TENDER

CONSTRUCTION OF CEBE CLINIC

SCMU5-24/25-0083

NAME OF COMPANY:

_____

CSD Nr:

_____

CRS Nr (CIDB):

_____

CLOSING DATE: 27 AUGUST 2024 **TIME: 11:00**

Department of Public Works and Infrastructure

Independence Avenue

Qhasana Building

Bhisho

5605

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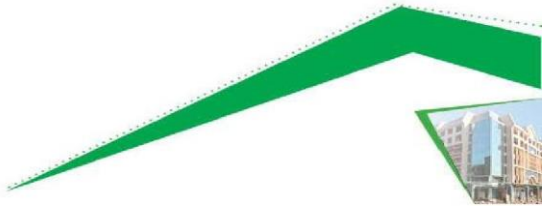

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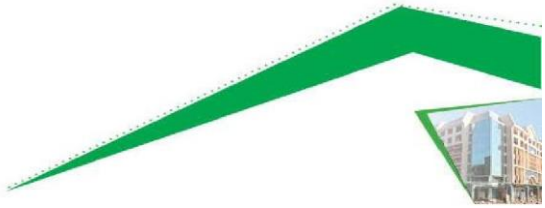
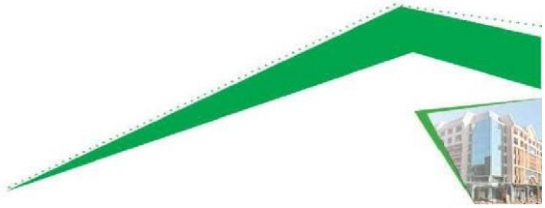


THE TENDER

PART T1 TENDERING PROCEDURES



PART T1.1: TENDER NOTICE AND INVITATION TO TENDER

T1.1 Tender Notice and Invitation to Tender

The Eastern Cape Department of Public Works and Infrastructure invites contractors with a CIDB Grading of **8GB or Higher** in the following Class of works (**GB)** to tender for the **"CONSTRUCTION OF CEBE CLINIC."** for an Eighteen (18) **month** contract.

The contract will be based on the **JBCC Edition 6.2 of 2018** and the Eastern Cape Public Works and Infrastructure will enter into a contract with the successful tenderer.

Only tenderers who have suitable experience and suitably qualified personnel in providing similar services to those that are required are eligible to submit tenders.

Bid documents are downloadable free of charge from Department of Public Works and Infrastructure website (www.ecdpw.gov.za/tenders) or from National Treasury's tender portal (http://www.etender.gov.za/content/advertised-tenders). Bid documents will be available on **26 August 2024**. No bid documents will be available at departmental offices.

Below is a link containing the drawings:
SCMU5-24.25-0083.zip

There will be a compulsory briefing meeting on **07 August 2024,** on the **Cebe Clinic site**, near Centane. (Refer to site co-ordinates under Site Information). The co-ordinates are: **-32.524929, 28.528116**
Prospective bidders are to meet on the site of the Proposed New Cebe Clinic at 11h00.

Queries relating to the issue of these documents may be addressed in writing to DPWI Supply chain Management - email: supply.chain@ecdpw.gov.za **Technical enquiries:** may be addressed in writing to Linda Reve Linda.Reve@ecdpw.gov.za

The closing time for receipt of tenders by the Eastern Cape Department of Public Works and Infrastructure (ECDPWI) is **11:00am** on **27 August 2024.**

A. TENDER SUBMISSIONS:
Telegraphic, telephonic, telex, facsimile, e-mail and late tenders **will not** be accepted. Bids must be submitted in sealed envelopes clearly marked **"SCMU5-24/25-0083: "CONSTRUCTION OF CEBE CLINIC."** must be deposited in the bid box, **DEPARTMENT OF PUBLIC WORKS, FRONT CORNER OF QHASANA BUILDING ON THE WAY TO CIDB OFFICES LABELLED "TENDERS", BISHO.**

It is the responsibility of the tenderer/s to ensure that bid documents /proposals are submitted on or before closing time and the correct location as the department will not take responsibility of wrong delivery. Tenderers using courier services for delivery of their bid documents must ensure the delivery is at the correct place / location and time as the department will not be held responsible for wrong delivery. Not delivered to Departmental officials. The Department will not accept responsibility if bids received by officials are not timely deposited in the Bid Box.

Tenders may only be submitted on the tender documentation that is issued. Tenderers must be registered on the National Treasury Central Supplier Data Base and proof of registration must be submitted with the proposal (https://secure.csd.gov.za).

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

B. BID EVALUATION:
This bid will be evaluated in Three (3) phases as follows:

Phase One: Compliance, responsiveness to the bid rules and conditions, thereafter they will be evaluated on Functionality.
Phase Two: Functionality will be applied as a prequalification criterion. Such criteria are used to establish minimum requirements where after bids will be evaluated solely on the basis of price and preference
Phase Three: Bidders passing all stages above will thereafter be evaluated on Preferential Procurement Policy Framework Act (PPPFA), and Preferential Procurement Regulations 2022.

PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT (PPPFA) AND PREFERENTIAL PROCUREMENT REGULATIONS 2022 POINTS WILL BE AWARDED AS FOLLOWS:

Maximum points on Price	-	**90 points**
Maximum points for Specific Goals	-	**10 points**
Maximum points	-	**100 points**

C. BID SPECIFICATIONS, CONDITIONS AND RULES

1. The minimum specifications, other bid conditions and rules are detailed in the bid document under Tender Data
2. The specifications, rules, special conditions of bid, evaluation criteria, and rules for evaluation for compliance to local content and other bid conditions are detailed in the document.
3. The Department of Public Works and Infrastructure SCM policy applies.
4. Tender validity period is **120 days.**
5. **Declaration certificate for local production and Declaration summary should be completed & signed.**

D. ENQUIRIES WITH REGARD TO THIS ADVERT MAY BE DIRECTED TO:

- **SCM RELATED ENQUIRIES** DPWI Supply chain Management
  Email Address: supply.chain@ecdpw.gov.za

- **TECHNICAL ENQURIES**
  Ms Linda Reve
  Tel No: **043 711 5765**
  Email Address: Linda.Reve@ecdpw.gov.za

FOR COMPLAINTS, FRAUD, & TENDER ABUSE:
Call: 0800 701 701

PART T1.2: TENDER DATA

T1.2 Tender Data

The conditions of tender are the latest edition of SANS 10845-3, *Standard conditions of tender*.

SANS 10845-3 makes 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 provisions of SANS 10845-3 *and* as contained in **Annexure C** of **Standard for Uniformity in Construction Procurement (Board Notice 423 of 2009 Government Gazette No 42622 of August 2019)**.

Each item of data given below is cross-referenced to the clause in SANS 10845-3 to which it mainly applies.

Clause number	Tender Data
3.1	The Employer is Public Works and Infrastructure – Eastern Cape
3.2	The tender documents issued by the employer comprise the following documents: **THE TENDER** **Part T1: Tendering procedures** T1.1 - Tender notice and invitation to tender T1.2 - Tender data T1.3 - Functionality scoring schedule **Part T2: Returnable documents** T2.1 - List of returnable documents T2.2 - Returnable schedules **THE CONTRACT** **Part C1: Agreements and Contract data** C1.1 - Form of offer and acceptance C1.2 - Contract data C1.3 - Dispute Resolution Mechanism **Part C2: Pricing data** C2.1 - Pricing Instructions C2.2 - Bills of Quantities **Part C3: Scope of work** C3 - Scope of work **Part C4: Site information** C4 - Site information
3.3	The tender documents issued by the employer comprise the documents listed on the contents page
3.4	The employer's agent is: Name: Intsika Architects (Pty) Ltd 73 Bonza Bay Road, Beacon Bay East London Principal Agent/Architect: Mr Rob Gillard Tel No: **043 748 2949** Email Address: rob@intsika.com
3.5	The language for communications is English
3.6	The competitive negotiation procedure shall be applied.
3.7	Method 2: Two (2) stage procurement procedure shall be applied.

4	**Tender's obligations**

4.1	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: 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) of 25(7A) of the Construction Industry Development Regulations, for a CIDB **Grade 8GB or Higher** class of construction work; and Joint ventures are eligible to submit tenders provided that: 1. every member of the joint venture is registered with the CIDB; 2. the lead partner has a contractor grading designation in the CIDB **Grade 7GB or higher class** of construction work; and. 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 CIDB **Grade 8GB or higher** class of construction work or a value determined in accordance with Regulation 25 (1B) of 25(7A) of the Construction Industry Development Regulations. 4. Joint Venture Agreement
4.2	The employer will compensate the tender as follows JBCC Edition 6.2 of 2018. The employer **will not** compensate the tenderer for any costs incurred in attending interviews or making any submissions in the office of the employer.
4.3	It is the responsibility of the tenderer to check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.
4.4	**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.
4.5	Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are incorporated into the tender documents by reference.
4.6	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 consider the addenda.
4.7	The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender. 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. **Tender documents will not be made available at the clarification meeting**

4.8	**Seek clarification** *Request clarification of the tender documents, if necessary, by notifying the employer at least* ***7 (Seven) working days*** ***before the closing time stated in the tender data.***

4.9	Tenderers are required to state the rates and currencies in Rands. Include in the rates, prices, and the tendered total of the prices (if any), all duties, taxes which the law requires to be paid [except value added tax (VAT)], and other levies payable by the successful tenderer, that are applicable 14 days before the closing time stated in the tender data. Show the VAT payable by the employer separately as an addition to the tendered total of the prices. 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. State the rates and prices in monetary value of the contract unless otherwise instructed in the tender data.
4.10	Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer or to correct errors made by the tenderer and ensure that all signatories to the tender offer initial all such alterations. Do not make erasures using masking fluid.
4.11	Main tender offers are not required to be submitted together with alternative tenders.
4.12	No alternative tender offers will be considered
4.13.1	Parts of each tender offer communicated on paper shall be submitted as an original. Submit a) the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with a translation of any documentation in a language other than the language of communication established in 3.5, and b) the parts communicated electronically by the employer of its agents on paper format with the tender.
4.13.2	Sign the original and all copies of the tender offer where required in terms of the tender data. State in the case of a joint venture which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer. NOTE The employer holds all authorized signatories liable on behalf of the tenderer.
4.13.3	A tender security in the amount of **N/A** is required and shall remain valid for a period not exceeding N**/A** days after the closing date for tender offers. The form of the tender security shall not differ substantially from the sample provided in Annex D of SANS 10845-3.

4.13.4	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: **Location of tender box: DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE, FRONT CORNER OF QHASANA BUILDING ON THE WAY TO CIDB OFFICES LABELLED "TENDERS", BISHO**. **Physical address:** Independence Avenue, Ground Floor, Qhasana Building, Bhisho 5605 **Identification details: SCMU5-24/25-0083: "CONSTRUCTION OF CEBE CLINIC."** **CLOSING TIME AND DATE: 27 August 2024** at **11:00**
4.13.5	The tenderer is required to submit with his tender the following certificates: 1) a copy of the CSD report showing, amongst other things, that tax matters of the service provider are in order the South African Revenue Services. *In the case of a Joint Venture/Consortium/Sub contractors each party must submit a separate* CSD report showing, amongst other things, that tax matters of the service provider are in order the South African Revenue Services. 2) CIDB Grading certificate or CRS number.

4.13.6	A two-envelope procedure will not be required.
4.13.7	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted. The tenderer accepts that the employer does 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.
4.14	The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender. 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. Proof of posting shall not be accepted as proof of delivery. Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of the standard conditions of tender in this part of SANS 10845 apply equally to the extended deadline.
4.15.1	The tender offer validity period is **120 days**. 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. 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. Extend the period of the tender security, if any, to cover any agreed extension requested by the employer.

4.15.2	**Placing of contractors under restrictions / withdrawal of tenders** If any tenderer who has submitted a tender offer or a contractor who has concluded a contract has, as relevant: withdrawn such tender or quotation after the advertised closing date and time for the receipt of submissions; after having been notified of the acceptance of his tender, failed or refused to commence the contract; had their contract terminated for reasons within their control without reasonable cause; offered, promised or given a bribe in relation to the obtaining or the execution of such contract; acted in a fraudulent, collusive or anti-competitive or improper manner or in bad faith towards the Provincial Government; or, made any incorrect statement in any affidavit or declaration with regard to a preference claimed and is unable to prove to the satisfaction of the Provincial Government that the statement was made in good faith or reasonable steps were taken to confirm the correctness of the statements, such tenderer/s may be placed under restriction from tendering with the state. Procedures are outlined in the EC SCM Policy for Infrastructure procurement and Delivery Management and also on **cidb** Inform Practice Note #30. Excerpts of the policy can be availed on request of any interested tenderer.
4.16	Access shall be provided for the following inspections, tests and analysis: **N/A**
4.17	the preferred tenderer will be required to submit an approved insurer undertaking to provide the Performance Bond / Guarantee / Surety / Security to the format and/or standard as per DPW policy
5	**Employer's undertakings**
5.1	The Employer will respond to requests for clarification received up to **Seven (7)** working days before the tender closing time. If, as a result of the issuing of addenda, it is necessary to extend the closing time stated in the tender data, grant such extension and notify all respondents accordingly.
5.2	The employer shall issue addenda until **Seven (7)** working days before tender closing time.
5.3	Tenders will be opened immediately after the closing time for tenders at **11:00am hours.**

5.4	Do not disclose to tenderers, or to any 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.

<table>
<tr><td>5.5</td><td>Determine, after opening and before detailed evaluation, whether each tender offer that was properly received
a) complies with the requirements of the standard conditions of tender in this part of SANS 10845,
b) has been properly and fully completed and signed, and
c) is responsive to the other requirements of the tender documents.
A responsive tender is one that conforms to all the terms, conditions, and scope of work of the tender documents, without material deviation or qualification. A material deviation or qualification is one which, in the employer's opinion, would
d) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the scope of work,
e) significantly change the employer's or the tenderer's risks and responsibilities under the contract, or
f) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.
Reject a non-responsive tender offer, and do not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.</td></tr>
<tr><td>5.6</td><td>Arithmetical errors, omission and discrepancies
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.</td></tr>
<tr><td>5.7</td><td>For Vat related discrepancies, National and Provincial Treasury prescripts in relation to VAT procedures apply.</td></tr>
<tr><td>5.7.1</td><td>The financial offer will be reduced to a comparative basis using the Tender Assessment Schedule.
Table F.1: Formulae for calculating the value of A
<table>
<tr><th>Formula</th><th>Comparison aimed at achieving</th><th>Option 1[a]</th><th>Option 2[a]</th></tr>
<tr><td>1</td><td>Highest price or discount</td><td>$A = \left(1 + \frac{(P - P_m)}{P_m}\right)$</td><td>$A = P/P_m$</td></tr>
<tr><td>2</td><td>Lowest price or percentage commission / fee</td><td>$A = \left(1 - \frac{(P - P_m)}{P_m}\right)$</td><td>$A = P_m/P$</td></tr>
<tr><td>a</td><td colspan="3">P_m is the comparative offer of the most favourable comparative offer.
P is the comparative offer of the tender offer under consideration.</td></tr>
</table></td></tr>
<tr><td>5.7.2</td><td>The procedure for the evaluation of responsive tenders is Method 3: Responsiveness & Administrative Compliance, Functionality, Price and Preference
Phase 1: Administrative requirements and Mandatory requirements (Responsiveness to the Bid requirements and rules).
Phase 2: Functionality eligibility of bidder to meet minimum requirements Phase 3: Price and preference (90/10 system).</td></tr>
<tr><td></td><td><u>PHASE ONE: RESPONSIVENESS TO THE BID REQUIREMENTS AND RULES</u>

Bidders' proposals must meet the following minimum requirements and supporting documents must be submitted with the completed bid document in a sealed envelope in the bid box at the closing date and time. Failure to comply will automatically eliminate the bid for further consideration:
1. Bid Document (This Document must be submitted in its original format)</td></tr>
</table>

	2. Bids which are late, incomplete, unsigned or submitted by facsimile or electronically, will not be accepted. 3. Bidder must be registered with CIDB in the correct grading and class of works as per the tender notice and requirements. And must the status on CIDB be active during award stage. It is the responsibility of the bidder to keep the status on CIDB active throughout bidding process (advert till award stage). 4. Bidders must be a legal entity or partnership or consortia. 5. Form of offer and Acceptance (fully completed and signed) 6. SBD 4 – Declaration of Interest (fully completed and signed) **SBD 4 must be duly completed and signed. In the event that 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, such interest must be disclosed on question 2.3.1.** 7. Incomplete or unsigned or poorly completed forms **SBD 4 will lead to a bidder being declared non-responsive**. 8. Compulsory Enterprise Questionnaire (Completed and signed) 9. If the offer is "Vat Inclusive", the VAT registration number of service provider must be indicated and if a service provider is not a VAT Vendor but include VAT in its prices, the successful service provider will be given 21 days to register as a VAT Vendor with SARS, after the issuing of an appointment letter. If a bidder is a VAT vendor/registered, the bidder is required to explicitly state the VAT amount. VAT vendors must include VAT at 15% in the bid offer(s). 10. If the Bid Sum (amount in words) differ from the Bid Sum (amount in figures), the Bid Sum (amount in words) will govern. 11. Resolution to Sign (must be completed, if applicable). 12. Declaration of Employees of the State or other State Institutions. 13. Only one offer per bidder is allowed and alternative offers will not be considered. If more than one offer is received, none of the offers will be considered. 14. Attendance of compulsory briefing meeting (if applicable)
	Other Conditions of bid (Non eliminating unless expressly mentioned in the document): 1. The bidder must be registered on the Central Supplier Database (CSD) prior the award 2. All bidders' tax matters must be in order prior to award. Bidders' tax matters will be verified through CSD. In cases where the bidder's status is found non-compliant, the bidder will be granted 7 days to correct the status. **A bidder that fails to rectify its tax matters with SARS will be declared non-responsive**. 3. The bidder has duly completed and signed the **SBD 1**, and **SBD 6.1**. 4. Bidders need to complete and sign **SBD 6.1** to claim points for specific goals. **Failure will lead to the non-awarding of points for specific goals.** 5. The relevant designated sector: Steel Products, PVC, Concrete, and Components. The minimum threshold for local production and content: 100%. 6. Bidders must submit a minimum of three (3) written contactable references for projects successfully completed in the past (clearly indicating client name, contract value, contract term, and contact person, contact details). Refer to Annexure I and Annexure M. This is not an elimination factor, but important for the department to make a decision. Unless it is used for Quality/functionality Points. 7. Bidders must submit a list of projects where he or she has submitted tender offers but tender results have not been confirmed by the client. Refer to Annexure L. This is not an elimination factor, but important for the department to make a decision. Unless it is used for Quality/functionality Points. 8. Bidders must submit their company profiles, list of available resources, plant and machinery, and any other additional capacity with the bid. Refer to Annexures K and H. This is not an elimination factor, but important for the department to make a decision. Unless it is used for Quality/functionality Points. 9. The bidder must also list all projects where there are pending litigations or litigations that have been concluded. The form for this is also attached after Annexure J.

	10. The Department will contract with the successful bidder by signing a formal contract. 11. This tender will be awarded as a whole. All trades listed in the Bills of Quantities or Pricing schedule must be priced for (except provisional sums and allowances which also need to be added to the total), failure to do so will increase the commercial risk of the bid and may lead to elimination or passing over of the bidder. 12. Wherever a brand name is specified in this document (i.e. specifications, pricing schedule, bill of quantities or anywhere), the department requires an item similar/equivalent or better. 13. DPWI Policy applies. 14. Protection of personal information: Consent (POPIA). 15. The successful tenderer (after being informed) will be required to bring along an unsigned copy of the form of contract to be signed by parties (e.g. JBCC Edition 6.2 of 2018). 16. Contractor must commit to support and allocate 30% to SMMEs (EME /QSEs which are at least 51% owed by Black people) within the Amatole District municipality region. The work packages to be implemented by the local SMMEs are already set or allocated in the Bills of Quantities of the project as provisional sum that a contractor will price only Profit and Attendance for. The responsibility to sub-contract with competent and capable sub-contractor's rests with the main contractor/supplier. Once awarded, to bring harmony on site, the department reserves the right to intervene in the selection of local sub-contractors or SMMEs on site.

PHASE TWO: FUNCTIONALITY ELIGIBILITY OF BIDDER TO MEET MINIMUM REQUIREMENTS

Functionality will be applied as a prequalification criterion. Such criteria are used to establish minimum requirements where after bids will be evaluated solely on the basis of price and preference.

Functionality Criteria	Sub-criteria	Weighting
Demonstrated – experience (past c performance) in or comparable projects Construction of Clini Hospital Buildings, Large scale building projects, etc	Project References	20
	Value of Projects	50
Qualifications, competency	Professional Construction Manager	5
	Site Agent / Foreman	5
	Health & Safety Officer (SACPCMP Registered)	5
Experience of the y staff ke personal that will be available to manage the exec ıtion of the project (refer to returnable sheet T2.2.10)	Professional Construction Manager	5
	Site Agent / Foreman	5
	Health & Safety Officer (SACPCMP Registered)	5
TOTAL POINTS		**MAX 100 Points**

Scoring criteria for functionality is detailed in Table A2: Indicators for scoring of functionality criteria.

Minimum combined weighted point threshold must equal (60/100 points) for further consideration of the tender.

<table>
<tr><td></td><td>

PHASE THREE: EVALUATION POINTS ON PRICE AND SPECIFIC GOALS / PPPFA OF 2022

The **90/10 preference point system** shall be applied for the purposes of this bid as per the requirements of the *Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000)* and Specific Goals/Preferential Procurement Regulations of 2022

Criteria	Points
POINTS ON PRICE	**90**
SPECIFIC GOALS	**10**
TOTAL	**100**

Please note:
1. Bidders need to complete and sign SBD 6.1 to claim points for specific goals. Failure will lead in non-awarding of points for specific goals.
2. The Department intends to award this to the highest point scorer as whole, unless circumstances justify otherwise.
3. All information will be verified through CSD.
4. SBD 6.1 is attached.

The 90/10 preference point system for acquisition of services, works or goods exceeding Rand value of R50 million:

a. The following formula must be used to calculate the points for price in respect of tenders (including price quotation) with a Rand value equal to, or above R 30 000 and up to Rand value of R 50 000 000 (all applicable taxes included):

The financial offer will be scored using the following formula:

$$A = (1 - (P - Pm))$$
$$Pm$$

The value of value of W_1 is:

1) **90** where the financial value inclusive of VAT of one or more responsive tender offers have a value **in excess of R 50 000 000** or
2) **80** where the financial value inclusive of VAT of one or more responsive tender offers have a value that **equals or is less than R 50 000 000**.

</td></tr>
<tr><td>5.7.3</td><td>The procedure for the evaluation of responsive tenders is Method 3 (Administrative, functionality, price and preference)</td></tr>
<tr><td>5.7.4</td><td>The quality criteria and maximum score in respect of each of the criteria are as follows: T1.3 Table A1: Functionality Criteria Score</td></tr>
<tr><td>5.7.5</td><td>Each evaluation criteria will be assessed in terms of five indicators – T1.3 Table A2: Indicators for the Scoring of Functionality Criteria</td></tr>
<tr><td>5.7.6</td><td>The prompts for judgment and the associated scores used in the evaluation of quality shall be as follows: T1.3 Table A2: Indicators for the Scoring of Functionality Criteria</td></tr>
</table>

5.8	**Tender offers will only be accepted if:** a) the tenderer is registered on the Central Supplier Database (CSD) for the South African government (see https://secure.csd.gov.za/) unless it is a foreign supplier with no local registered entity b) the tenderer is in good standing with SARS according to the Central Supplier Database. Bidders must submit a CSD no. or tax status compliance pin. c) the preferred tenderer will be required to submit an approved insurer undertaking to provide the Performance Bond / Guarantee / Surety / Security to after 21 days of appointment. d) the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation; e) the tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector. f) the tenderer has not: i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect. g) the tenderer has completed the Compulsory Declaration and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process. h) the tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process and persons in the employ of the state are permitted to submit tenders or participate in the contract; i) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer; j) The tenderer undertakes to maximize the sourcing of building material or infrastructure input material from Eastern Cape based suppliers or manufacturers. k) the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely. l) the tender has offered a market related offer. If the offer is believed not to be market related, the department through its Supply Chain Management bid committees will attempt to negotiate the offer with identified bidder/s to a reasonable amount. Bidders are not allowed to increase their tender offers during this process. m) A Resolution of signatory form has been completed and signed by director/s or a letter bearing a letterhead of the tenderer has been attached (specific to this bid) to the bid submission; it must be duly signed by all directors and submitted the bid. Only a duly authorized official can sign the bid. n) **NOTE:** The amount reflected on the Form of Offer and Acceptance takes precedence over any other total amount indicated elsewhere in bidder's tender submission. If the Form of Offer and Acceptance has no value or figure, the bidder will be regarded as having made no offer. o) The department reserves the right not to award the bid to the most favourable tenderer, if any of the situations occur: if it is not assisting in the advancement of designated groups; risk profile of the favourable firm is too high; the bidder has been awarded a considerable number of projects by the department or provincial government; has performed unsatisfactorily in the past, etc.
5.9	The number of paper copies of the signed contract to be provided by the employer is 1.
	The additional conditions of tender are: Wherever a brand name is specified in this document (i.e., specifications, pricing schedule, bill of quantities or anywhere), the department requires an item similar/equivalent or better.

T.2.1	***A. List of returnable documents***

1	**Documentation to demonstrate eligibility to have tenders evaluated i.e.** *List all documentation to demonstrate eligibility to have a submission evaluated.* Appropriate CIDB grading suitable for the works (as stated in 4.1).
2	**Returnable Schedules required for tender evaluation purposes** The tenderer must fully and appropriately complete and sign the following returnable schedules as relevant: • Record of Addenda to Tender Documents • Proposed amendments and qualifications • Compulsory Enterprise Questionnaire (In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted). • SBD 1, 4, 6.1. • Protection of personal content: Consent • Form of Offer and Acceptance • Complete priced Bills of Quantities, including Final Summary • Certificate of Authority for Joint Ventures
3	**Other documents required for tender evaluation purposes** The tenderer must provide the following returnable documents: • A CSD Report for a contractor with valid and correct information. • A letter of good standing from the Compensation Fund or a licensed insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act 1993 (Act No. 130 of 1993)
4	**Returnable Schedules that will be used for tender evaluation purposes and be incorporated into the contract** The tenderer must complete the following returnable documents: A duly completed form of Offer and Acceptance (and any revision of prices if there are any).

5	**Only authorized signatories may sign the original and all copies of the tender offer where required.** • In the case of a ONE-PERSON CONCERN submitting a tender, this shall be clearly Stated • In the case of a **COMPANY** submitting a tender, include a copy of a **resolution by its board of directors** authorizing a director or other official of the company to sign the documents on behalf of the company. • In the case of a **CLOSE CORPORATION** submitting a tender, include a copy of a **resolution by its members** authorizing a member or other official of the corporation to sign the documents on each member's behalf. • In the case of a **PARTNERSHIP** submitting a tender, **all the partners** shall sign the documents, unless one partner or a group of partners has been authorized to sign on behalf of each partner, in which case **proof of such authorization** shall be included in the Tender. • In the case of a **JOINT VENTURE/CONSORTIUM** submitting a tender, include **a resolution of each company** of the joint venture together with a **resolution by its members** authorizing a member of the joint venture to sign the documents on behalf of the joint venture. **Accept that failure to submit proof of authorization to sign the tender shall result in the tender offer being regarded as non-responsive.**

6	**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 nonresponsive.
7	**Canvassing and obtaining of additional information by tenderers** The Tenderer shall not make any attempt either directly or indirectly to canvass any of the Employer's officials or the Employer's agent in respect of his tender, after the opening of the tenders but prior to the Employer arriving at a decision thereon. The Tenderer shall not make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders.
8	**Prohibitions on awards to persons in service of the state** The Employer is prohibited to award a tender to a person a) who is in the service of the state; or b) if that person is not a natural person, of which any director, manager, principal shareholder or stakeholder is a person in the service of the state; or c) a person who is an advisor or consultant contracted with the Department or municipal entity. **In the service of the state** means to be a) a member of: *a* any municipal council; *b* any provincial legislature; or *c* the National Assembly or the National Council of Provinces;

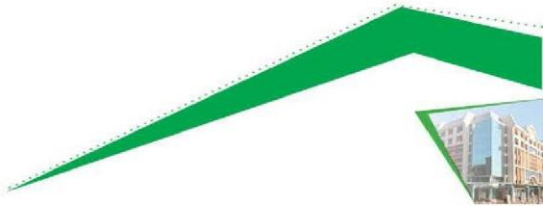
	d) a member of the board of directors of any municipal entity; *e)* an official of any Department or municipal entity; *f)* an employee of any national or provincial department; *g)* provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999); *h)* a member of the accounting authority of any national or provincial public entity; or *i)* an employee of Parliament or a provincial legislature. In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 of this procurement document must be completed.
9	**Awards to close family members of persons in the service of the state** Accept that the notes to the Employer's annual financial statements must disclose particulars of any award of more than R2000 to a person who is a spouse, child, or parent of a person in the service of the state (defined in clause 8 above), or has been in the service of the state in the previous twelve months, including *a)* the name of that person; *b)* the capacity in which that person is in the service of the state; and *c)* the amount of the award. In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 of this procurement document must be completed.
10	**Respond to requests from the tenderer** The employer will respond to requests for clarification up to **7 (seven) working days** before the tender closing time.
11	**Opening of tender submissions** Tenders will be opened immediately after the closing time for tenders
12	**Scoring quality / functionality:** Minimum combined weighted point threshold must equal (60/100 points) for further consideration of the tender

13	**Cancellation and re invitation of tenders** An organ of state may, prior to the award of the tender, cancel the tender if (a) due to changed circumstances, there is no longer a need for the services, works or goods requested; or (b) funds are no longer available to cover the total envisaged expenditure; or (c) no acceptable tenders are received. (d) Tender validity period has expired. (e) Gross irregularities in the tender processes and/or tender documents. (f) No market related offer received (after attempts of negotiation processes) Where applicable, the decision to cancel the tender will be published in the CIDB website and in the Tender Bulletin or the media in which the original tender invitation as advertised.
14	Dispute resolution mechanism will be done through the **Adjudication** route**.**
15	The department must when be acting against the tenderer or person awarded the contract on a fraudulent basis, considers the provisions of Regulation 14: The remedies provided for in Preferential Procurement Regulations 2022 do not prevent an institution from instituting remedies arising from any other prescripts or contract.
16	Where the employer terminates the contract due to default of the contractor in whole or in part, the employer may decide to: a) Refer the breach in contract to the **cidb** for investigation as a breach of the **cidb Code of Conduct** in terms of the **cidb Regulations**; or b) may impose a restriction penalty on the contractor in terms of Section 14 of the Preferential Procurement Regulations. The outcomes of such investigations in terms of both the cidb Regulations and the Preferential Procurement Regulations may prohibit the contractor from doing business with the public sector for a period not exceeding 10 years.

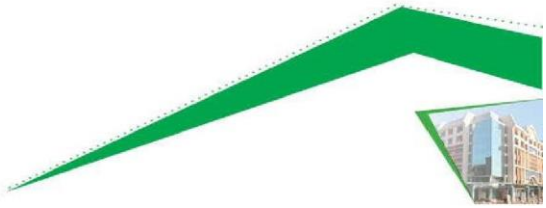
T 1.3: FUNCTIONALITY SCORING SCHEDULES

Table A1: FUNCTIONALITY CRITERIA SCORE

Functional Criteria	Sub-criteria		Requirements from Tenderers
	Description	Max Points	



COMPANY EXPERIENCE			
Demonstrated experience (past performance) in comparable projects – Construction of Clinics, Hospitals or other similar large scale Building Projects, etc **(To be determined from the Reference Form K submissions).** **Project References - 20** **Value of Projects - 50** **Total Points – 70 Points**	**Project References :**		This criterion covers the experience and knowledge that the Tenderer has with working on other construction projects that are comparable in terms of complexity, size, value and construction durations. Tenderers are to provide details on similar **Building Infrastructure projects** with the highest value that have been completed (or awarded) in the past 5 years. Tenderers MUST provide company profiles. **Tenderers MUST have Project Reference Forms (Form K) from previous employers or consultants that they have worked with or are currently working with. Details of three (3) contactable references for each project listed are to be included. For a Project Reference to be valid, a minimum score of 20 points is required. Points will only be awarded for 3 valid project references.** **The value of projects will be determined from the Project Reference Forms. At least three forms must be submitted to prove sufficient experience, but the one with the highest points will be used for scoring.**
	Project Reference: No References	0 points	
	Project Reference Forms: 3 Forms with Min scoring of 20 points required. (Highest Reference Scoring to be used.)	20 points	
	Value of Projects :		
	No Project Reference of a single project completed in last 5 years of similar value	0 points	
	Project Reference of a single project completed in last 5 years below R20 million	10 points	
	Project Reference of a single project completed in last 5 years greater than R20 million and below R30 million	20 points	
	Project Reference of a single project completed in last 5 years greater than R30 million and below R40 million	30 points	
	Project Reference of a single project completed in last 5 years greater than R40 million and below R50 million	40 points	
	Project Reference of a single project completed in last 5 years greater than R50 million	50 points	
PERSONNEL			
Qualifications, Competency and Experience of the Key staff personal that will be available to manage the execution of the project. These scores will be applied to each of the	**Qualifications :**		The Tenderers are to provide information that covers the level of qualifications, competency **(specific to the Professional Construction Manager, Site Agent and Health & Safety Officer).** Please provide copies of qualifications.
	Professional Construction Manger: Construction Manager with min NQF Level 5 certificate provided for the Built Environment	1 point	
	Professional Construction Manger: Construction Manager with NQF Level 6 certificate provided for the Built Environment	3 points	
	Professional Construction Manger: Construction Manager with NQF Level 7 (or above) certificate provided for the Built Environment	5 points	
	Site Agent / Foreman: Site Agent with Short Courses in the construction sector – Certificate of Attendance.	1 point	
Functional Criteria	**Sub-criteria**		**Requirements from Tenderers**
	Description	**Max Points**	



required individuals. **Qualifications Max -** **15 Points**		Site Agent with NQF Level 5 certificate provided for the Built Environment	3 points	
		Site Agent with NQF Level 6 (or above) certificate provided for the Built Environment	5 points	
	Health & Safety Officer (SACPCMP Registered)	Health & Safety Officer not registered with SACPCMP	0 points	
		Health & Safety Officer with relevant qualifications and registered with SACPCMP	5 points	
Experience Max – 15 Points		**Experience :**		The Tenderers are to provide information that covers the level of experience and the positions held of the key staff /personnel **(specific to the Professional Construction Manager, Site Agent and Health & Safety Officer).** Please provide copies of detailed CV's.
	Professional Construction Manger	Construction Manager with less than 5 years' experience in construction management	1 point	
		Construction Manager with more than 5 years but less than 10 years' experience in construction management	3 points	
		Construction Manager with more than 10 years' experience in construction management	5 points	
	Site Agent Foreman /	Site Agent with less than 5 years' experience on construction sites	1 point	
		Site Agent with more than 5 years but less than 10 years' experience on construction sites	3 points	
		Site Agent with more than 10 years' experience on construction sites	5 points	
	Health & Safety Officer (SACPCMP Registered)	Health & Safety Officer with less than 5 years' experience on construction sites	1 point	
		Health & Safety Officer with more than 5 years but less than 10 years' experience on construction sites	3 points	
		Health & Safety Officer with more than 10 years' experience on construction sites	5 points	
TOTAL POINTS		**Minimum point threshold must equal (60/100 points) for further consideration of the tender**	**100 points**	

PART T2 RETURNABLE DOCUMENTS

PART T2.1: LIST OF RETURNABLE DOCUMENTS

T2.1 List of Returnable Documents

The tenderer must complete the following returnable documents:

1 Returnable Schedules required for quotation evaluation purposes

- Compulsory enterprise questionnaire (In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted).
- Record of addenda issued (Only if addenda is issued)
- Certificate of authority for joint ventures (Only where the tender/ quotation is submitted by a joint venture)

2 Other documents required for quotation evaluation purposes

- Form of Offer and Acceptance
- Complete Priced Bills of Quantities & Final Summary

3 Returnable Schedules that will be incorporated into the contract

- Details of the Project Team and CV with Qualifications & Proof of Registration completed for each individual of proposed
- Schedule of Plant and Equipment
- Record of projects: current, past and on tender.
- Project References – at least 3
- SBD 1, 4, 6.1
- Declaration for Locality content and production
- Protection of personal content: Consent
- Subcontract agreement (where applicable) or intent to sub-contract as per requirements.

SBD 1

PART A

INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE DEPARTMENT OF PUBLIC WORKS & INFRASTRUCTURE					
BID NUMBER:	SCMU5-24/25-0083	CLOSING DATE:	27 AUGUST 2024	CLOSING TIME:	11H00 AM
DESCRIPTION:	**CONSTRUCTION OF CEBE CLINIC.**				

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT *(STREET ADDRESS)*
DEPARTMENT OF PUBLIC WORKS, FRONT CORNER OF QHASANA BUILDING ON THE WAY TO CIDB OFFICES LABELLED **"TENDERS"**, BHISHO.

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO		TECHNICAL ENQUIRIES MAY BE DIRECTED TO:	
CONTACT PERSON		CONTACT PERSON	Linda Reve
TELEPHONE NUMBER		TELEPHONE NUMBER	043 711 5765
FACSIMILE NUMBER		FACSIMILE NUMBER	N / A
E-MAIL ADDRESS	Supply.Chain@ecdpw.gov.za	E-MAIL ADDRESS	Linda.Reve@ecdpw.gov.za

SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE NUMBER				
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA

a) ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS/SERVICES /WORKS OFFERED?	Yes No [IF YES ENCLOSE PROOF]	b) ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	Yes, No [IF YES, COMPLETE QUESTIONNAIRE BELOW]
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS			

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	☐ YES ☐ NO
DOES THE ENTITY HAVE A BRANCH IN THE RSA?	☐ YES ☐ NO
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	☐ YES ☐ NO
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	☐ YES ☐ NO
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	☐ YES ☐ NO

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 SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.

PART B

TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.

1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED– (NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.**

1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.

1.4. **THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).**

2. TAX COMPLIANCE REQUIREMENTS

2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.

2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.

2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.

2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.

2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.

2.6 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.

2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

SIGNATURE OF BIDDER:

……

CAPACITY UNDER WHICH THIS BID IS SIGNED:

……
(Proof of authority must be submitted e.g. company resolution)

DATE:

……..……...

Compulsory Enterprise Questionnaire

A

Compulsory Enterprise questionnaire

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.

Section 1: Name of enterprise: . . . .

Section 2: VAT registration number, if any: . . . . . .

Section 3: CIDB registration number, if any: . . . .

Section 4: Particulars of sole proprietors and partners in partnerships

Name*	Identity number*	Personal income tax number*

** Complete only if sole proprietor or partnership and attach separate page if more than 3 partners*

Section 5: Particulars of companies and close corporations

Company registration number . . . .

Close corporation number . . . . Tax reference number . . . .

Section 6: The attached SBD 4 must be completed for each tender and be attached as a tender requirement.

Section 7: The attached SBD 6.1 must be completed for each tender and be attached as a requirement.

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise:

i) authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;

ii) confirms that the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004; iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;

iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and

iv) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed ..... Date .....

Name ..... Position .....

SBD 4

BIDDER'S DISCLOSURE

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[1] 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 /

[1] ***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.***

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
……
……

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[2] 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,

[2] ***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.***

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

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, BIDDERS 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 all bids:

- 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 **To be completed by the organ of state**

- The applicable preference point system for this tender is the 90/10 preference point system.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

(a) Price; and
(b) Specific goals.

1.4 **To be completed by the organ of state**

The maximum points for this bid are allocated as follows:

	POINTS
PRICE	90

SPECIFIC GOALS	10
Total points for Price and Specific Goals	**100**

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

(a) **"tender"** means a written offer in the form determined by an organ of state in response to an invitation to 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. FORMULA FOR PROCUREMENT OF GOODS AND SERVICES

3.1 POINTS AWARDED FOR PRICE

3.1.1 THE 90/10 PREFERENCE POINT SYSTEMS

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

90/10

$$= \quad (- \quad \underline{- \qquad\qquad})$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest 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 the 80/20 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of

(a) an invitation for tender for income-generating contracts, that the 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or

(b) any other invitation for tender, that the 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 the 90/10 preference point system.

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

(Note to organs of state: 90/10 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 claimed (90/10 system) (To be completed by the tenderer)
Historically Disadvantaged Individual:-			
	(a) 100% black ownership	3	
	(b) 51% to 99% black ownership	2	
	(c) Less than 51% black ownership	0	
Black women ownership:-			
	(a) 100% black women ownership	2	
	(b) 30% to 99% black women ownership	1	
	(c) Less than 30% black women ownership	0	
Black youth ownership:-			
	(a) 100% black youth ownership	2	
	(b) 30% to 99% black youth ownership	1	

	(c) Less than 30% black youth ownership	0	
Locality:-			
	Companies within the Eastern Cape	3	
	Companies outside Eastern Cape	0	

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

i) The information furnished is true and correct; ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 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 bidding 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 bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury 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 BIDDERS(S)

SURNAME & NAME: ……

DATE: ……...

ADDRESS: ……...

PROOF OF REGISTRATION ON THE NATIONAL TREASURY CENTRAL SUPPLIER DATABASE (CSD REPORT)

(ATTACH HERE)

VALID CIDB CERTIFICATE OF A TENDERER

(ATTACH HERE)

PROTECTION OF PERSONAL INFORMATION: CONSENT (POPIA)

The introduction of The Protection of Personal Information Act (POPIA) ensures the regulation of personal information through its entire life cycle of collection, transfer, storing and deletion. As part of its business activities, the Department of Public Works and Infrastructure obtains and requires access to personal data from a wide range of internal and external parties, including without limitation bidders who respond to requests for proposals that are published by the Department of Public Works and Infrastructure from time to time. The Department of Public Works and Infrastructure confirms that it shall process the information disclosed by Bidders for the purpose of evaluating and subsequently awarding/appointing a successful Bidder.

The Department of Public Works and Infrastructure hereby states that it does not and will never modify, amend, or alter any personal information submitted to it by a Bidder. Not unless directed to do so by an order of court, the Department of Public Works and Infrastructure does not disclose or permit the disclosure of any personal information to any Third Party without the prior written consent of the owner of the information.

Similarly, Bidders will from time-to-time access and be seized with information of a personal nature pertaining to the Department of Public Works and Infrastructure. Some of the information may because of legislative compliances be available in the public domain, whilst some is uniquely provided to bidders in pursuit of procurement or other business-related activities. In this regard, the Department of Public Works and Infrastructure requires that Bidders which receive or have access to its personal information, process any such information in a manner compliant with the requirements of the POPIA.

AGREEMENT

1. The Department of Public Works and Infrastructure and the Bidder (the Parties) agree and undertake that upon obtaining and having access to personal information relating to either of them, they shall always ensure that:
   a) They process the information only for the express purpose for which it was obtained.
   b) Information is provided only to designated and authorized personnel who require the personal information to carry out the Parties' respective obligations in terms of the Procurement processes.
   c) They will introduce, and implement all reasonable measures ensure the protection of all personal information from unauthorized access and/or use.
   d) They have taken appropriate measures to safeguard the security, integrity, and authenticity of all personal information in its possession or under its control.
   e) The Parties agree that if personal information will be processed for any other purpose other than the one for which the accessing of the information was intended, explicit written consent will be obtained prior to the execution of such reason.
   f) The Parties shall carry out regular assessments to identify all reasonably foreseeable internal and external risks to the interception of personal information in its possession or under its control and shall implement and maintain appropriate controls in mitigation of such risks.

2. The Parties agree that they will promptly return or destroy any personal data in their possession or control which belongs to the other Party once it no longer serves the purpose for which it was collected, subject

to any legal retention requirements. The information will be destroyed in such a manner that it cannot be reconstructed to its original form, linking it to any individual or organization.

3. Bidder's Obligations

a) The Bidder is required to notify the Information Officer of Department of Public Works and Infrastructure, in writing as soon as possible after it becomes aware of or suspects any loss, unauthorized access or unlawful use of any of the Department of Public Works and Infrastructure's personal information.
b) The Bidder shall, at its own cost, promptly and without delay take all necessary steps to mitigate the extent of the loss or compromise of personal data.
c) The Bidder shall be required to provide the Department of Public Works and Infrastructure with details of the persons affected by the compromise and the nature and extent of the compromise, including details of the identity (if known) of the unauthorized person who may have accessed or acquired the personal data.
d) The Bidder undertakes to cooperate with any investigation relating to security breach which is carried out by or on behalf of Department of Public Works and Infrastructure.

On behalf of the Bidder:

…….. ……
Signature Date

……. ……
Position Name of the Bidder

On behalf of the Client:

…….. ……
Signature Date

…….. ……
Position Name of Client Representative

THE CONTRACT

PART C1 AGREEMENTS AND CONTRACT DATA

PART C1.1: FORM OF OFFER AND ACCEPTANCE

AnnexC

(normative)

FORM OF OFFER AND ACCEPTANCE

Project title	**CONSTRUCTION OF CEBE CLINIC**
SCMU number	**SCMU5-24/25-0083**

OFFER

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of:

……

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

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

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

…… Rand (in words);

R ……(in figures) (or other suitable wording)

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 contractor in the conditions of contract identified in the contract data.

Signature
……
…
Name
……
.
Capacity
…… **for the tenderer**
……
.
(Name and address of organization)
Name and signature
of witness ……. ….. Date……

ACCEPTANCE

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

Part C1 Agreements and contract data, (which includes this agreement) Part C2 Pricing data Part C3 Scope of work.
Part C4 Site information and drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the returnable schedules as well as any changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this form of offer and acceptance. No amendments to or deviations from said documents are valid unless contained in this schedule.
The tenderer shall within 3 weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the employer's agent (whose details are given in the contract data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.
Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the tenderer (now contractor**)** within five working days of the date of such receipt notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.[1]

Signature
……
Name
……
Capacity
……
for the Employer
……
(Name and address of organization)
Name and signature of witness ……..……..Date ……..……..

Schedule of Deviations

1 Subject _____
Details
_____
_

2 Subject
_____

Details

_____
_

3 Subject

_____
Details

_____
_

4 Subject

_____
Details

_____
_

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

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

1
As an alternative, the following wording may be used:

Notwithstanding anything contained herein, this agreement comes into effect two working days after the submission by the employer of one fully completed original copy of this document including the schedule of deviations (if any), to a courier-to-counter delivery / counter-to-counter delivery / door-to counter delivery /door-to-door delivery /courier service (delete that which is not applicable), provided that the employer notifies the tenderer of the tracking number within 24 hours of such submission. Unless the tenderer (now contractor) within seven working days of the date of such submission 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*

Province of the
EASTERN CAPE
PUBLIC WORKS & INFRASTRUCTURE

A

RECORD OF ADDENDA TO BID DOCUMENTS

PROJECT TITLE	**CONSTRUCTION OF CEBE CLINIC**
SCMU NUMBER	**SCMU5-24/25-0083**

I / We confirm that the following communications received from the Department of Public Works before the submission of this tender offer, amending the tender documents, have been taken into account in this bid offer: (Attach additional pages if more space is required)

Item	Date	Title or Details	No. of Pages
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Attach additional pages if more space is required.

Signed _____ Date _____

Name Position

_____

_____ Tenderer

B

PROPOSED AMENDMENTS AND QUALIFICATIONS

The Tenderer should record any deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such deviations and qualifications in a covering letter to his tender and reference such letter in this schedule.

The Tenderer's attention is drawn to clause 5.8 of SANS 10845-3 regarding the employer's handling of material deviations and qualifications.

PROJECT TITLE	**CONSTRUCTION OF CEBE CLINIC**
SCMU NUMBER	**SCMU5-24/25-0083**

Page	Clause /Item	Proposal

The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the tenderer are within my personal knowledge and are to the best of my knowledge both true and correct

Signed ---------- Date ----------

Name ---------- Position ----------

Enterprise name ----------

C

RESOLUTION FOR SIGNATORY

CERTIFICATE OF AUTHORITY FOR SIGNATORY

Signatory for companies shall confirm their authority hereto by attaching a duly signed and dated copy of the relevant resolution of the board of directors to this form or on company letter head.

An example is given below:

"By resolution of the board of directors passed at a meeting held on _____

Mr/Ms _____ , whose signature appears below, has been duly authorised to

sign all documents in connection with the tender for Contract No._____

and any Contract which may arise there from on behalf of (Block Capitals) ____

SIGNED ON BEHALF OF THE COMPANY: _____

IN HIS/HER CAPACITY AS: _____

DATE: _____

SIGNATURE OF SIGNATORY: _____

WITNESSES:

If you cannot complete this form, attach a separate sheet (in a company letter head, project specific and signed by all directors):

DIRECTOR (NAMES)		SIGNATURE	
DIRECTOR (NAMES)		SIGNATURE	
DIRECTOR (NAMES)		SIGNATURE	
DIRECTOR (NAMES)		SIGNATURE	
DIRECTOR (NAMES)		SIGNATURE	
DIRECTOR (NAMES)		SIGNATURE	

D

CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

This Returnable Schedule is to be completed by joint ventures.

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorize Mr/Ms . . . ., authorized signatory of the company . . . . , acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

PROJECT TITLE	**CONSTRUCTION OF CEBE CLINIC**
SCMU NUMBER	**SCMU5-24/25-0083**

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner: ……		Signature. . ……... . . . . . . Name …….... Designation……
……		Signature. . ……... . . . . . . Name …….... Designation……
……		Signature. . ……... . . . . . . Name …….... Designation……
……		Signature. . ……... . . . . . . Name …….... Designation……

E

SCHEDULE OF PROPOSED SUBCONTRACTORS

PROJECT TITLE	**CONSTRUCTION OF CEBE CLINIC**
SCMU NUMBER	**SCMU5-24/25-0083**

We notify you that it is our intention to employ the following Subcontractors for work in this contract. The Subcontractors will all be CIDB registered and their CIDB Registration number shall be submitted below.

If we are awarded a contract, we agree that this notification does not change the requirement for us to submit the names of proposed subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

We confirm that all subcontractors who are or to be contracted are registered on Central Supplier Database (CSD).

No.	Name and address of proposed Subcontractor	Nature and extent of work	Year completed	Value	Contact details
1					
2					

3					
4					
5					

The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the tenderer are within my personal knowledge and are to the best of my knowledge both true and correct

Signed ---------- Date ----------

Name ---------- Position ----------

Enterprise name ----------

F

CAPACITY OF THE BIDDER

PROJECT TITLE	**CONSTRUCTION OF CEBE CLINIC**
SCMU NUMBER	**SCMU5-24/25-0083**

WORK CAPACITY: (The Bidder is requested to furnish the following capacity particulars and to attach additional pages if more space is required. Failure to furnish the particulars may result in the Bid being disregarded.)

Artisans and Employees: (Artisans and Employees to be, or are ,employed for this project)

Quantity / No. of Resources	Categories of Employee - Key Personnel (part of Business Enterprise)	Professional Registration No.	Date of Employment
	Construction Project Manager		
	Site Agent		
	Foreman		
	Quality Control & Safety Officer-Construction Supervisor		
	Artisans		
	Unskilled employees		
	Others		

The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the tenderer are within my personal knowledge and are to the best of my knowledge both true and correct.

Signed:	……	**Date**	……
Name:	……	**Position**	……
Enterprise Name: ……			

G

RELEVANT PROJECT EXPERIENCE – COMPLETED PROJECTS

Tenderers must submit a max one-page description of at least three projects successfully completed.

Attach a Completion Certificate for each of the project provided.

The description of each project must include the following information:

1. Essential introductory information:
   1.1. Name of project.
   1.2. Name of client.
   1.3. Contact details of client.
   1.4. Contact details (including telephone numbers and email addresses) of currently contactable references.
   1.5. The period during which the project was performed, and also, if this is different, the period during which the tenderer's team members were contracted.
   1.6. Cost of works and/or contract value (making it clear in broad terms what this cost/value purchased, and to what extent (if any) this cost/value was part of a larger project budget or programme budget).

NO.	NAME OF PROJECT.	NAME OF CLIENT.	CONTACT DETAILS OF CLIENT.	PROJECT VALUE	DATE COMPLETED
1					
2					
3					

If there are more projects, attach a separate page to address this issue (the above table is just for reference purposes).

The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the tenderer are within my personal knowledge and are to the best of my knowledge both true and correct.

Signed…….. Date……..

Name……. Position……

Enterprise name……..……..

H

RELEVANT PROJECT EXPERIENCE – CURRENT PROJECTS

Tenderers must submit a max one-page description of at least three projects under construction/ on hold/ just handed over/ towards completion (if they exist). **Attach an Appointment letter for each of the project provided.**

The description of each project must include the following information:

2. Essential introductory information:
   2.1. Name of project.
   2.2. Name of client.
   2.3. Contact details of client.
   2.4. Contact details (including telephone numbers and email addresses) of currently contactable references.
   2.5. The period during which the project was performed, and if this is different, the period during which the tenderer's team members were contracted.
   2.6. Cost of works and/or contract value (making it clear in broad terms what this cost/value purchased, and to what extent (if any) this cost/value was part of a larger project budget or programme budget).

NO.		NAME OF PROJECT.	NAME OF CLIENT.	CONTACT DETAILS OF CLIENT.	PROJECT VALUE	STAGE OF PROJECT
1						
2						
3						

Attach a separate page to address this issue (the above table is just for reference purposes).

The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the tenderer are within my personal knowledge and are to the best of my knowledge both true and correct.

Signed ---------- Date ----------

Name ---------- Position ----------

Enterprise name ----------

I

OTHER OFFERS SUBMITTED AT TIME OF THIS TENDER FOR WHICH RESULTS ARE PENDING (if they exist)

(Any other client's tender must also be included)

BID NO. / PROJECT NUMBER	PROJECT NAME	CLIENT NAME & CONTACT NO.	VALUE TENDERED IN RANDS	DATE SUBMITTED	CONTACT DETAILS (CLIENT)
1					
2					
3					
4					

Signed ---------- Date ----------

Name ---------- Position ----------

Enterprise name ----------

If there are more projects, attach a separate page to address this issue (the above table is just for reference purpose

J

SCHEDULE OF TENDERER'S LITIGATION HISTORY

The tenderer shall list below details of any litigation with which the tenderer (including its directors, shareholders or other senior members in previous companies) has been involved with any organ of state or state department within the last ten years. The details must include the year, the litigating parties, the subject matter of the dispute, the value of any award or estimated award if the litigation is current and in whose favour the award, if any, was made.

NO.	NAME OF CLIENT.	OTHER LITIGATING PARTY	BRIEF DETAILS OF DISPUTE	PROJECT VALUE	DATE RESOLVED OR STATUS OF LITIGATION
1					
2					
3					
4					

Signed ---------- Date ----------

Name ---------- Position ----------

Enterprise name

K

Project Reference Forms – 1

Project title:	**CONSTRUCTION OF CEBE CLINIC**
Project Number:	**SCMU5-24/25-0083**

NOTE: This returnable document must be completed by the person who was the Engineer/Project Manager on a project of similar value and complexity that was completed successfully by the tenderer.

I, _____ (name and surname) of _____ (company name) declare that I was the Project Manager on the following building construction project successfully executed by _____ (name of tenderer): Project name: _____

Project location: _____

Construction period: _____ Completion date: _____

Contract value: _____

A. Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting "Yes" in the relevant box below:

Key Performance Indicators	Very Poor 1	Poor 2	Fair 3	Good 4	Excellent 5	Total
1. Project performance / time management / programming						
2. Quality of workmanship						
3. Resources: Personnel						
4. Resources: Plant						
5. Financial management / payment of subcontractors / cash flow, etc						
TOTAL (A minimum score of 20 points to be considered as a valid Project Reference)						

B. Would you consider / recommend this tenderer again:

YES	NO

C. Any other comments:

_____

D. Contact Details:

Cell phone: _____ Fax: _____

E-mail: _____

Thus signed at _____ on this _____ day of _____ 2024.

_____

Signature of principal agent

COMPANY STAMP

NOTE:

If reference cannot be verified due to the inability to get hold of the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points. It is the responsibility of the tenderer to put referees who are reachable.

_____

Name of Tenderer

_____ _____

Signature of Tenderer Date

K

Project Reference Forms - 2

Project title:	**CONSTRUCTION OF CEBE CLINIC**
Project Number:	**SCMU5-24/25-0083**

NOTE: This returnable document must be completed by the person who was the Engineer/Project Manager on a project of similar value and complexity that was completed successfully by the tenderer.

I, _____ (name and surname) of _____ (company name) declare that I was the Project Manager on the following building construction project successfully executed by _____ (name of tenderer): Project name: _____

Project location: _____

Construction period: _____ Completion date: _____

Contract value: _____

A. Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting "Yes" in the relevant box below:

Key Performance Indicators	Very Poor 1	Poor 2	Fair 3	Good 4	Excellent 5	Total
1. Project performance / time management / programming						
2. Quality of workmanship						
3. Resources: Personnel						
4. Resources: Plant						
5. Financial management / payment of subcontractors / cash flow, etc.						
TOTAL (A minimum score of 20 points to be considered as a valid Project Reference)						

B. Would you consider / recommend this tenderer again:

YES	NO

C. Any other comments:

_____
_____

D. Contact Details :

Cellphone: _____ Fax: _____

E-mail: _____

Thus signed at _____ on this _____ day of _____ 2024.

_____
Signature of principal agent

COMPANY STAMP

NOTE:

If reference cannot be verified due to the inability to get hold of the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points. It is the responsibility of the tenderer to put referees who are reachable.

_____
Name of Tenderer

_____ _____
Signature of Tenderer Date

K

Project Reference Forms - 3

Project title:	**CONSTRUCTION OF CEBE CLINIC**
Project Number:	**SCMU5-24/25-0083**

NOTE: This returnable document must be completed by the person who was the Engineer/Project Manager on a project of similar value and complexity that was completed successfully by the tenderer.

I, _____ (name and surname) of _____ (company name) declare that I was the Project Manager on the following building construction project successfully executed by _____ (name of tenderer): Project name: _____

Project location: _____

Construction period: _____ Completion date: _____

Contract value: _____

A. Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting "Yes" in the relevant box below:

Key Performance Indicators	Very Poor 1	Poor 2	Fair 3	Good 4	Excellent 5	Total
1. Project performance / time management / programming						
2. Quality of workmanship						
3. Resources: Personnel						
4. Resources: Plant						
5. Financial management / payment of subcontractors / cash flow, etc.						
TOTAL (A minimum score of 20 points to be considered as a valid Project Reference)						

B. Would you consider / recommend this tenderer again:

YES	NO

C. Any other comments:

_____

_____

D. Contact Details :

Cellphone: _____ Fax: _____

E-mail: _____

Thus signed at _____ on this _____ day of _____ 2024.

_____
Signature of principal agent

COMPANY STAMP

NOTE:

If reference cannot be verified due to the inability to get hold of the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points. It is the responsibility of the tenderer to put referees who are reachable.

_____
Name of Tenderer

_____ _____
Signature of Tenderer Date

L

BASELINE RISK ASSESSMENT

PROJECT TITLE	**CONSTRUCTION OF CEBE CLINIC**
SCMU NUMBER	**SCMU5-24/25-0083**
PLEASE NOTE THAT THIS IS A BASELINE RISK ASSESSMENT AND NOT A DETAILED RISK ASSESSMENT OF ALL ANTICIPATED ACTIVITIES ON SITE	

Activity	Risk to Safety	Risk to Health	Risk to Environmental	Risk to Public Safety	Control Measures
Brickwork	Physical injury, Fatality				PPE, Use of Scaffolding
Roofing	Physical injury, Fatality				PPE, Use of Scaffolding
Plastering	Skin irritation, temporary blindness	Long term breathing problems	Ground contamination	Dust inhalation	Use of PPE, guarding off site on work areas
Paintwork	Skin irritation, temporary blindness	Long term breathing problems	Ground contamination	Air pollution	Use of PPE, guarding off site on work areas
Construction activities / demolition	Temporary deafness	Permanent deafness	Noise pollution	Noise pollution	Guarding / barricading of site
Moving machines	Driven over by machines	Injury to workers	Fuel spillage	Driven over by machines	Signage and slow driving

You can list all activities on a separate page to address this issue (the above table is just for reference purposes).

M

EASTERN CAPE INFRASTRUCTURE INPUT MATERIAL

PROJECT NAME	**CONSTRUCTION OF CEBE CLINIC**
PROJECT DESCRIPTION (SCOPE)	**CONSTRUCTION OF NEW CEBE CLINIC WITH OUTBUILDINGS, GUARDHOUSE, HEALTH PROFESSIONAL ACCOMODATION, EMS BASE AND RELATED CIVIL, ELECTRICAL & MECHANICAL WORKS.**
SCMU NUMBER	**SCMU5-24/25-0083**
CONTRACTOR NAME:	

1. Below is the list of building material which must be sourced from Eastern Cape based suppliers, manufacturers or accredited agents.
2. On monthly basis, the contractor will report the purchasing of any of this material.
3. The report will then be communicated to PT & OTP on quarterly basis or in whichever intervals, as prescribed by PT & OTP.

A. BUILDING MATERIAL LISTS– BUILDING RELATED STRUCTURES (NEW, REFURBISHMENTS & RENOVATIONS)

ITEM	BUILDING MATERIAL (TYPE)	ESTIMATE AMOUNT (Rands)
1	**Foundations:**	
1.1	Concrete	
1.2	Reinforcement	
1.3	Brickwork	
2	**Superstructure:**	
2.1	Brickwork	
2.2	Brickwork Sundries	
2.3	Lintels (precast concrete)	

2.4	Roof Structure (Steel Structures)	
2.5	Roof Covering (Steel)	

2.6	Rainwater Goods	
2.7	Doors (Timber)	
2.8	Doors Frames (Steel)	
2.9	Aluminium windows	
2.10	Aluminium doors	
3	**Internal Finishes:**	
3.1	Floor Finishes (Tiling and screeds)	
3.2	Tile Skirting's	
3.3	Floor finishes and skirting's (Vinyl and screeds)	
3.4	Internal Plaster	
3.5	Internal Wall Finishes	
3.6	Ceilings	
3.7	Ceiling Finishes (Painting)	
3.8	Cornices	
3.9	Waterproofing products	

4	**External Finishes:**	
4.1	Bricks (all kinds)	
4.2	External Plaster	
4.3	External Wall Finishes (Painting)	
5	**Fittings and Furniture:**	
5.1	Ironmongery	
5.2	Sanitaryware	
5.3	Stainless Steel Fittings	
5.4	Blinds	
6	**Services:**	
6.1	Plumbing Pipes	
6.2	Plumbing Fittings	
7	**External Works:**	
7.1	Paving	
7.2	Kerbing	
7.3	Fencing	
7.4	Water pipes	
7.5	Sewer pipes	

	TOTAL	

B. CONFIRMATION

1. I……(***Contractor name***) acknowledge and confirm the above mentioned material will be sourced in the Eastern Cape Province, from Eastern Cape based material suppliers and manufacturers.
2. I confirm that on monthly basis I will produce a proof of purchase of this material used or to be used, either in the form of delivery notes, tax invoices or any formal document which verifies that the material or goods were sourced from an Eastern Cape based supplier or manufacturer.

