh				
16	No	38		
6 mm steel bolts				
Carried to Collection				
Section No. 1				
Bill No. 12				
Metalwork				
			<b>R</b>	



CLAINLEIGH COURT  
Amount

**BILL NO. 12**  
**METALWORK**  
**COLLECTION**

Page No

Brought Forward from Page

59

60

61

Carried To Section Summary

R

Section No. 1  
Bill No. 12  
Metalwork

	Unit	Quantity	Rate	Amount
<b><u>SECTION NO. 1</u></b>				
<b><u>BUILDING WORKS</u></b>				
<b><u>BILL NO. 13</u></b>				
<b><u>PLASTERING</u></b>				
PREAMBLES				
The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades (2014; 2.1 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.				
<b><u>Plastering of existing face bricks panels or walls</u></b>				
Contractor preparation must be to clean down existing face brick walls to be free of all loose particles and any laitance or efflorescence from brickwork and plaster with sand cement plaster mix for rough brick walls, composed of 1 part cement (Code: CEM I 42,5N) and 6 parts sand 10mm - 20mm thick finished with a steel trowel to rough brick walls. Cement is to be manufactured in accordance with SANS 50197 - 1. Sand to conform to SANS 1083:1994.				
<b><u>SCREEDS</u></b>				
<b><u>Screeds on concrete:</u></b>				
1		38mm Thick on floors and landings.	m <sup>2</sup>	786
2		38mm Thick on treads and risers of stairs including readings.	m <sup>2</sup>	29
<b><u>INTERNAL AND EXTERNAL PLASTER</u></b>				
<b><u>Cement plaster on brickwork:</u></b>				
3		On walls.	m <sup>2</sup>	612
4		On narrow widths.	m <sup>2</sup>	30
Carried To Section Summary				
Section No. 1				
Bill No. 13				
Plastering				
			R	

	Unit	Quantity	Rate	Amount
<b><u>SECTION NO. 1</u></b>				
<b><u>BUILDING WORKS</u></b>				
<b><u>BILL NO. 14</u></b>				
<b><u>TILING</u></b>				
<b><u>FLOOR TILING</u></b>				
Waterproof grout is normally used in showers, on balconies, etc. Epoxy grout is used in kitchens, butcheries, etc, where floors are frequently washed with detergents				
<b><u>600 x 600 mm non slip ceramic tiles on existing granolithic floor to Architect's approval. Grout all joints and seal. All grouting joints to be continuous in both directions. Lay expansion joints</u></b>				
1	m <sup>2</sup>	1 769		
2	m <sup>2</sup>	105		
<b><u>CERAMIC WALL TILING</u></b>				
<b><u>300 x 300 x 5mm Gloss White glazed ceramic tiles fixed with adhesive to plaster (plaster elsewhere):</u></b>				
3	m <sup>2</sup>	459		
4	m <sup>2</sup>	58		
Carried To Section Summary				
Section No. 1				
Bill No. 14				
Tiling				
			<b>R</b>	



	Unit	Quantity	Rate	Amount
Concealed cistern compatible with cistern CC-CISTERN/N and CC-CISTERN/ WH or equally approved.	No	28		
8 LIXIL- Cobra Cast acrylic, oval, centre waste bath. 1 850mm X 900mm X 430mm. Volume 225 litres. Waste sold separately.	No	27		
9 LIXIL- Cobra Shelter Round wall hung basin. 495mm long X 430mm wide. 1 X pre-punched tap hole in the centre of the basin. Overflow, expansion bolts & installation manual included. Compatible with Cobra round full pedestal				
[CWLPERD1-6DT01] All necessary fittings to be to manufacturers specification and up to building standards and regulations. Wall edge and sink to be properly and neatly sealed with white silicone	No	28		
10 Square Shower Head, Arm & Mixer set - Brushed Stainless Steel. Shower Head with Mixers to connect hot and cold water inlets CrystalTech Walk-In Wall Mounted Shower Screen Including Arm - CTF7106CH - 1000 X 2000mm	No	21		
<b><u>STAINLESS STEEL KITCHEN EQUIPMENT</u></b>				
<b><u>Stainless steel single end bowl sink:</u></b>				
11 Franke Neptune Model NEX611 Grade 304 18/10 polished stainless steel single end bowl inset sink with right hand drainer (Code: 310074), overall size 860 x 510mm with one 360 x 420 x 200mm deep bowl, fitted onto cupboard (elsewhere measured)	No	27		
<b><u>WASTE UNIONS ETC</u></b>				
<b><u>Waste unions etc:</u></b>				
12 32mm Basin waste union with standing overflow tube.	No	27		
13 90mm Basin waste union with standing overflow tube.	No	64		
<b><u>TRAPS ETC</u></b>				
<b><u>uPVC</u></b>				
14 40 x 40mm Reseal "P" or "S" trap	No	27		
<b><u>Chromium plated:</u></b>				
15 32 x 340mm Bottle trap.	No	27		
<b><u>"Cobra Watertech" or equal approved</u></b>				
16 40mm VA 2.341 shower "P" trap	No	32		
Carried to Collection				
Section No. 1				
Bill No. 15				
Plumbing And Drainage				
			<b>R</b>	

	Unit	Quantity	Rate	Amount
<b><u>SANITARY PLUMBING (CPAP Work Group No 148)</u></b>				
<b><u>uPVC (SABS 967) pipes</u></b>				
<b><u>uPVC (SABS 967) pipes:</u></b>				
17	m	470		
18	m	57		
19	m	36		
20	m	200		
21	m	432		
22	m	45		
23	m	213		
<b><u>Extra over uPVC pipes for fittings:</u></b>				
24	No	5		
25	No	11		
26	No	8		
27	No	6		
28	No	8		
29	No	4		
30	No	22		
31	No	18		
32	No	13		
33	No	20		
34	No	20		
35	No	4		
36	No	9		
37	No	16		
38	No	6		
<b><u>Sundries:</u></b>				
39	Item			
Carried to Collection				
Section No. 1				
Bill No. 15				
Plumbing And Drainage				
			<b>R</b>	



	Unit	Quantity	Rate	Amount
<b><u>TAPS, VALVES, ETC</u></b>				
<b><u>'Architect approved valves with SANS 1480:2005 quality rating':</u></b>				
61	No	5		
62	No	40		
63	No	28		
64	No	56		
<b><u>SUBSOIL DRAINAGE (CPAP WORK GROUP NO. 146)</u></b>				
<b><u>Earthworks</u></b>				
65	m <sup>3</sup>	96		
66	m <sup>3</sup>	24		
67	m <sup>3</sup>	35		
68	m <sup>2</sup>	80		
<b><u>HDPE pipes</u></b>				
69	m	180		
<b><u>Slotted PVC-U flexible drainage pipes</u></b>				
70	m	85		
<b><u>Extra over HDPE pipes for fittings</u></b>				
71	No	5		
72	No	4		
73	No	7		
<b><u>Extra over slotted PVC-U flexible drainage pipes for fittings</u></b>				
74	No	6		
75	No	3		
76	No	2		
Carried to Collection				
Section No. 1				
Bill No. 15				
Plumbing And Drainage				
			<b>R</b>	

	Unit	Quantity	Rate	Amount
<b><u>STORMWATER DRAINAGE (CPAP WORK GROUP NO. 146)</u></b>				
<b><u>Class 100D concrete pipes with interlocking joints</u></b>				
77	m	200		
78	m	80		
79	m	40		
Carried to Collection				
Section No. 1 Bill No. 15 Plumbing And Drainage				<b>R</b>

CLAINLEIGH COURT  
Amount

**BILL NO. 15**  
**PLUMBING AND DRAINAGE**  
**COLLECTION**

Page No

Brought Forward from Page

65

66

67

68

69

70

Carried To Section Summary

R

Section No. 1  
Bill No. 15  
Plumbing And Drainage

	Unit	Quantity	Rate	Amount
<p><b><u>SECTION NO. 1</u></b>  <b><u>BUILDING WORKS</u></b>  <b><u>BILL NO. 16</u></b>  <b><u>ELECTRICAL WORK</u></b></p> <p><b><u>Electrical Works</u></b>  <b><u>Installation of Electrical Equipment</u></b></p>				
1	Item			
<p>To be carried forward from the Electrical Bill of Quantities</p>				
<p>Carried To Section Summary</p>				
<p>Section No. 1                      Bill No. 16                      Electrical Work</p>				
			<b>R</b>	





	Unit	Quantity	Rate	Amount
<p><b><u>SECTION NO. 1</u></b></p>				
<p><b><u>BUILDING WORKS</u></b></p>				
<p><b><u>BILL NO. 19</u></b></p>				
<p><b><u>PAINTWORK</u></b></p>				
<p><b><u>PAINTWORK</u></b></p>				
<p>User note</p>				
<p>Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions</p>				
<p>Take note that these Model Bills of Quantities utilise abbreviated descriptions</p>				
<p>The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards . Where such model preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system , represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications</p>				
<p>Consider inserting the preambles hereunder when using the abovementioned Model Preambles for Trades 2008</p>				
<p>Attention is drawn to the measurement rules in the measuring system regarding paint colours which read as follows:</p>				
<p>Section No. 1 Bill No. 19 Paintwork</p>				
<p>Carried to Collection</p>				
			R	



	Unit	Quantity	Rate	Amount
<b><u>ON EXISTING INTERNAL FLOATED PLASTER SURFACES</u></b>				
<b><u>Two coats superior quality acrylic emulsion paint for interior and exterior use</u></b>				
11	Walls	m <sup>2</sup>	3 869	
12	Underside of soffit and beams	m <sup>2</sup>	1 330	
<b><u>ON EXISTING EXTERNAL FLOATED PLASTER SURFACES</u></b>				
<b><u>Two coats superior quality acrylic emulsion paint for exterior use</u></b>				
13	Walls	m <sup>2</sup>	1 188	
14	Ceilings and beams	m <sup>2</sup>	224	
<b><u>Spot priming bare metal surfaces, one coat alkyd based universal undercoat and two coats superior quality universal enamel paint</u></b>				
15	Door frames	m <sup>2</sup>	59	
<b><u>ON EXISTING WOOD SURFACES</u></b>				
<b><u>One coat alkyd based universal undercoat and one coat superior quality universal enamel paint</u></b>				
16	Doors	m <sup>2</sup>	599	
17	Roof timbers at eaves and verges	m <sup>2</sup>	256	
18	Skirtings, rails, etc not exceeding 300mm girth	m	2 730	
Carried to Collection				
Section No. 1				
Bill No. 19				
Paintwork				
			<b>R</b>	

CLAINLEIGH COURT  
Amount

**BILL NO. 19**  
**PAINTWORK**  
**COLLECTION**

Page No

Brought Forward from Page

75

76

77

Carried To Section Summary

R

Section No. 1  
Bill No. 19  
Paintwork



	Unit	Quantity	Rate	Amount
5 Manholes size 2150 x 1800mm x 1500 exceeding 1m not exceeding 2m deep internally to invert level formed of hard burnt one brick sides in 1:3 cement mortar on and including 150mm thick mass concrete (20 Mpa at 28 days in 19mm stone) bottom projecting 75mm beyond sides and mass concrete (15 Mpa at 28 days in 12mm stone) benching, rendered internally in 1:3 cement plaster with 100mm thick mass concrete (20 Mpa at 28 days in 19 mm stone) kerb on top, rebated for and fitted with and including cast iron double seal cover and framed type 8A in accordance with SABS 558, bedded in 1:3 cement mortar and sealed in tallow including all necessary vitrified clay channels and fittings, excavations, forwork, holes through sides for pipes, etc	No	2		
6 Extra over excavations in pickable material for drain trenches, inpection chambers, etc., for excavations in soft rock	m <sup>3</sup>	144		
<b><u>Sundries</u></b>				
7 Precast concrete (Class 15MPa) block size 300 x 300 x 75mm thick finished smooth on top and four edges with letters "I.E." formed in top, set in ground over top of inspection fitting	No	4		
<b><u>Testing</u></b>				
8 Allow for testing all drains, and storm water drainage to the satisfaction of the Principal Agent / Civil Engineer. All defective work is to be taken out and replaced at the Contractor's expense	Item			
<b><u>PARKING (CPAP Work Group 154)</u></b>				
9 Scarify in-situ surface of the cleared surfaces to a depth of 150 mm, and compact to 95% Modified AASHTO density at optimum moisture content.	m <sup>2</sup>	868		
<b><u>Earth filling (G5) supplied by the contractor compacted to 98% Mod AASHTO density:</u></b>				
10 Under floors, steps, pavings, etc	m <sup>3</sup>	214		
<b><u>30MPa/19mm Reinforced concrete</u></b>				
11 Concrete to parking areas, roadways, etc cast in panels between construction joints etc.	m <sup>3</sup>	34		
12 To Footings	m <sup>3</sup>	10		
13 10mm Joints not exceeding 300mm high.	m	112		
Carried to Collection				
Section No. 1				
Bill No. 20				
External Works				
			<b>R</b>	





	Unit	Quantity	Rate	Amount
<b><u>Compaction of surfaces</u></b>				
30				
Compaction of ground surfaces under pavings etc, including scarifying for a depth of 150 mm, breaking down oversize material, adding suitable material where necessary and compacting to 96 % Mod AASHTO density	m <sup>2</sup>	800		
<b><u>Selected earth filling obtained from the excavations and/or prescribed stock piles on site</u></b>				
31				
Under road islands etc, compacted to 93% Mod AASHTO density	m <sup>3</sup>	98		
32				
Subbase course under parking areas etc, compacted to 96% Mod AASHTO density	m <sup>3</sup>	96		
<b><u>Filling supplied by the contractor under parking areas, roadways, etc</u></b>				
33				
G7 gravel-soil material compacted to 93% Mod AASHTO density	m <sup>3</sup>	96		
The items of testing given below are for additional testing which may be required by the principal agent over and above those for which the contractor is				
<b><u>Additional tests required by the principal agent</u></b>				
34				
In-situ dry density test in accordance with method A10(b) of TMH1	No	2		
<b><u>Paving Blocks</u></b>				
35				
lay 80 mm paving blocks on road areas	m <sup>2</sup>	800		
36				
Kerbs	m	213		
<b><u>Finishing top surfaces of paving areas</u></b>				
37				
Paving to parking areas, roads, etc to falls	m <sup>2</sup>	800		
38				
Lay DPC on unpaved surface	m <sup>2</sup>	800		
<b><u>Road signs</u></b>				
39				
Standard STOP sign with 50mm diameter galvanised mild steel post bedded in and including unreinforced concrete base, including any necessary excavation, paint finish, etc	No	3		
Carried to Collection				
Section No. 1				
Bill No. 20				
External Works				
			<b>R</b>	

	Unit	Quantity	Rate	Amount
<b><u>Paintwork</u></b>				
<b><u>Two coats reflective road marking paint on tarmacadam</u></b>				
40	m	120		
41	No	27		
<b><u>LAYER WORK</u></b>				
<b><u>CONCRETE STORMWATER CHANNELS ETC</u></b>				
<b><u>Concrete stormwater channels</u></b>				
42	m	110		
43	m	35		
44	m	70		
45	m	15		
<b><u>FENCING</u></b>				
In high corrosion areas fence posts, stays, gates, etc are to be galvanised				
In high corrosion areas fence posts, stays, gates, etc are to be galvanised				
<b><u>Provide boundary fence with steel pipe posts, stays, gates, etc including galvanised steel bolts, straining eye bolts, etc, site clearance and preparation of ground according to architect's drawings</u></b>				
46	m	45		
47	No	10		
48	No	1		
49	No	1		
Carried to Collection				
Section No. 1				
Bill No. 20				
External Works				
			<b>R</b>	

		Unit	Quantity	Rate	Amount
50	8 mm Steel link chain 300 mm long with each end fitted with 10 x 10 mm diameter ring for and including one 8 mm brass five pin tumbler padlock	No	1		
Section No. 1 Bill No. 20 External Works	Carried to Collection			<b>R</b>	

CLAINLEIGH COURT  
Amount

**BILL NO. 20**  
**EXTERNAL WORKS**  
**COLLECTION**

Page No

Brought Forward from Page

79  
80  
81  
82  
83  
84  
85

Carried To Section Summary

R

Section No. 1  
Bill No. 20  
External Works

**SECTION NO. 1**

**BUILDING WORKS**

**BILL NO. 21**

**PROVISIONAL SUMS**

**PROVISIONAL SUMS**

**General**

Work for which budgetary allowances are provided will be measured and valued in accordance with the relevant

building contract and deducted in whole or in part if not required without any compensation for loss of profit on the said allowances

Prime cost amounts and provisional sums are net. Prime cost amounts shall include for delivery to site of all articles concerned

Provisional sums are for material and equipment supplied and installed complete by firms of specialists

**Profit**

Where stated, the contractor may allow for profit if required

**User note**

Refer hereunder to 'nominated subcontractors' or 'selected subcontractors' or both as the case may be and in accordance with the relevant building agreement (building contract)

Where 'attendance' is defined in the relevant subcontract agreement/subcontract, the user is to refer thereto and is to ensure that the designations therein are used. Where 'attendance' is not defined in the relevant subcontract agreement/subcontract, the user is to provide a detailed description of the 'attendance' required from the contractor

**General attendance on nominated/selected subcontractors**

User note -

Use the following descriptions where the JBCC N/S Subcontract Agreement is applicable

The item 'attendance' which follows each provisional sum for nominated/selected subcontractors' work, shall be deemed to cover all the contractor's costs incurred in providing free of charge to the nominated/selected subcontractors the contractor's duties as described in clause 12.2 of the JBCC N/S Subcontract Agreement

Carried to Collection

R

Section No. 1

Bill No. 21

Provisional Sums

**Special attendance on nominated/selected subcontractors**

Where 'special attendance' such as unloading, storing, placing in position, providing special power supplies, specific hoisting, crange and scaffolding requirements, provision of temporary casing and/or other specific protection of the works, special security and clearing away rubbish is required, a separate item describing the specific requirements in detail is to be provided for the pricing of such requirements

**Builder's work**

Builder's work in connection with specialist services is given elsewhere in these bills of quantities

**PROVISIONAL SUM**

**Boundary Walls**

1	Provide the sum of R 20 000.00 for Rehabilitation of Boundary Walls within the site	Item	20 000	00
2	Profit	Item		
3	Attendance	Item		

**Facility Informative Signage**

4	Provide the sum of R 35 000.00 for Informative Signage	Item	35 000	00
5	Profit	Item		
6	Attendance	Item		

**Elevated Water Tank**

7	Provide the sum of R 680 000.00 for Erection of Steel Elevated Water Tank	Item	680 000	00
8	Profit	Item		
9	Attendance	Item		

**Fumigation of Building**

10	Provide the sum of R 350 000.00 fo Fumigation of the Building	Item	350 000	00
11	Profit	Item		
12	Attendance	Item		

**Seating Area**

13	Provide the sum of R 50 000.00 for Seating Area	Item	50 000	00
14	Profit	Item		
15	Attendance	Item		

**Outside Carport Shade**

16	Provide the sum of R 110 000.00 for Fixing of Carport Shade	Item	110 000	00
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Carried to Collection

R

Section No. 1  
Bill No. 21  
Provisional Sums



CLAINLEIGH COURT  
Amount

**BILL NO. 21**  
**PROVISIONAL SUMS**  
**COLLECTION**

Page No

Brought Forward from Page 87

88

89

Carried To Section Summary

**R**

Section No. 1  
Bill No. 21  
Provisional Sums



Section No.	<b><u>FINAL SUMMARY</u></b>	Brought from Previous	R	CLAINLEIGH COURT Amount
1	BUILDING WORKS			
	ADD: CONTINGENCIES			
	Allow R 2 700 000.00 for Contingencies toto be used at the sole discretion of the employer			2 700 000 00
	ADD: CPAP ALLOWANCE			
	Allow R 1 500 000.00 for Contract Price Adjustment Provision			1 500 000 00
	SubTotal excluding Value Added Tax			
	ADD VAT @ 15%:			
	Carried to Tender			
	ALTERATION AND REFURBLISHMENT OF GLAINLEIGH COURT			
	FINAL SUMMARY			

**INDEX TO BILLS OF QUANTITIES**

<u>Bill No</u>	<u>Page No</u>
<b>SECTION NO. 1: BUILDING WORKS</b> .....	1
<b>1 PRELIMINARIES</b> .....	2
Section No 1 .....	2
Preliminaries .....	2
Meaning Of Terms "Tender / Tenderer" .....	2
Execution .....	12
Payment .....	17
Section B: General Preliminaries .....	22
B3 Previous Work And Adjoining Properties .....	22
B5.0 Management Of Contract .....	23
B6.0 Samples, Shop Drawings And Manufacturer's Instructions .....	23
B7.0 Deposits And Fees .....	23
B9.0 Prime Cost Amounts .....	23
B11.0 General .....	24
Section C Contains Specific Preliminary Items Which Apply To This Contract Except Where N/a (not Applicable) Appears Against An Item .....	24
<b>2 ALTERATIONS</b> .....	32
Removal Of Existing Work .....	32
Cutting Through Floors And Ceilings .....	33
<b>3 EARTHWORKS</b> .....	36
Preambles .....	36
Supplementary Preambles .....	36
Site Clearance, Etc .....	37
Removal Of Trees Etc .....	37
Excavations Etc .....	37

Filling Etc .....	37
Tests .....	38
Isoboard Thermal Insulation .....	38
Weed Killers, Insecticides, Etc .....	38
<b>4 CONCRETE, FORMWORK AND REINFORCEMENT .....</b>	<b>40</b>
Preambles .....	40
Supplementary Preambles .....	40
Concrete Sundries .....	41
Rough Formwork (Degree Of Accuracy ii) (Cpap Work Group 111) .....	41
Movement Joints Etc .....	41
Reinforcement (Provisional) .....	41
Reinforced Concrete Cast On/in Formwork .....	41
Smooth Formwork (Degree Of Accuracy ii) (Cpap Work Group No. 111) .....	42
<b>5 MASONRY .....</b>	<b>44</b>
Preambles .....	44
Supplementary Preambles .....	44
Brickwork .....	44
Brickwork In Superstructure .....	44
Brickwork Sundries .....	45
<b>6 WATERPROOFING .....</b>	<b>47</b>
Preambles .....	47
Supplementary Preambles .....	47
Dampproofing Of Walls And Floors .....	47
Joint Sealants Etc (Provisional) .....	47
<b>7 ROOF COVERINGS .....</b>	<b>48</b>
Preambles .....	48

Steel Roof Sheeting And Accessories .....	48
Roof And Wall Insulation (Cpap Work Group No. 122).....	48
<b>8 CARPENTRY AND JOINERY .....</b>	<b>49</b>
Preambles .....	49
Supplementary Preambles.....	49
Roof Construction .....	51
Structural Timberwork Etc .....	51
Skirtings .....	52
<b>9 CEILINGS PARTITIONS AND ACCESS FLOORING .....</b>	<b>54</b>
Preambles .....	54
Ceilings, Partitions And Access Flooring .....	54
Ceiling Timbers, Beads, Insulation, Etc.....	54
<b>10 JOINERY FITTINGS .....</b>	<b>55</b>
Supplementary Preambles.....	55
Joinery Sundries .....	55
<b>11 IRONMONGERY .....</b>	<b>56</b>
Preambles .....	56
Hinges, Bolts, Etc .....	56
Hinges, Floor Spring Hinges,bolts, Panic, Bolts,etc.....	56
Push Plates And Kicking Plates .....	56
Locks .....	56
Door Closers .....	56
Letters, Nameplates, Etc.....	56
Bathroom Fittings .....	57
Sundries.....	57
<b>12 METALWORK .....</b>	<b>59</b>

Preambles .....	59
Supplementary Preambles .....	59
Stainless Steel Handrails, Balustrades, Etc .....	59
Sundry Steelwork .....	59
Galvanised Steel Handrails .....	59
Aluminium Windows, Doors, Etc (Cpap Work Group No. 140) .....	60
<b>13 PLASTERING</b> .....	<b>63</b>
Screeds .....	63
Internal And External Plaster .....	63
<b>14 TILING</b> .....	<b>64</b>
Floor Tiling .....	64
Ceramic Wall Tiling .....	64
<b>15 PLUMBING AND DRAINAGE</b> .....	<b>65</b>
Preambles .....	65
Sanitary Fittings .....	65
Stainless Steel Kitchen Equipment .....	66
Waste Unions Etc .....	66
Traps Etc .....	66
Sanitary Plumbing (Cpap Work Group No 148) Upvc (Sabs 967) Pipes .....	67
Water Supplies .....	68
Taps, Valves, Etc. ....	69
Subsoil Drainage (Cpap Work Group No. 146) .....	69
Stormwater Drainage (Cpap Work Group No. 146) .....	70
<b>16 ELECTRICAL WORK</b> .....	<b>72</b>
Electrical Works .....	72
<b>17 MECHANICAL WORK</b> .....	<b>73</b>

Mechanical Works .....	73
<b>18 GLAZING</b> .....	<b>74</b>
Preambles .....	74
Tops, Shelves, Doors, Mirrors, Etc. ....	74
<b>19 PAINTWORK</b> .....	<b>75</b>
Paintwork .....	75
Paintwork Etc To New Work .....	76
On New Internal Floated Plaster Surfaces .....	76
On New Internal Gypsum Plaster Surfaces .....	76
On New Metal Surfaces .....	76
On Existing Internal Floated Plaster Surfaces .....	77
On Existing External Floated Plaster Surfaces .....	77
On Existing Wood Surfaces .....	77
<b>20 EXTERNAL WORKS</b> .....	<b>79</b>
Preambles .....	79
Storm Channels And Head Walls .....	79
Parking (Cpap Work Group 154) .....	80
Dampproofing Of Walls And Floors .....	81
External Work .....	81
Landscaping .....	81
Roadwork, Parking Areas And Paving .....	82
Layer Work .....	84
Concrete Stormwater Channels Etc .....	84
Fencing .....	84
<b>21 PROVISIONAL SUMS</b> .....	<b>87</b>
Provisional Sums .....	87

Provisional Sum .....	88
<b>SECTION SUMMARY</b> .....	<b>91</b>

Item No.	Unit	Qty	Rate	Amount
<p><b><u>SECTION NO. 2</u></b></p>				
<p><b><u>ELECTRICAL WORK (PROVISIONAL)</u></b></p>				
<p><b><u>BILL NO. 1</u></b></p>				
<p><b><u>BULK ELECTRICAL INSTALLATION</u></b></p>				
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>				
<p>(WORK GROUP 162)</p>				
<p><b><u>Proprietary Items or Materials</u></b></p>				
<p>Proprietary items or materials where specified are to be of the brand specified - or equal approved - by the Engineer prior to tender closing.</p>				
<p><b><u>Specifications, Drawings, etc.</u></b></p>				
<p>The quantities measured in the Bills of Quantities for work and material must not be viewed as a limitation of the amount of work to be done and material provided by the contractor in the complete execution of the work.</p>				
<p>Tenderers are referred to the electrical specifications and drawings numbered (BS-01-01 to 33) prepared by Consulting Engineers, accompanying these bills of quantities for the electrical work, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification and drawings.</p>				
<p>The general descriptions and data of the work given in the specification, drawings or schedules are not fully repeated in the Bill of Quantities and reference to the other documents for complete information is therefore important and necessary.</p>				
<p>Material must be ordered as determined on site and not from the drawings or Bill of Quantities. The Employer will not accept any responsibility for surplus or inadequately ordered material. Payments will only be made for the actual re-measured quantities as installed.</p>				
<p>In these bills, the word "rate" shall be deemed to include the acquiring of equipment and materials from suppliers and workshops and the delivery, off-loading and safe storage of the equipment on site as well as unpacking, hoisting, placing and fixing, suspending or building in an approved position, cutting, connection, commissioning, testing and handing over of plant, equipment and materials.</p>				
<p>A price must be submitted for every item. Items for which no prices are given will be regarded as being covered by other items in the Bills.</p>				
<p>No variations or omissions may be done to the Bill of Quantities by the tenderer, any such variations or omissions will not be recognized and the text of the Bill of Quantities will be strictly adhered to.</p>				
<p>Carried to Summary Page</p>				<p>R <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px; vertical-align: middle;"></span></p>

Item No.	Unit	Qty	Rate	Amount
<p>Unless otherwise stated in the Bill of Quantities, all prices shall allow for the following items:</p> <p>Supply, deliver to site, and store new unused and undamaged and of the best quality available and complete with small materials necessary for the installation, testing, commissioning and rendering in proper working order.</p> <p>Installation, fixing in position, running or laying, as applicable, in a thorough and workmanlike manner.</p> <p>Making of all connections necessary.</p> <p>Ensuring the proper working and serviceability.</p> <p>Complete labelling with engraved labels to indicate all functions and instructions which otherwise would be unclear to ordinary users.</p> <p>Corrosion protection where necessary.</p> <p>All profits, overheads, supervision, transport and skilled and unskilled labour.</p> <p>Approval and inspection by the Employer.</p> <p>Compliance with all relevant regulations, by-laws and codes of practice.</p> <p>Compliance with the Specification.</p> <p>Compliance with all requirements set out in this section and any other section of the Specification and Bills of Quantity.</p> <p><b><u>Contract price adjustment provisions</u></b></p> <p>With reference to clause E11 of the Preliminaries all items in this bill will be subject to fluctuations in the cost of labour and material on the following basis:</p> <p>(a) Ring main units, miniature substations, transformers, main low tension boards, distribution boards and busbars between transformer and low tension boards calculated on the indices published by the Steel and Engineering Industries Federation of South Africa</p> <p>(b) Cables in excess of 16mm<sup>2</sup> calculated on the basis of proven cost</p> <p>(c) All other work calculated on the index for work group 160</p>				
<p><b>Carried to Summary Page</b></p>				<p>R <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px; vertical-align: middle;"></span></p>

Item No.	Unit	Qty	Rate	Amount
<b><u>Cables</u></b>				
Prices for piping, cables, etc. must include for cutting and losses, as well as short lengths where necessary, joining, supporting and complete fixing against walls, in ducts, in ceiling spaces, under concrete slabs, etc. as required and as shown on the drawing. Unless otherwise measured hereinafter, all quantities measured in the Bill of Quantities are net quantities. Cutting, offcuts, labour and material must also be included in the prices.				
<b><u>CABLE TRACING</u></b>				
<u>Approved cable tracer with proper cable tracing equipment (method and equipment to be approved by the Engineer PRIOR to coming on site) to trace and locate all cabling that will be affected by this project in terms of safety and making contingency plans to relocate cables. This includes :</u>				
<p># any building works  # and road works  # any cable routes and duct routes as identified on the Electrical Site Plan.  # Any water pipe and sewer/storm water routes as can be identified from the visible manholes.</p>				
1	Any cables identified shall be marked with a standard coloured wooden surveyor's pegs driven into the ground and the positions of these pegs and cable direction shall be marked accurately on a copy of the Electrical Site Plan.		Item	
<b><u>DISTRIBUTION BOARDS</u></b>				
<u>NOTE : Tenderer to submit layout drawings of DBs, MiniSubs and panels prior to manufacture of new equipment</u>				
2	Supply and install a new flush mounted Main Distribution Board and wire Existing Meters	No.	6	
3	Supply and install a new flush mounted Distribution Board on the Individual Flats	No.	27	
4	Liaison with the supply Authority for all Complex power Requirements.		Item	
<b>Carried to Summary Page</b>				R <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>

Item No.		Unit	Qty	Rate	Amount
5	Supply and install new 140A, 15 kA, 3 phase MCB (CBI to match existing) in existing MiniSub.	No	3		
	Addition of 150ATPCB 10kA to match the existing Main Breaker on the Main distribution Board	No	3		
6	Supply and install new 100A, 5 kA, Single phase MCB in the New DB's.	No	18		
7	Supply and install new 80A, 5 kA, Single phase MCB in the New DB's.	No	18		
8	Relocate any existing DB that need to be relocated	No	Item		
9	Relocate any existing Cable sleeves and Re-install	No	Item		
<b><u>SLEEVES</u></b>					
<u>Supply and install uPVC sleeve pipe, laid in trenches, measured</u>					
10	110 mm Diameter Sleeves	m	950		
11	50 mm Diameter Sleeves	m	860		
12	50 mm Diameter Sleeves, chased	m	430		
13	50 mm Long Radiused Bends.	No	215		
<b><u>KABELFLEX SLEEVES</u></b>					
Supply and install the following sleeves including easy bends, installed in ground, chased into brickwork, secured onto concrete slab or brickwork or installed in closed roof space.					
14	32 Dia PVC	m	600		
<b>Carried to Summary Page</b>					R <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>

Item No.		Unit	Qty	Rate	Amount
	<b><u>600/1000V LV CABLES</u></b>				
	<u>Supply and install PVC/SWA/PVC cable as specified in ground, in ducts, on cable ladder, fixed to the surface, etc. Rate to exclude excavations which are measured elsewhere.</u>				
15	35mm <sup>2</sup> x 4-core, ECC	m	400		
16	25mm <sup>2</sup> x 4-core, ECC	m	500		
17	16mm <sup>2</sup> x 4-core, ECC	m	600		
18	16mm <sup>2</sup> x 3-core, ECC	m	1500		
19	10mm <sup>2</sup> x 3-core, ECC	m	1000		
20	6mm <sup>2</sup> x 3-core, ECC	m	600		
	<u>PVC insulated stranded cabling</u>				
21	35mm <sup>2</sup> single core	m	200		
22	25mm <sup>2</sup> single core	m	250		
23	16mm <sup>2</sup> single core	m	300		
24	6mm <sup>2</sup> single core	m	300		
	<b><u>LV CABLE TERMINATIONS</u></b>				
	<u>Termination of Cables into panels from top or bottom utilising correctly sized glands and shrouds, including connection of cores to equipment terminals utilising correctly sized lugs.</u>				
25	35mm <sup>2</sup> x 4-core, ECC	No	16		
26	25mm <sup>2</sup> x 4-core, ECC	No	16		
27	16mm <sup>2</sup> x 4-core, ECC	No	16		
28	16mm <sup>2</sup> x 3-core, ECC	No	16		
29	10mm <sup>2</sup> x 3-core, ECC	No	16		
30	6mm <sup>2</sup> x 3-core, ECC	m	6		
31	PVC insulated stranded 35mm <sup>2</sup> single core	No	4		
32	PVC insulated stranded 25mm <sup>2</sup> single core	No	8		
33	PVC insulated stranded 16mm <sup>2</sup> single core	No	4		
34	<b>Extra over</b> , Fire Retardant Foam, 240 mins, in 750 ml aerosol containers.	Tube	1		
35	<b>Extra over</b> , LV Cable Labels (to be confirmed with engineer)	No	27		
	<b>Carried to Summary Page</b>				
				R	

Item No.		Unit	Qty	Rate	Amount
<b><u>TRENCHING AND BACKFILLING</u></b>					
<u>Excavate and backfill as specified including sifted soil for Soft, Intermediate and Hard Rock excavation, and compact. Ensure that traced cables are exposed firstly with the use of hand tools before any picks or other implements or machines are used. If concrete trench covers are encountered, stop excavation and notify EtheKwini Electricity immediately</u>					
36	Excavation in earth not exceeding 2m deep for cable trenches including risk of collapse of excavations, keeping excavations free from water, setting aside excavated material and later refilling trenches	m <sup>3</sup>	1000		
37	Cable warning tape laid 150mm below ground level in cable trench.	m	1000		
38	Concrete Cable Markers	No	28		
39	Extra over trench excavations for excavation in soft rock	m <sup>3</sup>	500		
40	Extra over trench excavations for excavation in hard rock	m <sup>3</sup>	250		
41	Extra over trench excavations for carting away surplus material to a dumping site to be located by the contractor	m <sup>3</sup>	125		
42	Extra over trench excavations for carting away surplus material to a dumping site situated approximately 5km from the building site.	m <sup>3</sup>	125		
43	Make good on paving (300mm wide trench)	m	500		
44	"Ski Rope" as draw wires in Telkom and Data ducts	m	250		
<b><u>MANHOLE CONSTRUCTION</u></b>					
45	Excavate, supply and install 450 x 450mm x 1,000 mm deep brick built, cable manhole complete with light duty cast iron frame and cover, suitable for pedestrian use. As detailed in the attached "Accessible Pipe Junction Box" drawing.	No	5		
<b>Carried to Summary Page</b>					

Item No.		Unit	Qty	Amount
	<b><u>CABLE LADDER</u></b>			
	<u>Supply and install Light Duty welded construction hot dip galvanised cable ladder with 1.6mm cross rungs and side rails (55mm), including short lengths, hangers, splices and supporting unistruts and anchors, bonding and continuity at fly overs, and all other items necessary to form a complete installation:</u>			
46	300mm Wide cable ladder.	m	600	
47	Extra over cable ladders for :			
48	300 mm 90° Bend	No	300	
49	300 mm 90° Internal/External Bend	No	150	
50	300 mm Tee	No	30	
	<b><u>GUARANTEE AND MAINTENANCE</u></b>			
51	Guarantee the efficient and safe working of the bulk installation for 12 months after Completion of the Works and the issuing of a Certificate of Completion (as per clause 5.14.5 of the 2010 GCC Contract)	No	1	
	<b><u>AS-BUILT DRAWINGS AND DOCUMENTATION</u></b>			
52	Allow for providing detailed marked up "As-built" drawings at practical completion (to the engineer), and originals plus two sets of maintenance and operation manuals, maintenance plan, certificates of compliance (allowed for elsewhere) etc. in handover files, plus one electronic set in PDF format, as specified in the electrical project specification at works completion of the complete installation (all sections) to the Engineer.	No	Item	
	<b><u>TESTING AND CERTIFICATION</u></b>			
53	Test, commission and issue Certificate of Compliance for the Installation	No	27	
54	Grading study, testing and balancing the Load.		Item	
55	Attend to transformer repair to the value of approximately R100,000.00 (Hundred Thousand Rand). This to be actioned on written instruction from the Engineer		Item	R 100 000,00
56	Infra red hot spot testing at the Consumer Main Supply points (Mini Sub & Kiosk Boxes installation) prior to commissioning, to the value of approximately R 25,000.00 (Twenty Five Thousand Rand)		Item	R 25 000,00
57	Provisional sum of 800 000.00 (Eight Hundred Thousand Rand) for Supply connection by the Municipality/Eskom. This amount is to be used on written instruction by the Engineer.		Item	R 800 000,00
	<b><u>Electrical Manholes</u></b>			
58	Supply and build either pre-cast or fullwall manhole with heavy duty cover with the following minimum inside dimensions: - 1200mm x 1200mm x 600mm	No	3	
	<b>Carried to Summary Page</b>			R <b>925 000,00</b>

**SECTION 2 - ELECTRICAL WORK  
BILL NO. 1 - BULK RETICULATION  
SUMMARY PAGE**

**PAGE 1**

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6

PAGE 7

925 000,00

**SECTION NO. 2: ELECTRICAL WORK  
BILL NO. 1 - BULK RETICULATION  
SUB-TOTAL CARRIED TO COLLECTION PAGE**

**925 000,00**

Item No.	Unit	Qty	Rate	Amount
<p><b><u>SECTION NO. 2</u></b></p> <p><b><u>ELECTRICAL WORK (PROVISIONAL)</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>LV ELECTRICAL INSTALLATION</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>(WORK GROUP 160)</p> <p>Tenderers are referred to the electrical specifications and drawings numbered (920-23-01 to 11) prepared by Consulting Engineers, accompanying these bills of quantities for the electrical work, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification and drawings.</p> <p><b><u>Distribution Boards, etc.</u></b></p> <p>Rates for distribution boards etc. are to include for busbars, jumpers, neutral bars, internal wiring and connections, circuit identification markers, control gear labels, circuit legend cards and working drawings.</p> <p><b><u>Switches, Socket Outlets, etc.</u></b></p> <p>Rates for switches, socket outlets, etc. are to include for screwing to outlet boxes, connecting up and cover plates</p> <p><b><u>Light fittings</u></b></p> <p>Rates for light fittings are to include for hanging, fixing and connecting and for lamp holders and fluorescent tubes and lamps of the type and wattage described.</p>				
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Item No.		Unit	Qty	Rate	Amount
	<b><u>CONDUITS ETC.</u></b>				
	<b><u>Rigid PVC Conduit</u></b>				
	<u>Surface mounted to brickwork, concrete, steel, wood, roof members, etc. not exceeding 3000mm above floor level, cutting, bending, waste, cleaned and ready for cables and supported on galvanised spacer saddles fixed at maximum 1m centres, and including round draw boxes when required (wire joints not acceptable in roof void)</u>				
59	20mm Diameter	m	22590		
60	20mm Diameter, CHASED OR BUILT IN	m	4518		
61	25mm Diameter	m	1076		
62	25mm Diameter, CHASED OR BUILT IN	m	2510		
63	32mm Diameter	m	2240		
64	32mm Diameter, CHASED OR BUILT IN	m	1120		
65	32 mm bends	No	560		
	<b><u>GALVANISED STEEL CONDUIT</u></b>				
	<u>Supply and install GALVANISED conduit including PVC ends, cutting, bending, waste, cleaned and ready for cables and supported on galvanised spacer saddles fixed at maximum 1m centres.</u>				
66	20mm Diameter	m	3470		
67	25mm Diameter	m	1735		
68	32mm Diameter	m	495,7143		
69	40mm Diameter	m	868		
70	Round galvanised outlet boxes of the number of ways required. As draw/tee boxes.	No	434		
	<b><u>GALVANISED DRAW WIRES</u></b>				
	<u>Supply and install galvanised draw wires cut into relevant lengths and installed into conduits and sleeves (for Telkom and data).</u>				
71	1.2mm	m	2479		
	<b><u>CONDUCTORS</u></b>				
	<u>PVC insulated stranded copper earth conductor drawn into wireways</u>				
72	1.5mm <sup>2</sup>	m	17910		
73	2.5mm <sup>2</sup>	m	2880		
74	4mm <sup>2</sup>	m	2220		
	<b>Carried to Summary Page</b>				
				R	

Item No.		Unit	Qty	Rate	Amount
	<b><u>LIGHT SWITCHES, SWITCHED SOCKET OUTLETS, ISOLATORS ETC</u></b>				
	<u>Switches, etc. complete with engraved/labelled cover plate fixed in 100x50mm galvanised box, and including box.</u>				
75	16A 1 lever 1 way, FLUSH.	No	140		
76	16A 2 lever 1 way, FLUSH.	No	18		
77	16A 1 lever 2 way, FLUSH, Red toggle.	No	40		
78	16A 1 lever intermediate, FLUSH, Red toggle.	No	10		
	<u>Switched socket outlets, etc complete with engraved/labelled cover plate fixed in a 100x100mm galvanised box and including box</u>				
79	16A Three pin Single Socket Outlet, FLUSH	No	140		
80	16A Three pin Double Socket Outlet, FLUSH, one Euro socket	No	40		
81	100x100mm galvanised box	No	180		
82	100x100mm galvanised cover plate	No	150		
	<b>Carried to Summary Page</b>				R <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>

Item No.		Unit	Qty	Rate	Amount
	<u>Supply and install Isolators of the size and number of poles described on surface, or flush-mounted, including box and engraved cover, colour WHITE, unless otherwise indicated.</u>				
83	5A 3-pin socket outlet, complete with round outlet box of the number of ways required, fixed surface or flush mounted.	No	347		
84	63A Double Pole Industrial isolator, Flush mounted	No	27		
85	20A Double Pole, FLUSH with Neon indicator, and cord grip	No	10		
	<b><u>LUMINAIRES AND EQUIPMENT</u></b>				
	<u>Supply and install luminaires or equipment complete with lamps, connections, etc mounted in position</u>				
86	18W LED Ceiling ligh fitting. Fitting to be supplied and installed with 2m length of 3-core heat resistant flexible cable and 5A 3-pin plugtop.	No	160		
87	2x18 W IP65 rated Dust Proof LED fitting either Surface/Celing mounted..Fitting to be supplied and installed with 2m length of 3-core heat resistant flexible cable and 5A 3-pin plugtop.	No	52		
88	Type PL: IP 65 2PL9 Bulkhead light fitting. Fitting to be supplied and installed with 2m length of 3-core heat resistant flexible cable and 5A 3-pin plugtop.	No	84		
89	Type B1 : Surface mounted IP65 rated fluorescent Round Bulkhead fitting, as LIH/MONTE CRISTO/99-0701/16W LED from Lihlelight or other approved, complete with opal polycarbonate diffuser, die cast aluminium body with (white – ceiling mounted or black – wall mounted) trim ring and stainless steel captive screws. Complete with 2m length of 3-core heat resistant flexible cable and 5A 3-pin plugtop in ceiling mounted / white trim option.	No	51		
	<b>Carried to Summary Page</b>				R <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>

Item No.		Unit	Qty	Rate	Amount
90	Type F1: 2x28W Surface/Ceiling mounted decorative prismatic florescent fitting. Fitting to be supplied and installed with 2m length of 3-core heat resistant flexible cable and 5A 3-pin plugtop.	No	33		
91	<b>Extra over</b> , Daylight switch as per National or other approved, including IP65 rated polycarbonate enclosure with deep clear screw lid .	No	27		
92	<b>Extra over</b> , 50mm round galvanised outlet box for 20mm conduit, with dome lid and No.0 compression gland as a cordgrip outlet, in ceiling void or in brickwork.	No	347		
93	<b>MOTION SENSORS</b> Surface mounted 360° infra red motion/occupancy sensor for operation with office lighting as indicated on the drawings. Motion detection speed of 0.6 to 1.5m/sec and a 5secs to 30min adjustable time delay, with minimum rating of 1kW (switching to minimum 2 kW) and with Auto/Off/Manual override switch.	No	18		
<b>Carried to Summary Page</b>					R <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>

Item No.		Unit	Qty	Rate	Amount
	<b><u>EARTHING AND BONDING</u></b>				
94	Allow for the earthing and bonding of the complete installation (this section of the works) as detailed in the General Electrical Specification.		Item		
	<b><u>SUNDRY EQUIPMENT</u></b>				
94	Supply and Install a 4 burner stove, Defy or other approved brand, including connection to isolator.	No	27		
	<b><u>DISMANTLING</u></b>				
95	Dismantle and Remove existing Kiosks Boxes		Item		
96	Dismantle and Remove existing Distribution Boards		Item		
97	Dismantle and Remove existing Cables		Item		
98	Dismantle and Remove existing Earthing & Lightning Protection Conduits, Boxes etc		Item		
	<b><u>BUILDER'S WORK</u></b>				
99	Coring through floor slab for 2 by 50mm, 4 by 32mm 1 by 20mm and 2 by 25mm conduit		Item		
	<b><u>GUARANTEE AND MAINTENANCE</u></b>				
100	Guarantee the efficient and safe working of the LV installation for 12 months after hand over of the completed building to the department.	No	1		
	<b>Carried to Summary Page</b>				
				R	

**SECTION 2 - ELECTRICAL WORK  
BILL NO. 2 - LV ELECTRICAL INSTALLATION  
SUMMARY PAGE**

**PAGE 1**

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6

**SECTION NO. 2: ELECTRICAL WORK  
BILL NO. 2 - LV ELECTRICAL INSTALLATION  
SUB-TOTAL CARRIED TO COLLECTION PAGE**

Item No.	Unit	Qty	Rate	Amount
<p><b><u>SECTION NO. 2</u></b></p> <p><b><u>ELECTRICAL WORK (PROVISIONAL)</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>REMOVAL OF EXISTING MATERIALS ON SITE</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>(WORK GROUP 160)</p>				
<p>Tenderers are referred to the electrical specifications and drawings numbered (BS-01-01 to 33) prepared by Consulting Engineers, accompanying these bills of quantities for the electrical work, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification and drawings.</p>				
<p><b><u>DISCONNECT THE FOLLOWING SUPPLY CABLES</u></b></p> <p>Price to switch off, disconnet and remove the following existing three or single phase supply cable. Price for digging must be included here. Make safe and tidy afterwards.( All cables must return to client)</p>				
50mm <sup>2</sup> - 70mm <sup>2</sup>	Sum	1		
16mm <sup>2</sup> - 35mm <sup>2</sup>	Sum	1		
6mm <sup>2</sup> - 10mm <sup>2</sup>	Sum	1		
Excavations for cables in trenches (450 x 600x1000) 3 linear metres equals 1 cubic metre				
Excavate in normal earth measured in linear metres (not cubic metre)	L/m	1000		
Allow for Soft Rock in above trench	m <sup>3</sup>	600		
Allow for Hard Rock in above trench	m <sup>3</sup>	250		
<b>Carried to Summary Page</b>				R <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px; vertical-align: middle;"></span>

Item No.		Unit	Qty	Rate	Amount
	<b><u>CONFIRM CABLE ROUTE</u></b>				
	Price to confirm an existing supply cable route and position on site with a cable detector. Price per visit of one day	Sum	1		
	Price to remove the following flush distribution boards. Disconnect and remove circuit breakers and other switchgear, disconnect conduits etc.				
1	Up to 8 way	unit	12		
2	Up to 12 way	unit	13		
	Up to 18 way	unit	9		
3					
	As above but for the following surface distribution boards:				
4	Up to 8 way	unit	10		
	Up to 18 way	unit	11		
5	Up to 11 way 3phase	unit	7		
6	<b><u>GENERAL LIGHTING</u></b>				
7	Price to remove the PVC/ Galvanised conduit, internal and external wiring, wall/surface light switch, wall/surface plugs.	Sum	1		
	<b><u>CONDUIT BOXES</u></b>				
8	Price to remove Galvanised bosal, 100 x 50 x 50 switch boxes for 20mm dia conduit built into brick-work or cast into concrete (coverplates measured elsewhere)				
9		Sum	1		
10	<b><u>Equipment and Control Gear</u></b>				
11	Galvanised steel, 100 x 100 x 50mm box for 20mm conduit built into brickwork or cast in concrete. (coverplates measured elsewhere)				
12		Sum	1		
	<b><u>LUMINAIRES</u></b>				
	Remove an existing recessed mounted, diffuser, three lamp and return to client.	Sum	1		
	Remove an existing surface mounted, open channel, two lamp fluorescent luminaires and return to client.	Sum	1		
	Remove an existing surface mounted fluorescent/ bulkhead type luminaires and return to client.	Sum	1		
	Remove an existing pole mounted luminaires ( mounted on 6m poles), including additional floodlights and return to client.	Sum	1		
	Remove an existing photo cells	Sum	1		
	<b>Carried to Summary Page</b>				
				R	

**SECTION 2 - ELECTRICAL WORK  
BILL NO. 2 - LV ELECTRICAL INSTALLATION  
SUMMARY PAGE**

PAGE 1

PAGE 2

**SECTION NO. 2: ELECTRICAL WORK  
BILL NO. 2 - REMOVAL OF EXISTING MATERIALS  
SUB-TOTAL CARRIED TO COLLECTION PAGE**

Item No.	Unit	Qty	Rate	Amount
<p><b><u>SECTION NO. 2</u></b></p> <p><b><u>ELECTRICAL WORK (PROVISIONAL)</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>TELEVISION INSTALLATION</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>(WORK GROUP 160)</p>				
<p>Tenderers are referred to the electrical specifications prepared by Consulting Engineers, accompanying these bills of quantities for the electrical work, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification and drawings.</p>				
<p><b><u>CONDUIT</u></b>  All conduits and accessories to be galvanised bosal.  The supply and installation of conduit including cutting, bending, joints, settings, fittings, boxes, fixing materials</p>				
<p>25mm galvanised bosal conduit</p>				
<p>Supply</p>	m	645		
<p>Install: cast in concrete, on surface in roof space built into brickwork</p>	m	645		
<p>32mm galvanised bosal conduit</p>				
<p>Supply</p>	m	385		
<p>Install</p>	m	385		
<p><b><u>CONDUIT ACCESSORIES</u></b>  The supply, installation of drawboxes including locknuts, bushes, coverplates, fixing materials.</p>				
<p>100 x 50 x 50 galvanised bosal drawboxes for 25mm conduit built into wall brick including coverplates</p>				
<p>Supply</p>	ea	30		
<p>Install</p>	ea	30		
<p><b>Carried to Summary Page</b></p>				R <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px; vertical-align: middle;"></span>