----------	**----------**	**----------**
Representative of the Contractor (Name)	***Signature***	***Date***

PART C1.2: CONTRACT DATA

The Joint Building Contracts Committee® - NPC
CONTRACT DATA
For use by ORGANS OF STATE and other PUBLIC SECTOR BODIES
Principal Building Agreement

Edition 6.2 - May 2018

A PROJECT INFORMATION

A1.0 Works [1.1]

Project name	**CONSTRUCTION OF CEBE CLINIC**
Reference number	**SCMU5-24/25-0083**
Works description	Refer to document C3 – Scope of Work

A2.0 Site [1.1]

Erf / stand number	Refer to document C4 – Site Information
Township / Suburb	Centane in the Eastern Cape Province
Site address	Refer to document C4 – Site Information
Local authority	Mnquma Local Municipality, in the Amathole District Municipality

A3.0 Employer [1.1]

Official Name of Organ of State / Public Sector Body	Eastern Cape Department of Public Works and Infrastructure		
Business registration number	N/A		
VAT/GST number	N/A		
Country	South Africa		
Employer's representative: Name	Ms. Linda Reve		
E-mail	Linda.Reve@ecdpw.gov.za		
Mobile number	060 979 4116	Telephone number	043 711 5765

Postal address	Independence Avenue, Qhasana Building, Bhisho	Postal Code	5605
Physical address	Independence Avenue, Qhasana Building, Bhisho	Postal Code	5605

A4.0 Principal Agent [1.1]

Name	Intsika Architects (Pty) Ltd		
Legal entity of above		Contact person	Mr Rob Gillard
Practice number		Telephone number	043 748 2949
		Mobile number	082 872 8748
Country	South Africa	E-mail	rob@intsika.com
Postal address	73 Bonza Bay Road, Beacon Bay, East London	Postal Code	5241
Physical address	73 Bonza Bay Road, Beacon Bay, East London	Postal Code	5241

A5.0 Agent [1.1]

Discipline	Architect			
Name	Intsika Architects (Pty) Ltd			
Legal entity of above		Contact person	Mr Rob Gillard	
Practice number		Telephone number	043 748 2949	
		Mobile number	082 872 8748	
Country	South Africa	E-mail	rob@intsika.com	
Postal address	73 Bonza Bay Road, Beacon Bay, East London		Postal Code	5241
Physical address	73 Bonza Bay Road, Beacon Bay, East London		Postal Code	5241

A6.0 Agent [1.1]

Discipline	Quantity Surveyor			
Name	Bisiwe Van Niekerk Inc			
Legal entity of above		Contact person	Mr Darren Edwards	
Practice number		Telephone number	043 721 1043	
		Mobile number	083 651 7886	
Country	South Africa	E-mail	darren@bisiwe.co.za	
Postal address	PO Box 15546, Beacon Bay, East London		Postal Code	5205
Physical address	Office 11F Beacon Park, 21 Pell Street, Beacon Bay		Postal Code	5241

A7.0 Agent [1.1]

Discipline	Civil / Structural Engineers			
Name	Lerumo Properties (Pty) Ltd			
Legal entity of above		Contact person	Kuhle Mthonjeni	
Practice number		Telephone number	087 152 0920	
		Mobile number	082 848 6962	
Country	South Africa	E-mail	kuhlem@lerumoprop.co.za	
Postal address	Office 30 Berea Mall, 1 Chamberlain Road, East London		Postal Code	5247
Physical address	Office 30 Berea Mall, 1 Chamberlain Road, East London		Postal Code	5247

A8.0 Agent [1.1]

Discipline	Electrical Engineers		
Name	Greenworld Investments (PTY)Ltd		
Legal entity of above		Contact person	Thabang Mabeta
Practice number		Telephone number	083 596 8600
		Mobile number	072 5246 262

Country	South Africa	E-mail	greenworldgroup2018@gmail.com	
Postal address	34 Harmony Road, Amalinda, East London		Postal Code	5247
Physical address	34 Harmony Road, Amalinda, East London		Postal Code	5247

A9.0 Agent [1.1]

Discipline	Mechanical Engineer			
Name	Gatyeni Consulting Engineers			
Legal entity of above		Contact person	Lwandiso Dutywa	
Practice number		Telephone number	082 739 0426	
		Mobile number	064 8486 293	
Country	South Africa	E-mail	lwandiso@gatyeni.co.za	
Postal address	36 Sunningdale Pl, Sunnyridge, East London		Postal Code	5201
Physical address	36 Sunningdale Pl, Sunnyridge, East London, 5201		Postal Code	5201

A10.0 Agent [1.1]

Discipline	Health & Safety Agent			
Name	Lumcus Training & Consulting Pty Ltd			
Legal entity of above		Contact person	Liza White	
Practice number		Telephone number	043 1100198	
		Mobile number	0823072592	
Country	South Africa	E-mail	liza@lumcus.co.za	
Postal address	PO Box 210, Kidds Beach		Postal Code	5264
Physical address	Kidds Beach		Postal Code	5264

A11.0 Agent [1.1]

Discipline	EIA Consultant

Name	Terreco Environmental			
Legal entity of above		Contact person	Mitchell Jarrett:	
Practice number		Telephone number	043 721 1502	
		Mobile number	083 5600 486	
Country		E-mail	jarrettm@terreco.co.za	
Postal address	123 Western Ave, Ocean View, East London		Postal Code	5217
Physical address	123 Western Ave, Ocean View, East London		Postal Code	5217

A12.0 Agent [1.1]

Discipline	Geotechnical			
Name	Lerumo Properties (PTY)Ltd			
Legal entity of above		Contact person	087 152 0920	
Practice number		Telephone number		
		Mobile number		
Country		E-mail		
Postal address	Office 30 Berea Mall, 1 Chamberlain Road, East London		Postal Code	5247
Physical address	Office 30 Berea Mall, 1 Chamberlain Road, East London		Postal Code	5247

B CONTRACT INFORMATION

B 1.0

Bills of quantities: System/Method of measurement	**Standard System of Measuring Building Work (Sixth Edition) as amended**

Law, regulations and notices [2.0]

Law applicable to the **works**, state country [2.1]	**Republic of South Africa**

Offer and acceptance [3.0]

Currency applicable to this **agreement** [3.2]	**South African Rand**

Definitions [1.1]

B 2.0

B 3.0

B 4.0 Documents [5.0]

The original signed **agreement** is to be held by the **principal agent** [5.2], if not, indicate by whom	**Employer**
Number of copies of **construction information** issued to the **contractor** at no cost [5.6]	**Three (3)**

Documents comprising the **agreement**	Page numbers
The **JBCC®** Principal Building Agreement, Edition 6.2 May 2018	1 to 30
The JBCC® Principal Building Agreement - Contract Data for Organs of State and other Public Sector Bodies, Edition 6.2 May 2018	1 to 18

The JBCC® General Preliminaries for use with the JBCC® Principal Building Agreement, Edition 6.2 May 2018	1 to 30

Contract drawings – description	Number	Revision	Date
Architectural Tender Drawings & Schedules (As Attached with Tender)			
Civil Tender Drawings (As Attached with Tender)			
Structural Tender Drawings (As Attached with Tender)			

B 5.0 Employer's Agents [6.0]

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

Principal agent's and **agents'** interest or involvement in the **works** other than a professional interest [6.3]
None

B 6.0 Insurances [10.0]

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

and/or

Insurances by **Contractor**	Amount	

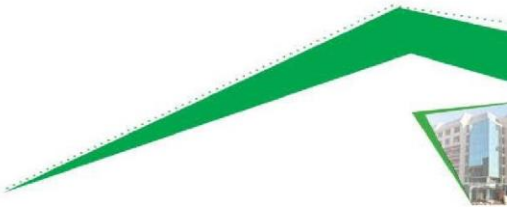
Yes / No:	Yes	including tax	Deductible amount including tax

	New **works** [10.1.1] (**contract sum** or amount)	To the minimum value of the contract sum +10%	With a deductable not exceding 5% of each and every claim
or	**Works** with **practical completion** in **sections** [10.2] (**contract sum** or amount)	N/A	N/A
or	**Works** with alterations and additions [10.3] (reinstatement value of existing structures with or including new **works**)	N/A	N/A
	Direct contractors [10.1.1; 10.2] where applicable, to be included in the contract works insurance	N/A	
	Free issue [10.1.1; 10.2] where applicable, to be included in the contract works insurance	N/A	
	Escalation, professional fees and reinstatement costs if not included above	N/A	
Total of the above contract works insurance amount		To the minimum value of the contract sum + 10%	
Supplementary insurance [10.1.2; 10.2]		R60 million	With a deductible not exceeding 5% of each and every claim
Public liability insurance [10.1.3; 10.2]		R5 million	
Removal of lateral support insurance [10.1.4; 10.2]		No	
Other insurances [10.1.5]			
Yes/ No?	No	If yes, description 1	
Hi Risk Insurance [10.1.5.1]			
Yes/ No?	No	If yes, description 2	

B 7.0 Obligations of the employer [12.1]

Existing premises will be in use and occupied [12.1.2]		**Yes / No?**	**No**
If yes, description			
Restriction of working hours [12.1.2]		**Yes / No?**	**No**
If yes, description			
Natural features and known services to be preserved by the contractor [12.1.3]		**Yes / No?**	**No**
If yes, description			

Province of the
EASTERN CAPE
PUBLIC WORKS & INFRASTRUCTURE



Restrictions to the site or areas that the contractor may not occupy [12.1.4]	**Yes / No?**	**No**
If yes, description		
Supply of free issue [12.1.10]	Yes / No?	**No**
If yes, description		

B 8.0 Nominated subcontractors [14.0]

Yes / No?	**No**	**If yes, description of specialisation**
Specialisation 1		N/A
Specialisation 2		
Specialisation 3		
Specialisation 4		
Specialisation 5		
Specialisation 6		
Specialisation 7		
Specialisation 8		

B 9.0 Selected subcontractors [15.0]

Yes / No?	**Yes**	**If yes, description of specialisation**
Specialisation 1		Electrical Installations
Specialisation 2		Mechanical Installations
Specialisation 3		Solar Electrical Installations
Specialization 4		Borehole Installation
Specialization 5		Landscaping

Specialisation 6	Joinery Fittings
Specialisation 7	Signage
Specialisation 8	
Specialisation 9	

B 10.0 Direct contractors [16.0]

Yes / No?	**No**	**If yes, description of extent of work**
Extent of work [12.1.11]		N/A
Extent of work [12.1.11]		
Extent of work [12.1.11]		
Extent of work [12.1.11]		
Extent of work [12.1.11]		

B 11.0 Description of sections [20.1]

Section 1	N/A
Section 2	N/A
Section 3	N/A
Section 4	N/A
Section 5	N/A
Section 6	N/A
Section 7	N/A

B 12.0 Possession of site [12.1.5], practical completion [19.0; 20.0] and penalty [24.0]

Practical completion for the works as a whole	Intended date of possession of the site Refer B17.0 [12.1.5; 12.2.22]	Period for inspection by the principal agent [19.3]	The date for practical completion shall be the period as indicated below from the date of possession of the site by the contractor [12.2.7; 24.1]	Penalty for late completion [24.1]
		working days	Period in months	Penalty amount per calendar day (excl. tax)
		10 Working days	18 **(Calendar) Project as whole**	1.75 **cents/R100 of Contract amount**

or where **sections** are applicable

Practical completion of a section of the works	Intended date of possession of the site Refer B17.0 [12.1.5; 12.2.22]	Period for inspection by the principal agent [19.3]	The date for practical completion shall be the period as indicated below from the date of possession of the site by the contractor [12.2.7; 24.1]	Penalty for late completion [24.1]
		working days	Period in months	Penalty amount per calendar day (excl. tax)
Section 1				
Section 2				
Section 3				
Section 4				
Section 5				
Section 6				
Section 7				
Section 8				
Remainder of the				

Criteria to achieve **practical completion** not covered in the definition of **practical completion**

B 13.0 Defects liability period [21.0]

Extended defects liability period: Refer B17.0 [21.13]	**Yes / No?**	**Yes**
If yes, description of applicable elements	**Electrical, Mechanical and all Equipment**	

B 14.0 Payment [25.0]

Date of month for issue of regular **payment certificates** [25.2]	**30th**		
Contract price adjustment / Cost fluctuations [25.3.4; 26.9.5]	**Yes / No?**	**Yes**	**Base date = Tender closing date**
If yes, method to calculate	**CPAP calculated with Haylett formulae based on indices as provided by StatsSA**		
Employer shall pay the **contractor** within: [25.10]	**Thirty (30) calendar days**		

B 15.0 Dispute resolution [30.0]

Adjudication [30.6.1; 30.10] Name of nominating body	**Refer to Part C1.3 Dispute Resolution Mechanism**	
Applicable rules for adjudication [30.6.2]	**Adjudication in accordance with the CIDB adjudication process**	
Arbitration [30.7.4; 30.10]	**Yes / No?**	**No**
If Yes, name of nominating body *If No, then dispute will be referred to litigation	N/A	
Applicable rules for arbitration [30.7.5]	N/A	

B 16.0 JBCC® General Preliminaries – selections

Provisional bills of quantities [B2.2]	**Yes / No?**	**No**

Availability of construction information – is the construction information complete? [B2.3]		**Yes / No?**	**Yes**
Previous work - dimensional accuracy - details of previous contract(s) [B3.1]		N/A	
Previous work - **defects** - details of previous contract(s) [B3.2]		N/A	
Inspection of adjoining properties - details [B3.3]		N/A	
Handover of **site** in stages - specific requirements [B4.1]		Refer to B11 (Contract Data)	
Enclosure of the **works** - specific requirements [B4.2]		Hoarding to working areas.	
Geotechnical and other investigations - specific requirements [B4.3]		Yes – Refer to Tender Document	
Existing premises occupied - details [B4.5]		Working Areas will not be occupied	
Services - known - specific requirements [B4.6]		No	
Water [B8.1]	By **contractor**	**Yes / No?**	**Yes**
	By **employer**	**Yes / No?**	**No**
	By **employer** – metered	**Yes / No?**	**No**
Electricity [B8.2]	By **contractor**	**Yes / No?**	**Yes**
	By **employer**	**Yes / No?**	**No**
	By **employer** – metered	**Yes / No?**	**No**
Ablution and welfare facilities [B8.3]	By **contractor**	**Yes / No?**	**Yes**
	By **employer**	**Yes / No?**	**No**
Communication facilities - specific requirements [B8.4]		No specific requirements	

Protection of the works - specific requirements [B11.1]	No specific requirements

Protection / isolation of existing works and works occupied in sections - specific requirements [B11.2]	No specific requirements
Disturbance - specific requirements [B11.5]	No specific requirements
Environmental disturbance - specific requirements [B11.6]	No specific requirements

B 17.0 Changes made to JBCC® documentation

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

Definitions

AGREEMENT: The completed Form of Offer and Acceptance, the completed **JBCC®** Principal Building Agreement and **JBCC® 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 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 DATA FOR ORGANS OF STATE AND OTHER PUBLIC SECTOR BODIES: The document listing the Organs of State and other Public Sector Bodies' requirements and the project specific information

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), calculated as simple interest, in respect of debts owing to the State, and will be the rate as determined by the Minister of Justice and Constitutional Development from time to time 80(1)(b) of the Public Finance Management Act, 1999 (Act No 1 of 1999), calculated as simple interest, in respect of debts owing by the State

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**

3.0 Offer and Acceptance

Amend 3.3 to read as follows:
This **agreement** shall come into force on the date as stated on the Form of Offer and 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]

6.0 Employer's Agents

Add the following as 6.7:
In terms of the clauses listed hereunder, the **employer** has retained its authority and has not given a mandate to the **principal agent**. The **employer** shall sign all documents in relation to clauses 4.2, 14.1.2,14.1.4, 14.4.1, 14.6, 23.1, 23.2, 23.3, 23.7, 23.8, 26.1, 26.7, 26.12 and 28.4

9.0 Indemnities

9.2.7: Add the following to the end of the first sentence: "…. due to no fault of the **contractor**"

10.0 Insurances

Add the following as 10.1.5.1:

Hi 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 do line formation the following will apply:

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

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 possession of the site, but before commencement of the **works**, submit to the **employer** proof of such insurance policy, if requested to do so

10.1.5.1.4

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

11.0 Securities

Amend 11.10 to read as follows:

There shall be no lien or right of retention held by any **contractor** in respect of the works executed on **site**

12.0 Obligations of the Parties

Amend 12.1.5 to read as follows:

Give possession of the **site** to the **contractor** within ten (10) **working days** of the contractor complying with the terms of 12.2.22

12.2.2: Not applicable

Add the following as 12.2.22:

Within fifteen (15) **working days** of the date of the **agreement** 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)

19.0 Practical Completion

19.5: Delete the words "subject to the **contractor's** lien or right of continuing possession of the **works** where this has not been waived"

21.0 Defects Liability Period and Final Completion

Add the following as 21.13:

The ninety (90) cal**endar days de**fects liability period for the **works** [21.1] is replaced with a period of three hundred and sixty-five (365) **calendar days** in respect of the listed applicable elements

25.0 Payment

25.7.5: Not applicable

25.10: Delete the words "and/or **compensatory interest**"

25.14.2: Not applicable

27.0 Recovery of Expense and/or Loss

27.1.5: Not applicable

29.0 Termination

Add the following after 29.1.3: or where …

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

29.1.5: The **contractor** has engaged in corrupt or fraudulent practices in competing for or in executing the contract

C TENDERER'S SELECTIONS

Guarantee for construction: Select Option A or B		**Option:**	
Option A	**Payment reduction of 10% of the value certified in the payment certificate**		
Option B	**Fixed construction guarantee of 5% of the contract sum and a payment reduction of 5% of the value certified in the payment certificate**		
Guarantee for payment by **employer** [11.5.1; 11.10]		Not Applicable	
Advance payment, subject to a **guarantee for advance payment** [11.2.2; 11.3]		Not Applicable	

C 1.0 Security [11.0]

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

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

C 3.0 Payment of preliminaries [25.0]

Contractor's selection: Select Option A or B	**Option:**	
Where the contractor does not select an option, Option A shall apply		

Payment methods

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

Lump sum contract

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

C 4.0 Adjustment of preliminaries [26.9.4]

Contractor's selection: Select Option A or B	**Option:**	

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

Provision of particulars

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

Option A	An allocation of the **preliminaries** amounts into Fixed, Value-related and Time-related amounts as defined for adjustment method Option A below, within fifteen (15) **working days** of the date of acceptance of the tender

Option B	A detailed breakdown of the preliminaries amounts within fifteen (15) working **days of** possession of the site. Such breakdown shall include, inter alia, the administrative and supervisory staff, the use of **construction equipment**, establishment and disestablishment charges, insurances and guarantees, all in terms of the **programme**

Adjustment Methods

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

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

Failure to provide particulars within the period stated

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

Lump sum contract

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

PART C1.3: DISPUTE RESOLUTION MECHANISM

C1.3 CIDB ADJUDICATOR'S AGREEMENT

This agreement is made on the . . . . day of . . . . between:. . . . .
. . . . (name of company / organization) of . . . .
. . . .
. . . . (address) and. . . . .
(name of company / organization) of . . . .
. . . .
. . . (address) (the Parties) and. . . . .
(name) of . . . .
. . . .
. . . . (address) (the Adjudicator).
Disputes or differences may arise/have arisen* between the Parties under a Contract dated . . . . .
. . . and known as. . . . .
. . . . . . and these disputes or differences shall be/have been* referred to adjudication in accordance with the CIDB Adjudication Procedure, (hereinafter called "the Procedure") and the Adjudicator may be or has been requested to act.

* Delete as necessary

IT IS NOW AGREED as follows:

1 The rights and obligations of the Adjudicator and the Parties shall be as set out in the Procedure.
2 The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the Procedure.
3 The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in accordance with the Procedure as set out in the Contract Data.
4 The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavour to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.
5 The Adjudicator shall inform the Parties if he intends to destroy the documents which have been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of either Party.

Name:	Name:	Name:
who warrants that he / she is authorized to sign for and on behalf of the first Party in the presence of	who warrants that he / she is duly authorized to sign for and of behalf of the second Party in the presence of	the Adjudicator in the presence duly

Witness	Witness:	Witness:
		Name:
Name:	Name	
Address:	Address:	Address:
SIGNED by:	SIGNED by:	SIGNED by:
Date: Date:	Date:	

Contract Data

1	The Adjudicator shall be paid at the hourly rate of R. . . . . in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
2	Adjudicator shall be reimbursed in respect of all disbursements properly made including, but ot restricted to: n Printing, reproduction and purchase of documents, drawings, maps, records and (a) photographs. (b) Telegrams, telex, faxes, and telephone calls. € Postage and similar delivery charges. (d) Travelling, hotel expenses and other similar disbursements. € Room charges. (f) Charges for legal or technical advice obtained in accordance with the Procedure.
3	The Adjudicator shall be paid an appointment fee of R . . . . . This fee shall become payable in equal amounts by each Party within ….. days of the appointment of the Adjudicator, subject to an Invoice being provided. This fee will be deducted from the final statement of any sums which shall become payable under item 1 and/or item 2 of the Contract Data. If the final statement is less than the appointment fee the balance shall be refunded to the Parties.
4	The Adjudicator is/is not* currently registered for VAT.
5	Where the Adjudicator is registered for VAT it shall be charged additionally in accordance with the rates current at the date of invoice.
6	All payments, other than the appointment fee (item 3) shall become due in 30 days after receipt of invoice, thereafter interest shall be payable at 5% per annum above the Reserve Bank base rate for every day the amount remains outstanding.

* Delete as necessary

PART C2 PRICING DATA

PART C2.1: PRICING INSTRUCTIONS

C2.1 Pricing Instructions

1 The Bills of Quantities have been drawn up in accordance with the Standard System of Measuring Building Work as amended) published and issued by the Association of South African Quantity Surveyors (Sixth Edition (Revised)), 1999. Where applicable the:

a) Civil engineering work has been drawn up in accordance with the provisions of the latest edition of SABS 1200 Standardised Specifications for Civil Engineering Works.
b) Mechanical work has been drawn up in accordance with the provisions of the latest edition of SABS 1200 Standardised Specifications for Mechanical Engineering Works.
c) Electrical work has been drawn up in accordance with the provisions of the latest edition of SABS 1200 Standardised Specifications for Electrical Engineering Works.

2 The agreement is based on the JBCC Edition 6.2 of 2018, prepared by the Joint Building
Contracts Committee, The additions, deletions and alterations to the JBCC Principal Building Agreement as well as the contract specific variables are as stated in the Contract Data. Only the headings and clause numbers for which allowance must be made in the Bills of Quantities are recited.

3 Preliminary and general requirements are based on the preliminaries for the use of JBCC Edition 6.2– May 2018. Only the headings and clause numbers for which allowance must be made in the Bills of Quantities are recited.

4 It will be assumed that prices included in the Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.stanza.org.za or www.iso.org for information on standards).

5 The drawings listed in the Scope of Works used for the setting up of these Bills of Quantities are kept by the Principal Agent or Engineer and can be viewed at any time during office hours up until the completion of the works.

6 Reference to any particular trademark, name, patent, design, type, specific origin or producer is purely to establish a standard for requirements. Products or articles of an equivalent standard may be substituted.

7 The bills of quantities forms part of and must be read and priced in conjunction with all the other documents forming part of the contract document, The Standard Conditions of Tender, Conditions of Contract, Specifications, Drawings, The document “Construction Works: Specifications:
General Specification (PW371-A) Edition 2.0” is obtainable on the Department’s website (http://www.publicworks.gov.za/ under “Consultants Guidelines”), and shall be read in conjunction with the **bills of quantities** / lump sum document and be referred to for the full descriptions of work to be done and materials to be used The document “Construction Works: Specifications: Particular

Specification (PW371-B) Edition 2.0" is issued together with the drawings and shall be read in conjunction with the drawings and the **bills of quantities** / lump sum document

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

9 The Contract Data and the standard form of contract referenced therein must be studied for the full extent and meaning of each and every clause set out in Section 1 (Preliminaries) of the Bills of Quantities

10 The Bills of Quantities is not intended for the ordering of materials. Any ordering of materials, based on the Bills of Quantities, is at the Contractor's risk.

11 The amount of the Preliminaries to be included in each monthly payment certificate shall be assessed as an amount prorated to the value of the work duly executed in the same ratio as the preliminaries bears to the total of prices excluding any contingency sum, the amount for the Preliminaries and any amount in respect of contract price adjustment provided for in the contract.

12 Where the initial contract period is extended, the monthly charge shall be calculated on the basis as set out in 11 but taking into account the revised period for completing the works.

13 The amount or items of the Preliminaries shall be adjusted to take account of the theoretical financial effect which changes in time or value (or both) have on this section. Such adjustments shall be based on adjustments in the following categories as recorded in the Bills of Quantities:

a) an amount which is not to be varied, namely Fixed (F)
b) an amount which is to be varied in proportion to the contract value, namely Value Related (V); and
c) an amount which is to be varied in proportion to the contract period as compared to the initial construction period excluding revisions to the construction period for which no adjustment to the contractor is not entitled to in terms of the contract, namely Time Related (T).

14 Where no provision is made in the Bills of Quantities to indicate which of the three categories in 13 apply or where no selection is made, the adjustments shall be based on the following breakdown:

a) 10 percent is Fixed
b) 15 percent is Value Related
c) 75 percent is Time Related

15 The adjustment of the Preliminaries shall apply notwithstanding the actual employment of resources in the execution of the works. The contract value used for the adjustment of the Preliminaries shall exclude any contingency sum, the amount for the Preliminaries and any amount in respect of contract price adjustment provided for in the contract. Adjustments in respect of any staged or sectional completion shall be prorated to the value of each section.

16 The tender price must include Value Added Tax (VAT). All rates, provisional sums, etc. in the bills of quantities must however be net (exclusive of VAT) with VAT calculated and added to the Total Value thereof in the Final Summary.

17. The Contractor shall adhere to "The national minimum wage determined by the Minister in accordance with the National Minimum Wage Act (NMWA)", and yearly pronounced increases for duration of contract.

OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

AS PER ANNEXURE 1

OHS BASELINE RISK ASSESMENTS

AS PER ANNEXURE 2

EPWP REQUIREMENTS AND SPECIFICATION

SCOPE OF WORKS IN RESPECT OF WORK RELATING TO THE EXTENDEND PUBLIC WORKS PROGRAMME (EPWP)			
Project Name	**CONSTRUCTION OF CEBE CLINIC**	SCMU Number	**SCMU5-24/25-0083**

Introductory notes:

1. The works, or parts of the works will be constructed using labour-intensive methods only in terms of this specification. The use of plant to provide such works, other than plant specifically provided for in the scope of work, is a variation to the contract. The items marked with the letters **LI** are not necessarily an exhaustive list of all the activities which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour-intensive specification in the Scope of Works.
2. Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the Scope of Works) will not be made unless they are constructed using labourintensive methods. Any unauthorised use of plant to carry out work which was to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment.

DESCRIPTION OF THE WORKS
Employer's objectives
The employer’s objectives are to deliver public infrastructure using labour-intensive methods.

Labour-intensive works
Labour-intensive works comprise the activities described in the Labour-Intensive Specification. Labourintensive works shall be constructed/maintained using local workers who are temporarily employed in terms of the scope of work.

LABOUR-INTENSIVE COMPETENCIES OF SUPERVISORY AND MANAGEMENT STAFF
Contractors shall only engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/ Supervisors at NQF level 4 “National Certificate: Supervision of Civil Engineering Construction Processes” and Site Agent/ Manager at NQF level 5 "Manage Labour-Intensive Construction Processes" or equivalent QCTO qualifications (See Appendix C). at NQF outlined in Table 1.

Emerging contractors shall have personally completed, or be registered on a skills programme for the NQF level 2-unit standard. All other site supervisory staff in the employ of emerging contractors must have completed, or be registered on a skills programme for the NQF level 2 unit standards or NQF level 4 unit standards. Table 1: Skills programme for supervisory and management staff.

Table 1: Skills programme for supervisory and management staff

Personnel	NQF level	Unit standard titles	Skills programme description
Team leader / supervisor	2	Apply Labour-Intensive Construction Systems and Techniques to Work Activities	This unit standard must be completed, and any one of these 3 unit standards
		Use Labour-Intensive Construction Methods to Construct and Maintain Roads and Storm water Drainage	
		Use Labour-Intensive Construction Methods to Construct and Maintain Water and Sanitation Services.	
		Use Labour-Intensive Construction Methods to Construct, Repair and Maintain structures	
Personnel	**NQF level**	**Unit standard titles**	**Skills programme description**
Foreman/supervisor	4	Implement LabourIntensive Construction Systems and Techniques	This unit standard must be completed, and any one of these 3 unit standards
		Use Labour-Intensive Construction Methods to Construct and Maintain Roads and Storm water Drainage	
		Use Labour-Intensive Construction Methods to Construct and Maintain Water an Sanitation Services	
		Use Labour-Intensive Construction Methods to Construct, Repair and Maintain structures	
Site Agent /Manager (i.e. the contractor's most senior representative that is resident on the site)	5	Manage Labour-Intensive Construction Processes	Skills Programme against this single unit standard

Details of these skills programmes may be obtained from the CETA ETQA manager (e-mail :gerard@ceta.co.za ,
tel: 011-265 5900)

EMPLOYMENT OF UNSKILLED AND SEMI-SKILLED WORKERS IN LABOUR INTENSIVE WORKS

1.1 Requirements for the sourcing and engagement of labour.

1.1.1 Unskilled and semi-skilled labour required for the execution of all labour-intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.

1.1.2 The rate of pay set for the SPWP per task or per day will be an acceptable rate determined by the Department of Labour.

1.1.3 Tasks established by the contractor must be such that:

a) the average worker completes 5 tasks per week in 40 hours or less; and

b) the weakest worker completes 5 tasks per week in 55 hours or less.

1.1.4 The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 1.1.3.

1.1.5 The Contractor shall, through all available community structures, inform the local community of the labour-intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:

a) where the head of the household has less than a primary school education;

b) that have less than one full time person earning an income;

c) where subsistence-agriculture is the source of income.

d) that who are not in receipt of any social security pension income

1.1.6 The Contractor shall endeavour to ensure that the expenditure on the employment of unskilled and semi-skilled workers is in the following proportions:

a) 55 % women;

b) 55% youth who are between the ages of 18 and 35;
and c) 2% on persons with disabilities.

1.2 Specific provisions pertaining to SANS 1914-5

1.2.1 Definitions

Targeted labour: Unemployed persons who are employed as local labour on the project.

1.2.2 Contract participation goals

1.2.2.1 There is no specified contract participation goal for the contract. The contract participation goal shall be measured in the performance of the contract to
enable the employment provided to targeted labour to be quantified.

1.2.2.2 The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training
programmes.

1.2.3 Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

1.2.4 Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

1.2.5 Variations to SANS 1914-5

1.2.5.1 The definition for net amount shall be amended as follows:
Financial value of the contract upon completion, exclusive of any value added tax or sales tax which the law requires the employer to pay the contractor.

1.2.5.2 The schedule referred to in 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days

of formal training provided to targeted labour.

1.3 Training of targeted labour

1.3.1 The contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise
worker health and safety.

1.3.2 The cost of the formal training of targeted labour, will be funded by the local office of the Department of Labour. This training will take place as close to the project site as practically possible. The contractor must access this training by informing the relevant regional office of the Department of Labour in writing, within 14 days of being awarded the contract, of the likely number of persons that will undergo training and when such training is required.

1.3.3 The contractor shall do nothing to dissuade targeted labour from participating in training programmes and shall take all reasonable steps to ensure that each beneficiary is provided with two days of formal training for every 22 days worked.

1.3.4 An allowance equal to 100% of the task rate or daily rate shall be paid by the contractor to workers who attend formal training, in terms of the above.

1.3.5 Proof of compliance with the above requirements must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

GENERIC LABOUR-INTENSIVE SPECIFICATION

1 Scope

This specification establishes general requirements for activities which are to be executed by hand involving the following:

a) trenches having a depth of less than 1.5 metres
b) storm water drainage
c) low-volume roads and sidewalks

2 Precedence

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this specification shall prevail.

3 Hand excavatable material

Hand excavatable material is material:

a) Granular materials:

i) whose consistency when profiled may in terms of table 1 be classified as very loose, loose, medium dense, or dense; or

ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm;

b) Cohesive materials:

i) whose consistency when profiled may in terms of table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or

ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

Note: 1) A boulder, a cobble and gravel is material with a particle size greater than 200mm, between 60 and 200mm.

2) A dynamic cone penetrometer is an instrument used to measure the in-situ shear resistance of a soil comprising a drop weight of approximately 10 kg

which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle of. 60 degrees with respect to the horizontal) into the material being used.

Table 1: Consistency of materials when profiled

GRANULAR MATERIALS		**COHESIVE MATERIALS**	
CONSISTENCY	**DESCRIPTION**	**CONSISTENCY**	**DESCRIPTION**
Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle.
Loose	Small resistance to penetration by sharp end of a geological pick.	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 3040 mm; can be moulded by fingers with some pressure.
Medium dense	Considerable resistance to penetration by sharp end of a geological pick.	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10 mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade.

Dense	Very high resistance to penetration by the sharp end of a geological pick; requires many blows for excavation.	Stiff	Can be indented by thumb-nail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers.
Very dense	High resistance to repeated blows of a geological pick.	Very stiff	Indented by thumb-nail' with difficulty; slight indentation produced by blow of a geological pick point.

4 Trench excavation

All hand excavatable material in trenches having a depth of less than 1,5 metres shall be excavated by hand.

5 Compaction of backfilling to trenches (areas not subject to traffic)

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100mm. Each layer shall be compacted using hand stampers

a) to 90% Proctor density;
b) such that in excess of 5 blows of a dynamic cone penetrometer (DCP) is required to penetrate 100 mm of the backfill, provided that backfill does not comprise more than 10% gravel of size less than 10mm and contains no isolated boulders, or
c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

6 Excavation

All hand excavatable material including topsoil classified as hand excavatable shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand.

The excavation of any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

7 Clearing and grubbing

Grass and small bushes shall be cleared by hand.

8 Shaping

All shaping shall be undertaken by hand.

9 Loading

All loading shall be done by hand, regardless of the method of haulage.

10 Haul

Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150 m.

11 Offloading

All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilised for haulage.

12 Spreading

All material shall be spread by hand.

13 Compaction

Small areas may be compacted by hand provided that the specified compaction is achieved.

14 Grassing

All grassing shall be undertaking by sprigging, sodding, or seeding by hand.

15 Stone pitching and rubble concrete masonry

All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must be collected, loaded, off loaded and placed by hand.

Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Grout shall be mixed and placed by hand.

16 Manufactured Elements

Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. In addition, the items shall be large enough so that four workers can conveniently and simultaneously acquire a proper handhold on them.

ADDITIONAL SPECIFICATION - EPWP NYS

EMPLOYMENT AND TRAINING OF YOUTH WORKERS ON THE EXPANDED PUBLIC WORKS PROGRAMME (EPWP) Infrastructure Projects: NATIONAL YOUTH SERVICE (NYS)

S.01 SCOPE

This project is part of the Expanded Public Works Programme and the National Youth Service Programme and aims to train young people and provide them with practical work experience as part of this programme. Youth aged between 18 and 35 will be recruited and trained in skills relevant to the work to be done on this project. These youth will have to be employed by the contractor as part of this project so that they can gain their work experience on these projects. The training of the youth will be coordinated and implemented by a separate service provider. This service provider will provide the contractor with a list of all the youth and the training each of these youth have received. The Contractor will be required to employ all of these youth for a minimum period of 6 months. Furthermore, the Contractor will be required to supervise these youths to ensure that the work they perform is of the required standard. If necessary, the contractor's staff will be required to assist and mentor the youth to ensure that they are able to perform the type of work they need to do to the satisfactory standards required. The contractor will not be required to employ all youth in the programme at the same time, but may rotate the youth on the project, as long as all youth are employed for the minimum duration stated earlier.

This specification contains the standard terms and conditions for workers employed in elementary occupations and trained on a Special Public Works Programme (SPWP) for the National Youth Services Programme. These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.

S.02 TERMINOLOGY AND DEFINITIONS

SL 02.01 TERMINOLOGY

(a) SPWP The Code of Good Practice for Special Public Works Programmes, which has been gazetted by the Department of Labour, and which provides for special conditions of employment for these EPWP projects. In terms of the Code of Good Practice, the workers on these projects are entitled to formal training, which will be provided by training providers appointed (and funded) by the Department of Labour. For projects of up to six months in duration, this training will cover life-skills and information about other education, training and employment opportunities.

(b) EPWP Expanded Public Works Programme, a National Programme of the government of South Africa, approved by Cabinet.

(c) UYF Umsobumvu Youth Fund.
(d) DOL Department of Labour.

SL 02.02 DEFINITIONS

(a) "Employer" means the contractor or any party employing the worker / beneficiary under the EPWP – NYS Programme.
(b) "Client"- means the Department of Public Works.
(c) worker / trainee - means any person working or training in an elementary occupation on a SPWP.

SL 03 APPLICABLE LABOUR LAWS

In line with the Expanded Public Works Programme (EPWP) policies, the Ministerial Determination, Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of labour in government Notice No. R63 of 25 January 2002, of which extracts have been reproduced below in clauses SL 04 shall apply to works described in the scope of work and which are undertaken by unskilled or semi-skilled workers. The Code of Good Practise for Employment and Conditions of Work for Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice No. R64 of 25 January 2002 shall apply to works described in the scope of work and which unskilled or semiskilled workers undertake.

SL 04 EXTRACTS FROM MINISTERIAL DETERMINATION REGARDING SPWP

SL 04.01 DEFINITIONS

a) "Department" means any department of the State, implementing agent or contractor;
b) "Employer" means any department that hires workers to work in elementary occupations on a SPWP;
c) "Worker" means any person working in an elementary occupation on a SPWP;
d) "Elementary occupation" means any occupation involving unskilled or semi-skilled work;
e) "Management" means any person employed by a department or implementing agency to administer or execute a SPWP;
f) "Task" means a fixed quantity of work;
g) "task-based work" means work in which a worker is paid a fixed rate for performing a task;
h) "task-rated worker" means a worker paid on the basis of the number of tasks completed;
i) "time-rated worker" means a worker paid on the basis of the length of time worked
j) "Service Provider" means the consultant appointed by Department to coordinate and arrange the employment and training of labour on EPWP infrastructure projects.

SL 04.02 TERMS OF WORK

(a) Workers on a SPWP are employed on a temporary basis.
(b) A worker may NOT be employed for longer than 24 months in any five-year cycle on a SPWP.
(c) Employment on a SPWP does not qualify as employment and a worker so employed does not have to register as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.

SL 04.03 NORMAL HOURS OF WORK

a) An employer may not set tasks or hours of work that require a worker to work–

(i) more than forty hours in any week

(ii) on more than five days' in any week; and

(iii) for more than eight hours on any day.

b) An employer and a worker may agree that the worker will work four days per week. The worker may then work up to ten hours per day.

c) A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks (based on a 40-hour week) allocated to him.

Every work is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.

An employer and worker may agree on longer meal breaks.

A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

SL 04.04 MEAL BREAKS

(a) A worker may not work for more than five hours without taking a meal break of at least thirty minutes' duration.

(b) An employer and worker may agree on longer meal breaks.

(c) A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

SL 04.05 SPECIAL CONDITIONS FOR SECURITY GUARDS

(a) A security guard may work up to 55 hours per week and up to eleven hours per day.

(b) A security guard who works more than ten hours per day must have a meal break of at least one-hour duration or two breaks of at least 30 minutes' duration each.

DAILY REST PERIOD

SL 04.06

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

SL 04.07 WEEKLY REST PERIOD

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

SL 04.08 WORK ON SUNDAYS AND PUBLIC HOLIDAYS

(a) A worker may only work on a Sunday or public holiday to perform emergency or security work.

(b) Work on Sundays is paid at the ordinary rate of pay.

(c) A task-rated worker who works on a public holiday must be paid –

(i) the worker's daily task rate, if the worker works for less than four hours;
(ii) double the worker's daily task rate, if the worker works for more than four hours.

(d) A time-rated worker who works on a public holiday must be paid –

(i) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;

(ii) double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

SL 04.09 SICK LEAVE

(a) Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.

(b) A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.

(c) A worker may accumulate a maximum of twelve days' sick leave in a year.

(d) Accumulated sick-leave may not be transferred from one contract to another contract.

(e) An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.

(f) An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.

(g) An employer must pay a worker sick pay on the worker's usual payday.

(h) Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is –

(i) absent from work for more than two consecutive days; or

(ii) absent from work on more than two occasions in any eight week period.

(i) A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.

(j) A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

SL 04.10 MATERNITY LEAVE

(a) A worker may take up to four consecutive months' unpaid maternity leave.

(b) A worker is not entitled to any payment or employment-related benefits during maternity leave.

(c) A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.

(d) A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.

(e) A worker may begin maternity leave –

(i) four weeks before the expected date of birth; or

(ii) on an earlier date –

(1) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or

(2) if agreed to between employer and worker; or

(iii) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.

(f) A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.

(g) A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months' employment, unless the SPWP on which she was employed has ended.

SL 04.11 **FAMILY RESPONSIBILITY LEAVE**

(a) Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances -

(i) when the employee's child is born;

(ii) when the employee's child is sick;

(iii) in the event of the death of –

(1) the employee's spouse or life partner

(2) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling

SL 04.12 **STATEMENT OF CONDITIONS**

(a) An employer must give a worker a statement containing the following details at the start of employment –

(i) the employer's name and address and the name of the SPWP;

(ii) the tasks or job that the worker is to perform;

(iii) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;

(iv) the worker's rate of pay and how this is to be calculated;

(v) the training that the worker may be entitled to receive during the SPWP.

(b) An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.

(c) An employer must supply each worker with a copy of the relevant conditions of employment contained in this specification.

(d) An employer must enter into a formal contract of employment with each employee. A copy of a pro-forma is attached at the end of this specification.

SL 04.13 KEEPING RECORDS

(a) Every employer must keep a written record of at least the following –

(i) the worker's name and position;

(ii) in the case of a task-rated worker, the number of tasks completed by the worker;

(iii) in the case of a time-rated worker, the time worked by the worker;

(iv) payments made to each worker.

(b) The employer must keep this record for a period of at least three years after the completion of the SPWP.

SL 04.14 PAYMENT

(a) A task-rated worker will only be paid for tasks that have been completed.

(b) An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer. Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.

(c) A time-rated worker will be paid at the end of each month and payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.

(d) Payment in cash or by cheque must take place –

(i) at the workplace or at a place agreed to by at least 75% of the workers; and

(ii) during the worker's working hours or within fifteen minutes of the start or finish of work;

(e) All payments must be enclosed in a sealed envelope which becomes the property of the worker.

(f) An employer must give a worker the following information in writing –

(i) the period for which payment is made;

(ii) the number of tasks completed or hours worked;

(iii) the worker's earnings;

(iv) any money deducted from the payment;

(v) the actual amount paid to the worker.

(g) If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.

(h) If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

SL 04.15 DEDUCTIONS

(a) An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.

(b) An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.

(c) An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.

(d) An employer may not require or allow a worker to –

(i) repay any payment except an overpayment previously made by the employer by mistake;

(ii) state that the worker received a greater amount of money than the employer actually paid to the worker; or

(iii) pay the employer or any other person for having been employed.

SL 04.16 HEALTH AND SAFETY

(a) Employers must take all reasonable steps to ensure that the working environment is healthy and safe and that all legal requirements regarding health and safety are strictly adhered to.

(b) A worker must:

(i) work in a way that does not endanger his/her health and safety or that of any other person;

(ii) obey any health and safety instruction;

(iii) obey all health and safety rules of the SPWP;

(iv) use any personal protective equipment or clothing issued by the employer;

(v) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

SL 04.17 COMPENSATION FOR INJURIES AND DISEASES

(a) It is the responsibility of employers to arrange for all persons employed on a SPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.

(b) A worker must report any work-related injury or occupational disease to their employer or manager.

(c) The employer must report the accident or disease to the Compensation Commissioner.

(d) An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

SL 04.18 TERMINATION

(a) The employer may terminate the employment of a worker provided he has a valid reason and after following existing termination procedures.

(b) A worker will not receive severance pay on termination.

(c) A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.

(d) A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

(e) A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24month period.

SL 04.19 CERTIFICATE OF SERVICE

(a) On termination of employment, a worker is entitled to a certificate stating –

(i) the worker's full name;
(ii) the name and address of the employer;
(iii) the SPWP on which the worker worked;
(iv) the work performed by the worker;
(v) any training received by the worker as part of the SPWP;
(vi) the period for which the worker worked on the SPWP;
(vii) any other information agreed on by the employer and worker.

SL 05 EMPLOYER'S RESPONSIBILITIES

The employer shall adhere to the conditions of employment as stipulated in the *Code of Good Practice for Employment and Conditions of Work for Special Public Works Programmes*. Over and above the conditions stipulated above, he shall be responsible to:

(a) formulate and design a contract between himself/ herself and each of the recruited youth workers, ensuring that the contract does not contravene any of the Acts stipulated in South African Law, e.g. Basic Conditions of Employment Act, etc. (A copy of a pro-forma contract is attached at the end of this specification);
(b) screen and select suitable candidates for employment from the priority list of youth workers provided by the Umsobumvu Youth Fund (UYF);

(c) ensure that the recruited youth workers are made available to receive basic life skills training which will be conducted and paid for by the Umsobumvu Youth Fund;
(d) ensure that all youth workers receive instruction on safety on site prior to them commencing with work on site;

(e) ensure that all youth workers are covered under workmen's compensation for as long as they are contracted to the contractor. Payment to the Compensation Commissioner shall be the responsibility of the contractor;
(f) assist in the identification and assessment of potential youth workers to undergo advanced technical training in respective trades;

(g) test and implement strict quality control and to ensure that the health and safety regulations are adhered to;

(h) provide all youth workers with the necessary protective clothing as required by law for the specific trades that they are involved in.

(i) provide overall supervision and day-to-day management of youth workers and/or sub-contractors; and

(j) ensure that all youth workers are paid their wages on time through a preagreed payment method as stipulated in the contract with the youth worker.

SL 06 PLACEMENT OF RECRUITED YOUTH WORKERS

Employers will be contractually obliged to:

(a) employ youth workers from targeted social groups from the priority list provided by the Service Provider/ Umsobumvu Youth Fund.

(b) facilitate on-the-job training and skills development programmes for the youth workers;

(c) achieve the following minimum employment targets:

(i) 100% people between the ages of 18 and 35
(ii) 60% women;

(iii) 2% people with disabilities.

(d) brief youth workers on the conditions of employment as specified in sub clause SL 04.09 above;

(e) enter into a contract with each youth worker, which contract will form part of the Employment Agreement;

(f) allow youth workers the opportunity to attend life skills training through DOL. This shall be arranged at the beginning of the contract;

(g) ensure that payments to youth workers are made as set out in sub clauses SL 04.14 and SL 04.15 above.

(h) set up of personal profile files as prescribed by Service Provider and as set out in sub clause SL 04.13 above.

(i) in addition to (h) - a copy of the I.D;

- qualifications;
- career progress;
- EPWP Employment Agreement, and
- list of small trade tools;

must be included in the youth worker's personal profile file.

SL 07 TRAINING OF YOUTH WORKERS

Three types of training are applicable, namely

- Life skills;
- On the job training and
- Technical Skills training.

Training will be implemented by training instructors accredited by DOL and/or CETA :

- Youth workers shall be employed on the projects for an average of 6 months.
- Youth workers shall be deployed on projects in the vicinity of their homes. The same arrangements as for other workers regarding accommodation, subsistence and travel shall be applicable to youth workers.

(a) Life skills training

All youth workers are entitled to undergo life skills training. Training of this module will be flexible enough to meet the needs of the employer. Training should take place immediately after site hand-over and during the period of site establishment and pre-planning before actual construction starts, alternatively this will be spread over the duration of the contract period. The contractor will be required to work closely with the person to schedule the training sessions so that the timing of the training is aligned with the contractor's work schedule and his demand for workers.

(b) On-the job training

The Employer shall provide youth workers with on-the-job training to enable them to fulfil their employment requirements. The employer shall also be expected to closely monitor the job performance of youth workers and shall identify potential youth workers for skills development programmes.

(c) Technical skills training

The Employer shall assist in identifying youth workers for further training. These youth workers will undergo further technical training to prepare them for opportunities as semi-skilled labourers.

Such training will comprise of an off-site theoretical component and practical training on-site. The contractor will be responsible for on-site practical work under his supervision. Youth workers who graduate from the first phase of the training programme will be identified and given opportunities to register for skills development programmes. These can ultimately result in an accredited qualification. The programme will consist of theoretical instruction away from the construction site as well as on-site practical work under the supervision of the employer. Candidates will be entitled to employment to complete all training modules.

SL 08 BENEFICIARY (YOUTH WORKERS) SELECTION CRITERIA

SL 08.01 PREAMBLE

The *Code of Good Practise for Employment and Conditions of Work for Special Public Works Programmes* encourages:

· optimal use of locally-based labour in a Special Public Works Programme (SPWP);
· a focus on targeted groups which consist of namely youth, consisting of women, female-headed households, disabled and households coping with HIV/AIDS; and

· the empowerment of individuals and communities engaged in a SPWP through the provision of training.

SL 08.02 BENEFICIARY (YOUTH WORKERS) SELECTION CRITERIA

(a) The youth workers of the programmes should preferably be nonworking individuals from the most vulnerable sections of disadvantaged communities who do not receive any social security pension income. The local community must, through all structures available, be informed of and consulted about the establishment of any EPWP – NYS

(b) In order to spread the benefit as broadly as possible in the community, a maximum of one person per household should be employed, taking local circumstances into account.

(c) Skilled artisans from other areas may be employed if they have skills that are required for a project and there are not enough persons in the local communities who have those skills or who could undergo appropriate skills training. However, this should not result in more than 20% of persons working on a programme not being from local communities.

(d) Programmes should set participation targets for employment with respect to youth, single male- and female-headed households, women, people with disabilities, households coping with HIV/AIDS, people who have never worked, and those in long-term unemployment.

(e) The proposed targets as set out in sub clause SL 06 (c)

· 55% youth from 18 to 35 years of age;
· 55% women;
· 2% disabled.

SL 09 **CONTRACTUAL OBLIGATIONS IN RELATION TO YOUTH LABOUR**

The youth workers to be employed in the programme (EPWP-NYS) shall be directly contracted to the employer. Over and above the construction and project management responsibilities, the employer will be expected to perform the tasks and responsibilities as set out in clause SL 05 above.

SL 10 **PROVINCIAL RATES OF PAY**

It is stipulated that youth workers on the EPWP-NYS receive a minimum of R 1 000 per month whilst working and R 600 per month whilst on training in ALL provinces. Should youth workers be attending training whilst employed by the contractor, the contractor will still be responsible for payment to the youth worker whilst at training.

SL 11 **MEASUREMENTS AND PAYMENT**

The number of youth workers specified for this contract that will receive life skills training is 50 and technical training is 50

SL 11.01 **PAYMENT FOR TRAINING OF YOUTH WORKERS (TARGET:- N/A YOUTH WORKERS)**

SL 11.01.01 Skills development and Technical training for youth workers for an average of 10 days ……(Prov.Sum)……..…..Unit: R/youth worker

The above item is only applicable if DoL does not fund the Technical Training PRIOR to site handover.

SL 11.01.02 Penalty due to not meeting the target as in SL 11.01.01…..……..Unit: Youth worker

LESS R N/A per youth worker

SL 11.02 **PAYMENT FOR TRAVELLING AND ACCOMMODATION DURING OFF-SITE TRAINING**

SL 11.02.01 **Life skills training for 26 days:**

01 Travelling (based on 50 km/youth worker) ……Unit: km

02 Accommodation……..(Prov.Sum)…..Unit: R/youth worker

Profit and
03 attendance…….
Unit: %

SL 11.02.02 **Skilled development and Technical training:**

Travelling (based on 50 km/youth

01 worker)……...Unit: km
02 Accommodation…….(Prov.Sum)….Unit:

R/youth worker
Profit and attendance 03
…….. Unit: %

The units of measurement for sub items SL 11.02.01 (01) and SL 11.02.02 (01) above shall be the distance travelled in km by the youth worker trained off site. The tendered rate shall include full compensation to safely transport the youth workers to and from the training venue/s.

The unit of measurement for sub items SL 11.02.01 (02) and SL 11.02.02 (02) above shall be the amounts in Rand expended for accommodation and daily meal allowances for the youth workers trained off site that must be arranged by the contractor. Amounts quoted shall be corrected according to re-measurement based on actual invoices.

The tendered percentages under sub items SL 11.02.01 (03) and SL 11.02.02 (03) will be paid to the contractor on the value of each payment pertaining to the accommodation and advance meal allowances to cover his expenses in this regard.

SL 11.03 **ALTERNATIVE WORKERS FOR THE PERIOD OF OFF-SITE TRAINING**

SL 11.03.01 Life skills training for 26 days ……. Unit: worker-days

SL 11.03.02 Skilled development and Technical training for youth workers for (…….) days…….. Unit: worker-days

The unit of measurement shall be the number of youth workers replaced while in training multiplied by the number of days absent from the site.

The rates tendered shall include full compensation for additional replacement labour during periods of off-site training.

SL 11.04 **EMPLOYMENT OF YOUTH WORKERS**

SL 11.04.01 Employment of youth workers……...(Prov.Sum)¼.Unit: R/ worker-month

The unit of measurement shall be the number of youth workers at the statutory labour rates of R ……. multiplied by the period employed in months and the rate tendered shall include full compensation for all costs associated with the employment of youth workers and for complying with the conditions of contract. The cost for the training shall be excluded from this item. This item is based on 6 months appointment for youth workers.

SL 11.05 PROVISION OF EPWP DESIGNED OVERALLS TO YOUTH WORKERS

SL 11.05.01 Supply EPWP designed overalls to youth workers ……..…….. (Prov.Sum)…….Unit: R
Youth worker overalls should be orange (top and bottom) as per EPWP specification with the exception of Correctional Services contracts where the youth workers top would be blue and the bottom orange.

SL 11.05.02 Profit and attendance……...
Unit: %

An amount has been provided in the Schedule of Quantities under sub item SL 10.05.01 for the supply of EPWP designed overalls, as per the specification provided by the EPWP unit, arranged by the Service Provider. The Engineer will have sole authority to spend the amounts or part thereof. The tendered percentage under sub items SL 10.05.02 will be paid to the contractor on the value of each payment pertaining to the supply of overalls to cover his expenses in this regard.

SL 11.06 PROVISION OF SMALL TOOLS FOR YOUTH WORKERS

SL 11.06.01 Provide all youth workers with prescribed tools for their respective trades. Specification for the mentioned tools to be provided by the EPWP-NYS Service Provider. These tools will become the property of the youth worker after the completion of the programme.....(Prov.Sum)….Unit: R 500-00 /youth worker

SL 11.06.02 Profit and attendance……...
Unit: %

SL 11.07 APPOINTMENT OF YOUTH TEAM LEADER/S

SL 11.07.01 Appointment of (_____) youth team leader/s for the duration of the contract……. (Prov.Sum)……..... Unit: R / team leader

The Youth Team Leader will act as CLO/PLO to facilitate the project work between the youth workers and the contractor. Umsobumvu Youth Fund can assist with the sourcing of Youth Team Leader for employment by the contractor.

SL 11.08 **LIAISON WITH SERVICE PROVIDER**

……Unit: hours

Reporting month: _____ Cell No: _____

Project Name: _____

_____ _____

Surname: _____ First Name: _____

IDENTITY NUMBER:

Day	Date	Time In	Signature	Time Out	Signature	Report On Any Formal Training Provided In The Reporting Month
WEEK 1						
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						

WEEK 2						
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						
WEEK 3						
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						
WEEK 4						
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						
Total Days worked						

HIV/STI COMPLIANCE REPORT

SPECIFICATION FOR HIV/AIDS AWARENESS

1 Scope

This generic specification contains requirements applicable to the reduction of the risk of transfer of the HIV virus between and among construction workers and the local community through the following four strategies:

a) raising awareness about HIV/AIDS;

b) providing construction workers with access to condoms;

c) HIV counselling, testing and referral services; and

d) Sexually Transmitted Infection diagnosis and treatment.

2 Normative references:

The following standard contains provisions that, through reference in this text, constitute provisions of this standard:

SANS 4074 ISO 4074, *Condom Rubbers*

3 Definitions and Abbreviations

3.1 Definitions

Construction Worker: all persons in the employ of the contractor or in the employ of any of the subcontractors contracted by the contractor.

Local Community: the communities' local to the site which are most likely to have contact with the construction worker and, in particular, sex workers in those communities.

Service provider: the natural or juristic person recognised by the South African Department of Health as specialist in conducting Aids Awareness Programmes.

3.2 Abbreviations

STI: Sexually transmitted infection

HIV: Human Immunodeficiency Virus

AIDS: Acquired Immune Deficiency Syndrome

4 Objectives

The objectives are to:

a) reduce the risk of transfer of the HIV virus between and among construction workers and the local community;

b) raise awareness amongst construction workers and the local community of the risk of infection with the HIV virus;

c) promote early diagnosis; and

d) assist affected individuals to access care and counselling.

5 Requirements

5.1 General requirement

The contractor shall, in order to satisfy the objectives stated in 4:

a) make condoms complying with the requirements of SABS ISO 4074 available to all construction workers at readily accessible points on the site, suitably protected from the elements, for the duration of the contract;

b) either place and maintain HIV/AIDS awareness posters of size of not less than A1 in areas which are highly trafficked by construction workers, or provide construction workers with a pamphlet, in languages largely understood by construction workers, which

c) encourage voluntary HIV/STI testing;

d) provide information concerning counselling, support and care of those that are infected services; and

e) comply with the requirements of 5.2.

***The* provisions *of* 5.1 c) *and d) do not apply to* this contract.**

5.2 HIV awareness programme

5.2.1 The contractor shall:

a) engage a qualified service provider as described in the scope of works to conduct an HIV Awareness Programme which is structured to achieve the outcomes stated in 5.2.3 for contract workers as soon as a construction workers camp is established and populated or, where no such camp is established, within two weeks of the commencement of a significant portion of the works and at subsequent intervals, if any, provided for in the scope of works; and

b) Arrange for, provide a suitable venue, and instruct all construction workers to attend the HIV Awareness Programme and notify the Employer's Representative of the date, time and venue whenever a session with construction workers is conducted.

Note: The National Department of Public Works maintains a list of qualified service providers

5.2.2 The contractor shall do nothing to dissuade construction workers from attending such an HIV Awareness Programme and shall take all reasonable steps to ensure that a minimum of 90% of construction workers engaged in the works attend such a programme, when it is conducted.

5.2.3 The outcomes of the HIV Awareness Programme shall as a minimum, result in contract workers exposed to such a programme being able to:

a) communicate the existence of problems of HIV and be able to outline the consequences of transmission of HIV to or from the local community;

b) recall and communicate the mode of HIV transmission and preventative measures including the proper use of the condom.

HIV/STI COMPLIANCE REPORT

Pro-forma reporting format in terms of the SPECIFICATION FOR HIV/AIDS AWARENESS

SCMU number:			
Payment covered number:		Claim Period by payment claim:	

1. Distribution of condoms (briefly describe where and how condoms are distributed).

2. Posters / pamphlets (briefly describe where posters were placed / how pamphlets were distributed).

3. Voluntary testing (briefly describe the actions taken / information provided to promote testing).

4. Counselling, support and care (summarise information provided).

5. HIV awareness programme (briefly describe action).

6. Schedule of construction workers exposed to the HIV awareness programme.			
Name	Identity number	Trade / occupation on	Name of employer

I hereby declare the above to be a true reflection of actions taken to ensure compliance with the specification.

For Contractor: **Employer's representative:**

Name: …….. Name:……

Signature: …… Signature:……

Date : …….. Date……

Specification for developing skills that result in nationally accredited outcomes through infrastructure contracts

Version: September 2016

Issued by:

Specification for developing skills that result in nationally accredited outcomes through infrastructure contracts

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Specification for developing skills that result in nationally accredited outcomes through infrastructure contracts

1 Scope

This specification establishes a key performance indicator in the form of a contract skills development goal (CSDG) relating to the structured work learning component of occupational or professional learning, which enables learners to make measurable progress towards the attainment of:

a) a part or full occupational qualification registered on the National Qualification Framework,

b) a trade qualification leading to a listed trade (GG No. 35625, 31 August 2012);

c) a national diploma registered on the National Qualification Framework; or

d) Registration in a professional category by a recognized professional body or statutory council.

in the delivery, maintenance and operation of infrastructure through the performance of professional service, service, supply or engineering and construction works contracts or an order associated with such a contract.

This specification sets out the methods by which the key performance indicator is established, measured, quantified and verified in the performance of the contract or the execution of an order.

NOTE This specification can be applied to contracts or to orders (call-offs) issued in terms of framework agreements. Framework agreements are well suited to situations in which long term relationships are entered into. They offer flexibility in attaining contract skills development goals as requirements can be adjusted from one order to another, thus allowing key performance indicators to be improved upon over time.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply:

Allowance
Amount provided for in the contract or an order by the employer relating to one or more of the following:

a) the performance by the contractor of work or services that are foreseen but cannot be accurately specified at the time that the contract was entered into or the order issued;
b) work or services to be performed, or goods provided, by a subcontractor who is either nominated by the employer or is selected by the employer in consultation with the contractor after the award of the contract or the issuing of an order;
c) provision for price adjustment for inflation; or
d) other budgetary provisions intended to cover the employer's contractual risks

Artisan a person who has been certified as competent to perform a listed trade in accordance with Section 26B of the Skills Development Act of 1998 (Act No. 97 of 1998)

Black people a generic term which means Africans, Coloureds and Indians and who are citizens of the Republic of South Africa:

a) by birth or descent; or

b) by naturalisation before 27 April 1994 or on or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalisation prior to that date

Candidate
a person who is registered in a category of registration which ultimately leads to registration in a professional category by a statutory council in terms of their founding legislation

Class of construction works the class of construction works referred to in Schedule 3 of the Construction Industry Development Regulations 2004 as amended and published in terms of the Construction Industry Development Board Act of 2000 (Act 38 of 2000)

Contract amount
Financial value of the contract at the time of the award of the contract or the issuing of an order, excluding all allowances and expenses and value added tax

Contract skills development goal (CSDG)
the number of hours of skills development opportunities that a contractor contracts to provide in relation to work directly related to the contract or order up to:

a) completion in the case of a professional service contract;

b) the end of the service period in the case of a service contract;

c) completion (state of readiness for occupation of the whole works although some minor work may be outstanding) in the case of an engineering and construction works contract; and

d) the delivery date for all the work required in terms of the supply contract

Contractor
Person or organization that contracts to provide the goods, services or engineering and construction works covered by the contract

Employer
Person or organization intending to or entering into the contract with the contractor for the provision of goods, services, or engineering and construction works

Employer's representative
Person authorized to represent the employer in terms of the contract

Engineering and construction works contract
Contract for the provision of a combination of goods and services arranged for the development, extension, refurbishment, rehabilitation or demolition of a fixed asset, including building and engineering infrastructure

Expenses
Costs incurred by the contractor in the performance of the contract or order which are in terms of the contract recoverable from the employer

Framework agreement
an agreement between an organ of state and one or more contractors, the purpose of which is to establish the terms governing orders to be awarded during a given period, in particular with regard to price and, where appropriate, the quantity envisaged.

Mentor
a qualified, experienced and, in the case of professionals, registered person, designated to guide a learner or candidate through a structured work experience learning component of a learning programme required for the acquisition of a part or full qualification or professional designation

Occupational qualification
Occupational qualification registered on the National Qualifications Framework Act (Act No 67 of 2008)

Order an instruction to provide goods, services or any combination thereof under a framework agreement

Part qualification
an assessed unit of learning that is registered on the National Qualifications Framework as part of an occupational qualification

Professional category
a category of registration identified in Table 1 or such other category recognised by the Employer in the application of this specification

Table 1: Categories of registration

Profession	Category of registration	Act
Architectural	Architect, Senior Architectural Technologist, Architectural Technologist or Architectural Draughtsperson	Architectural Profession Act of 2000 (Act No. 44 of 2000)
Construction project management	Construction Project Manager	Project and Construction Management Professions Act of 2000 (Act No. 48 of 2000)
Construction management	Construction Manager	
Engineering	Engineer, Engineering Technologist, Engineering Technician or Certificated Engineer	Engineering Profession Act of 2000 (Act No. 46 of 2000)
Landscape Architectural	Landscape Architect, Landscape Technologist, Landscape Technician or Landscape Assistant	Landscape Architectural Profession Act of 2000 (Act No. 45 of 2000)
Quantity surveying	Quantity surveyor	Quantity Surveying Profession Act of 2000 (Act No. 49 of 2000)
Scientists	Natural scientists	Natural Scientific Professions Act (Act No. 27 of 2003)
Surveying	Land surveyor, Engineering surveyor or Technician engineering surveyor	Professional and Technical Surveyors' Act (Act No. 40 of 1984)

Professional service contract
Contract for the provision of services with the skill and care normally delivered by professionals

Sector Education and Training Authority (SETA)
an institution established under section 9 of the Skills Development Act, Act 97 of 1998 and which has the responsibility under this Act to register learners on learning programmes

Service contract
Contract for the provision of labour or work, including knowledge-based expertise, carried out by hand or with the assistance of equipment and plant **Site**
Means the land or place made available by the employer, for the purposes of the contract or order, on, under, over, in or through which the works or services are to be executed

Skills development agency an agency which performs some or all of the functions set out in section 4.1.4.

Statutory council a council as established under the

a) South African Council for the Architectural Profession, established by the Architectural Profession Act of 2000 (Act No. 44 of 2000);

b) South African Council for the Project and Construction Management Professions, established by the Project and Construction Management Professions Act of 2000 (Act No. 48 of 2000);

c) Engineering Council of South Africa, established by the Engineering Profession Act of 2000 (Act No. 46 of 2000);

d) South African Council for the Landscape Architectural Profession, established by the Landscape Architectural Profession Act of 2000 (Act No. 45 of 2000);

e) South African Council for the Quantity Surveying Profession, established by the Quantity Surveying Profession Act of 2000 (Act No. 49 of 2000);

f) South African Council for Professional and Technical Surveyors, established by the Professional and Technical Surveyors' of 2000 (Act No. 40 of 1984); or

g) South African Council for Natural Scientific Professions, established by the Natural Scientific Professions Act (Act No. 27 of 2003):

Structured mentorship
Mentorship provided by a person who is registered in a suitable category of professional registration by a statutory council or professional body which leads and directs a candidate towards professional registration

Structured work experience learning component
component of learning in an occupational qualification or for professional designation whereby a learner is mentored by a qualified, and where required, registered mentor in the application and integration of the knowledge and practical skills learnt, under supervision, in the actual

context of a workplace in accordance with the prescripts set by the relevant qualifying authority, professional body or statutory council.