**SECTION 2 - ELECTRICAL WORK  
BILL NO. 2 - LV ELECTRICAL INSTALLATION  
SUMMARY PAGE**

PAGE 1

PAGE 2

**SECTION NO. 2: ELECTRICAL INSTALLATION  
BILL NO. 2 - TELEVISION INSTALLATION  
SUB-TOTAL CARRIED TO COLLECTION PAGE**

Item No.		Unit	Qty	Rate	Amount
	<p><b><u>SECTION NO. 2</u></b></p> <p><b><u>ELECTRICAL WORK (PROVISIONAL)</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>PERIMETER LIGHTING</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>(WORK GROUP 160)</p> <p>Tenderers are referred to the electrical specifications prepared by Consulting Engineers, accompanying these bills of quantities for the electrical work, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification and drawings.</p> <p><b>LOW VOLTAGE CABLE</b> Provide, install, test and commission the following 1 000V ECC/SWA/ECC copper cable. Price shall allow for the installation of cables in cable ducts, through sleeves, conduits, or installation against vertical and horizontal levels (e.g. walls, poles, etc)</p> <p>but shall not include the various cable ends, trenches or the backfilling of trenches.</p> <p>Supply &amp; Install 6mm<sup>2</sup> x 4 core ECC</p> <p>Terminate and make off the following 1 000V ECC/ SWA/ECC cable in a cable gland onto a gland plate according to the manufacture's instructions. Provide the gland as well as the cores with lugs and bolt onto terminals. The marking of the cable shall also be allowed for. (Note the light fittings are supplied with glands, see detail spec.)</p>	m	1472		
	<b>Carried to Summary Page</b>				R <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>

Item No.		Unit	Qty	Rate	
1	Supply & Install 6mm <sup>2</sup> x 4 core terminations supply install	ea	92		
2	Supply and Install a three-way Pratley box,cores with lugs and suitable connectors.	ea	36		
1	Supply and install a four-way Pratley box, cores with lugs and suitable connectors.	ea	36		
	<b>CABLE TRENCHES</b>				
2	Excavation and back-fill cable trenches as per specification. (Including soft soil layer around cable). The excavation for the perimeter poles are included here.				
	Earth	m <sup>3</sup>	2640		
	Soft rock	m <sup>3</sup>	1320		
	Hard rock	m <sup>3</sup>	880		
	Provide and install cable marker tape above cable, 300mm below finished ground level.	m	1920		
	<b>PVC INSULATED CONDUCTOR</b>				
	Supply and install the following lenghts of insulated conductor 2.5mm	m	3784		
	<b>EARTH WIRE</b>				
	Supply and install the following lengths of earth wire ( inside poles)	m	1892		
	6mm (to be taped together with the 6x3c cable at 1.5m intervals)	m	946		
	<b>Carried to Summary Page</b>				<b>R</b> <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>

Item No.		Unit	Qty	Rate	
	<b>LIGHT FITTINGS</b>				
	Provide, install and connect completely the following light fittings as described in the light fitting schedule in the positions indicated on the drawings. Light fittings shall be complete with lamps and shall be approved by the Department				
	Supply & Install Post Top LED light fitting	ea	40		
	Supply & Install Photocell	ea	40		
	Supply: Galvanised steel light pole for area lighting to achieve 9.5m above ground. Install in tarmac to achieve 9.5m above ground level	ea	40		
	<b>Carried to Summary Page</b>				R <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>

**SECTION 2 - ELECTRICAL WORK  
BILL NO. 2 - LV ELECTRICAL INSTALLATION  
SUMMARY PAGE**

**PAGE 1**

PAGE 2

PAGE 3

<b>SECTION NO. 2: ELECTRICAL WORK BILL NO. 2 - AREA LIGHTING SUB-TOTAL CARRIED TO COLLECTION PAGE</b>	
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Item No.	Unit	Qty	Rate	Amount
<p><b><u>SECTION NO. 2</u></b></p> <p><b><u>ELECTRICAL WORK (PROVISIONAL)</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>LV ELECTRICAL INSTALLATION</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>(WORK GROUP 160)</p> <p>Tenderers are referred to the electrical specifications and drawings numbered (920-23-01 to 11) prepared by Consulting Engineers, accompanying these bills of quantities for the electrical work, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification and drawings.</p> <p><b><u>Gate Motor</u></b></p> <p>Rates for Installation of the D4 motor gate includes all the necessary equipments for successful working of the gate motor.</p> <p><b><u>Turnstile</u></b></p> <p>Rates for Installation of the Turnstile includes the programming and all necessary equipment for successfully operation. Test and commission an access control system complete with a control panel, software electromechanical hardware, electronic hardware and system users (ID card)</p> <p style="text-align: right;"><b>Carried to Summary Page</b></p>				R <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>

Item No.	Unit	Qty	Rate
<b><u>GATE CONTROL EQUIPEMENT</u></b>			
Supply and Install a four arm full height double turnstile complete with all the necessary equipments (electronic, control panel, backup battery, exit & entry card reader) Supply Install	ea	5	
Supply and install a D5 gate motor complete with all the necessary equipment (two sets of remote controls and anti theft lock) Supply Install	ea	2	
<b><u>CONDUIT</u></b>			
The supply and installation of conduit including cutting, bending, settings joints, fittings, draw boxes, fixing materilas. The conduit to be PVC.25mm Conduit Supply Install	m	1440	
<b><u>CONDUIT ACCESSORIES</u></b>			
The supply, Installation of surface box and lid including coverplatesfor 25mm diameter built into brickwork including.	ea	720	
Coupling for 25mm Supply Install	ea ea	16 16	
<b><u>CONDUCTOR</u></b>			
Supply & Install 2.5mm <sup>2</sup> PVC black and red	m	384	
2.5mm <sup>2</sup> PVC insulated green/yellow earth wire	m	192	
Testing and commission of the complete Access Control installation	Sum	2	
Provide marked-up copy "As built" record drawings for Access Control		Item	
Provide complete operating and maintenance manuals for Access Control installation.		Item	
<b>Carried to Summary Page</b>			R

**SECTION 2 - ELECTRICAL WORK  
BILL NO. 2 - LV ELECTRICAL INSTALLATION**

**SUMMARY PAGE**

**PAGE 1**

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6

**SECTION NO. 2: ELECTRICAL WORK  
BILL NO. 2 - LV ELECTRICAL INSTALLATION  
SUB-TOTAL CARRIED TO COLLECTION PAGE**

<b>FINAL SUMMARY PAGE</b>		
1	SECTION 1 - PRELIMINARIES AND GENERAL	
2	SECTION 2 - BILL 1 - BULK ELECTRICAL (PROVISIONAL)	925 000,00
3	SECTION 2 - BILL 2 - GENERAL ELECTRICAL (PROVISIONAL)	
4	SECTION 2 - BILL 3 - REMOVAL OF EXISTING MATERIALS ON SITE (PROVISIONAL)	
5	SECTION 2 - BILL 4 - TELEVISION (PROVISIONAL)	
5	SECTION 2 - BILL 5 - PERIMETER LIGHTING (PROVISIONAL)	
5	SECTION 2 - BILL 5 - Access Control (PROVISIONAL)	
SUB-TOTAL		925 000,00
ADD 15% VAT		138 750,00
<b>GRAND TOTAL (Carried forward to Form of Offer: T2.21)</b>		<b>1 063 750,00</b>

**Part C3: Scope of work**  
C3 - Scope of work

### 1 Background To ECDC

#### Vision

To be an innovative leader in promoting sustainable economic growth and development of the Eastern Cape.

#### Mission

**To promote sustainable economic development in the Eastern Cape through focused:**

- a) Provision of innovative development finance
- b) Leveraging of resources, strategic alliances, investment and partnerships.

#### Legislative Mandate

ECDC draws its mandate directly from the Eastern Cape Development Corporation Act (Act 2 of 1997) and is led by the economic development priorities of the provincial government, as detailed in the Provincial Growth and Development Plan (PGDP), Eastern Cape Provincial Industrial Development Strategy (PIDS), the policy statement and budget speech of the Member of the Executive Council (MEC) of Economic Development, Environment Affairs and Tourism (DEDEAT)

Section 3 of the ECDC Act states that the Corporation shall “plan, finance, co-ordinate, market, promote and implement development of the Province and its people in the field of industry, commerce, agriculture, transport and finance”.

### 2 Scope of Works

#### 2.1 General description of the works

The description and scope of works, as described hereunder are a general guide only and may be subject to change. No liability or claim will be accepted should this information provided change or be regarded as misleading.

**The work comprises the following sections:**

#### 2.1 Alterations and Refurbishment of Clanleigh Court in Queenstown

This existing large single storey storage facility requires the following work:

- Site clearance and cutting off grass and trees
- Removal and replace all gutters and rainwater pipes
- Reinstate boundary wall
- Removal of existing timber skirting and replace with new
- Paint internal and external walls
- Repairs on damaged plastered walls internal and external
- Paint carport
- Repainting of internal and external areas including ceilings
- General repairs to internal doors and ironmongery
- Servicing to existing joinery work including aligning of doors and replacing missing parts
- New floor finishes (Tiles)

- Repairs to existing electrical works
- Repairs to existing plumbing items
- New balustrade
- Fumigation of the facility
- Etc (As contained in the attached BOQ)

## **2.2 Variation in the Scope of Work**

The Client retains the right to omit specific sections of the work prior to signing the contract and in the event that such omissions are incorporated in the contract it is hereby agreed that no claim for loss of profit will be entertained. In addition, tenderers are required to price all work in a “stand-alone fashion” so that profit/mark-up etc are such that omission of any of the tendered works will NOT render the remaining contract work visible.

## **2.4 Temporary works, etc.**

Tenderers are advised that, in view of the nature and extent of the works temporary works are an essential part of the works. Tenderers must therefore fully examine and understand the nature and extent of the proposed works and must allow in their pricing for all access, structures, hoardings and other temporary works. Refer also to Clause 4.2: Enclosure of the Works in the Preliminaries Section of this document.

## **3. General**

### **3.1 Damage to other services**

The Contractor shall assume full responsibility in the event where he or any person in his service is directly or indirectly responsible for any damages caused to other services already installed (water, sewerage, storm water, roads, surveyors’ pegs, etc.) Any such damage shall immediately be reported to the Principal Agent.

The Contractor shall be held fully responsible for the repair of such damage to the satisfaction of the Principal Agent.

The costs for the repair of such damage shall be borne by the Contractor. Claims by the Contractor in this connection will not be considered. Should any portion of the works in terms of this Contract, for which the Contractor is responsible, be damaged by other Contractors, the Contractor shall repair such damage at the tendered rate and shall submit full details of such damage to the Principal Agent so that he can recover such costs from the responsible party.

This repair work may only be done on the written instruction from the Principal Agent.

The contractor shall make provision for a full scan of the area to determine the position of services in the area.

### **3.2 Local labour and local authorities**

Local Labour:

It is intended that the project must make maximum possible use of local labour which is presently unemployed in the area of which the project is performed.

All unskilled labour shall be from the Local Municipal Supply area.

Engagement of local labour shall be controlled in a formal manner through the client’s labour liaison body. It is furthermore expected that the labour liaison body will assist in the monitoring of labour goals.

### **3.3 Liaison with Local Authorities**

The contractor will have to liaise with local authorities regarding the following matters:

- 3.3.1 Locating of existing underground services.
- 3.3.2 Protection of existing services during construction.

It is the contractor's onus to immediately contact all these authorities and to accommodate their involvement in his programme of work.

The contractor should also warn the authorities at least 48 hours before the actual work commence.

Compensation for delays, losses or accidents will not be considered should the contractor at any time have failed to keep the local authorities informed.

The Principal Agent or employer must immediately be notified, should the contractor experience any problem regarding work, which involves a local authority.

### **3.4 Community Liaison and Community Relations**

In all dealings with the community and workers employed from within the community, the Contractor shall take due cognisance of the character, culture and circumstances of the community involved and shall at all times use his best endeavours to avoid the development of disputes and to foster a spirit of co-operation and harmony towards the project.

The Contractor shall at all times, keep the Principal Agent fully informed on all matters affecting the contractor and the community, and shall attend all community meetings relating to the project as may be reasonably required by the Principal Agent.

All matters concerning the community shall be discussed and where possible, resolved at such meetings. Where any resolution of a community meeting shall be contrary to the terms and provisions of the Contract, the Contractor shall not give effect thereto without a prior written instruction from the Principal Agent.

Where the Contractor is of the opinion that any instruction of the Principal Agent issued in terms of this clause will result in the incurring of additional costs which were not provided for in his tendered rates and/or that a delay in the progress of the works will result, he shall be entitled to submit a claim in terms of the conditions of contract .

### **3.5 OCCUPATIONAL HEALTH AND SAFETY ACT (ACT 85 OF 1993)**

Contractors shall meet the health and safety requirements as stipulated in health and safety plan.

#### **3.5.1 Safety Precautions**

Notwithstanding the fact that the Contractor is solely responsible for the actions of his staff and any duly appointed sub-contractors, the Principal Agent reserves the right for himself, or his nominated representative, to inspect and monitor working methods and materials handling to ensure that safe working practices are being adhered to at all times.

#### **3.5.2 Health and Safety Specifications**

Please refer to Annexure A in Part C.4 for the Health and Safety Specification.

## 4. CONDITIONS SPECIFIC TO THIS BID

### 4.1 Responsibilities and duties

Notwithstanding the fact that a description of the services has been provided above, ECDC shall be entitled to request additional services related to deliverables required to ensure the successful completion of the services set out above on such further terms and conditions as may be agreed between the parties in writing.

The service provider shall at all times faithfully and timeously carry out and perform the Services and shall use its best endeavours to properly conduct, improve, extend and develop the business of ECDC in the provisioning of the services.

The Services Provider shall as part of his duties, attend such meetings as may be required by ECDC from time to time and submit weekly or monthly progress reports on the services as may be required and requested by ECDC.

### 4.2 Obligation to perform and sub-contracting

The bidder shall notify ECDC in writing of all subcontracts awarded under this contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the bidder from any liability or obligation under the contract.

The bidder shall not assign, in whole or in part, its obligations to perform under the contract, except with ECDC's prior written consent.

### 4.3 Performance guarantee

Within fourteen (14) days of receipt of the notification of contract award, the successful bidder shall furnish to ECDC the performance security of the amount specified above.

The proceeds of the performance security shall be payable to ECDC as compensation for any loss resulting from the bidder's failure to complete his obligations under the contract.

The performance security shall be denominated in the currency of the contract or in a freely convertible currency acceptable to ECDC and shall be in one of the following forms:

A bank guarantee or an irrevocable letter of credit issued by a reputable bank located in South Africa, acceptable to ECDC, in the form provided in the bid documents or another form acceptable to ECDC;  
or

A cashier's or certified cheque

The performance security will be discharged by ECDC and returned to the bidder not later than thirty (30) days following the date of completion of the bidder's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

Notwithstanding the provisions above, the bidder shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.

### 4.4 Anti-dumping and countervailing duties and rights

When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, ECDC is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to ECDC or ECDC may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him.

#### **4.5 ECDC facilities**

Unless otherwise agreed in writing by ECDC, the Service Provider will work from its own office and provide its own facilities, such as transport, telephone, cell phone, fax and computer facilities to perform the services.

The service provider may use certain facilities made available by ECDC to assist in performing the services, including but not limited to computer facilities, telephone and fax facilities and stationery. In this regard the service provider agrees to:

Abide by the health, safety and security measures as prescribed by ECDC from time to time;

To use such accommodation and facilities entirely at his own risk and ECDC shall not be liable for any loss or damage whatsoever and howsoever caused arising out of or in connection with the use of these items, other than loss or damage caused as a result of ECDC's own wilful misconduct.

#### **4.6 Force majeure**

If a force majeure situation arises, the bidder shall promptly notify ECDC in writing of such condition and the case thereof. Unless otherwise directed by ECDC in writing, the bidder shall continue to perform its obligations under the contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

#### **4.7 Insurance**

The contractor shall affect and maintain all required and/or necessary insurances in accordance with Clause 10 of the JBCC Contract Edition 6.2, as applicable.

#### **4.8 Responsibility to perform**

Delivery of the goods and performance of services shall be made by the bidder in accordance with the time schedule prescribed by ECDC in the contract.

If at any time during performance of the contract, the bidder or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the bidder shall promptly notify ECDC in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the bidder's notice, ECDC shall evaluate the situation and may at his discretion extend the bidder's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.

ECDC reserves the right to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the bidder's point of supply is not situated at or near the place where the supplies are required, or the bidder's services are not readily available.

A delay by the bidder in the performance of its delivery obligations may render the bidder liable to the imposition of penalties, unless an extension of time is agreed upon without the application of penalties.

ECDC shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance.

ECDC may also consider termination of the contract.

#### **4.9 Duration of the contract**

The construction project duration is **18 Months** from date of appointment.

The successful Bidder shall be required to complete and submit the signed and duly completed **client recommended Services Level Agreement**.

Upon any delay beyond the delivery period in the case of a supplies contract, ECDC shall, without cancelling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the bidder's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the bidder. (N/A)

#### **4.10 Payments and tax**

Payments shall only be made in accordance with the fees as quoted in this documentation. Prices charged by the bidder for goods delivered and services performed under the contract shall not vary from the prices quoted by the bidder in this bid, with the exception of any price adjustments authorized at ECDC's request for bid validity extension, as the case may be.

ECDC will reimburse the service provider for expenses and disbursements incurred subject to the submission of satisfactory proof that such expenses and disbursements have been incurred and subject to it being within the budget as indicated in this documentation.

The service provider shall from time to time during this contract duration furnish ECDC with a VAT compliant tax invoice accompanied by a copy of the delivery note and upon fulfilment of other obligations stipulated in the contract.

Each invoice must be accompanied by a detailed timesheet and expense claim forms substantiating the amount claimed.

Payments shall be made promptly by ECDC in Rand, but in no case later than thirty (30) days after submission of a VAT compliant tax invoice and supporting documentation by the service provider if the services have been properly executed as agreed.

The service provider shall retain all proof of expenditure and maintain such accounts and records as are reasonably necessary, claimed above, should ECDC require an audit to substantiate that expenditure and allows ECDC's own personnel or an independent auditor access to those records.

Should the above audit reveal that ECDC has been overcharged, the Service Provider will re-imburse the ECDC the amount overcharged within 30 days inclusive of interest calculated at prime plus 2% per annum.

A foreign bidder shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Republic of South Africa.

A local bidder shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to ECDC.

#### **4.11 Subcontracting**

A minimum of 30% of the building work needs to be allocated to SMME'S Sub- Contractors will be required to supply verified monthly statements/ Schedules (verified by their auditors) indicating the % achieved for that month. A cumulative schedule also needs to be maintained each month that has passed.

C3.2 – Health & Safety Specifications

## Contents

<b>2</b>	<b>SCOPE</b> .....	<b>126</b>
2.1	Site Specific Specification .....	128
	Project Scope: .....	128
2.2	Project Location: .....	<b>Error! Bookmark not defined.</b>
3.1.	List of Abbreviations .....	129
3.2.	Key References.....	129
<b>4.</b>	<b>INTERPRETATION</b> .....	<b>130</b>
4.1.	Purpose of the Project Specific Health and Safety Specification (PSHSS) ..	130
4.2.	Implementation of the Project Specific Occupational Health and Safety Specifications (PSHSS)	130
<b>5.</b>	<b>GENERAL REQUIREMENTS</b> .....	<b>130</b>
5.1.	Risks .....	130
5.2.	Specified Hazardous Chemical Substances .....	131
5.3.	Client Hazard Notification .....	131
5.4.	General Risk Management.....	132
5.5.	Training, Awareness and Competency .....	132
5.5.1.	Health & Safety Training.....	132
5.5.2.	Induction.....	133
5.5.3.	Awareness .....	133
5.5.4.	Competency .....	133
5.5.5.	Specified Hazardous Chemical Agentss .....	133
<b>6.</b>	<b>OCCUPATIONAL HEALTH &amp; SAFETY MANAGEMENT</b> .....	<b>134</b>
6.1.	Construction Work Permit (CR 3) .....	134
6.2.	Organogram and Appointment of Competent Site Personnel .....	134
6.2.1.	Construction Manager (CR 8.1) & (8.2. alternate).....	134
6.2.2.	Construction Work Supervisor (CR 8.7).....	134
6.2.3.	Construction Health and Safety Officer (CR 8.5) .....	135
6.2.4.	Health & Safety Representative / H&S Committee Member (OHS Act 17 & 19).....	135
6.2.5.	First Aider / First Aid Attendant.....	135
6.2.6.	Risk Assessor .....	135
6.2.7.	Appointment of Competent Contractors (CR7.3) .....	135
6.2.8.	Appointment of Sub-Contractors .....	136
<b>7.</b>	<b>GENERAL RISK MANAGEMENT</b> .....	<b>136</b>
7.1.	Health Risks and Medical Surveillance.....	136
7.2.	Emergency Procedures.....	137
7.3.	Fires and Emergency Management.....	137
7.4.	Hazardous Biological Agents.....	137
7.5.	Incident Management and Compensation Claims .....	138
7.6.	Personal Protective Equipment (PPE) and Clothing .....	138
7.7.	Occupational Health and Safety Signage .....	138
7.8.	Induction of Employees and Visitors, General H&S Training .....	138
7.9.	General Requirements and Provisions .....	139
7.10.	POPI Act Policy, Procedure and Control .....	139
<b>8.</b>	<b>Working at Heights</b> .....	<b>139</b>
<b>9.</b>	<b>Communication On Site</b> .....	<b>140</b>
<b>10.</b>	<b>Care of Workers on Site (Welfare)</b> .....	<b>140</b>
<b>11.</b>	<b>Discipline, Alcohol and Substance Abuse</b> .....	<b>140</b>
<b>12.</b>	<b>Excavations</b> .....	<b>140</b>
<b>13.</b>	<b>Electrical Tools</b> .....	<b>141</b>
<b>14.</b>	<b>Electrical Installations</b> .....	<b>141</b>
<b>15.</b>	<b>Earthworks and Pavement Layers of Gravel or Crushed Stone</b> .....	<b>141</b>
<b>16.</b>	<b>Additional Works</b> .....	<b>141</b>
<b>17.</b>	<b>Fumigation</b> .....	<b>141</b>
<b>18.</b>	<b>Hoarding</b> .....	<b>142</b>
<b>19.</b>	<b>Construction And Mobile Plant</b> .....	<b>142</b>
<b>20.</b>	<b>Subcontractors</b> .....	<b>142</b>
<b>21.</b>	<b>Delivery of Materials</b> .....	<b>142</b>

<b>22. General Site Control .....</b>	<b>142</b>
<b>23. Traffic Management .....</b>	<b>143</b>
<b>24. Noise And Disturbance.....</b>	<b>143</b>
<b>25. Demolition Work .....</b>	<b>143</b>
<b>26. Non-Conformances.....</b>	<b>143</b>
<b>27. Health And Safety File .....</b>	<b>143</b>
<b>28. Project Close Out Requirements .....</b>	<b>144</b>
<b>29. Penalties.....</b>	<b>145</b>
<b>ANNEXURE A.....</b>	<b>146</b>
<b>CONTRACTORS MONTHLY HEALTH AND SAFETY REPORT .....</b>	<b>146</b>
<b>Annexure B: OHS BUDGET.....</b>	<b>147</b>
<b>Annexure C: PoPIA Declaration form.....</b>	<b>149</b>
<b>Annexure D: Baseline Risk Assessment .....</b>	<b>Error! Bookmark not defined.</b>

## SCOPE

### Site Specific Specification

This health and safety specification in respect construction work to be executed for **ALTERATIONS AND REFURBISHMENT OF CLANEIGH COURT IN QUEENSTOWN**. The health and safety specification provides the overarching framework within which the Principal Contractor is required to demonstrate compliance with the Occupational Health and Safety Act 85 of 1993, during construction work. This document sets a standard on the following:

- Establishes the way the Principal Contractor is to manage the risk of health and safety incidents during construction; and
- Establishes the way the Client's Health and Safety Agent will interact with the Principal Contractor.

This specification establishes general requirements to enable the Principal Contractor to satisfy aspects of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Construction Regulations, 2014.

The Principal Contractor is required to develop, implement, and maintain a site-specific health and safety plan. The Client is required to provide certain site-specific information to the Principal Contractor or a health and safety specification for the works to enable such a plan to be formulated. Accordingly, this specification on its own cannot ensure compliance with the requirements of the Act.

The Construction Regulations, 2014, requires a client 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 to be a threat to the health and safety of persons. The Appointed OHS Agent will conduct monthly Health and Safety Audits.

#### Project Scope:

The scope of this Occupational Health, Safety and Environmental (SHE) Specification is to address the reasonable and foreseeable aspects of occupational health, safety and environmental management, which will be affected by the contract work.

The specification will provide the requirements that the Principal Contractor and other Contractors shall comply with in order to reduce the risks associated with the contract work, and that may lead to incidents causing injury and/or ill health or degradation of the environment, to a level as low as reasonably practicable and possible.

**ALTERATIONS AND REFURBISHMENT OF CLIEMLIEGH COURT IN QUEENSTOWN**, programme through the Eastern Cape Development Cooperation (ECD) will do construction works as per the scope of works.

The Scope of Works are as follows:

#### 2.1 Alterations and Refurbishment in Queenstown Queenstown

This existing large single storey storage facility requires the following work:

- Site clearance and cutting off grass and trees.
- Removal and replace all gutters and rainwater pipes.
- Reinstatement boundary wall.
- Removal of existing timber skirting and replace with new.
- Paint internal and external walls
- Repairs on damaged plastered walls internal and external
- Paint carport
- Repainting of internal and external areas including ceilings
- General repairs to internal doors and ironmongery
- Servicing to existing joinery work including aligning of doors and replacing missing parts.
- New floor finishes (Tiles)
- Repairs to existing electrical works

- Repairs to existing plumbing items (Installation of geyser)
- New balustrade
- Fumigation of the facility
- Installation of Aluminium
- Etc (As contained in the attached BOQ)

The nature of the work may result in unforeseen hazards, design changes and scope creep, which may need risk reduction controls. The PC must implement a dynamic OHS system that develops controls for risk continuously.

### 3. DEFINITIONS

As per the Occupational Health and Safety Act (85 of 1993) and the relevant regulations and applicable standards.

#### 3.1. List of Abbreviations

AIA	Approved Inspection Authority
BOQ	Bill of Quantities
CEO	Chief Executive Officer
CHS	Construction Health and Safety
CHSA	Construction Health and Safety Agent
CHSO	Construction Health and Safety Officer
COC	Certificate of Compliance
COIDA	Compensation for Occupational Injuries and Diseases Act
COLTO	Committee of Land and Transportation Officials
CR	Construction Regulations (Gazette 10113 of 07/02/2014)
DoEL	Department of Employment and Labour
GAR	General Administration Regulations
GSR	General Safety Regulations
ID	Identification Document
HASCHEM	Hazardous Chemicals
HCAR	Hazardous Chemical Agent Regulations
HBAR	Hazardous Biological Agents Regulations
HIRA	Hazard Identification Risk Assessment
H&S	Health and Safety
NQF	National Qualifications Framework
OHSA	Occupational Health and Safety Act No. 85 of 1993 (as amended)
OHSS	Occupational Health and Safety Specification
PA	Principal Agent
CHSS	Construction Health and Safety Specification
POPIA	Protection of Personal Information Act
PSHSS	Project Specific Health and Safety Specification
PC	Principal Contractor
PPE	Personal Protective Equipment
PSP	Professional Service Providers
SANS	South African National Standards (Authority)
SARTSM	South African Road Traffic Signs Manual
SDS	Safety Data Sheet
SHE	Safety Health and Environment
SWP	Safe Work Procedure
TSO	Traffic Safety Officer
UIF	Unemployment Insurance Fund

#### 3.2. Key References

Occupational Health and Safety Act No. 85 of 1993 and Regulations (as amended)

Mine Health and Safety Act and Regulations No. 29 of 1996 (as amended)

Compensation for Injury and Occupational Diseases Act No. 100 of 1993 (as amended)

Committee of Land Transport Officials (COLTO) South African Roads Specifications for Road and Bridge Construction

South African National Standards

General Conditions of Contract 2015 (GCC) Edition 3

Traffic Safety Manual (SARTSM) Chapter 13, Volume 2 of 1999

Road Traffic Act No. 93 of 1996 (as amended)

Municipal Bylaws

#### **4. INTERPRETATION**

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

##### **4.1. Purpose of the Project Specific Health and Safety Specification (PSHSS)**

The PSHSS is a performance specification to ensure that the Client and any bodies that enter into formal agreements with the Client / Agents, Professional Service Consultants (Engineers, Quantity Surveyors and Architects), Principal Contractor and Contractors achieve an acceptable level of OHS performance.

The absence of advice or approval for any document mandated by the PSHSS, such as hazard identification and risk assessments, or any communication from the Client should not be interpreted as the Client accepting any obligation that relieves the Principal Contractor of the responsibility to meet the required performance standards and comply with legal requirements. It is essential to note that the Client does not assume liability for any consequences arising from the Principal Contractor's failure to adhere to the PSHSS; thus, the Principal Contractor retains the responsibility for achieving the necessary performance levels and ensuring legal compliance.

A Mandatory Agreement in terms of Section 37.2 of the OHSA will be signed between parties prior to any works commencing. The PSHSS highlights the aspects to be implemented over and above the minimum requirements of current legislation. Requirements may be changed should new risks arise, work scope change or any other issues be identified that could not have been foreseen during the design phase of the project, or during the construction phase. Any new legislation or standards (legislated or determined by the Client) that are promulgated or accepted during the contract will automatically be applied.

It should be noted that this PSHSS in no way relieves the Contractor of any of his responsibilities set out in the Act and Regulations

##### **4.2. Implementation of the Project Specific Occupational Health and Safety Specifications (PSHSS)**

A project specific H&S specification will be subject to approval by the Client. This must include all supporting documentation as required to verify the H&S system. The OHS Plan must address the scope of works.

The plan includes the preliminary program and site lay-out.

#### **5. GENERAL REQUIREMENTS**

##### **5.1. Risks**

Principal Contractor to provide a detailed risk assessment and hazard analysis for the entire construction works proposed for the site. This includes people, machinery and material aspects within the micro and macro

construction environment and shall include all the risks noted in the baseline risk analysis given at tender stage. See the notes under project scope and use the baseline HIRA.

Risk Control as per the Baseline Risk Assessment See Annexure D

1. Construction Work Permit
2. Entrance of Site with busy road works, Access
3. Site security and safeguarding
4. Training of Employees
5. Induction/Training
6. Hazardous Chemical Agents
7. Appointment of Subcontractors
8. Selection of workers / staff for site.
9. Emergency Procedures
10. Fire Equipment
11. Incident Reporting
12. Distribution of PPE
13. Safety Signage
14. Communication and Documentation
15. Welfare Facilities
16. Disciplinary Procedures and Alcohol abuse
17. Designation of laydown areas
18. Poor waste management
19. Use of hand tools
20. Use of portable power tools
21. Working at Heights
22. Loading and Off-loading
23. Stacking and storage
24. Existing Services
25. Operating of Heavy Construction Vehicles and Mobile Plant on site: TLB may be used for demolition of stores, levelling and so on.
26. Minor batching of Concrete work
27. Traffic Management
28. Noise
29. Dust Control
30. Paving
31. Demolition
32. Rewiring of Electrical cables and installation of new DB box's

## **5.2. Specified Hazardous Chemical Substances**

The PC is to supply the products required as per the bill of quantities-, materials data sheets (SDSs) for each of the product envisaged to be utilized on site. The South African SDS to be provided.

The SDS data must be indexed, and a risk analysis done to indicate the risks related to each product in use. Training on this information must be given on site and risk controls implemented.

## **5.3. Client Hazard Notification**

Site establishment and Site camp:

This area will require the PC to assess impact on the Clainleigh entrance:

- Access to works in a trafficked area: Plan for employee safety, control deliveries and parking.
- Employees to be visible and everyone working there to have a reflector vest with employer name always displayed. The PC may propose labelled reflector overalls or Label on the hard hat induction stickers. This must be noted in the PC safety plan.
- Inductions must inform employees that they must not enter any unauthorised area.

- The registered competent CHSO must be aware daily of where work is done, what is done and how many people are working in that specified area.
- Access, restricted space for construction works, security, noise and dust hazards.

The PC must plan for safe works access and ensure work under controlled conditions:

- Hoarding structural as per PA instruction
- Employee movement control and visibility
- No smoking
- Electrical and services are isolated.

*Construction traffic: Planning concrete pours, deliveries, employee drop off, pedestrian pathways will all have hazards. Removal of waste from site will have hazards associated with the task.*

*Work may be done over a cross section of areas: if PC program is approved in this manner, competency for supervision in every works area is critical.*

#### **5.4. General Risk Management**

The Principal Contractor must provide a detailed risk assessment for the entire works on site. Certain construction activities, equipment, substances etc. represent significantly higher safety risks than others. The risk assessment is required to define systems and safe working procedures that will be implemented on site in an endeavour to complete the activity safely.

The contractor is required to:

- Identify health and safety hazards and risks to which persons may be exposed during the construction period;
- Analyse and evaluate the identified hazards and risks;
- Document a plan which will highlight safe working procedures to mitigate, reduce or control the identified risks; and
- Develop a Monitoring and Review Plan of the hazards and risks.
- Dynamic hazard identification daily for tasks noted in the DSTI's and updated to the HIRA
- Index risk assessment to note what had been assessed.
- Implement a Review and Monitoring plan.

The client baseline risk assessment provided with this specification aims to provide the framework within which the risks must be assessed for the construction phase of the project, and to highlight any reasonably foreseeable risks which may be inherent to the project based on its current scope of works. (5.1).

The baseline risk assessment is therefore not the replacement of the contractor's risk assessment but rather to point the contractor towards some risks he might not be aware of during tendering stage and while conducting his formal risk assessment. The baseline risk assessment, which is attached as an Annexure D to this specification must be used as a guide in conducting the construction phase risk assessments. Refer to Construction Regulations for minimal requirements relating to doing a HIRA.

#### **5.5. Training, Awareness and Competency**

##### **5.5.1. Health & Safety Training**

The Principal Contractor must ensure that all his / her staff is adequately trained to perform the tasks allocated to them and that there is always the requisite amount of supervision to maintain safe work practices and standards, particularly where semi-skilled and unskilled personnel are involved. The contractor shall conduct a

training needs analysis to ascertain what health and safety training and re-training is required. No employees shall be allowed on site unless there is proof of induction training and identification.

Competency for the following is not negotiable, list is not limited to:

- Construction Manager and Assistant alternate Construction Manager, Competent person with a minimum qualification of NQF Level 7
- Health and Safety Officer must have NQF Level 5
- Temporary works planner and controller
- SHE Reps
- First Aiders
- Fire extinguisher Inspectors
- All appointed inspectors and supervisors must understand liability and duty of signing appointments.
- Scaffolding Erectors and Inspectors;
- Fall Protection Planner (SAQA US 229994);
- Working at Heights (SAQA US 229998)

### **5.5.2. Induction**

The contractor shall conduct a site-specific health & safety induction for all the employees, contractors and visitors to the site.

Copies of the attendance registers signed by the attendees as acknowledgement of attendance are to be kept on site in the health & safety file for verification during inspections and Client Audits.

### **5.5.3. Awareness**

The Principal Contractor shall conduct on-site periodic toolbox talks that cover the relevant activity and an attendance register and the contents of the topics discussed must be kept on site in the health & safety file.

Proof of training requires proof of the lesson plan and employee signatories.

Safety notices and symbolic signs, including health and safety awareness posters must be displayed at the site entrance and at strategic positions on the site to create health and safety awareness.

### **5.5.4. Competency**

The Principal Contractor shall send relevant persons to appropriate courses as required by the Act, relevant Regulations, and applicable safety standards. The type of training to be conducted will be determined after conducting a Hazard Identification and Risk Assessment (HIRA). Copies of training certificates must be kept on site in the health & safety file.

The training to be conducted is, but not limited to:

Health & Safety Representative Course.  
First Aid Training,  
Incident investigation; and  
HIRA Course.

Proof of competency to be attached to Appointment letters.

### **5.5.5. Specified Hazardous Chemical Agentss**

The PC is to supply the products required as per the bill of quantities-, materials data sheets (SDSs) for each of the product envisaged to be utilized on site. The South African SDS to be provided.

The SDS data must be indexed, and a risk analysis done to indicate the risks related to each product in use. Training on this information must be given on site and risk controls implemented.

## **6. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT**

### **6.1. Construction Work Permit (CR 3)**

The client is responsible for applying for the construction work permit from the Provincial Director of the Department of Labour. The application, in the form of Annexure 1 in the Act, should be submitted to the East London Provincial Office in the relevant geographic location where work is intended to commence.

The submission of the following documents is required with Annexure 1:

- Health and Safety File
- Declaration letter acknowledging OHS specifications and BoQ
- Appointment letter for the Construction manager and Construction health and safety officer, along with certified copies of their identity documents and training certificates
- Letter of award from the client
- Signed 37.2 Mandatory Agreement
- Appointment letter as per CR 5(1)(k)

No work is allowed to start on-site until the Department of Employment and Labour issues the approval and Construction Work Permit.

The site-specific number must be prominently displayed at the main entrance to the site, and the size of the permit board should be visible from a distance of 20 meters. The site-specific number is non-transferable.

The Principal Contractor is required to keep a copy of the construction work permit in the health and safety file at all times. If there are any changes to the Construction manager and Construction health and safety officer, the Principal Contractor must provide the replacement persons' documentation for approval to the Pr. CHSA. It is essential to note that these OHS specifications do not relieve the Contractor of any responsibilities outlined in the Act and Regulations.

### **6.2. Organogram and Appointment of Competent Site Personnel**

The CEO (OHSA S16.1) of the PC will take overall responsibility for the appointment of competent site staff for the duration of the project. Should the CEO not be personally involved in the project, the H&S responsibilities are to be delegated to the Acting CEO (OHSA 16.2). Knowledge and training in H&S are required, and certificates indicating H&S training as well as experience to be included in CVs.

All other legal appointments are to be made with relevance to the type of work to be performed.

#### **6.2.1. Construction Manager (CR 8.1) & (8.2. alternate)**

The Principal Contractor is required to formally designate a full-time competent individual specializing in civil construction works as the Construction Manager. This individual will be responsible for overseeing all construction activities at the designated site, including ensuring compliance with occupational health and safety standards. In the event that the designated Construction Manager is unavailable, an alternate must be appointed, possessing appropriate training and/or experience in the relevant area of responsibility.

Upon the acceptance of the tender, the contractor is obligated to submit the Construction Manager's competency details in writing to the client for approval before commencing work.

#### **6.2.2. Construction Work Supervisor (CR 8.7)**

The Principal Contractor must in writing appoint construction work supervisor/s responsible for construction activities and ensuring occupational health and safety compliance on the construction site.

### **6.2.3. Construction Health and Safety Officer (CR 8.5)**

The Principal Contractor must appoint a suitably competent Construction Health & Safety Officer (CHSO) to coordinate his or her organization's health & safety efforts on the site.

The CV for the proposed CHSO must be submitted to the Client appointed CHS Agent for approval. The appointed CHSO must be full time and readily available on site during working hours. The CHSO must conduct monthly internal audits and random site safety and equipment checks, including overall compliance with the site-specific construction health and safety plan and procedures, and compile a monthly CHSO report to be tabled at each site progress meeting. The CHSO must evaluate the contractors Health and Safety Plan.

The minimum qualification for the CHSO must be a matric certificate, NQF 5 qualification with at least two years and more experience on civil engineering and/or building projects.

The CHSO that the Principal Contractor intends to appoint **must be registered as a CHSO** with the SACPCMP and shall provide a valid registration with a letter of good standing with SACPCMP.

### **6.2.4. Health & Safety Representative / H&S Committee Member (OHS Act 17 & 19)**

Irrespective of the number of employees employed on the site, the PC and contractors must each appoint a full-time health and safety representative, who at least has completed the necessary health and safety representative course. The election or appointment of health & safety representatives must be in writing.

Regular inspections are to be carried out by health & safety representatives; records must be kept on site in the health & safety file. Deviations must be rectified by the responsible person immediately.

The H&S representative will liaise and report to the health and safety officer.

In cases where there are more than two health & safety representatives elected, a health & safety committee must be established. Health and safety committee meetings must be held at least monthly to discuss relevant health & safety topics.

### **6.2.5. First Aider / First Aid Attendant**

The Principal Contractor must appoint at Level 2 First Aid Attendant for the project and where practicable, one First Aid Attendant for each work team or section of the works. The appointed First Aid Attendant must be suitably qualified and have valid training certificates.

The Principal Contractor together with the responsible First Aid Attendant must ensure that the first aid boxes(s) are fully stocked. General Safety Regulations must be applied. The First Aider must be available and accessible on site at all times and should form part of the rescue team.

### **6.2.6. Risk Assessor**

The Principal Contractor is required to appoint a competent risk assessor and must understand the process of identifying hazards and assessing risks emanating from the identified hazards.

This appointed person can be an already designated health & safety officer because the task of assessing risks is an ongoing process and therefore risk review process must be done regularly.

There must be a direct link to the personal protective equipment / clothing and training to be conducted throughout the contract.

### **6.2.7. Appointment of Competent Contractors (CR7.3)**

The Principal Contractor is to ensure compliance with the Clients minimum standards and all legislative requirements. The same H&S standards required of the PC are to be applied to all Contractors. A register of all

Contractors and Suppliers is to be on file and kept updated at all times. The PC is to ensure there is sufficient funding for H&S compliance by each Contractor.

The following minimum aspects are applicable to any Contractor appointed:

- The CHSO is to ensure a contractor's appointment and approval of H&S documentation at least seven (7) working days prior to commencing work.
- No Contractor may work under the PC's Compensation Registration Number. If required, the PC may assist targeted subcontractors with their registration with the
- Compensation Commissioner. However, such Contractors will not be able to commence work until proof of registration or Letter of Good Standing has been received.
- No work may commence without the following documentation in place:
  - The Contractor is to have an appointment letter.
  - Mandatory (37.2) agreements between parties in place.
  - Valid letters of Good Standing or proof of application (not older than 3 months)
  - OHS Plan Approval Letter issued by the PC.

### **6.2.8. Appointment of Sub-Contractors**

The Principal Contractor shall, when appointing Contractors, shall do so in terms of the Construction Regulations 2014, and in terms of the requirements of Section 37(2) of the Occupational Health and Safety Act, 85 of 1993 (As amended).

The appointments shall be in writing and the responsibilities clearly stated together with the period for which the appointment / designation is valid. This information shall be communicated and agreed with the appointees as well as all the mandatories.

The Principal Contractor must provide a project specific health and safety organogram of all appointed designated personnel and a list of contractors appointed on the project and shall always keep an up-to-date copy of each on site. The site organogram and list of contractors shall also be displayed on the site notice board.

The Principal Contractor is to ensure that each Contractor's H&S documentation is evaluated and approved in accordance with the Occupational Health and Safety Act 85 of 1993 (As amended) and applicable regulations. A copy of the Contractor's H&S Plan Approval is to be sent through to the appointed H&S Agent.

The Principal Contractor must ensure that an audit is conducted on each Contractor monthly before the arranged site progress meeting. This audit is to be conducted by the Principal Contractor's appointed H&S Officer and a report is to be given on each Contractor's H&S performance for the past month.

## **7. GENERAL RISK MANAGEMENT**

### **7.1. Health Risks and Medical Surveillance**

All personnel, including Contractor employees, must possess a medical fitness certificate issued by a registered Occupational Medical Practitioner before starting work. The commencement of medical surveillance is scheduled during the pre-employment phase, and Annexure 3 should be on record.

Authorization to retain, share, and dispose of data must be documented under the Protection of Personal Information Act (POPIA).

Every worker, including those employed by Sub-Contractors, must have a valid medical fitness certificate before commencing work. No employed / contract worker will be allowed on site without a valid medical certificate of fitness. Annual medical surveillance is mandatory unless a more frequent schedule is specified.

Provisions for retaining medical records for the required duration should be duly acknowledged.

Given the potential health risks the following aspects are to be included in each medical surveillance intervention:

Full medical, surgical, and occupational history.  
Full physical examination of all systems, and  
Referral if required for the management of identified health issues that may affect the worker.

Specific testing for existing conditions and limitations relative to exposure could include, but are not limited to:

Audiometry (hearing tests).  
Spirometry (lung function testing).  
Chest X-rays.  
Liver function testing (volatiles), and

Any other tests identified as relevant It is preferable that the PC has a medical surveillance plan.

## **7.2. Emergency Procedures**

An emergency plan and procedure that is appropriate to the risks is required prior to commencement on site. It is advised that the system should be simple and easy for any worker to follow. Assembly point /area to must be clearly visible.

The visibility and integration of local emergency telephone numbers into the emergency procedure are non-negotiable requirements. Strict adherence to the fundamental principles of emergency management, especially regarding the hierarchy of control and management, is paramount. The Principal Contractor (PC) is obligated to collaborate closely with the Client in the preparation for emergencies, recognizing that the operational status of the buildings must be maintained. Local emergency contact numbers must be displayed.

## **7.3. Fires and Emergency Management**

Giving due consideration to emergency planning and procedures is of utmost importance, particularly in addressing identified risks. The specific focus areas include:

- Fire: This requires special attention as the Building currently lacks fire protection measures.
- Public Safety.

The emergency plan aims to involve local service providers whenever possible, and these arrangements should be established before the project begins. The plan should comprehensively address on-site fire risks and those associated with specific activities.

Fire extinguishers, tailored to the potential risks, must be readily available in adequate numbers to address potential fire incidents. All plant must be equipped with fire extinguishers. No open fires are permitted on site, and designated smoking areas with controlled times must be provided for smokers.

Submit a comprehensive response plan outlining the steps and procedures to be followed in the event of emergencies or unforeseen situations. This should include detailed actions to address various types of incidents and potential risks.

Specify the individuals appointed as part of the response team, including their roles and responsibilities. Ensure that the team includes individuals with the necessary competencies, such as first aiders, to effectively manage emergencies.

Outline specific measures and protocols in place to address the potential risk of a disease outbreak. This should cover preventive measures, communication plans, and actions to be taken in case of suspected cases.

## **7.4. Hazardous Biological Agents**

The principal contractor is to identify all potential HBA's prior to the commencement of works. All employees who are or might be in contact with HBA is to obey all lawful instructions given from their employer. All employees that will be exposed to HBA should undergo a medical evaluation and declared fit before being exposed and 14 days after exposure be medically evaluated again. Before being exposed to HBA the employee is to wear the correct PPE, clothing and personal samplers. All PPE to be issued where there is a possibility of exposure to raw sewage is to be completely impermeable and the possibility of skin contact with raw sewage is to be eliminated. It is the

responsibility of the employer to ensure that a disinfection and decontamination facility is available to all employees exposed to HBA. Employers should ensure that monitoring is continuous while employees are exposed to HBA. All assessments, monitoring results and medical surveillance reports should be kept for minimum period of 40 years.

Due to the removal of existing sewer systems all employees that will be removing the sewer must be vaccinated.

#### **7.5. Incident Management and Compensation Claims**

All incidents and accidents are to be investigated. All serious incidents involving any form of disabling injury or fatality are to be reported to the Designer (PA) /Client /CHS Agent immediately. This shall be confirmed in writing following the incident.

Proof of compensation claims, DOEL reports, and other relevant information must be on site for verification.

All Occupational diseases to be reported to Compensation Commissioner.

#### **7.6. Personal Protective Equipment (PPE) and Clothing**

The PC is to provide PPE to all employees free of charge.

The wearing of the identified SANS approved PPE at all times is non-negotiable.

- Hard hats: Chin strapped hats must have a safety breaker strap.
- Protective footwear.
- Overalls that ensure worker visibility and Company worked for:
- Eye protection (as required)
- Attenuated hearing protection.
- Reflective jackets (no bibs);
- Respiratory protection (minimum of FFP2).
- Gloves.
- other necessary PPE identified from SDS's and/or risk assessments.
- PPE for Visitors

#### **7.7. Occupational Health and Safety Signage**

On-site H&S signage is required. Signage shall be posted up at fixed or temporary working areas, or other potential risk areas/operations. These signs shall be in accordance with the requirements of the General Safety Regulations or SANS requirements as amended. Signage is to be noted on the site drawings indicating where fixed/temporary signage is required.

- 'Hard hat area' or other PPE requirements noted.
- First aid box positions (including vehicles); and
- Fire extinguishers.
- Assembly Area
- No Un-authorized entry.

Signs shall be posted at areas of work on site indicating that a construction site is being entered and that persons should take note of H&S requirements.

#### **7.8. Induction of Employees and Visitors, General H&S Training**

A simple, formal induction program is to be prepared which is site specific. Inductions must be carried out for all workers and visitors (including Client and PSP's) to the site. Record of induction must be kept for a period of 2 years.

DSTI training is required to ensure workers are familiar with the risks and H&S measures of the work or tasks to be done.

Penalties for non-compliance regarding induction is stipulated in penalty clause.

## **7.9. General Requirements and Provisions**

Information in series cover the startup aspects of the project, with a number of activities (excluding establishment) lasting the duration of the contract.

Telkom and Eskom overhead lines are present; however, they will remove their own services where they encroach on the construction.

Inclement weather conditions include high rain falls, extreme cold and hot temperatures.

The contractor should be ready to address severe injuries and always ensure the presence of a qualified level 2 first aider on-site. Continuous supervision is mandatory, and provisions for a telephone and transportation must be in place to respond promptly to any emergencies.

Clearing and grubbing of all areas will mostly be done by hand.

## **7.10. POPI Act Policy, Procedure and Control**

The PC will ensure that the companies control of information is known to all employees and that the employees had signed off on Medicals, Monitoring and Incident information being shared, and all other contractual information sharing requirements. All personal information collected for health and safety purposes will be handled in accordance with the Protection of Personal Information Act (POPIA). Such information will only be used for the intended purpose and will not be disclosed to unauthorized individuals or entities.

The Contractor must get consent before collecting any personal information, and individuals will be informed about the specific purpose for which their information is being collected or used. Personal information will be retained only for the necessary duration required for health and safety compliance purposes.

Each employee of the contractor is required to sign a declaration granting permission for us to capture photographs during audits and utilise them exclusively for reporting purposes to the client. (see declaration form Annexure C).

## **8. Working at Heights**

A competent individual, as per Unit Standard 229994, is required to develop a practical site-specific fall protection plan in accordance with CR 10. This plan must be submitted to the client appointed CHSA for evaluation and approval. Once approved, the plan needs to be signed off by the 8.1 and remain in their possession for control. The plan should reflect the selected works method for the specific scope of work, considering the potential use of scaffolding and ladders for accessing heights during construction.