Supervisor
a supervisor is a person in the particular workplace charged with the responsibility of allocating workplace tasks to a learner that are aligned to the prescriptions of their learning programme and of overseeing and reporting on that learning using a formally agreed record keeping system

Supply contract
Contract for the provision of goods and associated services including design

Work integrated learning the workplace learning component required by learners completing a national diploma at a University of Technology or Comprehensive University.

3 Requirements

3.1 Contract skills development goal (CSDG)

3.1.1 The contractor shall attain or exceed the contract skills development goal in the performance of the contract or the execution of an order.

3.1.2 The contract skills development goal shall be not less than:

a) the contract amount in millions of Rand multiplied by:

1) the relevant number of hours per million Rand expenditure contained in Table 2 in the case of engineering and construction works contracts for the applicable class of construction works used in the application of the Construction Industry Development Regulations issued in terms of the Construction Industry Development Board Act of 2000; or
2) 300 in the case of a service contract; or
3) 100 in the case of a professional service contract or a supply contract; or

b) the hours tendered in the preference schedule or the quantum agreed in the scope of work of the contract or order.

Example: The contract amount for an engineering and construction works contract in the GB class of construction works is R65,7 million. The contract skills development goal is 65,7 x 250 = 16 425 hours.

Table 2: Number of hours per million Rand expenditure in an engineering and construction work contract

Class of construction works as identified in terms of Regulation 25(3) of the Construction Industry Regulations 2004		**Number of hours per million Rand expenditure**
Designation	**Description**	

CE	Civil engineering	125
CE or GB	Civil Engineering or general building	190
EE	Electrical engineering works (buildings)	125
EP	Electrical engineering works (Infrastructure)	125
GB	General building	250
ME	Mechanical engineering works	125
SB	Specialist	125

3.1.5 Where required in terms of the contract or order, a specified proportion of the learners and candidates shall be selected from a list of persons in the employ of the state contained in the scope of work of the contract or order under the terms and conditions embodied therein.

NOTE: The contract skills development goal can be achieved through the direct employment of persons who are developing skills that result in nationally accredited outcomes, through the engagement of subcontractors who employ such persons or, where specifically required, the provision of work place opportunities to employees of the state.

3.2 Achieving the contract skills development goal (CSDG)

3.2.1 The contractor shall achieve the measurable contract skills development goal by providing one or a combination of any of the following in relation to work directly related to the contract or order:

Method 1: structured work experience learning component opportunities for learners towards the attainment of a part qualification or a full occupational qualification;

Method 2: structured work experience learning component opportunities for apprentices or other artisan learners towards the attainment of a trade qualification leading to a listed trade (GG No. 35625, 31 August 2012) subject to at least 60% of the artisan learners being holders of public FET college qualifications;

Method 3: work integrated learning opportunities for University of Technology or Comprehensive University students completing their national diplomas;

Method 4: structured work experience opportunities for candidates towards registration in a professional category by a recognized professional body or statutory council.

3.2.2 No single method, except in the case of professional service contracts, shall contribute more than 75 percent of the contract skills development goal, Method 1 shall not contribute to more than 25 percent of the contract skills development goal in engineering and construction works or service contract and related orders.

3.2.3 Not more than one method may be applied to any individual in the calculation of the contract skills development goal.

NOTE: The principle is that an individual can only be counted once towards the CSDG.

3.3 Contract skills development goal credits

3.3.1 Credits towards the contract skills development goal shall be granted by summating the hours of opportunities provided in accordance with this specification.

3.3.2 No more than 8 hours may be claimed for any 24-hour period for any individual.

3.3.3 Contract skills development goal credits shall be reduced to the extent that they fail to comply with the requirements of this specification.

3.4 Denial of credits

Credits towards the contract skills development goal shall be denied should:

a) the opportunities not be provided on site or the opportunities cannot be directly linked to the contract or order;

b) the following not be provided:

1) the required contract compliance baseline plan, an interim contract compliance report or a final contract compliance report;

2) the required mentorship plan for a candidate;

3) the required training plan for learners;

4) the training reports covering a period; or

5) the required records, specified documents and signatures;

c) the structured mentorship be found not to be in accordance with the requirements of the applicable professional body, statutory council or qualifying authority;

d) the structured work experience learning component be found not to be in accordance with the curriculum requirements of the part qualification or qualification or prescription for professional registration for which the learner is registered;

e) conditions of employment and rates or allowances for learners not be in accordance with legislative provisions;

f) the contractor does not maintain the required training records or an audit reveals that there is insufficient information to substantiate claims for credits; and

g) a learner, learner artisan or candidate fails to present their credentials for assessment when they have, in the opinion of the mentor, sufficient structured work experience or structured mentorship to do so.

4 Compliance with requirements

4.1 General

4.1.1 The contractor shall submit to the employer's representative:

a) within 30 days of the contract coming into effect or the issuing of an order, a contract compliance base line training plan (see Annex A) taking into account the skills mix and type of workers that are to be engaged;

b) interim contract compliance training reports (see Annex A) at intervals which do not exceed 3 months;

c) a final contract compliance training report (see Annex A) within 15 days of reaching completion, final delivery or the end of the service as relevant; and

d) a report which provides a breakdown of the number of hours reported in each interim and in the final contract compliance report into black people and women and people with disabilities.

NOTE: The Code of Good Practice on Key Aspects of Disability in the Workplace issued in terms of Employment Equity Act No 55, OF 1998 provides guidance on establishing who people with disabilities are.

4.1.2 The contractor shall keep records of the name and identity number, hours worked, payments made to, registration particulars towards a part qualification or occupational qualification and particulars of opportunities offered to persons who are provided with work experience learning component opportunities which contribute to the contract skills development goal and any other training records required by or which demonstrate compliance with this specification. The contractor shall allow the employer's representative to inspect or audit such training records at any time within working hours.

4.1.3 The employer's representative shall undertake suitable random audits on records to confirm compliance with requirements.

4.1.4 Where learners are sourced through a Skills Development Agency (SDA), the contractor shall enter into a contract agreement with one or more SDAs of their choice that is participating in the implementation of this specification to, as relevant:

a) facilitate placement of learners for training opportunities;

b) prepare training plans for registered learners, including details of the scope of experiential work to be covered and expected outcomes;

c) register learners with the appropriate sector Education and Training Authority established in terms of the Skills Development Act of 2008 (Act 37 of 2008);

d) manage all the employment functions of learners such as payment of stipends, contributions to the Unemployment Insurance Fund, Workman's Compensation, provision of personal protective clothing, trade specific tools, etc.;

e) liaise with the training co-ordinators to monitor onsite training progress of learners;

f) liaise with the training co-ordinators to arrange for summative assessments at appropriate stages of the training; and

g) Liaise with the training co-ordinators to prepare reports for the employer or employer's representative.

4.2 Structured workplace learning opportunities for learners

4.2.1 Structured work experience learning component opportunities shall be aligned to the curriculum requirements set for the particular part or full occupational qualification or professional designation for which the learner is registered.

4.2.2 A responsible supervisor shall be appointed to allocate learning tasks, under the guidance of a qualified person, to learners in line with their training plans

4.2.3 Mentoring associated with structured work experience learning component for artisan learners shall be undertaken by an artisan qualified in the applicable trade with a minimum of 3 years of trade related experience. The number of artisan learners mentored by a single mentor shall, unless otherwise permitted by the National Artisan Moderation Body, not exceed 4 at any one time.

4.2.4 Mentoring associated with structured work experience learning component for learners leading to a part or an occupational qualification other than artisan learners shall be undertaken by a person qualified in the applicable discipline with a minimum of 3 years of experience.

4.2.5 The contractor or service provider shall submit to the employer's representative, in respect of each learner:

a) within one month of commencing work directly related to the contract or order, a workplace training plan together with name of the learner's mentor and supervisor

b) within three months of commencing work directly related to the contract or order:

   1) proof of registration as a learner with the relevant SETA; and

   2) a copy of the mentorship agreement entered into with the learner or the company mentorship agreement entered into with the relevant qualified agency;

c) within two weeks of updating a workplace training plan, the revised workplace training plan; and

d) a quarterly progress report and a final report at the end of the structured mentorship period including a log of exposure and interactions with the mentor in sufficient detail to demonstrate compliance with requirements, signed off by the mentor, the supervisor and the learner.

4.2.6 Learners shall be required by the mentor to complete training reports required by the relevant qualifying authority whenever a substantial activity or training period has been completed.

4.2.7 The mentor and supervisor shall sign off all reports and logbooks to allow the learner to move to other projects or employment and continue on the path towards qualification and, where relevant registration, where the work related to the contract ends for whatever reason prior to the learner gaining sufficient experience for final assessment.

4.3 Structured mentorship opportunities for candidates

4.3.1 Mentoring associated with structured work experience for candidates shall be in accordance with the prescripts of the relevant professional body or statutory council.

4.3.2 The contractor shall:

a) appoint a supervisor who is actively engaged in work directly associated with the contract to issue tasks, oversee their implementation and provide input to the candidate on an ongoing basis;

b) identify a suitable mentor for the candidate, if such candidate does not have a mentor, who shall enter into a mentoring agreement with the candidate or the company as required by the professional body or statutory council; and

c) issue each candidate with a portfolio of evidence file which is to be kept up to date with all the documentation issued or prepared including the workplace training plan and all revisions thereof as well as copies of the logbook entries and training period reports;

4.3.3 The mentor shall provide and update from time to time a workplace training plan for a candidate outlining the activities in which the candidate will be involved that includes activities required by the relevant statutory council. The mentor shall require candidates to maintain a logbook issued by the relevant statutory council. The mentor shall sign off such logbook at quarterly presentations and progress review meetings.

NOTE: The mentor should ensure where the duration of the contract or order exceeds the minimum time to register in a professional category of registration that candidates are exposed to the full range of activities and work towards assuming the full level of responsibility recommended by the relevant statutory council. This may require rotations and secondments.

4.3.4 The contractor or service provider shall submit to the employer's representative, in respect of each candidate:

a) within one month of commencing work directly related to the contract or order:
   1) a workplace training plan together with name of the candidate's mentor and supervisor
   2) proof of registration as a candidate with the relevant professional body or statutory council; and
   3) a copy of the mentorship agreement entered into with the candidate or the company mentorship agreement entered into with a professional body or statutory council;

b) within two weeks of updating a workplace training plan, the revised workplace training plan.

c) a quarterly progress reports and a final report at the end of the structured mentorship period including a log of exposure and interactions with the mentor in sufficient detail to demonstrate compliance with requirements, signed off by the mentor, the supervisor and the candidate.

4.3.5 Candidates shall be required by the mentor to complete training reports required by the relevant statutory council whenever a substantial activity or training period has been completed.

4.3.6 **The** mentor and supervisor shall sign off all reports and logbooks to allow the candidate to move to other projects or employment and continue on the path towards registration where the work related to the contract ends for whatever reason prior to the candidate gaining sufficient experience for registration.

5 Records

5.1 The contractor shall submit all the documentation required in terms of clause 4 in a timely manner.

5.2 The employer's representative shall certify the value of the credits counted towards the contract skills development goal, if any, whenever a claim for payment is issued to the employer, and shall notify the contractor of this amount.

5.3 The contractor shall, upon termination of the opportunities provided in order to satisfy the contract skills development goal, certify the quantum and nature of the opportunity and submit the certificate, counter-certified by the relevant individual, to the employer's representative for record-keeping purposes.

6 Sanctions

In the event that the contractor fails to substantiate that any failure to achieve the contract skills development goal was due to reason beyond the contractor's control which may be acceptable to the employer, the sanctions provided for in the contract or order shall apply.

Annex A: Skills compliance plans

(Normative)

Skills compliance base line plan		
Name of contractor:		
Contact person:	Telephone:	
Address:	Cell phone:	Email:
Contract / order number:	**Start date for contract / order:**	
Contract title:		
Contract skills development goal (CSDG) (tick appropriate box) □ **Tendered** / contracted CSDG = ... hours □ Minimum CSDG calculated in accordance with standard		
Minimum CSDG calculated in accordance with the standard (complete only if applicable)		
Contract type (tick appropriate box): □ professional service □ service □ engineering and construction works	**Contract amount** **excl VAT** **R** **Less expenses (if any)** **R** **Less allowances** **R**	
CIDB Class of construction works, if applicable	**Contract amount** **R**	
Contract amount expressed in millions of Rand R . . . . . m ❶ Number of hours per million Rand expenditure from sub-clause 3.1.2 of the *Standard for developing skills that result in nationally accredited outcomes through infrastructure contracts* = ... ❷ Minimum contract skills development goal which the contractor is required to achieve (Gmin) **=** ❶ x ❷ = ... x . . . . . = ... hours		

I intend achieving the CSDG as follows:

□ **Method 1:** structured work experience learning component opportunities towards a part or a full occupational qualification .

. . . . . hours

□ **Method 2:** structured work experience learning opportunities for apprentices or other artisan learners . . . . . hours

□ **Method 3:** work integrated learning opportunities for University of . Technology or Comprehensive University national diploma students . . . . . hours

□ **Method 4:** structured work experience opportunities for candidates . towards registration in a professional category of registration . . . . . hours

. . . . . hours

Total

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the Contractor, confirms that the contents of this plan are within my personal knowledge and are to the best of my belief both true and correct.

Signed Date

Position

Name

Skills compliance report (tick appropriate box)			**Date:** □ **Interim report**			□ **Final report**		
Name of contractor: Contact person: Address:			Telephone Cell phone email					
Contract / order number: **Contract title:** **Contract skills development goal (CSDG)** . . . . . hours			**Start date for contract / order:**					
Method 1: structured workplace experience learning component opportunities towards a part or a full occupational qualification								
Employed by contractor								
Name	**Identity or passport number**	**Cell or telephone number**	**Part or full occupational qualification NQF ref. no.**	**Student number**	**SETA with whom learner is registered**	**Dates for engagement on work related to contract**		**Total hours**
						Start	**End**	
Employed by subcontractor: (state name)								
	Name Student telephone number number	**SETA with**	**Identity Total number**	**or hours**	**Cell or e**	**Dates for engagement on work related to contract**		**Part or full passport occupational**
						Start	**End**	
	Qualification whom		**NQF ref. no. learner is registered**					
Method 2: structured work experience learning component opportunities for apprentices or other artisan learners								
Employed by contractor								
Name	**Identity or passport number**	**Cell telephone number**	**Listed trade**	**National artisan learner data base registration number (where available)**	**SETA with whom the learner is registered**	**Dates for engagement on works related to contract**		**Total hours**
						Start	**End**	

Employed by subcontractor: (state name)

Name	Identity or passport number	Cell or telephone number	Listed trade	National artisan learner data base registration number	SETA with whom the learner is registered	Dates for engagement on works related to contract		Total hours
						Start	End	

				(where available)				

Method 3: work integrated learning opportunities for University of Technology (UOT) or Comprehensive University (CU) diploma students

Employed by contractor

Name	Identify or passport number	Cell or telephone number	Diploma	Learner registration number	UOT/CU with whom the learner is registered	Date for engagement on contract		Total hours
						Start	End	

Employed by sub-contractor

Name	Identify or passport number	Cell or telephone number	Diploma	Learner registration number	UOT/CU with whom the learner is registered	Date for engagement on contract		Total hours

Method 4: structured work experience opportunities for candidates towards registration in a professional category of registration

Employed by contractor

Name	Identity or passport number	Cell or telephone number	Statutory council particulars		Dates for engagement on work related to contract		Total hours
			Title	Registration number	Start	End	

Employed by subcontractor							
Name	**Identity or passport number**	**Cell or telephone number**	**Statutory council particulars**		**Dates for engagement on work related to contract**		**Total hours**
			Title	**Registration number**	**Start**	**End**	

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the Contractor, confirms that the contents of this plan are within my personal knowledge and are to the best of my belief both true and correct.

Signed Date

Position

Name

Annex B: Incorporating this specification in a procurement document B1 General

B1.1 The following clause should be added to the scope of work of a contract or order to establish requirements:

Skills development requirements

The contractor shall achieve in the performance of the contract the contract skills development goal established in the Department of Higher Education and Training's *Standard for developing skills that result in nationally accredited outcomes through infrastructure contracts (September 2012)*

Note: The term contractor may need to be changed to "consultant" or "professional service provider" depending upon the term that is used in the form of contract that is adopted. The term "performance of the contract" may need to be replaced with "execution of an order" where the scope of work forms part of an order.

B1.2 Where an employer requires that employees of the state be seconded to the contractor in order to be provided with work integrated learning opportunities, structured workplace experience opportunities or structured mentorship opportunities in accordance with the provisions of this standard, the following clause should be included in the scope of work:

The specified proportion of employees of the state is . . . . . %. Work integrated learning opportunities / structured workplace experience opportunities / structured mentorship opportunities shall be offered to any of the persons identified in Annexure 1. Persons selected by the contractor from the list in Annexure 1 shall be seconded to the contractor under the following terms and conditions:
. . . . . .

NOTE: The annexure should inform the contractor of the opportunities which the named employees of the state require through the contract or order in order to attain a nationally accredited outcome.

B2 Financial incentives

Financial incentives may be offered to contractors should they exceed a key performance indicator (KPI) in the performance a contract in the form of a contract skills development goal in accordance with the requirements of this standard which can be agreed to either through a negotiation process before or after a contract or order is awarded.

Financial incentives should not be confused for preferences for rewarding contactors for offering to achieve a deliverable and a financial penalty (low performance damages) for failing to deliver on obligations. The intention for offering financial incentives for the attainment of KPIs is to encourage, rather than coerce, the contractor to meet and exceed the employer's objectives.

Financial incentives can be formulated in a number of ways. The most common way is to make them linearly proportional to increases in contract participation goals. Stepped incentives may also be used. Consideration should be given to capping the quantum of the financial incentive.

Option X20 (Key Performance Indicators) of the NEC3 Engineering and Construction Contract, NEC3 Professional Service Contract and the NEC3 Term Service Contract makes provision for a contractor to be paid an amount stated in an incentive schedule if the target stated for a key performance indicator is improved upon or achieved.

Additional conditions of contact need to be framed and included in the contract data where use is made of other forms of contract.

Note: Financial incentives are usually used where tenderers are not invited to tender contract skills development goals, but are required to accept a minimum contract skills development goal and are rewarded for performance beyond the minimum.

B3 Sanctions

Sanctions should be provided for in the contract in the event that the contractor fails to substantiate that any failure to achieve the contract participation goal was due to quantitative under runs, the elimination of items, or any other reason beyond the contractor's control which may be acceptable to the employer.

Appropriate action should be taken by employers against tenderers who are awarded contracts in preference to others on a fraudulent basis or against contractors who fail to achieve their contractual obligations relating to the development of skills. Employers have a number of sanctions and contractual remedies available to address such situations, including the in position of a financial penalty (low performance damages) more severe than the financial preference calculated at the time when tenders were evaluated or more severe than complying with contractual obligations or not awarding future orders in terms of framework agreements.

PART C2.3: BILLS OF QUANTITIES
(SEE ANNEXURE 3)

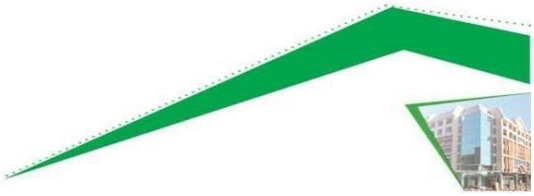
DRAWINGS
(SEE ANNEXURE 6)

PART 3 - LIST OF DRAWINGS – SEE ANNEXURE 6

The following drawings/annexure shall be issued during the bid period to form part of the bid documentation. Where applicable, drawings/annexure could be re-issued to the Contractor at commencement of the construction phase.

Tender drawings

DRAWINGS	DESCRIPTION
Architectural Drawings & Schedules - See Architects Drawings & Schedules attached under Annex 6	
Civil Drawings - See Civil Drawings attached under Annex 6	
Structural Drawings - See Structural Drawings attached under Annex 6	



PART C3 SCOPE OF WORKS

C3 SCOPE OF WORK

C3 Scope of Work

Project Name:	**CONSTRUCTION OF CEBE CLINIC**
Tender No:	**SCMU5-24/25-0083**

C3.1 Scope of Works

The project shall entail the construction of new ideal clinic together with the nurse's accommodation, guardhouse and Emergency Medical Service hub, including related civil, electrical & mechanical works.

The scope of work can be summarized as below:

Main Clinic

- Main entrance and internal circulation with public ablution, covered walkway, reception area that has record and server rooms
- Consulting room
- Counselling room
- Medical store
- Facility manager
- Staff room with lockers
- Multipurpose room
- Mother's room with play area

Acute care (emergency and minor alignment)

- Acute consulting room
- Emergency / birthing room
- Dirty utility
- Vitals room
- Waiting area

Infection disease Triage / Testing Unit

- Separate entrance with emergency drop-off
- Waiting area
- Office
- Donning & doffing area
- Staff change room
- PPE storage
- Consulting room
- Counselling room

- Vitals room

Chronic Care Area

- Waiting area
- Consulting room
- Vitals room
- Store room

Adolescent Youth Friendly Area

- Waiting area
- Consulting room
- Vitals
- Store room
- Services area

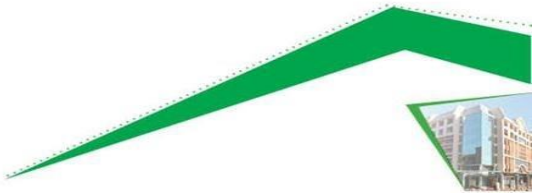
- **Ablution facility**
- Cleaner's store
- Gardner's store
- Laundry area
- Medical waste

3.2 Restrictions and Constraints

- The completion of the project is urgent and work shall be executed during normal working hours i.e. 7h00 until 17h00 daily including weekends. Work required to be executed outside of these hours must be arranged with the members of the traditional council, in advance
- Noise must be kept to a minimum and within acceptable levels at all times. It is possible that the council could impose restricted times for demolition due to the close proximity of the site to existing homes
- All shut-offs and tie/cut-ins to existing services must be arranged in advance with the members of the council and a methodology with appropriate mitigation of risks must be prepared by the contractor and submitted to the relevant Professional discipline in advance, for approval
- Dust emanating from the work site must be controlled

3.3 Operational Protocols

- Security is a priority, and the site shall be kept safe at all times
- The approved Health and Safety plan shall be adhered to at all times
- All staff members of the contractor shall wear PPE at all times
- All staff members of the contractor shall be always specifically identifiable and to this end shall wear a predetermined coloured overall to be able to enter and work on the site.
- Regular meetings, the frequency of which is to be determined, shall be held with the members of the traditional council to always ensure a cohesive spirit of co-operation
- The successful contractor must take into account that other contractors may be busy with • construction in close proximity to the works and allowance must be made in the contractor's



- submission to accommodate these parties.

3.4 Access

- Prospective bidders are to fully familiarize themselves with the site and access to the site and restricted area for site establishment. Prospective bidders are to familiarize themselves with the site as no additional costs shall be entertained.
- Identified area for the site establishment shall be pointed out to prospective bidders at mandatory site inspection. The Contractor shall be liable for security fencing (if enquired), water, sewer, ablutions, electricity, etc. for the site establishment area. No Contractor's representatives, worker are allowed to sleep on the establishment area or with in the clinic complex.

3.5 ACCEPTANCE OF TENDERS

The Employer is not bound to accept the lowest, or any tender, or any portion of any tender

3.6 MINIMUM WAGE

The Contractor shall adhere to "The national minimum wage determined by the Minister in accordance with the National Minimum Wage Act (NMWA)", and yearly pronounced increases for duration of contract.

3.7 TEMPORARY WORKS

All temporary work to comply with the Construction Health and Safety Act (Act 85 of 1993) and its regulations.

3.8 EMPLOYER'S DESIGN N/A

3.9 DESIGN BRIEF

N/A

3.10 DRAWINGS

Refer to*: (PART 3 - LIST OF DRAWINGS/ANNEXURE 6)* for tender drawings

PART C4 SITE INFORMATION

C4.1 SITE INFORMATION

Project title:	**CONSTRUCTION OF CEBE CLINIC**
Project Number:	**SCMU5-24/25-0083**

GENERAL

Prospective bidders to familiarize themselves with the locality, access, any other "restrictions" (Refer to *Scope of Works C3)*
The site is a green site at the below co-ordinates.

Co-ordinates

The co-ordinates are: **-32.524929, 28.528116**

Cebe Clinic is located in Ward 27 of Mnquma Local Municipality in Cebe Village near Centane in the Eastern Cape Province. The locality plan indicating the project area is shown in Figure 1 below.

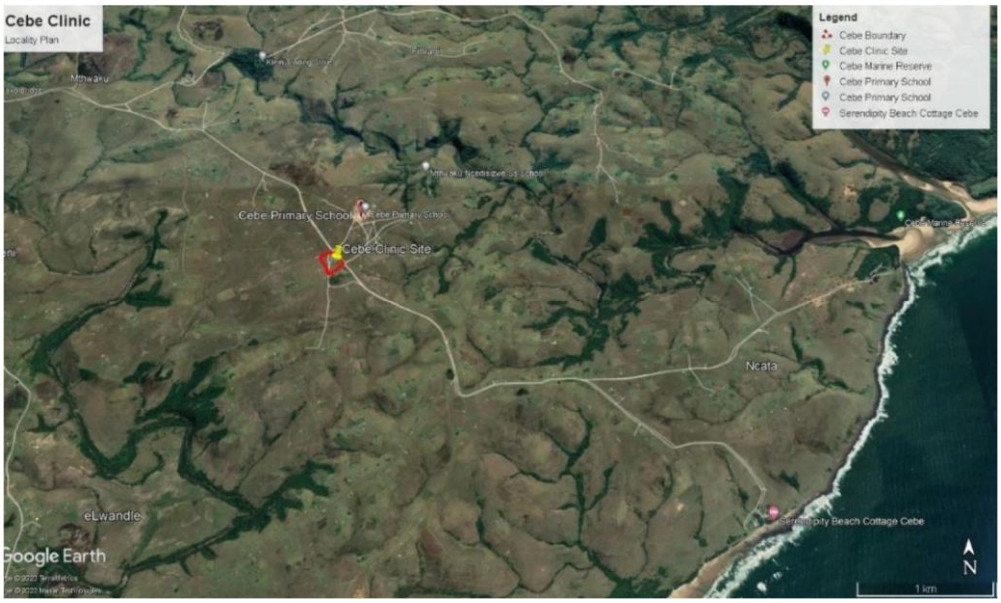
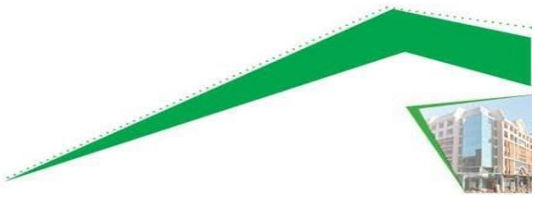


Figure 1: Locality Plan



-24/25-0083

ANNEXURE 1 – OHS SPECIFICATIONS

PROJECT SPECIFIC OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

FOR

GENERAL BUILDING

MANAGED ON BEHALF OF

(THE "CLIENT")

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

Department of Health

PREPARED BY:

Lumcus Training and Consulting PTY Ltd

Lumcus
TRAINING & CONSULTING

PROJECT:

Construction of Cebe Clinic in the Amathole District under Mnquma Local Municipality Ward 27

KEY ROLE PLAYERS

Client	**Department of Health**

Principal Agent	**Intsika Architects**
Contact	Rob Gillard
Contact Number:	082 872 8748
Email address:	rob@intsika.com

Health & Safety Agent	**Lumcus Training & Consulting PTY LTD**
Contact	Liza White
Contact Number:	082 307 2592
Email address:	liza@lumcus.co.za

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PROJECT SPECIFIC OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

LIST OF ABBREVIATIONS

AIA	Approved Inspection Authority
BoQ	Bill of Quantities
CC	Compensation Commissioner
CHS	Construction Health and Safety
CHSA	Construction Health and Safety Agent
CHSO	Construction Health and Safety Officer
CR	Construction Regulations (Gazette 10113 of 07/02/2014)
ECDOH	Eastern Cape Department of Health
DMR	Driven Machinery Regulations
DoL	Department of Labour
FEMA	Federated Employers Mutual Association
GAR	General Administration Regulations
GSR	General Safety Regulations
HCSR	Hazardous Chemical Substances Regulations
HIRA	Hazard Identification Risk Assessment
H&S	Health and Safety
ER	Engineer's Representative
LI	Labour Intensive
OH	Occupational Health
OHS	Occupational Health and Safety
OHSA	Occupational Health and Safety Act No. 85 of 1993 (as amended)
OHSS	Occupational Health and Safety Specification
PA	Principal Agent
PSHSS	Project Specific Health and Safety Specification
PC	Principal Contractor
PPE	Personal Protective Equipment
SANS	South African National Standards (Authority)
SDS	Safety Data Sheet
SMME	Small, Micro, Medium Enterprise
SWP	Safe Work Procedure
ECO	Environmental Control Officer
MDSD	Material Safety Data Sheet

DEFINITIONS

The definitions used will be those set out in the Regulation Gazette No 84 of 2014 7 February 2014 with the following additions:

Client: Eastern Cape Department of Health

Construction Health and Safety Agent:
A competent person appointed by the Client to carry out the duties of the Client in respect of Occupational Health and Safety on the Project in terms of Regulation 5 sub regs (5) and / or (6)

Designer: Means a competent person appointed by the Client as Agent to design, supervise and monitor construction on their behalf.

Hazard: Source of exposure to danger

Hazard Identification and Risk Assessment (HIRA) and Risk Control:

Means a documented plan, which identifies hazards, assesses the risks and details the control measures and safe working procedures which are to be used to mitigate and control the occurrence of hazards and risks during construction or operation phases.

Health and Safety Agent:

Means any person who acts as a representative for the Client in managing the overall health and safety work as their responsible person.

Health and Safety Plan:

Means a documented plan which answers to the Site specific Health and Safety Specification; including all the supporting documentation that indicate how the Principal Contractor or Contractor plans to manage H&S for the duration of the Contract.

Induction Training:

Means once off introductory training on general health and safety issues given to all employees and visitors to the site before commencement of work on site.

Principal Agent:

Means a competent person appointed by the Client to design, supervise and monitor the construction on their behalf.

Risk: Means the probability or likelihood that a hazard can result in injury or damage.

Regulation/s:

Shall mean the relevant regulation/s promulgated in terms of the Occupational Health and Safety Act, No. 85 of 1993.

Site: Means the area in the possession of the Principal Contractor for the construction of the works. Where there is no demarcated boundary it will include all adjacent areas, which are reasonably required for the activities for the Principal Contractor, and approved for such use by the Designer.

The Act: Means, unless the context indicates otherwise, the Occupational Health and Safety Act, No. 85 of 1993 and Regulations promulgated thereunder, as amended.

Worker: means any person who works in an employer's workplace including an employee of the employer or contractor, a self-employed person or volunteer 3;

Workplace: means any premises or place where a person performs work;

KEY REFERENCES

Occupational Health and Safety Act No. 85 of 1993 and Regulations (as amended)
Compensation for Injury and Occupational Diseases Act No. 100 of 1993 (as amended)
Joint Building Conditions of Contract (JBCC)
Construction Specifications & Standards 6.0 for Southern Africa. Hans Wegelin 6th Edition 2010
SANS Code 10400
Sector Guidelines
Municipal By Laws

SCOPE OF WORK: Construction of Cebe Clinic

a) **Main Clinic**

i. Main entrance and internal circulation with public ablution, covered walkway, reception area that has record and server rooms ii. Consulting room iii. Counselling room iv. Medical store

v. Facility manager vi.

Staff room with lockers

vii. Multipurpose hall

viii. Mother's room with play area

b) **Acute care (emergency and minor alignment)**

i. Acute consulting room ii.

Emergency / birthing room

iii. Dirty utility

iv. Vitals room

v. Waiting area

c. Infection disease Triage / Testing Unit

i. Separate entrance with emergency drop-off

ii. Waiting area iii. Office

iv. Donning & doffing area

v. Staff change room vi.

PPE storage vii.

Consulting room viii.

Counselling room ix.

Vitals room

d) Chronic Care Area

i. Waiting area ii.

Consulting room

iii. Vitals room iv.

Store room

e) Adolescent Youth Friendly Area

i. Waiting area ii.

Consulting room

iii. Vitals

iv. Store room

f) Services area

i. Ablution facility ii.

Cleaner's store iii.

Gardner's store iv.

Laundry area

v. Medical waste vi. General waste vii.

Cylinder stores (separate new from used)

1. PREAMBLE

Each year fatalities, serious injuries and poor attitudes of Contractors mar the reputation of the Construction Industry. ECDOH has a responsibility to limit its risk by ensuring a zero tolerance and better practice approach to Contractors and those affiliated to a particular project. Thus a high premium is placed on the health and safety (H&S) of ECDOH stakeholders, which include its employees, professional service providers, public and its physical assets. The responsibilities that the Department and relevant stakeholders have toward its employees are captured in, but not limited to this document. The responsibilities stem from both moral, civil and a variety of legal obligations. The Principal Contractor is to take due cognisance of the above statement.

ECDOH, as the Client and where there is an appointed CHS Agent on its behalf, shall provide a project specific Health & Safety Specification (PSHSS) for the project and provide the Principal Contractor/s making a bid or appointed to perform construction work for the project, or parts thereof.

1.1 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 viz. Agents, Professional Service Consultants (Engineers, Quantity Surveyors and Architects), Principal Contractors and Contractors achieve an acceptable level of OHS performance. No advice, approval of any document required by the PSHSS, such as hazard identification and risk assessments, or any other form of communication from the Client shall be construed as acceptance by the Client of any obligation that absolves the Principal Contractor from

achieving the required level of performance and compliance with legal requirements. Furthermore, there is no acceptance of liability by the Client, which may result from the Principal Contractor failing to comply with the PSHSS, i.e. the Principal Contractor remains responsible for achieving the required performance levels.

A Mandatary 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 or issues are 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 ECDOH) that are promulgated or accepted during the contract will automatically be applied.

Environmental management shall receive due attention as per the requirements of the Environmental Control Officer (ECO),but will be managed by the ECO directly.

It should be noted that this OHSS in no way relieves the Contractor of any of his responsibilities set out in the Act and Regulations.

1.2 Implementation of the Project Specific Occupational Health and Safety Specifications (PSHSS)

The project specific H&S specification (PSHSS) forms an integral part of the Contract, and PCs are required to make it an integral part of their Contracts with Contractors and Suppliers. A PSHSS will be available for each level of Contract and Contractor and must be complied with.

This specification must be read in conjunction with the OHSA, Regulations (as amended) and any other standards relating to work being done and ensure compliance thereto. The information relative to the scope of the project, the works etc. are detailed in the tender, are to be considered when developing the H&S plan and associated documentation. The summary of risks is included in Section 2 of the PSHSS.

The OHSA S.37.2 Mandatory Agreement must be fully completed by the PC, supplied by the Client. These documents shall be deemed to form part of the returnable Contract Documents.

No work may commence without written approval of the H&S plan by the CHS Agent, or the responsible person in ECDOH.

Should there be design changes, or change in the scope of works, an amended PSHSS may be issued. Where amended PSHSS are issued, the PC will be required to ensure a resubmission of an amended H&S plan for approval. Further to this, the PC must ensure that similar information must be provided as it applies to the works to all their Contractors, within 5 working days following notification thereof. Such design changes.

The CHS Agent will visit the project as deemed necessary by the Designer and the CHS Agent to ensure compliance and limit risk. All activities on the site and all appropriate documentation will be monitored and reported on to the Client and the Designer.

Non-conformances will be issued, and penalties or work stoppage will be issued where appropriate. Communication between the CHS Agent and the PC will be through the Designer (or Client's responsible person) as determined at the commencement of the project.

1.3 Requirements at Design Phase

The below items are to be identified during the early works stages as indicated in the Baseline Risk Assessment

Early Works

- Existing Services: Contact with underground and overhead services. Underground & Overhead Services: Electrical/ water/ telephone / sewer lines to be identified.
- SANRAL / Municipality / Ward Council Communication Permission from relevant authorities / Traffic Accommodation issues Additional access for construction and permanent entrances
- Geotechnical Survey Construction Activities in the vicinity of public and members of the community. Survey to be done by a registered Geotechnical Professional
- Environmental Impact Assessment to be done on advice / instruction from the professional team. Construction Activities in the vicinity of public and members of the community. Assessment to be done by a registered AIA.

General Safety During the Design Phase

- Community Liaison Officer to be considered in the early stage. Community Unrest due to lack of communication from the professional team. Appointment of CLO in the early stages of the project
- Consultants Safety - Injury to consultants and people visiting the proposed site. Bites and stings from poisonous insects, animals and snakes. Appointed consultants arrange meetings in advance to discuss any changes etc. with relevant parties.
- Contact with the existing community. Misunderstanding with existing community due to lack of communication Arrange meetings in advance to discuss any changes etc. with relevant parties.

1.4 Requirements at Tender Stage

Tenderers are required to submit a project specific pre-tender H&S plan with their Tender submission The documentation submitted will be used to assess the competence of the tenderer, as required in the CRs, therefore the information submitted needs to be complete and as close as possible to the final product.

Adequate pricing for H&S is required, and the appropriate section in the BoQ is to be completed. Failure to do so could result in the Tender being regarded as non-responsive.

The PC shall ensure adequate information is submitted as supporting documentation with his completed Tender. Such information will be assessed against the criteria listed and a score provided to the Bid Award Committee (BAC) for consideration. Failure to provide such information could render the tender application non-responsive.

A project specific H&S Plan in response to this PSHSS will be subject to approval by the CHS Agent. This must include all supporting documentation as required to verify the H&S system:

- A declaration to the effect that the Principal Contractor has the competence and necessary resources to carry out the work safely in compliance with the Occupational Health and Safety Act and its Regulations;

- A valid Letter of Good Standing;

- Detailed technical method statements for approval by the Designer and appropriate risk assessments and safe work procedures for approval by the CHS Agent or Client:
  - Site establishment including:
    - Clearing and grubbing;
    - Exposure of services, power, telecommunication etc.;
    - Arrangements for hoarding,
    - Demarcation and hoarding between construction activities and the operational buildings and offices
  - Excavating
  - An emergency plan indicating how and where emergencies will be handled o Working at heights

Further method statements are to be submitted prior to, and during the project where changes or new work is required, and the approval of the Designer/Client is required before work on that aspect or activity can commence The CHS Officer is to be included in production planning sessions/meetings to ensure that the appropriate risk assessments, safe work procedures and communication required are available and completed timeously. Penalties will be applied should this not be adhered to, and deemed a serious offence.

2. GENERAL REQUIREMENTS

2.1 Summary of Risks identified during Design

The intention of the summary of findings from the design baseline risk assessment is to highlight the residual risks identified during the design phase. The full design risk assessment can be found in the tender document.

The summary of risks provided is to point the contractor towards some risks he may not be aware of during tendering stage and while developing his formal risk assessments for the project.
The design risks and the management thereof should be included in the Principal Contractors (PC) risk assessments. Where there are other Contractors appointed to do work, the PC is to ensure that Contractors include such information in their risk assessments.

The management thereof should be included in the Contractors risk assessments.

- Excavation
- Environmental
- Working at Heights
- Exposure to noise and dust
- Electrical tools
- Concrete work
- Building works
- Plumbing

- Painting
- Electrical Installations
- Carpentry
- Paving
- Hazardous Chemicals
- Ergonomics
- Excavations
- Bulk Earth Works
- Lifting Equipment
- Equipment and Machinery
- Chemical and Environmental
- Traffic and Site Access
- Subsurface Utility Conflicts
- Wildlife and Insects
- Material Handling and Lifting
- Personal Protective Equipment (PPE)
- Communication Hazards
- Inadequate Training
- Emergency Response Coordination
- Existing services from surrounding area

2.2 Specified Hazardous Chemical Substances

Specified Hazardous Chemical Substances are those which have been identified as likely to be used on the project. Where the PC is likely to supply the product as the product has not been specified, materials data sheets (MDSs) need to be considered prior to all selections.

3. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

3.1 Structure and Organization of H&S Responsibilities

3.1.1 Application for a Construction Work Permit

The Client (ECDOH's) appointed Health and Safety Agent must acquire a "Construction Work Permit" from the Department of Labour

.

Work may not commence without the "Application for a Permit to do Construction Work" form being completed by the Client and accepted by the Department of Labour. This includes, inter alia, the Contractor's Health and safety Plan as accepted by the Client.

It should be noted that this OHSS in no way relieves the Contractor of any of his responsibilities set out in the Act and Regulations

The provincial director at the Department of Labour will issue the permit in writing to perform construction work within 30 days of receiving the construction work permit application and must assign a site-specific number for each construction site.

The contractor must ensure that the site-specific number issued by the Department of Labour must be conspicuously displayed at the main entrance to the site for which that number is assigned.

4. HEALTH AND SAFETY PLAN FRAMEWORK

The H&S aspects related to the project outlined in the previous sections are to be taken into account when drawing up the H&S Plan. The PC is required to demonstrate competence by providing an H&S system that will address the requirements of the project.

The current legislative requirements, SANS codes, SANS 10400 and any other standards that may guide practice are to be taken into consideration. The following aspects must be addressed in the H&S Plan, as they have been identified in section 2, as playing a role in reducing the overall risk of a particular activity, or section of the project. The CHS Agent may from time-to-time request additions or systems as they relate to the works or legislative requirements at the time.

The PC is to prepare a site layout drawing to indicate at least the following:

- The positions of site offices of all Contractors, toilets, drinking water and worker rest areas;
- Indicate the positions of emergency personnel and equipment (fire, first aiders, first aid posts);
- Protection of plant and pedestrians, indicate parking, and
- Storage areas (materials and equipment, waste etc.)
- Access and egress to site for deliveries and intended temporary traffic management.
- Emergency assembly point

Such layouts are to be updated regularly throughout the project.

4.1 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 Site Agent (OHSA 16.2). Knowledge and training in H&S is 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 required and kept current with the project programme. The construction team is to ensure the appointed CHS Officer is kept up to date with all planned activities, to ensure all H&S requirements are met.

All construction/technical method statements are to be generated by senior site personnel, and the appropriate risk assessments developed therefrom in conjunction with the CHS Officer.

The Occupational Health and Safety Plan shall include the following, but is not limited to the following key appointments:

4.1.1 Construction Supervision

Competent Construction Managers (CR8.1) will be appointed to manage part or all of the works and have training and/or experience in the area of responsibility. The Construction Manager may not hold any other position on the site staff. All site supervisors must show evidence of appropriate training in H&S, and an understanding or training in areas of responsibility (i.e. risk assessments, method statements etc.).

Multiple competent Assistant Construction Managers (CR8.2) may be appointed where justified by the scope and complexity of the works.

Curriculum Vitae (CVs) are to be submitted for approval by the Designer, and/or Client. The Supervisor will be held responsible for the safety of working teams and subordinates, housekeeping and stacking and storage of materials.

If the Construction Manager (CR8.1) changes throughout the project. The Principal Contractor must notify the client and Pr.CHSA for approval two weeks prior in order for the Pr.CHSA update the Annexure 1 with Department of Employment and Labour two weeks prior to commencement of work activities. Documentation required: Updated signed Annexure 1, Signed Appointment letter, CV as well as proof of competency.

4.1.2 Construction Health and Safety Officer

The PC will employ at least one competent, full-time CHS Officer (CR8.5) for the duration of the contract. The CHS Officer's CV is to be submitted for approval by the CHS Agent or the Client, at time of tender. The PC is to ensure adequate resources are provided in order to undertake all responsibilities (i.e. mobile phone, computer and internet access, vehicle etc.) Qualifications shall include Diploma in H&S qualifications or similar, with exposure to civil engineering and building that is appropriate given the level of project complexity preferably in an OHS capacity. He should also have undergone training in the Act and Regulations. In the case of a contract where contractors are employed, the CHS Officer must have a competence to evaluate the Contractors Health and Safety plans.

Proof of Full registration as a Construction Health and Safety Officer with SACPCMP must be supplied.

This person may not hold any other position on the site staff.
The site supervisor may not act as the CHS Officer.
The CHS Officer/s will be held responsible for all H&S on the project.

- Senior site staff and supervision, Contractors are to follow systems, instructions etc. given by the CHS Officer at all times;
- No new Contractors may commence work without approval or following the H&S plan as submitted, and
- No inductions of Contractor staff until the H&S documentation is approved by the CHS Officer.
- The CHS Officer/s may not be removed or replaced without the approval of the CHS Agent, nor may the site be left unattended for more than 1 day without adequate, competent cover.

A monthly report of all H&S activities and incidents is required by the end of the first week of each month, or at a date agreed to by the CHS Agent/Client and the CHS Officer. An example of the monthly report is attached as an Annexure C.

The CHS Officer will be responsible for collating the H&S documentation at the close out of the project in electronic format. A list of the typical aspects that should be provided is available as Annexure B to this document. The PC is to ensure that all Contractors documentation follows the same requirements and closed out H&S documentation must be completed and be available with the close out of the main contract in electronic format.

If the CHSO is replaced the Principal contractor is required to submit the following documentation for approval by the Client and appointed Pr. CHSA at least two weeks before:

1. Applicant CV
2. Applicant Competency
3. SACPCMP Certificate of Goodstanding

Failure to do so will be considered a serious offence and penalties /stoppage of site will apply.

4.2 Health and Safety Representatives and H&S meetings

H&S Representatives representing workers and Contractors are to be appointed following the startup of the project, irrespective of the number of workers on site. The appointed H&S Representatives are to be actively involved with H&S and will assist the CHS Officer and site management in meeting legislative duties.

The CHS Officer shall further ensure that H&S is discussed at all internal production or progress meetings. Issues arising from the CHS Agent audits are to be discussed, as well as all H&S related issues.

Minutes are to be kept for all H&S interventions and meetings. Failure to do so will be deemed to be a moderate offence.

4.3 Appointment of Competent Contractors

The Principal Contractor is to ensure compliance with the Client's minimum standards and all legislative requirements. The same H&S standards required of the PC are to be applied to all Contractors. An index 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 CHS Officer is to ensure a Contractors appointment and approval of H&S documentation at least seven (7) working days prior to commencing work.
- The contractor should take note of the required workload of the appointed CHSO in relation to the appointed SMME's
- No Contractor may work under the PC's Compensation registration number. If required, the PC may assist SMMEs 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 Mandatary agreements between parties in place.

The following aspects are applicable to Suppliers or short-term works (surveying, repairs, servicing, deliveries etc). Cognisance is to be taken of the level of risk involved and the CHS Officer is to ensure the level of H&S documentation is appropriate:

- Signed Mandatary agreements in place
- Valid Letter of Good Standing
- Method statements and risk assessments
- Available information relative to:
    - Load testing and registers for cranes or lifting devices.
    - Medical certificates of fitness
    - Safety data sheets (SDSs)

Failure to provide written approval of H&S documentation will be considered a serious offense, and could result in aspects of, or all the activities being stopped, and penalties implemented.

5. GENERAL RISK MANAGEMENT

5.1 Health Risks and Medical Surveillance

As some products use in the building work have not been identified, the PC is to ensure the CHS Officer and all supervision is responsible for ensuring the safe use of such products, and their inclusion into method statements and risk assessment. The appropriate SDSs are to be obtained for all products and used to develop the H&S documentation as they relate to the works.

Many of the processes may be labour intensive and ergonomic risks are to be noted. All workers (including Contractors) are to be included in the medical surveillance programme.

Workers will be exposed to noise, dust, and physical risks from extended periods of work of a repetitive nature, materials specified and the general nature of the works.

Environmental monitoring results and risk assessments are to be made available to the occupational health professionals doing the medical surveillance. The use of occupational risk exposure profiling (OREPS) and job descriptions are to be used to determine specific exposures for management.

All permanent workers (including those of Contractors) are required to be in possession of a medical certificate of fitness prior to commencing work.
Medical surveillance will commence at pre-employment. All workers (including Contractors) are required to be in possession of a medical certificate of fitness prior to commencing work. Annual medical surveillance is required (unless identified as being required more frequently), as well as an exit medical. Arrangements for keeping medical records for the required time are to be noted. It is preferable that the PC has a medical surveillance plan. Full medical records are not to be placed in the H&S file. A procedure for managing the medical records which require safekeeping for prescribed periods are to be addressed.
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); and
- Any other tests identified as relevant from chemical or specifically identified risks of exposure.

No employee/ contract worker will be allowed on site without a valid medical certificate of fitness.

Failure to do so will be considered a serious offence.

5.1.1 General Environmental Conditions

Compliance with the Environmental Regulations (as amended), among others is required.
Environmental monitoring of ventilation, lighting and dusts may be deemed to be required by the Approved Inspection Authority used to measure the environment. Copies of the relevant reports and actions taken in respect of these are to be placed in the H&S file.

Testing and reporting for airborne silica as required by the 2008 amendment to the HCS Regulations is required.

5.1.2 Noise Risks

All plant from plant hire companies (suppliers) or that of the PC is to be compliant with the Noise Induced Hearing Loss Regulations. Plant identified that has not been tested and marked for noise emissions will result in having to be tested at the Contractors or PCs expense. Failure to do so within a reasonable time period will result in such plant being removed from site.

Audiometric testing of all workers is noted as required in the medical surveillance programme for all permanent workers prior to work commencing. Temporary labour working in identified noise areas will require testing if the noise levels are indicated on plant or through processes as greater than 85dB. Audiometry records are to be available in the H&S file.
Suitable SANS approved hearing protective equipment shall be issued and worn. Where several items of construction plant are in operation at or near to each other, the noise zone for the combined plant should be established and suitable hearing protective equipment used within this zone Failure to do so will be considered a serious offence.

5.2 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. The plan may be adapted should new information or risks are identified.

The procedure shall detail the response plan in relation to the works, and include at least (but are not limited to) the following key elements:

- Appointment of a competent emergency response co-ordinator ○ Fire; ○ Public injury, Motor vehicle accidents; ○ Falls from heights; ○ Serious injury to workers (medical or work-related); and ○ Any other major risks identified during risk assessments.
  ○

Drills to be conducted annually for the below:

- Fire drill
- Bomb threat
- Fall from Heights Rescue procedures.

The emergency plan is to ensure the inclusion of local service providers where possible. Such arrangements should be made with these persons prior to the commencement of the project. Local emergency telephone numbers must be displayed and made part of the emergency procedure.

- First aid

  Extra gloves, and disinfectants are to be available

- Evacuation plans

The general principals of emergency management are to be applied as it applies to the hierarchy of control and management.

5.2.1 First Aiders and First Aid Equipment

At least 1 first aider will be trained to Level 3. First aiders shall be available and accessible on site at all times and be able to work as a team when responding to any emergency on the project.

Contractors are expected to ensure compliance and provide/manage their own first aiders and equipment. The number of First aiders will be determined by the complexity and exposed risks of the project, not numbers of workers.

Appropriately stocked first aid kits, at least to the requirements of the Annexure to the GAR, are to be available at all times to assure continual availability and access on site.

5.2.2 Fires and Emergency Management

Attention to emergency planning and procedures is very important. The full emergency plan must form part of the supporting documentation with the H&S Plan. The CHS Agents approval of all emergency plans and procedures is required prior to commencement on site. It is advised that the system should be simple and easy for any worker to follow. The plan may be adapted should new information or risks are identified.

First aiders shall be available in each working team and be able to work as a team when responding to any emergency on the project.

The procedure shall detail the response plan in relation to the works, and include at least (but are not limited to) the following key elements:
Appointment of a competent emergency response co-ordinator and wardens;

- Lists of first aiders, and
- Requirement in terms of identified risks:
  - Fire;
  - Explosions;
  - Falls from heights, and
  - Motor vehicle accidents.

The emergency plan is to ensure the inclusion of local service providers where possible. Such arrangements should be made with these persons prior to the commencement of the project.
The emergency plan is to include the risk of fire on site and related to any specific activities where gas, welding, cutting etc. occur.

Fire extinguishers will be appropriate for the risk and in sufficient numbers to deal with the type of fires that could occur. All mobile plant is to have appropriate, accessible fire extinguishers. Hot work permits are required for any such activities.

5.2.3 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 /Client /CHS Agent immediately. This shall be confirmed in writing following the incident. Full details are to be included in each site meeting or when the Client visits site. A summary of incidents is to be included in the monthly report.

Any person who contracts the Covid-19 Virus may need to be reported to the Compensation Commissioner as an occupational disease where their work is to monitor and in contact with others. Such details are provided in the Compensation for Injuries and Diseases Act (COIDA).

Failure to comply with emergency provisions will be considered a serious offence, and the operation or project may be stopped if deemed inadequate for the work at the time of assessment or site inspection.

5.3 Personal Protective Equipment (PPE) and Clothing

The PC is to provide a procedure as an addendum to indicate how PPE is managed within the Company. The wearing of the identified SANS approved PPE. The PC shall ensure that all workers (Including Contractors) are issued with and shall wear:

- Hard hats;
- Protective footwear;
- Dust Masks
- Hand Gloves

  It is preferable that surgical gloves are not worn unless indicated and workers trained in the proper use thereof. Gloves must only be used when the activity demand the wearing of specific type of hand gloves. This will be directed by the PC risk assessment.
- Site office personnel need to be made aware of the risks in the office environment, this include to handling of documents and plans. These employees could be issued with the appropriate hand gloves or sufficient hand wash / sanitising facilities must be available in the site office.
- Overalls that ensure worker visibility.

  All employees must be issued with 3 overalls (1 overall wearing; 1 overall in the wash and one as the backup). This will ensure that the employee will be able to wear clean hygienic overalls.
- Eye protection (if required)
- Hearing protection;
- Reflective jackets (no bibs)
- Harnesses (working on heights)
- Respiratory protection (minimum of FF2), and
- Any other necessary PPE identified from SDSs and/or risk assessments.

Adequate quantities of PPE shall be available. This shall include the necessary PPE for visitors. The procedures for managing PPE are to be in a formal procedure submitted with the H&S plan for approval.

Any person (including Client, Designers etc.) found on site without the necessary PPE will be removed from site until the PPE is supplied and worn.

Failure to comply will result in penalties being applied.

5.4 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.

Temporary signage is to include (but not be limited to) the following:

- Report to site office/ ‘Warning: Construction Site – Keep out’ or similar;
- Site office
- hard hat area or other PPE requirements noted;
- First aid box positions (including vehicles); and • Fire extinguishers.
- Assembly Area

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.
Note should be taken that “omnibus” signs indicating that the entire site requires PPE should not be used. Any areas where PPE is mandatory must be separately signed.

The Principal Contractor must ensure that members of the public will not be able to gain access to the construction area.

Failure to comply will result in penalties being applied.

5.5 Induction of Employees and Visitors, General H&S Training

A simple, formal induction programme is to be submitted as an addendum for approval with the H&S plan. Inductions must be carried out for all workers and visitors (including Client, Designers) to the site.

Pre-task training is required to ensure workers are familiar with the risks and H&S measures of the work or tasks to be done. Such training is to be done at least daily. Records of inductions and pre-task training are to be kept in the H&S file.

- Induction training to educate to ensure all users are hand washing correctly.
- Induction to include training on the correct use of face masks.

Any person found on site without proof of induction in the H&S File will be removed from site until the proof is supplied and, and a penalty issued per non-compliance.

5.6 Management of Plant and Equipment

Close control of plant and equipment is required, including that of Contractors. It should be noted that control measures should be implemented especially between the two site areas and should at all times be separated from the Institute employees' persons and vehicles.

Daily monitoring of all plant and equipment is required prior to commencing work. Full lists of hired and own plant are to be available at the CHS Agent's/Client audit. All daily inspection records are to be kept in the H&S file. Plant Hire and Haulage Contractors are to comply with the requirements where plant and equipment is brought onto site. Registers are not to be more than 1 week behind.

Only competent, fit plant operators are to be used. Medical certificates of fitness are required for all operators.
Any plant or slings used to lift plant or material require annual load testing by an AIA, and all certificates must have the testers LMI/E number. Operators are to be adequately trained and certified to operate mobile cranes or crane trucks. Certificates and registers are to be placed in the H&S file.
Movement of plant in closures and in confined working areas is to be closely monitored and managed by the supervisors. The blind spots of plant are to be taken into account and workers and Contractors protected accordingly.

Failure to do so will be considered a serious offence.

5.7 Excavations

A procedure for managing excavations is to be provided as an addendum to the H&S plan describing how excavations are to be managed.

Excavation method statements are to be approved by the Designer and associated risk assessments are required. Designs by competent persons are required where ground conditions are deemed to require shoring.

A competent person is to be appointed for managing all excavations. A permit system is to be available and used for all excavations. All equipment and ground conditions to be checked daily, and prior to work commencing.

Excavations should preferably not be open beyond what can be closed daily. Where excavations need to remain open, all excavations are to be properly protected. Adequate stakes with 1m high demarcation and berms/spoil are required to be a safe distance from the edge of the angle of repose.

Candy tape may not be used to demarcate excavations. Cognisance is required of the surrounding area and increased levels of protection are required where work is in communities, near schools and clinics.

Work will be stopped, and penalties applied to any work in excavations that is not compliant.

5.8 Working at heights

A fall protection and rescue plan is to be available and supplied as an addendum to the H&S plan. The fall protection plan must be appropriate for the project. Method statements, appropriate risk assessments, safe work procedures and training are to be available prior to work commencing.

Construction drawings shall be required for all temporary structures as they relate to the project. The drawings shall be accompanied by full calculations, design loads and any relevant test results as required by the SANS code and ensure adequate allowance for the development of appropriate documentation and training. All drawings are to be checked and signed by a competent structural engineer (registered with ECSA).

The focus for working at height shall include fall restraint systems where possible except during assembling or dismantling top components or where it is not deemed safe. The relevant SANS codes are to be applied as they apply to the works and the project, such as:

- SANS 10085
- SANS 10333 (parts 1-3)

Should part of the works be contracted out, competent Contractors are to be appointed and submit documentation according to the project requirements. The PC is to note if such work is to be contracted to specialists in the H&S Plan. The plan is to be developed and work managed by a competent person for the duration of the project. The following aspects must be included:

- The public or users of buildings are to be protected at all times by way of hoarding, barricading or fencing;
- Notices to be posted;
- Restrictions or stoppage when weather conditions are deemed hazardous;
- Permit system for working at heights;
- Prevention of falling tools or equipment; • Link to emergency plan regarding rescue.

All workers are to be in possession of valid certificates of fitness that extend for the duration of the works. Note the requirements in the section relating to medical surveillance.

Registers and all relevant documentation are to be placed in the H&S file.

Work will be stopped, and penalties applied to any work at heights that is not compliant.

5.9 Cranes and lifting equipment

Should any form of lifting device or crane (fixed or mobile) be used during the project for deliveries, moving of supplies or equipment, the appropriate documentation must be made available. Method statements, risk assessments, safe work procedures and training are to be available prior to work

commencing. A procedure for managing loads and lifting must be made available as an addendum to the H&S Plan.

5.10 Temporary Works (Scaffolding, support work, formwork)

Temporary works must be properly designed and signed off by a competent person. In these instances a competent person is defined as a Professional Engineer or Professional Technologist (registered with ECSA) who has sufficient experience in the design of the type of temporary work in question to be able to assess the design. The appropriate competent persons are to be appointed to manage and monitor such works to the satisfaction of the Engineer and CHS Agent. Records and registers are to be properly completed and kept in the H&S file. If temporary works are to be erected by a Contractor, this must be notified to the Designer/CHS Agent.

All necessary calculations and drawings of temporary works must be kept on site and available to the PA and CHSA

Failure to do so will be considered a serious offence.

5.11 Mechanical installations

All mechanical installations are to be carried out in conformity with the manufacturer's instructions. Method statements and risk analyses must be compiled for each type of installation. A competent person must be designated to supervise the work**.**

5.12 Auditing

Frequency of external auditing by the CHS Agent or Client will be as agreed with the Client and Designer but will at least conform to the requirements of the Construction Regulations. The site will be inspected, and the documentation audited relative to the activities and H&S plan. The CHS Officer of the PC must accompany the Client, or the CHS Agent, on all audits and inspections. Not all audits will be, or need be announced.

The PC will ensure that all their Contractors are audited at a frequency determined by the CHS Agent. Audit frequency may be increased if Contractors are not performing adequately. Audit results will be acted upon and non-conformances and penalties issued where deemed appropriate. The Client, Designer or CHS Agent may act or require further outcomes if non-compliances are noted or unsafe acts are noted on site.

Internal audits are to include site conditions as well as ensuring H&S files are appropriate, and compliant. Comprehensive audit reports are to be made available, the format of the audit reports are to be acceptable by the CHS Agent.

The PC will be audited using a template as supplied in the tender document. The audit template will be adjusted from time to time relative to the activities on site. A similar process is to be used by the PC when auditing their Contractors on site. Compliance with legislative requirements and the systems provided by the PC to manage the H&S on site will be measured. Full compliance is required. Time limits for corrective actions will be set and must be adhered to.

Failure to address findings or non-conformances will be considered a serious offence.

5.13 Communication on Site

All H&S communication during the project between the CHS Agent and the PC will be done through the Architect/Clerk of Works/Client and be in writing, including the issue and responses to nonconformances and H&S audit results.

Failure to address issues timeously will be considered a serious offence.

5.14 Access/Egress of Site / Welfare Facilities

Welfare Facilities

Adequate toilets, clean, safe drinking water and decent shelter must be afforded workers at all times. Toilets will be within reasonable distance of workers, or placed with each working team in safe, with reasonable privacy. No substances containing Formaldehyde may be used in Chemical Toilets.

Ablution facilities are an essential facility that must be available for workers across a site. Facilities are a high-risk area and increased cleaning regimes are required to be introduced. A policy on how this will be done is required, that will cover both portable and permanent facilities. The following are considerations, that include, *inter alia*:

- Portable toilets to be provided at a 1:30 ratio but be sanitized daily as per Occupational Health and Safety Measures in Workplaces or more frequently.
- Cleaners to continually clean and have a formal cleaning regime.
- Hand washing facilities (soap and water, paper towel) to be available where possible, and if not, to provide hand sanitizer.
- Induction training to educate to ensure all users are hand washing correctly.
- Flush toilets preferably 1:30 unless increased cleaning regime present;
- Restrict the number of people using toilet facilities at any one time e.g. use a welfare attendant;
- Wash hands before and after using the facilities;
- Enhance the cleaning regimes for toilet facilities particularly door handles, locks and the toilet flush;
- Portable toilets should be avoided wherever possible, but where in use these should be cleaned and emptied more frequently;
- Provide suitable and sufficient rubbish bins for hand towels with regular removal and disposal that need to be managed as hazardous waste;
- Introduce staggered start and finish times to reduce congestion and contact at all times;
- Consider increasing the number or size of facilities available on site if possible.

Access/Egress

The PC is to ensure there is suitable access control is established and adequate provision to minimize the risk of persons unauthorized persons entering the construction site.

Failure to ensure compliance will be considered a serious offence.

5.15 Discipline, Alcohol and Substance Abuse

All employees (management included) are to follow instructions given in the interest of H&S. Disciplinary action is to be imposed on those who do not follow such instructions or company rules or policies.

No person is allowed to work or access site if under the influence of alcohol or other substances that could impact on their own or others safety. The PC is to have a drug and alcohol policy available to manage such instances.

These requirements are applicable to any employee of any organization providing services on site. Penalties may also be applied by the Client, OHS Agent or Engineer.

5.16 Electrical Equipment

In addition to the requirements of the Electrical Machinery Regulations and the General Machinery Regulations any electrical distribution board used for construction work shall be fitted with suitable earth leakage protection. Leads must be properly and firmly connected. Plugs and sockets shell be in good and safe condition.
All electrical apparatus, other than electrical hand tools, shall have a physical “lock out” system which will prevent any operation other than that authorized by a supervisor. A “lock out” sign shall be displayed when the apparatus is not in use.
Method statements and safe work procedures will be required for all work involving electrical apparatus.

5.17 Barricading and Hoarding

It is the responsibility of the contractor is to ensure to price correctly for barricading and hoarding as the construction site must be securely barricaded from the surrounding community to ensure that no public, can gain any access to the construction area.

Contractor to ensure that the barricading/ hording is maintained at all times.

Failure to ensure compliance will be considered a serious offence.