For scaffold safety, ground conditions are crucial; ensure they are level, compacted, and not in proximity to the leading edge of an embankment. Appoint scaffold erectors and inspectors with the necessary competencies in writing and designate a scaffold supervisor to oversee all scaffold operations on site.

Employees required to work at heights must be declared medically fit by an occupational health practitioner, and medical certificates must be obtained before commencing work at heights. Ongoing medical assessments may be addressed under the DSTI, and all employees working at heights should possess certificates in line with Unit Standard 229998.

Consider wind forces when working at heights and cease operations during significant wind or inclement weather such as thunderstorms or rain.

SANS 100085 to be on site.

Evaluate environmental impact risks, including excessive heat and cold, when planning work at heights. Remember, scaffold safety begins with a solid foundation.

**Where there is any doubt as to the maximum permissible height of a scaffold, the complete scaffolding design shall be approved by a person competent in scaffolding design or by a professional engineer.**

## **9. Communication On Site**

All H&S communication during the project between the CHS Agent and the PC will be done through the PA/ Clerk of works/ Client and will be in writing, including the issue and responses to non-conformances and H&S audit results.

The PC Organogram should reflect communication protocol on the site.

## **10. Care of Workers on Site (Welfare)**

In compliance with regulations, it is necessary to provide toilets at reasonable intervals within work areas, as stipulated by the National Building Regulations and Construction Regulation 30. Additionally, chemical toilets must be regularly serviced and maintained in a clean condition. To enhance safety and safeguard against sexual abuse issues, male and female ablutions should be separated. The placement of ablutions should be anchored, maintaining a ratio of 1 for every 30 males or females.

Furthermore, ablutions must not be situated within 75m of a natural stream. Clean drinking water should be accessible to all employees continuously, with an emphasis on the importance of protecting this precious resource. Handwashing stations, along with 70% alcohol-based hand sanitizer and handwashing soap, must be provided. A sheltered eating area is required for on-site workers.

Moreover, an information board within employee facilities should be utilized to display audits and awareness notices. Department of Labour (DOL) information must be prominently displayed and effectively communicated.

## **11. Discipline, Alcohol and Substance Abuse**

All employees, including management, must adhere to lawful Health and Safety instructions. Disciplinary measures will be taken against those violating company rules or policies.

No individual under the influence of alcohol or substances affecting safety will be permitted to work or access the site. Random alcohol testing will be conducted on-site.

Clear employment policies are crucial for addressing absenteeism. Employees should be informed about sick leave procedures and expectations for Mondays and Fridays post-payment. Strict enforcement is necessary as absenteeism affects project progress and may result in rushed work and accidents.

## **12. Excavations**

The Principal Contractor is to provide a method statement for excavations, and this will be approved by the H&S Agent and the Engineer. Contractor must appoint a competent person in writing to manage excavations. The Principal Contractor must ensure that all excavations are safe to enter prior to any work commencing. Area being worked at needs to be properly barricaded or fenced off. Barricading must be done in such a manner that it prevents people and animals from falling into open excavations.

All deep excavations deeper than 1m must be sloped or shored to make the work environment for employees safe to work in.

All excavations on site where employees are performing work, must have a ladder for safe access in and out of excavation. The ladder must be long enough to protrude 900mm above the edge of the excavation and available at least for every 6m length of excavations.

Excavations should preferably not be opened beyond what can be worked in daily.

**DANGER TAPE OR CANDY TAPE IS NOT PERMITTED TO BE USED ON SITE AS A MEANS OF DEMARCATION!**

Suitable material such as hard-plastic mesh (long durability) adequately supported being able to withstand a normal person's weight and the elements (wind, rain) must be utilized as barricading. The PC must ensure that this is priced for in the BOQ.

**All open excavations will be kept clean (dewatered) of standing water.**

### **13. Electrical Tools**

The use of electrical tools involves potential hazards such as electric shock, burns, or fire. Safety measures include proper training on tool usage, regular equipment inspections, using tools with appropriate safety features, and following guidelines for electrical safety to prevent accidents.

### **14. Electrical Installations**

Every electrical and mechanical installation must adhere to the requirements outlined in the Health and Safety Act, Construction Regulation 2014, EIR, and other applicable standards.

Specialist contractors should handle this type of work, and their appointment must comply with Regulation 7 of the Construction Regulations 2014. The electrical contractor needs to be registered with the Department of Labour (DOL), and the registered competent person's name should be on-site, demonstrating competency to manage the required voltages. Proof of competency is mandatory.

A Certificate of Compliance (COC) must be issued by a competent person, covering any temporary electrical installations and including a temporary disconnection certificate with a lockout procedure for demolition and refurbishment work.

Prior to use, all electrical tools must undergo checks to prevent electrical disruptions. Measures should be in place to mitigate fire and explosion risks. The Principal Contractor (PC) requires the submission and approval of relevant safe work procedures and technical method statements.

### **15. Earthworks and Pavement Layers of Gravel or Crushed Stone**

All material will be considered as silica containing and require compliance with Government Gazette No. 65 (Feb 2010, No. 32930) is required. Items have been allowed in the BoQ for measuring dust and personal dosimetry for the duration of the contract. Dust levels are to be kept to a minimum from the quarries and relating to haulage. The appropriate PPE is to be issued and the wearing thereof enforced where required, and stockpiling of material for storage or spoil will be allowed at identified areas.

### **16. Additional Works**

During weed removal and herbicide application, it is crucial to exercise utmost caution due to the high-risk nature of the chemicals involve.

Note must be taken of wind conditions during herbicide application. Avoid spraying in high winds to prevent herbicide drift and unintended contamination of nearby areas.

Exercise care and precision when removing weeds manually. Use appropriate tools to minimize soil disturbance and prevent the dispersion of weed seeds.

### **17. Fumigation**

It is imperative that fumigation activities be conducted by trained and certified professionals well-versed in handling fumigants. Adequate ventilation must be maintained during and after the fumigation process to disperse potentially harmful fumes, with a thorough airing of treated areas before allowing re-entry.

Evacuation of occupants, including people, pets, and plants, is essential during fumigation to prevent exposure to hazardous chemicals. All entry points, such as windows and doors, should be properly sealed to contain fumigants and prevent leakage.

Effective communication is key, involving the notification of neighbours, adjacent businesses, and relevant authorities about the fumigation schedule and necessary precautions. Workers engaged in the fumigation process should use appropriate personal protective equipment (PPE), and clear warning signs should be prominently displayed in fumigated areas.

Proper storage of fumigants in secure, well-ventilated areas is crucial, and monitoring devices should be employed to track fumigant levels, ensuring they remain within safe limits. Establishing an emergency response plan is essential, complete with access to first aid and emergency contacts.

Post-fumigation cleanup should be conducted meticulously, disposing of residue and contaminated materials in compliance with regulations. It is paramount to adhere to local, regional, and national regulations governing fumigation procedures, permits, and safety standards.

The overall effectiveness of fumigation is contingent on strict adherence to these protocols and safety measures, requiring consultation with professionals and authorities to ensure compliance with the latest guidelines.

## **18. Hoarding**

Adequate hoarding to be done to reduce dust and noise and prevent public entrance to site. Security features must accompany the hoarding to maintain a secure environment for the existing occupants. Hoarding will be specified by the PA.

## **19. Construction And Mobile Plant**

The primary contractor is responsible for ensuring that all equipment in operation is well-maintained and suitable for its intended purpose. They must strategically plan for access and egress, preventing any unsafe situations or obstruction of emergency routes unless it is part of a planned and coordinated effort.

All plant operators, including those operating delivery vehicles, must possess valid medical certifications, relevant training, and a thorough understanding of on-site risks, rules, and Construction Regulation 23 (CR 23). Heavy plant requires competent fit operators and kept in good working order. Daily records of all plant to be available. Close supervision is mandatory for cut and fill operations, and the vertical cutting of embankments should be avoided.

Unauthorized dumping of spoil is strictly prohibited, and written authorization from the local municipality is required for any such activities.

## **20. Subcontractors**

The Principal Contractor bears the responsibility of ensuring that each subcontractor adheres to the health and safety specifications and Construction Regulations. Commencement by any contractor is strictly prohibited without the prerequisite Letter of Good Standing, and submission of a mandatory agreement. All necessary documentation must be present in the Health and Safety File. Approval of the subcontractor's health and safety file is mandatory before the commencement of any work.

## **21. Delivery of Materials**

The Principal Contractor (PC) is responsible for the proper management of all material deliveries to the site, ensuring coordinated stacking and storage. Designated areas for Roadworks materials must be established to prevent any inconvenience. Dust generation should not cause a nuisance to the residence living in close proximity with the Clanleigh Court Building.

Material stacking must be conducted in a controlled manner, with a focus on minimising wastage. Lay down areas should be cordoned off to manage multiple contractors effectively, ensuring the safety of everyone working at the Clanleigh Court Building. All sand and dust-related materials must be securely enclosed to prevent wind-driven dust nuisances at the construction site.

## **22. General Site Control**

Minor batching must be done in a controlled manner, prevent waste to run off into storm water drains, roads, or gardens. All concrete (Wet works) to be done as per standard and quality manual. No mixing on the ground or run off pollutants allowed.

Housekeeping, stacking, and storing control must form part of site daily management control and every work area must ensure that good housekeeping practices are an integral part of construction technique.

Construction waste material may not build up in the contractor's camp or be left on site.

### **22.1. Site Requirements**

Site lay out plan indicating:

- Access and security controls
- Site Office
- Lay down areas.
- Parking
- Escape routes and assembly points
- Fire extinguishers
- First Aid Equipment
- Waste
- Facilities
- Storm water planning as applicable to works.

### **23. Traffic Management**

Effective control of traffic management is essential. PC to develop a traffic management plan including traffic flow diagram. Contractors are required to ensure proper traffic control, prohibiting the parking of construction vehicles in a manner that obstructs traffic flow. All vehicles visiting or working on-site should use the designated parking area.

### **24. Noise And Disturbance**

Given the ongoing construction activities at the Clanleigh Court Building site, it is imperative to place a high priority on the well-being of nearby residents, staff, and visitors. This involves taking proactive measures to minimize and mitigate noise disruptions associated with the construction process. Implementing effective noise control strategies not only fosters a more harmonious living and working environment but also demonstrates a commitment to the comfort and quality of life of those in the vicinity. Such considerations underscore the importance of a conscientious approach to construction activities, ensuring that the impact on the surrounding community is kept to a minimum.

### **25. Demolition Work**

Demolition of a building must be conducted in compliance with relevant regulations and Building Regulations. It's crucial to prioritize the safety of workers, the public, and the environment. Appoint a responsible supervisor in writing. Submit an approved Demolition plan signed by the engineer. Conduct a thorough site assessment to identify potential hazards. Ensure a pre-checklist is done and signed off by a competent person before demolition work starts. Cart Away all rubble to an approved dump site.

### **26. Non-Conformances**

Should, at any time, the works, or part of the works, be stopped due to unsafe acts or non-compliance with the Clients OHS Specification or PCs H&S Plan; the PC shall have no claim for extension of time or any other compensation.

### **27. Health And Safety File**

As required by Construction Regulation 7, the Principal Contractor shall keep and maintain a Site Health and Safety File where all relevant health & safety records will be kept, including the Site-Specific Health & Safety Plan, and the relevant construction risk assessments as referred to above. Other relevant information includes but not limited to:

- a) Client Site Specific Health and Safety Specification and HIRA
- b) PC appointment letter
- c) Signed 37.2 Mandatory Agreement
- d) PC approved OHS Plan and approval letter
- e) OHS Administrative statutory documents:
  - Valid Letter of Good Standing with the Workmen's Compensation Commissioner
  - Notification of Construction Work

- f) OHS Policies and procedures signed by the CEO, dated with a review provision.
- g) Other Policies (POPIA, Alcohol Abuse, Drug Abuse, HIV/Aids, Smoking, Environmental, Waste Management, PPE, Competency)
- h) Organogram with appointments, competencies, and statutory registrations
- i) HIRA for proposed site activities and works.
- j) Safe work procedures / Methodologies/ Plans: inclusive of but not limited to:
  - Noise reduction plan
  - Dust control
  - Waste management plans
  - Prevention of water to works.
  - Facility management and planning for safe access to the works areas.
  - Bitumen Work
  - Concrete Work
  - Paving Work
  - Demolition plan
- k) Induction program
- l) Traffic Management Plan
- m) Training and toolbox talks. Upliftment of competency requirements as required for this works.
- n) Inspection registers with appropriate policies and procedures
- o) Emergency management, relevant contact numbers.
- p) Hazardous Chemical management
- q) Construction environmental management system
- r) Laws and Regulations
- s) Communications
- t) OHS Committee
- u) Sub-Contractor Management
- v) Employee medical monitoring:
  - OHS Medicals fit for work.
  - Employee ID; s
  - Assessment for work at heights
  - Ergonomic surveys
  - Proof of UIF payments
- v) Incident Management:
  - Procedures
  - General monthly incident management register
  - Annexure 1
  - COIDA forms
- u) Audits
  - Internal
  - Subbie Audits
  - CHSA Audits and Inspections

## 28. Project Close Out Requirements

The documentation submitted and approved following the awarding of the contract will be used to form the H&S file. On completion of the project, a consolidated health and safety file consisting of the following documents but not limited to, shall be submitted to the client appointed CHSA:

- The H&S Plan and the approval by Client.
- PC Appointment Letter.
- Mandatory Agreement with Client.
- Notification of Construction work and Confirmation letter from DOEL.
- Record of Competencies (CVs) and appointments (close out of appointments).
- Training Records.
- Method statements.
- Risk assessments.
- Traffic Control Logs and Management Plan
- Safe work procedures and specialized plans.

- Emergency and Injury Management (Accident Stats and Investigations);
- Medical surveillance records.
- Registers and Checklist.
- Internal H&S Audit Reports.
- Contractor H&S Audit Reports.
- Non-Conformance Reports; and
- Any other documents which may be required by the appointed CHSA.

The file must be submitted for close out and sign off by the CHSA, and then submitted with a performance close out report to the Client for storage.

## 29. Penalties

The Contractor shall be penalised R1000.00 for commencing works on site without requisite approved method statements and safe working procedures.

The Contractor shall be penalised R200.00 for each day on which work continues without requisite approved method statements.

Penalties arising out of lack of method statements shall be deductible from monthly payment certificates.

Penalties can be raised in terms of the following categories:

- Minor
- Medium
- Severe

See table below for penalties.

Table 1

<b>Minor: Penalty: R50/count</b>	<b>Medium: Penalty: R200/count or non-conformance</b>	<b>Severe Penalty: R5000/count, non- conformance and/or activity stoppage</b>
Non-use of PPE supplied	Toilets not supplied or regularly serviced; lack of drinking water	Contractors working without Health and Safety Plan approval
Non completion of registers for plant and equipment on site	Contractors not audited	Workers transported in contravention of the OHS plan or legal requirements
Lack of H&S signage at work areas	Working without training or the appropriate H&S method statements	Invalid Letters of Good Standing
Tools and equipment identified in poor condition during inspections	Legal non-conformances identified during the previous audit and not addressed within the agreed time frame	Failure to adhere to requirements of fall protection and fall arrest controls
Minor at risk actions and or conditions of a continuous nature.	No monthly OHS report at site meeting to report on	Scaffolding and or formwork not inspected, signed off and grossly non-compliant to the SANS codes and legal requirements
	No certificates of fitness for workers as required	Deep excavations not inspected, signed off and grossly non-compliant to legal requirements
	General non-compliance to developed procedures, forms, appointments, and other requirements of the contractors OHS plan	Continued or repeated gross at risk actions and or conditions.

**ANNEXURE A**

**CONTRACTORS MONTHLY HEALTH AND SAFETY REPORT**

(To be submitted by the end of the first week of each month and be available with each audit)

<b>CONTRACT NUMBER:</b>		<b>PROJECT NAME:</b>	<b>CONTRACT DETAILS:</b>
<b>1</b>	<b>GENERAL ACTIVITIES FOR THE MONTH</b>  (Detail each area of work)		
<b>2</b>	<b>NUMBER OF WORKERS</b> (permanent and local, contractors)		
<b>3</b>	<b>TRAINING DONE</b> (Supplier, no of people, type)		
<b>4</b>	<b>INCIDENTS / ACCIDENT</b>  (List number and details, attach reports)		
<b>6</b>	<b>NON-CONFORMANCES</b> (Closed out or active)		
<b>7</b>	<b>CONTRACTORS</b> (list, approval status)		
<b>8</b>	<b>AUDITS COMPLETED</b> (internal and external)		
<b>9</b>	<b>CRITICAL ISSUES</b>		
<b>10</b>	<b>GENERAL</b>		

Health and Safety Officer: \_\_\_\_\_ Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Construction Manager: \_\_\_\_\_ Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Annexure B: OHS ESTIMATE FOR PERMIT APPLICATION**

<b>OCCUPATIONAL HEALTH &amp; SAFETY ESTIMATE</b>					
<b>ALTERATIONS AND REFURBISHMENT OF CLANEIGH COURT: ELN/INFRA/29/012024</b>					
<b>ITEM NO</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>	<b>RATE</b>	<b>TOTAL</b>
<b>1</b>	<b>Occupational Health &amp; Safety, incl. HBA</b>				
1.1	Preparation of the Contractor's site-specific Health and Safety Plan & Risk Assessment Health and Safety File in Hard Copy.(Note this must include the Sub-Contractors OHS Files)	Sum			
<b>2</b>	<b>Provision of Personal Protective Equipment (PPE)</b> <b>Note:</b> Tenderer to provide quantity for full component of staff for contract period				
2.1	Reflective vests with visible marking of contractor's name and proof of induction	Item			
2.2	Hard Hats (High Density polyethylene, & 6-point lining)	Item			
2.3	Safety boots/shoes (Steel-Toe)	Item			
2.4	Earplugs/muffs	Item			
2.5	Dust Mask (at least FF2 type)	Item			
2.6	Safety gloves	Item			
2.7	Ear Defenders SABS approved	Item			
2.8	Overall/work suit (100% Cotton)	Item			
2.9	Safety Red flags (for flagman)	Item			
<b>3</b>	<b>Competent Personnel</b>				
3.1	Provision of a Construction <b>Health and Safety Officer (SACPCMP Registered)</b>	Month			
3.2	Construction Manager	Sum			
3.2	SHE Representative OHS Section 17	Sum			
3.3	Flagman	Sum			
3.4	Traffic Safety Officer (TSO)	Sum			
3.5	Security guard	Sum			
<b>4</b>	<b>Cost of medical certificates and medical surveillance per employee</b> <b>Note:</b> Tenderer to provide quantity for full component of staff for contract period				
4.1	Initial (baseline) medical examinations	Item			
4.2	Provision of First Aid Boxes to GSR requirements	Item			
4.3	Level 2 First Aider	Month			
4.4	OHS Signage (safety, health, First Aiders, road works, Excavation, Office, PPE, etc)	Sum			
4.5	Fire and emergency prevention signage,	Sum			

5	<b>Adhoc: Any OHS &amp; HBA related requirements not listed above</b>				
5.1	Printer, Paper and Ink, consumables, soap	Sum			
5.2	Waste bins	Item			
5.3	Under cover eating area	Item			
5.4	Fencing around full site	Sum			
5.5	Hoarding and netting	Sum			
5.7	Close out H& S files scanned electronically with original files to CHSA.	Sum			
<b>SUBTOTAL TAKEN FORWARD TO THE PRELIMINARIES</b>					

This list is not exhaustive, and contractors may expand all levels to include all relevancy H & S expenditure

**The Clients Principal Agent Approval:**

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

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

Date: \_\_\_\_\_

**FOR PRINCIPAL CONTRACTOR**

Principal Contractor Representatives Acceptance: Name:

\_\_\_\_\_

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

\_\_\_\_\_

Date: \_\_\_\_\_

## Annexure C: PoPIA Declaration form

### DECLARATION FORM: PERMISSION TO CAPTURE PHOTOGRAPHS DURING AUDITS

I, [Name of the Individual], hereby grant permission to [Your Company Name], hereinafter referred to as "the Company," to capture photographs during audits conducted on [Date(s)] at [Client's Name/Location]. I understand that these photographs will be utilized exclusively for reporting purposes to the client.

I acknowledge and agree to the following terms and conditions:

- Purpose of Photography:** The photographs captured by the Company during the audits will be used solely for the purpose of documenting and reporting on the audit findings to the client.
- Exclusivity:** I understand that the photographs taken will be used exclusively for reporting purposes to the client and will not be shared, sold, or utilized for any other purpose without my explicit consent.
- Confidentiality:** The Company agrees to treat all photographs as confidential information and will take appropriate measures to ensure that they are not disclosed to any third party without the consent of the undersigned.
- Duration of Permission:** This permission is granted for the duration of the audit conducted on [Date(s)] and includes any subsequent reviews or follow-up audits directly related to the initial audit.
- Withdrawal of Consent:** I reserve the right to withdraw this permission at any time by providing written notice to the Company. In the event of withdrawal, the Company will cease to use the photographs for reporting purposes.
- Indemnity:** I agree to indemnify and hold the Company harmless from any claims, actions, damages, or liabilities arising out of the use of the photographs in accordance with this declaration.

I have read and understood the terms and conditions outlined in this declaration. By signing below, I affirm my consent to the capture of photographs by [Your Company Name] during the specified audits for reporting purposes to the client.

**Individual's Full Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

[Witness Section, if applicable]

**Witness's Full Name:** \_\_\_\_\_ **Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Annexure D: Baseline Risk Assess

## ELECTRICAL SPECIFICATION

**INDEX**

1.	SECTION 1 : GENERAL ELECTRICAL INSTALLATION : GENERAL REQUIREMENTS	6
2.	SECTION 2 : GENERAL ELECTRICAL INSTALLATION : DETAILED REQUIREMENTS	24
3.	SCHEDULE OF EQUIPMENT OFFERED BY CONTRACTOR <b>(Note : Compulsory completion by Tenderers)</b>	SCHED1

**GENERAL REQUIREMENTS - Index**

- 1. CONDUIT AND CONDUIT ACCESSORIES**
  - 1.1 Conduit**
  - 1.2 Conduit Accessories**
  - 1.3 Flexible Conduit**
- 2. CONDUIT AND CONDUIT ACCESSORIES**
  - 2.1 General**
  - 2.2 In Roof Spaces**
  - 2.3 In Concrete Slabs**
  - 2.4 Surface Work**
  - 2.5 Future Extensions**
  - 2.6 Fixing of Conduits**
  - 2.7 Chases and Building Work**
- 3. PLUGGING OF WALLS**
- 4. FIXING TO CONCRETE CEILING**
- 5. WIRING**
  - 5.1 PVC Insulated Single Core Medium Voltage Conductor**
- 6. MOUNTING AND POSITIONING OF LUMINAIRES**
- 7. BATTEN HOLDERS**
- 8. LAMP HOLDERS**
- 9. SWITCHES AND SOCKET OUTLETS**
- 10. POSITIONS OF SWITCHES AND SOCKET OUTLETS**
- 11. LOW TENSION SWITCHBOARDS**
- 12. DISTRIBUTION BOARDS**
  - 12.1 Approval**
  - 12.2 Flush Mounting Distribution Boards**

**12.3 Surface Mounting Distribution Boards**

**12.4 Single Phase Distribution Boards**

**12.5 Distribution Boards – in Roof Spaces**

**13. METER BOXES**

**14. CONNECTIONS TO OUTLETS**

**14.1 General**

**14.2 Connections to Stoves**

**14.2.1 General**

**14.2.3 Stove Connections for Kitchens**

**14.3 Connections to Hot-water Cylinders**

**14.4 Connections to Power Points**

**14.5 Underground Service Connection**

**15. UNDERGROUND CABLES**

**15.1 Trenching**

**15.2 Cable Joints**

**15.3 Bedding**

**15.4 Laying**

**15.5 Back Filling**

**15.6 Protection of Cables**

**15.7 Marking of Cables**

**15.8 Joints and Termination of Cables**

**15.9 Sealing of Paper Insulated Cables**

**15.10 Earth Wires**

**15.11 Opening up of Existing Cables**

**15.12 Definitions for Classifying of Excavations**

**(a) Soft excavation**

**(b) Intermediate excavation**

- (c) **Hard rock excavation**
- (d) **Class A Boulder excavation**
- (e) **Class B Boulder Excavation**

**16. EARTHING**

**16.1 Main Earthing**

**16.2 Earthing in Installations**

**17. EXISTING BUILDINGS**

**17.1 Occupied Buildings**

**17.2 Temporary Connections**

**17.3 Old Materials**

**17.4 Making Good**

**18. COMPLETION**

**18.1 Balancing of Load**

**18.2 Tests**

**18.3 Labelling**

**18.4 Finishes**

**18.5 Site Drawing**

**19. BELLS AND BUZZERS**

**19.1 Bells**

**19.2 Doorbells, Buzzers and Bell Transformers**

**19.3 Bell Pushes**

**20. TIME SWITCHES**

**21. MOULDED CASE CIRCUIT BREAKERS (INCLUDING MINIATURE)**

**22. SWITCHBOARD EQUIPMENT**

**23. BUS-BAR COPPER**

**24. SPECIFICATION COMPLIANCE**

**DETAILED REQUIREMENTS - Index**

1. **SCOPE OF WORK**
2. **STANDARD SPECIFICATIONS**
3. **DRAWINGS**
4. **ELECTRICAL SUPPLY**
5. **CONTRACTOR'S WORK**
6. **WIRING**
7. **OUTLET COVERS – GENERAL AND ENGRAVING**
8. **SOCKET OUTLETS**
9. **LIGHT SWITCHES**
10. **EARTHING**
11. **CONDUIT**
12. **SCHEDULE OF LUMINAIRES**
13. **TESTING AND COMMISSIONING OF INSTALLATION**
14. **NOTICE OF TESTING AND COMMISSIONING**
15. **MAINTENANCE AND GUARANTEE PERIOD**
16. **AS BUILT DRAWINGS**
17. **COMPLIANCE CERTIFICATE**
18. **PROPRIETARY MATERIALS, SYSTEMS ETC.**
19. **BILL OF QUANTITIES**

## **ELECTRICAL : SECTION 1**

### **GENERAL ELECTRICAL INSTALLATION**

(ALL IN CONTRACTS)

#### **1. CONDUIT AND CONDUIT ACCESSORIES**

##### **1.1 Conduit**

Conduit shall be of steel galvanised internally and externally, either solid drawn or welded and not less than 20mm diameter, with all rough edges removed. All tube ends removed. All tube ends are to be reamed. With screwed conduit one threaded end is to be fitted with a coupling and the other end is to be protected against damage.

UPVC conduit may only be used if permitted by the Head: Works and only in those areas which he may specify. In this case this conduit shall be according to SANS 6289:1999.

Conduit accessories which are secured to the conduit by means of lugs, screws or set screws are not acceptable.

General requirements of conduiting to SANS 60614(1)

Metal conduits shall be fully in accordance with SANS 61386-1:1996

##### **1.2 Conduit Accessories**

All conduit accessories shall be galvanized both internally and externally and comply with SANS 61386-1:1996.

All screwed conduit fittings shall be of malleable cast iron.

Where fittings are fitted with covers, the covers shall be of galvanized pressed steel secured with brass screws.

##### **1.3 Flexible Conduit**

Flexible conduit shall be of the plastic covered metal type complete with brass connectors to the approval of the Engineer.

#### **2. INSTALLATION OF CONDUIT**

##### **2.1 General**

Except where cables are specified for certain circuits, the installation(s) shall be

conducted throughout in steel conduit. Split conduit is not permitted. All conduits shall, where ever possible, unless otherwise specified or agreed, be concealed in the structural work.

Except where agreed or otherwise specified or indicated on the drawings, all conduits to points shall run via the ceiling and floor slabs or roof space. In damp situations and where exposed to the weather, the conduits shall be so installed as to avoid, as far as possible, the condensation of moisture within them. All running joints are to be painted with an approved metal primer.

Mechanical and electrical continuity must be maintained throughout the installation. Each length of conduit and every conduit fitting must be inspected for defects and all sharp edges or burrs must be removed before installation. All joints are to be tightly fitted together.

Running joints with long threads, where used, are to be fitted with a lock nut and the running thread shall not be longer in length than a coupling and locknut.

In conduits smaller than 32mm diameter, elbows and normal bends are not to be used and conduits are to be set to the required angles.

Flexible connections between conduit and appliance or other equipment shall be by means of flexible tubing (see Par 1.3).

No wiring shall be drawn into conduits until the conduits have been installed.

Where more than one socket outlet is connected on a circuit, the conduit shall be looped from the one outlet box to the following outlet box.

All switch-boxes, socket outlet boxes and any other purpose made metal box including distribution board trays shall be suitable treated against corrosion before installation with "Rustodian" or other approved metal primer.

All conduits shall be securely fixed into chases, and all flush switch and socket outlet boxes must be firmly embedded in cement mortar.

The Contractor shall make himself familiar with the positions of all fittings, such as blackboards, pinning boards, cupboards, shelving, work-tops, etc., before commencing the conduit installation. The position of switches and socket outlets as indicated on the drawings are approximate only. The Contractor must verify that the final position of these will not be covered by the installation of the fittings referred to above, or come midway between the junction of any dadoes and upper wall finishes.

No extras will be entertained for moving switches or socket outlets as a result of the Contractor's failure to verify the final positions of the fittings or type of wall finish.

## **2.2 In Roof Spaces**

The conduit in roof spaces shall be installed parallel or at right angles to the roof

truss members and shall be secured at centres not exceeding 1,2m by means of saddles nailed to the timbers with galvanized clout nails. Crampets will not be allowed.

Crossing of conduits is to be avoided wherever possible. Where unavoidable, one conduit must be neatly set over the other. Where a number of conduits have to run back to the distribution board or switchboard, they shall run parallel to the distribution board or switchboard, and at saddle distance to each other wherever possible.

Conduit runs from distribution boards shall terminate in fabricated sheet steel draw boxes or galvanised trunking installed in the roof above the distribution boards. Each draw box shall be fabricated from 1,60mm galvanized sheet steel with welded corners and suitably treated against corrosion with "Rustodian" or other approved primer and finished in aluminium paint.

Conduit droppers shall be neatly cut into timber wall plates and set to face the right direction. All sets must be uniform. Conduits may be set at angles only where droppers or ceiling points are within 230mm of roof members.

No conduits are to be run over the top of gangplanks or trap doors.

Draw-in boxes with covers shall be provided where required and shall be installed near the gangplanks, if any. All inspection conduit fittings in open roof spaces shall face upwards to facilitate wiring and to permit easy inspection. Three-way conduit boxes shall be used for tee-off purposes in open roof spaces. Inspection tees are to be used except where otherwise agreed or specified.

All conduits extended into a roof space with a roof clearance of more than 900mm shall be set onto the beams and extended into the roof for a distance where there is sufficient clearance. Under flat roofs or where there is less than 900mm clearance, the conduits shall be installed as specified for tubing in concrete slabs, right angle bends should be kept to a minimum and the shortest route taken.

Where false ceilings occur they shall be tubed as called for in the detailed specification. Conduits in restricted spaces and run as for concrete slabs must, however, be installed in a neat and orderly manner.

Conduits to ceiling points for all types of fittings must be firmly supported and shall terminate in a back entry conduit box. The conduit box shall be taken through to the face of the ceiling and finish flush. Where the ceiling bandering interferes with the installation of the ceiling point specified, the Contractor must trim the bandering to allow the conduit box to be taken through to the face of the ceiling as specified. Luminaires must be bonded to the conduit box by means of metal threaded screws.

### **2.3 Concrete Slabs**

In order not to delay building operations, the Contractor must ensure that all conduits and conduit fillings, which are to be cast in concrete, are laid in good

time. The Contractor shall have a competent Electrical Artisan standing by during casting of concrete, etc., to ensure that the conduit boxes remain in their correct positions and that the conduit and boxes are not damaged during casting of concrete.

Draw boxes, expansion joint boxes and round conduit boxes are to be provided where necessary.

Deep type conduit boxes shall be used for side entering conduits and normal shallow boxes may be used for back entry conduits. No elbows, bends or sharp sets will be allowed in concrete slabs except in cases of conduits of 40mm diameter or when larger sweeping bends will be permitted.

Common draw and/or inspection boxes shall be used where there is more than one circuit involved. They shall be installed in lavatories, storerooms, or other inconspicuous places. Covers shall be of hardboard neatly finished to match the finished ceiling or wall surface, and shall be fitted parallel to the wall or ceiling.

All boxes, etc., are to be securely fixed to the shuttering to prevent displacement when concrete is cast. All conduits must be laid off the deck, supported and secured at regular intervals and installed as close as possible to the neutral axis of concrete beams and slabs.

Expansion joints shall consist of a box in which one conduit is fixed and the other capable of movement with the building's expansion and contraction. Earth continuity of these joints shall be maintained by a means of stranded copper conductors bonded to the conduits in the box.

Earth conductors and clamps buried in concrete are not permitted.

Conduits must be spaced sufficiently apart to allow for proper concreting. All joints shall be painted with an approved metal primer after completion of the tubing installation, prior to the concreting. All exposed parts of the conduit installation shall be suitably protected against corrosion at the discretion of the Engineer & End user.

Before any concrete slab is cast, all conduit droppers to switchboards shall be neatly spaced and rigidly fixed.

## **2.4 Surface Work**

All conduit must be plumbed and levelled and only straight lengths shall be used.

In cases where door frames are out of plumb, or fittings, beams, etc. are out of level, the conduit shall be run parallel with the door frames, fittings, beams, etc.

No threads shall be visible when the conduit installation is complete, except on running couplings.

No inspection or normal bends are to be used on surface work, except with the approval of the Works Inspector and where conduits of 32mm diameter or larger

are used. Conduits shall be set uniformly and inspection couplings shall be used where necessary.

Fittings, tees, boxes, couplings, etc. are to be cut into the surface to allow the conduit to fit flush against the surface or alternatively, spacer bar saddles may be used. Conduit is to be bedded into any irregularities to avoid gaps between the surface and the conduit.

Double sets, where used, shall be parallel with no twists and shall be as short as possible. All conduits which terminate at metal trays, boxes, industrial switches and plugs shall do so by means of couplings and male bushes. No couplings shall be permitted in droppers of less than 3.6m.

Where crossings of conduits is unavoidable, purpose-made boxes shall be used. The length of the box is to be 8 times the diameter of the largest conduit, the width one and a half times the sum of the diameters of all the conduits, and the depth one and a half times the diameter of the largest conduit with a minimum depth of 50mm. The box shall be fitted with a neatly fitting cover and the finish shall be in keeping with the general layout.

Where a number of conduits are to be installed in parallel they shall be evenly spaced and grouped under one purpose made saddle. Conduit spacing shall not exceed 10mm. The purpose made saddle shall be formed to suit the curvature of the various conduits and shall be drilled and fixed by means of screws between. Saddles shall be spaced at intervals not exceeding 1.8m, except for conduit droppers, which shall be saddled centrally between ceiling and accessory box. All saddles are to be secured to the wall by means of black japan or brass round head screws. Distribution boards, draw boxes, industrial switches and plugs, etc. shall be neatly recessed into the surface of plastered walls to avoid double sets or alternatively spacer bar saddles may be used. On facebrick walls the conduit shall be tightly set into the switch or plug.

In situations where there are no ceilings, the conduits are to be run along the wall plates and tie beams.

No wiring is to be carried out until the tubing has been inspected and approved.

Where spacer bar saddles are used, these shall be installed at centres not exceeding 1m for horizontal and 1.5m for vertical runs.

All surface conduits shall be painted with an approved enamel paint to match the background colour.

## **2.5 Future Extensions**

In roof spaces with a minimum clearance of 900mm, switch and plug drops for future use are to be set 300mm in the correct direction and shall be fitted with couplings. Where the roof over the slab is to be removed for future expansions, conduits for future use are to terminate 40mm above tie beams and shall be fitted with plugged couplings.

Where future extensions are to be below slabs, all switch, socket outlet and other conduit droppers are to terminate 130mm below the slab or beam with conduit ends fitted with plugged couplings.

Where provision is made for future extensions to a concrete slab, all conduits required for future use are to project 130mm from the slab. Conduit projections are to be fitted with plugged couplings.

All switch, plug and other outlet boxes required for future use shall be fitted with approved blank cover plates.

Unused lighting outlet boxes are to be fitted with round hardboard or plastic covers with brass cover screws which shall fit flat on the finished ceiling.

## **2.6 Fixing of Conduits**

Conduits shall be fixed to switch and socket outlet boxes by means of couplings and brass male bushes or lock nuts and brass bush nuts. Couplings and male bushes to be used on all surface work.

## **2.7 Chases and Building Work**

Except where otherwise specified conduits, switch boxes, plug boxes and distribution boards are to be built into the brick walls by the building Contractor. It will, however, remain the responsibility of the electrical Contractor to ensure that the above-mentioned boxes and distribution boards are correctly built in and are firmly bedded and cemented into the walls, plumb and square.

The electrical Contractor shall, unless otherwise specified, do all necessary chasing and cutting of brickwork. All electrical materials (e.g. conduits up to 40mm for UG cables, conduits, conduit boxes, distribution boards, etc.) must be supplied by the Contractor, who must arrange to have these on site and positioned, when required, for the building work. A competent Electrical Artisan must be in attendance and ensure that the conduits, etc. are correctly installed and positioned.

The Contractor is to ensure that tubing installed in chases is securely nailed and covered by a layer of 5:1 mixture of coarse sand and cement, finished flush with the brickwork and that switch and plug boxes finish flush with the finished wall surface.

The electrical Contractor is to ensure that below Distribution Boards connected by means of underground cables, a 230mm wide by 115mm deep cavity in the wall from the cable pipe to the Distribution Board is to be provided by the building Contractor, or alternatively, cable sleeves as specified.

## **3. PLUGGING OF WALLS**

Only approved plastic plugs shall be used to secure conduit or equipment up to 5kg mass. The use of round headed screws only will be permitted.

Heavier equipment shall be secured by means of approved expansion bolts.

Wood plugs and any plugs in the joints in brick walls are not permitted.

**4. FIXING TO CONCRETE CEILING**

Ceiling mounted equipment other than luminaires shall be secured to concrete ceilings by means of expansion bolts or "Robot" tools bolts or as expressly specified by the service.

**5. WIRING**

**5.1 PVC Insulated Single Core Medium Voltage Conductor**

The conductor is to be of high conductivity copper wire insulated with Poly Vinyl Chloride. The cable shall be finished in the required colours and shall be in accordance with SANS 1507 and 1574.

Circuit wiring shall be of the loop-in system and no wiring joints in the conduit or conduit fittings will be permitted. Not more than two conductors of a kind will be allowed at any outlet point. The end strands of cables, whether single or looped which have to be connected to terminals of switches, plugs, lamp-holders, fittings and distribution boards, etc. are to be tightly twisted together. Cutting away of wire strands of any cable will not be allowed. Only one circuit in any one conduit will be permitted unless otherwise specified.

Conductor sizes shall be as follows except where otherwise specified :-

Lighting Circuits	1.5 mm <sup>2</sup>	
Clock Circuits	1.5 mm <sup>2</sup>	
Plug Circuits	2.5 mm <sup>2</sup>	with 2.5 mm <sup>2</sup> insulated earth wire.
Geyser Circuits	4 mm <sup>2</sup>	with 2.5 mm <sup>2</sup> insulated earth wire.

To avoid deformation of PVC insulated cables at temperatures in excess of 57 degrees C, they shall not be brought directly onto the terminals of appliances such as electrical heaters, or any other electrical appliances or apparatus (including luminaires) which have a temperature in excess of 57 degrees C. They shall terminate in a suitable terminal box as near to the appliance or fitting as possible and connect up from thereon, with heat resistant conductor.

**6. MOUNTING AND POSITIONING OF LUMINAIRES**

Luminaires and installation to comply with SANS 60598 Parts 1 to 22 and IEC 598-1 and IEC 60598 as applicable.

The Contractor shall, in the case of board and acoustic tile ceilings (i.e. as opposed to concrete slabs), ensure that the luminaires are symmetrically positioned with regard to the ceiling pattern.

The layout of luminaires as indicated on the drawings shall be adhered to as far as possible. The exact positions must be confirmed on site with the Engineer.

Except where otherwise specified, pendant luminaires are to be mounted with the bottom of the fitting 2.4m above finished floor level, mounted on either metal discs or wood blocks.

Under no circumstances shall cove strips be cut to accommodate wood blocks. Wood blocks must be neatly slotted to fit over the cover strips and are to be secured by a minimum of two screws which shall penetrate at least 25 mm into solid wood. Ceiling cover strips shall be neatly cut to accommodate fluorescent luminaires.

Where ceilings are raked fluorescent luminaires are to be mounted direct on the raked ceilings without levelling blocks.

Fluorescent luminaires to be mounted on concrete ceilings shall be screwed to the outlet boxes and additionally supported by means of 50mm x 6mm expansion bolts. The bolts are to be  $\frac{3}{4}$  of the luminaires apart.

Where a number of luminaires are installed end-to-end, outlet points must be provided after every second luminaire unless otherwise indicated on the drawing. The luminaires are to be jointed together by means of 20mm conduit nipples, lock nuts and male bushes, and the wiring led through the channels of the luminaires. The Contractor shall ensure that all such rows are correctly lined up and that the rows are parallel with the appropriate building line.

Fluorescent luminaires shall be secured to board ceilings by means of the conduit box and 6mm bolts passing through the boards and brandering.

**7. BATTEN HOLDERS**

B.C. batten holders shall be of brass or moulded plastic reinforced type complete with shade ring. The batten holders shall comply with SANS IEC 60238 and SANS IEC 71184. All lamp holders are to have brass terminals with screw type connection.

**8. LAMP HOLDERS**

Edison Screw Lampholder : SANS IEC 60238

Bayonet Lampholders : SANS IEC 61184

Lampholders for Tubular Fluorescent Lamps : SANS IEC 60400

B.C. screwed lampholders shall be of brass 20mm E.T. complete with shade ring and shall comply with SANS IEC 60238 and SANS IEC 61184 with screw type connection terminals.

## **9. SWITCHES AND SOCKET OUTLETS**

Switches SANS IEC 60669 as applicable and socket outlets SANS IEC 60884 as applicable shall be of the most modern manufacture and bear the SABS mark.

Flush switch and plug cover plates shall, unless otherwise specified, be of anodised Aluminium of thickness not less than 0.9mm, satin or other approved finish as directed and otherwise to be fully in accordance with SANS IEC 61084 for cover plates and SANS 1085 for wall boxes.

## **10. POSITIONS OF SWITCHES AND SOCKET OUTLETS**

Except where otherwise specified, lighting switches are to be installed at 1.4m and socket outlets are to be installed 300mm above finished floor level.

All mounting heights specified are to be measured from finished floor level to the bottom of the outlet box.

Where the lower portion of the wall consists of face brickwork and the upper portion of plastered finish, switches and socket outlets are to be mounted in the plastered surface, provided that the lower edge of the plasterwork does not exceed a height of 1.5m above finished floor level in which case the switches or socket outlets are to be installed in the facebrick dado.

Where socket outlet and switch boxes have been installed with fixing lugs below the finished wall surface, only approved distance pieces required to compensate for the recess shall be used. The lengths of distance pieces are not to exceed 15mm.

Unless otherwise approved, light switches adjacent to doors are to be installed at the lock side of the door. Where the lock position is not indicated on the drawings, its position shall be ascertained before the switch box is installed. Switch boxes are to be installed 150mm from the reveal, or centrally, if there is a fitting near the door.

All switch and socket outlet boxes shall be installed plumb, and built into the wall with a 1:1 mixture of cement and sand.

Industrial type switches and socket outlets shall be neatly recessed into the surface of plastered walls to avoid sets or alternatively spacer bar saddles may be used.

Deep type boxes may be used where switches or socket outlets are back to back. However, where one side only is to be utilised at the time and the other is

for future use, the side for future use shall be suitably covered with a metal cover plate.

## **11. LOW TENSION SWITCHBOARDS**

Low Voltage switchgear and control gear to comply with SANS 1473-1 and SANS IEC 60947 and SANS IEC 60439.

Where switchboards are to be installed in switchrooms or switch cupboards, the Contractor must ensure that the boards are manufactured to suit the dimensions of the rooms or cupboards.

Low tension switchboards shall be specified in detail for each service, but shall generally conform to the following :

They are to be of strong and rigid construction, with suitable angle, channel or folded steel framework. They are to be flush fronted and totally enclosed with sheet steel panels suitably formed at the edges and reinforced to prevent distortion. Unless otherwise directed, all front panels must be at least 2mm thick and all other panels at least 1.6mm thick. Panels are to be secured to the framework with studs and chromium plated dome nuts (self-tapping and similar screws are not permitted).

Switches, etc. are to be mounted on metal frames within the boards to give flush front panels. Equipment of normally surface mounted types such as energy meters, time switches and contactors, are to be mounted on inner metal trays behind hinged front panels. In the case of supply authority meters the hinged front panels must have transparent inserts.

All metal work of the boards must be thoroughly degreased, primed with PA 10 self etching primer and finished with one coat of undercoat and two coats of electric orange high gloss enamel, unless otherwise specified.

All accessible current carrying parts, bus-bars, connecting strips, collector bars, etc. are to be adequately insulated in phase colours and suitably braced to withstand projected fault currents.

Connecting strips and collector bars must be of sufficient cross sectional area to carry full rated current of the switches served, irrespective of the fuse or trip rating.

The complete distribution board including bus-bars must be suitably constructed to withstand fault currents specified.

Connections to bus-bars are to be made by means of lugs suitably bolted and locked with high tensile bolts and connections to lugs must be effected by means of a crimping tool.

Incoming and outgoing bus-bar stubs, where required, must be suitably insulated where they pass through panels of the board, and firmly supported within the board.

Where applicable, outgoing and incoming collector bars for cables in parallel must be so arranged that the multiple cable ends can be connected to the bars with reasonably short tails which do not have to cross.

Cable supports must be placed at suitable heights having regard to the bending radius of the cables concerned and convenience in making off.

Wall-mounting and floor-standing back to wall type boards must be provided with full easy access to all equipment and wiring without any necessity of disconnecting or removing of any of the equipment mounted in the board.

Clear visible indication of all switch positions must be provided and the switches must be clearly labelled as directed by the Engineer.

## **12. DISTRIBUTION BOARDS**

### **12.1 Approval**

The Engineer must approve the details of construction proposed and all equipment within distribution boards before manufacture commences.

### **12.2 Flush Mounting Distribution Boards**

These shall generally be manufactured in accordance with SANS 1973-3. The board shall consist of two panels fitted side by side with a common bonding tray and attached to a common architrave. One panel shall accommodate all single phase MCBs, and the second panel shall accommodate the main isolator, main bus-bars and triple pole MCBs. The chassis shall be of rigid channel section rust proofed steel with clip-on trays for the single pole MCBs. The main isolator is to be mounted at the bottom of the second panel with the triple pole circuit breakers above.

### **12.3 Surface Mounting Distribution Boards**

These shall be generally manufactured in accordance with SANS 1973-3, with two panels as for flush boards.

### **12.4 Single Phase Distribution Boards**

Single phase boards shall be generally constructed as three phase boards except they shall have a single panel. Single phase boards shall be mounted with the bottom of the architrave 1,5m above finished floor level unless specifically directed otherwise.

### **12.5 Distribution Boards – in Roof Spaces**

Where distribution boards are installed below a roof space, a minimum of 2 x 20mm and 1 x 25mm spare conduits are to be run from the distribution board into the roof space in addition to the conduits necessary to carry the identified circuits.

### **13. METER BOXES**

The meter box shall be mounted with the top 1.7m above finished ground level. Surface mounted meter boxes shall be secured by at least 4x 10mm expansion bolts.

Service cables entering the meter box shall be protected by means of a suitably sized galvanised pipe extended 450mm below the ground surface and securely saddled to wall and bonded to the meter box.

### **14. CONNECTIONS TO OUTLETS**

#### **14.1 General**

Where connectors are used to connect to the wiring of luminaires and other appliances the connectors shall comply with SANS Specification 1239.

#### **14.2 Connections to Stoves**

##### **14.2.1 General**

The connection to an electric stove, unless otherwise specified shall consist of 2x 10mm<sup>2</sup> conductors and a 6mm<sup>2</sup> insulated earth wire in a 25mm conduit. The stove shall be controlled by a 60 Amp micro-gap switch of approved make and the connection shall be by means of a 45 Amp 3 pin stove plug of the "Cape Town" type. Cable ends, which are to be connected to the stove, shall be equipped with suitable soldered or crimped lugs. The connection between the stove plug and stove shall be by means of flexible conduit.

The conduit shall be chased into the wall and fitted with a switchbox for housing the micro gap switch and a 25mm circular conduit box over which the stove plug will be mounted. The stove plug shall be fitted with an adaptor plate and shall be screwed directly to the conduit box by means of round head metal screws. The plug outlet shall face downwards.

The stove plug and switch shall be mounted 430mm and 1,4m respectively above finished floor level unless otherwise specified or indicated in the drawings.

##### **14.2.2 Stove Connections in Kitchens**

Connections to stoves in Kitchens, where the stoves are situated in front of a fitting, shall generally be as specified in Clause 14.2.1 except that the 25mm diameter conduit shall be run in the floor slab, from the distribution board to a position to the right of the stove. A pedestal, which is complete with a 45 Amp 3 pin "Cape Town" type cooker plug, mounted on the back, shall be fitted over the conduit and securely bolted to the floor by means of expansion bolts. The plug circuit, which passes through the pedestal, is to be on a separate circuit.

#### **14.3 Connections to Hot-water Cylinders**

The connections to hot-water cylinders not exceeding 3 kW loading shall consist of 2x 4mm<sup>2</sup> PVC conductors and 1x 2.5mm<sup>2</sup> insulated earth wire in a 20mm minimum diameter conduit from the distribution board. The conduits shall be chased in the wall and shall terminate at the side of the cylinder in a box over which is to be mounted a double pole isolator with pilot light.

The final connection between the isolator and cylinder shall be means of silicon heat resistant conductors in 20mm diameter flexible conduit.

Connections to roof mounted hot-water cylinders shall generally be as specified above with an isolator with pilot light mounted adjacent.

#### **14.4 Connections to Power Points**

Connections to electric motors and fixed apparatus subject to vibration shall, unless otherwise specified or indicated on the drawings, have final connections consisting of conduit and flexible tubing or reinforced hose in accordance with Clause 1.3 of this specification and PVC cables and earth wire of the required size. An isolator shall protect all fixed apparatus and where necessary a starter fitted with a no-volt coil and overload protection adjacent to such apparatus. Power points for connection of fixed apparatus to be installed by others, shall terminate in an approved type wall mounted switch unless otherwise specified. The minimum conductor size for all power points shall be 4mm<sup>2</sup> unless otherwise specified.

#### **14.5 Underground Service Connection**

This clause refers to underground service connections not provided by the Supply Authorities. The service cable and earth wire are to be connected at the supply point in accordance with Clause 15.8 of this specification, and unless otherwise specified, shall be laid 600mm below ground level throughout and otherwise fully in accordance with Clause 15 and all applicable sub-clauses thereof. Cable entries to meter boxes shall be in accordance with Clause 13 and other entries shall be by pipe or duct as directed.

### **15. UNDERGROUND CABLES**

1,000V PVC/SWA cables and accessories shall be in accordance with the relevant SABS specification to SANS 1507. The storage, transportation, handling

and laying of underground cables shall be according to the manufacturer's requirements and the Contractor shall have adequate and suitable equipment and labour to ensure that no damage is done to cables during such operation. All cable pipes and ducts entering buildings are to be sealed against the ingress of vermin, water, etc.