6. HEALTH AND SAFETY FILE

The documentation submitted and approved following the awarding of the contract will be used to form the H&S file. The H&S file is required to be laid out in a logical manner, and documentation filed within the file is to be easily accessible.
The following completed information shall be included (but not be limited to) as part of the index:

- The PSHSS;
- Letter of Goodstanding
- The H&S Plan and the approval by Client;
- Appointment by Client;
- Mandatory agreement with Client;
- Permit Application for construction work
- A record of all working drawings, calculations and design where applicable.
- Detailed list of Contractors with contact details, appointments, Mandatories etc., H&S specifications issued;
- Record of Competencies (CVs) and appointments;
- Training Records;
- Permits;
- Method statements;
- Risk assessments;
- Safe work procedures;
- Emergency and injury management;
- Safety data sheets
- Medical surveillance records;
- Registers; and

- Records of audits, minutes etc.
- Plant lists
- Temporary electrical installations
- Employee records (who is on site)

7. 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 or PCs H&S Plan; neither the PC nor any other Contractor shall have a claim for extension of time or any other compensation.
The following constitute examples of the types of non-conformances that will attract penalties:

Minor: Penalty: R50/count	**Medium: Penalty: R500/count and a non-conformance**	**Severe Penalty: R5000/count, a nonconformance and/or activity stoppage**
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, approved 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	Non-compliance with traffic accommodation requirements: layout or physical conditions
	No monthly OHS report at site meeting to report on	Any serious breach of legal requirements
	No certificates of fitness for workers as required	
	Working without approved method statements	

7.1 Failure to Comply with Provisions

Failure or refusal on the part of the PC or their Contractors to take the necessary steps to ensure the safety of workers and the general public in accordance with these specifications or as required by statutory authorities or ordered by the engineer, shall be sufficient cause for the engineer to apply penalties as follows:

(i) A penalty as shown in the Table above shall be deducted for each and every occurrence of non-compliance with any of the requirements of the PSHSS.

(ii) In addition, a time-related penalty of R500, 00 per hour over and above the fixed penalty may be deducted for non-compliance to rectify any non-conformance within the allowable time after a site instruction to this effect has been given by the Designer. The site instruction shall state the agreed time, which shall be the time in hours for reinstatement of the defects. Should the Contractor fail to adhere to this instruction, the time-related penalty shall be applied from the time the instruction was given.

8 MEASUREMENT AND PAYMENT

The payment items for Occupational Health & Safety are contained in the Bill of Quantities. The same rules are applicable in respect of the pricing of these items as for every other payment item. Attention is drawn to the Pricing Instructions in this document.

Item and Unit

C.01 Preparation of Contractor's Project Specific Health and Safety Plan. (Lump Sum (L.S))

The rate for this item must cover all expenses incurred in preparing the Contractor's project specific Health and Safety Plan as required by the Client's project specific Health and Safety Specification in this document.

C.02 Principal Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations. (Lump Sum (L.S))

The full amount will be paid in one instalment only when the Client's Agent has verified and approved the following:

(a) The Principal Contractor has notified the Provincial Director of the Department of Labour in writing of the project, Annexure A to the Regulations.
(b) The Principal Contractor has made the required initial Appointments of Employees and Contractors.
(c) The Client has approved the Principal Contractor's project Health and Safety Plan. (d) The Principal Contractor has set up his Health and Safety File.

C.03 Principal Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations. (Month (Mth))

The amount shall represent full compensation for that part of the Principal Contractor's general obligations in terms of the Occupational Health and Safety Act and Regulations which are mainly a function of time. Payment will be made when the Client's Agent has verified the Principle Contractor's compliance as part of the audit. This will include the updating and administration of the Health and Safety file.

C.04 Provision of Personal Protective Equipment (PPE) as listed in the Bill of Quantities. (Number (No))

The rates for these items shall include for the procurement, delivery, storage, distribution and all other actions required for the supply of PPE to the employees of the Principle Contractor, full or part time, requiring them. Sub-Contractors are responsible for their own costs in this regard. Any items of PPE not included on the list will be paid for only after the Engineer has agreed to their acquisition.

Items listed will include, among others which may be noted, are: hard hats, reflective vests, reflective bibs, high visibility overalls, protective foot wear, fall arrestor harness and tethers, gloves, ear muffs, earplugs and dust masks of appropriate type. Normal items such as standard overalls, waterproof

clothing, gum boots and standard workshop safety equipment such as welding masks and goggles will not be paid for.

Payment will be based on the issues register for PPE as kept by the Construction Health and Safety Officer, backed up by paid invoices if requested.

C.05 Provision of part-time or Full Time Construction Health and Safety Officer, Construction Manager, Assistant Manager, Construction Supervisor

The Tender sum shall include for the cost of a Construction Health and Safety Officer, Construction Manager, Construction Supervisor on a fulltime basis, the amount tendered will be prorated according to the amount of time spent on the project.

C.06 Costs of Medical Surveillance (Unit (No))

This item shall cover all costs in involved in the obtaining of baseline medical examinations of temporary labour, including operators for mobile plant as contemplated in CR 21(d) (ii); for temporary workers and workers exposed to noises at or above the limits given in the Noise-induced Hearing Loss regulations, as stipulated.

Workers in the permanent employ of the Contractor will only be paid for if their certificates require updating.

C.06 a) Initial (baseline) medical examinations, including audiometric and lung function testing.

C.07 Induction Training (Unit (No)

This item shall cover all costs incurred for the health and safety inductions as set out on Regulation 7 of the Construction regulations and the proof of induction required. Payment will be made on the figures contained in the induction section of the Health and Safety File.

C.08 Provision of First Aid Boxes. (Unit (No))

The rate for this item shall cover all costs incurred in the provision and maintaining of first aid boxes as outlined in Paragraph 7 above.

C.09) Establishment of noise levels (Unit (No))

a) This item shall cover all costs involved in the establishment of noise zones, including any workshops, in terms of Regulation 9 of the Noise-induced Hearing Loss Regulations. Where a zone has previously been established for a particular item of plant within the last two years, the test need not be repeated but must be kept valid for the duration of the Contract.

C.10 Submission of the Health and Safety File. (Lump Sum)

Expenditure under this item shall be made in accordance with the general conditions of contract.

This amount will be paid only once the Principal Contractor has met all his obligations in respect of the Occupational Health and Safety Act and the Construction Regulations and has submitted his Health and Safety File complete as envisaged on this specification to the Client's satisfaction. This must be done prior to the issue of a Certificate of Completion

ANNEXURE A
CLOSE OUT REQUIREMENTS

The H&S files for the Principal Contractors and all Contractors require closure and handover to the Client at the completion of the project. The following list is an example of what should be included, but is not exhaustive. The OHS Agent or the Client may require further information at the time of completion and the Principal Contractor is to ensure that all instructions are met. Documentation would include all records from the start of the project. Daily or monthly plant inspection records are not required unless they are related to an accident. All records to be in electronic format and submitted to the OHS agent for approval in adequately formatted lists and folders. Layout should be logical and in the same order as in the site files.

Health and Safety close out file requirements include:

a) Client H&S Specification
b) Principal Contractor's OHS Plan(s)
c) Principal Contractors Policies
d) Organograms
e) Legal Appointments
f) List of all employees employed on a permanent or contractual basis over the duration of the contract.
g) Permit Application with Department of Labour
h) Letters of Good Standing for the Project
i) Full files for all Contractors as well as their close out reports
    - List of Contractors
    - All employees employed on a permanent or contractual basis over the duration of the contract.
    - Letters of Approval of Contractors
    - Mandatary Agreements
    - Letters of Good Standing
    - Appointments
j) Incident Records
k) Non- Conformance records
l) Agent's Audits
m) Method Statements
n) Risk assessments
o) Safe work procedures
p) Medical surveillance certificates of fitness. Medical records are to be kept according to the OH&S Act as amended.
q) All drawings for temporary structures (suspended beams/scaffolds etc.)
r) All operating manuals for any systems that require on-going maintenance.
s) Copies of test results, policies and procedures for environmental monitoring (silica, noise, dusts etc.)

Defect and Liability Period

The H&S files are to be kept 'live' for the defect and liability period by the Principal Contractor, including those of their Contractors. Any work required during the defect and liability period will require an assessment of the H&S file by the OCHS Agent prior to any work commencing. A copy drawing records for the as-builts are to be placed on file by the Designers once complete.

ANNEXURE B
NON-CONFORMANCES

HEALTH AND SAFETY SITE INSPECTION NON-CONFORMANCE NO		
AGENT:	**PROJECT:**	
Consultant:	**Date and time:**	
Client	**Area:**	
Contractor:		
ASPECTS NOTED:	**COMMENTS:**	**COMPLETION REQUIRED BY (DATE):**
	•	
	•	
	•	
	•	
	•	
PHOTOGRAPHIC EVIDENCE (if available):		
OTHER:		
The following penalties are to be applied:		
Signature of Designer		
Signature of CHS Officer/Site Agent		
Signature: of CHS Agent		

ANNEXURE C:

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)

	CONTRACT NUMBER:	PROJECT NAME:	CONTRACT DETAILS:
1	GENERAL ACTIVITIES FOR THE MONTH (detail each area of work)		
2	NUMBER OF WORKERS (permanent and local, contractors)		
3	TRAINING DONE (supplier, no of people, type)		
4	INCIDENTS / ACCIDENT (list number and details attach reports)		
6	NON-CONFORMANCES (closed out or active)		
7	CONTRACTORS (list, approval status)		
8	AUDITS COMPLETED (internal and external)		

9	**CRITICAL ISSUES**	
10	**GENERAL**	

CHS Officer **Signature** **Date:**

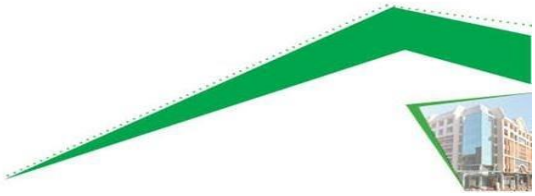
Site Agent _____ **Signature** _____ **Date:** ___

ANNEXURE D

BILL OF QUANTITIES FOR HEALTH AND SAFETY

Item	Description	Unit	Quantity	Rate	Total
	Preparation of the Contractor's site-specific Health and Safety Plan	lump sum			
	Principal Contractor's initial obligations in respect of the Occupational Health and Safety Act / Construction Regulations	lump sum			
	Principal Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations	month			
	Provision of Personal Protective Equipment (PPE)				
(a)	Reflective vests	Item			
(b)	Hard hats	Item			
(c)	Protective foot wear	Item			

(d)	Earplugs	Item			
(e)	Dust masks	Item			
(f)	Gloves	Item			
(h)	High visibility overalls to SARTSM Chapter 13 Level 3	Item			
(i)	Ear Defenders SABS approved	Item			
(j)	Overalls	Item			
(k)	Induction Training	Sum			
	Provision of a full-time Construction Health and Safety Officer registered with SACPCMP	Monthly			
	Cost of medical certificates and medical surveillance				
(a)	Initial (baseline) medical examinations	prime cost (PC) sum			
(b)	Periodic and exit examinations	prime cost (PC) sum			
	Contractor's charges to allow for handling costs and profit in respect of sub (a) and (b)	%			
	Provision of First Aid Boxes to GSR requirements	Item			
	Noise monitoring				
(a)	Establishment of noise zones (plant)	Item			
(b)					
	Audiograms (personnel)	Item			
	Submission of a Health and Safety File	lump sum			



ANNEXURE 2 – BASELINE RISK ASSESSMENT

CONSTRUCTION OF CEBE CLINIC - STAGE 5-7

BASELINE RISK ASSESSMENT

The base line risk assessment is to highlight hazards emanating from project risks identified. During Stages 5-7 of the project. This is a working document.

Feb 2024

Low	Med	High
1	4	12
2	6	18
3	8	27

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

Note, this HIRA is a guide only and does not cover all risks. It must be read in conjunction with the Site Specific OHS Specification in the Contract document. The Contractor must supply a full risk assessment for all activities on site

					Baseline risk					**Residual risk**				
REF where appropriate	Operation	Hazard	Design Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an inciden	Frequency of Exposure	Probability of harm	Risk rating and risk category	Extra control measures necessary to reduce risk / Redesign by Client and / or Designer	Likely consequences of an accident	Frequency of Exposure	Probability of harm	Risk rating and risk category	Accountability
GENERAL SAFETY														
	General Safety	Community Liaison Officer to be considered in the early stage	Community Unrest due to lack of communication from the professional team	Appointment of CLO in the early stages of the project	2	2	2	8	Clear communication by means of the appointed Community Liaison Officer with existing community to ensure no unexpected delays due to misunderstanding	2	2	1	4	Contractor, Construction Manager, CHSO
		Consultants Safety	Injury to consultants and people visiting the proposed site. Bites and stings from poisonous insects, animals and snakes.	Appointed consultants arrange meetings in advance to discuss any changes etc. with relevant parties	1	2	1	2	Consultants should not walk on their own around the proposed construction site and should always be accompanied by members of the professional team or appointed Community Liaison Officer. Although PPE is not required at this stage preferably jeans or long pants with no short allowed and closed shoes to be worn at all times.	3	2	2	12	

		Contact with the existing community	Misunderstanding with existing community due to lack of communication	Arrange meetings in advance to discuss any changes etc. with relevant parties	1	2	1	2	Clear communication by means of the appointed Community Liaison Officer with existing community to ensure no unexpected delays due to misunderstanding	3	2	2	12	

SITE ESTABLISHMENT														
CR 24	Existing Services	Electrical	Contact with electrical cable overhead	Erect warning signs, inform workers	3	3	3	27	Experienced supervision by site staff and P A. Competent Inspection	3	2	2	12	Contractor, Construction Manager, CHSO
			Contact with underground cable	Erect warning signs, inform workers	3	3	3	27	Experienced supervision by site staff and P A. Competent Inspection	3	2	2	12	
			Use of equipment under HV cable	Erect warning signs, inform workers no work under cable without permission and compliance with ESCOM requirements	3	3	3	27	Experienced supervision by site staff and P A. Competent Inspection	3	2	2	12	
		Water	Underground pipes	Care in excavation	2	2	2	8	Experienced supervision by site staff and P A. Competent Inspection	2	2	1	4	Contractor. Construction Manager. CHSO
		Telephone	Overhead cables	Erect warning signs, inform workers	1	3	2	6	Experienced supervision by site staff and P A. Competent Inspection	1	1	1	1	Contractor, Construction Manager, CHSO

WORKING AT HEIGHTS															
CR 10	Working at Heights	Scaffolding not properly erected	Scaffold collapse	Calculate load capacity of scaffold. Proper design of scaffold	3	3	3	27	Specification must ensure design is done by competent person. Method statements	3	2	2	12	Contractor, Scaffold Erector, Scaffold inspector
		Scaffolding not properly erected	Fall from height	Fall protection Plan by registered fall planner	3	3	3	27	Experienced supervision by site staff and P A. Competent Inspection. Method statements	3	2	2	12	Contractor, Scaffold Erector, Scaffold inspector
		Scaffold not properly erected	Falling objects	Use of toe boards, proper decking, catch nets	3	3	3	27	Experienced supervision by site staff and P A. Competent Inspection. Method statements	3	2	2	12	Contractor, Scaffold Erector, Scaffold inspector
GSR 13A		Use of ladders	Persons / objects falling	Ladders conform to General Safety regulation 13a	2	3	3	18	Worker training Experienced supervision by site staff and P A. Competent Inspection. Method statements	2	2	2	8	Contractor, Scaffold Erector, Scaffold inspector
CONSTRUCTION PLANT AND EQUIPMENT															
CR 23	Use of Construction Plant and Equipment	Struck by vehicle	Injury to persons/Employees / personnel / Institute Employees	Vehicle fitted with acoustic warning devices, hooter and reverse warning	3	3	3	27	Competent supervision and adequate pre-task training will be required. Competent fit operators	3	2	2	12	Contractor, Plant manager
		Vehicle overturns	Injury to persons/Employees/Personnel. Damage to vehicles / Damage to Institute parked vehicles	Proper operation of vehicle	3	3	3	27	Competent supervision and adequate pre-task training will be required. Competent fit operators	3	2	2	12	Contractor, Plant manager
		Untrained operator	Injury to persons. Damage to vehicle	Only employ competent operators	3	3	3	27	Competent supervision and adequate pre-task training will be required. Competent fit operators	3	2	2	12	Contractor, Plant manager. CHSO
		Unsilenced plant	Noise induced hearing loss	Fit or repair silencer	2	3	3	18	Proper supervision, operator training, Establishment of noise zones by AIA. Correct PPE including ear defenders/plugs	2	2	1	4	Contractor, Plant manager. CHSO

EXPOSURE TO NOISE														
N-IH I Regs	Exposure to Noise	Over 85 Db for long period: When activities are in process	Hearing Loss	Avoid exposure to noise where possible	2	3	3	18	Specification to require establishment of noise zones by AIA. Communication with the Institute to ensure minimal noise at all times	2	2	2	8	Contractor, Plant manager. CHSO
EXPOSURE TO DUST														
	Exposure to Dust	If severe lack of clear vision; Breathing problems. When activities are in process	Loss of Lung Function	Dust prevention	2	3	3	18	Specification to include dust palliative requirements. Communication with the Institute to ensure minimal dust at all times	2	2	2	8	Contractor, Plant manager. CHSO
ENVIRONMENTAL														
Environmental and facilities regs	Weather is a factor to be considered, raised temperatures in summer, with high humidity levels. Very cold weather may be encountered with the possibility of frost. High Wind speeds	Working in wet, extreme hot conditions Temperature range 2 to 40 deg C. Extreme wind conditions	Possible hypo- or hyper-thermia.low efficiency of workers.	Work stoppage in rain or following rain that would affect the works. Cold weather protective clothing may become necessary. Hot weather may require work stoppage. Adequate supply of drinking water.	3	3	2	18	Use of weather stations to monitor temperature, Work to be assessed should discomfort index reach 100, work may be stopped at 105 if deemed problematic. Adequate water intake. Sheltered areas for rest and eating.	2	3	2	12	Contractor, Construction Manager, CHSO
	Office facilities	Working in cramped unventilated or poor lighting conditions. Poor Hygiene	Health issues / Covid-19 Infection	Office set-up to be checked for suitability, Office to be cleaned at regular intervals	2	2	2	8	Avoid the use of containers for offices unless properly modified for use as offices, Ensure office cleaning and sanitizing done regularly	2	1	1	2	Contractor, Construction Manager, CHSO
	General Waste Management	Use of temporary toilets	Health Issues	Use of chemical Toilets, at least one per 20 worker's male and female separated	2	2	3	12	No Formaldehyde in chemicals. Serviced and cleaned at least once weekly by competent service providers.	1	2	1	2	Contractor, Construction Manager, CHSO
		Waste disposal	Health and Environmental issues	All waste properly disposed of two certificated rubbish dump	2	2	3	12	No burning of cement bags or other refuse on site. Site to be kept tidy. Removal of all waste at regular intervals by competent service providers.	2	1	1	2	Contractor, Construction Manager, CHSO

ELECTRICAL TOOLS														
	Use of small electrical tools	Contact with electricity	Electric shock	Certificate of Compliance for electrical supply	3	2	2	12	Ensure all connections secure, no breaks in cable. Proper routing of cables on site	3	2	1	6	Contractor, Construction Manager, CHSO, Electrical Supervisor
ACCESS														
	Public access	Persons in dangerous areas. Personnel gaining access to construction area / Institute Personnel and Institute visitors gaining access to construction area	Injury to person's/employees/personnel	Separate general public from construction site. Extra care to be taken to ensure the public and personnel do not gain access to the construction activities. Extra care to be taken when phasing is done to separate the above	3	2	2	12	Spec to require: Access control. Induction for visitors. Security control. Safety Notices. Extra Observation	3	1	1	3	Contractor, Construction Manager, CHSO
	Access control	Personnel, Public and employees may gain access to site	Fall into excavation, injury from plant, tools or at workplace/ construction activities.	Access control to be in place, hoardings erected to separate site from public. Extra hoarding to be in place to ensure the public and personnel are kept out of the construction site.	3	2	2	12	Strict access control, gates locked or manned at all times. Trained security staff on duty. Induction for all visitors. Extra hoarding as well as 24 hour security	3	1	1	3	Contractor, Construction Manager, CHSO, Security, Institute Management
CONCRETE WORK														
CR 20	Outsourced supply	Delivery by truck	Person struck by truck	Reverse warning Driver training	3	2	2	12	Worker training. Experienced supervision	3	1	2	6	Contractor. Batch plant and Concrete Supervisor, CHSO
			Person struck by concrete poured into shuttering	Proper training and supervision	2	2	2	8	Area cleared of all but essential workers	2	1	2	4	
	Hand mixing	Use of small tools	Contact with cement	Care in opening cement bags	2	2	2	8	Ensure workers fit for work. Proper supervision	2	1	2	4	Contractor. Batch plant and Concrete Supervisor, CHSO
			Inhale cement dust	Care in opening cement bags	2	2	2	8	Ensure workers fit for work. Proper supervision	2	1	2	4	
			Ergonomic risks	Rotate work	2	3	3	18	Ensure workers fit for work. Proper supervision	2	3	1	6	

CR20	Use of concrete vibrator	injury to persons	Noise, vibration, contact with vibrating head, contact with wet concrete	Operator training	2	2	3	12	Experienced supervision by site staff. Competent Inspection. Use of proper equipment	2	2	1	4	Contractor. Concrete Supervisor, CHSO
BRICK WORK														
	Delivery by truck	Struck by truck	Injury to persons	Vehicle fitted with acoustic warning devices, hooter and reverse warning	3	3	3	27	Experienced supervision by site staff and P A. Competent Inspection	3	2	2	12	Contractor, Building Supervisor, CHSO
	Moving bricks	Use of wheel barrow	Injury to person's ergonomic risks	Training of workers. Job rotation	2	2	3	12	Experienced supervision by site staff. Competent Inspection. Use of proper equipment	2	2	1	4	Contractor, Building Supervisor, CHSO
		Use of Brick lift	Injury to persons	Training of workers in use of equipment	3	2	2	12	Experienced supervision by site staff. Competent Inspection. Use of proper equipment	3	2	1	6	Contractor, Building Supervisor, CHSO
	Use of support work	Collapse of support work	Injury to persons	Training of workers in use of equipment Method statements	3	2	2	12	Experienced supervision by site staff. Competent Inspection. Use of proper equipment proper calculation of loads involved by competent person	3	2	1	6	Contractor, Building Supervisor, CHSO
	Use of access scaffolding and Ladders	Working with ladders and low scaffolds	Falls, slips	Fall protection plan. Ladders to GSR13A	3	2	2	12	Training, proper supervision. Ladder inspection	3	1	2	6	Contractor, Building Supervisor,, Scaffolding Inspector CHSO
	Working with glass	Glass breaking	Cuts and other injuries	Training of workers in use of equipment	3	2	2	12	Experienced supervision by site staff and P A. Competent Inspection	3	2	1	6	Contractor, Building Supervisor,, Scaffolding Inspector CHSO

PLUMBING														
	Plumbing Contractor	Unregistered, incompetent contractor	poor work, cost overruns, no municipal connection No Certificate of Compliance	Ensure appointment of registered, competent contractor	3	2	3	18	Project specific H&S Specification and HIRA in tender Document	3	2	2	12	Contractor, Construction Manager, CHSO
PAINTING														
GSR 13A	Painting	Working with ladders and low scaffolds	Falls, slips	Fall protection plan. Ladders to GSR13A	3	2	2	12	Training, proper supervision. Ladder inspection	3	1	2	6	Contractor, Construction Manager, Ladder Inspector, CHSO
		Ingestion of Paint	Gastric irritation, nausea	Training; clean site	2	2	2	8	Tool box talks, proper supervision	1	2	2	4	Contractor, Painting Supervisor, CHSO
		Cleaning Brushes	Use of thinners, benzene, possible carcinogens; highly flammable	Supply SDS Use alternative brush cleaner Keep away from open flames	2	2	2	8	Use of Turpentine, Proper supervision Training	1	2	2	4	Contractor, Painting Supervisor, CHSO
ELECTRICAL INSTALLATION (see also Electrical installation regulations)														
	Electrical Contractor	Unregistered, incompetent contractor	Poor work, cost overruns, no municipal connection	Ensure appointment of registered, competent contractor	3	2	3	18	Project specific H&S Specification and HIRA in tender Document	1	2	2	4	Contractor, Construction Manager, CHSO, Electrical Supervisor
CARPENTRY														
	Carpentry	Use of Tile Cutter and grinder	Injury to worker / ERGONOMIC RISK	Training of workers / job rotation / training of workers with equipment	2	2	2	8	Ensure Correct PPE, toolbox talks proper supervision	2	1	2	4	Contractor / Supervisor / CHSO
PAVING														
	Paving	Use of wheelbarrows, handtools, cutting equipment / moving vehicles	Injury to persons / ergonomic risk	Training of workers / job rotation / training of workers with equipment	2	2	2	8	Ensure Correct PPE, toolbox talks proper supervision	2	1	1	4	Contractor / Supervisor / CHSO
HAZARDOUS CHEMICALS (see also Hazardous Chemical Regulations)														
HCS Regulations	Use/supply of hazardous Chemicals	Improper use/storage of hazardous Chemicals	Fire, explosion poisoning of persons	Supply appropriate materials safety data information	3	2	3	18	Component person appointed to check stores. Proper storage. Provision of fire extinguishers. Emergency plan.	3	1	2	6	Contractor, Construction Manager, CHSO HCS supervisor, SMME Contractor(if employed)
	Plastering	Cement Mortar	Used across the project for a range of tasks,	Avoid contact with cement. Supply SDS	3	3	2	18	Dust control, PPE (eye and respiratory) Use of distributor when stabilizing road. Rotation of workers	2	3	1	6	
	Tiling	Tile grouts and Adhesives	Contact with materials	Avoid contact with grouts and Adhesives. Supply SDS	2	2	2	8	Proper PPE. Worker training	2	1	2	4	
	Carpentry	Wood glue & Varnish	Health Risk to Workers	Avoid over exposure	2	2	2	8	Ensure proper ventilation	2	1	2	4	

ERGONOMICS														
	Plastering, Tiling, Carpentry	Ergonomic risks	Working in confined areas, bending,	Rotate work	2	2	2	8	Proper supervision, competent trained workers	2	1	2	4	Contractor, Construction Manager, CHSO
EXCAVATIONS														
CR13	Excavations	Plant & Manual	Injury or death to employees, Public and personnel	Proper training of operator: Medicals, machine in good working order	3	2	3	18	Excavation barricaded/shored as required. Proper supervision	3	2	2	12	Contractor, Construction Manager, CHSO, Excavation Supervisor
BULK EARTH WORKS														
	Bulk Earthworks	Unauthorized entry	Injury/death of employees	Ensure that bulk earthwork area is out of bounds to unauthorized persons. PPE to be worn by all employees	3	3	3	27	Method statements/ Risk Assessments/Safe Work procedures must be adhered to. Control measures must be in place for all	3	2	2	12	
		Unsafe working conditions	Injury/death of employees	All operators & employees to be inducted.	3	2	3	18	Daily checklists and Tool Box Talks must be done	3	2	2	12	Contractor, Construction Manager, CHSO, Earthworks Supervisor
		Unsafe equipment	Property/equipment damage	Operating manual should be adhered to. Operators to be aware at all times	3	2	3	18	Daily checks list/ Method statements/ Risk Assessments/Safe Work Procedures Tool Box Talks	3	2	2	12	
LIFTING EQUIPMENT														
CR22	Lifting Equipment	Uneven ground, loose soft soil, overhead power lines or other obstructions	Machine could tilt or become bogged down and causing a dangerous situation. Resulting in injury/property damage/Death	Correct inspection and evaluation of the working area. Ensure working area is clean and that the machine will be stable	3	3	3	27	Correct inspection and evaluation of the working area Ensure working area is clean and that the machine will be stable.	3	2	2	12	
		Checking out the machine to ensure that all is in good working order	Controls not functioning correctly, oil leaks. Machine failure causing damage and injury to employees	All operators & employees to be inducted.	3	2	3	18	Daily checklists and Tool Box Talks must be done	3	2	2	12	Contractor, Construction Manager, CHSO, Lifting Operator, Lifting Inspector

		Correct positioning of equipment ensuring it is level before carrying out the lift	Machine could tip over in one particular direction. Property/equipment damage/employee injury	Ensure that the machine is correctly positioned and will not be over extended in any particular direction of operation. Barricade the area to prevent unauthorized entry.	3	2	3	18	Ensure competent operators to position machine correctly to ensure maximum usage are any one lift / Method statements/ Risk Assessments/Safe Work Procedures Tool Box Talks	3	2	2	12	

Risk rating and risk category
1
2
3
4
6
8

18
27

RISK ASSESSMENT MATRIX EXPLANATION

Risk rating multiplier	Low =1	Medium =2	High=3
Likely consequences of an accident/incident (what are the potential results)	Minor damage to equipment / first aid treatment /	Possible fractures / lost time injury /compensation payout / equipment in need of repair	Serious injury /occupational disease / fatality, multiple fatalities / loss of equipment
Frequency of Exposure (how often does it happen)	Limited activity, maybe once or twice on a project (e.g. exposure of services)	Occurs fairly often on a project	Occurs on a daily basis, or continually
Probability of harm (liklihood of something going wrong)	Low, due to limited activity, limited people exposed	Moderate risk, happens within the industry, many exposed	Occurs often withn industry, many exposed

The purpose of the Design HIRA is to assess risk relative to the existing design requirements and standards, and attempt to understand the typical behaviours and practices of the Contractor or team doing the work. One should consider the standards used and refer to them, use drawings, read the design reports and have seen the site. The Agent needs to know and be able to assess the total circumstances that the project is going to operate in. The Agent also needs to understand the environment, relative to H&S and also the people, presence of the public, any particular issues that are known or could be problematic during the project. The Agent should consider the remoteness, the challenges of local labour, and specific requirements of the Client such as use of local labour. Knowledge of products specified, use of SDSs or MSDSs to be included, as well as statistical knowledge of incidents, diseases and fatality rates for similar types of work.

low	med	high
1	4	12
2	6	18
3	8	27

LEGEND

CR	Construction Regulations
CHSM	Construction Health and Safety Manager
CHSO	Construction Health and Safety Officer
GSR	General Safety Regulations
N-IH l Regs	Noise Induced Hearing Loss Regulations
HCS Regulations	Hazardous Chemical Regulations
HIRA	Hazard Identification and Risk Assessment
Db	Decibels
SDS	Safety Data Sheet
H&S	Health and Safety
PPE	Personal Protective Equipment
SMME	Small, Medium and Micro Enterprise
PA	Principal Agent
PSHSS	Project Specific Health and Safety Specification
MSDS	Material Safety Data Sheets

ANNEXURE 3 – BILLS OF QUANTITIES

BILLS OF QUANTITIES

FOR

Construction of New Cebe Clinic with Outbuildings, Guardhouse, Health Professional Accommodation, EMS Base and Related Civil, Electrical & Mechanical Works

FOR

EC Department of Public Works & Infrastructure

ARCHITECTS
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2024/07/26

SECTION NO 1

PRELIMINARIES

Item		R	c
	SECTION 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 abovementioned 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 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)

SECTION 1: PRELIMINARIES **Each Item Carried to Collection**

PRICING OF BILLS OF QUANTITIES

SECTION 1: PRELIMINARIES (SECTION A) **Each Item Carried to Collection**

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

INTERPRETATION

A1.0 **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 [CD]

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 [CD] by the principal agent to the parties certifying the amount due and payable in terms of Clause 25.3

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.

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

A2.0 **LAW, REGULATIONS AND NOTICES**

Clause 2.0

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

A3.0 **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]

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

A4.0 **CESSION AND ASSIGNMENT**

Clause 4.0

Ref Clause 6.7 [CD] - 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

F:..... V:..... T:..... Item A5.0

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:
The parties may publish or disclose on any platform only the contract scope and contract amount

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

A6.0 **EMPLOYER'S AGENTS**

Clause 6.0

Replace Clause 6.5 with the following:
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

Add the following as Clause 6.7:
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

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

A7.0 **DESIGN RESPONSIBILITY**

Clause 7.0

Replace first sentence of Clause 7.2 with the following:
Any design responsibility undertaken by a subcontractor shall not devolve on the contractor except for items that require specific component design and or compatibility design and or shop drawings and or the assembly thereof

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

INSURANCES AND SECURITIES

A8.0 **WORKS RISK**

Clause 8.0

Replace Clause 8.4 with the following:

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

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

A9.0 **INDEMNITIES**

Clause 9.0

Add the following to the end of the first sentence of Clause 9.2.7: "…. due to no fault of the **contractor**

9.2.9 No Clause

9.2.10 No Clause

Add the following as clause 9.3:
The employer's rights to claim damages for the contractor's omissions and actions will not be affected.

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

A10.0 **INSURANCES**

Clause 10.0

Replace Clause 10.1 with the following:
The party responsible shall effect and keep the respective insurances [CD] 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:
Hi 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:

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

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

A11.0 **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.

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:
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.

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:
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).

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

EXECUTION

A12.0 **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) [CD]

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

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)

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]

Offices

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]

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

Main notice board

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]

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

A13.0 **SETTING OUT**

Clause 13.0

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

A14.0 **NOMINATED SUBCONTRACTORS**

Clause 14.0

Ref Clause 6.7 [CD] - Clause 14.1.4

14.1.5 No Clause

Replace “principal agent ” with “employer” [6.7 [CD]] in Clause 14.4.1

Ref Clause 6.7 [CD] - Clause 14.6

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

A15.0 **SELECTED SUBCONTRACTORS**

Clause 15.0

Ref Clause 6.7 [CD] - Clause 15.1.4 & Clause 15.5

15.1.5 No Clause

Replace Clause 15.1.2 with the following:
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 [CD]] in Clause 15.4.1

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

A16.0 **DIRECT CONTRACTORS**

Clause 16.0

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

A17.0 **CONTRACT INSTRUCTIONS**

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.

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

COMPLETION

A18.0 **INTERIM COMPLETION**

Clause 18.0

F:..... V:..... T:..... N/A - -

A19.0 **PRACTICAL COMPLETION**

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:
WORKS COMPLETION

(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

(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).

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

A20.0 **COMPLETION IN SECTIONS**

Clause 20.0

Add the following as Clause 20.2.1.A
A certificate of Works Completion [19.8]

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

A21.0 **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 of works completion [CD] 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

(2) all outstanding work or defects that must be attended to, or rectified to achieve final completion or 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]

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

A22.0 **LATENT DEFECTS LIABILITY PERIOD**

Clause 22.0

22.3.2 No Clause

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

A23.0 **REVISION OF THE DATE FOR PRACTICAL COMPLETION**

Clause 23.0

Ref Clause 6.7 [CD] – Clause 23.1
Ref Clause 6.7 [CD] – 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 CD]

Ref Clause 6.7 [CD] - Clause 23.7
Ref Clause 6.7 [CD] - Clause 23.8

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

A24.0 **PENALTY FOR LATE OR NON-COMPLETION**

SECTION 1: PRELIMINARIES (SECTION A) **Each Item Carried to Collection**

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 [CD], or the revised applicable completion date, the contractor shall be liable to the employer for the penalty [CD]

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 [CD], 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]

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

PAYMENT

A25.0 **PAYMENT**

Clause 25.0

Replace Clause 25.2 with the following:
The principal agent shall issue at regular agreed intervals [CD] 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:

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])

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:

25.12.7 Ninety per cent (90%) of such value in interim payment certificates issued up to the date of practical completion

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

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

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

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

A26.0 **ADJUSTMENT OF THE CONTRACT VALUE AND FINAL ACCOUNT**

Clause 26.0

Ref Clause 6.7 [CD] – Clause 26.1

Omit Clause 26.4.3

Ref Clause 6.7 [CD] – Clause 26.7

Replace Clause 26.10 with the following:

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

Ref Clause 6.7 [CD] – Clause 26.12

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

A27.0 **RECOVERY OF EXPENSE AND/OR LOSS**

Clause 27.0

Replace Clause 27.1.2 with the following:
Interest due to late payment only

Replace Clause 27.1.4 with the following:
Interest due to late payment only

27.1.5 No Clause

Replace Clause 27.5 with the following:
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

Add the following as Clause 27.6:
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

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

SUSPENSION AND TERMINATION

A28.0 **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

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

A29.0 **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, 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

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

DISPUTE RESOLUTION

A30.0 **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

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

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

SECTION B: GENERAL PRELIMINARIES

B1.0 **DEFINITIONS AND INTERPRETATION**

B1.1 **Definitions**

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

B1.2 **Interpretation**

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B2.0	**DOCUMENTS**		
B2.1	**Checking of documents**		
	F:..... V:..... T:.....	Item	
B2.2	**Provisional bills of quantities**		
	F:..... V:..... T:.....	Item	
B2.3	**Availability of construction information**		
	F:..... V:..... T:.....	Item	
B2.4	**Ordering of materials and goods**		
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B3.0	**PREVIOUS WORK AND ADJOINING PROPERTIES**		
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B3.2	**Previous work - defects**		
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B3.3	**Inspection of adjoining properties**		
	F:..... V:..... T:.....	Item	
B4.0	**THE SITE**		
B4.1	**Handover of site in stages**		
	F:..... V:..... T:.....	Item	

B4.2 **Enclosure of the works**

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

B4.3 **Geotechnical and other investigations**

	SECTION 1: PRELIMINARIES (SECTION B)	**Each**

Item Carried to Collection

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

B4.4 **Encroachments**

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

B4.5 **Existing premises occupied**

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

B4.6 **Services - known**

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

B5.0 **MANAGEMENT OF CONTRACT**

SECTION 1: PRELIMINARIES (SECTION B) **Each**

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B5.3	**Technical meetings**			
	F:..... V:..... T:.....	Item		
B6.0	**SAMPLES, SHOP DRAWINGS AND MANUFACTURER'S INSTRUCTIONS**			
B6.1	**Samples of materials**			
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B6.2	**Workmanship samples**			
	F:..... V:..... T:.....	Item		
B6.3	**Shop drawings**			
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B6.4	**Compliance with manufacturer's instructions**			
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B7.0	**DEPOSITS AND FEES**			
B7.1	**Deposits and fees**			
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B8.2	**Electricity**			
	F:..... V:..... T:.....	Item		
	SECTION 1: PRELIMINARIES (SECTION B)	**Each**		

Item Carried to Collection

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

B9.0 **PRIME COST AMOUNTS**

B9.1 **Responsibility for prime cost amounts**

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

B8.3 **Ablution and welfare facilities**

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

B8.4 **Communication facilities**

SECTION 1: PRELIMINARIES (SECTION B) **Each**

Item Carried to Collection

B10.0 **ATTENDANCE ON SUBCONTRACTORS**

B10.1 **General attendance**

The **contractor** shall at his own expense provide the following general attendance on the **subcontractors**:

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**

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

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

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

B10.2 **Special attendance**

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

B11.0 **GENERAL**

B11.1 **Protection of the works**

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

B11.2 **Protection/isolation of existing works and works occupied in sections**

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

B11.3 **Security of the works**

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

B11.4 **Notice before covering work**

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

SECTION 1: PRELIMINARIES (SECTION B) **Each**

Item Carried to Collection

B11.5 **Disturbance**

operations **works** all

The **contractor** shall keep the **site**, structures, etc well watered during to prevent dust and shall provide and erect and remove on completion of the necessary temporary dust screens all to the satisfaction of the **principal agent**

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

B11.6 **Environmental disturbance**

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

B11.7 **Works** **cleaning and clearing**

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

B11.8 **Vermin**

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

B11.9 **Overhand** **work**

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

B11.10 **Tenant** **installations**

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

B11.11 **Advertising**

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

Item		R	c
	SECTION C: SPECIFIC PRELIMINARIES		

Section C contains specific preliminary items which apply to this contract except where N/A (Not Applicable) appears against an item

C1.0 **CONTRACT DRAWINGS**

* 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

* A full set of drawings is issued with the tender documents indicating the full 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

Should any part of the drawings not be clearly understood by the tenderer he shall, before submitting his tender, obtain clarification in writing from the **principal agent**

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

C2.0 **PREAMBLES**

The document “Construction Works: Specifications: General Specification (PW371-A) Edition 2.1” is obtainable on the Department’s website (http://www.publicworks.gov.za/ under “Consultants Guidelines”), and shall be read in conjunction with the **bills of quantities** / lump sum document and be referred to for the full descriptions of work to be done and materials to be used

The document “Construction Works: Specifications: Particular Specification (PW371-B) Edition 2.2” is issued together with the drawings and shall be read in conjunction with the drawings and the **bills of quantities** / lump sum document

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

C3.0 **TRADE NAMES**

Wherever a trade name for any product has been described in the **bills of quantities** / lump sum document, the tenderer’s attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the **principal agent** being obtained prior to the closing date for submission of tenders

If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for

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

C4.0 **IMPORTED MATERIALS AND EQUIPMENT**

Where imported items are listed in the tender documents, the tenderer shall provide all the information called for, failing which the price of any such item, materials or equipment shall be excluded from currency fluctuations. (refer to Schedule of Imported Materials and Equipment DPW-23(EC) to be completed by tenderer)

Notwithstanding any provisions elsewhere regarding the adjustment of contract prices, the price of any item, material or equipment listed in terms of this clause shall be excluded from the

Item		R	c
	Contract Price Adjustment Provisions (if applicable)		

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

C5.0 **VIEWING THE SITE IN SECURITY AREAS**

The **site** is situated in a security area and the tenderer must arrange with the unit commander or other responsible officer to obtain permission to enter the **site** for tendering purposes

F:..... V:..... T:..... Item N/A

C6.0 **COMMENCEMENT OF WORKS IN SECURITY AREAS**

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

F:..... V:..... T:..... Item N/A

C7.0 **ENTRANCE PERMITS TO SECURITY AREAS**

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

F:..... V:..... T:..... Item N/A

C8.0 **SECURITY CHECK OF PERSONNEL**

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**

F:..... V:..... T:..... Item N/A

C9.0 **PROHIBITION ON TAKING OF PHOTOGRAPHS**

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

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

F:..... V:..... T:..... Item N/A

C10.0 **HIV/AIDS AWARENESS**

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. 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

C10.1 **AWARENESS CHAMPION**

Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification

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

C10.2 **AWARENESS WORKSHOPS**

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

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

C10.3 **POSTERS, BOOKLETS, VIDEOS, ETC.**

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

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

C10.4 **ACCESS TO CONDOMS**

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

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

C10.5 **MONITORING**

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

F:..... V:..... T:..... Item C11.0

OCCUPATIONAL HEALTH AND SAFETY ACT

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)

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 – **(Also refer to Health & Safety Bill in the Bills of Quantities for pricing of individually itemised Health & Safety Items).**

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

C12.0 **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 re-measurement 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

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

C13.0 **IMPLEMENTATION OF LABOUR-INTENSIVE INFRASTRUCTURE PROJECTS UNDER THE**

EXPANDED PUBLIC WORKS PROGRAMME (EPWP)

The **contractor** shall comply with all the requirements of the "Code of Good Practice for Employment and Conditions of Work for Special Public Works Programmes" issued in terms of the "Basic Conditions of Employment Act, 1997 (Act No 75 of 1997)" and the related "Ministerial Determination", for the employment of locally employed temporary workers on a labour- intensive infrastructure project under the Expanded Public Works Programme (EPWP)

The **contractor** shall maintain daily records with regard to the workers employed and shall, on a monthly basis, submit a report to the **principal agent** in the prescribed format. Compulsory indicators such as the project budget, actual project expenditure, number of job opportunities created, demographic characteristics of workers employed, minimum daily wage rate, number of person-days of employment created and number of training person-days, shall be included in said report, all as defined in the "Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)"

Provision for pricing of compliance with the aforementioned is made under this clause and it is explicitly pointed out that all requirements in respect of the aforementioned are deemed to be

priced hereunder and no additional claims in this regard shall be entertained

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

C14.0 **SHOP DRAWINGS**

The term 'shop drawings' shall mean drawings, layout drawings, diagrams, illustrations, schedules, performance charts, brochures, operating manuals and other data which are prepared by the Contractor or any Sub-Contractor, manufacturer, supplier or distributor and which illustrate the specified portion of the work.

The Contractor shall ensure that all shop drawings required for the Works in terms of this Contract, all Selected/Nominated Sub-Contracts and/or any Principal Agent's instruction, are prepared and submitted timeously in accordance with the following procedure:

A) Three prints of shop drawings of all fabricated work, working or setting out drawings, shop details and schedules shall be submitted to the Principal Agent, for approval. Such work shall not be carried out until such approval has been given.

B) Shop drawings shall be submitted to the Principal Agent for approval at least two weeks prior to the date on which such approval is required in order to comply with the Contract Programme.

C) All submissions shall be prepared in accordance with the Contract drawings and specifications and/or any Principal Agents instructions and any deviation shall be specifically highlighted in writing, with a detailed explanation of the reason for such deviation, together with any cost and/or time implications. Delays in approval of shop drawings due to non-compliance with drawings, specifications and/or Principal Agent's instructions shall not constitute grounds for any claims for delay, extension of time and the like.

D) When the Principal Agent advises that shop drawings have been approved, the original transparencies of such drawings shall immediately be submitted to the Principal Agent so that the Principal Agents stamp of approval may be appended thereto. Thereafter, four prints of the approved shop drawings, setting out drawings and schedules shall be furnished to the Principal Agent. As many prints of the approved shop drawings and schedules as required shall also be furnished to the Works. No work shall be performed in accordance with drawings and/or catalogues not stamped with the Principal Agents approval.

E) The Contractor, Sub-Contractor or Supplier, as the case may be, shall be responsible for ensuring that all dimensions affecting shop drawings conform to the dimensions of built work.

F) The Principal Agents approval of shop drawings is limited to checking conformity with specification and shall not relieve the Contractor, Sub-Contractor or Supplier of his responsibility for design, erect ion or installation fit, nor does it vary his contractual or delictual obligations and liabilities.

G) Should the Contractor, Sub-Contractor or Supplier be of the opinion that corrections to shop drawings made by the Principal Agent constitute a change to the scope of work, then he shall immediately advise the Principal Agent in writing of this, together with the cost and/or programme implications thereof, in order to obtain the Architects directive.

H) One copy of the final approved set of 'Shop Drawings' is to be submitted to the Quantity Surveyors for purposes of valuation re-measurement.

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

C15.0 **METHOD STATEMENT**

The Tenderer shall produce, when required to do so by the Principal Agent, a Method Statement outlining the methods of construction and labour and plant resources that he proposes to use in the execution of the Works. Any approval given or observation made by the Principal Agent shall not relieve the Contractor of his sole responsibility to adopt the methods of construction and to provide the labour and plant resources necessary for the due and proper timeous execution of the Works.

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

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SECTION NO 2

OCCUPATIONAL HEALTH AND SAFETY

SECTION NO. 2

OCCUPATIONAL HEALTH AND SAFETY

BILL NO. 1

OCCUPATIONAL HEALTH AND SAFETY

BILL OF QUANTITIES PRICING OF OCCUPATIONAL HEALTH AND SAFETY

The Contractor is to take note of and carefully price all Occupational Health and Safety items listed in the Bill below.

Note: While every effort has been made with the provisions herein to include *inter alia*, compliance with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety

Amount

Act, 1993 (Act No 85 of 1993), and in particular with Regulation 5(1) requiring the compilation of a health and safety plan, as well as Regulation 6(1) requiring the appointment of a construction supervisor, the Contractor is to carefull take note of any obvious omissions and duly make provision for these accordingly in their pricing of this section and the relevant Preliminaries item.

Note: Also refer to the relevant item under Preliminaries in the BOQ document which refers to the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification.

This Bill must be read in conjunction with the Project Health & Safety Specification attached together with these bills of quantities and reference should be made to the Annexures which forms part of this specification and which items are included in this bills of quantites for pricing purposes.

OCCUPATIONAL HEALTH AND SAFETY

1	Preparation of the Contractor's site specific Health and Safety Plan.	Item			
		Unit	Quantity	Rate	
2	Principal Contractor's initial obligations in respect of the Occupational Health and Safety Act / Construction Regulations.	Item			

Principal Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations.	Months	18			
Provision of Personal Protective Equipment (PPE) :					
Reflective vests.	Item				
Hard hats.	Item				
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Dust masks	Item				
Gloves	Item				
High visibility overalls to SARTSM Chapter 13 Level 3.	Item				
Ear Defenders SABS approved	Item				
Overalls	Item				

					Amount
		Item			
	Induction Training				
	Carried to Collection			R	

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13

		Unit	Quantity	Rate	Amount
	Safety Officers, etc. :				
14	Provision of full time Construction Health and Safety Officer registered with SACPCMP	Months	18		

					Amount
	Cost of Medical Certificates and Medical Surveillance :				
15	Initial (baseline) medical examinations.	Item			
16	Periodic and exit examinations.	Item			
17	Contractor's charges to allow for handling costs and profit in respect of above sub items for medical examinations.	Item			
18	Provision of First Aid Boxes to GSR requirements.	Item			
19	**Noise Monitoring :**				
20	Establishment of noise zones (plant)	Item			
21	Audiograms (Personnel)	Item			
		Item			
	Health and Safety File :				
	Submission of a Health and Safety File				
	Carried to Collection			R	

Amount

OCCUPATIONAL HEALTH AND SAFETY

COLLECTION

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SECTION NO. 2

OCCUPATIONAL HEALTH AND SAFETY

SECTION SUMMARY

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BUILDING WORKS

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SECTION NO. 3

BUILDING WORKS

BILL NO. 1

EARTHWORKS (PROVISIONAL)

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

	Unit	Quantity	Rate	Amount

SUPPLEMENTARY PREAMBLES

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/Engineer. **Nature of ground:**

The Tenderer must aquaint himself with the nature of the material to be excavated.

The nature of the ground is assumed to be loose fine to medium sandy material, therefore earth, but possibly interspersed with hard rock or soft rock.

In most areas the nature of the ground is assumed to be well compacted filling as a result of platforms created under Bulk Earthworks, therefore 'earth'.

Subterranean Water:

No information regarding subterranean water is available. The Tenderer must aquaint himself of the prescence and depth of the subterranean water and allow therefore in his price.

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.

Amount

Carting away of excavated material:

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.

Density Testing :

Prices for filling are to include for all necessary density and other tests.

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/Engineer and these tests are successful, they will be paid for additionally.

		Unit	Quantity	Rate	Amount
	EARTHWORKS (PROVISIONAL)				
	EXCAVATION OTHER THAN BULK				
	Excavation in earth not exceeding 2m deep				
1	Surface trenches.	m^3	473		

	Unit	Quantity	Rate	Amount
CB 473 Holes.	m³	5		
CB 5 **Extra over excavations other than bulk in earth for excavation in:**				
Soft rock.	m³	24		
CB 24 Hard rock.	m³	14		
CB 14 **Risk of collapse of excavations other than bulk:**				
Sides of trench and hole excavations not exceeding 1,5m deep.	m²	1 317		
CB 1317 **CARTING AWAY.**				
Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
In spoil heaps where directed on site, for later re-use.	m³	478		
CB 478				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
4					
5					
6					
7	Off site to a dumping site to be found by the Contractor.	m³	124		
	CB 124				
	EARTH FILLING, ETC.				
	Filling with selected material from the excavations compacted to a density of at least 95% Mod. AASHTO maximum density:				
8	Backfilling to trenches, holes, etc.	m³	265		

		Unit	Quantity	Rate	Amount
	CB 265 Under surface beds, floors, etc.	m³	89		
	CB 89 Under steps, ramps, etc.	m³	0		
	Filling with approved G7 material supplied and carted onto site by the Contractor, compacted to a density of at least 93% Mod. AASHTO maximum density:				
	Under surface beds, floors, etc.	m³	89		
	CB 89 Under steps, ramps, etc	m³	0		
	Filling with approved G5 material supplied and carted onto site by the Contractor, compacted to a density of at least 95% Mod. AASHTO maximum density:				
	Under surface beds, floors, etc.	m³	89		
		m³	0		
	CB 89 Under steps, ramps, etc				
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
11					
12					
13					
14					
15	Under pavings, aprons, etc.	m³	50		
	CB 50 **Coarse river sand filling compacted to 95% Mod. AASHTO maximum density:**				
16	50mm thick under floors, aprons, ramps, etc.	m²	924		

		Unit	Quantity	Rate	Amount
CB 924	**Surface Preparation:**				
	Trim and level off surface of ground (excavated or filled under this Contract) to receive concrete surface beds, aprons, ramps, etc., including excavating or filling, ripping and scarifying as necessary and compacting the whole area for a depth of 150mm to a density of at least 90% Mod. AASHTO maximum density.	m²	924		
CB 924	**KEEPING EXCAVATIONS FREE OF WATER**				
	Keeping excavations free of water:				
	Allow for keeping excavations free of all water by hand or machinery.	Item			
IT 1	**WEED KILLERS, INSECTICIDES, ETC**				
	Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:				
	Under floors, aprons, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming.	m²	924		
CB 924					
	Carried to Collection			R	

		Unit	Quantity	Rate	Amount
18					
19					
20	To bottoms and sides of trenches, etc.	m²	1 635		

CB 1635

TESTS

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/Engineer and these tests are successful, they will be paid for additionally.

Prescribed tests to determine degree of compaction or other properties of ground or filling

21	Modified AASHTO Density test	No	25		

		Unit	Quantity	Rate	Amount
CB					
25					
	Carried to Collection			R	

Amount

BILL NO. 1

EARTHWORKS (PROVISIONAL)

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SECTION NO. 3

Section No. 3
Bill No. 1
Earthworks (provisional)

Unit Quantity Rate Amount

BUILDING WORKS

BILL NO. 2

CONCRETE, FORMWORK AND REINFORCEMENT

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

	Unit	Quantity	Rate	Amount

SUPPLEMENTARY PREAMBLES

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/Engineer.

Cost of Tests:

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/Engineer. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Architect/Engineer. (Test cubes are measured separately).

Formwork:

Descriptions of formwork shall be deemed to include use and waste only (except where described as left in or permanent), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use.

The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself

Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described

	Unit	Quantity	Rate	Amount
			R	

		Unit	Quantity	Rate	Amount
CB 16					
	Carried to Collection				

Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described

Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks

CONCRETE, FORMWORK AND REINFORCEMENT

UNREINFORCED CONCRETE CAST

AGAINST EXCAVATED SURFACES

15Mpa/19mm Concrete:

1 Surface blinding under footings and bases. (Provisional). m³ 16

UNREINFORCED CONCRETE CAST ON/IN FORMWORK

25Mpa/19mm Concrete:

2 Infill to cavity brick walls in foundations. m³ 9

CB 9	**REINFORCED CONCRETE CAST**				
	AGAINST EXCAVATED SURFACES				
	25Mpa/19mm Concrete:	Unit	Quantity	Rate	Amount
	Strip footings.	m³	95		
CB 95					
	Bases.	m³	1		
CB 1					
	Apron pavings cast in panels on waterproofing to falls.	m³	33		
CB 33					
	Ramps on waterproofing to falls.	m³	0		
	Surface beds on waterproofing.	m³	59		
CB 59					
	Surface beds, pavings on waterproofing to washbay, yards and verandahs.	m³	0		
	REINFORCED CONCRETE CAST ON/IN FORMWORK				
	25MPa/19mm concrete				
	Wall ring beams.	m³	26		
CB 26					
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
7					
8					
9					
10	Raised shower floors.	m³	0		
	30MPa/19mm concrete				
11	Stub columns in foundations (Provisional).	m³	0		

	Unit	Quantity	Rate	Amount
TEST BLOCKS				
Test blocks:				
Making and testing set of three 150 x 150 x 150mm concrete strength test cubes (Provisional).	Sets	30		
CB 30				
FINISHING TOP SURFACE OF CONCRETE				
Finishing top surfaces of concrete smooth with a wood float (Class U2):				
Surface beds, slabs, aprons, ramps, etc to falls.	m²	332		
CB 332				
Finishing top surfaces of concrete smooth with a power float :				
Surface beds, slabs, etc (Provisional).	m²	22		
CB 22				
GROUTING				
25MPa non-shrink grout :				
Bedding approximately 15mm thick under 280 x 280mm base plate including chamfered edges all round.				
Carried to Collection	No	0	**R**	

		Unit	Quantity	Rate	Amount
14					
15					
16	Bedding approximately 15mm thick under 300 x 300mm base plate including chamfered edges all round.	No	0		

	Unit	Quantity	Rate	Amount
ROUGH FORMWORK (DEGREE OF ACCURACY II)				
Rough Formwork to Sides:				
Rectangular columns and stub columns in foundations (Provisional)	m²	0		
Wall ring beams	m²	185		
CB 185				
Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	228		
CB 228				
Boxing in rough formwork to form				
25 x 25mm Chamfers along top or bottom edges. (Provisional).	m	0		
25 x 25mm Vertical chamfers at corners. (Provisional).	m	0		
MOVEMENT JOINTS ETC				
Two layers of 3-ply malthoid in slip joints between horizontal concrete and brick surfaces including cement mortar bed.				
Not exceeding 300mm wide	m	154		
CB 154				
Carried to Collection			**R**	

17

18

		Unit	Quantity	Rate	Amount
19					
20					
21					
22	**Isolation joints with 10mm Thick 'Sondor' or equally approved jointex joint between horizontal concrete and brick surfaces**				
23	10mm Joints not exceeding 300mm high.	m	530		

		Unit	Quantity	Rate	Amount
CB 530					
	10mm Joints not exceeding 300mm high at aprons	m	215		
CB 215					
	Saw cut joints:				
	6 x 20mm Saw cut joints in top of concrete surface beds in construction joints.	m	125		
CB 125					
	6 x 20mm Saw cut joints in top of concrete aprons in construction joints.	m	188		
CB 188					
	REINFORCEMENT, ETC. (PROVISIONAL)				
	Mild steel reinforcement to structural concrete work :				
	Varying diameter mild steel R bars	Tonnes	5,44		
CB 5,44					
	High tensile steel reinforcement to structural concrete work :				
	Varying diameter high tensile steel Y bars	Tonnes	5,44		
CB 5,44					
	Carried to Collection			R	

		Unit	Quantity	Rate	Amount
25					
26					
27					
28					
	Fabric reinforcement:				
29	Mesh Ref. No. 193 fabric reinforcement in concrete surface beds, slabs, aprons, ramps, etc.	m²	332		

		Unit	Quantity	Rate	Amount
CB 332	Mesh Ref. No. 245 fabric reinforcement in concrete surface beds, slabs, etc.	m²	592		
CB 592					
	Carried to Collection			R	

Amount

BILL NO. 2

CONCRETE, FORMWORK AND REINFORCEMENT

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SECTION NO. 3

Section No. 3
Bill No. 2
Concrete, Formwork And Reinforcement

	Unit	Quantity	Rate	Amount

BUILDING WORKS

BILL NO. 3

MASONRY

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

	Unit	Quantity	Rate	Amount

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/Engineer.

BRICKWORK

Cement Mortar

Unless otherwise described, all brickwork shall be built in 1:5 cement mortar

Sizes in descriptions:

Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick.

Hollow walls etc

Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole and galvanised butterfly wire ties at 5 per square meter.

Descriptions of hollow walls to receive concrete filled cavities shall be deemed to include building up brickwork in increments not exceeding 1m high or as otherwise instructed by Engineer, filling cavity with concrete infill, before raising brickwork further.

	Unit	Quantity	Rate	Amount

Walls in two skins described as 'bagged and sealed' shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats 'Brixeal' bitumen emulsion waterproofing coating.

Brick reinforcement

Descriptions of brickwork shall be deemed to include for steel reinforcing fabric as specified every fourth course in superstructure and every course in foundations. Additional reinforcement in lintols, etc. are measured seperately

Face bricks

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

Pointing:

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

Samples:

Samples of all masonry building units, except those for walls described as 'load bearing', shall consist of a minimum of 6 units. Samples of building units to be used in walls described as 'load bearing' shall consist of 30 units from every 30 000 units delivered to site.

Rates for brickwork, faced brickwork,etc shall include for all required samples.

Brickwork:

		Unit	Quantity	Rate	Amount
	All brickwork to comply with SANS 10164 Part 1-1980 or the latest revision.				
	BRICKWORK IN FOUNDATIONS (PROVISIONAL)				
	Brickwork of NFX bricks (15 MPa nominal compressive strength) in Class I mortar:				
1	Rectangular shaped piers	m³	1		
	CB 1				
	Irregular L-shaped piers	m³	0		
	Half brick walls.	m²	179		
	CB 179				
	One brick walls.	m²	171		
	CB 171				
	One brick walls in yard and verandah walls.	m²	26		
	CB 26				
	Carried to Collection			R	
2					
3					
4					
5					

	Unit	Quantity	Rate	Amount
6 280mm Hollow walls of two half brick skins with 50mm cavity to receive concrete infill (concrete elsewhere measured), including butterfly wall ties.	m²	200		

CB 200

BRICKWORK IN SUPERSTRUCTURE

Brickwork of NFP bricks in class II mortar:	Unit	Quantity	Rate	Amount
Rectangular shaped piers	m³	1		
CB 1				
Irregular L-shaped piers	m³	0		
Half brick walls.	m²	339		
CB 339				
Half brick walls in shower upstand bund wall	m²	0		
Half brick walls in beamfilling.	m²	5		
CB 5				
Half brick walls in internal fire walls in roof space.	m²	13		
CB 13				
One brick walls.	m²	224		
CB 224				
One brick walls in beamfilling.	m²	16		
CB 16				
One brick walls in yard walls.	m²	40		
CB 40				
One brick walls in internal fire walls in roof space.	m²	65		
CB 65				
Carried to Collection			R	

		Unit	Quantity	Rate	Amount
10					
11					
12					
13					
14					
15					
16					
17	One brick walls of two half brick skins bagged and sealed.	m²	93		

	Unit	Quantity	Rate	Amount
CB 93 One brick walls of two half brick skins bagged and sealed in gable walls.	m²	3		
CB 3 280mm Hollow walls of two half brick skins, including butterfly type wall ties.	m²	15		
CB 15 280mm Hollow walls of two half brick skins, including butterfly type wall ties in internal fire walls in roof space.	m²	10		
CB 10 280mm Hollow walls of two half brick skins, bagged and sealed, including butterfly type wall ties in beamfilling.	m²	50		
CB 50 280mm Hollow walls of two half brick skins, bagged and sealed, including butterfly type wall ties in gable walls.	m²	0		
280mm Hollow walls of two half brick skins, bagged and sealed, including butterfly type wall ties.	m²	297		
CB 297 **BRICKWORK SUNDRIES**				
Sundries:				
Splayed mortar fillets one course high in 50mm cavities	m	215		
CB 215 Closing 50mm cavities of hollow walls vertically with brickwork one brick wide	m	118		
CB 118				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
19					
20					
21					
22					
23					
24					
25					
26	Closing 50mm cavities of hollow walls horizontally with one course of brickwork	m	215		

		Unit	Quantity	Rate	Amount
CB 215	**Joint forming material in movement joints:**				
	10mm Bitumen impregnated fibre board built in vertically between brick skins and concrete.	m²	3		
CB 3					
	10mm Bitumen impregnated fibre board built in vertically between brick skins and concrete in foundations. (Provisional).	m²	2		
CB 2					
	40 x 1,6mm Galvanised hoop iron tie in 600mm lengths bent as per detail and built in to brickwall at every 4th course above expansion joints (Provisional).	No	48		
CB 48					
	Brickwork reinforcement:				
	75mm Wide reinforcement built in horizontally.	m	3 303		
CB 3303					
	75mm Wide reinforcement built in horizontally in foundations. (Provisional)	m	5 352		
CB 5352					
	230mm Wide reinforcement built in horizontally.	m	1 323		
CB 1323					
	230mm Wide reinforcement built in horizontally in foundations. (Provisional).	m	1 812		
CB 1812					
	Carried to Collection			**R**	

27

		Unit	Quantity	Rate	Amount
28					
29					
30					
31					
32					
33	**Turning pieces:**				
34	115mm Wide turning pieces to lintols etc.	m	50		

	Unit	Quantity	Rate	Amount
CB 50 280mm Wide turning piece to lintels etc.	m	5		
CB 5 **Prestressed fabricated concrete lintels including necessary temporary supports :**				
75 x 110mm Lintels in lengths not exceeding 3m	m	160		
CB 160 75 x 110mm Lintels in lengths exceeding 3m and not exceeding 4.5m	m	7		
CB 7 75 x 110mm Lintels in lengths exceeding 4.5m and not exceeding 6m	m	12		
CB 12 **Galvanised hoop iron cramps, ties, etc:**				
30 x 1,6mm Wall tie 500mm long with one end shot pinned to concrete/brickwork and other end built into brickwork in foundations (Provisional).	No	24		
CB 24 30 x 1,6mm Wall tie 500mm long with one end shot pinned to concrete/brickwork and other end built into brickwork	No	48		
CB 48 30 x 1,6mm Wall tie 500mm long with one end fixed to timber and other end built into brickwork	No	24		
CB 24				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
36					
37					
38					
39					
40					
41					
42	30 x 1,6mm Roof tie 1,6m long with one end fixed to timber and other end built into brickwork or cast into concrete.	No	146		

CB 146

FACE BRICKWORK

	Unit	Quantity	Rate	Amount
'Makana' Cathcart Travertine 30Mpa FBS Clay face bricks (or equally approved), size 222 x 106 x 73mm, manufactured in accordance with 227:2007, bedded and jointed in Class II mortar and pointed with recessed horizontal and vertical joints, suitable for exposure zones 1-4 :				
Extra over brickwork for face brickwork in foundations (Provisional).	m²	80		
CB 80				
Extra over brickwork to piers and pilasters for face brickwork in foundations (Provisional).	m²	1		
CB 1				
Extra over brickwork for face brickwork externally.	m²	494		
CB 494				
Extra over brickwork to piers and pilasters for face brickwork	m²	11		
CB 11				
Extra over brickwork for brick-on-edge header course lintel pointed on face and 115mm soffit.	m	55		
CB 55				
Fair raking cutting	m	10		
CB 10				
Carried to Collection			**R**	

43

44

45

		Unit	Quantity	Rate	Amount
46					
47					
48					
	FACE BRICKWORK COPINGS, SILLS, ETC.				
	Brick-on-edge header course copings, sills, etc of Selected Face Bricks as before, pointed with recessed joints on all exposed faces:				
49	75mm Wide sill set sloping and slightly projecting with solid face brick to edges.	m	47		

		Unit	Quantity	Rate	Amount
CB 47	230mm Copings on top of one brick walls.	m	16		
CB 16					
	Carried to Collection			R	

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BILL NO. 3

MASONRY

COLLECTION

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SECTION NO. 3

BUILDING WORKS

Section No. 3
Bill No. 3
Masonry

	Unit	Quantity	Rate	Amount

BILL NO. 4

WATERPROOFING

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

Amount

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/Engineer.