### **15.1 Trenching**

Cables, unless otherwise specifically directed, shall be laid at a depth of 600mm below ground level. Trenches shall not be less than 300mm wide for one to three cables, and the width shall be increased where more than three cables are to be laid together so that the cables may be placed at least 75mm apart throughout the run.

The Contractor shall take all necessary precautions to prevent trenching work being in any way a hazard to the public and to safeguard all structures, roads, sewer works, or other property from risk of subsidence and damage.

### **15.2 Cable Joints**

Joints in underground cable runs will not be permitted unless unavoidable and at the discretion of the Engineer. Where cable joints are unavoidable, the cable jointer is to work efficiently and cleanly and so that each end of the cables to be joined may have a minimum of 0.9m of slack disposed in a loop without stress. Backfilling under joints must be firmly tamped to prevent any subsequent settling.

### **15.3 Bedding**

In trenches made in intermediate, hard rock, or boulder material, the cables shall be laid on a 75mm thick bed of earth and be covered with a 150mm layer of earth before the trench is filled in. The Contractor to supply all earth required for trench filling.

### **15.4 Laying**

Cable shall be removed from the cable drum in such a way that to twisting, tension or mechanical damage is caused, and must be adequately supported at short intervals during the whole operation. Particular care must be exercised where it is necessary to draw cables through pipes and ducts, to avoid abrasion, elongation or distortion of any kind. The ends of such pipes and ducts shall be sealed to approval after the drawing in of the cables.

### **15.5 Back Filling**

Back filling after bedding (see Clause 15.3) is to be carried out with a proper grading of the material to ensure settling without voids, and the material is to be tamped down after the addition of every 150mm. The surface is to be made good as required.

Back filling of cable trenches must not be commenced until after the cable trenches and laid cable(s) have been inspected by the Head : Works. Where the

contractor fails to observe this requirement, he may, at the discretion of the Head : Works, be required to re-open such cable trenches for inspection at his own expense.

#### **15.6 Protection of Cables**

Where so directed by the Head : Works, concrete or other warning covers shall be placed over cables above the top bedding layer. Cable pipes when directed are to be installed at road and other crossings.

#### **15.7 Marking of Cables**

Cable marking tape is to be supplied by the Contractor and is to be laid 150mm below ground over a cable run and as may be directed by the Engineer to give early indication of underground cable runs.

#### **15.8 Joints and Termination of Cables**

Joints in underground cables and terminations shall be made by means of "Scotch-Cast" or other approved epoxy-resin pressure type jointing kits. Low tension PVC cables are to be made off with sealing glands and materials specially designed for this purpose, which must be of approved make.

Where cables terminate in a switchboard, the glands or end boxes shall be bolted to the gland plate of the switchboard.

#### **15.9 Sealing of Paper Insulated Cables**

Where cables are cut and not immediately made off, the ends must be sealed without delay. If cables are cut and the ends not immediately made off or sealed, the cable may be rejected and the Contractor will be required to replace it at his own expense.

#### **15.10 Earth Wires**

Except where specifically directed otherwise, earth continuity conductors are to be run with all underground cables constituting part of a low tension distribution system. Such earth continuity conductors shall be bare copper wire of a cross sectional area in accordance with the Code of Practice 0142 but shall not be less than 40mm<sup>2</sup> nor more than 70mm<sup>2</sup>. The earth continuity conductor is to be bonded to the cable armouring, and to the lead sheath if any, at each termination, as well as to the local earth bar. The earth wire must be secured to the cable at 1,8m centers.

#### **15.11 Opening up of Existing Cables**

Where it is necessary to expose existing buried cables for any purpose, or to excavate in the vicinity of existing buried cables, pipes, etc., every care is to be exercised and only labourers experienced in such work, and duly warned by the Contractor, shall be employed thereon.

## 15.12 Definitions for Classifying of Excavations

- (a) **Soft excavation** – shall be excavation in material that can be efficiently removed by a back-acting excavator of flywheel power approximately 0,10 kW per millimetre of tinned-bucket width, without the assistance of pneumatic tools such as paving breakers, or that can be efficiently loaded without prior ripping or stockpiling by a rubber tyred front-end loader approximately 15T mass and a flywheel power of approximately 100kW.
- (b) **Intermediate excavation** – shall be excavation in material that requires a back-acting excavator of flywheel power exceeding 0.10kW per millimetre of tinned-bucket width and the assistance of pneumatic tools prior to removal by equipment equivalent to that specified in (a) above.
- (c) **Hard rock excavation** – shall be excavation in material that cannot be efficiently removed without blasting or without wedging and splitting prior to removal.
- (d) **Class A Boulder excavation** – shall be excavation in materials containing more than 40% by volume of boulders of size between 0,03 cubic metres in a matrix of softer material or smaller boulders

**Note:** (1) Excavation of solid boulders or lumps of size exceeding 20 cubic metres will be classified as hard rock excavation.

(2) Excavation of fissured or fractured rock will not be classed as boulder excavation but as hard rock or intermediate excavation according to the nature of the material.

- (e) **Class B Boulder excavation** – shall be excavation of boulders only in a material containing 40% or less by volume of boulders of size between 0.03 cubic meters and 20 cubic meters in a matrix of softer material or smaller boulders.

**Note:** Those boulders that require individual drilling and blasting in order to be loaded by a back-acting excavator as specified in (a) above, or by a track type front-end loader, will each be separately classed as Class B Boulder Excavation.

## **16. EARTHING**

### **16.1 Main Earthing**

The type of main earthing shall be as required by the Supply Authority, if other than the Engineer and in any case as directed by the End user who may require additional earthing to meet test standards.

Where required, an earth mat is to be provided, the minimum size, unless otherwise specified, being constructed from copper straps 950x 25x 3mm at 230mm centres and braced at all intersections. Alternatively, or additionally, earth rods or trench earths may be required, as the Engineer may direct, and installed according to his instructions.

All earth electrodes and connections thereto must be approved "*in situ*" by the Engineer before backfilling.

The electrode installation shall not be earthed by means of the lightning arrester earth electrode, if such is included in the installation, but may be bonded thereto.

### **16.2 Earthing in Installations**

The installation shall be effectively earthed in accordance with the relevant sections of the Code of Practice SANS 10142-1, SANS 10198 (Part 3) and SANS 10292 – earthing of low voltage (LV) distribution systems and the requirements of the Supply Authority. The contractor shall be responsible for all earthing and bonding of the buildings and installations.

All metal hot and cold water and waste pipes are to be effectively bonded by means of 12 x 1.5mm solid copper tape (perforated tape or wire will not be permitted), clamped by means of brass nuts and bolts. Bonding tapes exceeding 75mm in length must be fixed to the wall by means of No. 6 x 20mm brass screws and plastic plugs not exceeding 150mm centres. Main earth copper tapes where installed less than 2.4m from ground level, must be run in 20mm diameter conduit securely saddled to the wall.

Gutters and downpipes are to be bonded by means of 6mm round head brass bolts, with nuts and washers. Self-tapping screws are not permitted.

Connections from the earth bar or terminal on the main board must be made to a visible cold water main, the incoming service conductor, if any, and the earth mat or plate (where such is required) by means of either 12 x 1.5mm solid copper tape or bare 25mm<sup>2</sup> copper wire, or such larger conductor as the Engineer may direct. From each distribution board separate earth connectors are to be taken to the main earth bar or terminal on the main board. Each conductor shall consist of stranded copper conductors drawn into the conduit together with the distribution board feeders. The size of the earth conductors to be in accordance with the requirements of the Code of Practice 0142 or as specified.

Earthing clips shall be made of not less than 0,90mm thick copper strips not less than 12mm wide. They are to be complete with 25 x 7,7mm brass bolts, washers and nuts and must be constructed so that the clip will fit firmly to the conduit

without any additional packing.

Adjustable earth clips are not permitted.

All light and plug circuits shall include a 2.5mm<sup>2</sup> minimum insulated earth conductor respectively, run from the earth bar of the relevant distribution boards. All other earthing conductors shall have rated areas in accordance with the calculated maximum permissible earth resistance determined for the earth conduit path.

Corrugated iron and IBR roofs, including steel roof trusses (where applicable) shall be effectively earthed at a minimum of four points and the gutters or gutter constructions, and mounting supports, brackets and down pipes shall be bonded and effectively earthed.

## **17. COMPLETION**

### **17.1 Balancing of Load**

The Contractor is required to balance the load as equally as possible over multi-phase supplies.

### **17.2 Tests**

The installation shall be tested by the Contractor as the service progresses or as required by the Head: Works and upon completion, for earth continuity and insulation. The final test before the taking over of the installation shall be made in the presence of the Consulting Engineer.

The mandatory "Certificate of Compliance" shall be issued by the Contractor to the Supply Authority, with a copy to both Engineer & End user prior to first delivery being taken.

### **17.3 Labelling**

All circuits and apparatus on switchboards shall be suitably and correctly labelled by means of engraved plastic labels (white lettering on black) which are to be either bolted or screwed to the equipment panel or fitted in channeling provided below the switchgear.

Sub-circuits are to be numbered and a legend detailing the circuits is to be framed and fitted to the door of the distribution board.

All other equipment is to be individually labelled to indicate the function.

All switchboards are to be fitted with a label on which the designation of the board is clearly indicated.

A separate engraved label depicting the origin of the cable and the conductor's size shall be fixed below the main switch on each distribution board.

**17.4 Finishes**

Covers for all boxes, expansion boxes, etc. should be finished to match the paint work of the ceiling or wall surface or as specified.

**17.5 Site Drawing**

On all completed new works or where specifically called for in the Tender Document, the Contractor shall, on completion of the works, submit to the Engineer a marked up site plan indicating the exact underground reticulation.

**18. TIME SWITCHES**

The time switch shall consist of a single pole switch with silver to silver or other approved contacts operated by a quartz movement with a 24 hour reseve.

A suitable 24 hour, night and day dial, with our indicator and two adjustable strikers, one OFF and one ON must be provided. The whole mechanism is to be totally enclosed in a dust proof case.

The current rating and switch shall, in general, be suitable for operation on a 220 Volt 50 Herz AC supply. Time switches used for underfloor heating are to be fitted with a weekend cut-out.

**19. MOULDED CASE CIRCUIT BREAKERS (INCLUDING MINIATURE)**

Circuit breakers shall be of the size and type as directed and specified for the service. They shall comply with SANS specification 156 and SANS IEC 60947-2.

**20. SWITCHBOARD EQUIPMENT**

Switchboard equipment such as switches, circuit breakers, etc. shall be as directed and specified in the detail specification for the service.

Circuit breaker equipment is to comply with SANS IEC 60934.

**21. BUS-BAR COPPER**

Bus-bar copper must be fully in accordance with Tables A1 and A2 of SANS 1473-2 and SANS IEC 60439-2.

**22. SPECIFICATION COMPLIANCE**

The complete installation shall comply with the requirements of this specification. Should any differences or contradictions exist between this Specification and the Detailed Requirements for a specific installation, then the Detailed Requirements shall take preference.

## **ELECTRICAL : SECTION 2**

### **GENERAL ELECTRICAL INSTALLATION**

#### **DETAILED REQUIREMENTS**

##### **1. SCOPE OF WORK**

The electrical work for this project relates to all the electrical requirements in the Repairs and Renovations of Clanleigh Court. Where buildings are built on unserviced ground but with an overhead power line or telephone running past it is not the responsibility of the Electrical Sub-contractor to arrange connection points for both telephone and electric power. However, he/she will be responsible for the payment of the necessary fees to Eskom and to liase with Eskom for power connection. The electrical contractor is to study the relevant drawings carefully as every attempt has been made to detail all items of equipment specified, cross reference is to be made to room data sheets where space has made detailing difficult. Separate layout drawings are provided for Electrical reticulation for which are to be supplied and installed by the Electrical sub-contractor. The specialist work viz, Lightning Protection, must be undertaken by a specialist sub-contractors as domestic sub-contractors to the Electrical Sub-contractor. Provisional amounts for these items have been provided in the bills of quantities. The Engineer will assist the Electrical Sub-contractor to obtain quotations from specialist sub-contractors later.

##### **2. STANDARD SPECIFICATION**

The entire installation shall be completed to the satisfaction of the Head: Works and shall be carried out in accordance with the following:

- (a) The Code of Practice for the Wiring of Premises as issued by the South African Bureau of Standards (SANS 10142).
- (b) Low Voltage Switchgear and Controlgear to conform to SANS 60947 Parts 1 to Part 7.2.
- (c) Low Voltage Earth Distribution System to conform to SANS 10292.
- (d) Electrical Installation Ducting and Trunking Systems on walls and ceilings to conform to SANS 61084 Parts 1 to 2.
- (e) Electrical Installation Conduiting System to conform to SANS 60614 Part 1 to Part 2.7.
- (f) Electrical Installation Conduit Fittings to conform to SANS 61035 Part 1 to 2.4.
- (g) Electrical Earth Leakage Protection units to conform to SANS 767 Part 1 to 2.
- (h) Electrical Surge Arrestors to conform to SANS 60099.
- (i) Lighting systems, interior lighting, artificial lighting, to conform to SANS 10114-1.
- (j) NOTE : wherever SABS specifications are referred to in this document they shall be deemed to be omitted and replace with the re-numbered or re-designated South African National Standards (SANS).
- (k) Occupational Health and Safety Act No. 85 of 1993 as amended.
- (l) The applicable Telkom regulations.
- (m) The municipal by-laws and any specific requirements of the Local Supply Authority of the area or district concerned.

(n) Local Fire Regulations.

### 3. DRAWINGS

(a) The outlet positions shown on drawings are approximate only as are the positions of light fittings. Actual positions are to be determined on site in liaison with the Engineer.

(b) The drawings issued with this document are:

BS-01-01	Ground Floor Lighting Layout
BS-01-02	Ground Floor Small Power & Communication Layout
BS-01-03	First Floor Lighting Layout
BS-01-04	First Floor Small Power & Communication Layout
BS-01-05	Second Floor Lighting Layout
BS-01-06	Second Floor Small Power & Communication Layout
BS-01-07	Fourth floor Lighting Layout
BS-01-08	Fourth floor Small Power & Communication Layout
BS-01-09	Fifth floor Lighting Layout
BS-01-10	Fifth floor Small Power & Communication Layout
BS-01-11	Ground floor Lighting Layout
BS-01-12	Ground floor Small Power & Communication Layout
BS-01-13	Basement floor Lighting & Small Power Layout
BS-01-14	First floor Fire Detection Layout
BS-01-15	Second floor Fire Detection Layout
BS-01-16	Third floor Fire Detection Layout
BS-01-17	Fifth floor Fire Detection Layout

#### TO BE CONTINUED

The balance of drawings (i.e., site plan and various floor plans) shall only be issued to the successful Tenderer at site handover.

### 4. ELECTRICAL SUPPLY

The electrical supply available on site is a three-phase system with a nominal voltage of 400/230 Volts  $\pm 10\%$  at 50 Hz. All supplied equipment shall be suitable for use at the stated voltage.

Application has been made for an upgrade to the Municipality. Supply is received from Municipality at 11 kV and will be stepped down by minisub belonging to the Hospital.

### 5. CONTRACTOR'S WORK

The Contractor shall supply and install all the conduit, wireways, cables, wiring, fittings, socket outlets and all the necessary equipment as specified below and as per the Bill of Quantities.

### 6. WIRING

Wiring of the socket outlets and other power circuits shall be 4,0mm<sup>2</sup> PVC

wiring with 2.5mm<sup>2</sup> PVC insulated earth wire.

Wiring of the lightning circuits shall be 1.5 mm<sup>2</sup> PVC wiring with 1.5mm<sup>2</sup> PVC insulated earth wire.

## **7. OUTLET COVERS – GENERAL AND ENGRAVING**

Outlet covers shall wherever possible be constructed of plastic.

It is a requirement that all cover plates to light switches, isolators, socket outlets etc., shall have the Distribution Board Name and Circuit No. engraved thereon. Where metal cover plates are used they shall be provided with engraved ivory labels screwed on to the cover plate.

## **8. SOCKET OUTLETS (in accordance with SANS 164 Parts 1 and 2)**

The switched socket outlets shall comprise single 16 Amp flush units in 100 x 100 galvanised conduit boxes including box and engraved / Ivory type labelled cover plate or in Power Skirting including engraved / Ivory type printed label. CLIPSAL, CRABTREE or other approved.

## **9. LIGHT SWITCHES (in accordance with SANS 60669-1:1998)**

Light switches generally shall be flush mounted 16/20A units in 100 x 50 galvanized conduit box including box and engraved / Ivory type labelled cover plate, CLIPSAL or other approved.

All light switches shall be mounted at a height of 1400mm from finished floor level to the centre of the box.

## **10. EARTHING**

### **10.1 Standards**

The installation shall be earthed in full accordance with Clause 16 of Section 1, General Electrical Specification.

After the installation is complete, allow to conduct tests in accordance with SANS 10142 – Clause 8 “Inspection and Testing”).

### **10.2 Soil Resistivity Surveys**

The Contractor shall allow for the soil resistivity surveys to be conducted and submit results to the Employer to determine the requirements for the Installation of Mains and Lightning Protection Earthing systems. The surveys shall be undertaken by an approved specialist in this field. Each earth point shall be individually tested for earth resistance and the results shall be submitted to the Employer (earthing resistivity at 1m depth to be included). The survey shall be made with a null-balance AC Megger or similar instrument.

### **9.3 Earthing Rods**

The earthing rods shall be of copper coated high tensile steel type 16mm diameter and approximately 1,5m long. The copper coat shall be “molten welded” onto the steel so that an interlocking crystalline union exists between the two metals. The coatings shall be even over the entire rod and shall be of a thickness not less than 0,4mm. The rod, when broken by successive bending shall show no seams, pit slivers or separation of the copper from the steel.

### **9.4 Installation of Rods**

Earth rods shall be hand or power driven with a proper driver. The use of hammers for driving without the use of driving caps is not acceptable. Where the soil resistivity survey indicates a good earth at depth and hard subsoil or rock is encountered, holes must be drilled. After placing the rods the holes must be filled with sludge.

### **9.5 Hardware**

Threads on the rods shall be protected during driving using the necessary couplings, driving tips, heads and studs.

Jointing of the rods shall be done with the aid of proper couplings tightly screwed onto the rods.

Earth conductors shall be solidly clamped onto the earth rod with special bronze clamps.

### **9.6 Earth Conductors**

All earth conductors used shall be bare stranded copper conductor with a minimum size of 70mm<sup>2</sup> for main earths and 35mm<sup>2</sup> for LV surge diverter earths.

Earth conductor joints shall be kept to a minimum. Where connections or joints are to be made, only a “Cadweld” or a brazed joint shall be acceptable. Clamp or wrap joints will not be accepted.

Where connections are made to equipment, suitable tinned copper cable lugs shall be fitted and properly crimped onto the end of the wires.

### **9.7 Trench Earths**

Where the survey indicates that the resistivity does not decrease with depth and that deep earths will therefore not be feasible, a trench earth must be used.

Trench earths shall consist of bare copper conductors of not less than 70mm<sup>2</sup>, buried at least 500mm below ground level.

Depending on the site conditions, trench earths can be of the one or more “radial arm” or of the “closed loop” types.

## 9.8 EARTH WIRES

All distribution cables shall have earth wires run with them or shall have suitably sized integral earth wire in its armouring.

All earth wires of 16mm<sup>2</sup> and over shall be terminated by means of hexagonally crimped lugs.

Earth wire shall be a minimum of 50% of the cross-sectional area of the phase conductor of the PVC/SWA/PVC cable or wiring with a minimum size of 2.5mm<sup>2</sup> and up to a maximum size of 70mm<sup>2</sup>.

## 10. CONDUIT

All installations shall be tubed in PVC conduit, unless otherwise indicated.

The per metre run, supply and install rates shall provide for all conduit boxes, tees, couplings, adaptors and saddles where applicable.

Conduit runs (and associated wiring) shall be installed on the basis of "POINT-TO-POINT" wiring meaning that all wiring shall be pulled from point to point, and it shall NOT be necessary to utilize draw boxes in the ceiling. The ONLY reason why wiring shall be pulled in the ceiling is when trunking wireways have been provided in an accessible position in the ceiling (i.e. close to centreline).

It shall NOT be necessary to pull Telkom cabling via draw boxes in the ceiling. i.e. "POINT-TO-POINT". Should draw boxes be necessary in the ceiling (at the Engineer's approval) then they shall be accessible from BELOW the ceiling and shall be positioned unobtrusively (i.e. near corners, etc. of rooms).

## 11. SCHEDULE OF LUMINAIRES

**ALL LUMINAIRES SUPPLIED AND INSTALLED UNDER THIS CONTRACT SHALL HAVE SABS APPROVAL, BE OF THE SPECIFIED TYPE OR OTHER APPROVED AND SHALL BE SUPPLIED COMPLETE WITH OSRAM ELECTRONIC CONTROL GEAR AND LAMPS.**

- CL 18W ceiling light fitting recessed. Fitting to be supplied and installed with 2m length of 3-core heat resistant flexible cable and 5A 3-pin plug top.
- PL 2PL9 Downlight fitting. Fitting to be supplied and installed with 2m length of 3-core heat resistant flexible cable and 5A 3-pin plug top.
- B 2 x 18W IP 65 rated dust proof light fitting LED fitting either surface/recessed mounted. Fitting to be supplied and installed with 2m length of 3-core heat resistant flexible cable and 5A 3-pin plug top.
- B1 Surface mounted IP65 rated fluorescent Round Bulkhead fitting,

SW/ILM/MAS/SOL/2PL9 or LIH/MONTE CRISTO/99-0701/2PL9, complete with 2 x 9Watt PL lamps, separate ballast per lamp, opal polycarbonate diffuser, die cast aluminium body with black trim ring and stainless-steel captive screws or other approved. Complete with 2m length of 3-core heat resistant flexible cable and 5A 3-pin plug top.

- F1 Surface mounted decorative fluorescent fitting with rounded corner end caps and single piece prismatic diffuser, complete with electronic control gear and 2x 28W Tri phosphor cool white tubes, as SW/ILM/PRO/SFC/RCE/228/ECG or Lihleight MEC/228/ELB, or other approved.

## **12. TESTING AND COMMISSIONING OF INSTALLATION**

During the course of and on completion of the work, the whole of the installation shall be tested in accordance with the wiring code.

The Head: Works reserves the right to be present at such tests and the onus will be on the Contractor to inform him at least 48 hours prior to the time set for the tests to commence.

The Contractor shall furnish to the Head: Works a test report detailing particulars of the tests executed, in a format acceptable to the Head: Works, the following tests being a minimum requirement:

- (a) Routine tests on all switchboards as called for above.
- (b) 1,000V Megger test of all circuit external to the switchboards.
- (a) Earth loop resistance test on all earthed equipment.
- (b) Earth leakage test on all earth leakage protected circuits to prove the soundness of the wiring and protection.
- (c) Checking of polarity of all switched socket outlets.
- (d) Operational check on all equipment to verify execution of works in accordance with drawings and designated circuits.

## **13. NOTICE OF TESTING AND COMMISSIONING**

The Engineer shall receive not less than two weeks' advance notice of any tests requiring to be witnessed by him.

Such tests as are laid down in the specific sections hereinafter shall be carried out on site in the presence of the Head: Works should he so require.

Furthermore, the Contractor shall advise the Engineer two weeks in advance of any pre-testing procedures and schedules for commissioning purposes. The Head: Works may witness such tests and carry out any testing of his own if he so desires.

## **14. MAINTENANCE AND GUARANTEE PERIOD**

The contractor shall Guarantee, and provide maintenance for, the complete installation including fittings, fixtures, materials and workmanship for a period of twelve (12) months from the date of first delivery of the installation. This shall be inclusive of the time and other costs (materials, travel,

accommodation, etc.) required.

The contractor shall allow to visit the site at the start of the 12<sup>th</sup> month after First Delivery is taken to perform any required maintenance as well as any guarantee related work not already actioned.

## 15. AS BUILT DRAWINGS

A complete set of drawings of the entire installation shall be returned to the Engineer before First Delivery can be considered. The set shall include:

- The electrical drawings suitably marked up indicating where all light fittings, socket outlets, light switches, and other electrical fittings were, including lightning protection, and indicating circuit numbers.

## 16. COMPLIANCE CERTIFICATE

A Compliance Certificate shall be issued for the work on or before First Delivery.

## 17. PROPRIETARY MATERIALS, SYSTEMS, ETC.

**Any reference in these Bill of Quantities to trade or brand names (and catalogue numbers etc.) shall be deemed to be followed by the words “or other approved”.**

The Tenderers special attention is drawn to the fact that in connection with the aforementioned where ever any wording with meanings equating with similar to, equal to, etc., are used in combination with a trade or brand name (and catalogue numbers, etc.), they shall be deemed to be omitted and entirely replaced by the trade or brand names (or catalogue numbers etc.) followed by the words ‘OR OTHER APPROVED’. This will take precedence over any contradictory clause or note appearing anywhere on these Bill of Quantities.

## 18. BILL OF QUANTITIES

### 18.1 General Notes

Unless a separate rate for the supply and installation of any item is specifically called for, the supply and installation cost of any item shall be fully included in the unit price.

The rate for conduit outlet boxes up to 100 x 100mm shall be the same regardless of number of entries.

Industrial switch and plug units shall include the fixing to the conduits or trunking as specified.

Outlet boxes for switches, isolators, socket outlets etc. shall be without covers and draw boxes shall include covers, screws etc.

Light switches, switch plugs, dimmer units etc., shall include screws, cover

plates and other equipment specified.

All fittings and accessories must always include the fixing, fastenings, electrical connections and associated inter equipment wiring necessary to complete the work and ensure satisfactory operation.

All measurements are nett and Tenderers must allow for wastage in the rates.

Unless specifically otherwise stated in the Bills of Quantities, all prices shall allow for the following items:

Supply, deliver to site and store new, unused and undamaged of best available quality and complete with all smaller materials necessary for installation, testing, commissioning and rendering in proper working order.

Installation, fixing in position, running or laying, as applicable, in a thorough and workmanlike manner inclusive of any anti-vibration equipment necessary to ensure no vibration is transmitted to the building or other systems.

Making of all connections necessary.

All insulation, earth loop impedance and continuity tests.

Ensuring the proper working and serviceability.

Commissioning on completion and maintenance during guaranteed period.

Complete labelling with engraved labels to match the distribution layout drawings exactly and to indicate all functions and instructions which otherwise would be unclear to ordinary users.

Earthing and bonding.

Corrosion protection where necessary.

All profits, overheads, supervision, transport and skilled and unskilled labour.

Inspection by the Head: Works and approval by all authorities.

Compliance with the specification.

Compliance with all requirements set out in this section of the specification and bills of quantities.

The installation is to comply with the technical specification included in this document.

The colour of cover plates is to be white and the colours of distribution boards to be as detailed on the drawings.

## Repairs & Renovations to Clanleigh Court Electrical installation specification

Where alternative equipment/components are approved the onus is on the Contractor to formally prove compliance with all aspects of the contract documents. This will not be undertaken by the Employer or his agents.

Termination of cables is to include for all lugs, crimping fixings and fastenings including costs of specialised tools.

## LIGHTNING PROTECTION INSTALLATION

### GENERAL SPECIFICATION

#### 1. SATISFACTORY INSTALLATION

The whole of the installation shall be carried out in accordance with:

- (a) The latest SABS Code of Practice for the Protection of Structures against Lightning – SANS 10313; SANS IEC 61024 (1), 61024 (1-1) & (1-2); SANS IEC 61312 (1), (2) & (4); SANS IEC 61662 & NRS 042.
- (b) The Municipal By-Laws and any other special requirements as deemed necessary by the Local Supply Authority
- (c) Local Fire Regulations.

#### 2. S.A.B.S. APPROVED DRAWINGS

SABS approved drawings are not required for this project.

#### 3. TEST ON COMPLETION

Upon completion of the lightning protection system, the following tests shall be witnessed by an appointed representative of the Head : Works. The results shall be recorded on suitable test certificates which must be signed by both the Contractor and the Head : Works's representative. A sketch must be included on each test certificate indicating the positions of each earth electrode in relation to some permanent reference point. It must also indicate:- positions at which tests were carried out, the type of test and the results of these.

##### 3.1 Earth Resistance Test

The Earth Resistance Test shall involve measuring the resistance to earth of each rod-type electrode, or group of rod-type electrodes, or trench earth which would normally be connected to one down-conductor or earth terminal. This test must be made with the electrodes completely disconnected from any part of the structure or lightning protection system.

##### 3.2 Electrical Continuity Tests

###### (a) External Down-Conductors

Electrical continuity between the lower ends of external down-conductors which must all be disconnected from the earthing system during the test shall not exceed 1 (one) ohm.

###### (b) Metallic Services

Electrical continuity between any metallic structures of services (e.g. rainwater pipes) which form an integral part of the lightning protection system shall not exceed 1 (one) ohm. These tests should be carried out with all other components of the lightning protection system disconnected from the component being tested.

#### 4. DESCRIPTION OF MATERIAL

##### 4.1 Air Terminals and Down-conductors

All conductors must be in accordance with the requirements of BSS 1474 or American Standards Specification 6063. All aluminium conductors shall have a cross-section area of not less than 30mm<sup>2</sup> (domestic dwelling only) or 50mm<sup>2</sup> for all other applications. The dimensions of flat section conductors to be 20mm x 3mm. Where conductors are mounted in stand-off guides, the cross-section area of the conductor must be not less than 70mm<sup>2</sup> to give adequate mechanical strength.

##### 4.2 Conductor Guides

The conductor must be mounted in aluminium alloy guides conforming with the material specification given in 4.1 above. The guides must allow for free longitudinal movement of the conductor to cater for expansion and contraction of the system caused by temperature variation. The minimum thickness of any part of the guide shall not be less than 3mm. The guides must be securely attached to the structure using two stainless steel screws and plugs, the use of plated screws is not permitted.

The conductor system shall be supported in guides so that an air gap exists at all times between the aluminium and the surface of the structure, the guides being seated upon plastic or other similar insulating material. Should conductors be installed directly upon the surface of concrete or cement plaster, an insulating strip is to be installed over its whole length to prevent contact between the two surfaces. Guides shall be installed to support the conductor at intervals not exceeding 1,2 metres horizontally or 1,5 metres vertically.

N.B.: No part of an aluminium conductor system must be allowed to come into direct contact with concrete or cement plaster as this may cause the aluminium to corrode.

##### 4.3 Expansion Loops

Where conductors are installed horizontally without deviation from a straight line over long distances, expansion loops must be provided at distances not exceeding 30 metres. These expansion loops must have a cross-sectional area which is at least equal to that of the conductor.

##### 4.4 Protection of Down-conductors

Where external down-conductors are installed in areas which are readily accessible to the public, the lower ends of the conductors shall be enclosed in a rigid conduit. In the case of a circular section conductor this shall comprise a 2 metre length of 20mm diameter Galvanised conduit. This conduit shall be securely attached to the wall by means of galvanized steel saddles fixed with stainless steel screws and plugs, spaced at intervals not exceeding 1m. Where a flat section conductor is used this shall be covered by a similar length of 25mm Galvanised conduit. The lower end of the conduit shall be positioned as close as practicable to ground level, i.e. immediately above an aluminium to copper joint. The ends of the conduit shall not be sealed.

#### 4.5 Earthing Electrodes

Earthing electrodes must consist of either copper-clad steel rods not less than 12mm in diameter and having a minimum copper thickness of 0,20mm driven into the ground, or a 50mm (35mm for domestic dwellings) bare copper conductor buried in a trench, or a combination thereof. Where copper clad steel electrodes are used they must have a suitable bond between the steel core and copper exterior to prevent moisture ingress between the two metals. Where it is necessary to extend earth rods, an electrolytically compatible corrosion resistant, coupling device, which prevents ingress or moisture into the joint shall be used. The copper conductor below the down-conductor joint shall be covered by a semi-rigid P.V.C. conduit for a distance of approximately 200mm above ground and 400mm below ground.

#### 4.6 Joints Above Ground

Circular section aluminium conductors shall be jointed by aluminium ferrules or lugs which are securely crimped into place. Aluminium lugs must be bolted together using 10mm diameter bolts and washers. The material specification for these components must conform with that laid down in paragraph 4.1. Alternatively heavily tinned copper lugs and ferrules may be used. The lugs should be joined together by means of 10mm diameter copper, brass or bronze bolts and washers. Care should be taken to inhibit corrosion where dissimilar metals are used by thoroughly cleaning the surfaces of the metal before assembly and subsequently sealing the joint with an inert tenacious compound or tape.

Flat section aluminium conductors shall be joined by double rivetting, using aluminium rivets which comply with the material specification laid down in 4.1. Alternatively, 2 x 6mm diameter stainless steel bolts, nuts and washers may be used. Fold over type bends will not be permitted.

Down-conductors are to be terminated approximately 200mm above finished ground level. Circular section aluminium is to be jointed to a 50mm<sup>2</sup> (35mm<sup>2</sup> in the case of domestic dwellings) stranded copper conductor by securely crimping in place two heavily tinned lugs and bolting these together using 10mm diameter copper, brass or bronze nuts, bolts and washers.

N.B. Under no circumstances shall aluminium conductors be buried in the ground.

#### 4.7 Joints Below Ground

A joint in the stranded copper conductor which forms part of the earthing system must be made by using a crimped copper ferrule clamping (not lugs) using two copper line taps of suitable dimensions, or exothermic welding. The copper earth conductor must be joined to an earth rod by either clamping, using a standard earth rod clamp or copper line tap or by exothermic welding. Joints which are made between dissimilar metals (i.e. copper conductor to galvanized steel water main), must be thoroughly cleaned before assembly. They shall be rendered watertight using waterproof adhesive tape on a suitable compound for a minimum distance of 200mm in all directions from the joint.

#### 4.8 Bonds

Where it is necessary to bond the aluminium conductor to any other metallic surface, this must be done by bolting or rivetting. When attaching aluminium to a dissimilar metal the joints are to be thoroughly cleaned and sealed to prevent corrosion

### 5. GENERAL INSTALLATION PROCEDURE

#### 5.1 Air Terminals for Non-metallic Pitched Roofs

Aluminium conductors are to be installed along all ridges of roofs and projections such as dormer windows, etc., terminating at the ends with conductors running downwards over the surface of the roof and the eaves. Non-metallic chimneys must be protected by means of a finial of sufficient length to cover the chimney within a 45 degree angle struck downwards from its point. Alternatively it should have a conductor installed in the form of a closed loop upon the upper surface. The conductors are to follow the outer contour of the stack and must be bonded at a convenient point to the nearest component of the air terminal system.

N.B. This bond may run in a horizontal or downward direction, but under no circumstances must any part of it run above horizontal.

Conductors may be dead-ended (i.e. have one end free and unbonded), providing that the length of such a conductor does not exceed 10 metres and that the unbonded end is either at the same level or higher than the bonded end. This technique may be used where ridge conductors are installed over dormer windows etc.

In all cases where metallic gutters have been installed along the eaves of a pitched roof, these must be bonded to the air terminal system. Where metallic gutters do not exist, however, a conductor must be installed over the surface of the roof at eaves level to which the remainder of the air terminal system is to be bonded, with the following exceptions:

- (a) Where the maximum distance from ground level to the eaves of the building is less than 4 metres the pitch of the roof is more than 1 in 2 (27 degrees from the horizontal).
- (b) Where the maximum distances from ground level to the eaves is less than 7 metres and the pitch of roof is more than 1 in 1,5 (34 degrees from the horizontal).
- (c) Where the distance from the ground level to the eaves is more than 7 metres and the pitch of the roof more than 1 in 1, (i.e. the included angle at the apex of the roof is less than 90 degrees).

Under these circumstances eaves conductors need not be installed.

Any non-metallic objects which protrude above the general roof lines, such as Cape Dutch gable ends, must be protected as described above with a suitable air terminal system. Any metallic objects which protrude above the general roof line, such as hot

water expansion pipes must be bonded as directly as possible to the nearest eaves conductor, gutter or other part of the lightning system.

N.B. These bonding conductors must run in a horizontal or preferably a downward direction, from the vent pipe, etc., to the lightning protection system.

#### 5.2 Air Terminals for Metallic Pitched Roofs

Buildings with roofs covered with electrically continuous metal sheets do not require separate air terminals but must be earthed via down conductors generally as described in 5.6 and 5.7. Any non-metallic objects projecting above the general roof line must be separately protected as described in 5.1 and bonded to the metal roof covering.

#### 5.3 Air Terminals for Non-metallic Flat or Mono-pitched Roofs

For flat or mono pitched roofs of non-metallic construction the air terminal system must consist of aluminium alloy conductors installed around the outer perimeter of each section of the roof structure. These conductors must be installed on top of parapet walls if these exist. Lift motor rooms, tank rooms, penthouses etc., which protrude above the general roof line must have air terminal conductors installed around the outer perimeter of each roof slab or parapet wall. Any metallic objects which protrude above the roof line such as expansion pipes, signs, flag poles, handrails etc., must be bonded directly to the nearest component of the lightning protection system as described in 5.1.

N.B. It is not permissible for the ends of conductors to be bonded directly to the perimeter air terminal system if the latter is installed upon a parapet wall having a height exceeding 500mm above roof slab level. In these circumstances the conductors are to be bonded directly to the down conductors.

#### 5.4 Air Terminals for Metallic Flat or Mono Pitched Roofs

Metallic flat or mono pitched roofs do not require separate air terminal conductors, providing that there is electrical continuity between the metallic roofing sheets, (see 5.2). A metallic roof surrounded by a non-metallic parapet wall shall have conductors installed at the top of the parapet wall and these must be bonded to the metallic roof at intervals not exceeding 20m. If the parapet wall is clad with metal over its upper surface or a handrail is installed which affords good electrical continuity, separate air terminal conductors need not be installed. Under these circumstances the metal handrail or cladding must be bonded to the metal roof covering at intervals not exceeding 20 metres.

All non-metallic covering such as slates, tiles, asbestos cement sheeting, etc., supported by a steel structure being electrically continuous throughout may be treated as being of a complete metal construction. In these circumstances no separate air terminal system need be installed providing the steel roof structure is bonded to earth at intervals given in 5.5.

#### 5.5 Down Conductors for Non-metallic Structures

Down conductors must be installed at regular intervals around structures and to run as directly as possible between the air terminal and earthing system. They must, where practicable, be positioned at the external corners of the structure. The maximum separating distance between down conductors around the perimeter of the structure must not exceed 30 metres. In the case of very tall buildings having a slender base (i.e. chimney stacks, water towers etc.), a minimum of two down conductors must be installed.

The lower end of down conductors are to be terminated and bonded to the earthing system approximately 200mm above finished ground level. Under no circumstances must aluminium conductors be buried underground. Test joints must be provided between the down conductors and earthing system. Down conductors must run vertically between the air terminal and earthing systems. Where this is impracticable, their course may be deviated to run at any angle up to and including horizontal.

Where it is necessary to run conductors horizontally over the upper surface of a structural protrusion, such as an exposed concrete slab, the conductor may run down vertically over the edge of the slab and return to the main structure, so that the distance between the upper and lower conductors exceeds one third of the length of the horizontal run. Looped down conductors are not permitted. Down conductors must not run over the underside of large overhangs which are less than 6 metres above ground level, or other areas where people are likely to be present during a thunderstorm.

External or internal metallic rainwater pipes may be used as down conductors providing these are of substantial section and are jointed by screwing one length into another or welding. Thin gauge galvanized steel pipes whose sections are held together by friction, rivets or screws must not form part of a lightning protection system.

## 5.6 Down Conductors For Reinforced Concrete Framed Structures

The steel reinforcement of this type of structure may be used in place of down conductors. Where the reinforcing system is used the air terminal system must be bonded to it at a maximum of 30 metre intervals using steel clamps. This bond may be achieved by clamping, with a steel clamp, a steel conductor to a selected reinforcing bar, the opposite end of this conductor must terminate at a corrosion resistant metallic terminal such as Grade 316 stainless steel.

The reinforcing system of prefabricated concrete buildings must not be used unless special provision is made for bonding the various prefabricated sections together.

The terminals should be mounted flush with the face of the concrete. An aluminium alloy bond must then be taken from the air terminal system and be connected to the stainless steel terminal by means of a heavily tinned crimp lug for circular section aluminium, or a suitable bi-metallic joint in the case of flat section aluminium. A similar system must be used to bond the reinforcing system at ground level to the earthing system at points directly below the air terminal bonds. Here copper conductors must be used as the external bonding material.

Under no circumstances must copper, or other non-ferrous material be allowed to come into contact with steel reinforcing bars, as this may cause severe corrosion and subsequent structural damage. The lightning protection system must not be bonded to any part of the structure which is electrically isolated from the remainder of the building, i.e. cantilevered sections. In these circumstances, or where it is otherwise impracticable to use the reinforcing system, external down conductors must be installed as described in 5.5.

#### 5.7 Down Conductors For Steel Framed Structures

Where the framework of a building is constructed of structural steel columns, these may be used in place of down conductors providing the separating distance between them does not exceed 30m. The upper ends of the columns must be bonded to the air terminal systems and the lower ends to the earthing system.

#### 5.8 Earthing By Means Of Vertically Installed Rod Type Electrodes

Rod-type electrodes must be driven into the ground at a position directly below each down connector. The maximum earthing resistance of each electrode or number of electrodes bonded to any one down conductor shall not exceed  $N \times 30$  ohms, where N equals the total number of down conductors which are bonded to a common air terminal system, or 200 ohms whichever is the lower value.

The minimum horizontal separating distance between rod-type electrodes bonded together must not be less than their installed depth. The upper ends of installed rod-type electrodes are to be terminated approximately 500mm below finished surface level. A 20mm copper bonding conductor must be installed to run between each earthing electrode system and the lower ends of the adjacent down conductors. A joint is to be made between each of these bonding conductors and the down conductors at a position approximately 200mm above finished ground level. These bonding conductors must be installed in P.V.C. conduit securely affixed to the wall (see 4.4). The length of this P.V.C. conduit must be approximately 600mm and must be installed so that approximately 200mm protrudes above ground level, the remainder being buried into the soil.

#### 5.9 Earthing By Means Of Metallic Water Mains

Where two or three down conductors are installed the water mains may serve as an earth terminal for one of these. Where three or more down conductors are installed the water mains may serve as an earth terminal for two of these. Regardless of whether the water mains are used as an earth terminal or not, the incoming metal water pipe must be bonded to the lightning earthing system underground.

#### 5.10 Earthing By Means Of Trench Type Electrodes

Where the soil conditions prevent the satisfactory installation of rod-type electrodes, a trench earth system must be installed. This method is to comprise a 50mm stranded copper conductor installed horizontally into a trench at a depth of 500mm below finished ground level. The conductor is to follow the general out-line of the structure to be protected on rocky ground, the trench earth may be attached to the lower part of

the wall in areas where rock protrudes through the soil. The conductor must, however, be buried wherever possible as described above.

Each down conductor must be bonded to the trench earth system as directly as possible by means of a copper conductor.

Trench earth systems must have a maximum earth resistance of 30 ohms. An isolated length of trench earth mat must be bonded to the down conductor system in such a way as to reduce the length of dead-ends to the minimum.

Should trench earths be installed beneath pathways where people are likely to be present during a thunder-storm, a plastic, bitumastic or ceramic pipe must be installed having a length similar to the width of the pathway and the trench earth conductor run inside it.

N.B. The maximum useful length of a dead-ended trench earth is 80 metres.

## LIGHTNING PROTECTION INSTALLATION

### PARTICULAR SPECIFICATION

Allow to supply and install Lightning Protection for the upgraded Maternity/Neonatal Building, the upgraded Mothers in waiting Building and the new Pump House. The buildings will be sheeted with metal roof sheeting.

All down conductors must be installed into rigid PVC surface conduits neatly chased into the walls of the buildings from below the eaves of the buildings to 400mm AGL where a Test Point Box is to be installed. Rainwater down pipes may NOT be utilized for down conductors. Continue the chase to below ground level.

Note that earth rods and tails back to the earth test points MUST be installed BEFORE the concrete aprons around the buildings have been cast.

#### 1 SCOPE

This specification covers the supply of materials, installation, commissioning and testing of the Lightning Protection System for the above service, including a Soil Resistivity Survey, for approval by the Engineer, prior to any work starting.

The installation has been measured and allowed for in the Bill of Quantities of the documentation.

#### 2 SPECIALIST WORK

The installation work shall be carried out by a recognised specialist with a proven track record in the field of Earthing and Lightning Protection

#### 3 COMPLIANCE WITH REGULATIONS AND STANDARDS

The Lightning Protection Installation shall comply with SABS codes as per the General Specification: Lightning Protection, paragraph 1, Satisfactory Installation

#### 4 DEFINITION OF TERMS

“Air Terminals” – the part of a Lightning Protective System that is intended to intercept lightning charges (Air Terminals includes masts, metallic roofs, roof conductors and finials).

“Down Conductor” – A conductor that connects an air terminal to the earthing terminal.

“Earthing Terminal” – The above ground terminal of the earthing system.

“Earthing System” – The part of the lightning protective system that is intended to discharge lightning currents into the general mass of the earth.

“Finial” – An air terminal consisting of a metal rod with a rounded end.

## 5 DRAWINGS

The following drawings are attached to this section and form part of the documentation.

- 33-27-02 : Power Layout, Neonatal Wards Building
- 33-27-08 : Power Layout, Mothers in Waiting Building
- 33-27-11 : Electrical Layout, Pump House

### 5.1 WORKING DRAWINGS

The Contractor shall submit shop drawings for the following:

- Details of Down Conductors
- Details of reinforcing steel bonding materials
- Details of test joints
- Details of earthing system
- “As built” marked up drawings on completion of the installation.

## 6 LIGHTNING PROTECTION SYSTEM

The Lightning Protection System shall consist of Air terminal runs, vertical risers, pipe work, and equipment forming an integral part of the installation and the earth electrodes installed into the ground work.

### 6.1 SYSTEM DESCRIPTION AND PERFORMANCE

The system shall comprise :

- (a) Down conductors shall be installed flush via guides and 25mm PVC conduit.
- (b) In the case of the Pump House aerial aluminium conductors shall be mounted surface on the roof slab.
- (c) Earthing electrodes shall be installed into the ground (or counter poise earth conductors).

Each earth electrode associated with a down-conductor shall have a resistance not exceeding two hundred ohms ( $\Omega$ ) or  $nR_t$ , whichever is the lesser, where :

$R_t = 50n$  ohm for category B or C structures

$n$  = the number of down conductors connected to a common air terminal system.

After the down-conductors have been bonded to their separate earth electrodes, the earth resistance of the earth electrodes system thus connected in parallel by a common air terminal system must not exceed  $R_t$ .

### 6.3 DOWN CONDUCTORS

The down conductors shall be of 10mm diameter Aluminium conductor.

The conduits shall be installed flush into the brickwork and/or columns from just below the eaves to a flush test point box which shall consist of an IP65 enclosure with a labelled cover and installed at 400mm AGL and then taken down to below ground level.

## 6.2 EARTH ELECTRODES

Supply and install 16mm diameter 1,5m long copper clad earth rod type electrodes vertically into the ground to a depth with the top 500mm below general ground level. The electrodes are to be positioned on the sides of the building but AWAY from any concrete surrounds and SHALL be accessible via excavation of the soil covering. The electrodes are to be installed 1,000mm (or beyond the surrounding concrete apron) from the building and as far as possible away from any adjacent cables and/or other metal components connected to the "Mains Earth System" for the general building installations.

A 20mm PVC conduit shall be taken down from the Test Point enclosure to 500mm deep and then taken beyond the building's concrete surround. These sleeves MUST be laid prior to the casting of any concrete or paving surrounds so that the PVC insulated conductor may be pulled through without disturbing the concrete or paving to the earth rods.

The earth electrodes shall comprise of a copper clad steel rod at least 16mm in diameter. There shall be a molecular bond between the rod and the cladding, so as to prevent peeling or chipping. The cladding shall be of a quality and thickness as to afford protection against corrosion of the steel core after installation.

All the metal components, the Main Earth Electrodes and all extraneous metal parts are to be bonded to each other by means of 50mm<sup>2</sup> PVC insulated copper conductors lugged on both ends and fixed with cadmium-plated bolts.

Where paving, stormwater channels etc. have to be broken out to achieve the conductor electrode installation, the Lightning Protection Contractor shall make all his requirements known to the Building Contractor, who will carry out this work.

## 6.3 JOINTS BETWEEN DISSIMILAR METALS

Where copper to aluminium joints are required, these shall be by means of heavily tinned lugs, or ferrules of a design which excludes the possibility of direct contact between copper and aluminium. Lugs shall be secured by means of stainless steel nuts, the end of the conductor in contact with steel shall be tinned, and the clamp shall be a material, which does not promote galvanic action, such as stainless steel.

## 6.4 MATERIALS

All materials used shall be of the best quality and selected for the best resistance to corrosion.

7. TESTING

TESTING OF LIGHTNING PROTECTION SYSTEM

On installation of each earth electrode for the lightning protection system, its resistance shall be measured. Additional electrodes shall be installed until the specific value has been attained.

Provide permanent testing joints between each down conductor and its associated earth conductor.

**Test and submit records to the Head : Public Works, as follows:**

Earth resistance of each conductors

Continuity of any trench earth

Continuity of overhead system by measuring between one down and each of the remaining down conductors with the earth conductors disconnected.

On completion of the lightning protection system, the resistance to earth of the systems as a whole shall be measured.

WITNESSING OF THE TEST

Prior to commencement of any tests, the Head : Works shall be notified to enable him to witness tests should he opt to do so.

TEST CERTIFICATES

On completion of the lightning protection installation, the Contractor shall submit test certificates covering all tests, irrespective of whether any previous test results have been submitted or not, and all such tests shall comply with SANS 10313. The Head : Works shall be given 48 hours notice of such tests being carried out, and shall have the right to witness and check these tests.

8. BILL OF QUANTITIES

Prices of conductors are to allow for joints at angles and intersections, for joints in the length (aluminium to aluminium), testing joints, expansion loops and for conductor guides. Joints and bonds of conductors to dissimilar metallic surfaces are measured separately.

9. PROPRIETARY MATERIALS, SYSTEMS, ETC.

Any reference in the schedule of prices or specifications to trade or brand names (and catalogue numbers, etc.) shall be deemed to be followed by the words "or other approved". Similarly, any wording equating to similar to, equal to, equivalent to, etc. when used in combination with a trade name or brand name (and catalogue numbers, etc.) shall be entirely replaced with the trade or brand names (or catalogue numbers, etc.) followed by the words "OR OTHER APPROVED". This will take precedence over any contradictory clause or note appearing anywhere in this document.

Where the term “or other approved” is used in connection with proprietary materials or articles it is to be understood that approval shall be at the sole discretion of the Head : Works.

Where brand and trade names are referred to in these documents they shall indicate the quality and type of material or fitting required and no substitution of materials so specified will be permitted unless the authority of the Head : Works has been obtained in writing **before tenders close**.

In all cases where the Contractor takes delivery of, handles, stores, uses, applies and/or fixes any proprietary product he shall do so in strict accordance with the manufacturer’s instructions after consultation with the manufacturer or his authorized representative.

10. DEFINITION OF APPROVED, ETC.

The terms “approved” or “specified” where used in these documents shall mean approved or specified by the Head : Works.