Waterproofing

Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs

Waterproofing is to be laid in strict accordance with the manufacturers Code of Practice and by an Approved Contractor.

Preparation of substrata:

		Unit	Quantity	Rate	
	Screeded roof surfaces shall be firm, dry and clean. Corners shall be coved or arris rounded. All surfaces to receive waterproofing are to be fully primed with a solvent based bitumen primer.				
	Timber boarded roof surfaces shall be dry, clean and even. All internal angles are to receive a timber triangular fillet. Corners and edges shall be arris rounded.				

DAMPPROOFING OF WALLS AND FLOORS

One layer of 375 micron Consol Plastics Brikgrip DPC embossed damp proof course:

1	In walls.	m²	173		

	Carried to Collection			R	

		Unit	Quantity	Rate	Amount
CB 173	**One layer of 250 micron Consol Plastics Gunplas USB Green waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape:**				
	Under surface beds.	m²	592		
CB 592	Under surface beds at aprons, yards, ramps, etc.	m²	332		
CB 332	**Prepare plastered surface and apply two coats approved brush on Masonry Waterproofing coating, all in strict accordance with manufacturers specifications and instructions.**				
	On concrete screed floors to receive tiling in showers	m²	0		
		m²	0		
	On plastered walls to receive tiling in showers				
	Carried to Collection			R	

Amount

Approved silicone or equally approved sealing compound :

6	In pointing joints around frames and face brick walls externally.	m	207	

		Unit	Quantity	Rate	Amount
CB 207	**Approved two-part polyurethane sealing compound including backing cord, bond breaker, primer, etc**				
	6 x 10mm In saw cut construction joints in floors, aprons, etc.	m	313		
CB 313	10 x 10mm In isolation joints in floors, aprons, etc including raking out expansion joint filler as necessary.	m	745		
CB 745	10 x 10mm In vertical expansion joints in brickwork including raking out expansion joint filler as necessary	m	31		
CB 31					
	Carried to Collection			**R**	

BILL NO. 4

WATERPROOFING

COLLECTION

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	Unit	Quantity	Rate	Amount

SECTION NO. 3

BUILDING WORKS

BILL NO. 5

ROOF COVERINGS

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

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/Engineer.

RIBBED METAL SHEETING AND ACCESSORIES

Notes:

The following roof sheeting systems are to be manufactured and/or supplied and installed in strict accordance with the Manufacturer's and/or Supplier's specifications.

Fixing of all roof sheeting is to be in accordance with the Manufacturer's approved Instruction Book.

Carried to Collection **R**

	Unit	Quantity	Rate	Amount
Sheeting :				
The roof cladding shall be IBR 686 profile from certified ZINCALUME® 0.53mm steel. A certificate verifying compliance shall be issued by the manufacturer. The profile shall have 5 trapezoidal ribs at 171.5mm centres giving a net cover of 686mm with each pan incorporating a stiffener rib. The rib height shall be 37mm.				
Contractor to ensure that the roof sheeting is to be turned up at ridges to form a dam and turned down at gutters to form a drip. Ensure that the female overlap is not facing in the direction of the prevailing wind and ensure that overlapping sheets are positively locked into position.				
Fixing :				
The sheeting shall be laid with side-laps on the leeward side of the prevailing wind direction. An approved sidelap sealant shall be incorporated on roofing with a pitch of less than 15 degrees. All fixing holes shall be drilled and not punched. Roof sheets shall be fixed by means of No.14 Top speed Hex Head screws 65mm long for steel purlins or 90mm long for timber purlins and shall incorporate 26mm diameter bonded washers. Side-lap stitching shall be effected at no more than 600mm centres with 25mm long Top speed Hex Head screws and shall incorporate 19mm diameter bonded washers.				
Flashings :				
Stop endings must be formed at apex to form a dam and the pan turned down to form drip. The roof sheeting shall be closed as necessary with purpose				
Carried to Collection			**R**	

	Unit	Quantity	Rate	Amount
made flashings and shall incorporate serrated closers and poly closers where necessary. Flashing shall be fixed to roofing by means of No. 14 Top speed Hex head screws 25mm long with 26mm diameter bonded washers on roof and 19mm diameter bonded washers for side cladding.				
Erection, safety, handling and storage:				
Every precaution shall be taken to prevent damage to roof sheets, cladding, etc., during all stages of construction. Duck boards should be used when necessary to protect the sheeting from damage. Sheeting which has become deformed or damaged in any way, shall be replaced.				
Care shall be taken to ensure that no sheeting or flashing will be cut with abrasive disc on roof surfaces in order to prevent steel particles from penetrating coated surfaces.				
Sheetings should be suitably supported, clear of the ground, under well ventilated cover, away from risk of damage from building operations, contact with cement, dust, lime and abrasive dust, until required to be installed.				
The contractor shall exercise special care when handling long length sheeting, particularly in windy conditions. Should work be interrupted for any reason, all loose sheeting and incomplete sections must be adequately secured against possible movement by wind and gravity.				
The contractor shall ensure that all materials used on site for roofing/cladding, etc are transported, handled and stored in accordance with the manufacturer's				
Carried to Collection			**R**	

	Unit	Quantity	Rate	Amount
recommendations. Material damaged shall be rejected and replaced with undamaged material at the contractor's expense. Repair of damaged material will not generally be permitted. Rates are to include for preventing damage and protecting sheets through all stages of construction.				
Protrusion through sheeted surfaces :				
Protrusions such as pipes, ducts and the like, shall be adequately flashed where they pass through the sheeting surface. Where ribs have to be cut away to permit penetration, additional framing is to be installed as required to support the sheeting. Depending on the position of the penetration through the roof, special attention shall be given to back flashing the sheeting to the ridge or point of water entry. In all cases, all cutting and flashings shall be so arranged that adequate provision is made for the drainage of all troughs and corrugations.				
Guarantee :				
The manufacturer shall comply with ISO 9001:2008 Quality Management System. The IBR 686 sheeting shall be laid in strict accordance with the manufacturer's specifications by an approved contractor.				
A written and approved five year guarantee of siteworkmanship and watertightness shall be issued after final inspection and approval of Fixing of roofing, cladding, etc., by the Manufacturer on condition that the sheeting was laid by an approved contractor.				
Cleaning of roof, etc:				
Carried to Collection			**R**	

	Unit	Quantity	Rate	Amount

All debris, swarf, etc. arising from the fixing of the cladding shall be removed from the sheeting as the fixing progresses. In addition, off-cuts of insulation, surplus fasteners and sealants, mandrels from pop rivets, off-cuts of flashings and sheeting, surplus flashing, food packaging, cartons, bottles, cans, etc shall not be left on the roof or in the gutters.

Care shall be taken to ensure that no such material enters, blocks or partially impedes the flow of water into the outlets, down pipes, etc.

		Unit	Quantity	Rate	Amount
	RIBBED METAL SHEETING AND ACCESSORIES				
	0.53mm Thick IBR 686 profile ZINCALUME AZ150 coated steel G550 (Heavy Industrial) with a TCT Clean COLORBOND metalic coating finish to one side and a standard backing coat, Shadow Grey to other side, fixed to 50 x 75mm timber purlins at max 1200mm centres, all in strict accordance with the manufacturers specifications and recommendations.				
1	Roof covering with pitch not exceeding 25 degrees.	m²	844		

					Amount
CB 844 Lean-to roof covering with pitch not exceeding 25 degrees. CB 19 **IBR 686 Flashings, etc** **0,53mm Thick to suit IBR 686 profile ZINCALUME AZ150 coated steel G550 with a TCT Clean COLORBOND metallic coating finish one side and a standard backing coat to other side in accessories to preceding roof coverings in continuous lengths fitted in strict accordance with manufacturers specifications and recommendations.**	m²	19			
Ridge cap 462mm girth 1 times bent and notched on site to suit roof profile. CB 63	m	63			
Hip cap 462mm girth 1 times bent and notched on site to suit roof profile. CB 95	m	95			
Apex flash 462mm girth 1 times bent and notched on site to suit roof profile. CB 6	m	6			
Gable trim/Barge flash 462mm girth, 1 times bent. CB 22	m	22			
Carried to Collection				**R**	

2

		Unit	Quantity	Rate	Amount
3					
4					
5					
6					
7	Headwall flash 308mm girth, 1 times bent and notched on site to suit roof profile.	m	0		

				Amount
Counter flash 185mm girth, 2 times bent.	m	0		
Raking valley gutter 1000mm girth, 4 times bent along girth with central v-bend.	m	32		
CB 32				
Broad flute closers to suit IBR profile.	m	345		
CB 345				
ROOF AND WALL INSULATION				
Polyethelene durable double sided reflective foil laminate incorporating layers of aluminium foil, high strength fire retardant Kraft paper and reinforcing scrim bonded together with low density polyethylene :				
Insulation sisalation sheeting laid taut over purlins (at approximately 1200mm centres) and fixed concurrent with roof covering with minimum 150mm stapled laps including galvanised steel straining wires at not exceeding 400mm centres and double-sided tape at edges where required, to manufacturers specifications.	m²	862		
CB 862				
'Isoboard' or equally approved rigid extruded polystyrene 100% closed cell insulation boards in specified thickness, Core density 32-36kg/m3 and an R-value of 3.049m2 K/W, all in accordance with manufacturers specifications and instructions.				
High density 32-36kg/m3 rigid extruded polystyrene 100% closed cell insulation board of 80mm thickness and 600 mm width, with tongue and groove joints, fixed concurrently with roof covering to roof sheeting manufacturer's guidelines, over timber purlins at approximately 1200mm centres, with 5 mm gap between boards butt-joined on top of purlins.	m²	708		
CB 708				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
9					
10					
11					
12					

BILL NO. 5

ROOF COVERINGS

COLLECTION

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Roof Coverings

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Unit Quantity Rate Amount

SECTION NO. 3

BUILDING WORKS

BILL NO. 6

CARPENTRY AND JOINERY

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

SUPPLEMENTARY PREAMBLES

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/Engineer.

	Unit	Quantity	Rate	Amount

Particle board:

Particle board shall comply with the following specifications: a) SANS 1300 Particle board: exterior and flooring type b) SANS 1301 Particle board: interior type.

Joinery:

Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc.

Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes.

Fixing:

Items described as nailed shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.

Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs in brickwork or concrete at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere.

General :

All glazing to timber doors or frames is elsewhere measured.

All factory timber doors are to be pre-treated with a linseed oil based transit stabilizing sealer.

PREFABRICATED TIMBER ROOF TRUSS CONSTRUCTION ETC

		Unit	Quantity	Rate	Amount

Plate nailed timber roof trusses are at maximum 1200mm centres.

Roof covering is type IBR 686 roof sheeting on timber purlins.

Ceiling is suspended ceiling panels on suspended tee system or 6mm Nutec sheeting on 38 x 50mm brandering

References given in descriptions refer to the respective roofs as a whole and detailed on the Architect's and Engineers drawings annexed to these bills of quantities for tender purposes

Dimensions in descriptions of the roofs or trusses are nominal and actual measurements are to be obtained from the Architect/Engineer and/or taken on site before design or fabrication commences.

The design drawings are to be submitted to the Architect/Engineer for approval prior to fabrication commencing.

Sawn softwood Grade 5 plate nailed timber roof truss construction:

1 Roof construction to double pitched roof of Clinic Block Building (Roof Area approximately 726m2), complete, with centre double pitched roof for full length of building size 46604 x 12302mm wide x 2263mm high, with four valley sets and four projecting roofs with hipped ends two approximately 6500 x 12302mm wide each and two approximately 5000 x 9551mm wide each, roof with 600mm eaves overhang on all sides, all roof structures including all trusses, girders, hipped ends, valleys trusses, jack trusses, overhangs, intersections, temporary and permanent bracings, valley boarding, etc, and including all sundry materials, hangers, straps, bolts, washers, clips, etc. all as per the Architects & Engineers Plans and Roof Drawings at the back of these

		Unit	Quantity	Rate	Amount
	Bills of Quantities and in accordance with an Approved prefabricated Mitek timber roof truss design. (Clinic Building, complete).	No	1		
	CB 1 Roof construction to double pitched roof of Clinic Block Outbuilding Store Building (Roof Area approximately 67m2), complete, with centre double pitched roof for full length of building size 12793 x 5201mm wide x 1000mm high, with two gable ends, roof with 600mm eaves overhang on sides and 385mm overhang at verges, all roof structures including all trusses, girders, overhangs, intersections, temporary and permanent bracings, etc, and including all sundry materials, hangers, straps, bolts, washers, clips, etc. all as per the Architects & Engineers Plans and Roof Drawings at the back of these Bills of Quantities and in accordance with an Approved prefabricated Mitek timber roof truss design. (Clinic Outbuilding/Stores Building, complete).	No	1		
	CB 1 Carried to Collection			**R**	

2

		Unit	Quantity	Rate	Amount
3	Roof construction to double pitched roof of EMS Hub Building No 1 (Roof Area 1 approximately 96m2), complete, with centre double pitched roof for full length of building size 10442 x 9112mm wide x 1000mm high, with one valley and four hipped ends of varying sizes, roof with 300mm eaves overhang on all sides, all roof structures including all trusses, girders, hipped ends, valleys trusses, jack trusses, overhangs, intersections, temporary and permanent bracings, valley boarding, etc, and including all sundry materials, hangers, straps, bolts, washers, clips, etc. all as per the Architects & Engineers Plans and Roof Drawings at the back of these Bills of Quantities and in accordance with an Approved prefabricated Mitek timber roof truss design. (EMS Hub Building 1, complete).	No	0		

		Unit	Quantity	Rate	Amount
	Roof construction to double pitched roof of EMS Hub Building No 2 (Roof Area 2 approximately 55m2), complete, with centre double pitched roof for full length of building size 7420 x 6324mm wide x 1000mm high, with four hipped ends of two different sizes, roof with 300mm eaves overhang on all sides, all roof structures including all trusses, girders, hipped ends, valleys trusses, jack trusses, overhangs, intersections, temporary and permanent bracings, valley boarding, etc, and including all sundry materials, hangers, straps, bolts, washers, clips, etc. all as per the Architects & Engineers Plans and Roof Drawings at the back of these Bills of Quantities and in accordance with an Approved prefabricated Mitek timber roof truss design. (EMS Hub Building 2, complete).	No	0		
	Roof construction to double pitched roof of Staff Accommodation Building (Roof Area approximately 197m2), complete, with centre double pitched roof for full length of building size 24646 x 6713mm wide x 1400mm high, with two gable ends, roof with 600mm eaves overhang on sides and 144mm overhang at verges, all roof structures including all trusses, girders, overhangs, intersections, temporary and permanent bracings, etc, and including all sundry materials, hangers, straps, bolts, washers, clips, etc. all as per the Architects & Engineers Plans and Roof Drawings at the back of these Bills of Quantities and in accordance with an Approved prefabricated Mitek timber roof truss design. (Staff Accommodation Building, complete).				
	Carried to Collection	No	0	**R**	

4

		Unit	Quantity	Rate	Amount
5					
6	Roof construction to double pitched roof of Guard House Building including Covered Foyer (Roof Area approximately 47m2), complete, with centre double pitched roof for full length of building size 7937 x 4472mm wide x 1000mm high, with two gable ends, roof with 600mm eaves overhang on sides and 150mm overhang at verges, all roof structures including all trusses, girders, overhangs, intersections, temporary and permanent bracings, etc, and including all sundry materials, hangers, straps, bolts, washers, clips, etc. all as per the Architects & Engineers Plans and Roof Drawings at the back of these Bills of Quantities and in accordance with an Approved prefabricated Mitek timber roof truss design. (Guard House Building, complete).	No	0		

	Unit	Quantity	Rate	Amount
Roof construction to double pitched roof of Booster Pumphouse Building (Roof Area approximately 28m2), complete, with centre double pitched roof for full length of building size 4984 x 3624mm wide x 1000mm high, with two gable ends, roof with 600mm eaves overhang on sides and 200mm overhang at verges, all roof structures including all trusses, girders, overhangs, intersections, temporary and permanent bracings, etc, and including all sundry materials, hangers, straps, bolts, washers, clips, etc. all as per the Architects & Engineers Plans and Roof Drawings at the back of these Bills of Quantities and in accordance with an Approved prefabricated Mitek timber roof truss design. (Booster Pumphouse Building, complete).	No	0		
Allow for design, supply, inspection and Engineering certificate of approval, TR1 & TR2, by an Approved Manufacturer for the manufacture and the erection of ALL new roof trusses to ALL buildings, complete, all to the Engineers and Architects approval.	Item			
IT 1				
ROOF CONSTRUCTION				
Sawn softwood :				
38 x 114mm Wall plates.	m	179		
CB 179				
Carried to Collection			**R**	

7

		Unit	Quantity	Rate	Amount
8					
9					
10	38 x 114mm Backing pieces fixed to purlins at verges at approximately 1200mm centres with galvanised steel 'Trip-L-Grip' brackets to receive barge boards (elsewhere measured). (Provisional).	m	22		

		Unit	Quantity	Rate	Amount
CB 22	38 x 114mm Backing piece fixed to end of rafters at eaves at approximately 1200mm centres with galvanised steel 'Trip-L-Grip' brackets to receive fascia boards (elsewhere measured).	m	185		
CB 185	50 x 228mm Gangboarding (Provisional)	m	160		
CB 160	50 x 76mm Purlins.	m	989		
CB 989	50 x 228mm Rafters.	m	20		
CB 20	50 x 228mm Rafter to brick piers in verandah/stoep beams.	m	13		
CB 13	**Roof Sundries :**				
	50 x 1.6mm 90 Degree Eco truss hanger bracket, bolted to wall with and including 2 x anchor bolts, to receive timber rafters (elsewhere measured). (Provisional).	No	0		
	EAVES, VERGES, ETC				
	Wrought meranti				
	19mm Quadrant beads	m	396		
CB 396					
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
12					
13					
14					
15					
16					
17	**Medium density plain Nutec fibre-cement flat sheets :**				
18	6mm Verge soffit covering including 38 x 38mm sawn softwood branders along edges and at 600mm centres across sheets, joined with H-profile galvanised steel strips.	m²	4		

		Unit	Quantity	Rate	Amount
	CB 4 6mm Eaves soffit covering including 38 x 38mm sawn softwood branders along edges, along centre and at 600mm centres across sheets, joined with H-profile galvanised steel strips.	m²	122		
	CB 122 **Fibre Cement medium density plain ungrooved fascias and barge boards:**				
	12 x 225mm Plain fascia boards, including PVC H-profile jointing strips and corner jointers, twice screwed on with 12x40mm countersunk brass screws at 900mm centres.	m	185		
	CB 185 80 x 275mm Socketless barge board, butt jointed and with PVC H-profile joiners and corner joiners, twice screwed on.	m	22		
	CB 22 **SKIRTINGS**				
	Wrought meranti:				
	70 x 16mm Hollow backed standard meranti skirting with arris rounded top edge, nailed.	m	80		
	CB 80				
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
20					
21					
22					
	TIMBER DOORS, WINDOWS, ETC				
	Fire doors:				
	Fire doors are to be in accordance with SANS 1253				
	Solid chipboard core laminated flush fire doors with 0.8mm Polyurethane laminate both sides, with 40 x 20mm hardwood edging strip all round, hung to steel frames.				
23	Class B fire rated door 813 x 2032mm high. (See Architects Door Schedule - D 01, D02).	No	5		

		Unit	Quantity	Rate	Amount
	CB 5 Class B fire rated double door in two unequal leaves, size 1400 x 2032mm high overall with rebated meeting edges, with one leaf 1025 x 2100mm and other leaf 375 x 2100mm high with glazed viewing panel opening size 300 x 750mm high in larger leaf, fitted with wrought hardwood glazing beads, (glazing elsewhere measured). (See Architects Door Schedule - D 05).	No	2		
	CB 2 Class B fire rated double door size 1800 x 2032mm high overall, in two equal leaves size 900 x 2032mm high each, with rebated meeting edges and with 300 x 750mm high framed viewing panel opening to each leaf, fitted with wrought hardwood glazing beads on both sides, (glazing elsewhere measured). (See Architects Door Schedule - D17).	No	2		
	CB 2 **DOORS ETC** **Solid core flush panel doors with commercial veneer on both sides and two hardwood edge strips.** 40mm Door 813 x 1950mm high. (See Architects Door Schedule - D 03).	No	3		
	CB 3 Carried to Collection			**R**	

24

25

		Unit	Quantity	Rate	Amount
26					
	Solid chipboard core laminated flush doors with 0.8mm Polyurethane laminate both sides, with 40 x 20mm hardwood edging strip all round door, hung to steel frames.				
27	40mm Door 813 x 2032mm high. (See Architects Door Schedule - D 01, D02).	No	18		

		Unit	Quantity	Rate	Amount
	CB 18 40mm Door 1000 x 2032mm high. (See Architects Door Schedule - D 04).	No	1		
	CB 1 40mm Double Door 1400 x 2032mm high in two unequal leaves size 1025 x 2032mm and 375 x 2032mm high, with rebated meeting edges and with 300 x 750mm high framed viewing pane opening to larger leaf fitted with wrought hardwood glazing beads on both sides, (glazing elsewhere measured). (See Architects Door Schedule D 05).	No	1		
	CB 1 Extra over for 500 x 300mm high framed opening in timber doors for aluminium louvre unit (louvre unit elsewhere measured). (Provisional).	No	8		
	CB 8 **WROUGHT HARDWOOD DOORS, ETC.** All glazing is elsewhere measured. All doors are to be pre-treated with a linseed oil based transit stabilizing sealer. **External Quality (5 Year Guarantee) Approved Hardwood Doors hung to steel frames:** 44mm Type PD60 Heavy Duty horizontal slatted external quality hardwood door, size 813 x 2032mm high. (See Architects Door Schedule - D 09, D11).	No	6		
	CB 6				
	Carried to Collection			**R**	

28

29

		Unit	Quantity	Rate	Amount
30					
31					
32	44mm Type PD60 Heavy Duty horizontal slatted external quality hardwood stable door, size 813 x 2032mm high. (See Architects Door Schedule - D 10).	No	0		

	Unit	Quantity	Rate	Amount
Extra over for 500 x 300mm high framed opening in timber doors for aluminium louvre unit (louvre unit elsewhere measured). (Provisional).	No	4		
CB 4				
FRAMED FRAMES ETC				
All door frame profiles are to be manufactured according to SABS specification No. 1129 of 1977.				
All door frames are to be pre-treated with a linseed oil based transit stabilizing sealer.				
Wrought standard hardwood :				
70 x 50mm Rebated and angle rounded frame in styles for door linings. (See Architects Door Schedule - D 03).	m	13		
CB 13				
BEADS, ARCHITRAVES, SILLS, ETC				
Wrought meranti:				
19mm Quadrant beads	m	25		
CB 25				
44 x 44mm Rebated, splayed and grooved weather boards, fixed to external doors, including grooves in doors.	m	4		
CB 4				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
34					
35					
36					
	NOTICE BOARDS, PINNING BOARDS, WRITING BOARDS, KEYBOARDS, DUCKBOARDS, ETC				
	Approved bulletin pinning boards with carpet and anodised aluminium frame.				
37	Pinning/bulletin board size 1200 x 900mm high plugged to walls. (Provisional).	No	21		

		Unit	Quantity	Rate	Amount
CB 21	**Approved White Boards Non-Magnetic, with aluminium frames, aluminium pentray, mounting brackets, etc., fixed to walls, all installed in accordance with manufacturers instructions.**				
	White non-magnetic writing board, size 900 x 600mm high, plugged to walls. (Provisional).	No	10		
CB 10	**STORAGE SHELVING, ETC. (PROVISIONAL)**				
	Supply and fit wall mounted timber and steel shelving complete, consisting of 1820mm long wall bands (code WB1820) with standard epoxy powder coated finish fitted vertically at approximately 670mm centres, fitted as per manufacturers specifications, complete with heavy duty brackets (code WBR 300) for wood shelves and fit six (6) rows of 22mm thick x 380mm wide SAP Lamboard Laminated pine shelving with and including preparation and finish with two coats high quality polyurethane varnish, sanding lightly between coats and shelves screwed to brackets from below :				
	Steel shelving with six rows of 22mm x 380mm wide laminated SAP timber board shelving on wall bands and brackets, approximately 1916mm high, including finish, fixed to walls. (Provisional).	m	20		
CB 20					
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
39					
	FURNITURE AND FITTINGS, ETC. (PROVISIONAL)				
	Stainless Steel Waiting Area Benches :				
40	3 Seater flash silver stainless steel durable waiting area bench (SKU:XX-CHW12798) for high volume traffic in waiting areas. (Provisional)	No	8		

		Unit	Quantity	Rate	Amount
	CB 8 4 Seater flash silver stainless steel durable waiting area bench (SKU:XX-CHW12798) for high volume traffic in waiting areas. (Provisional)	No	8		
	CB 8 5 Seater flash silver stainless steel durable waiting area bench (SKU:XX-CHW12798) for high volume traffic in waiting areas. (Provisional)	No	6		
	CB 6 For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.				
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Amount

BILL NO. 6

CARPENTRY AND JOINERY

COLLECTION

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SECTION NO. 3

Section No. 3
Bill No. 6
Carpentry And Joinery

Unit Quantity Rate Amount

BUILDING WORKS

BILL NO. 7

CEILINGS PARTITIONS AND ACCESS FLOORING

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

	Unit	Quantity	Rate	Amount

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/Engineer.

CEILINGS, PARTITIONS AND ACCESS FLOORING

Ceilings :

Unless otherwise described ceilings shall be deemed to be horizontal.

Fixing :

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 and screwed shall be deemed to include screwing to fibre, plastic or metal plugs at centres not exceeding 600mm, and where described as bolted the bolts have been given elsewhere.

Steel components :

All steel components for ceilings, partitions, etc are to

be galvanised in accordance with SANS 121

Descriptions:

Boards must be stacked on a level surface in a dry place on a timber platform. Boards must be carried on edge.

		Unit	Quantity	Rate	Amount

'Nutec' ceiling boards shall be secured to timber brandering with 32 x 2.5mm galvanized serrrated nails at centres not exceeding 150mm.

Skimming of plasterboard ceilings must be plastered the same day that the plasterboard has been erected.

SUSPENDED CEILINGS

Proprietary suspended ceilings, hangers, suspension grids, lay-in panels, etc are to be strictly in accordance with the manufacturers' recommendations.

Electrical light fittings, diffusers, panels etc are generally lay-in units of the same dimensions as the suspension grid described and allowance must be made in the rates accordingly for their support inclusive of any flexibility in setting out that may be required (ceiling panels have not been deducted and pricing is to take cognisance thereof).

Exposed Ceiling System with Exposed Ceiling Grid :

Lay Gypsum white embossed vinyl covered 1200mm x 600 x 9mm ceiling tile into fire rated construct S3 exposed demountable Butt-cut T24 suspension system, comprising galvanised main tees and cross tees, main tees suspended by means of galvanised hangers at centres not exceeding 1200mm with ceiling perimeter finished with Shadowline W-trim (elsewhere measured), all installed to manufacturers instructions.

1	Ceilings suspended not exceeding 1m below timber purlins at 1200mm centres (rafter trusses at 1200mm centres).	m²	477		

Carried to Collection			R	

CB 477	**Cornices, perimeter trims, etc to suspended ceilings :**	Unit	Quantity	Rate	Amount
	Type Shadowline W-trim wall angles, plugged and screwed at 200mm centres.	m	517		
CB 517					
	Carried to Collection			**R**	

2

		Unit	Quantity	Rate	Amount
	Skimmed Ceiling System with Concealed Ceiling Grid :				
	Fix 2x RhinoBoard® FireStop® dB 15 mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Greentag Level B) to Gypframe® UltraSTEEL® (or equally approved) Brandering using Sharp-point Screws 25 mm (base layer) and 42mm (face layer) at maximum 150 mm centres. All joints should be staggered. Perimeter suspension shall be less than 400mm from the wall. 25 mm x 25 mm Galvanized Angle Hanger fixed to timber tie beam or floor joist using 2 Grabber Screws. Gypframe® UltraSTEEL® Studs 51 mm at 600 mm centres fixed to 25 mm x 25 mm Galvanised Angle Hangers using 13mm Wafer-head Tek Screws. Suspension Bracket fixed to Gypframe®UltraSTEEL® Stud 51 mm using one line of 2 Wafer-head Tek Screw 13 mm. Gypframe® UltraSTEEL® Brandering shall be spaced at 400 mm centres clipped onto Suspension Bracket. Branders are joined using Brander Joiners. Apply RhinoTape® to all joints and internal corners. Install Gypframe® Corner Bead to all external corners. Cover RhinoTape® with 1 layer of RhinoLite® Multipurpose/ RhinoLite® Natural Plus®/ RhinoLite® CreteStone® (locally manufactured, Greentag Level B).				
3	Ceilings suspended not exceeding 1m below timber purlins at 1200mm centres (rafter trusses at 1200mm centres).	m²	18		

		Unit	Quantity	Rate	Amount
	CB 18 Extra over ceiling for 4mm diameter 50 x 50mm aperature welded mesh mild steel 'fence' fixed to top of bottom chord of timber roof trusses as tamper proof ceiling.	m²	18		
	CB 18				
	Carried to Collection			R	

4

Cornices, perimeter trims, etc to suspended ceilings :

5	75mm Rhino Coved cornice fixed with approved adhesive.	m	24		

CB 24

NAILED-UP CEILINGS

	Unit	Quantity	Rate	Amount
6mm Fibre-cement plain ceiling boards (SANS9001:2000) with SANS 803:2005 mark with Hprofile galvanised steel jointing strips over joints and fitted using 32x2,5mm serrated ceiling nails at 150mm centres, all in accordance with manufacturers recommendations :				
Ceilings including 38 x 50mm sawn softwood brandering at 600mm centres and cross brandering at joints, ends of sheets and at light fittings, etc.	m²	88		
CB 88				
Vertical ceilings for gable end closure including 38 x 50mm sawn softwood brandering at 600mm centres and cross brandering at joints, ends of sheets, etc.	m²	0		
Extra over ceiling for 600 x 600mm trap door of 38 x 50mm wrought softwood rebated framing with one cross brander, covered with ceiling board and fitted flush in opening, including necessary trimmers around.	No	2		
CB 2				
Gypsum plasterboard cornices to nail up ceilings :				
75mm Rhino Coved cornice fixed with approved adhesive.	m	99		
CB 99				
Carried to Collection			**R**	

6

7

8

		Unit	Quantity	Rate	Amount
9					
	ACCESS FLOORING (PROVISIONAL)				
	Approved Access Flooring System (Intermediate loading) :				
10	600 x 600mm Modular and interchangeable steel panel access flooring including 'Freestanding' understructure pedestal system and all steel panels (code USP52) finished with Heavy commercial 100% Stainproof Miracle Fibre (Polypropylene) structured needlepunch Resinbac SABS Class 2 fire rating carpet tiles, size 500 x 500 x 7mm thick, installed by an approved installer. (Access flooring to finish 150mm above the concrete sub-floor).	m²	6		

		Unit	Quantity	Rate	Amount
	CB 6 Junctions against walls, islands and columns including additional supporting members, pedestals, etc.	m	9		
	CB 9 Hole for 110mm external diameter pipe through floor panel including sealing.	No	1		
	CB 1 Extra over access flooring for access grommet.	No	1		
	CB 1 Spare floor panel finished with carpet finish handed to Employer.	No	2		
	CB 2				
	Carried to Collection			**R**	

Amount

BILL NO. 7

CEILINGS PARTITIONS AND ACCESS FLOORING

COLLECTION

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SECTION NO. 3

Section No. 3
Bill No. 7
Ceilings Partitions And Access Flooring

Unit Quantity Rate Amount

BUILDING WORKS

BILL NO. 8

FLOOR COVERINGS, WALL LININGS, ETC

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

		Unit	Quantity	Rate	Amount

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/Engineer.

Fixing

Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc

VINYL FLOOR COVERINGS, WALL LININGS, ETC.

The following floor coverings, wall linings, etc. Are to be manufactured and/or supplied by manufacturer as specified and installed in strict accordance with the Manufacturer's and/or Supplier's instructions and specifications.

Vinyl Floor Coverings and Wall Linings :

2.0mm Thick safe Verona PUR Safety vinyl floor sheeting colour Dolphin Grey code: 5203, (or equally approved), laid in an approved neoprene contact adhesive spread with a roller on suitably prepared cement screed (elsewhere measured) with a hygrometer reading showing a moisture content of less than 70%, with joints welded with a fully flexible coloured welding rod to provide a smooth, hygienic sealed finish and rolled with 68kg articulated floor roller, all in accordance with manufacturer's recommendations.

1	On floors.	m²	463		

	Carried to Collection			R	

	Unit	Quantity	Rate	Amount
CB 463 On walls in 200mm turn-up over coves against walls as skirtings.	m²	93		
CB 93 **SKIRTINGS, NOSINGS, ETC**				
Vinyl sheeting skirtings, nosings, accessories, etc				
40mm PC20 polycove fillet.	m	465		
CB 465 40mm PC20 polycove fillet vertically at internal corners of wall cladding in skirtings.	m	24		
CB 24 75x75mm Corner cap vertically at external corners of wall cladding in skirtings.	m	5		
CB 5 40mm Fully flexible PVC capping strip CS48.	m	454		
CB 454				
Carried to Collection			**R**	

2

3

4

		Unit	Quantity	Rate	Amount
5					
6					
7	CT Capping strip to receive wall tiles one side and vinyl sheeting other side.	m	11		

CB 11				
Wall Guards and Bed Protectors :	Unit	Quantity	Rate	Amount
40mm 90 Degree Standard PVC corner guard (Colour later by Architect) size 40x40mm, fixed to walls in standard lengths 1220mm high with pre-applied tape or adhesive, complete, all in accordance with the manufacturers specifications and instructions. (Provisional).	m	35		
CB 35				
1800i Gradus PVC Wall Guard 200mm high (Colour later by Architect) bump rail, plugged and screwed to walls, complete, including mitres, corners, end caps, etc., all in accordance with the manufacturers specifications and instructions. (Provisional).	m	88		
CB 88				
BL800 Gradus PVC Bed Protector 139mm high x 915mm long, (Colour later by Architect), plugged and screwed to walls, complete,etc., all in accordance with the manufacturers specifications and instructions. (Provisional).	No	5		
CB 5				
Structural movement joints and covers:				
EJC65 or equally approved structural joint cover, (colour to match vinyl floor covering) fixed in and to floors at construction/expansion joints, all as per manufacturers instructions. (Provisional).	m	98		
CB 98				
Carried to Collection			**R**	

8

		Unit	Quantity	Rate	Amount
9					
10					
11	**POLISH, SEALERS, ETC**				
	Polish, sealers, etc :				
12	Clean down and apply 2 coats approved polish sealer on vinyl flooring, all to manufacturers recommendations.	m²	463		

CB 463

MATS (PROVISIONAL)

	Unit	Quantity	Rate	Amount
'Mat-lok Aluguard' or equally approved single sided barrier mat :				
Door mat size 1800 x 1200 x 12mm gauge, heel-proof, closed construction barrier mat consisting of electrostatic, buffed-nylon tyre-rubber strips, inserted and fixed into modular natural anodised aluminium scraper sections, fixed with nail-in-anchors in sunken AMF31/31 aluminium mat surround (elsewhere measured). (Provisional)	No	1		
CB 1				
'Decramat' or equally approved Mat-well Frame :				
Mat surround size 1800 x 1200mm formed of natural anodised aluminium pre-formed matwell frame AMF31/31, complete with mitred edges and corner connectors, bedded into screed. (Provisional)	No	1		
CB 1				
Carried to Collection			**R**	

13

14

Amount

BILL NO. 8

FLOOR COVERINGS, WALL LININGS, ETC

COLLECTION

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SECTION NO. 3

Section No. 3
Bill No. 8
Floor Coverings, Wall Linings, Etc

Unit Quantity Rate Amount

BUILDING WORKS

BILL NO. 9

IRONMONGERY

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

		Unit	Quantity	Rate	Amount
	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/Engineer.				
	Finishes to ironmongery:				
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered : CH Chromium plated : SC Satin chromium plated : SE Silver enamelled : GE Grey enamelled : AS Anodised silver : AB Anodised bronze : AG Anodised gold : ABL Anodised black : PB Polished brass : PL Polished and lacquered : PT Epoxy coated.				
	Fixing:				
	Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs in brickwork or concrete.				
	HINGES, FLOOR SPRING HINGES, BOLTS, PANIC BOLTS, ETC				
	Approved hinges, floor springs, bolts, panic bolts, etc.:				
1	1040 100mm Aluminium sinkless hinge, centre pin with standard alignment grooving for easy fitment.	No	20		

Carried to Collection R

		Unit	Quantity	Rate	Amount
	CB 20 2040 200mm Aluminium sinkless hinge, centre pin, Anodised.	No	13		
	CB 13 DBB-SS-009 102x75x3mm EN1935 Grade 13 Stainless steel two ball bearing butt hinge, fire rated, with 120kg carrying capacity per pair.	Pairs	43		
	CB 43 Galvanised 150mm Barrel Bolt fitted to inactive door leaf, top and bottom.	No	2		
	CB 2 M1519AS 150mm Anodised aluminium flush bolts	No	4		
	CB 4 DFB-SC-180 153mm Satin chrome Manual flush bolt with heel.	No	10		
	CB 10 DPS-SS-032 Stainless steel dust proof strike.	No	6		
	CB 6 PHA2 W SD Two point locking panic bar - Single door Door leaf 1300mm wide x 2270mm high (2201.2105.PHX02.PHX04).	Sets	2		
	CB 2				
	Carried to Collection			**R**	

2

3

		Unit	Quantity	Rate	Amount
4					
5					
6					
7					
8					
9	BTS75 Adjustable size EN 1-4 Hold Open floor spring certified to EN1154 with single action accessories for 120kg door leaf weight with stainless steel cover, adjustable closing and latching speeds, complete set for aluminium framed glass doors, including sealing compound applied to floor spring box. (BTS75 SAA-HO)	Sets	2		

	Unit	Quantity	Rate	Amount
CB 2 BTS75 Adjustable size EN 1-4 Hold Open floor spring certified to EN1154 with single action accessories for 120kg door leaf weight with stainless steel cover,,adjustable closing and latching speeds, complete set for timber doors, including sealing compound applied to floor spring box. (BTS75 SAT-HO)	Sets	4		
CB 4 **LOCKS**				
Approved locks, locksets, etc. :				
51mm 'All Weather' 5 pin plastic covered external padlock and 3 keys.	No	12		
CB 12 DCE-002 S.S Stainless steel round cylinder escutcheon.	Pairs	7		
CB 7 D038R NP Nickel plated rebate conversion kit for Euro profile locks D036S, D037D	No	4		
CB 4 DBC-SS-022 Stainless Steel Adjustable Roller bolt	No	7		
CB 7 ISEO 1450.00.55 Single Long Throw Profile Cylinder Gate Lock, 55mm Backset.	No	3		
CB 3				
Carried to Collection			**R**	

10

		Unit	Quantity	Rate	Amount
11					
12					
13					
14					
15					
16	DSC204101 MK (40.5mm) Satin Nickel 40.5mm Europrofile Nickel Plated E-SP 5 pin Single cylinder, Master Keyed.	No	4		

		Unit	Quantity	Rate	Amount
	CB 4 DDC206301 MK (63mm) Satin Nickel 31.5+31.5mm Europrofile Nickel Plated E-SP 5 pin double cylinder, Master Keyed.	No	35		
	CB 35 DKC206301 MK (63mm) Satin Nickel 31.5+31.5mm Europrofile Nickel Plated E-SP 5 pin knob cylinder, Master Keyed.	No	12		
	CB 12 D034S SS Stainless steel Multiple Lever Sash Lock, case dimensions 102mm high x 78mm deep, with forend dimensions 155mm high x 22mm wide and backset 57mm. Centres 62mm.	No	6		
	CB 6 D035S SS Stainless steel Bathroom Sash Lock, case dimensions 102mm high x 78mm deep, with forend dimensions 155mm high x 22mm wide and backset 57mm. Centres 57mm.	No	4		
	CB 4 D036S SS Stainless steel Cylinder sash lock, case dimensions 116.5mm high x 78mm deep, with forend dimensions 168mm high x 22mm wide and backset 57mm. Centres 61mm.	No	32		
	CB 32 D037D SS Stainless steel Cylinder deadlock, case dimensions 116.5mm high x 78mm deep, with forend dimensions 168mm high x 22mm wide and backset 57mm.	No	16		
	CB 16				
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
18					
19					
20					
21					
22					
23	DMWC-SS-008 Stainless steel bathroom deadlock, case dimensions 38mm high x 76mm deep, with forend dimensions 78mm high x 22.5mm wide and backset 55mm.	No	5		

	Unit	Quantity	Rate	Amount
CB 5 DWC-005 Stainless steel bathroom WC indicator (Red & White) and turn knob.	Sets	4		
CB 4 DWC-006 Stainless steel disabled WC indicator (Red & White) and turn knob for physically impaired.	Sets	1		
CB 1 **CATCHES, CABIN HOOKS, ETC**				
Catches, cabin hooks, etc				
200mm 166 SC on brass cabin hook and eye, fixed to and including 100 x 100 x 75mm thick meranti block with chamfered edges, finished with and including clear varnish and twice bolted to wall with and including 2 x 80mm Rawlbolts.	No	10		
CB 10 **HANDLES, FLUSH PULLS, ETC**				
Handles, flush pulls, etc :				
TH120 Cyl S.S Stainless steel lever handle set on rose with cylinder escutcheons	Sets	13		
CB 13 TH120 Key S.S Stainless steel lever handle set on rose with key escutcheons	Sets	6		
CB 6 TH120 WC S.S Stainless steel lever handle set on rose with Bathroom/WC furniture.	Sets	2		
CB 2				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
25					
26					
27					
28					
29					
30	TH120 BP Cyl S.S Stainless steel lever handle set on 170x170mm plate with cylinder cutout.	Sets	21		

		Unit	Quantity	Rate	Amount
CB 21	TH120 BP WC RH S.S Stainless steel lever handle set on 170x170mm plate with Bathroom WC Furniture RH.	Sets	2		
CB 2	DPH301B Stainless steel 325x25mm Straight tubular pull handle flange fixing.	No	2		
CB 2	DPH301C BT Stainless steel 149x19mm Straight tubular pull handle BT.	No	7		
CB 7	DPH209 BTB Stainless steel 200x22mm Straight tubular pull handle BTB (BTB fixing sets included).	Pairs	3		
CB 3	DPH215 BTB Stainless steel 382x32mm D Shaped Offset tubular pull handle BTB (BTB fixing sets	Pairs	7		
CB 7	DHP-304-CR-SF 100x200 DPH301C Pull Handle BT fixed on a 100x200x1.2mm thick Grade 304 brushed stainless steel plate with cylinder cutout, right. Stainless steel plate to have four countersunk holes for screw fixing.	No	5		
CB 5	DHP-304-CL-SF 100x200 DPH301C Pull Handle BT fixed on a 100x200x1.2mm thick Grade 304 brushed stainless steel plate with cylinder cutout, left. Stainless steel plate to have four countersunk holes for screw fixing.	No	5		
CB 5					
	Carried to Collection			**R**	

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Section No. 3
Bill No. 9
Ironmongery

		Unit	Quantity	Rate	Amount
32					
33					
34					
35					
36					
37					
38	DHP-430-CR-SF 170x170 DPH301C Pull Handle BT fixed on a 170x170x1.2mm thick Grade 430 brushed stainless steel plate with cylinder cutout, right. Stainless steel plate to have four countersunk holes for screw fixing.	No	2		

		Unit	Quantity	Rate	Amount
	CB 2 DHP-430-CL-SF 170x170 DPH301C Pull Handle BT fixed on a 170x170x1.2mm thick Grade 430 brushed stainless steel plate with cylinder cutout, left. Stainless steel plate to have four countersunk holes for screw fixing.	No	2		
	CB 2 **PUSH PLATES AND KICKING PLATES**				
	Push plates and kick plates :				
	DPP-304-BL-SF 170x170 - Grade 304 brushed stainless steel blank push plate size 170mm x 170mm x 1,2mm thick, four times drilled and countersunk for stainless steel screw fixing to doors.	No	4		
	CB 4 DKP-430-SF 200 - Grade 430 Brushed stainless steel plate 200mm x 813mm x 1,2mm thick, finished size to be checked on site, drilled and countersunk for stainless steel screw fixing to doors.	No	76		
	CB 76 DKP-430-SF 300 - Grade 430 Brushed stainless steel kick plate 300mm x 813mm x 1,2mm thick, finished size to be checked on site, drilled and countersunk for stainless steel screw fixing to doors.	No	75		
	CB 75				
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
40					
41					
42					
	DOOR CLOSERS				
	Approved door closers:				
43	TS91 EN3 FP Stainless Steel Plate to be fabricated from 1.2mm thick stainless steel with 8mm diameter predrilled holes positioned according to the relevant drawings with all corners to receive 5mm radius fillet, fixed with patent fixing screws.	No	12		

		Unit	Quantity	Rate	Amount
	CB 12 TS73V DC-SL EN2-4 Regular arm DELAYED ACTION door closer, pull side fitting EN2 750-850, EN3 850-950, EN4 950-1100, colour silver, fixed with patent fixing screws.	No	1		
	CB 1 TS73V PA-SL EN2-4 Parallel arm NON-HOLD OPEN door closer, adjustable strength, hydraulic speed control, push side fitting (parallel arm bracket included) EN2 750-850, EN3 850-950, EN4 950-1100, colour silver, fixed with patent fixing screws.	No	1		
	CB 1 TS73V PA DC-PAB-SL EN2-4 Parallel arm DELAYED ACTION door closer, push side fitting (parallel arm bracket included) EN2 750-850, EN3 850-950, EN4 950-1100, colour silver, fixed with patent fixing screws.	No	1		
	CB 1 TS91B - SL NON HOLD OPEN Cam action slide channel door closer, Max door width 950mm, Closing Force EN 3, hydraulic speed control, Pull-side door leaf fixing (Standard), Push side transom fixing. Door closer compliant with EN 1154. Door closer is CERTI FIRE approved (Certificate No. CF 119) for door types ITT 120, MM/IMM 240, Certified manufacturer to ISO 9001. Colour Silver, fixed with patent fixing screws.	No	6		
	CB 6				
	Carried to Collection			**R**	

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45

		Unit	Quantity	Rate	Amount
46					
47					
48	TS92B HO - SL MECHANICAL HOLD OPEN Cam action slide channel door closer, Max door width 1100mm, Closing Force EN 2-4V, Adjustable strength, hydraulic speed control, Pull-side door leaf fixing (Standard), Push side transom fixing. Door closer compliant with EN 1154. Door closer is CERTI FIRE approved (Certificate No. CF 119) for door types ITT 120, MM/IMM 240, Certified manufacturer to ISO 9001. Colour Silver, fixed with patent fixing screws.	No	1		

		Unit	Quantity	Rate	Amount
	CB 1 TS91B G-SR EMF 1 VK ELECTRO MECHANICAL HOLD OPEN co-ordinated door closer system for rebated doors btween 1220-1350mm, Closing Force EN 3, hydraulic speed control, Max door width 950mm per leaf. Pull-side door leaf fixing. Door closer compliant with EN 1154. Door co-ordinators tested to EN 1158. Door closer is CERTI FIRE approved (Certificate No. CF 119) for door types ITT 120, MM/IMM 240, Certified manufacturer to ISO 9001. Colour Silver, fixed with patent fixing screws.	No	4		
	CB 4 **LETTERS, NAMEPLATES, ETC.**				
	Door Signage:				
	DSS-130M "MALE" stainless steel information sign size 150x150mm, fixed to doors with stainless steel self tapping screws.	No	1		
	CB 1 DSS-131F "FEMALE" stainless steel information sign size 150x150mm, fixed to doors with stainless steel self tapping screws.	No	1		
	CB 1 DSS-132 MF "MALE/FEMALE" stainless steel information sign size 150x150mm, fixed to doors with stainless steel self tapping screws.	No	2		
	CB 2				
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
50					
51					
52					
53	DSS-133P "DISABLED PERSONS" stainless steel information sign size 150x150mm, fixed to doors with stainless steel self tapping screws.	No	1		

	Unit	Quantity	Rate	Amount
CB 1 DSS-138C "CLEANER" stainless steel information sign size 150x150mm, fixed to doors with stainless steel self tapping screws.	No	1		
CB 1 DSS-136EL "ELECTRICAL" stainless steel information sign size 150x150mm, fixed to doors with stainless steel self tapping screws.	No	1		
CB 1 DSS-146FE "FIRE EXTINGUISHER" stainless steel information sign size 150x150mm, fixed to doors with stainless steel self tapping screws.	No	3		
CB 3 **PHOTOLUMINESCENT SIGNS**				
SABS approved wall mounted / Ceiling mounted emergency photoluminescent statutory fire signs to SANS 1186, Framed and Single Sided :				
150 x 150mm Photoluminescent silkscreen on PVC symbolic safety signs	No	20		
CB 20 150 x 304mm Photoluminescent silkscreen on PVC symbolic safety signs	No	15		
CB 15 594 x 420mm Photoluminescent silkscreen on PVC symbolic assembly point signs	No	1		
CB 1				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
55					
56					
57					
58					
59					
	PELMETS AND CURTAIN TRACKS				
	Hospital Cubicle Curtain Tracks, etc. :				
60	Approved natural anodised lightweight, rigid and robust hospital cubicle curtain tracks not exceeding 1000mm below soffit including 12 gliders per metre, hangers, brackets, stopped ends, etc plugged.	m	18		

		Unit	Quantity	Rate	Amount
	CB 18 Extra over for wall end bracket plugged	No	10		
	CB 10 Extra over for slow bend	No	9		
	CB 9 **'Rufflette' or equally approved Aluminium Curtain Poles :**				
	25mm Aluminium curtain poles including curtain rings, brackets, etc plugged to brickwork.	m	0		
	Extra over for standard Ball Finials to suit 25mm pole.	No	0		
	BATHROOM FITTINGS				
	Bathroom Fittings:				
	SKU 2120180 Medius MEDX002HP polished stainless steel double towel rail, size 600 x 125 x 54mm deep, plugged and screwed to wall with stainless steel screws.	No	1		
	CB 1 BHM18P polished stainless steel towel ring, size 203mm diameter, plugged and screwed to wall with stainless steel screws.	No	1		
	CB 1				
	Carried to Collection			**R**	

61

62

		Unit	Quantity	Rate	Amount
63					
64					
65					
66					
67	RODX672 Double Toilet Roll Holder with spindle system, surface mounted Satin finish stainless steel, overall size 144 x 138 x 301mm high, installed as per manufacturers instructions complete.	No	7		

		Unit	Quantity	Rate	Amount
	CB 7 RODX619 Manual operated foam dispenser, surface mounted Satin finish stainless steel, overall size 200 x 85 x 140mm high, installed as per manufacturers instructions, complete.	No	16		
	CB 16 RODX602 Paper Towel Dispenser and Waste Bin Combination (23L), surface mounted Satin finish stainless steel, overall size 411 x 171 x 1148mm high, installed as per manufacturers installations, complete.	No	15		
	CB 15 RODX611 Wall Mounted Sanitary Bin, surface mounted Satin finish stainless steel, overall size 200 x 165 x 295mm high, installed as per manufacturers instructions complete.	No	5		
	CB 5 Chrome plated toilet brush set (code: AC-0913-100) size 155 x 120 x 375mm high, plugged.	No	7		
	CB 7 **Grab Rails:**				
	CNTX700A or equally approved 32mm Diameter satin finished Grade 304 stainless steel side angle bar (Code: 359877), size 618 x 95 x 256mm with fine grip surface, plugged and screwed to walls with stainless steel screws.	No	1		
	CB 1 CNTXBR or equally approved 32mm Diameter satin finished Grade 304 stainless steel cistern back rail (Code: 359912), size 750 x 260mm with fine grip surface, plugged and screwed to walls with stainless steel screws.	No	1		
	CB 1				
	Carried to Collection			**R**	
68					

		Unit	Quantity	Rate	Amount
69					
70					
71					
72					
73					
	SUNDRIES				
	Sundries:				
74	External and internal signage for Hot Water System Valve Rooms consiting of engraved traffolite labels fixed with stainless steel screws, to all buildings (Clinic, Staff Accom & EMS).	Item			

		Unit	Quantity	Rate	Amount
	CB 1 Standard circular identification metal key tags including straps	No	8		
	CB 8 6mm Link hot dipped galvanised security chain	m	8		
	CB 8 **Approved door stops, coat hooks, etc. :**				
	DDS-SS-017 Stainless steel floor mounted door stop plugged.	No	45		
	CB 45 DDH-SS-020 Stainless steel wall buffer plugged.	No	8		
	CB 8 DHC-SS-031B Stainless steel hat and coat hook with rubber buffer, plugged.	No	6		
	CB 6				
	Carried to Collection			**R**	

75

76

		Unit	Quantity	Rate	Amount
77					
78					
79					
	VENETIAN BLINDS (PROVISIONAL)				
	Supply and fit aluminium venetian blind, colour to Principal Agent later specification, with 16 x 0,21mm thick slats including 25 x 25mm high matching aluminium powder coated top and bottom tracks with stainless steel separator pins, cordlock and roller pins, blinds to be fitted inside reveal to concrete lintol:				
80	Venetian blinds to suit window opening size 900 x 1200mm high. (W02)	No	8		

		Unit	Quantity	Rate	Amount
	CB 8 Venetian blinds to suit window opening size 1200 x 600mm high. (W03)	No	1		
	CB 1 Venetian blinds to suit window opening size 1800 x 1200mm high. (W04)	No	16		
	CB 16 Venetian blinds to suit shopfront side panels size 1785 x 2100mm high. (SF01)	No	2		
		No	0		
	CB 2 **STEEL SAFES, LOCKERS, ETC.**				
	SABS & SAPS approved Group B2 standard gun safe with key locks:				
	RHS 9-5 Rifle Safe with Top Compartment with 3mm thick body and 6mm thick door, size 400mm wide x 1500mm high x 345mm deep with a weight of 98kg.				
	Carried to Collection			**R**	

81

82

		Unit	Quantity	Rate	Amount
83					
84					

Amount

BILL NO. 9

IRONMONGERY

COLLECTION

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SECTION NO. 3

	Unit	Quantity	Rate	Amount

BUILDING WORKS

BILL NO. 10

STRUCTURAL STEELWORK

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

	Unit	Quantity	Rate	Amount

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/Engineer.

Descriptions

Descriptions of bolts shall be deemed to include nuts and washers

Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete

Descriptions of columns and beams shall be deemed to include flat section base, top, bearer and connection plates

Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete
NOTE: All structural steelwork to be fabricated and erected in accordance with SABS 0162 - 1984 and SABS 1200H - 1983. Dimensions and levels to be verified on site prior to manufacture. Any discrepancies found during site measure to be reported to and resolved by the Engineer prior to manufacture. All structural steel elements must be inspected by the Engineer prior to transporting to site. All bolts must be galvanised grade 8.8 unless otherwise specified by the Engineer. Bolts shall not have threads within the shear planes. All holes to be drilled at standard backmark. Baseplates to be properly grouted up and painted prior to backfiling being done. All box or circular section ends to be closed with 14mm plates. Where packer plates are used, longer bolts must be used to ensure that sufficient length of thread is taken up by the nuts.

All welds to be 6mm continuous fillet or the weld throat thickness to be the thickness of the thinnest of the two parent metals. All structural steel members to be of grade 350W. Purlins and girts to be pre-galvanised.

Carried to Collection			**R**	

	Unit	Quantity	Rate	Amount

All structural steelwork inclusive of bolts, nuts, washers, plates, connections, etc., other than purlins & girts to be hot dipped galvanised in accordance with SANS 121 or ISO 1461 All hot dipped members to be drilled, cut, welded, etc., prior to galvanising. Prices to include for preparation of shop drawings for approval of the Engineer prior to manufacture. A minimum of 7 days must be allowed for checking of shop drawings. Only structural sizes, connections and splices will be checked. Final dimensions and fitting of members shall remain the contractors responsibility. Prices to include for fabrication, cutting, drilling, bending, welding, etc., delivery to site, and hoisting up and erecting into position. The contractor is responsible for stabilising the structure and maintaining it in the correct position during erection.

All purlins and girt cleat holes are to be 14mm Dia for M12 black bolts of grade 4.8. Fixing holes are to be on purlins. All purlin splices are to be fixed staggered and purlins are to be continuous over at least two spans. Purlins are to be fixed to cleats with two bolts at continuous connection and two bolts at purlin or cleat end.

Note: The following restrictions are applicable on ground floor slab during construction and erection of structural steel. 0-7 days: Concrete curing; no loading on ground floor slab permitted. 7-14 days: Light foot traffic permitted. 14-28 days: Light vehicles<5 ton.28+ days: Maximum gross crane load during construction = 25 ton (excludes lifting load). Crane outrigger base footings to be on double cross layer of 50 x 228mm timber spreader supports over and area of 1,00 x 1,00m or similar approved by the Engineer to avert damage to concrete ground floor slab. Only tyre cranes permitted on slab.

Structural steelwork shall be completed by the Manufacturer - cleaned, hot-dipped galvanised in workshop before transportation to site.

Structural steelwork shall be completed by the Manufacturer - cleaned and painted with specified primer

		Unit	Quantity	Rate	Amount
	in workshop before transportation to site ONLY if specified in the Engineering Structural Steel drawings.				
	STRUCTURAL STEELWORK TO STAFF CARPORT AND EMS WASHBAY				
	GALVANISED STEEL COLUMNS AND BEAMS				
	Welded columns in single lengths with flat base, cap, bearer and connection plates, bolted to concrete and steel :				
1	152 x 152mm x 23kg/m H-section columns including 280 x 280 x 20mm thick base plate with 4 No holes for M20 holding down anchor bolts and 220 x 150 x 10mm thick end plate to top end of column four times bolted to beam, including stiffener plates to both sides of columns, (bolts elsewhere measured). (4 No Columns).	Tonnes	0,00		
	203 x 203mm x 46kg/m H-section columns including 300 x 300 x 10mm thick base plate with 4 No holes for M20 holding down anchor bolts and 10mm thick end plate to top end of column four times bolted to beam, including stiffener plates to both sides of columns, (bolts elsewhere measured). (4 No Columns).				
	Carried to Collection	Tonnes	0,00	**R**	
2					
	Welded beams in single lengths with flat bearer and connection plates, bolted to steel :				
3	203 x 133mm x 25kg/m Universal I-section roof beam rafters bolted to I section roof beams (elsewhere) both ends with and including 10mm connection plates, including haunch's, and stiffeners and including 100 x 100 x 3mm x 200mm long angle cleats four times holed and bolted for fixing to rafter one slde and purlins other side, including cleats, welds, mitres to corners, etc, (purlins and bolts elsewhere measured). (3 No Rafters).	Tonnes	0,00		

	Unit	Quantity	Rate	Amount
203 x 133mm x 25kg/m Universal I-section roof beam rafters bolted to top end of H section columns (elsewhere) and including 10mm connection plates, including haunch's, and stiffeners and including 75 x 60 x 3mm x 130mm long angle cleats four times holed and bolted for fixing to rafter one side and purlins other side, including cleats, welds, mitres to corners, etc, (purlins and bolts elsewhere measured). (4 No Beams).	Tonnes	0,00		
254 x 146mm x 31kg/m Universal I-section roof beams bolted to H columns (elsewhere) one side with and including 10mm connection plate and bolted to H rafters other side with and including 10mm connection plate, including haunch's, and stiffeners, (bolts elsewhere measured). (2 No Beams).	Tonnes	0,00		
GALVANISED STEEL PURLINS, GIRTS, BRACING, ETC				
Purlins and girts, bolted to steel :				
75 x 50 x 20 x 3,5mm CFLC Channel section in purlins including mitres to corners and twice bolted to top of rafter beam cleats, to receive sheeting (bolts and sheeting elsewhere measured).	Tonnes	0,00		
100 x 50 x 20 x 3,5mm CFLC Channel section in purlins including mitres to corners and twice bolted to top of rafter beam cleats, to receive sheeting (bolts and sheeting elsewhere measured).	Tonnes	0,00		
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
6					
7	**Welded bracing, anti-sag rails, etc with flat connection/gusset plates, etc, bolted to steel**				
8	88.9 x 3mm Thick Bracing tubes, with 10mm cap plates each four times holed and bolted to rafters (bolts elsewhere measured).	Tonnes	0,00		

	Unit	Quantity	Rate	Amount
88.9 x 3mm Thick Bracing tubes, with 10mm cap plates each four times holed and bolted to rafter beams one side and columns other side (bolts elsewhere measured).	Tonnes	0,00		
BOLTS, FASTENERS, ETC				
Galvanised Bolts, etc. :				
M12 High tensile galvanised bolts (Grade 8.8)	No	0		
M16 High tensile galvanised bolts (Grade 8.8)	No	0		
M20 High tensile galvanised bolts (Grade 8.8)	No	0		
	No	0		
Galvanised Anchors, etc. :				
M20mm Diameter U-shaped galvanised threaded anchor holding down bolt (Grade 8.8) approximately 1620mm girth set up and embedded in top of concrete columns.				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
9					
10					
11					
12					
13					

Amount

BILL NO. 10

STRUCTURAL STEELWORK

COLLECTION

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Carried To Section Summary	**R**	

SECTION NO. 3

Unit Quantity Rate Amount

BUILDING WORKS

BILL NO. 11

METALWORK

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

	Unit	Quantity	Rate	Amount

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/Engineer.

Descriptions:

Descriptions of bolts shall be deemed to include nuts and washers.

Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.

Metalwork described as holed for bolt(s) shall be deemed to exclude the bolts unless otherwise described.

Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres

Note :

Also refer to Supplementary Preambles under Structural Steelwork Bill for clauses relevant to structural metalwork.

GALVANISED STEEL MINOR WORK

Galvanised and powder coated steel double fold clothes line bolted to brickwork :

1 CLFDTW double fold clothes line 2200mm wide x 1350mm deep with lift and lock system, consisting of 10 lines and 21,5kg load capacity, including bolts, holes, No 2 etc.

CB 2

GALVANISED STEEL GATES, SCREENS, ETC

CONSTRUCTION OF CEBE CLINIC - EC DEPARTMENT OF PUBLIC WORKS & INFRASTRUCTURE

Note: The contractor is to check on site measurements before placing of order.

	Unit	Quantity	Rate	Amount
Welded galvanised clear view steel hinged gates to brickwork :				
Single hinged clear view swing gate to service duct, complete in single leaf, to suit opening size 600 x 1319mm high overall, consisting of 80 x 100mm SHS frame and 80 x 100mm SHS middle rail, gate filled in with 76.2 x 12.7mm galvanised mesh fixed to steel framing and gate fitted with and including a suitable locking mechanism to lock gate in closed position, two galvanised gate hinges each 2 times holed for bolting to brickwork with M12 chemical anchors (elsewhere measured). (See Architects Door Schedule - D13).	No	1		
CB 1				
Carried to Collection			**R**	

2

3 Double hinged clear view swing gate to service areas, complete in two equal leaves, to suit opening size 1490 x 2080mm high overall, consisting of 80 x 100mm SHS frames and 80 x 100mm SHS middle rails, gate filled in with 76.2 x 12.7mm galvanised mesh fixed to steel framing and gate fitted with and including a suitable locking mechanism to lock gate in closed position, two galvanised gate hinges per leaf, each 2 times holed for bolting to brickwork with M12 chemical anchors (elsewhere measured). (See Architects Door Schedule - D14). No 2

		Unit	Quantity	Rate	Amount
	CB 2 Double hinged clear view swing gate to refuse service area, complete in two equal leaves, to suit opening size 2760 x 2100mm high overall, consisting of 80 x 100mm SHS frames and 80 x 100mm SHS middle rails, gate filled in with 76.2 x 12.7mm galvanised mesh fixed to steel framing and gate fitted with and including a suitable locking mechanism to lock gate in closed position, two galvanised gate hinges per leaf, each 2 times holed for bolting to brickwork with M12 chemical anchors (elsewhere measured). (See Architects Door Schedule D15).	No	0		
	Double hinged clear view swing gate to service yard entrance, complete in two equal leaves, to suit opening size 3779 x 2305mm high overall, consisting of 80 x 100mm SHS frames and 80 x 100mm SHS middle rails, gate filled in with 76.2 x 12.7mm galvanised mesh fixed to steel framing and gate fitted with and including a suitable locking mechanism to lock gate in closed position, three galvanised gate hinges per leaf, each 2 times holed for bolting to brickwork with M12 chemical anchors (elsewhere measured). (See Architects Door Schedule - D16).	No	1		
	CB 1 M12 Galvanised chemical anchor bolt 180mm long into concrete or brickwork.	No	32		
	CB 32				
	Carried to Collection			**R**	

4

		Unit	Quantity	Rate	Amount
5					
6	**'Shutterway' or equally approved Stylish Security swing gate consisting of 32 x 32 x 1.6mm mild steel square hollow section frame with 40 x 4.5mm thick flat bar louvres welded at 48 degrees, all as per manufacturers details and factory coated "Matt Black", and hung with one pair of approved steel hinges including double throw dead-lock, complete and fixed to brickwork:**				
7	Single security gate with frame for opening size 880 x 2100mm high (See D01 - External Only).	No	4		

		Unit	Quantity	Rate	Amount
	CB 4				
	Single security gate with frame for opening size 950 x 2100mm high (See D09, D10 - External Only).	No	0		
	Single security gate with frame for opening size 1100 x 2100mm high (See Waiting Area Opening, D06).	No	4		
	CB 4				
	Single security gate with frame for opening size 1800 x 2100mm high (See Waiting Area Openings).	No	2		
	CB 2				
	Double security gate and screens with frame for opening size 5400 x 2100mm high overall, consisting of double gate size 1830 x 2100mm high and two equal side screens each side size 1785 x 2100mm high (See SF01).	No	1		
	CB 1				
	STAINLESS STEEL DOOR FRAMES				
	Grade 304 1.6mm Rebated frames suitable for half brick walls with and including three 100mm stainless steel butt hinges per door leaf:				
	Frame for door 880 x 2100mm high. (See Architects Door Schedule - D 01).	No	4		
	CB 4				
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
11					
12					
13	Frame for door 880 x 2100mm high and fixed fanlight 300mm high. (See Architects Door Schedule - D 02).	No	7		

	Unit	Quantity	Rate	Amount
CB 7 **Grade 304 1.6mm Rebated frames suitable for one brick walls with and including three 100mm stainless steel butt hinges per door leaf:**				
Frame for door 880 x 2100mm high. (See Architects Door Schedule - D 01).	No	3		
CB 3 Frame for door 880 x 2100mm high and fixed fanlight 300mm high. (See Architects Door Schedule - D 02).	No	5		
CB 5 Frame for door 1100 x 2100mm high. (See Architects Door Schedule - D 04).	No	1		
CB 1 Frame for double door 1400 x 2100mm high. (See Architects Door Schedule - D 05).	No	3		
CB 3 Frame for double door 1800 x 2100mm high. (See Architects Door Schedule - D17).	No	2		
CB 2 **Grade 304 1.6mm Rebated frames suitable for 280mm cavity brick walls with and including three 100mm stainless steel butt hinges per door leaf:**				
Frame for door 880 x 2100mm high. (See Architects Door Schedule - D 01).	No	4		
CB 4				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
16					
17					
18					
19	**GALVANISED PRESSED MILD STEEL DOOR FRAMES**				
	1.6mm Rebated frames suitable for half brick walls with and including three 100mm brass butt hinges per door leaf				
20	Frame for door 813 x 2032mm high. (See Architects Door Schedule - D11).	No	3		

		Unit	Quantity	Rate	Amount
	CB 3 **1.6mm Rebated frames suitable for one brick walls with and including three 100mm brass butt hinges per door leaf**				
	Frame for door 813 x 2032mm high. (See Architects Door Schedule - D 09).	No	3		
	CB 3 **1.6mm Rebated frames suitable for 280mm cavity brick walls with and including three 100mm brass butt hinges per door leaf**				
	Frame for door 813 x 2032mm high. (See Architects Door Schedule - D09, D10).	No	0		
	STEEL RECORDROOM AND STRONGROOM DOORS, VENTILATORS, ETC				
	SABS approved Record Room doors etc suitable for 230mm walls fixed to brickwork or concrete :				
	Single ended approved record room ventilator to suit.	No	1		
	CB 1				
	Carried to Collection			**R**	

21

22

		Unit	Quantity	Rate	Amount
23					
24	Record room Type DS1 door and frame 1200 x 1883mm high overall with and including 7-lever security keylock and 3-wheel combination lock, custom made and finished in rustproof undercoat for final painting by contractor (elsewhere measured). (See Architects Door Schedule - D 18).	No	1		

CB 1

NATURAL ANODISED ALUMINIUM LOUVRE DOOR GRILLE

	Unit	Quantity	Rate	Amount
Approved door grille louvre units with telescopic backframe extruded type 50S anodised grade aluminium with fixed horizontal chevron louvres fitted to openings in doors (openings elsewhere measured):				
Door grille size 500 x 300mm high overall to fit opening size 500 x 300mm high, fixed to door with s/s screws punched and counter-sunk and sealed. (Provisional).	No	12		

CB 12

ALUMINIUM ROLLER SHUTTERS ETC

Aluminium automated domestic 77mm Micro Hole roller shutter doors in powder coated colour finish (Colour later by Architect), of 77mm x 2mm light extruded aluminium slats with aluminium guides fitted with wool pile for silent running, including operation via 220V internal tubular motor and selected switch, fitted to concrete or brickwork, all in accordance with manufacturers specifications and instructions.				
Automated slatted 77mm Micro Hole Domestic Roller Shutter Door for opening size 1200 x 900mm high. (See Architects Window Schedule - W07).	No	1		

CB 1

Automated slatted 77mm Micro Hole Domestic Roller Shutter Door for opening size 1800 x 900mm high. (See Architects Window Schedule - W06).	No	1		

CB 1

Carried to Collection			**R**	

25

		Unit	Quantity	Rate	Amount
26					
27					
28	Automated slatted 77mm Micro Hole Domestic Roller Shutter Door for opening size 1200 x 1200mm high. (See Architects Window Schedule - W09).	No	0		

	Unit	Quantity	Rate	Amount
Automated slatted 77mm Micro Hole Domestic Roller Shutter Door for opening size 1800 x 1200mm high. (See Architects Window Schedule - W08).	No	0		
Automated slatted 77mm Micro Hole Domestic Roller Shutter Door for opening size 2930 x 1200mm high. (See Architects Window Schedule - W05).	No	1		
CB 1				
ALUMINIUM WINDOWS.				
Aluminium windows, etc., are to be constructed and installed in accordance with the guidelines of The Association of Architectural Aluminium Manufactures of South Africa (AAAMSA). These frames cannot be built in and openings must be prepared by the Contractor for the aluminium frame to be fixed into, where after the plaster can be finished up against the frame. All dimensions to be checked and verified on site prior to manufacture.				
Unless otherwise stated ironmongery is to be the manufacturer's standard corrosion resistant ironmongery for the particular product range.				
Glazing is to be carried out in strict accordance with the SANS 0137/2000 Code of Practice: "The Installation of Glazing in Buildings" and where required, safety glazing materials must conform to SANS 1263.				
All opening sashes must be weather and draught proofed using wool pile, vinyl, etc. seals and the perimeter frames sealed to the structure using manufacturer approved sealants.				
All aluminium is to be protected after manufacture by removable PVC tape or other approved application. The protection is to be removed only when authorised by the Architect.				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
30					

	Unit	Quantity	Rate	Amount

Any component damaged in any way prior to the completion of the building is to be replaced with new. 'Touching up' of decorative finishes will not be permitted.

Carried to Collection			R	

		Unit	Quantity	Rate	Amount

Top hung Aluminium Windows able to meet the mechanical performance requirements of SANS 613 for wind loads of up to 1500Pa with frames to receive 60-80um 'Matt Black' powder coating (for Architectural applications), supplied by manufacturer complying with SANS 1578 and applied in accordance with SANS 1796 by an approved applicator. Glazing shall be executed strictly in conformance with glass manufacturers recommendations and SANS 10137-2011 Code of Practice: "The Installation of Glazing in Buildings" and where required, safety glazing materials must conform to SANS 1263 and safety glass must have name of manufacturer permanantly marked on each sheet, visible after glazing. Drawings of all sections and fixing details to be used to be submitted for approval and all dimensions are to be verified on site prior to manufacture. All shopfronts and windows must be weatherproofed and sealed where necessary and all aluminium is to be protected during installation and for the duration of construction work by removable PVC tape. All ironmongery to be as specified by manufacturer.

Burglar Bars are to be installed to all opening sections comprising of 6mm thick 30mm wide clear polycarbonate InvisiBars, fitted directly into aluminium frames over opening sections with maximum spacing of 120-130mm between each bar and stainless steel pop rivets with polyethylene cover caps fitted over installation points. If the bar spans greater than 950mm then a vertical support or aluminium support is required to reduce flexibility in horizontal bar.

Descriptions in the bills of quantities are to be read in conjunction with the Architects Window Schedules and Details attached. The references given in the descriptions are to the respective types of windows detailed on the Architect's schedules annexed to these Bills of Quantities for tender purposes.

31 Aluminium top hung window size 600 x 600mm high overall, consisting of one top hung opening section, glazed with 6,35mm GSA SmartGlass IntruderprufeNS

	Unit	Quantity	Rate	Amount
Clear laminated safety glass and opening section to receive burglar proofing, all as per Architects Window Schedule Detail - W01.	No	1		

		Unit	Quantity	Rate	Amount
	CB 1 Aluminium top hung window size 600 x 600mm high overall, consisting of one top hung opening section, glazed with 6,75mm Decorlam laminated safety glass and opening section to receive burglar proofing, all as per Architects Window Schedule Detail - W01 (Ablutions).	No	8		
	CB 8 Aluminium top hung windows size 900 x 1200mm high overall, consisting of two equal vertical sections one opening and one fixed, all glazed with 6,35mm GSA SmartGlass IntruderprufeNS Clear laminated safety glass and opening sections all to receive burglar proofing, all as per Architects Window Schedule Detail - W02.	No	8		
	CB 8 Aluminium top hung windows size 900 x 1200mm high overall, consisting of two equal vertical sections one opening and one fixed, all glazed with 6,75mm Decorlam laminated safety glass and opening sections all to receive burglar proofing, all as per Architects Window Schedule Detail - W02 (Ablutions).	No	1		
	CB 1 Aluminium top hung windows size 1200 x 600mm high overall, consisting of two equal horizontal sections one opening and one fixed, all glazed with 6,35mm GSA SmartGlass IntruderprufeNS Clear laminated safety glass and opening sections all to receive burglar proofing, all as per Architects Window Schedule Detail - W03.	No	1		
	CB 1				
	Carried to Collection			**R**	

32

		Unit	Quantity	Rate	Amount
33					
34					
35					
36	Aluminium top hung windows size 1200 x 600mm high overall, consisting of two equal horizontal sections one opening and one fixed, all glazed with 6,75mm Decorlam laminated safety glass and opening sections all to receive burglar proofing, all as per Architects Window Schedule Detail - W03 (Ablutions).	No	2		

		Unit	Quantity	Rate	Amount
	CB 2 Aluminium top hung windows size 1800 x 1200mm high overall, consisting of two equal vertical opening sections and one larger fixed section, all glazed with 6,35mm GSA SmartGlass IntruderprufeNS Clear laminated safety glass and opening sections all to receive burglar proofing, all as per Architects Window Schedule Detail - W04.	No	16		
	CB 16 Aluminium fixed booth internal window size 2930 x 1200mm high overall, consisting of two equal horizontal fixed sections, all glazed with 6,35mm GSA SmartGlass IntruderprufeNS Clear laminated safety glass, all as per Architects Window Schedule Detail - W05.	No	1		
	CB 1 Aluminium horizontal sliding window size 1800 x 900mm high overall, consisting of two equal horizontal sections one sliding and one fixed, all glazed with 6,35mm GSA SmartGlass IntruderprufeNS Clear laminated safety glass and opening section all to receive burglar proofing, all as per Architects Window Schedule Detail - W06.	No	1		
	CB 1 Aluminium horizontal sliding window size 1200 x 900mm high overall, consisting of two equal horizontal sections one sliding and one fixed, all glazed with 6,35mm GSA SmartGlass IntruderprufeNS Clear laminated safety glass and opening section all to receive burglar proofing, all as per Architects Window Schedule Detail - W07.	No	1		
	CB 1				
	Carried to Collection			**R**	

37

		Unit	Quantity	Rate	Amount
38					
39					
40					
41	Aluminium horizontal sliding window size 1200 x 1200mm high overall, consisting of two equal horizontal sections one sliding and one fixed, all glazed with 6,35mm GSA SmartGlass IntruderprufeNS Clear laminated safety glass and opening section all to receive burglar proofing, all as per Architects Window Schedule Detail - W09.	No	0		

		Unit	Quantity	Rate	Amount
	Aluminium horizontal sliding window size 1800 x 1200mm high overall, consisting of two equal horizontal sections one sliding and one fixed, all glazed with 6,35mm GSA SmartGlass IntruderprufeNS Clear laminated safety glass and opening section all to receive burglar proofing, all as per Architects Window Schedule Detail - W08.	No	0		
	ALUMINIUM DOORS, ETC.				
	Aluminium doors and shopfronts, etc., are to be constructed and installed in accordance with the guidelines of The Association of Architectural Aluminium Manufactures of South Africa (AAAMSA).				
	Unless otherwise stated ironmongery is to be the manufacturer's standard corrosion resistant ironmongery for the particular product range.				
	Glazing is to be carried out in strict accordance with the SANS 0137/2000 code of Practice: "The Installation of Glazing in Buildings" and where required, safety glazing materials must conform to SANS 1263 and AAAMSA selection guide for safety glazing materials.				
	All opening sashes must be weather and draught proofed using wool pile, vinyl, etc. seals and the perimeter frames sealed to the structure using manufacturer approved sealants.				
	Carried to Collection			**R**	
42					

		Unit	Quantity	Rate	Amount
	All aluminium is to be protected after manufacture by removable PVC tape or other approved application. The protection is to be removed only when authorised by the Architect. Any component damaged in any way prior to the completion of the building is to be replaced with new. 'Touching up' of decorative finishes will not be permitted.				
	A certificate of conformance with SANS 999 is required.				
	Descriptions in the bills of quantities are to be read in conjunction with the Architects Door and Shopfront Schedules and Details attached. The references given in the descriptions are to the respective types of doors detailed on the Architect's schedules annexed to these Bills of Quantities for tender purposes.				
	80u Thick purpose made Matt Black epoxy powder coated aluminium hinged doors, framed and glazed, including glazing, hinges with nylon bushes, clip on glazing beads with gasket seals, high quality cylinder lockset, handles, bolts, etc., plugged to brickwork or concrete :				
43	Single glazed fire escape aluminium door and frame, to fit opening size 1100 x 2100mm high, glazed door with two unequal fixed glass panes with one dividing transom, door glazed with and including 6mm Pyran S Borosilicate (2 Hour) Clear laminated safety glass, door fitted with approved standard ironmongery, quality cylinder lockset and handles, all as per attached Architects Door Schedule Detail - D06.	No	3		

		Unit	Quantity	Rate	Amount
CB 3					
	Carried to Collection			R	

Natural Anodised Aluminium purpose made hinged service doors and frames complete, including grills, hinges with nylon bushes, gasket seals, high quality cylinder lockset, handles, bolts, etc., plugged to brickwork or concrete :

44	44mm Single aluminium service door and frame complete, to fit opening size 880 x 2100mm high, in one brick wall, with aluminium frame size 38 x 79mm, door section made up of size 44 x 60mm inner frame cladded with an aluminium sheet and including louvre grills size 430 x 530mm high to suit, door fitted with approved standard ironmongery, quality cylinder lockset and handles, all as per attached Architects Door Schedule Detail - D07.	No	2		

		Unit	Quantity	Rate	Amount
	CB 2 40mm Double aluminium service door, in two equal leaves, and frame complete, to fit opening size 1000 x 2100mm high in half brick wall, with aluminium frame size 38 x 79mm, door sections made up of size 44 x 60mm inner frame cladded with an aluminium sheet and including louvre grills to both leafs size 221 x 300mm high each to suit, door fitted with approved standard ironmongery, quality cylinder lockset and handles, all as per attached Architects Door Schedule Detail - D12.	No	4		
		No	0		
	CB 4 40mm Double aluminium service door, in two equal leaves, and frame complete, to fit opening size 1681 x 2100mm high, in one brick wall, with aluminium frame size 38 x 79mm, door section made up of size 44 x 60mm inner frame cladded with an aluminium sheet and including louvre grills to both leafs, size 430 x 530mm high to suit, door fitted with approved standard ironmongery, quality cylinder lockset and handles, all as per attached Architects Door Schedule Detail - D08.				
45	Carried to Collection			**R**	

46

	Unit	Quantity	Rate	Amount

POWDER COATED ALUMINIUM SHOPFRONTS

All work is to be executed in strict compliance with the Manufacturer and any other drawings, specifications, etc., issued by the manufacturer. Only specialist contractors approved by the manufacturer may be employed in the preparation and installation of the shop fronts and its ancillary components, e.g. sealant application, glazing.

Sealants between aluminium components and between aluminium components and surrounding structures are to be two part polyurethane flexible sealants in accordance with SABS 1077.

Silicone sealants for glazing are to be approved and selected and used in strict accordance with the manufacturer's instructions.

	Unit	Quantity	Rate	Amount

Santoprene seals to mullions, transoms, etc., are to be Santoprene type G-25067 vent seals.

Gasket seals for glazing are to be santoprene seals as recommended by the manufacturer.

All glass and glazing is to be in accordance with SABS 0137.

All junctions between mullions, transoms, etc., are to be mastic sealed.

All contact surfaces between sub-frames, frames, cills, etc., and the enclosing structure are to be mastic pointed.

All fixings are to be of aluminium or stainless steel. All fixing screws are to be stainless steel.

Items described as plugged are to be stainless steel screwed into plastic plugs.

Aluminium Shopfront System consisting of frames to be 80um Powder Coated Aluminium sections, constructed and installed according to the guidelines of The Association of Architectural Aluminium Manufactures of South Africa (AAASA). Glazing is to be carried out in strict accordance with the SABS 0137/2000 Code of Practice: "The Installation of Glazing in Buildings" and where required, safety glazing materials must conform to SABS 1263. Drawings of all sections and fixing details to be used to be submitted for approval and all dimensions are to be verified on site prior to manufacture. All shopfronts and windows need to be weatherproofed and sealed where necessary and all aluminium is to be protected during installation and for the duration of construction work by removable PVC tape. All ironmongery to be as specified by the manufacturer.

Descriptions in the bills of quantities are to be read in conjunction with the Architects Shopfront Schedules,

		Unit	Quantity	Rate	Amount

Door Schedules and Details attached. The references given in the descriptions are to the respective types of Shopfronts and Doors detailed on the Architect's schedules annexed to these Bills of Quantities for tender purposes.

80um Thick Matt Black Powder Coated Aluminium Shopfront System, as manufactured and supplied by an Approved Specialist in Aluminium Systems, complete with sub frames (with 80 micron powder coated aluminium protective coating finish), ironmongery, glass, sealing, etc. and fixing to brickwork or concrete :

47	Aluminium Main Entrance Shopfront SF 01 size 5400 x 2100mm high overall, fitted between concrete columns or brickwork, consisting of four (4) unequal fixed sections, with and including aluminium double doors size 1830 x 2100mm in centre in two equal leafs each on three aluminium reflex hinges with nylon bushes, with clip on glazing beads with gasket seats and a high quality cylinder lockset and handles, all shopfronts glazed with 6.35mm Laminated Safety Glass. (Refer to Architects Shopfront Schedule SF 01).	No	1		
	CB 1				
	Carried to Collection				R

ALUMINIUM FRAMED AND UNFRAMED SHOWER CUBICLE PANELS AND DOORS ETC

Natural anodised aluminium framed shower cubicle panels and doors with frames, sliding gear, pivot hinges, cleats, stops, etc and 6mm toughened obscure safety glass, plugged to tiled walls and sealed with silicone sealant :

48	Sliding door for opening size 800 x 2100mm high in equal size sliding doors to suit opening.	No	0		

		Unit	Quantity	Rate	Amount
	Sliding door for opening size 1500 x 2100mm high in equal size sliding doors to suit opening.	No	0		
		No	0		
	L Shaped corner shower cubicle with one fixed panel size 900 x 2100mm high and one sliding door for opening size 900 x 2100mm high in equal size sliding doors to suit opening.				
	Carried to Collection			**R**	

49

50

Amount

BILL NO. 11

METALWORK

COLLECTION

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	Unit	Quantity	Rate	Amount

SECTION NO. 3

Carried to Collection **R**

Section No. 3
Bill No. 12
Plastering

	Unit	Quantity	Rate	Amount

BUILDING WORKS

BILL NO. 12

PLASTERING

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works:
Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

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/Engineer.

Preparation of surfaces to receive screeds, plaster, etc. :

Surfaces shall be dry and clean, free of dust, sand, grit and flaking particles, laitance and loose matter, contaminants such as oil, grease, etc. Surfaces shall have a moisture content not exceeding 4%. All free standing water to be removed prior to application of primers or compounds. Absorbent surfaces to be thoroughly pre-soaked in fresh water. Oil, grease, animal fats, etc. to be removed with suitable product to be applied in strict accordance with the manufacturer's instructions. Once clean, surfaces to be profiled mechanically (scabbling, blasting, scarifying, chipping or grinding) or by means of acid etching in strict accordance with the manufacturer's instructions.

All floors should be level and free of all material as per SANS10155 and all existing screeds should be tested for satisfactory levelness using a level light meter.

Carried to Collection **R**

	Unit	Quantity	Rate	Amount
As a general rule, a maximum deviation of not more than 3mm over an area				
Carried to Collection			R	

	Unit	Quantity	Rate	Amount

of 3m is a good guide and will give a quality level floor, with the deviation not being too close together and too frequent.

Where the screed does not conform to these requirements then a self levelling screed is to be applied and the rates are to include for the testing of the existing screeds as described above.

V-Grooves to plaster :

V-Grooves are deemed to be included and are to be provided in plaster where it meets with concrete columns, slabs or beams.

GRANOLITHIC:

Method :

The method to be used shall be either the monolithic method or the bonded method.

Preparation :

For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic

Carried to Collection **R**

	Unit	Quantity	Rate	Amount

Mix :

Carried to Collection **R**

Section No. 3
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Plastering

	Unit	Quantity	Rate	Amount

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

Panels :

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

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

Laying :

Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels.

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

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

Carried to Collection **R**

		Unit	Quantity	Rate	Amount

Curing, seasoning and protection

Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying.

GRANOLITHIC

Untinted granolithic, on concrete :

1	30mm Thick on floors and landings.	m²	0		

	Unit	Quantity	Rate	Amount
Grano skirtings 20mm thick x 100mm high with 30mm radius cove.	m	32		
CB 32				
SCREEDS				
Screeds on concrete:				
30mm Thick on floors and landings.	m²	570		
	m²	0		
CB 570				
Average 30mm thick on raised shower floors to falls.				
Carried to Collection			R	

2

		Unit	Quantity	Rate	Amount
3					
4	**SELF LEVELLING SCREEDS** **Self levelling screeds on concrete/screeded surfaces :** **Concrete substrates should have a compressive strength of not less than 25 MPa and provides a tensile adhesion strength greater than 1.5 MPa, must be mechanically sound and fully cured in accordance with good concrete practice, must be clean and free of laitance, oil, grease, dust and any other contamination. Prime surface with one coat abe.®prime SLC acrylic primer or equally approved and allow to dry. Mix in accordance with manufacturer's recommendations. Pour abe.® screed SLCP FS fast set self-levelling screed (or equally approved), allow to level out and within 5 minutes roll with a spiked roller, all in accordance with the manufacturer's recommendations.**				
5	On floors and landings to receive vinyl floor coverings.	m²	463		

		Unit	Quantity	Rate	Amount
CB					
	463				
	Carried to Collection			R	

EPOXY SCREEDS / CONCRETE FINISH

Chemical Resistant Epoxy Screed :

abe.®screed dura.Top (or equally approved) to be supplied and laid on a suitable sound and vacuum cleaned concrete or screed base primed with abe Prime SLC (or equal) as per exposed trafficked environment outlined under "priming" in the product data sheet. DuraTop screed laid to minimum thickness of 6 mm by hand or by pump 6 mm to 30 mm maximum thickness and Screed to receive two component, solvent free, water dispersed epoxy coating finish. The coating finish will be abe.®cote WD337 (to later colour specification)(or equally approved), a two component, solvent free water dispersed epoxy coating, all applications to be mixed, laid and applied in accordance with the

		Unit	Quantity	Rate	Amount
	instructions and recommendations of a.b.e.® Construction Chemicals, (or equally approved).				
6	6mm Thick on floors and landings. (Provisional).	m²	22		
	CB 22 6mm Thick on grano skirtings not exceeding 300mm high.	m	32		
	CB 32 **INTERNAL PLASTER**				
	Cement plaster on brickwork :				
	On walls.	m²	1 620		
	CB 1620 On narrow widths.	m²	22		
	CB 22				
	Carried to Collection			**R**	
7					
8					
9					

		Unit	Quantity	Rate	Amount
	Cement plaster on concrete :				
10	On walls beams.	m²	97		

		Unit	Quantity	Rate	Amount
CB 97	On narrow widths.	m²	8		
CB 8	**EXTERNAL PLASTER**				
	Cement plaster on concrete :				
	On wall beams.	m²	88		
CB 88	**CORNER PROTECTORS, DIVIDING STRIPS, ETC**				
	Corner protectors, dividing strips, etc.:				
	3 x 57mm Flat section brass dividing strips between different floor finishes at external doors.	m	13		
CB 13					
	Carried to Collection			R	

		Unit	Quantity	Rate	Amount
11					
12					
13					

Amount

BILL NO. 12

PLASTERING

COLLECTION

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SECTION NO. 3

Section No. 3
Bill No. 12
Plastering

	Unit	Quantity	Rate	Amount

BUILDING WORKS

BILL NO. 13

TILING

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

	Unit	Quantity	Rate	Amount

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/Engineer.

Patterns

Unless otherwise described, tiles shall be laid with continuous joints in both directions.

Fixing

Unless described as fixed with adhesive to plaster (plaster elsewhere) descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding

Tiling described as fixed with adhesive on power floated concrete shall be deemed to include for approved tiling key-coat

Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts as recommended by the manufacturer of the tiles

Preparation of surfaces:

The area to be tiled is to be wood floated. If tiling onto critical surfaces prime with approved primer or use new generation flexible one part adhesives which enables application directly onto critical surfaces.

Surfaces must be firm and free of dust, mould, oil, grease, wax polish and organic growth. Organic growth must be removed and the spores killed with an effective fungicide such as a household bleaching solution.

		Unit	Quantity	Rate	Amount

On both walls and floors there are minimum curing periods for walls and concrete floors as well as screeds and plasters and they are as follows:

* New concrete floors require 6 weeks curing time before direct bedding

* New brick walls require 6 weeks curing time before direct bedding

* New concrete floors require 4 weeks curing time before screeding and the screed another 4 weeks before tiling can commence

* New brick walls require 4 weeks curing time before plastering and the plaster another 2 weeks before tiling can commence

CERAMIC / PORCELAIN WALL TILING

Allow the PC Amount of R250.00 (Two Hundred and Fifty Rand)(Excluding VAT) for the Supply and Delivery of Ceramic/Porcelain Wall Tiles size 300 x 600mm, cut to 150 x 600mm fixed to internal wall plaster backing (elsewhere measured) with TAL or equally approved professional tile adhesive mixed with TAL or equally approved bonding liquid in lieu of water, with flush pointed joints continuous in both directions and grouted with TAL or equally approved tinted tile grout, with excess grout on the surface to be cleaned with water as the work proceeds - Contractor is to allow for labour of fixing tiles and all adhesive and grouting, all to manufacturers specifications including mark-ups, etc. (The rate will be adjusted for material costs only, when the Client selects the wall tile.) :

1	On walls.	m²	186		

	Carried to Collection			R	

		Unit	Quantity	Rate	Amount
CB 186	On walls in isolated panels, splashbacks, etc.	m²	13		
CB 13	On narrow widths.	m²	4		
CB 4					
	Carried to Collection			R	

2

3

CERAMIC / PORCELAIN FLOOR TILING

Allow the PC Amount of R300.00 (Three Hundred Rand)(Excluding VAT) for the Supply and Delivery of Ceramic/Porcelain Floor Tiles size 600 x 600mm, fixed to internal floor screeds (elsewhere measured) with TAL or equally approved professional tile adhesive mixed with TAL or equally approved bonding liquid in lieu of water, with flush pointed joints continuous in both directions and grouted

		Unit	Quantity	Rate	Amount
	with TAL or equally approved tinted tile grout, with excess grout on the surface to be cleaned with water as the work proceeds - Contractor is to allow for labour of fixing tiles and all adhesive and grouting, all to manufacturers specifications including markups, etc. (The rate will be adjusted for material costs only, when the Client selects the floor tile.) :				
4	On floors and landings.	m²	107		
	CB 107 On shower floors to slight falls in cut tiles 100 x 100mm.	m²	0		
	Skirtings 150mm high of cut tiles.	m	33		
	CB 33 **NOSINGS, JOINT COVERS, PROTECTORS, ETC.**				
	Approved wall and floor tile edge protectors, transition strips, etc :				
	Standard aluminium type straight edge tiling trim. (Provisional)	m	155		
		m	0		
	CB 155 Standard aluminium T shaped transition strip for vinyl sheeting to floor tiles. (Provisional)				
	Carried to Collection			**R**	
5					

		Unit	Quantity	Rate	Amount
6					
7					
8					

Amount

BILL NO. 13

TILING

COLLECTION

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SECTION NO. 3

Carried to Collection **R**

Section No. 3
Bill No. 14
Plumbing And Drainage (provisional)

	Unit	Quantity	Rate	Amount

BUILDING WORKS

BILL NO. 14

PLUMBING AND DRAINAGE (PROVISIONAL)

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works:
Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

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/Engineer.

'Polycop' polypropylene pipes:

Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with 'Fast-fuse' heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated.

Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's All pipe diameters are nominal external.

Carried to Collection **R**

	Unit	Quantity	Rate	Amount

uPVC pressure pipes and fittings:

Carried to Collection **R**

Section No. 3
Bill No. 14
Plumbing And Drainage (provisional)

	Unit	Quantity	Rate	Amount

Pipes for water supply shall be of the class stated.

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings.

Pipes of 50mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints.

Copper pipes:

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

Fixing of pipes, fittings, etc :

Unless specifically otherwise stated, descriptions of pipes shall be deemed to include for fixing to walls etc. casting in, building in or suspending not exceeding 1m below suspension level

Descriptions of wall mounted, floor standing, drop-in, etc type sanitary fittings shall be deemed to include fixing in position and all fixing accessories.

Descriptions of proprietary items shall include fixing in position and all fixing accessories as specified by the manufacturer.

Carried to Collection **R**

	Unit	Quantity	Rate	Amount

Chasing :

Carried to Collection **R**

Section No. 3
Bill No. 14
Plumbing And Drainage (provisional)

	Unit	Quantity	Rate	Amount

Chasing pipes into new walls shall be regarded as "building in" and is not measured seperately. The cost of chasing and making good shall be included in the rates for the pipes.

Reducing fittings:

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

Wire gratings:

Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings.

Exposed concrete surfaces:

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster.

Excavations:

No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling.

'Soft rock' and 'hard rock' shall be as defined in 'Earthworks'.

Carried to Collection **R**

	Unit	Quantity	Rate	Amount

Laying, backfilling, bedding, etc of pipes:

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Plumbing And Drainage (provisional)

	Unit	Quantity	Rate	Amount

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions.

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

Unless otherwise described bedding of rigid pipes shall be class B bedding.

Flush pans:

Flush pans shall have straight or side outlets and 'P' or 'S' traps as necessary.

Stainless steel basins, sinks, wash troughs, urinals, etc:

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable.

Prices for sinks are to include for preparing the worktop to receive the fitting and for securely fixing sinks to worktops using the clips provided. The Contractor is to provide worktop manufacturers with details of cut outs ensure that the cut openings are sufficiently accurate to provide proper engagement for these clips.

Waste unions:

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings.

Carried to Collection **R**

		Unit	Quantity	Rate	Amount

General:

All screw and bolt fixings for sanitary ware are to be stainless steel or chromium plate on brass.

Prices for sanitary fittings are to include for the application of white anti-fungal silicone sealant between the fittings and abutting wall and floor finishes, vanity tops, bathroom fittings, etc.

RAINWATER DISPOSAL

0.60mm Thick Approved Ogee seamless aluminium watertight gutters and rainwater accessories, with factory coated finish (colour to match roof sheeting to approval), installed complete as per manufacturers specifications and recommendations:

1	150 x 100mm Ogee seamless aluminium eaves gutters, complete with 32 x 325mm brackets at 1000mm centres, including splash plate.	m	179		

		Unit	Quantity	Rate	Amount
	CB 179 Extra over eaves gutter for stopped end.	No	8		
	CB 8 Extra over eaves gutter for angle.	No	14		
	CB 14 Extra over 150 x 100mm eaves gutter for outlet for 100 x 75mm downpipes.	No	12		
	CB 12 100 x 75mm Rectangular aluminium rainwater downpipes, fixed to walls with holderbats at 1000mm centres.	m	39		
	CB 39				
	Carried to Collection			**R**	
2					
3					
4					
5					
6	Extra over 100 x 75mm rectangular rainwater pipe for shoe.	No	12		

	Unit	Quantity	Rate	Amount
CB 12 Extra over rainwater pipe for eaves or plinth offset 600mm projection.	No	12		
CB 12 **STAINLESS STEEL RACKS, TABLES, ETC.** **Model T' or equally approved table manufactured from grade 304 stainless steel 1,2mm thick with a 50x10mm turndown all round. The underside sprayed with vermin proof bitumastic sound deadening and supported with a 30x30x3mm framework and galvanised mild steel backing sheet. Unit fixed 900mm high from the top of the front apron to the finish floor level with and including anchor bolts.** Stainless steel table size 1500 x 650mm wide. (Provisional).	No	2		
CB 2 Stainless steel table size 1850 x 650mm wide. (Provisional).	No	2		
CB 2 Solid Shelves manufactured from grade 304 stainless steel 1.2mm thick shelf designed to fit over the cross braces on the legs of table, size 1500 x 420mm wide.	No	1		
CB 1 Solid Shelves manufactured from grade 304 stainless steel 1.2mm thick shelf designed to fit over the cross braces on the legs of table, size 1850 x 420mm wide.	No	1		
CB 1				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
8					
9					
10					
11					
12	Slatted Shelves manufactured from 22mm diameter grade 304 stainless steel tubing. Under shelf designed to fit over the cross braces on the legs of table, size 1500 x 420mm wide.	No	1		

	Unit	Quantity	Rate	Amount
CB 1 Slatted Shelves manufactured from 22mm diameter grade 304 stainless steel tubing. Under shelf designed to fit over the cross braces on the legs of table, size 1850 x 420mm wide.	No	1		
CB 1 **SANITARY FITTINGS** **Approved AISI grade 304 (V2A) 0.6mm stainless steel top mount sinks with drainer:** K200 45-S 86/50 1.0 rev top mounting type stainless steel single bowl sink and drainer, size 860 x 500mm SEB with one end bowl size 350 x 400 x 160mm deep, set on cupboard fitting (cupboard elsewhere), including cutting one taphole, 35mm waste, 3.5"/90mm waste strainer with automatic waste fitting accessories and mounting set, complete. (G-315525D1).	No	5		
CB 5 **Approved grade 430 (17/0) stainless steel wash troughs, etc:** ET102' economy type fabricated double wash trough size 1030 x 430mm with 348mm deep trough with sloping front and wash ridges with fixing lugs, seven times plugged and screwed to wall with and including bolts, wastes, plugs, chains, etc. complete.	No	3		
CB 3 Carried to Collection			**R**	

13

		Unit	Quantity	Rate	Amount
14					
15					
	Approved grade 304 (18/10) stainless steel slop hoppers and pot sinks:				
16	CH' slop hopper size 540 x 545mm with integral 100mm high splashback to back and both sides, bowl with integral flushing rim, 110mm diameter waste outlet, hinged bucket grid and 38mm diameter x 250mm long vertical inlet pipe 11 litre grade 304 (18/10) stainless steel high level cistern with inlet valve, 'Beta' flushing valve with chain and pull and stainless steel inlet pipe and adaptor, set on pair of 40 x 40mm stainless steel tube brackets, each twice bolted to wall with and including M8 expansion bolts.	No	1		

		Unit	Quantity	Rate	Amount
CB 1	**Approved vitreous china wash hand basins :**				
	400 x 321 x 170mm 'Welcome' (709000WH) or equally approved white small round wall hung washbasin, with one pre-punched tap hole on right hand side of the basin and intergrated overflow, including wall fixing set mounted to brickwall with required fixing material as per manufacturer and sealed with approved sealant where basin meets the wall.	No	0		
	495 x 430 x 190mm 'Shelter' (709300WH) or equally approved white round wall hung washbasin, with one pre-punched tap hole in the centre of the basin and intergrated overflow, including wall fixing set and bolts, mounted to brickwall with required fixing material as per manufacturer and sealed with approved sealant where basin meets the wall.	No	9		
CB 9	490 x 575 x 210mm 'Sola' (702804WH) or equally approved white semi-rectangular wall hung medical washbasin, with three punched tap holes, no overflow or chain stay hole, including concealed wall fixing basin bracket set and bolts, mounted to brickwall with required fixing material as per manufacturer and sealed with approved sealant where basin meets the wall.	No	8		
CB 8					
	Carried to Collection			**R**	

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		Unit	Quantity	Rate	Amount
19					
	Approved vitreous china WC suites :				
20	'Welcome' or equally approved white close couple toilet suite with top, dual flush capability with 3L flush, box rim including cistern, all fittings, pan, seat and cover, complete. (772664WH).	No	6		

		Unit	Quantity	Rate	Amount
	CB 6 'Atlas Paraplegic' or equally approved white close couple Low-Level Disabled toilet suite with low level raised height pan, side flush cistern and disabled flushing mechanism including all fittings, pan, seat and cover, complete. (PARSETLLBONOSBE).	No	1		
	CB 1 **Approved vitreous china urinals :**				
	'Pause' or equally approved Watersave Urinal 337 x 356 x 585mm white vitreous china wall mounted Ultra Eco design to accommodate a water saving 0.9L flush with compact concealed trapway, connecting to concealed urinal flush controls (elsewhere measured), fixed to brickwall.	No	4		
	CB 4 White vitreous china wall mounted urinal division, size 400 x 700mm high, including approved fasterning material and fixed to brickwork.	No	1		
	CB 1 **WASTE UNIONS ETC**				
	Waste unions, etc:				
	Unslotted basin waste without chain & stay with flanged back nut and washer and plug, 62mm diameter flange, 77mm long shank, 1 1/4 BSP male iron connection end. (308/N).	No	8		
	CB 8				
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
22					
23					
24					
25	Slotted basin waste with flanged back nut and washer, plug with stirrup, chain and stay, 62mm diameter flange, 80mm long shank, 1 1/4 BSP male iron connection end. (301/N).	No	9		

	Unit	Quantity	Rate	Amount
CB 9 32mm Chrome plated anti-theft plug for wastes with 72mm spindle. (309-32/N).	No	17		
CB 17 **TRAPS ETC**				
Traps, etc.:				
40 x 50mm Rubber deep seal P or S trap.	No	11		
CB 11 340/N 40mm Chrome plated universal bottle trap with adjustable telescopic waste connection pipe 1 1/4 BSP female inlet connection , 1 1/4BSP male iron outlet connection, Brass body and adaptors, to basins.	No	17		
CB 17 32 x 32mm 340 Chrome plated urinal deep seal bottle trap with 75mm deep seal, outlet and 75mm chrome plated hinged domical urinal grating (elsewhere measured with urinal).	No	4		
CB 4 373/SQ/N Shower type P-Trap with shallow seal and square grating, rough brass, including 1 1/4 BSP female iron outlet connection.	No	0		
FT125H Stainless steel floor drain size 150 x 150 x 125mm with optimal flow rate of 800ml/S and a load capacity of 400kg,	No	0		
OLT800 Stainless steel 304/430 Grease Trap size 700 x 700 x 600mm suitable for 5 vehicles per day, with 3 lids and 110mm outlet.	No	0		
			R	

		Unit	Quantity	Rate	Amount
	Carried to Collection				

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TAPS, VALVES, ETC

Stopcocks, Stoptaps, Gate valves, Check valves, Strainers, etc:

Section No. 3
Bill No. 14
Plumbing And Drainage (provisional)

		Unit	Quantity	Rate	Amount
33	15 x 10mm Code 232-10/N Chrome plated angle regulating valve with durable ABS handle, DZR body, flow regulating spindle type headpart G1/2 x G1/2 BSP connections, angle valve adaptors as necessary, to basins and sink.	No	50		
	CB 50 15mm Rough brass CxC 'Copcal' capillary type underwall stoptap (code 133-15), in line for supply to cisterns.	No	7		
	CB 7 15mm Metering non-hold open , self closing underwall stoptap chrome plated with stainless steel wall flange, 1/2 BSP male iron connector ends, flow cycle 1-20 seconds.	No	4		
	CB 4 15mm Chrome plated fullway ballcock with plastic coated plated steel lever handle.	No	2		
	CB 2 22mm Chrome plated fullway ballcock with plastic coated plated steel lever handle.	No	4		
	CB 4 22mm Bronze gate type isolating valve c/w aluminium handle including insulation	No	16		
	CB 16 28mm Bronze gate type isolating valve c/w aluminium handle including insulation	No	12		
	CB 12				
	Carried to Collection			**R**	
34					

		Unit	Quantity	Rate	Amount
35					
36					
37					
38					
39					
40	35mm Bronze gate type isolating valve c/w aluminium handle including insulation	No	2		

	Unit	Quantity	Rate	Amount
CB 2 42mm Bronze gate type isolating valve c/w aluminium handle including insulation	No	1		
CB 1 28mm Soft Resilient seat type Non return valve	No	1		
CB 1 35mm Soft Resilient seat type Non return valve	No	1		
CB 1 **Crutch handle, elbow action and lockshield bibtaps:**				
20mm Rough brass hose crutch handle bibtap with 20mm BSP hose union to standpipes or gulleys.	No	3		
CB 3 **Pressure reducing valves, vacuum breakers, etc.:**				
22mm 600kPa Expansion relief valve	No	2		
CB 2 28mm Temperature and pressure safety valves.	No	2		
CB 2 35mm Adjustable constant temperature valve.	No	1		

		Unit	Quantity	Rate	Amount
		No	0		
	CB 1 **Mixer fittings:** Vandalproof shower head and arm, single function, chrome plated including 1/2" BSP male inlet, minimum flow pressure of 50kPa. (Code KP2-6/N).				
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
48					
49	'Zambezi' shower head 85mm round chrome plated with ball joint connector, flow restricted to 8 l/min with G1/2 female connection ends (076ZM-RND), including short wall mounted shower arm with wall flange 143mm long with 2 x G1/2 male connection ends (027ZM-SHORT).	No	0		

	Unit	Quantity	Rate	Amount
'Star' or equally approved Heavy Pattern chrome plated wall mounted sink mixer with aerated swivel spout including 2 x1/2" BSP male iron connection ends, made with de-zincification resistant brass for increased durability. (Code 166/041/NV).	No	1		
CB 1 'Star' or equally approved Original Pattern chrome plated deck mounted sink mixer with aerated swivel spout including 2 x1/2" BSP male iron connection ends, made with de-zincification resistant brass for increased durability, with easy switch technology for handle switching. (Code 266/041/10/NV).	No	1		
CB 1 'Pause' or equally approved C-spout pillar sink mixer, swivel outlet, chrome plated wall mounted kitchen sink mixer including 3/8" BSP and 450mm long, female inlets. (Code PS-970).	No	6		
CB 6 'Pause' or equally approved Standard basin mixer, one hole single lever chrome plated with flow restricted to 5.7 l/min including 3/8" BSP and 400mm long, female flexible inlets. (Code PS-951).	No	8		
	No	0		
CB 8 'Pause' or equally approved Concealed bath/shower mixer, undertile, single lever chrome plated with wall			R	

		Unit	Quantity	Rate	Amount
	plate including 1/2" BSP female connections. (Code PS-956).				
	Carried to Collection				
50					
51					
52					
53					
54					
55	'Euroeco Special' or equally approved Single lever safety basin mixer, single hole smooth body Starlight chrome finish with Ecojoy technology for less water and perfect flow, ceramic cartridge adjustable flow rate limiter,				

	Unit	Quantity	Rate	Amount
adjustable temperature limiter, adjustable minimum flow rate 6 l/min including flexible connection hoses, etc. (Code G-32789000).	No	1		

	Unit	Quantity	Rate	Amount
CB 1 Heavy Pattern Medical elbow-action chrome plated wall type mixer with progressive control, eco 4.5l/min flow regulators, wall mounted medical basin mixer. (Code 507/HP).	No	8		
CB 8 **SANITARY PLUMBING**				
uPVC (SANS 967) pipes:				
40mm Pipes.	m	51		
CB 51 40mm Pipes laid in and including trenches not exceeding 1m deep under surface beds.	m	34		
CB 34 50mm Pipes.	m	30		
CB 30 50mm Pipes laid in and including trenches not exceeding 1m deep under surface beds.	m	20		
CB 20 110mm Pipes	m	18		
CB 18 110mm Pipes vertically or ramped to cleaning eyes etc (no excavation)	m	14		
CB 14				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
57					
58					
59					
60					
61					
62					
63	110mm Pipes laid in and including trenches not exceeding 1m deep under surface beds.	m	15		

	Unit	Quantity	Rate	Amount
CB 15 110mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	110		
CB 110 **Extra over uPVC pipes for fittings (SANS 967):**				
40mm Bend.	No	17		
CB 17 40mm Access bend.	No	17		
CB 17 40mm Junction.	No	6		
CB 6 50mm Reducer.	No	5		
CB 5 50mm Bend.	No	10		
CB 10 50mm Access bend.	No	10		
CB 10 50mm Junction.	No	5		
CB 5 50mm Access junction.	No	3		
CB 3 110mm Reducer.	No	8		
CB 8				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
65					
66					
67					
68					
69					
70					
71					
72					
73					
74	110mm Bend.	No	10		
75	CB 10 110mm Access bend.	No	10		

	Unit	Quantity	Rate	Amount
CB 10 110mm Junction.	No	4		
CB 4 110mm Access junction.	No	4		
CB 4 110mm Access reducing junction.	No	3		
CB 3 110mm Pan connector	No	8		
CB 8 110mm Two-way' vent valve.	No	6		
CB 6 **Gulleys :**				
Precast concrete dished gulley surround including 160mm 'P' trap PVC gulley head and grating, complete, not exceeding 1000mm deep.	No	6		
CB 6 **Sundries:**				
Testing waste pipe systems, complete.	Item			
IT 1				
Carried to Collection			R	

		Unit	Quantity	Rate	Amount
78					
79					
80					
81					
82					
	WATER SUPPLIES				
	Polycop' polypropylene pipes with and including compression fittings:				
83	15mm Pipes laid in trenches not exceeding 2m deep, including excavation in all materials, bedding, backfilling, compaction and disposing of surplus excavated material.	m	40		

		Unit	Quantity	Rate	Amount
	CB 40 22mm Pipes laid in trenches not exceeding 2m deep, including excavation in all materials, bedding, backfilling, compaction and disposing of surplus excavated material.	m	30		
	CB 30 15mm Pipes.	m	35		
	CB 35 22mm Pipes.	m	20		
	CB 20 **SABS 460 Class 2 copper pipes :**				
	15mm Pipes	m	66		
	CB 66 22mm Pipes	m	240		
	CB 240 28mm Pipes	m	170		
	CB 170 35mm Pipes	m	12		
	CB 12 42mm Pipes	m	1		
	CB 1				
	Carried to Collection			**R**	

84

85

		Unit	Quantity	Rate	Amount
86					
87					
88					
89					
90					
91					
92	54mm Pipes	m	1		

CB 1

Extra over Class 2 copper pipes for capillary fittings

93	15mm Fittings	No	45		

		Unit	Quantity	Rate	Amount
	CB 45				
	22mm Fittings	No	42		
	CB 42				
	28mm Fittings	No	5		
	CB 5				
	28 x 15mm Reducing tee	No	24		
	CB 24				
	28 x 22mm Reducing tee	No	24		
	CB 24				
	35 x 22mm Reducing tee	No	16		
	CB 16				
	35 x 28mm Reducing tee	No	12		
	CB 12				
	Extra over Class 2 copper pipes for brass compression fittings				
	15mm Fittings	No	30		
	CB 30				
	22mm Fittings	No	35		
	CB 35				
	28mm Fittings	No	29		
	CB 29				
	Carried to Collection			**R**	

94

95

		Unit	Quantity	Rate	Amount
96					
97					
98					
99					
100					
101					
102					
103	35mm Bend	No	4		
	CB 4				
104	35mm Reducer	No	4		

	Unit	Quantity	Rate	Amount
CB 4 35mm Equal tee	No	6		
CB 6 42mm Bend	No	1		
CB 1 42mm Reducer	No	1		
CB 1 42mm Equal tee	No	1		
CB 1 **TESTING**				
Testing:				
Testing and commissioning hot and cold water pipe system, complete.	Item			
IT				
			R	

		Unit	Quantity	Rate	Amount
1					
	Carried to Collection				

105

106

107

108

109

SOLAR WATER HEATERS

'Approved' Solar Geysers, supplied and installed by specialist strictly in accordance with manufacturers specifications, including testing and commissioning and supplying all necessary guarantees, operating &

		Unit	Quantity	Rate	Amount
	maintenance manuals, as-built drawings, testing records, (both hard copies & electronic copies), etc :				
110	150 Litre solar water heater mounted on hot dip galvanised mild steel wall brackets c/w tp valve and drain cock ball valve, thermostat, electrical heating hard water (Incolloy) element, complete.	No	1		
	CB 1				
	Geyser blanket suitable for 150 Litre solar water heater	No	1		
	CB 1				
	200 Litre solar water heater mounted on hot dip galvanised mild steel wall brackets c/w tp valve and drain cock ball valve, thermostat, electrical heating hard water (Incolloy) element, complete.	No	2		
	CB 2				
	Geyser blanket suitable for 200 Litre solar water heater	No	2		
	CB 2				
	'Approved' Solar Collectors, supplied and installed by specialist strictly in accordance with manufacturers specifications, including testing and commissioning and supplying all necessary guarantees, operating & maintenance manuals, asbuilt drawings, testing records, (both hard copies & electronic copies), etc :				
	Solar collectors with built in circulating pump mounted on hot dip galvanised mild steel wall brackets, to suit 150 Litre geyser, complete.	No	1		
	CB 1				
	Carried to Collection			**R**	
111					

		Unit	Quantity	Rate	Amount
112					
113					
114					
115	Solar collectors with built in circulating pump mounted on hot dip galvanised mild steel wall brackets, to suit 200 Litre geysers.	No	2		

	Unit	Quantity	Rate	Amount
CB 2 **'Approved' polyethylene geyser trays (SABS 1848:2000):**				
600 x 600mm Heavy duty polyethylene geyser drip tray to suit solar horizontal geysers, with and including 50mm diameter PVC overflow connector for waste pipe.	No	3		
CB 3 **WATER BOILERS AND CHILLERS**				
Water boilers and water chillers:				
Hydroboil code 3800 (or equally approved) 7,5/06' litre white powder coated water boiler, plugged and screwed to wall, and connected to water supply and electrical supply, (electrical connection elsewhere measured).	No	2		
CB 2 **FIRE APPLIANCES ETC.**				
Fire Extinguishers to SANS 10400-T :				
4,5kg DCP hand held fire extinguisher including mounting bracket and backboard plugged and screwed to wall.	No	1		
CB 1 4,5kg Carbon dioxide CO2 hand held fire extinguisher including mounting bracket and backboard plugged and screwed to wall.	No	11		
CB 11				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
117					
118					
119					
	Fire Hose Reels to SANS 10400-T :				
120	Fire hose reel complete with 30m rubber hose, pressure gauge, chromium plated stopcock/ball valve, fire hose reel combined nozzle stop cock shut-off nozzle and wall bracket mounted to wall as per manufacturers instructions.	No	4		

WATER SUPPLIES TO FIRE APPLIANCES

	Unit	Quantity	Rate	Amount
SABS62 Medium Grade Hot Dipped Galvanised Steel Pipes :				
25DN GMS pipes.	m	48		
CB 48				
25DN GMS Pipes laid underground with and including two layers of Densowrap or equally approved up to 100mm above floor level.	m	60		
CB 60				
Extra over SABS62 Medium Grade Hot Dipped Galvanised Steel pipes for compression fittings:				
25DN Elbow.	No	28		
CB 28				
25DN Union connector	No	4		
CB 4				
25DN Coupling reducer	No	4		
CB 4				
Testing				
Testing fire water pipe system, complete	Item			
IT 1				
Carried to Collection			**R**	

121

122

123

		Unit	Quantity	Rate	Amount
124					
125					
126					
	WATER STORAGE TANKS, ETC				
	SABS and ECO approved Polyethylene (LLDPE) drinking water tanks with 10 year guarantee :				
127	5 000 Litre Slimline Cloudy Grey circular water tank, complete with 15mm plastic tap, clip on lid, outlet and overflow, mounted on top of concrete plinth base and tied down as instructed by manufacturer (concrete base elsewhere measured).	No	4		

		Unit	Quantity	Rate	Amount
CB					
4					
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BILL NO. 14

PLUMBING AND DRAINAGE (PROVISIONAL)

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Unit Quantity Rate Amount

Unit Quantity Rate

SECTION NO. 3

BUILDING WORKS

BILL NO. 15

GLAZING

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

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/Engineer.

Safety glazing to comply with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137.

GLAZING TO STEEL WITH PUTTY AND SCREWEDON BEADS (BEADS ELSEWHERE)

CB	2				
		Carried to Collection			R
		Carried To Section Summary			R

Amount

6,35mm 'GSA Smartglass Intruderprufe' or equally approved normal strength (N.S.) Clear laminated safety glass :

1	Panes exceeding 0,1m and not exceeding 0,5m	m²	2	

		Unit	Quantity	Rate	Amount
	6mm Pyran S Borosilicate (2 Hour) or equally approved Clear laminated safety glass to safety doors :				
2	Panes exceeding 0,1m and not exceeding 0,5m	m²	1		

CB				Amount
GLAZING TO WOOD WITH PINNED ON BEADS				
6,35mm 'GSA Smartglass Intruderprufe' or equally approved normal strength (N.S.) Clear laminated safety glass :				
Panes exceeding 0,1m and not exceeding 0,5m	m²	1		
CB 1				
6mm Pyran S Borosilicate (2 Hour) or equally approved Clear laminated safety glass to safety doors :				
Panes exceeding 0,1m and not exceeding 0,5m	m²	1		
CB 1				
TOPS, SHELVES, DOORS, MIRRORS, ETC.				
6mm Silvered float glass copper free mirrors with 10 mm bevelled and polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete:				
Mirror 400 x 900mm high with four screws.	No	16		
CB 16				
Carried to Collection			R	

		Unit	Quantity	Rate	Amount
5					

BILL NO. 15

GLAZING

COLLECTION

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SECTION NO. 3

BUILDING WORKS

BILL NO. 16

PAINTWORK

Key:	Location Description:
CB	Main Clinic Building
IT	Items

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

	Unit	Quantity	Rate	Amount

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/Engineer.

PREPARATORY WORK FOR UNPAINTED SURFACES

All work to be executed in strict accordance with the specifications and instructions of the manufacturer.

Primers and first coats may be thinned in accordance with the various paint specifications to aid the absorption of the paint.

All surfaces must be sound, clean and have a moisture content of less than 8% for walls generally, 3% for slabs/screeds, and 14% for wood etc, when measured with a Doser hygrometer or equivalent.

Where surfaces of plaster etc are sandy / friable, the first coat must be replaced with a plaster primer thinned 10% with turpentine.

		Unit	Quantity	Rate	Amount
	PAINTWORK ETC TO NEW WORK				
	ON NEW INTERNAL FLOATED PLASTER SURFACES				
	'Wall & All' or equally approved paint to interior new cement plaster, surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat Plaster Primer (UC56) with an overcoating time of 16 hours and finish with two coats Wall & All (WAA 1) with 2 hours drying time between coats, for a maintenance cycle of 12 years in a C5 coastal/marine environment, for interior use :				
1	Walls and beams.	m²	1 546		

CB 1546

ON NEW EXTERNAL FLOATED PLASTER SURFACES

		Unit	Quantity	Rate	Amount
	'Wall & All' or equally approved paint to exterior new cement plaster, surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat Plaster Primer (UC56) with an overcoating time of 16 hours and finish with two coats Wall & All (WAA 1) with 2 hours drying time between coats, for a maintenance cycle of 12 years in a C5 coastal/marine environment, for exterior use :				
	Walls and beams.	m²	88		

CB 88

Carried to Collection **R**

2

ON NEW FAIR FACED BRICKWORK

Prepare surfaces and remove all loose material, builder's plaster etc with weak spirits of salts (or any other suitable means), wash, dry and apply three coats of Approved Brick / Stone sealer':

3	On facebrick walls externally. (Provisional).	m²	585		

CB 585

ON NEW FIBRE-CEMENT / PLASTERBOARD SURFACES

	Unit	Quantity	Rate	Amount
'Wall & All' or equally approved paint to new fibre cement, surface to be dry, sound and free of dirt and loose particles. Wipe down with a damp cloth and allow to dry completely. Prime with one coat Universal undercoat with an overcoating time of 1 hour and finish with two coats Wall & All (WAA 1) with 2 hours drying time between coats, for a maintenance cycle of 12 years in a C5 coastal/marine environment.				
On ceilings and cornices,	m²	106		
CB 106				
On vertical ceilings and boarding,	m²	0		
On eave and verge boarding.	m²	126		
CB 126				
Carried to Collection			R	

4

5

6

'Velvaglo' or equally approved polyurethane enamel paint to new fibre-cement, surface to be dry, sound and clean. Prime with one coat Plaster Primer (UC56) with an overcoating time of 16 hours and finish with two coats Velvaglo Polyurethane Enamel (VLO) with 2 hours drying time between coats, for a maintenance cycle of 3 years in a C5 coastal/marine environment, for interior/exterior use :

		Unit	Quantity	Rate	Amount
7	Fascias and barge boards not exceeding 300mm girth , including priming metal jointing strips.	m	207		

	Unit	Quantity	Rate	Amount
Polyurethane enamel paint to new metal, surface to be dry, sound and clean. Clean and degrease with Aquasolve Degreaser GR1, rinse and prime with one coat Galvogrip Metal Primer, one coat Merit Universal Undercoat and finish with two coats Polyurethane Enamel (VLO) with 2 hours drying time between coats, for a maintenance cycle of 3 years in a C5 - coastal/marine environment, for interior/exterior use to galvanised steel :				
Columns. (Provisional).	m²	0		
Members of exposed sloping roof members, rafters, purlins, bracing, etc. (Provisional)	m²	0		
Door frames, etc.	m²	12		
CB 12 Record room doors and frames, etc.	m²	8		
	m	0		
CB 8 Rails, bars, pipes, etc not exceeding 300mm girth.				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
13	Rails, bars, pipes, etc not exceeding 300mm girth to fire protection pipes.	m	48		

CB 48				
ON NEW WOOD SURFACES				
Two coats oil wood primer	Unit	Quantity	Rate	Amount
Backs of frames, linings, etc not exceeding 300mm	m	13		
CB 13				
Prepare surfaces, light sand, clean and apply two coats approved carbolinium timber preservative, with light sand between coats :				
Roof timbers at eaves and verges	m²	123		
CB 123				
Polyurethane enamel paint to new wood, surface to be dry, sound and clean, wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK2) and apply one coat of Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1A5) < 14% or less. Prime with one coat Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats Satin Polyurethane enamel paint (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C5 coastal/marine environment, for interior / exterior use to new wood :				
Interior / Exterior doors.	m²	34		
CB 34				
Door frames, etc.	m²	3		
CB 3				
Exposed roof timbers and at eaves and verges.	m²	53		
CB 53				
Carried to Collection			R	

		Unit	Quantity	Rate	Amount
15					
16					
17					
18					

		Unit	Quantity	Rate	Amount
19	Skirtings, rails, etc not exceeding 300mm girth.	m	80		
	CB 80				

	Carried to Collection			R	

Amount

BILL NO. 16

PAINTWORK

COLLECTION

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BUILDING WORKS

SECTION SUMMARY

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SECTION NO. 4

EXTERNAL WORKS (PROVISIONAL)

BILL NO. 1

SITE CLEARANCE AND BULK EARTHWORKS

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

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/Engineer.

	Unit	Quantity	Rate	Amount

Note :

All Earthworks shall be done in accordance with the SANS 1200 specifications.

Nature of ground:

The Tenderer must aquaint himself with the nature of the material to be excavated.

The nature of the ground is assumed to be loose fine to medium sandy material, therefore earth, but possibly interspersed with hard rock or soft rock.

Carting away of excavated material:

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.

Dewatering of Excavations

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.

Density testing on filling

Rates of filling, etc shall include for all density and soil type testing to prove that the specified compaction is achieved.

	Carried to Collection			R

		Unit	Quantity	Rate	Amount

When additional testing is done on instruction of the Architect and these tests are successful, they will be paid for additionally.

General :

Before starting work, the Contractor shall carry out a thorough survey and examination of the buildings or structures to be demolished and satisfy themselves as to the nature and requirements of the contract. The Contractor is to locate and mark the positions of existing services affected by the demolitions. No extra's will be allowed due to the Contractor's failure to carry out the above.

Burning of materials arising from the demolitions will not be permitted on site.

All sizes given for demolitions are approximate and are to be confirmed on site.

DEMOLITIONS. ETC.

Taking down and removing

1	Existing timber gum pole power pole approximately 3-5m high above ground, including excavations, backfilling of hole, carting away, etc.	No	3		

	Carried to Collection			R	

	Unit	Quantity	Rate	Amount
Existing 5000 litre rainwater tank, including rainwater tank plinth/base excavations, backfilling, carting away, etc.	No	1		
Demolishing and removing				
Single storey IBR shack building approximately 8 x 5m on plan and 3m high, comprising unreinforced concrete surface bed, IBR sheeting external and internal walls and IBR roof covering on timber framework.	No	1		
SITE CLEARANCE, ETC.				
Site clearance, etc.:				
Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scoffling up as required and cart away all vegetation and debris.	m²	12 535		
	m³	970		
Strip topsoil layer average 150mm thick and stockpile on site.				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
3					
4					
5	**REMOVAL OF TREES, ETC.**				
	Taking out and removing, grubbing up roots and filling in holes:				
6	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	2		

	Unit	Quantity	Rate	Amount
Tree stump exceeding 500mm and not exceeding 1000mm girth.	No	1		
Cut down and remove, grub up roots and fill in holes:				
Tree exceeding 500mm and not exceeding 1000mm girth.	No	2		
Tree exceeding 1000mm and not exceeding 1500mm girth.	No	2		
BULK EXCAVATION				
Open face excavation in earth over sloping site:				
Open face excavation over sloping site to reduce levels for platforms including spreading and levelling in areas of fill and depositing excavated material over site or carting off site to spoil including haulage not exceeding 1km from perimeter of excavations.	m³	8 901		
Extra over bulk excavation in earth for excavation in:				
Soft rock	m³	223		
	m³	89		
Hard rock				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
8					
9					
10					
11					
12	**CARTING AWAY.**				
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
13	In spoil heaps where directed on site.	m³	970		

	Unit	Quantity	Rate	Amount
Off site to a dumping site to be found by the Contractor.	m³	8 901		
COMPACTION OF SURFACES				
Compaction of surfaces:				
In - place treatment of existing or filled material by ripping, scarifying for a depth of 150mm, breaking down oversize material, stabilizing soil with and including 4% lime mixed evenly into fill material and compacting to 95% Mod AASHTO density.	m²	6 465		
EARTH FILLING, ETC.				
Filling with material from the excavations, cut to fill, spread and levelled and compacted to a density of at least 95% Mod. AASHTO maximum density:				
Over site for platforms.	m³	150		
	m³	5 332		
Filling with approved G7 quality selected fill material carted onto site by the Contractor, compacted to a density of at least 95% Mod. AASHTO maximum density in 150mm layers:				
Over site for platforms.				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
15					
16					
17	**Filling with approved G5 sub-base quality material carted onto site by the Contractor, compacted to a density of at least 95% Mod. AASHTO maximum density in 150mm layers:**				
18	Over site for platforms.	m³	1 331		

	Unit	Quantity	Rate	Amount
KEEPING EXCAVATIONS FREE OF WATER				
Keeping excavations free of water:				
Keeping excavations free of all water other than subterranean water.	Item			
TESTS				
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 PA/Engineer and these tests are successful, they will be paid for additionally.				
Prescribed density tests on filling:				
Modified AASHTO Density test.	No	10		
In-situ dry density (sand replacement) test in accordance with method A10 (a) of TMH 1	No	20		
	No	20		
Maximum dry density and optimum moisture content test in accordance with method A7 of TMH 1				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
20					
21					
22					
	GRASSING, ETC.				
	Ground preparation:				
23	Cultivation and preparation of areas to be planted, including general shaping and trimming of ground.	m²	1 600		RATE ONLY

	Unit	Quantity	Rate	Amount
Topsoil, compost, lime and fertilizer:				
Topsoil obtained from prescribed stock piles on site spread and levelled to average 150mm thick to areas around structures where directed and including in-place treatment of filled topsoil material by ripping, scarifying for a depth of 150mm and breaking down oversize material.	m²	1 600		RATE ONLY
Fertilizing:				
Fertilize garden top soil with 3:2:1 super phosphate spread at a rate of 1kg/10m2 including working evenly into top 20mm depth of soil.	m²	1 600		RATE ONLY
Grassing of Kikuyu grass or equally approved roots in rows over site:				
Kikuyu grass or equally approved runners over topsoiled areas including watering and maintanance, etc until Practical Completion of the project, 3 months maintenance period after practical completion elsewhere measured.	m²	1 600		RATE ONLY
Maintenance:	Item			
Maintenance of grassed and ground covered areas for a period of 3 months (total area approximately 1600m2), including regularly weeding and irrigating as necessary.				RATE ONLY
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
25					
26					
27					

Amount

BILL NO. 1

SITE CLEARANCE AND BULK EARTHWORKS

COLLECTION

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SECTION NO. 4

Section No. 4
Bill No. 1
Site Clearance And Bulk Earthworks

	Unit	Quantity	Rate	Amount

EXTERNAL WORKS (PROVISIONAL)

BILL NO. 2

ROADWORKS, PARKING AREAS & WALKWAYS

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

	Unit	Quantity	Rate	Amount

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/Engineer. **Nature of ground:**

The Tenderer must aquaint himself with the nature of the material to be excavated.

The nature of the ground is assumed to be loose fine to medium sandy material, therefore earth, but possibly interspersed with hard rock or soft rock.

In most areas the nature of the ground is assumed to be well compacted filling as a result of platforms created under Bulk Earthworks, therefore 'earth'.

Carting away of excavated material:

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.

Dewatering of Excavations

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.

Density testing on filling

Rates of filling, etc shall include for all density and soil

	Unit	Quantity	Rate	Amount

type testing to prove that the specified compaction is achieved

		Unit	Quantity	Rate	Amount

When additional testing is done on instruction of the Architect/Engineer and these tests are successful, they will be paid for additionally.

Note:

All Earthworks shall be done in accordance with the SANS 1200 specifications.

Refer to the relevant sections in SANS 1200 Mk for the specification of roadworks which will apply in this Bill.

ROADWORKS, WALKWAYS, ETC.

COMPACTION OF SURFACES

Compaction of surfaces:

1	In - place treatment of existing cut and filled material by ripping, scarifying for a depth of 150mm, breaking down oversize material and compacting to 93% Mod AASHTO density:	m²	1 898		

EARTH FILLING, ETC.

Filling with approved G7 Selected filling layer material (SABS 1200) supplied and carted onto site by the Contractor, in 150mm lifts under roadways and parking, and compacted to a density of at least 95% Mod. AASHTO maximum density:

2	150mm Thick layers under roadways and parking.	m³	866		

	Unit	Quantity	Rate	Amount
Filling with approved G5 Sub-Base Course material (SABS 1200) supplied and carted onto site by the Contractor and stabalised with 4% cement, under roadways and parking, and compacted to a density of at least 95% Mod. AASHTO maximum density:				
150mm Thick layers under roadways and parking.	m³	191		
Filling with approved Gravel Wearing Course material (SABS 1200) supplied and carted onto site by the Contractor, under roadways and parking, and compacted to a density of at least 95% Mod. AASHTO maximum density:				
200mm Thick gravel wearing course layer to roadways and parking.	m³	109		
KEEPING EXCAVATIONS FREE OF WATER	Item			
Keeping excavations free of water:				
Keeping excavations free of all water other than subterranean water.				
Carried to Collection			**R**	

3

4

		Unit	Quantity	Rate	Amount
5					
	TESTS				
	Note:				
	Control testing to be undertaken by the Contractor will be required to prove that the works have been executed in accordance with the Specification and Drawings.				
	The Engineer will execute a certain number of check tests to monitor the control testing results submitted by the Contractor. Payment for these check tests will be made from the Provisional quantity allowed in the Bill of Quantities, if they are succesful.				
	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.				
	Prescribed density tests on filling:				
6	Modified AASHTO Density test.	No	10		

		Unit	Quantity	Rate	Amount
	Natural CBR test.	No	10		
	Indicator test.	No	10		
	In-situ dry density (sand replacement) test in accordance with method A10 (a) of TMH 1	No	10		
	Nuclear In-situ density test	No	15		
	Carried to Collection			**R**	

7

8

9

10

SOIL POISONING

Approved brand of weedkiller mixed and applied strictly in accordance with the manufacturer's instructions :

11	To gravel wearing course to roadways, etc.	m²	628		

	Unit	Quantity	Rate	Amount
Under paving to roads and parking area, etc.	m²	1 055		RATE ONLY
Under paving to walkways, etc.	m²	215		RATE ONLY
BOND AND INTERLOCKING CONCRETE BLOCK PAVERS				
Block paving to be manufactured in accordance with SABS Specification 1058 to the following compressive strength:				
Class 25 or 35MPa or as specified by the Engineer.				
Paving to be laid in accordance with SANS 1200MJ, SABS 1058 and the Concrete Manufacturers Association's specifications.				
Clean dry bedding sand complying with SANS 1200D to be laid under paving.				
Clean dry jointing sand complying with SANS 1200MJ is to be swept into joints between roadstones.				
Paving to be installed with a minimum longitudinal fall of 1% and a transverse fall of at least 2%.				
All block paving to be inspected and resanded after 3 months.				
Carried to Collection			**R**	

12

13

		Unit	Quantity	Rate	Amount
	Approved paving of 60mm thick Type S-A approved Precast Concrete 'Weathered Charcoal' coloured interlocking paving blocks, size 200 x 100 x 60mm Thick, laid in herringbone pattern on and including 50mm thick compacted river sand bed with fine dry filler jointing sand swept and vibrated into joints all laid on subgrade (elsewhere measured conforming to SABS 1200D degree of accuracy l :				
14	Paving to walkways to falls.	m²	215		RATE ONLY

	Unit	Quantity	Rate	Amount
Approved paving of 80mm thick Type S-A approved Precast Concrete 'Weathered Charcoal' coloured interlocking paving blocks, size 200 x 100 x 60mm Thick, laid in herringbone pattern on and including 50mm thick compacted river sand bed with fine dry filler jointing sand swept and vibrated into joints all laid on subgrade (elsewhere measured conforming to SABS 1200D degree of accuracy I :				
Paving to roads and parking areas to falls.	m²	1 055		RATE ONLY
Fair circular cutting and waste to paving.	m	21		RATE ONLY
CONCRETE EDGE BEAM, ETC.				
Excavation not exceeding 2m deep:				
For edge beam to roadways.	m³	1		RATE ONLY
Extra over all excavations for carting away				
Surplus material from excavations to a dumping site to be located by the contractor.	m³	1		RATE ONLY
30MPa/19mm Reinforced concrete:				
In edge beams to roadways.	m³	1		RATE ONLY
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
19					
	Finishing top surfaces of concrete with a wood float:				
20	Top of edge beams.	m²	4		RATE ONLY

	Unit	Quantity	Rate	Amount
Rough formwork:				
Edges not exceeding 300mm high.	m	25		RATE ONLY
Fabric reinforcement :				
Type 193 fabric reinforcement in concrete edge beams, etc.	m²	4		RATE ONLY
KERBING CHANNELS, ETC.				
Precast concrete kerbing finished smooth on exposed surfaces including bedding, jointing and pointing, etc.				
Standard Kerb (SABS 927-1969 Fig 2) 125 x 250mm high overall laid upright on and including 200 x 50mm thick unreinforced 15/19Mpa concrete bedding, with 150 x 300mm unreinforced concrete haunching at back of each joint in kerbing, including all excavation, backfilling, etc.	m	424		RATE ONLY
Ditto but circular on plan not exceeding 4m radius formed with short lengths of straight kerbing including all excavations, backfilling, etc.	m	10		RATE ONLY
	m	18		RATE ONLY
Ditto but circular on plan exceeding 4m radius.				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
21					
22					
23					
24					
25					
26	Standard Kerb (SABS 927-1969 Fig 3) 150 x 300mm high overall laid upright on and including 200 x 50mm thick unreinforced 15/19Mpa concrete bedding, with 150 x 300mm unreinforced concrete haunching at back of each joint in kerbing, including all excavation, backfilling, etc.	m	234		RATE ONLY

	Unit	Quantity	Rate	Amount
Ditto but circular on plan not exceeding 4m radius formed with short lengths of straight kerbing including all excavations, backfilling, etc.	m	12		RATE ONLY
Ditto but circular on plan exceeding 4m radius.	m	9		RATE ONLY
PAINTING, ETC.				
Prepare surfaces, wash thoroughly, remove loose material, leave to dry and apply two coats Road Marking' acrylic road marking paint to roadways and parking areas all in accordance with Standard Provincial Road Practice including all setting out to:				
100mm Wide solid white line to precast concrete paved roadways and parking.	m	70		
Standard "STOP" sign markings to precast concrete paved roadways and parking.	No	3		
Standard "DISABLED" sign markings to precast concrete paved roadways and parking.	No	2		
			R	

		Unit	Quantity	Rate	Amount
	Carried to Collection				
27					
28					
29					
30					
31					

ROAD SIGNAGE

Traffic sign to Standard Roads Department Specification (SARTSM) comprising reflective face on aluminium reinforced backing fixed to and including 125 -150mm diameter bitumen impregnated creosote pole 3 900mm long with and including stainless steel strapping 16mm wide to top and bottom of pole and including two 40mm diameter breakaway holes drilled through 150mm creosote pole one at 150mm and other at 450mm above finished ground level. Pole to be set in compacted stabilized selected backfill material with 1:12 cement, soil ratio compacted in 100mm layers to 90% Mod. AASHTO maximum density in base size 900mm diameter x 700mm deep with and including

		Unit	Quantity	Rate	Amount
	all excavations and removal of surplus excavated material from site.				
32	"10 Km\h Speed Limit" Prohibition sign as R201	No	2		
	"No Trucks" Prohibition sign as R229	No	1		
	"Parking" Reservation sign as R305P	No	4		
	"Stop" Controll sign as R1	No	3		
	Carried to Collection			**R**	
33					
34					
35					

Amount

BILL NO. 2

ROADWORKS, PARKING AREAS & WALKWAYS

COLLECTION

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SECTION NO. 4

Section No. 4
Bill No. 2
Roadworks, Parking Areas & Walkways

	Unit	Quantity	Rate	Amount

EXTERNAL WORKS (PROVISIONAL)

BILL NO. 3

SEWER RETICULATION

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

	Unit	Quantity	Rate	Amount

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/Engineer.

Note:

All plastic pipe diameters are nominal external.

All pipes shall be jointed and fixed strictly in accordance with the manufacturers instructions.

uPVC pipes and fittings:

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings.

Soil, waste and vent pipes and fittings shall be solvent weld jointed.

uPVC pressure pipes and fittings:

All pipes shall be of the class stated.

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings.

Pipes of 50mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints.

Exposed concrete surfaces:

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops,

	Unit	Quantity	Rate	Amount

cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster.

		Unit	Quantity	Rate	Amount

Excavations:

No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling.

'Soft rock' and 'hard rock' shall be as defined in 'Earthworks'.

Laying, backfilling, bedding, etc of pipes:

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions.

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SANS 1200 L : Medium pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SANS 1200.

SEWER RETICULATION, ETC.

NEW SEWER RETICULATION

uPVC Class 51 sewer pipes:

1	160mm Pipes laid in and including trenches not exceeding 1m deep.	m	130		RATE ONLY

	Unit	Quantity	Rate	Amount
160mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep.	m	141		RATE ONLY
Extra over uPVC Class 51 pipes for fittings:				
160 x 160mm Y Junction.	No	1		RATE ONLY
160mm Bend.	No	7		RATE ONLY
	No	1		RATE ONLY
160mm Tee.				
Carried to Collection			**R**	

2

		Unit	Quantity	Rate	Amount
3					
4					
5					
	MANHOLES, INSPECTION CHAMBERS, ETC.				
	Precast concrete circular inspection chambers, including benching, covers and channels, etc :				
6	Precast concrete manhole 1110mm diameter overall and exceeding 750mm and not exceeding 1500mm deep internally to invert level of precast concrete manhole frame with approved epoxy sealed joints including 150mm thick 20/19Mpa concrete base projecting 75mm beyond sides with and including 20mm dolomitic benching steel floated with factory made concrete cover slab with frame and cover and bedded in 1:6 cement mortar including all necessary channels and fittings, excavations, filling, formwork, holes through sides for pipes, concrete encasing around pipes through side of manhole and Calcamite or similar approved step irons at 300mm centres, etc. (See Sewer Typical Manhole Details as per Engineering Standard Details Drawing CEBE-2023-03-D007- Sewer Typical Manhole Details).	No	10	RATE ONLY	

	Unit	Quantity	Rate	Amount
Ditto, but exceeding 1500mm deep and not exceeding 2250mm deep.	No	2		RATE ONLY
	No	3		RATE ONLY
Extra over precast concrete circular manholes for built up frame at finished sloped sidewalks, to detail consisting of 230mm brickwall built in steps approximately 340mm high and manhole frames to be cast in 20/19 Mpa Concrete finished on sloping ground level, to detail. (Provisional).				
Carried to Collection			**R**	

7

8

CONSERVANCY, SEPTIC TANKS AND SOAKAWAYS, ETC.

The following in Construction of 1No Concrete Septic/Conservancy Tank (160m3 Tank - Size 8000 x 8000 x 2910mm deep internally - (See Septic Tank Layout & Details as per Engineering Standard Details Drawing CEBE-2023-03-D011- Septic Tank Layout & Details) :

		Unit	Quantity	Rate	Amount
9	Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scoffling up as required and cart away all vegetation and debris.	m²	100		RATE ONLY

	Unit	Quantity	Rate	Amount
Strip topsoil layer average 300mm thick and stockpile on site.	m³	30		RATE ONLY
Excavation in earth not exceeding 2m deep for pits.	m³	174		RATE ONLY
Excavation in earth exceeding 2m not exceeding 4m deep for pits.	m³	149		RATE ONLY
Excavation of vertical sides of excavation in earth for working space including backfilling compacted to 95% Mod. AASHTO maximum density, exceeding 500mm and not exceeding 4m deep for erection and removal of formwork to tank walls.	m²	153		RATE ONLY
Extra over excavations other than bulk in earth for excavation in soft rock.	m³	16		RATE ONLY
Extra over excavations other than bulk in earth for excavation in hard rock.	m³	8		RATE ONLY
	m²	139		RATE ONLY
Risk of collapse of excavations other than bulk to sides of trench and hole excavations exceeding 1,5m deep.				
Carried to Collection			**R**	

10

11

		Unit	Quantity	Rate	Amount
12					
13					
14					
15					
16					
17	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk), off site to a dumping site to be found by the Contractor.	m^3	281		RATE ONLY

	Unit	Quantity	Rate	Amount
Filling with material from the excavations compacted to a density of at least 95% Mod. AASHTO maximum density in backfilling behind conservancy tank walls, etc.	m³	42		RATE ONLY
Topsoil obtained from prescribed stock piles on site spread and levelled to average 300mm thick to areas above structure where directed and including in-place treatment of filled topsoil material by ripping, scarifying for a depth of 150mm and breaking down oversize material.	m²	100		RATE ONLY
Trim and level off surface of ground (excavated or filled under this Contract) to receive concrete surface beds, including excavating or filling, ripping and scarifying as necessary and compacting the whole area for a depth of 150mm to a density of at least 95% Mod AASHTO.	m²	87		RATE ONLY
Keeping all excavations free of water.	Item			RATE ONLY
Prescibed modified AASHTO Density tests on filling.	No	5		RATE ONLY
15Mpa/19mm Unreinforced concrete in blinding under tank bases.	m³	4		RATE ONLY
25Mpa/19mm Mass Unreinforced concrete in concrete box column	m³	1		RATE ONLY
25Mpa/19mm Reinforced concrete in tank base.	m³	22		RATE ONLY

		Unit	Quantity	Rate	Amount
		m³	16		RATE ONLY
	25Mpa/19mm Reinforced concrete in tank cover slab including upstand beams.				
	Carried to Collection			R	

		Unit	Quantity	Rate	Amount
27	25Mpa/19mm Reinforced concrete in brick cavity infill to tank walls.	m^3	15		RATE ONLY

	Unit	Quantity	Rate	Amount
Making and testing set of three 150 x 150 x 150mm concrete strength test cubes (Provisional).	Sets	10		RATE ONLY
Finishing top surfaces of concrete slabs smooth with a wood float.	m²	76		RATE ONLY
Smooth formwork to sides of column concrete box.	m²	5		RATE ONLY
Rough formwork to soffits of tank slab.	m²	64		RATE ONLY
Rough formwork to sides inverted beams above concrete circular to not exceeding 1m radius	m²	1		RATE ONLY
Smooth formwork to edges not exceeding 300mm high.	m	35		RATE ONLY
Rough formwork to edges of base not exceeding 300mm high. (Provisional).	m	37		RATE ONLY
Rough formwork to form 75mm diameter opening through 200mm slab.	No	1		RATE ONLY
Rough formwork to form 160mm diameter opening through 200mm slab.	No	1		RATE ONLY
Rough formwork to form 1250mm diameter opening through 200mm thick slab.	No	1		RATE ONLY

		Unit	Quantity	Rate	Amount
	Various Diameter steel reinforcement bars in concrete.	Tonnes	2		RATE ONLY
		m²	36		RATE ONLY
	Type Ref 500 fabric mesh reinforcement, top and bottom, with 50mm cover, in concrete base and slab.				
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
38					
39					
40	Type Ref 500 fabric mesh reinforcement, with 50mm cover, vertically in concrete walls.	m²	97		RATE ONLY

	Unit	Quantity	Rate	Amount
Brickwork of NFX bricks (15 MPa nominal compressive strength) in class II mortar in loadbearing walls in 370mm Hollow walls of two half brick skins with concrete cavity infill (elsewhere measured), including wall ties.	m²	97		RATE ONLY
2,5mm Galvanised brick reinforcement 75mm Wide reinforcement built in horizontally.	m	368		RATE ONLY
30mm thick grano screed on floors to falls and currents in tanks.	m²	64		RATE ONLY
Internal plaster to brick walls.	m²	93		RATE ONLY
Internal plaster to concrete soffits of slab.	m²	64		RATE ONLY
'Sikagard-63N Epoxy protective coating or equally approved waterproofing product to plastered walls, subject to approval by Engineer prior to application,	m²	93		RATE ONLY
'Sikagard-63N Epoxy protective coating or equally approved waterproofing product to plastered soffits of slabs subject to approval by Engineer prior to application.	m²	64		RATE ONLY
'Sikagard-63N Epoxy protective coating or equally approved waterproofing product to screed/grano tank floors subject to approval by Engineer prior to application.	m²	64		RATE ONLY

		Unit	Quantity	Rate	Amount
41	1250mm Diameter x 500mm high circular precast concrete chamber section to SANS 1294 with and including 560 ID round cover slab with concrete lid build over opening onto concrete slab.	No	1		RATE ONLY
	Carried to Collection			R	
42					
43					
44					
45					
46					
47					
48					

		Unit	Quantity	Rate	Amount
49					
50	160mm Diameter L-Shaped stainless steel suction pipe approximately 5760mm long overall, to manufacturers specifications, top section cast into concrete box with 550mm exposed and projecting, through concrete slab and fixed to pit wall with 6mm thick stainless steel plate brackets at 1000mm centres inside tank, all to Engineers Suction Pipe & Bracket Details on Drawing No CEBE-2023-03-D011 Septic Tank Layout & Details.	No	1		RATE ONLY

	Unit	Quantity	Rate	Amount
75mm Diameter uPVC Vent pipe approximately 2200mm long overall, cast into concrete box with 100mm exposed and projecting at top, through concrete slab and projecting 100mm into pit at underside of slab, all to Engineers Drawing No CEBE-2023-03-D011 Septic Tank Layout & Details.	No	1		RATE ONLY
SUNDRIES				
Sundries:				
Extra over excavation in earth for pipe trenches, manholes, etc for excavation in soft rock.	m³	20		RATE ONLY
Extra over excavation in earth for pipe trenches, manholes, etc for excavation in hard rock.	m³	10		RATE ONLY
Extra over backfilling to drain pipe trenches, manholes, etc for selected approved Class I & II earth backfilling from excavations, supplied by the Contractor.	m³	30		RATE ONLY
Extra over excavation for pipe trenches, manholes, etc for carting away surplus material (where imported filling used) to a dumping site to be located by the Contractor.	m³	30		RATE ONLY
	m	20		RATE ONLY
Unreinforced concrete class 'B' encasing to 110mm horizontal pipe in ground.				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
51					
52					
53					
54					
55					
56					
57	Standard 150 x 150mm precast reinforced concrete pipeline route markers tapering to 100 x 100mm at top, 1500mm long overall, complete with pipeline lable lettering, marker set 750mm deep in ground and cast into mass concrete base size 550 x 550 x 600mm high and protruding 750mm above ground level, to route of underground pipes, including all excavations, backfilling, carting away, etc. and painted above ground with one coat primer and two coats enamel based paint once erected.	No	25		RATE ONLY

		Item			
	TESTING	Unit	Quantity	Rate	Amount
	Testing :				
	Testing sewer drainage pipe system, complete.				
	Carried to Collection			R	

58

Amount

BILL NO. 3

SEWER RETICULATION

COLLECTION

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	Unit	Quantity	Rate	Amount

SECTION NO. 4

Carried to Collection **R**

Section No. 4
Bill No. 4
Potable Water Reticulation

	Unit	Quantity	Rate	Amount

EXTERNAL WORKS (PROVISIONAL)

BILL NO. 4

POTABLE WATER RETICULATION

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

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/Engineer.

uPVC pressure pipes and fittings:

Pipes for water supply shall be of the class stated.

Pipes of 50mm diameter and greater shall be to SABS 966 and shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron or cast steel as recommended by the manufacturer of the pipe, all with similar push-in type joints.

Reducing fittings:

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

Carried to Collection **R**

	Unit	Quantity	Rate	Amount

Corrosion Protection:

Carried to Collection **R**

Section No. 4
Bill No. 4
Potable Water Reticulation

	Unit	Quantity	Rate	Amount

External protection of all underground steel pipes, flanges, joints and couplings shall be by means of a 300 micron layer of coaltar epoxy of an approved make. External protection of all above ground steel pipes, flanges, jounts and couplings shall be by means of a zinc coating. The finished surface shall be clean and uniform any excess being removed. The zinc deposit shall exceed 0.735 kg/m3.

Joints, Bolts, Nuts and Washers:

"Bolts, nuts and washers shall be treated as follows:

Bolts and nuts shall be cadmium plated to BS 1706 and shall conform to grade 4.6 of SABS 135 and BS 916.

Plain and tapered washers for use with mild steel bolts and nuts shall comply with BS 4320 and will be electrogalvanised to BS 1706.

Plain and tapered washers for use with high rensile steel bolts and nuts shall be case hardened with a minimum hardness of Rockwell C-35.

Corrosive Soil:

All buried steel pipework and connections to be "DENSO" wrapped.

"Fittings and joints shall be protected with 'Denso Tape' or similar approved material.

After the joints and fittings have been tasted, they shall be liberally and completely coated with 'Denso Paste' and immediately thereafter wrapped with 'Denso Tape'. Wrapping shall commence at a point at least 50mm heyond the opposite side of the joint or fitting. An overlap of at least 25mm shall be given on each turn.

Carried to Collection **R**

	Unit	Quantity	Rate	Amount
Care shall be taken to smooth down the tape so as to avoid air pockets and				
Carried to Collection			R	

	Unit	Quantity	Rate	Amount

gaps through which water could penetrate. Any turned or damaged tape shall be replaced or patched to the satisfaction of the Engineer's Representative. The Contractor shall ensure that the wrapping is not damaged during backfilling.

Galvanising:

"Galvanised steel pipework, fittings, specials etc. Shall comply with SABS 934 and 763 and be entirely coated with zinc after fabrication by complete immersion in a zinc bath. The finished surface shall be clean and uniform and any excess being removed. The zinc deposit shall exceed the following. Coastal areas 0.735 kg/m3

Inland areas 0.400 kg/m3

"Coastal areas' shall apply to this contract."

Pipeline Markers

Where so instructed by the Engineer or as shown on the drawings, the Contractor shall erect pipeline markers. These markers will be precast concrete units manufactured out of 25 Mpa concrete to the dimensions shown on the drawings and shall comply with SABS 1200 GA Concrete.

All markers to receive one primer coat followed by two coats of enamel based paint, colour blue, once erected.

Markers are to be erected 300mm off the edge of the pipe trench to the left of the trench and at right angles to the trench centre line at the points as indicated on the pipe longsections.

At bends the marker will be erected at the P.I. Point of these 300 mm offset lines.

Carried to Collection **R**

	Unit	Quantity	Rate	Amount

Depth and Cover:

Carried to Collection **R**

Section No. 4
Bill No. 4
Potable Water Reticulation

	Unit	Quantity	Rate	Amount

Depth of excavation for pipe trenches shall be as per the drawing. The minimum required cover to the top of collars shall be 600mm.

Testing:

General

Pipes shall be tested in convenient lengths not exceeding 500m per each test.

Testing of Valves

All valves shall be pressure tested according to SABS 664 or other applicable code at the appropriate test pressure.

No separate payment shall be made for testing of valves and hydrants and the scheduled rates for the supply and installation of valves shall include for all costs in respect of testing.

Disinfecting:

All pipes are to be disinfected to a free chlorine count of 8 parts per million.

No separate payment shall be made for disinfecting pipes and scheduled rates for piping shall include for all costs in respect of disinfecting.

Excavations:

No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling.

Carried to Collection **R**

		Unit	Quantity	Rate	Amount

'Soft rock' and 'hard rock' shall be as defined in 'Earthworks'.

Laying, backfilling, bedding, etc of pipes:

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' and Engineers instructions.

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SANS 1200 L : Medium pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SANS 1200.

POTABLE WATER RETICULATION, ETC.

HDPE WATER PIPES

Class 12 HDPE water pipes :

1	63mm Diameter pipes laid in and including trenches not exceeding 1m deep.	m	200		RATE ONLY

		Unit	Quantity	Rate	Amount
	63mm Diameter pipes laid in and including trenches exceeding 1m not exceeding 2 m deep.	m	58		RATE ONLY
	Extra over Class 12 HDPE pipes for HDPE pressure fittings :				
	63mm Reducer.	No	11		RATE ONLY
	63mm Bend.	No	25		RATE ONLY
		No	15		RATE ONLY
	63mm Threaded adaptor.				
	Carried to Collection			**R**	
2					
3					
4					
5					
6	63mm Equal Tee.	No	10		RATE ONLY
7	63mm End cap.	No	2		RATE ONLY

	Unit	Quantity	Rate	Amount
63mm Cast iron to PVC flange adaptor drilled to table including connecting bolts, gaskets, etc.	No	4		RATE ONLY
63mm Cast iron Hydrant tee drilled to table 10 SABS 1123 including connecting bolts, gaskets, etc.	No	2		RATE ONLY
WATER METER AND PIPE FITTINGS				
Water meter and pipe fittings installation within and around the meter chamber, all in accordance with Manuafacturers instructions :				
63mm HDPE Class 12 pipe cut to suit.	m	2		RATE ONLY
80mm 'WOLTMAN' Helix water meter with Data Logger and with flanges drilled to table 16 and bolted joints.	No	1		RATE ONLY
2" BSP female, chrome plated ball valve.	No	1		RATE ONLY
63mm x 63mm, 90 degree HDPE Class 12 elbow.	No	2		RATE ONLY
63mm x 2" 90 degree HDPE Class 12 elbow (threaded female).	No	1		RATE ONLY
2" Galvanised nipple, BSP male.	No	2		RATE ONLY
2" Galvanised socket union, BSP female.	No	2		RATE ONLY

		Unit	Quantity	Rate	Amount
		No	1		RATE ONLY
	63mm Diameter galvanised steel flanged equal tee, bolted on.				
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
18	63mm Diameter galvanised steel blank flange, bolted on.	No	1		RATE ONLY
19	63mm Diameter HDPE flanged adaptor, bolted on.	No	2		RATE ONLY

	Unit	Quantity	Rate	Amount
15Mpa Concrete haunching support under water meter and valves, etc.	No	2		RATE ONLY
ISOLATION VALVES AND FITTINGS				
'Valves, etc':				
Note:				
All valves shall be coated and lined by means of a powder (sintered) epoxy coating with a dry film thickness of at least 250 micron without holidays.				
All valves, connecting pipe specials and fittings that show any surface corrosion shall be cleaned and protected to the Engineer's satisfaction.				
Sluice Valves shall be the resilient seal type water works pattern gate valve able to operate successfully under a maximum unbalanced static pressure of 1.6MPa. The valve body and other components shall comply with SABS 664/665, the valve shall be of the nonrising spindle type with clockwise closing and generally plain ended for installation in uPVC pipe lines.				
Valves shall all be provided with spindle caps for use with keys unless stated or indicated to the contrary.				
The valve gate shall be covered with a Nitrile rubber resilient seal. Spindles shall be manufactured from heat treated stainless steel grade 420S29, bonnet and gate shall be manufactured out of Spheroidal Graphite Iron Grade 420/12.				
Carried to Collection			**R**	

20

		Unit	Quantity	Rate	Amount
	All graphite iron and steel surfaces to be epoxy powder coated.				
	Valves, etc.				
21	63mm Diameter RSV flanged cast iron gate valve Class 16 (SABS 664) Right hand closing including installation on concrete support pad, joints, including cutting pipes where necessary.	No	7		RATE ONLY

		Unit	Quantity	Rate	Amount
	Valve Chambers, etc.				
	Valve chambers for Isolating Gate Valves size 810 x 810mm overall not exceeding 1m deep, consisting of SABS 558 Type 3A cast iron valve cover size 100 x 230 x 300mm, on 230mm brick footing on well compacted filling and corbelled 115mm brickwork with mortar, including excavations, backfilling, carting away surplus material, etc.	No	7		RATE ONLY
	Ditto, but water meter chamber not exceeding 1m deep.	No	1		RATE ONLY
	FIRE HYDRANTS, ETC.				
	Fire Hydrants, etc:				
	80mm Diameter Fire Hydrant complete, including 80 x 65mm Brass right angle shielded spindle fire hydrant Woodlands type valve with cap and chain, 80 x 63mm diameter brass reducer and transition coupler with brass male thread and brass reducer bush to suit fire hydrant, 80mm tapered thread for B.S.P, including 80mm diameter galvanised pipework approximately 1500mm high with 80mm diameter galvanised long radius bend, approximately 1000mm long 80mm diameter pipework in ground Denso wrapped and fitted to main pipeline with hydrant tee (elsewhere measured), fitted to or encased in concrete hydrant pedestal (elsewhere measured), all as per SABS 1128-2/SANS 1128-2.				RATE ONLY
	Carried to Collection	No	3	**R**	

22

23

		Unit	Quantity	Rate	Amount
24					
25	Extra for supplying hydrant keys to suit.	No	3		RATE ONLY
	Fire hydrant pedestals:				
26	Reinforced concrete 25Mpa/19mm hydrant pedestal 700mm high above ground, cast around vertical 80mm diameter galvanised water pipe with bottom 1000mm minimum below ground level, 440 x 440mm square at base and tapering to octagonal shaped top 240 x 240mm overall including all necessary excavation, smooth off shutter formwork, concrete, 4 x Y12 reinforcing bars vertically, finished smooth off shutter and painted two coats of approved golden yellow B.S.S. 356 paint to exposed surfaces.	No	3		RATE ONLY

SUNDRIES

	Unit	Quantity	Rate	Amount
Sundries:				
Extra over excavation in earth for pipe trenches, manholes, etc for excavation in soft rock.	m³	26		RATE ONLY
Extra over excavation in earth for pipe trenches, manholes, etc for excavation in hard rock.	m³	13		RATE ONLY
Extra over backfilling to drain pipe trenches, manholes, etc for selected approved imported earth backfilling from excavations, supplied by the Contractor.	m³	39		RATE ONLY
	m³	39		RATE ONLY
Extra over excavation for pipe trenches, manholes, etc for carting away surplus material (where imported filling used) to a dumping site to be located by the Contractor.				
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
31	Standard 200 x 200 x 40mm Thick 25/13Mpa precast concrete pipeline route markers complete with 150 x 150mm recessed section for and including 35 x 50mm High pipeline lable lettering, marker set level in ground, to route of underground pipes, including all excavations, backfilling, carting away, etc. and painted above ground with one coat primer and two coats enamel based paint once erected.	No	25		RATE ONLY

		Unit	Quantity	Rate	Amount
	Supply of valve key with 1200mm extension.	No	2		RATE ONLY
	15Mpa Concrete encasement to pipes or thrustblocks including formwork, etc.	m³	2		RATE ONLY
	TESTING				
	Testing:				
	Testing complete water pipe line systems.	Item			RATE ONLY
	TANKS, ETC				
	See Elevated Tank Layout & Details as per Engineering Standard Details Drawing CEBE-2023-03-D010Elevated Tank Layout & Details :				
	Note: Shop drawings to be provided by Manufacturer/Supplier and approved by Engineer before manufacturing Tank & Stand.				
	Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
34					

		Unit	Quantity	Rate	Amount

Hot-dipped galvanised Steel Sectional Water Tanks etc

35	25KL Galvanised Pressed Steel Elevated Water Tank and Stand with split domestic/fire water supply & storage, supplied and erected by an Approved Supplier and Manufacturer, complete, with tank external flanges and flat top including all galvanised steel pipe work, breathers, rubber sealing plugs, overflows, mechanical water level indicator, bird-proofing, in-and outlets, bolted and vented, manhole lid, internal and external access ladders as required, walkway around tank with flooring and handrails, outlet union for 75mm GI Steel Pipe including hole through tank and tank hoisted into position approximately 15m above ground level onto and including a galvanised structural steel tank stand 15m high with beam platform to receive tank and tank stand columns mounted and fixed on concrete with concrete stub columns cast around foot of columns with base plates and holding down anchor bolts (elsewhere measured), all designed, built and erected in accordance with SANS 10329-2004, SANS 10162 for Structural Steel, SANS 121 SABS 1461, SABS 62 and all in accordance with Engineers Drawings/Details CEBE-2023-03-D010 - 25KL Elevated Tank Layout & Details.				
		No	1		

		Unit	Quantity	Rate	Amount
	Galvanised steel pipes with screwed and socketed joints :				
	100mm Pipes	m	75		
	Extra over galvanised steel pipes with screwed and socketed joints for steel fittings:				
	100 x 50mm Diameter GI steel reducer	No	1		
	100 x 75mm Diameter GI steel reducer	No	1		
	75mm Diameter GI Bend	No	1		
	Carried to Collection			**R**	
36					
37					
38					
39					
40	100mm Diameter GI Bend	No	1		
41	100mm Diameter GI Tee junction	No	1		

	Unit	Quantity	Rate	Amount
Valves, etc.				
100mm Diameter RSV flanged cast iron gate valve Class 16 (SABS 664) Right hand closing including installation on vertical GI pipe including cutting pipe where necessary.	No	2		
The following in Builders Work for Elevated Steel Tank foundations, stub columns, etc.:				
Excavate in pickable material for bases not exceeding 2m deep.	m³	12		
Risk of collapse to sides of excavations not exceeding 1,5m deep.	m²	35		
Trim and level off surface of ground to receive concrete, ripping and scarifying as necessary and compacting the whole area for a depth of 150mm to a density of at least 95% Mod. AASHTO maximum density.	m²	9		
Backfilling with approved excavated material, compacted to a density of at least 95% Mod. AASHTO maximum density in 150mm layers.	m³	9		
Carting away excavated material off site to a site located by the contractor.	m³	3		
Modified AASHTO prescribed density test on filling.	No	4		
15Mpa Mass Concrete in blinding layer under foundation bases.	m³	1		
			R	

		Unit	Quantity	Rate	Amount
	Carried to Collection				
42					
43					
44					
45					
46					
47					
48					
49					
50	25 Mpa/19mm Reinforced Concrete in foundation bases.	m³	3		
51	25 Mpa/19mm Reinforced Concrete stub columns in foundations.	m³	1		

	Unit	Quantity	Rate	Amount
Making and testing set of three 150 x 150 x 150mm concrete strength test cubes (Provisional).	Sets	2		
Steel reinforcement in varying diameters to structural concrete work.	Kg	480		
Rough formwork to sides of foundation bases, in foundations.	m²	11		
Rough formwork to sides of rectangular stub columns in foundations.	m²	5		
Boxing in formwork to top and side edge of stub columns to form 45 degree chamfer.	m	11		
20mm Diameter galvanised steel anchor bolts x 360mm Long with 50 x 50 x 12mm plate welded on at bottom, supplied with tank and cast into concrete stub columns, including setting up and aligning in position.	No	18		

		Unit	Quantity	Rate	Amount
		No	4		
	1:3 Cement : Sand Grout bedding approximately 10mm thick under 200 x 200mm base plates, well rammed and neatly worked off as necessary.				
	Carried to Collection			**R**	

Amount

BILL NO. 4

POTABLE WATER RETICULATION

COLLECTION

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SECTION NO. 4

	Unit	Quantity	Rate	Amount

EXTERNAL WORKS (PROVISIONAL)

BILL NO. 5
FENCING

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

Carried to Collection **R**

	Unit	Quantity	Rate	Amount

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/Engineer.

FENCING, ETC

Rates for fencing are to include for taking all necessary precautions to ascertain position of and preventing damage to services in ground over which such fencing is to be constructed. Nevertheless, the Contractor shall bear the full responsibility for any such damage to services which may occur and the cost of consequent repairs shall be for the Contractor's account, and rates shall include for the occurrence of this risk. The Contractor is to allow for levelling, filling and excavating to maintain a regular ground level at finished ground level and the bottom of the fencing.

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/Engineer/Project Manager.

	Unit	Quantity	Rate	Amount

Clearing of Fence Lines Carried to Collection **R**

Section No. 4
Bill No. 5
Fencing

	Unit	Quantity	Rate	Amount

Prices shall be deemed to include for the clearance of a 1000mm wide area where new fence is to be erected including removing trees, shrubs etc. not exceeding 200mm girth, grubbing up roots and roughly levelling.

The bottom of the fence shall be located at a uniform distance above the ground line, but no more than 50mm. Large surface irregularities will be closed with fencing as instructed.

The tendered rate shall include full compensation for the clearing of the fence line, including the removal of stones, the removal and grubbing of trees and tree stumps (except large trees and stumps), cutting of branches, backfilling of cavities and the compaction of backfill material to 90% of Modified AASHTO density, demolishing of structures and the removal and disposal of material resulting from clearing operations at an approved spoil site.

Levelling of Ground

On completion of the erection of the fence, the Contractor shall level existing ground flush with the bottom edge of the mesh.

Classification of Excavated Material

Prices for all post excavations shall include for excavations in earth, soft and/or hard rock.

No extra over rate will be entertained for the occurance of rock.

Disposal of Surplus Excavated Material

All surplus earth from the excavations shall be deposited and roughly levelled on site or carted away as directed.

Note:

The Bidder/Contractor should ensure that all the materials used fully comply with the prescribed SABS/SANS codes and minimum performance requirements. Samples of fencing materials will be tested for compliance to the specifications and should the tests be negative the Bidder/Contractor will have to replace the materials at their own cost and source an alternative supplier that complies with the specifications.

		Unit	Quantity	Rate	Amount
	SITE CLEARANCE				
	Site Clearance, etc :				
1	Allow for clearing site for the width of 1000mm where fencing is to be erected including removing trees, shrubs etc. not exceeding 200mm girth, grubbing up roots and roughly levelling.	m²	489		RATE ONLY
	GALVANISED SECURITY FENCING				
	Galvanised 'ClearView/Transparent' Type Security Fencing:				
	Contractor is to ensure the following is submitted when required and is to make provision in their rates for any costs assosciated with these required submittals.				
	A. Certificate of compliance for materials and coatings				
	B. Shop drawings for gates				
	C. Quality control program shall be submitted to the Architect/Engineer for review prior to commencement of any work				
	Products:				
	Carried to Collection			**R**	

Carried to Collection **R**

	Unit	Quantity	Rate	Amount
General:				

Section No. 4
Bill No. 5
Fencing

	Unit	Quantity	Rate	Amount

A. All steel materials shall be of good commercial quality, galvanized steel.

B. All pipes shall be galvanized, one piece without joints. Furnish moisture proof caps for all posts.

C. Zinc coating shall be smooth and essentially free from lumps, globs, or points.

D. Miscellaneous material shall be galvanized then Marine Fusion Bond coated or equivalent duplex corrosion protection system.

E. The fence corner configuration should not have any sharp corners and all angles at changes of direction should be a minimum of 130 degrees.

Execution:

Posts:

A. Post holes shall be cleared of loose material. Waste material shall be spread where directed by Engineer. The ground surface irregularities along the fence line shall be eliminated to the extent necessary

B. Posts shall be set plumb, and follow the indicated alignment. All posts shall be set to the depth indicated on the design documents. Concrete shall be thoroughly consolidated around each post, free of voids, and finished with a domed shaped surface, with the base of dome at grade elevation. Concrete shall be allowed to cure prior to installing any additional components to the posts.

	Unit	Quantity	Rate	Amount
C. Concrete footings shall be carried down to at least the depth indicated on the Carried to Collection			R	

	Unit	Quantity	Rate	Amount

design documents and shall not be smaller than the dimensions shown. Where a rock layer is encountered within the required depth to which the post is to be erected, a hole of a diameter slightly larger than the largest dimension of the post may be drilled into the rock and the post grouted in. Then the regular concrete footing shall be placed between the top of the rock and the top of the footing elevation as shown on the design documents. Posts shall be approximately centered in their footings. All concrete shall be placed promptly and consolidated by tamping or other approved methods.

D. Where the ground is firm enough to permit excavation of the post hole to neat lines, the concrete may be placed without forms by completely filling the hole. Curing may be achieved by covering the concrete with not less than four inches of loose moist material immediately after placing concrete, or by using a curing compound. All excess material from footings, including loose material used for curing, shall be disposed of as directed by the Engineer

E. Where the ground cannot be satisfactorily excavated to neat lines, forms shall be used to place concrete for footings. Under these conditions the earth and forms coming in contact with the concrete shall be moistened and all ponded water shall be removed from the hole prior to placing concrete. When forms are removed, the footing shall be backfilled with moistened material, and thoroughly tamped. The top of the concrete shall then be covered with not less than 100 mm of loose moistened material or use curing compound if the 7-days cure is not completed. All excess material from footings, including loose material used for curing, shall be disposed of as directed.

Gates:

Gates shall be installed at the locations shown. Hinged gates shall be mounted to swing as indicated. Latches, stops, and keepers shall be installed as required. Slide gates shall be installed as recommended by the manufacturer.

Adjusting Gates:

	Unit	Quantity	Rate	Amount
Adjust gate to operate smoothly, easily, and quietly, free from binding, warp, excessive				

		Unit	Quantity	Rate	Amount

deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.

Lubricate hardware and other moving parts.

Welded galvanised clear view transparent type security mesh panel fencing with hot dipped galvanised coating then fusion bond coated or equivalent duplex corrosion protection system to provide a 10 year guarantee, all in strict accordance with manufacturers specifications and instructions.

21 300mm High transparent clear view type hot dipped galvanised and then fusion bond coated, or equivalent duplex corrosion protection system, steel welded mesh panels in panels 3305mm wide x 1300mm high, with panel apertures of 76.2 x 12.7mm of 3.5mm diameter coated wire and the panel shall be reinforced with 4 x 50mm deep 'V' formation horizontal recessed bands for rigidity and the panel shall have 2 x 70 degree flanges along the sides, and panel shall have 1 x 90 degree flange along top and 1 x 30 degree flange along the toe, with integrated rigid angle, panel posts shall have a flush panel post finish with no climbing aid, (posts elsewhere measured). Panel shall be affixed to post over 48 line wires with and including 16 x single bolt comb clamps and using 16 x anti vandal bolts, with all panels and fixtures galvanised and then marine fusion bondcoated
or equally approved, etc.m6RATE ONLY

3 1 800mm High transparent clear view type hot dipped galvanised and then fusion bond coated, or equivalent duplex corrosion protection system, steel welded mesh panels in panels 3305mm wide x 1800mm high, with panel apertures of 76.2 x 12.7mm of 3.5mm diameter coated wire and the panel shall be reinforced with 4 x 50mm deep 'V' formation horizontal recessed bands for rigidity and the panel shall have 2 x 70 degree flanges along the sides, and panel shall have 1 x 90 degree flange along top and 1 x 30 degree flange along the toe, with integrated rigid angle, panel posts shall have a flush panel post finish with no climbing aid, (posts elsewhere measured). Panel shall be affixed to post over 48 line wires with and including 16 x single bolt comb clamps and using 16 x anti vandal bolts, with all panels and fixtures galvanised and then marine fusion bondcoated
or equally approved, etc. m 489 RATE ONLY

Carried to Collection **R**

		Unit	Quantity	Rate	Amount
	100mm High toughened steel 'Shark Tooth' type spike topping, hot dipped galvanised then marine fusion bond coated, or equal equivalent duplex corrosion protection system to provide 10 years guarantee, fixed to panel edge of fencing internally at 150mm intervals using Antivandal bolts.	m	495		RATE ONLY
	Hot dipped galvanised and marine fusion bond coated or equivalent protection system steel Taper Locking Post 1900mm long x 85mm wide tapering to 45mm with a depth of 85mm and posts shall include 'Locking Recess Mechanism' to secure panel edge and posts sealed with a UV stabilized polymer cap, with and including 25MPa, 450 x 450 x 600mm concrete base, excavations, backfilling, carting away, etc.	No	5		RATE ONLY
		No	145		
	Hot dipped galvanised and marine fusion bond coated or equivalent protection system steel Taper Locking Post 2400mm long x 85mm wide tapering to 45mm with a depth of 85mm and posts shall include 'Locking Recess Mechanism' to secure panel edge and posts sealed with a UV stabilized polymer cap, with and including 25MPa, 450 x 450 x 600mm concrete base, excavations, backfilling, carting away, etc.				RATE ONLY
	Carried to Collection			**R**	

4

5

		Unit	Quantity	Rate	Amount
6					

	Carried to Collection	**R**

Section No. 4
Bill No. 5
Fencing

		Unit	Quantity	Rate	Amount
	Galvanised Seel Gates, etc.				
7	Security swing gate 1000 x 1800mm high overall in single leaf of 3.5mm diameter galvanized and marine fusion bond coated wire or equally approved protective system with aperture size 76.2mm x 12.7mm; panel reinforced with 4 x 50mm deep “V” formation horizontal recessed bands for rigidity, 2 x 70 degree anti vandal flanges, line wire secure connections, locking recess mechanism, 1 x 90 degree flange along top and 1 x 30 degree along toe with all connections and joints welded to form rigid frames or assembled with corner fittings, with 100mm High toughened steel 'Shark Tooth' type spike topping, complete all with hot dipped galvanized finish then marine fusion bond coated or equivalent duplex corrosion protection system, inclusive of gate posts with stays set in and including rails, 450 x 450 x 600mm 25Mpa concrete bases, including all excavations, backfilling, carting away, etc, and hinges shall not twist or turn under the action of the gate and shall be arranged that a closed gate cannot be lifted off the hinges to obtain entry, all in accordance with manufacturers specifications and instructions.	No	1		RATE ONLY

					Amount
8	Security sliding gate 6000 x 1800mm high overall in single leaf of 3.5mm diameter galvanized and marine fusion bond coated wire or equally approved protective system with aperture size 76.2mm x 12.7mm; panel reinforced with 4 x 50mm deep “V” formation horizontal recessed bands for rigidity, 2 x 70 degree anti vandal flanges, line wire secure connections, locking recess mechanism, 1 x 90 degree flange along top and 1 x 30 degree along toe with all connections and joints welded to form rigid frames or assembled with corner fittings, with 100mm High toughened steel 'Shark Tooth' type spike topping, complete with hot dipped galvanized finish then marine fusion bond coated or equivalent duplex corrosion protection system, inclusive of gate posts with stays set in and including rails, 450 x 450 x 600mm 25Mpa concrete bases, including all excavations, backfilling, carting away, etc. with all fittings, brackets, rails and rear wheel tracks being standard manufactured products for the intended application, all in accordance with manufacturers specifications and instructions.	No	1		RATE ONLY
9		No	2		RATE ONLY
	Supply 50 mm "Viro" Padlocks and Keys (or equal approved)				
	Carried to Collection			**R**	

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FENCING

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SECTION NO. 4

EXTERNAL WORKS (PROVISIONAL)

SECTION SUMMARY

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Bill No. 5
Fencing

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1	SITE CLEARANCE AND BULK EARTHWORKS	195	
2	ROADWORKS, PARKING AREAS & WALKWAYS	205	
3	SEWER RETICULATION	216	
4	POTABLE WATER RETICULATION	230	
5	FENCING	239 **R**	
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Section No. 4
SECTION SUMMARY

SECTION NO 5

SMME WORK PACKAGES

Amount

SECTION NO. 5

SMME WORK PACKAGES

BILL NO. 1

WORK PACKAGES BY SMME'S

WORK PACKAGES TO BE DONE BY SMME'S

PREAMBLES

For Preambles refer to "Department of Public Works: Specification of Materials and Methods to be used PW371-A" which shall be read in conjuction with and shall apply to all items in these Bills of Quantities.

SUPPLEMENTARY PREAMBLES

	Unit	Quantity	Rate	Amount

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/Engineer.

The following Provisional Sum Amounts are for work to be carried out by SMME'S as per Work Packages identified by the Client in order to achieve the required SMME Target % of the Contract Value :

The Tenderer must comply with the SMME specification in all respects and achieve a minimum of 30% of the Tendered Contract Value (excluding Socio-Economic Deliverable Allowances, Escalation, Contingency and VAT) towards SMME participation. The pre-defined work packages are listed in the Bill of Quantities below with Provisional Sums given.

The Tenderer is however furthermore encouraged to exceed the minimum of 30 % SMME participation of the tender value by identifying other works for appointment of their own SMME’s other than the work that is already packaged in the tender below.

All work in this section is to be read and dealt with strictly in accordance with the "Specification for the Employment of SMME Sub-Contractors", as attached together with these bills of quantities.

WORK PACKAGES TO BE DONE BY SMME'S

SOLAR ELECTRICAL SYSTEM INSTALLATION (CLINIC BUILDING ONLY)

Solar Electrical System Installation (Clinic Building Only) :

1 Provide the amount of R 2 930 000.00 (Two Million Nine Hundred and Thirty Thousand Rands) for Solar Electrical

				Amount
System Installation to Clinic Building Only, all to later specifications, by Specialist SMME Sub-Contractor, executed complete.	Item			2 930 000 00
Main Contractors Profit on above item.	Item			
Main Contractors Attendance on ditto.	Item			
BUILDERS WORK - BOOSTER PUMPHOUSE				
Builders Work - Booster Pumphouse :				
Provide the amount of R 270 000.00 (Two Hundred and Seventy Thousand Rand) for all Builders Work Only for the Construction of the Booster Pumphouse, complete, (Excluding Electrical & Mechanical Works and other Specialist Work under Provisional Sums), executed complete, by a SMME Sub-Contractor.	Item			270 000
Main Contractors Profit on above item.	Item			
Main Contractors Attendance on ditto.	Item			
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
4					
					00
5					
6					

		Unit	Quantity	Rate	Amount

BUILDERS WORK - GUARDHOUSE

Builders Work - Guardhouse :

7	Provide the amount of R 630 000.00 (Six Hundred and Thirty Thousand Rand) for all Builders Work Only for the Construction of the Guardhouse, complete, (Excluding Electrical & Mechanical Works and other Specialist Work under Provisional Sums), executed complete, by a SMME Sub-Contractor.	Item			630 000 00

	Unit	Quantity	Rate	Amount
Main Contractors Profit on above item.	Item			
Main Contractors Attendance on ditto.	Item			
BUILDERS WORK - EMS HUB BUILDING				
Builders Work - EMS Hub Building :				
Provide the amount of R 2 480 000.00 (Two Million Four Hundred and Eighty Thousand Rand) for all Builders Work Only for the Construction of the EMS Hub Building, complete, (Excluding Electrical & Mechanical Works and other Specialist Work under Provisional Sums), executed complete, by a SMME Sub-Contractor.	Item			2 480 000
Main Contractors Profit on above item.	Item			
Main Contractors Attendance on ditto.	Item			
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
10					
					00
11					
12					
	BUILDERS WORK - STAFF ACCOMMODATION				
	Builders Work - Staff Accommodation :				
13	Provide the amount of R 3 020 000.00 (Three Million and Twenty Thousand Rand) for all Builders Work Only for the Construction of the Staff Accommodation Building Including Carports, complete, (Excluding Electrical & Mechanical Works and other Specialist Work under Provisional Sums), executed complete, by a SMME Sub-Contractor.	Item			3 020 000 00

	Unit	Quantity	Rate	Amount
Main Contractors Profit on above item.	Item			
Main Contractors Attendance on ditto.	Item			
GRASSING - EXTERNAL WORKS				
Grassing - External Works :				
Provide the amount of R 290 000.00 (Two Hundred and Ninety Thousand Rand) for Grassing, externally, (Preparation, topsoil from stock piles, fertilizer, grassing & maintenance), executed complete, by a SMME SubContractor.	Item			290 000
Main Contractors Profit on above item.	Item			
Main Contractors Attendance on ditto.	Item			
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
16					
					00
17					
18					
	LANDSCAPING				
	Landscaping :				
19	Provide the amount of R 100 000.00 (One Hundred Thousand Rands) for Landscaping, Trees, Planterboxes and Pathways, Excluding Grassing, (Grassing Elsewhere) all to later specification, executed complete, by a SMME Sub-Contractor.	Item			100 000 00

	Unit	Quantity	Rate	Amount
Main Contractors Profit on above item.	Item			
Main Contractors Attendance on ditto.	Item			
PRECAST CONCRETE KERBING - EXTERNAL WORKS ROADS & PARKING				
Precast Concrete Kerbing - External Works Roads & Parking :				
Provide the amount of R 195 000.00 (One Hundred and Ninety Five Thousand Rand) for Precast Concrete Kerbing to External Works Roads & Parking & Walkways, executed complete, by a SMME SubContractor.	Item			195 000
Main Contractors Profit on above item.	Item			
Main Contractors Attendance on ditto.	Item			
Carried to Collection			**R**	

		Unit	Quantity	Rate	Amount
22					
					00
23					
24					
	PRECAST CONCRETE PAVING - EXTERNAL WORKS ROADS & PARKING				
	Precast Concrete Paving - External Works Roads & Parking :				
25	Provide the amount of R 435 000.00 (Four Hundred and Thirty Five Thousand Rand) for Precast Concrete Paving to External Works Roads & Parking and Walkways, (Soil poisoning, sandbed layer and paving - Excluding Layerworks), executed complete, by a SMME Sub-Contractor.	Item			435 000 00

		Unit	Quantity	Rate	Amount
	Main Contractors Profit on above item.	Item			
	Main Contractors Attendance on ditto.	Item			
	POTABLE WATER RETICULATION - EXTERNAL WORKS				
	Potable Water Reticulation - External Works :				
	Provide the amount of R 220 000.00 (Two Hundred and Twenty Thousand Rand) for Potable Water Reticulation (Piping, Valves, Chambers etc - Excluding Elevated Water Tank) to External Works, executed complete, by a SMME Sub-Contractor.	Item			220 000
	Main Contractors Profit on above item.	Item			
	Main Contractors Attendance on ditto.	Item			
	Carried to Collection			R	

		Unit	Quantity	Rate	Amount
28					
					00
29					
30					
	SEWER RETICULATION - EXTERNAL WORKS				
	Sewer Reticulation - External Works :				
31	Provide the amount of R 830 000.00 (Eight Hundred and Thirty Thousand Rand) for Sewer Reticulation to External Works, including piping, manholes and 160m3 Conservancy Tank, executed complete, by a SMME Sub-Contractor.	Item			830 000 00

		Unit	Quantity	Rate	Amount
	Main Contractors Profit on above item.	Item			
	Main Contractors Attendance on ditto.	Item			
	FENCING - EXTERNAL WORKS				
	Fencing - External Works :				
	Provide the amount of R 1 100 000.00 (One Million One Hundred Thousand Rand) for Fencing to External Works, executed complete, by a SMME Sub-Contractor.	Item			1 100 000
	Main Contractors Profit on above item.	Item			
	Main Contractors Attendance on ditto.	Item			
	BUILDERS WORKS FOR ENTRANCE FEATURE WALL				
	Builders Works for Entrance Feature Wall :				
	Provide the amount of R 50 000.00 (Fifty Thousand Rand) for Builders Works for Entrance Feature Wall at Main Gate to later detail, executed complete, by a SMME Sub-Contractor.				50 000
	Carried to Collection	Item		**R**	

		Unit	Quantity	Rate	Amount
34					
					00
35					
36					
37					
					00

		Unit	Quantity	Rate	Amount
38	Main Contractors Profit on above item.	Item			
39	Main Contractors Attendance on ditto.	Item			

Amount

BILL NO. 1

WORK PACKAGES BY SMME'S

COLLECTION

	Page No	
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Carried To Section Summary	**R**	

Amount

SECTION NO. 5

SMME WORK PACKAGES

SECTION SUMMARY

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1	WORK PACKAGES BY SMME'S	249 **R**	
	Carried to Next		

SECTION NO 6

PROVISIONAL SUMS AND ALLOWANCES

Amount

SECTION NO. 6

PROVISIONAL SUMS AND ALLOWANCES

PROVISIONAL SUMS AND ALLOWANCES

The following Nominated/Selected Sub-Contract amounts are for work to be carried out by Nominated or Selected Sub-Contractors in terms of the Conditions of Contract :

General

Work for which budgetary allowances are provided will be measured and valued in accordance with the relevant building agreement/building contract and deducted in whole or in part if not required without any compensation for loss of profit on the said allowances

Amount

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.

NOTE: The Tenderers attention is drawn to the fact that uUnless otherwise descibed all Provisional Amounts stated are NETT and do not include any builders discount.

Profit on Nominated/Selected Subcontractors :

Where stated, the contractor may allow for profit if required

General Attendance on Nominated/Selected Subcontractors :

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.

Builder's Work :

Builder's work in connection with specialist services is given elsewhere in these bills of quantities

NOMINATED / SELECTED SUB-CONTRACTORS

JOINERY FITTINGS

Joinery Fittings :

1	Provide the amount of R 850 000.00 (Eight Hundred and Fifty Thousand Rands) for all Joinery Fittings, Fixtures and Shelving to all buildings, all to later specifications, by Specialist, executed complete.	Item	850 000 00

Carried To Section Summary **R**

			Amount
	Profit on above item, if required.	Item	
	Attend apon the firm executing the installation and make good.	Item	
	SIGNAGE		
	Signage :		
	Provide the amount of R 100 000.00 (One Hundred Thousand Rands) for Internal and External Signage to Buildings and Main Entrance & Directional Signage, not measured, to later specification, executed complete.	Item	100 000
	Profit on above item, if required.	Item	
	Attend apon the firm executing the installation and make good.	Item	
	Carried To Section Summary	**R**	

Amount

6

BOREHOLE

Borehole :

7	Provide the amount of R 320 000.00 (Three Hundred and Twenty Thousand Rands) for a New Borehole, including siting, drilling, testing, licencing, borehole casing, piping, valves, submersible borehole electric pump, cables, etc, all to later specification and details, executed complete. (Excludes Borehole Pumpstation Structures - Elsewhere measured).	Item	320 000 00

			Amount
	Profit on above item, if required.	Item	
	Attend apon the firm executing the installation and make good.	Item	
	ELECTRICAL, ELECTRONIC AND MECHANICAL INSTALLATIONS		
	ELECTRICAL CONNECTION		
	Electrical Connection (Eskom) :		
	Provide the amount of R 525 000.00 (Five Hundred and Twenty Five Thousand Rands) for a New Electrical Supply Connection (Eskom) to later specification and details, executed complete.	Item	525 000
	Profit on above item, if required.	Item	
	Attend apon the firm executing the installation and make good.	Item	
	Carried To Section Summary	**R**	

8

9

Amount

10

00

11

12

ELECTRICAL INSTALLATION TO BUILDINGS & SITE RETICULATION, ETC

Electrical Installation to Buildings & Site Reticulation, etc :

13 Provide the amount of R 5 930 000.00 (Five Million Nine Hundred and Thirty Thousand Rands) for Electrical Installation to Buildings & Site Reticulation, including, Kiosks, Sleeves, Manholes, Trenching, Excavations, Site Lighting, Distribution Boards, Mains Cabling & Sub Mains Wiring, General Lighting, Switches, Plugs, Power Skirting, Luminaires, Special Light Fittings, Earthing & Bonding, Lightning & Grounding Protection, Telephone & LAN Wireways, CCTV & Sundry Items,etc, all to later specification and details, executed complete. Item 5 930 000 00

			Amount
	Profit on above item, if required.	Item	
	Attend apon the firm executing the installation and make good.	Item	
	STANDBY GENERATOR SET		
	Standby Generator Set :		
	Provide the amount of R 290 000.00 (Two Hundred and Ninety Thousand Rands) for 25kVA 3 -Phase Standby Generator Set with Change over Switch, Bund Walls and Plinth, all to later specifications, by Specialist, executed complete.	Item	290 000
	Profit on above item, if required.	Item	
	Attend apon the firm executing the installation and make good.	Item	
	Carried To Section Summary	**R**	

Amount

00

17

18

FIRE DETECTION INSTALLATIONS

Fire Detection Installations :

19 Provide the amount of R 790 000.00 (Seven Hundred and Ninety Thousand Rands) for Fire Detection Installations to later specification, by Specialist, executed complete. Item 790 000 00

			Amount
	Profit on above item, if required.	Item	
	Attend apon the firm executing the installation and make good.	Item	
	HEATING, VENTILATION & AIR-CONDITIONING INSTALLATIONS		
	Heating, Ventilation & Air-Conditioning Installations :		
	Provide the amount of R 620 000.00 (Six Hundred and Twenty Thousand Rands) for Heating, Ventilation & Air-Conditioning Installations to later specification, by Specialist, executed complete.	Item	620 000
	Profit on above item, if required.	Item	
	Attend apon the firm executing the installation and make good.	Item	
	KITCHEN & LAUNDRY EQUIPMENT INCLUDING LP GAS MANIFOLD SYSTEM INSTALLATIONS		
	Kitchen & Laundry Equipment including LP Gas Manifold System Installations :		
	Provide the amount of R 230 000.00 (Two Hundred and Thirty Thousand Rands) for Kitchen & Laundry Equipment including LP Gas Manifold System Installations to later specification, by Specialist, executed complete.	Item	230 000
	Profit on above item, if required.	Item	
	Carried To Section Summary	**R**	

			Amount
22			
			00
23			
24			
25			
			00
26			
27	Attend apon the firm executing the installation and make good.	Item	
	AUTO CLAVES		
	Auto Claves Installations :		
28	Provide the amount of R 70 000.00 (Seventy Thousand Rands) for Auto Claves Installations to later specification, by Specialist, executed complete.	Item	70 000 00

			Amount
	Profit on above item, if required.	Item	
	Attend apon the firm executing the installation and make good.	Item	
	FIRE PUMPS & TANKS INSTALLATION		
	Fire Pumps & Tanks Installation :		
	Provide the amount of R 3 320 000.00 (Three Million Three Hundred and Twenty Thousand Rands) for Fire Pumps & Tanks Installation, to later specification, by Specialist, executed complete.	Item	3 320 000
	Profit on above item, if required.	Item	
	Attend apon the firm executing the installation and make good.	Item	
	WATER FILTRATION & TREATMENT WORKS INSTALLATION		
	Water Filtration & Treatment Works Installation :		
	Provide the amount of R 40 000.00 (Forty Thousand Rands) for Water Filtration & Treatment Works Installation, to later specification, by Specialist, executed complete.	Item	40 000
	Profit on above item, if required.	Item	
	Carried To Section Summary	**R**	

Amount

31

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32

33

34

00 35

36 Attend apon the firm executing the installation and make good. Item

BUDGETARY ALLOWANCES

The following budgetary allowances are for work to be executed by the Contractor and paid for in terms of the Conditions of Contract (work is to be remeasured at Bill rates where-ever possible).

Investigation, Application of Permits, Licences, etc :

37 Provide the amount of R 50 000.00 (Fifty Thousand Rand) for Investigation, Application of Permits, Licences, etc., executed complete. Item 50 000 00

The following budgetary allowances are for Socio-Economic Items to be provided for and included in the execution of the project.

EPWP Training Allowance for Training, Placement & Employment :

		Amount
Provide the provisional amount of R 350 000.00 (Three Hundred and Fifty Thousand Rand) for EPWP Training Allowance for Training, Placement and Employment.	Item	350 000
Main Contractors mark-up and other associated costs on the above item.	Item	

Employment of Trade Tested Artisans :

Provide the provisional amount of R 600 000.00 (Six Hundred Thousand Rand) for the Employment of Trade Tested Artisans to promote the achievement of socio-economic objectives on the project.	Item	600 000
	Item	
Main Contractors mark-up and other associated costs on the above item.		
Carried To Section Summary	**R**	

38

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39

40

00 41

Placement of Students :

			Amount
42	Provide the provisional amount of R 648 000.00 (Six Hundred and Forty Eight Thousand Rand) for the Placement of Students to promote the achievement of socio-economic objectives on the project.		
	Placement of 3 x Students (R12 000 x Contract Duration of 18 Months) **Provisional Allowance – R 648 000.00**	Item	648 000 00

			Amount
	Main Contractors mark-up and other associated costs on the above item.	Item	
	<u>In-Service Traning of Built Environment Learners :</u>		
	Provide the provisional amount of R 252 000.00 (Two Hundred and Fifty Two Thousand Rand) for the In-Service Training of Built Environment Learners to promote the achievement of socio-economic objectives on the project.		
	Placement of 2 x Learners (R7 000 x Contract Duration of 18 Months) Provisional Allowance – R 252 000.00	Item	252 000
	Main Contractors mark-up and other associated costs on the above item.	Item	
	<u>Employment of Clerk of Works :</u>		
	Provide the provisional amount of R 1 500 000.00 (One Million Five Hundred Thousand Rand) for the Employment of a Clerk of Works on the project to promote the achievement of socio-economic objectives on the project.		
	Employment of a Clerk of Works for Duration of the Project Provisional Allowance – R 1 500 000.00	Item	1 500 000
		Item	
43	Main Contractors mark-up and other associated costs on the above item. Carried To Section Summary	**R**	

44

Amount

00

45

46

00 47

Employment of Community Liason Officer :

48 Provide the provisional amount of R 108 000.00 (One Hundred and Eight Thousand Rand) for the Employment of a Community Liason Officer on the project to promote the achievement of socio-economic objectives on the project.

Employment of a CLO (R 6 000 x Contract Duration of 18 Months)
Provisional Allowance – R 108 000.00 Item 108 000 00

			Amount
	Main Contractors mark-up and other associated costs on the above item.	Item	
	Employment of Social Facilitator :		
	Provide the provisional amount of R 250 000.00 (Two Hundred and Fifty Thousand Rand) for the Employment of a Social Facilitator on the project to promote the achievement of socio-economic objectives on the project.		
	Employment of a Social Facilitator for Duration of the Project Provisional Allowance – R 250 000.00	Item	250 000
	Main Contractors mark-up and other associated costs on the above item.	Item	
	MONETARY ALLOWANCES		
	The following monetary provisions are to be omitted from the contract sum and used as directed below.		
	Contingency Allowance :		
	Provide the amount of R 1 650 000.00 (One Million Six Hundred and Fifty Thousand Rand) for a Contingency Allowance to be used as instructed by the Principal Agent / Project Manager and approved by the Client, in terms of the Principal Building Agreement.	Item	
			1 650 000
	Carried To Section Summary	**R**	

Amount

00

51

52

00

Amount

CPAP / Escalation Allowance :

53	Provide the amount of R 2 350 000.00 (Two Million Three Hundred and Fifty Thousand Rand) for CPAP / Escalation to be used for Contract Price Adjustment Provisions in terms of the Principal Building Agreement.	Item	2 350 000 00

Carried To Section Summary **R**

Section No. 6
Bill No. 1
Provisional Sums And Allowances

Amount

SECTION NO. 6

PROVISIONAL SUMS AND ALLOWANCES

SECTION SUMMARY

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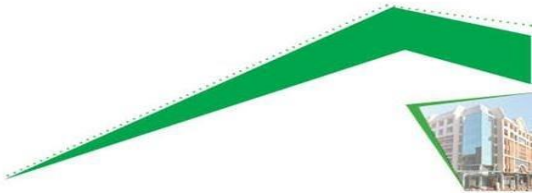
SECTION SUMMARY
Section **FINAL SUMMARY** No.

Page

CONSTRUCTION OF CEBE CLINIC
SCMU5-24/25-0083

			Amount
1 2	PRELIMINARIES	32	
3	OCCUPATIONAL HEALTH AND SAFETY	37	
4	BUILDING WORKS	187	
5			
6	EXTERNAL WORKS (PROVISIONAL)	240	
	SMME WORK PACKAGES	250	
	PROVISIONAL SUMS AND ALLOWANCES		
	SubTotal excluding Value Added Tax ADD		
	VAT @ 15%:	261 **R**	
	Carried to Tender		

FINAL SUMMARY



ANNEXURE 4 – JBCC PRO-FORMA GUARANTEE

Guarantee for Construction

For use with the **JBCC® Principal Building Agreement** edition /date

GUARANTOR DETAILS AND DEFINITIONS

Guarantor:

Physical Address:

Guarantor's signatory 1: Capacity

Guarantor's signatory 2: Capacity

Employer:

Contractor:

Principal Agent:

Works:

Site:

Contract Sum: Accepted amount inclusive of **tax** Currency

… amount in words:

Guaranteed Sum: The maximum aggregate amount Currency

… amount in words:

Guarantee for Construction: *(Insert Variable or Fixed)*

AGREEMENT DETAILS

Expiry Date:

Sections: Total number / not applicable Last Section

Principal Agent issues JBCC® format Interim Payment Certificates, the Final Payment Certificate, the Certificate of Practical Completion and the Certificate of Final Completion

1.0 GUARANTEE FOR CONSTRUCTION (Variable)

1.1 Where a Guarantee for Construction (Variable) in terms of the Agreement has been selected this clause 1.0 and 3.0 to 13.0 shall apply. The Guarantor's liability shall be limited to the diminishing amounts of the Guaranteed Sum as follows:

GUARANTOR'S LIABILITY		PERIOD OF LIABILITY
1.1.1 Maximum Guaranteed Sum (not exceeding of the contract sum) in the amount of :	10%	From and including the date of issue of this Guarantee for Construction and up to and including

	the date of issue of the Interim Payment Certificate certifying in excess of 50% of the contract sum

Amount in words:

1.1.2 Reducing to the Guaranteed Sum (not exceeding 6.0% of the contract sum) in the amount of:

From and including the day after the date of the aforesaid Interim Payment Certificate and up to and including the date of issue of the only Certificate of Practical Completion or last Certificate of Practical Completion where there are sections

Amount in words:

1.1.3 Reducing to the Guaranteed Sum (not exceeding 4.0% of the contract sum) in the amount of:

From and including the day after the date of the applicable Certificate of Practical Completion and up to and including the date of issue of the only Certificate of Final Completion or the last Certificate of Final Completion where there are sections

Amount in words:

1.1.4 Reducing to the Guaranteed Sum (not exceeding 2.0% of the contract) in the amount of:

From and including the day after the date of the applicable Certificate of Final Completion and up to and including the date of issue of the Final Payment Certificate where payment is due to the Contractor, whereafter this Guarantee for Construction shall expire. Where the Final Payment Certificate reflects payment due to the Employer, this Guarantee for Construction shall expire upon payment of the full amount certified

Amount in words:

1.2 The Guarantor's liability limits set out in 1.1.1 to 1.1.4 shall apply in respect of any claim received by the Guarantor during the guarantee validity period

2.0 GUARANTEE FOR CONSTRUCTION (Fixed)

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

GUARANTOR'S LIABILITY	PERIOD OF LIABILITY

Maximum Guaranteed Sum (not exceeding 5 % of the contract sum) in the amount of:

From and including the date of issue of this Guarantee for Construction and up to and including the date of the only Certificate of Practical Completion or the last Certificate of Practical Completion where there are sections, whereafter this Guarantee for Construction shall expire

Amount in words:

3.0 The Guarantor acknowledges that:

3.1 Any reference in this Guarantee for Construction to the Agreement is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention to create a suretyship;

3.2 Its obligation under this Guarantee for Construction is restricted to the payment of money; and

3.3 Reference to a Recovery Statement or an Interim or Final Payment Certificate, or a Certificate(s) of Practical or Final Completion shall mean such certificate issued by the Principal Agent

4.0 Subject to the Guarantor's maximum liability referred to in 1.0 or 2.0, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4. 3:

4.1 A copy of a first written demand notice issued by the Employer to the Contractor stating that payment of a sum certified by the Principal Agent in an Interim or Final Payment Certificate has not been made in terms of the Agreement and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;

4.2 A first written demand notice issued by the Employer to the Guarantor at the Guarantor's Physical Address with a copy to the Contractor stating that a period of seven (7) calendar days has elapsed since the issue of the first written demand notice in terms of 4.1 and that the sum certified has not been paid to date. The Employer herewith calls up this Guarantee for Construction and demands payment of the sum certified from the Guarantor; and

4.3 A copy of the applicable payment certificate which entitles the Employer to receive payment in terms of the Agreement of the sum certified in 4.0

5.0. Subject to the Guarantor's maximum liability referred to in 1.0 or 2.0, the Guarantor undertakes to pay the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand notice from the Employer to the Guarantor at the Guarantor's Physical Address calling up this Guarantee for Construction stating that:

5.1 The Agreement has been terminated due to the Contractor's default and that the Guarantee for Construction is called up in terms of 5.0. The demand shall enclose a copy of the notice of termination; or

5.2 A provisional sequestration or liquidation court order has been granted against the Contractor and that the Guarantee for Construction is called up in terms of 5.0. The demand notice shall enclose a copy of the court order.

6.0 The aggregate amount of payments to be made by the Guarantor in terms of 4.0 and 5.0 shall not exceed the Guarantor's maximum liability in terms of 1.0 or 2.0.

7.0 Where the Guarantor is a registered insurer and has made payment in terms of 5.0, the Employer shall within one hundred and eighty (180) calendar days of receipt of payment submit an expense account to the Guarantor showing how all monies received in terms of the Guarantee for Construction have been expended, or will be expended, and shall refund to the Guarantor any surplus amount. All monies refunded to the Guarantor in terms of this Guarantee for Construction shall bear interest at the prime overdraft rate of the Employer’s bank compounded monthly and calculated from the date of payment by the Guarantor to the Employer until the date of refund.

8.0 Payment by the Guarantor in terms of 4.0 or 5.0 shall be made within seven (7) calendar days upon receipt of the first written demand notice to the Guarantor.

9.0 The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer deems fit and the Guarantor shall not have the right to claim its release from this Guarantee for Construction on account of any conduct alleged to be prejudicial to the Guarantor.

10.0 The Guarantor chooses the Physical Address stated above for all notices and correspondences in relation to this Guarantee.

11.0 This Guarantee for Construction is neither negotiable nor transferable and shall expire in terms of either 1.1.4 or 2.1, or payment in full of the Guaranteed Sum or on the Expiry Date, whichever is the earlier, whereafter no claims will be considered by the Guarantor. The original Guarantee for Construction form shall be returned to the Guarantor after it has expired.

12.0 This Guarantee for Construction, with the required demand notices in terms of 4.0 or 5.0, shall be regarded as a liquid document for the purpose of obtaining a court order.

13.0 Where this Guarantee for Construction is issued in the Republic of South Africa this Guarantee for Construction shall be governed by the laws of the Republic of South Africa. A competent court in the Republic of South Africa shall have sole jurisdiction in terms of this Guarantee for Construction. Where this Guarantee for Construction is issued outside the Republic of South Africa, the laws of the guarantor who issued this Guarantee for Construction shall prevail. A competent court, in the jurisdiction in which the guarantor is domicile shall prevail.

Signed at: | Date:

Guarantor's Signatory 1: ---------- Guarantor's Signatory 2: ----------

Witness: ---------- Witness: ----------

Guarantor's seal or stamp

ANNEXURE 5 – GEOTECHNICAL AND GEOHYDROLOGICAL REPORTS

ENGEOLAB (PTY) LTD

Reg. No. 2017/536405/07 VAT Reg. No. 4710205925

Branches: Gauteng_Pretoria / KZN_Mtunzini / Mpumalanga_eMalahleni

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Finances - finance@engeolabcc.co.za / 082 800 2245
Sales - paul@engeolabcc.co.za / 082 881 5370

Website:
www.engeolabcc.co.za

PART 1
REPORT ON A
GEOTECHNICAL INVESTIGATION ON
CEBE CLINIC SITE AND BORROW PIT SEARCH

Province of the
EASTERN CAPE
PUBLIC WORKS & INFRASTRUCTURE

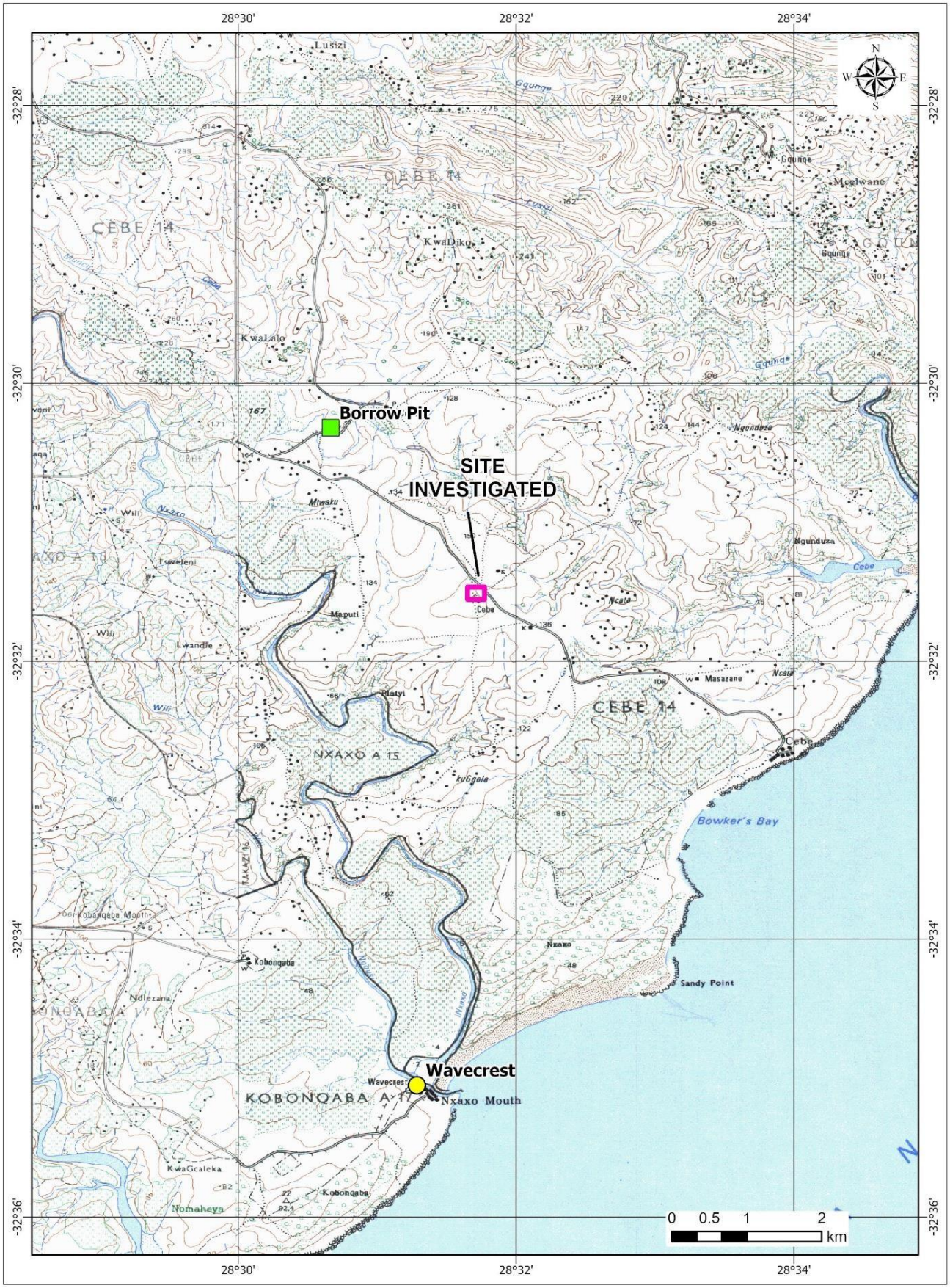
LERUMO
PROPERTIES
PROPERTY DEVELOPMENT
& CONSULTING ENGINEERS

PROJECT: LL3859

DATE: APRIL 2023

BY: P.G. HANSMEYER *Pr.Sci.Nat.*

Figure 1: Locality Plan



EXECUTIVE SUMMARY

A geotechnical investigation as well as an assessment of the groundwater potential of the Cebe Clinic's grounds were carried out. In order to distinguish between the two investigations contained in the same appointment, the geotechnical investigation is referred to as Part 1 with the latter as Part 2. The geotechnical investigation also included a borrow pit search for construction material.

The Cebe Clinic site is located about 40km due east of Butterworth and roughly halfway between the coastal resorts of Wavecrest and Mazeppa Bay and about 5km due west from the Cebe Marine Reserve. The area falls within the jurisdiction of the Mnquma Local Municipality.

The geotechnical report presents a summary of the site soils, geology and the geotechnical constraints encountered on the site, some 1.3ha in size. The geotechnical appraisal is based on an aerial photographic interpretation, test pitting, recording of groundwater seeps, soil sampling and laboratory testing of representative disturbed soil samples. In situ tests which included dynamic penetration testing and a single Marchetti dilatometer test were carried out as well.

The site is underlain by sediments – that is mudstone and sandstone of the Adelaide Group. The bedrock dips about 4 degrees to the north, emulating the topography. No outcrops were encountered and bedrock was only exposed in the gravel road's verges, deeper cuttings and in the rutted travelling lanes. Several dolerite intrusions occur within close proximity of the site, but none were recorded on the site itself.

The soil samples that were taken during the test pitting phase of the geotechnical investigation were submitted to SNALAB for analyses. The soil laboratory is a SANAS accredited civil engineering facility located in Richards Bay for analyses.

In situ testing comprised nine dynamic penetration tests (DPSH) and a single Marchetti Dilatometer probe – generally referred to as a 'DMT'.

A local pan and two shallow excavations were filled to the brim and according to local inhabitants, may be attributed the recent good rains. Surface run-off follows downslope cattle paths and rudimentary gravel roads, eroding the road verges and draining into the main gravel road. No groundwater seeps or springs were recorded on site, nor were any observed in the nearby vicinity. Seepage was encountered at a depth of 1.2m in the base of TP3 but elsewhere the test pits were dry.

The local borrow pit located some 3km to the west of the site is located on dull grey mudstone of the Adelaide Group. The mudstone tends to be flaky and it recorded a bulk density of 1691kg/m^3, classifies as G7 class pavement construction material, is non-plastic with a coarse grading and is generally suitable for selected layers and subgrade.

Disturbed representative soil samples taken from the test pits were analysed in terms of their engineering characteristics such as plasticity, grading, expansiveness, dispersiveness and compaction. These samples were also classified in terms of the pavement construction material classes. The top soils – that is the hillwash layer, residual materials and decomposed, soft

excavatible mudstone comply with > G10 type material, which are unsuitable for backfill and subgrade construction use.

The black top soils and clay-silt-sand mixes derived from in situ decomposed mudstone do comply to some extent with the guidelines of acceptable ranges of properties for the impermeable core of a small earth embankment dam which may be required for the disposal of dirty water. These properties include non-dispersivenes, impermeability (K ~ 1xE-09m/s), good compaction as well as adequate shear strength after compaction. Semi-permeable zone and outer shell material will have to be sourced elsewhere.

The assessment of the test pit excavation's stability indicated that the moist cover - and in situ soils had a sufficient silt/clay fraction within the matrix to provide adequate strength against collapse of the test pit side walls with sufficient stand-up time of more than one week.

Two foundation options have been recommended and as follows: -

OPTION 1: Deep strip foundations or: -

OPTION 2: Removal of in situ material below the footprint of the clinic.

Both options require strip foundations to found on competent mudstone below the problem horizon and adequate drainage precautions.

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PART 1 REPORT ON A GEOTECHNICAL INVESTIGATION AND A BORROW PIT SEARCH, CEBE CLINIC

1. INTRODUCTION

Following an appointment by Lerumo Properties, a geotechnical investigation was conducted on the proposed Cebe Clinic grounds. A borrow pit search for construction material was also carried out. The proposed clinic site investigated and the borrow pit's position relative to the clinic are indicated on the Locality Plan, Figure 1 in the beginning of the report.

The Cebe Clinic appointment comprises two parts – that is Part 1 – the geotechnical investigation and Part 2, the groundwater assessment of the site. The latter is presented separately and comprises three phases of which Phase 1, the site investigation has been completed and the data had been forwarded to Lerumo Engineers.

The Part 1 geotechnical report presents a summary of the site soils, geology and the geotechnical constraints encountered on the site, some 1.3ha in size. The geotechnical appraisal is based on an aerial photographic interpretation, test pitting, recording of groundwater seeps, soil sampling and laboratory testing of representative disturbed soil samples. In situ tests which included dynamic penetration testing and a single Marchetti dilatometer test were carried out as well.

The field work was carried out from Monday, 3 April to Tuesday, 4 April 2023 and the soil samples were submitted for laboratory analyses on Wednesday, 5 April 2023. The soil test data was received on 26 May 2023 and the report was presented on 14 May 2023.

Mr. Kuhle Mthonjeni *Pr. Eng*. of Lerumo Properties authorized the investigation on behalf of the Eastern Cape Public Works and Infrastructure by e-mail correspondence dated 28 March 2023.

2. TERMS OF REFERENCE

The terms of reference included the following aspects that had to be identified/ assessed/determined: -

- Site soils and geology;
- Foundation design parameters including allowable bearing capacities and expected settlements;
- Groundwater and seepage;
- Excavatibility;
- The slope of all batters and embankments will be subject to confirmation by geotechnical investigation and interpretation. Slopes may be modelled at 1V:2H pending geotechnical assessment. Embankments higher than 3.0m according to TRH 10 are to be checked and analysed for: - ○ Circular slip; ○ General slip; ○ Surface sloughing;
- Suitability of bedding material and backfill;
- Stand-up time of excavations;
- Possible sources of pavement construction material and backfill.

3. INFORMATION SOURCES

The following geological, hydrogeological, topographical sources of information were consulted: -

- Geological map, sheet 3228 Kei Mouth printed in 1979 to a scale of 1:250 000;
- Aerial photographic interpretation of Google Maps of the area;
- Cebe Clinic Scope of Works Dated 22 February 2023 by Lerumo Properties; - Site layout and topography in dwg format provided by Lerumo Properties.

4. SITE DESCRIPTION AND DEVELOPMENTS

The Cebe Clinic site is located about 40km due east of Butterworth and roughly halfway between the two coastal resorts Wavecrest and Mazeppa Bay and some 5km due west from the Cebe Marine Reserve. Cebe Clinic and environs fall within the jurisdiction of the Mnquma Local Municipality.

Figure 2: Site Map with Clinic Site

The clinic site is located on a north sloping hillside with the northern boundary along the main gravel road from the coast to Butterworth – refer to the Site Plan, Figure 2 above. The site is covered by short grass with the historic clinic (a derelict corrugated iron structure) more or less in the middle and a fairly large pan in the north-western corner near the gravel road – refer to Plates 1 and 2 below.

Two water filled excavations are also in close proximity to the old clinic. The eastern boundary is formed by a local pathway that leads to scattered houses nearby and another pathway more or less follows the western boundary. The site has an even cross fall of about 4 degrees towards the north and surface run-off naturally drains towards the 0.5m deep incised gravel road along the northern boundary.

Plate 1: View of the site

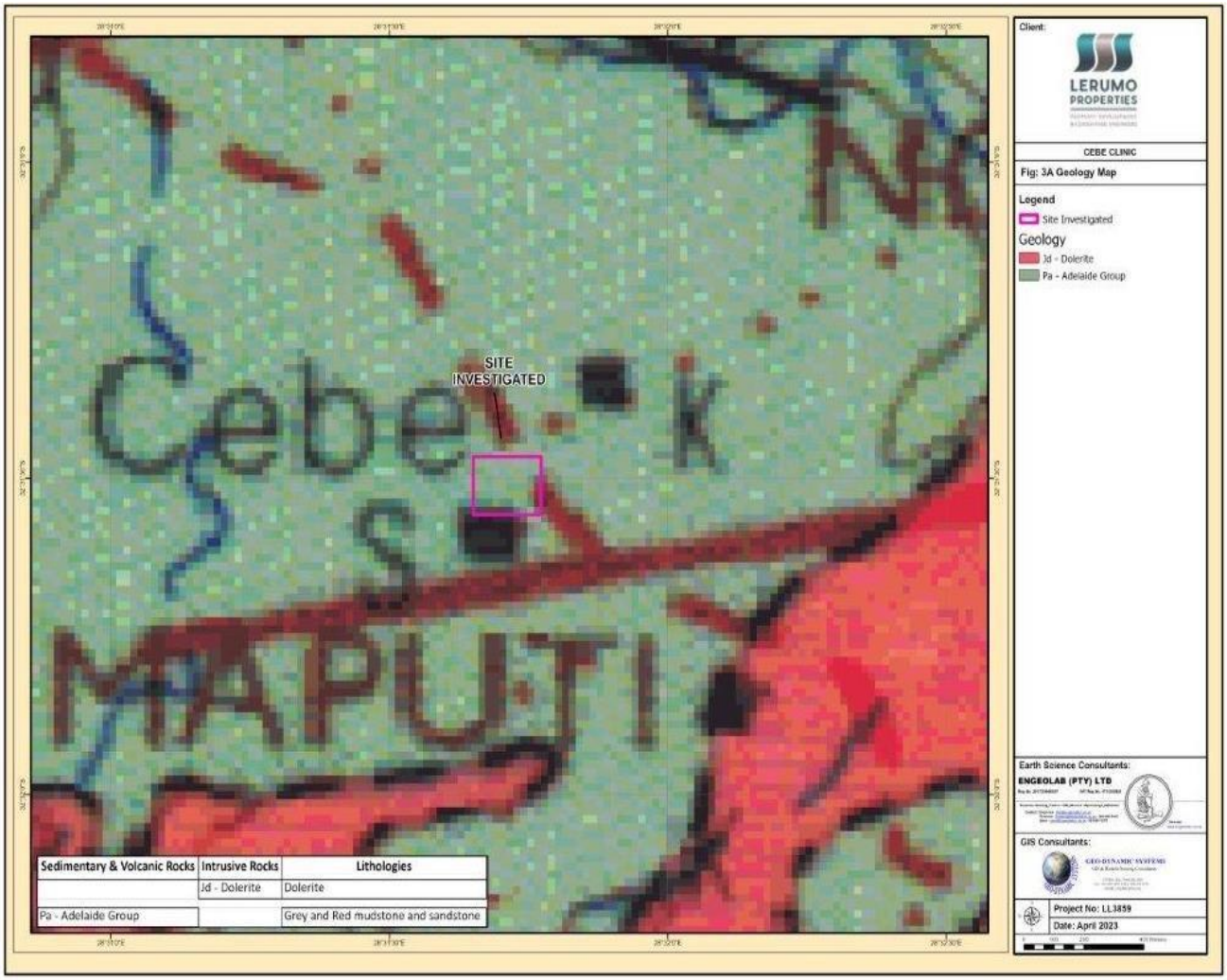
Plate 2: Water filled Pan

The proposed clinic is a single storey structure with its footprint orientated due north with the bulk of the development located in the lower portion of the site, adjacent to the main gravel road to Butterworth.

5. SITE SOILS AND GEOLOGY

The site is underlain by sediments – that is mudstone and sandstone of the Adelaide Group – refer to the Regional Geology, Figure 3A on the following page.

Figure 3A: Regional Geology

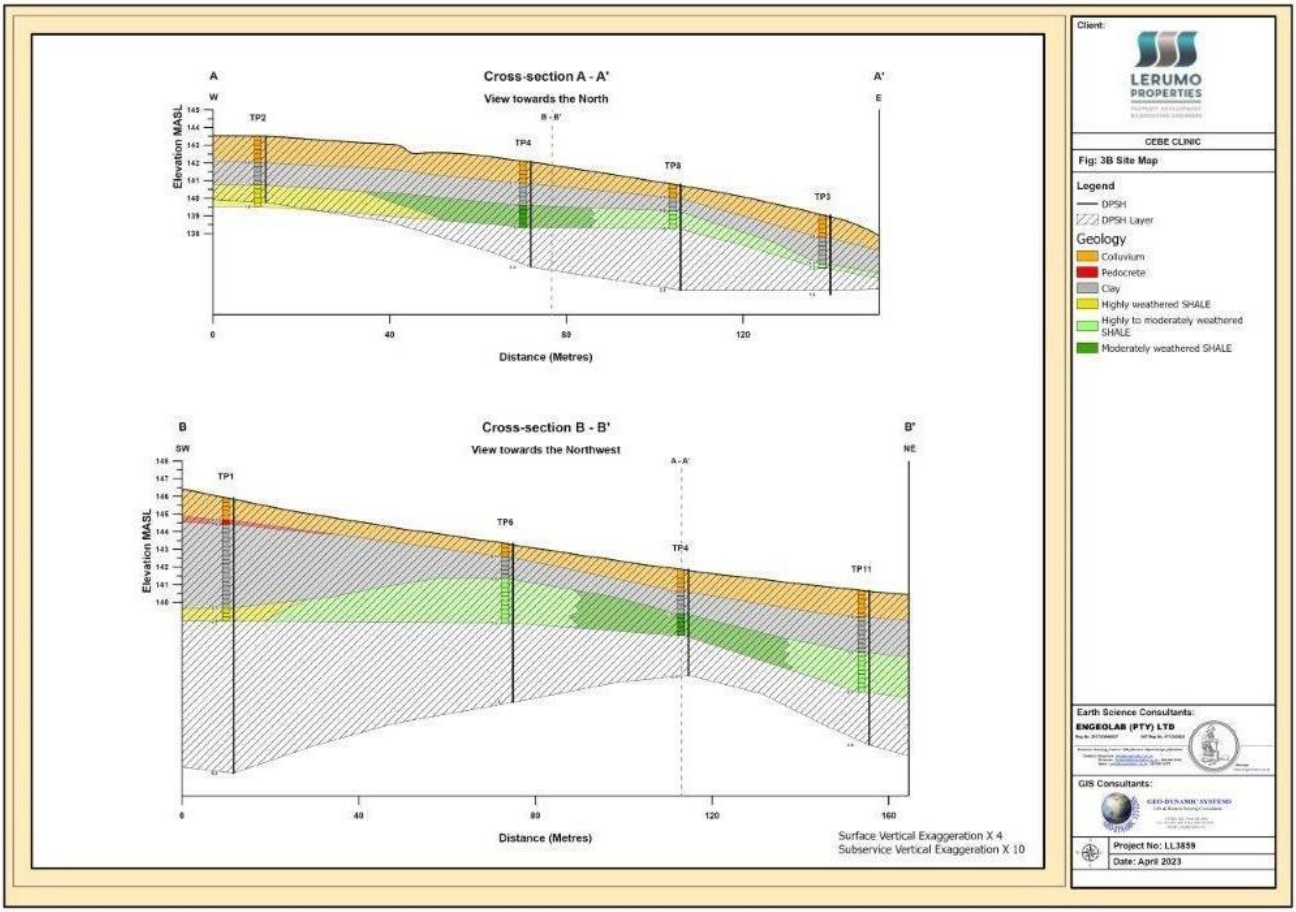


The bedrock dips about 4 degrees to the north, emulating the topography. No outcrops were encountered and bedrock was only exposed in the gravel road's verges, deeper cuttings and in the rutted travelling lanes. Elsewhere on site, the sediments are exposed along the southern rim of the oval-shaped pan in the north-western corner of the site – refer to Plate 3 below. Several dolerite intrusions (red colouring on map – Figure 3A) occur within close proximity of the site, but none were recorded on the site itself.

Plate 3: Sandstone exposed in Pan

Although sandstone had been recorded in the lower reaches of the site, mudstone dominates the lithological profile and no sandstone was exposed in any of the test pits excavated. The dull grey, north dipping mudstone is sequentially overlain by non – to low-active reddish and yellow clays derived from in situ decomposed mudstone, followed by a thin, scattered pedogenic layer of ferricrete nodules overlain by a top soil layer of black, micro-shattered, medium active clay – refer to the Cross Sections, Figure 3B below. Grass roots extend to about 0.2m below surface.

Figure 3B: Cross Sections



6. INVESTIGATION METHODOLOGY

The investigation comprised a desk top study, aerial photographic interpretation, a walk-over survey, test pitting, profiling and sampling as well as photography. During the walk-over survey the three surface impoundments and the main gravel road were inspected. The soil samples that were taken during the test pitting phase were submitted to SNALAB, a SANAS accredited civil engineering laboratory located in Richards Bay for analyses. The soil laboratory data was received on 26 April 2023.

The borrow pit search was initiated with an aerial photographic search, followed by communication with the local community representatives and a drive–over search.

6.1 Test Pitting

A 65KW powered 4x4 tractor-loader-backhoe (TLB) was used to excavate the nine test pits located over the site surface – refer to the Site Plan, Figure 2 on page 7 and Plate 4 on the

following page. Note that test pits TP10 and TP11 were inferred. The test pits were excavated to shallow refusal or the maximum reach of the backhoe, up to 3m below natural ground level and profiled in accordance with the visual and tactile methods as advocated by Jennings *et al* (1973) - Ref. 1 and Plate 4 below.

Plate 4: TLB excavating test holes

6.2 Soil Testing

Soil materials sampled from various test pit excavations were analysed and the laboratory tests are summarized on the following page for convenience. The summaries together with the hard copy test results are attached as Appendix A to the report.

The following tests were carried out on the soil samples: -

- Eight foundation indicator tests comprising particle size distribution analysis and Atterberg limit tests on disturbed samples. These tests permit a basic classification of the soils and group them according to typical engineering properties.
- Two compaction tests on bulk representative soil samples taken from the test pit TP1 and a single sample taken from a borrow pit stockpile. These tests evaluate the compaction characteristics and classify their suitability for use as construction materials. These tests comprise Modified AASHTO maximum dry density moisture/density relationships and California Bearing Ratio values.
- The loose bulk density of three samples used for the compaction tests were determined as well. The loose bulk density is defined as the mass of uncompacted material divided by the volume that the sample occupies in kg/m³.
- A single 'quick' collapse test was done on an undisturbed sample to determine settlement that occurs when the sample is inundated at a vertical pressure of 200KPa.
- The acidity/alkalinity of 8 soil samples were determined.
- The conductivity of 8 soil samples were determined.

Table 6-2: Summary of Soil Test Data

TP No.	Sample No.	Depth (m)	Material Type	Origin	PI	Liquid Limit	% Clay	% MC	GM	MDD Kg/m³	% OMC	CBR @ 95%	G-Class	Expansiveness	pH	Conductivity mS/m	Unified Soil Class	Loose Bulk Kg/m³
Borrow Pit Stockpile	Borrow Pit	-	Poorly graded Gravel	Borrow Pit	NP	CBD	1	-	2.45	2103	8.6	32	G7	Non	8.68	27.4	GP-GM	1691
TP1	DSTP1A	0.1-0.5	Lean Clay	Hillwash	13	34	18	20.7	0.30	1690	20.6	7	> G10	Low	6.33	17.4	CL	1157
TP1	DSTP1B	0.6-1.1	Elastic Silt	Residuum	26	62	59	32.1	0.01	-	-	-	-	Med	6.96	27	MH	-
TP1	DSTP1C	1.2-2.5	Silt	Residuum	11	43	19	32.8	0.07	1684	15.8	1	> G10	Low	6.96	37.4	ML	1112
TP2	DSTP2A	0.1-0.6	Sandy Silt	Hillwash	13	43	9	11.5	0.47	-	-	-	-	Non	6.5	16.2	CL	-
TP2	DSTP2B	0.6-1.0	Lean Clay with Sand	Residuum	10	29	34	19.6	0.37	-	-	-	-	Non	7.36	56.2	CL	-
TP5	DSTP5A	0.1-0.5	Sandy Silt	Hillwash	3	21	14	9.2	0.41	-	-	-	-	Non	5.81	40.9	ML	-
TP5	DSTP5B	0.5-0.7	Sandy Silt	Residuum	NP	-	21	30.5	0.81	-	-	-	-	Non	7.21	47.9	ML	-

6.3 In Situ Testing

In situ testing comprised nine dynamic penetration tests (DPSH) and a single Marchetti Dilatometer probing – generally referred to as a 'DMT'. The test data and results are attached to Appendices C and D respectively. The DPSH tests were carried out adjacent to the test pits while DMT1 was undertaken adjacent to TP01– refer to the summary below and the Site Plan, Figure 2, Page 7.

Table 6-3: Summary of In Situ Test Locations

Test Type & Number	Test Type	Adjacent to	Coordinates South	Coordinates East	TEST PIT Refusal Depth (m)	DPSH Refusal Depth (m)	DMT Refusal Depth (m)
DPSH1	DMT1	TP1	S32°31'32.4"	E028°31'41.6"	2.5	6.3	7.4
DPSH2		TP2	S32°31'29.1"	E028°31'40.5"	1.6	1.5	
DPSH3		TP3	S32°31'29.1"	E028°31'45.4"	1.2	1.8	
DPSH4		TP4	S32°31'29.0"	E028°31'42.8"	1.5	2.4	
DPSH5		TP5	S32°31'30.0"	E028°31'44.4"	2.1	2.1	
DPSH6		TP6	S32°31'30.3"	E028°31'42.4"	1.8	3.6	
DPSH7		TP7	S32°31'31.2"	E028°31'43.0"	2.3	3.3	
DPSH8		TP8	S32°31'29.1"	E028°31'44.1"	2.4	2.4	
DPSH9		TP9	S32°31'30.6"	E028°31'40.7"	2.4	2.4	

Plate 5: DPSH Probing Set-up

DPSH PENETRATION TESTS: The DPSH tests were conducted as indicator tests to verify the consistency of the substrate soils and to facilitate the location of the dilatometer tests. A typical DPSH result for DPSH 1, carried out adjacent to TP is presented on the following page.

The DPSH is regarded as being comparable with the SPT (Standard Penetration Test) after certain corrections (Terzaghi & Peck, 1967), for which N values have been correlated with soil

consistencies for sands and clays. Hard impenetrable ground (often weathered bedrock) is assumed where refusal (>80 blows per 30cm penetration) of the probe occurs.

Plate 6: DPSH Data

DPSH TEST RESULTS SUMMARY

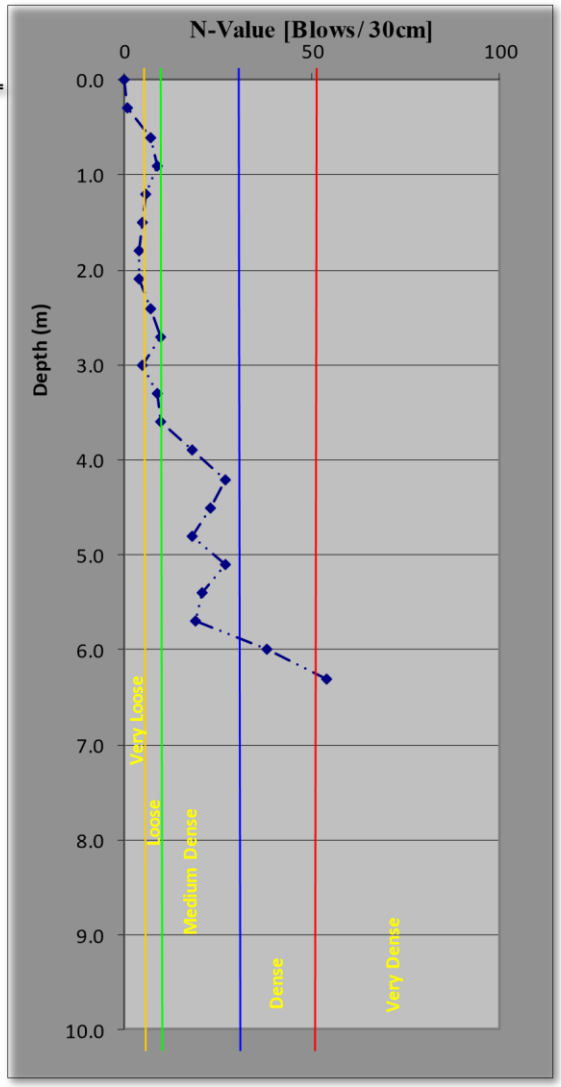
CLIENT	Lerumo Properties
PROJECT	Cebe Clinic
SITE	Cebe Clinic

FILE No.	LL3859
TEST BY	NJ Khebesi
DATE	03/04/2023

COORDINATES	S32°31'32.4"
	E28°31'41.6"

DPSH No.	1

Depth (m)	N-Value [Blows/ 30cm]	Cumulative Count		EABC (kPa)	Est Soil Modulus (MPa)
0.0	0	0	VL	0	8
0.3	1	1	VL	30	8
0.6	7	8	L	80	13
0.9	9	17	L	90	15
1.2	6	23	L	70	12
1.5	5	28	L	65	12
1.8	4	32	L	60	11
2.1	4	36	L	60	11
2.4	7	43	L	80	13
2.7	10	53	MD	95	16
3.0	5	58	L	65	12
3.3	9	67	L	90	15
3.6	10	77	MD	95	16
3.9	18	95	MD	130	22
4.2	27	122	MD	165	29
4.5	23	145	MD	150	26
4.8	18	163	MD	130	22
5.1	27	190	MD	165	29
5.4	21	211	MD	140	24
5.7	19	230	MD	135	23
6.0	38	268	D	195	38
6.3	54	322	VD	235	51
6.6					
6.9					
7.2					
7.5					
7.8					
8.1					
8.4					
8.7					
9.0					
9.3					
9.6					
9.9					
10.2					
	Refusal				



Sand		Clay	
N SPT value	Relative Density	N SPT value	Consistency
0 – 4	Very Loose	<2	Very Soft
4 – 10	Loose	2 – 4	Soft
10 – 30	Medium	4 – 8	Medium
30 – 50	Dense	8 – 15	Stiff
>50	Very Dense	15 – 30	Very Stiff
		>30	Hard

1. Relative density and soil characteristics based on N SPT value (Terzaghi dan Peck) [5]

MARCHETTI DILATOMETER TESTS: A single flat dilatometer test (DMT's) was performed on site and adjacent to TP1's and DPSH1's positions.

Plate 7: Marchetti Set-up

The purpose of the DMT tests was to determine in situ the following soil properties which are presented in Plate 8 below: - • Material Index.

- Shear strength properties of the soils (Cu – undrained cohesion in clayey soils and friction angle Ø in sandy soils).
- Constrained modulus for settlement calculations.
- In situ stress conditions.

The test-end depth was recorded at 7.4m and it is assumed that the refusal occurred on grey mudstone.

Plate 8: DMT Data

DMT1	LEGEND	INTERPRETED PARAMETERS	GENERAL PARAMETERS
4 APR 2023 Lerumo Properties Cebe Clinic LL3859 Clinic Site Done at TP1 & DPSH1	Z = Depth Below Ground Level Po,P1,P2 = Corrected A,B,C readings Id = Material Index Ed = Dilatometer Modulus Ud = Pore Press. Index = (P2-Uo)/(Po-Uo) Gamma = Bulk unit weight Sigma' = Effective overb. stress Uo = Pore pressure	Phi = Safe floor value of Friction Angle Ko = In situ earth press. coeff. M = Constrained modulus (at Sigma') Cu = Undrained shear strength Ocr = Overconsolidation ratio (OCR = 'relative OCR'- generally realistic. If accurate independent OCR available, apply suitable factor)	DeltaA = 15 kPa DeltaB = 40 kPa GammaTop = 17.0 kN/m^3 FactorEd = 34.7 Zm = 0.0 kPa Zabs = 0.0 m Zw = 5.0 m

WaterTable at 5.00 m
Reduction formulae according to Marchetti, ASCE Geot.Jnl.Mar. 1980, Vol.109, 299-321; Phi according to TC16 ISSMGE, 2001

Z	A	B	C	Po	P1	P2	Gamma	Sigma'	Uo	Id	Kd	Ed	Ud	Ko	Ocr	Phi	M	Cu	DMT1
(m)	(kPa)	(kPa)	(kPa)	(kPa)	(kPa)	(kPa)	(kN/m^3)	(kPa)	(kPa)			(MPa)				(Deg)	(MPa)	(kPa)	DESCRIPTION
0.2	130	600		124	560		17.7	3	0	3.51	36.5	15.1				46	56.4		SAND
0.4	260	700		256	660		17.7	7	0	1.58	36.9	14.0					52.4		SANDY SILT
0.6	340	850		332	810		17.7	10	0	1.44	31.8	16.6							
59.6		SANDY SILT		0.8	320	900		309	860			17.7	14	0	1.79	22.1	19.1			
62.2		SANDY SILT																	
1.0	330	800		324	760		17.7	18	0	1.34	18.5	15.1					46.6		SANDY SILT
1.2	450	1000		440	960		17.7	21	0	1.18	20.9	18.0		2.8	39.0		57.7		
87	SILT	1.4	470	1000		461	960		17.7	25	0	1.08	18.8	17.3		2.7	32.9		
53.6	89	SILT	1.6	480	900		477	860		17.7	28	0	0.80	17.0	13.3		2.5		
28.1		39.9	89	SILT															
1.8	410	900		403	860		17.7	32	0	1.13	12.7	15.8		2.1	18.0		43.3	70	SILT
2.0	500	1200		483	1160		17.7	35	0	1.40	13.7	23.5					65.8		SANDY SILT
2.2	550	1250		533	1210		19.1	39	0	1.27	13.8	23.5					65.9		SANDY SILT
2.4	550	1200		535	1160		19.1	43	0	1.17	12.6	21.7		2.1	17.7		58.9	93	SILT
2.6	500	1000		493	960		17.7	46	0	0.95	10.6	16.2		1.9	13.6		41.5	82	SILT
2.8	600	1100		593	1060		17.7	50	0	0.79	11.9	16.2		2.0	16.1		43.2	102	CLAYEY SILT
3.0	800	1700		773	1660		19.1	53	0	1.15	14.5	30.8		2.3	22.0		87.7		
139	SILT	3.2	1100	2100		1068	2060		19.1	57	0	0.93	18.6	34.4		2.7	32.6		
106.4	205	SILT																	
3.4	600	1150		590	1110		19.1	61	0	0.88	9.7	18.0		1.8	11.7		44.5	96	SILT
3.6	500	1350		475	1310		19.1	65	0	1.76	7.3	29.0					63.8		SANDY SILT
3.8	600	1500		573	1460		19.1	69	0	1.55	8.3	30.8					71.6		SANDY SILT
4.0	600	1300		583	1260		19.1	73	0	1.16	8.0	23.5		1.6	8.8		53.7	91	SILT
4.2	500	1050		490	1010		17.7	76	0	1.06	6.4	18.0		1.4	6.2		37.1	72	SILT
4.4	450	800		450	760		17.7	80	0	0.69	5.6	10.7		1.3	5.0		20.6	64	CLAYEY SILT
4.6	700	1600		673	1560		19.1	83	0	1.32	8.1	30.8					70.5		SANDY SILT
4.8	600	1200		588	1160		19.1	87	0	0.97	6.7	19.9		1.4	6.7		41.8	88	SILT
5.0	470	1000		461	960		17.7	91	0	1.08	5.1	17.3		1.2	4.3		31.6	64	SILT
5.2	500	1250		480	1210		17.7	93	2	1.53	5.2	25.3						47.1	
SANDY SILT	5.4	1000	2500		943	2460		20.6	94	4	1.62	10.0	52.6					131.4	
SANDY SILT																			
5.6	1700	3700		1618	3660		20.6	96	6	1.27	16.7	70.9					211.7		SANDY SILT
5.8	1500	3000		1443	2960		20.6	99	8	1.06	14.6	52.6		2.3	22.2		150.3		
259	SILT	6.0	1400	2950		1340	2910		20.6	101	10	1.18	13.2	54.5		2.2	19.1		
150.5	235	SILT																	
6.2	1200	2300		1163	2260		20.6	103	12	0.95	11.2	38.1		2.0	14.7		99.2	195	SILT
6.4	1350	3050		1283	3010		20.6	105	14	1.36	12.1	59.9					160.6		SANDY SILT
6.6	1000	2050		965	2010		19.1	107	16	1.10	8.9	36.3		1.7	10.2		86.3	152	SILT
6.8	1600	3050		1545	3010		20.6	109	18	0.96	14.0	50.8		2.3	20.9		143.3	273	SILT
7.0	1050	1500		1045	1460		18.6	111	20	0.40	9.2	14.4		1.7	10.9		34.8	165	SILTY CLAY
7.2	800	1700		773	1660		19.1	113	22	1.18	6.6	30.8		1.4	6.5		64.6	112	SILT
7.4	800	1750		770	1710		19.1	115	24	1.26	6.5	32.6					67.7		SANDY SILT

The DMT dilatometer consists of a stainless steel blade 250mm long, 95mm wide and 15mm thick with a 60mm diameter recording membrane in the center of the blade. The DMT blade is attached to a set of 44mm diameter hollow rods that are advanced through the soil at a rate of about 2cm/sec by hydraulically pushing the rods with a 20T thrust. The soil response at the DMT membrane-soil interface is recorded at predetermined intervals normally 20cm – refer to Appendix D.

The flat shape of the blade creates an envelope of undisturbed soil at the blade face. An electropneumatic cable is used to inflate the blade diaphragm and simultaneously measure the gas pressure needed to move the diaphragm off its base (P_o) and then to achieve maximum deflection (P_1 – just less than 0.01% irrecoverable strain).

The $P_o - P_1$ values are converted into primary output for use in soil parameter identification and are immediately available in a report format, containing graphs and tabular outputs. Typical applications include: -

- Settlements prediction
- Soil type (silt, sand, clay)
- Operative soil modulus M – equivalent to constrained modulus
- Undrained shear strength Cu in cohesive soils
- Compaction control
- Detection of slip surfaces in slopes
- P-y curves for laterally loaded piles
- Liquefaction potential
- Coefficient of consolidation and permeability (clays)
- Friction angle in sandy soils
- OCR and Ko in clays
- Subgrade reaction modulus for diaphragm walls
- Choice of Input parameters for Plaxis
- Subgrade reaction modulus for pavements

The DMT is currently used in 50 countries and has standardized procedures written up in the ASTM (USA) standards and in the Eurocode 7. The equipment and test procedure are described in detail in the ISSMGE Committee Report TC16 (2001). The probing data is attached as Appendix D to the report.

7. SEEPAGE & SURFACE RUN-OFF

- Seepage was encountered at a depth of 1.2m in the base of TP3. Elsewhere the test pits were dry. The local pan and two shallow excavations were filled to the brim and according to local inhabitants, may be attributed to the recent good rains - refer to Plates 9 and 10 on the following page.

Plate 9: Excavation near Old Clinic

Plate 10: Excavation South of Old Clinic

- Surface run-off follows downslope cattle paths and rudi mentary gravel roads, eroding the road verges and draining into the main gravel road.
- No groundwat er seeps or springs were recorded on site, nor were any observed in the nearby vicinity.

8. BORROW PIT SEARCH AND SAMPLING

The local borrow pit which is indicated on the Locality Plan, Figure 1 in the beginning of the report was inspected – refer to Plate 11 below. The borrow pit is located about 3km west of the site and directly adjacent to the main gravel road from Cebe Clinic to Butterworth. The borrow pit has been utilized for some time and had progressively been enlarged. It is located on dull grey mudstone of the Adelaide Group which is predominantly intermediate excavatable with hard ripping required in some of the less weathered sections.

Plate 11: Cebe Borrow Pit

The scattered stockpiles of mudstone were inspected and found to comprise abundant mudstone fragments and flat, tabular gravels and blocks which were sampled. Binding materials – that is fines comprising sand-silt-clay mixes were absent. A thorough inspection of the stockpiled material indicated that, despite being exposed to the atmosphere for some time, no slaking had taken place. Although the mudstone is rather flaky, it recorded a bulk density of 1691kg/m³, classifies as G7 class pavement construction material, is non-plastic with a grading modulus of GM~2.47, suitable for selected layers and subgrade.

9. GEOTECHNICAL CONSIDERATIONS

This section of the report discusses the engineering geological properties of the foundation materials and bedrock inferred from visual observations made during the walk- and drive-over surveys, as well as from the test pit excavations, the soil laboratory test analyses, the dynamic penetration and dilatometer testing.

Aspects such as bedding materials, excavatability and stand-up times of excavations are also detailed as well as drainage precautions and the application of local borrow materials.

Bedrock on site comprises grey Adelaide Group mudstone with subordinate sandstone, sequentially overlain by low active, very fine (grading moduli ranging from 0.01 – 0.81) silt-clay mixes derived from insitu decomposed mudstone. The decomposed mudstone is overlain by a scattered pedogenic layer of black, clay coated ferricrete nodules and capped by black, low active, fine clayey hillwash with grass roots in the top 0.20m.

Seepage was encountered at a depth of 1.2m in the base of TP3; however, elsewhere, the test pits were dry and groundwater seeps were absent.

9.1 Site Material for backfill & Small Earth Embankment Dam

Disturbed representative soil samples taken from the test pits were analysed in terms of their engineering characteristics such as plasticity, grading, expansiveness, dispersiveness and compaction. These samples were also classified in terms of the pavement construction material classes (Ref. 2: TMH 14: 1985 and Table 6-2, Summary of Test Data). The top soils – that is the hillwash layer, residual materials and decomposed, soft excavatable mudstone comply with > G10 type material, which are unsuitable for backfill and subgrade.

The black top soils and clay-silt-sand mixes derived from in situ decomposed mudstone do comply to some extent with the guidelines of acceptable ranges of properties for the impermeable core of a small earth embankment dam which may be required for disposal of dirty water. These properties include non-dispersivenes, impermeability (K ~ 1xE-09m/s) good compaction as well as adequate shear strength after compaction – refer to Table 9-11 Guidelines to Acceptable Ranges below (Ref. 3: Soil survey For Engineering). Materials suitable for semi-permeable zone and outer shell will have to be sourced elsewhere.

Table 9-1-1: Guidelines to the Acceptable Ranges of Properties for Composite Earth Dams

Soil Parameter	Site Test Data	Impermeable Core	Semi-permeable Intermediate Zone	Permeable Shell
Grading	Fine (GM 0.01 – 0.81)	Fine	Medium - coarse	Coarse
% Clay	9 - 59	10 – 30	5 - 10	<5
Liquid limit	21 - 62	25 – 40 - 60	<25	<20
Plasticity Index	3 - 26	10 - 30	<10	<5

Linear shrinkage		6 - 14	<5	<2
% Optimum MC	15.8 – 20.6	12 - 25	10 - 15	8 – 12
MDD Kg/m³	1684 - 1690	1400 - 1650	1550 - 1750	1650 - 1900
Soil Parameter	**Site Test Data**	**Impermeable Core**	**Semi-permeable Intermediate Zone**	**Permeable Shell**
Ø°	*25 - 33	20 - 30	20 - 30	>35
Cohesion (KPa)	*36 - 136	25 - 50	25	<25
K (m/s)	*2.3E-05 – 1.4E-07**	1xE-09	1xE-07	1xE-05

***Inferred data**

****Natural, uncompacted: Note further testing to be done to confirm low permeability**

9.2 Stability of Excavations

The stability of the test pit excavations was assessed by an assessment of the shear strength and other simple field tests included below: -

i) The shear strength (C_u) of the top clayey material is rather low (DMT in situ test recording from surface to 5m, the C_u varies from 50 – 100KPa) which relates to a firm soil which should, under current moisture conditions, maintain its integrity;

ii) slumping, raveling or collapse of the test pit side walls occurring within 15 minutes from time of excavation.

The visual stability assessment of the test pits excavated had a sufficient silt/clay fraction within the matrix to provide adequate strength against collapse of the test pit side walls with sufficient stand-up time of more than one week. It must be borne in mind that the investigation took place after some good rains and additional seepage areas and soils with higher inherent moisture contents may be encountered during prolonged rainy spells.

If seepage is present or an elevated moisture content is expected during the wetter part of the year, even trenches shallower than 1.5m should be regarded as dangerous and stand-up time could be measured in minutes.

Sections of trenches/excavations/cuts exceeding 1.5m should be regarded as potentially unsafe and further sampling and testing specifically for excavation design stability should be undertaken. At the very least excavations deeper than 1.5m should be either shored or flattened to less than 60° from horizontal; alternatively, the trenches should not exceed 1.5m in depth. Furthermore, spoil from any excavations should not be placed closer than the equivalent depth thereof to avoid unnecessary loading of the sidewalls, especially under moist to saturated conditions.

9.3 Excavatability

The following observations are made with regards to the general excavatibility of the site soils and bedrock, namely that: -

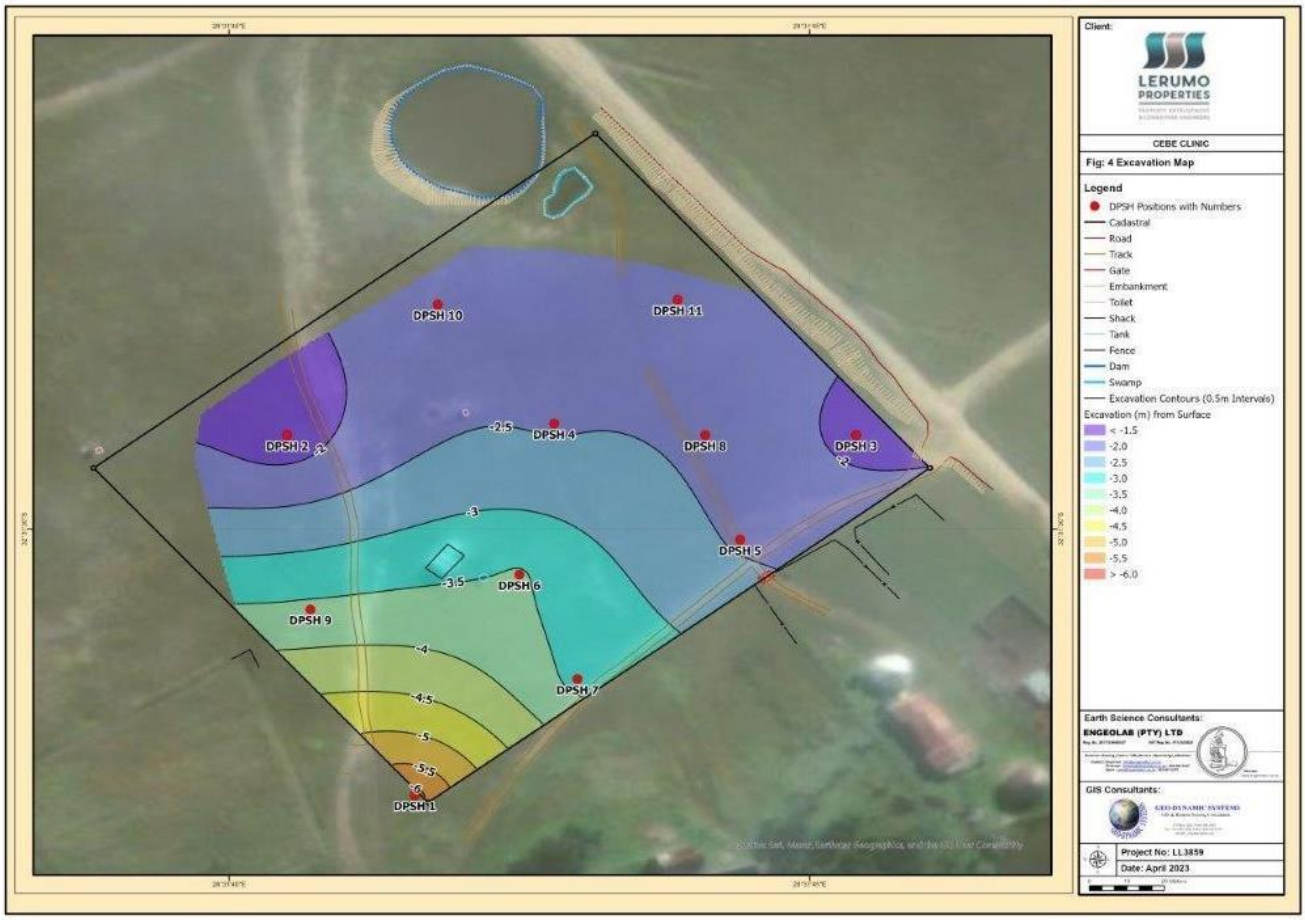
The top soil, clayey mudstone residuum and decomposed to highly weathered mudstone bedrock present at an average depth of 1.5m are soft excavatible with bedrock ranging initially from soft to intermediate, expected to become hard excavation with depth – that is

with the exception of the area in the vicinity of TP1 > 2m. The excavatibility of the site soils and bedrock is classified according to SANS 1200D and is presented by Table 9-3 on the following page. The variation in excavation depths on site is also presented by the Excavatibility Map, Figure 4 on the following page.

Table 9-3: Excavation Classes (Modified SABS 1200D)

Sample Position	Simplified Description of Typical Material Properties
Soft excavation	Material that can be efficiently removed or loaded, without prior ripping, by means of a bulldozer, tractor-scraper, track type front-end loader or back-acting excavator without the use of pneumatic tools such as paving breakers.
Intermediate excavation	Material that can be efficiently ripped by a bulldozer fitted with a single-tine ripper or with a back-acting excavator of flywheel power exceeding **0,10 kW per mm** of tined-bucket width or the use of pneumatic tools before removal by equipment equivalent to that specified above.
Hard rock excavation	Excavation in material that cannot, before removal, be efficiently ripped by a bulldozer. This is material that cannot be efficiently removed without blasting or without wedging and splitting.
Boulder excavation (Class A)	Excavation in material containing more than 40 % by volume boulders of size in the range of 0,03-20m3, in a matrix of soft material or smaller boulders.
Boulder excavation (Class B)	Excavation in material containing 40 % or less by volume boulders of size in the range of 0,0320m3, in a matrix of soft material or smaller boulders and which require individual drilling and blasting in order to be loaded by a track type front-end loader or back-acting excavator.

Figure 4: Excavatability Map



9.4 Soil Resistivity, Corrosiveness and Acidity/Alkalinity

Distilled water was leached through eight soil samples retrieved from test pits excavated on site. The leachate was subsequently tested for conductivity and the results were inverted to

determine the resistivity. A rough guide in determining the corrosiveness of a soil, based on the resistivity is shown below.

Table 9-4: Resistivity

Resistivity Reading (Ohm.meter)	Corrosiveness Status	Site Data (Ohm.meter)
< 30	Very corrosive	50% of samples
30 - 50	Moderately corrosive	12.5% of samples
50 - 100	Mildly corrosive	37.5% of samples

Based on these results it can be concluded that the site soils are predominantly corrosive.

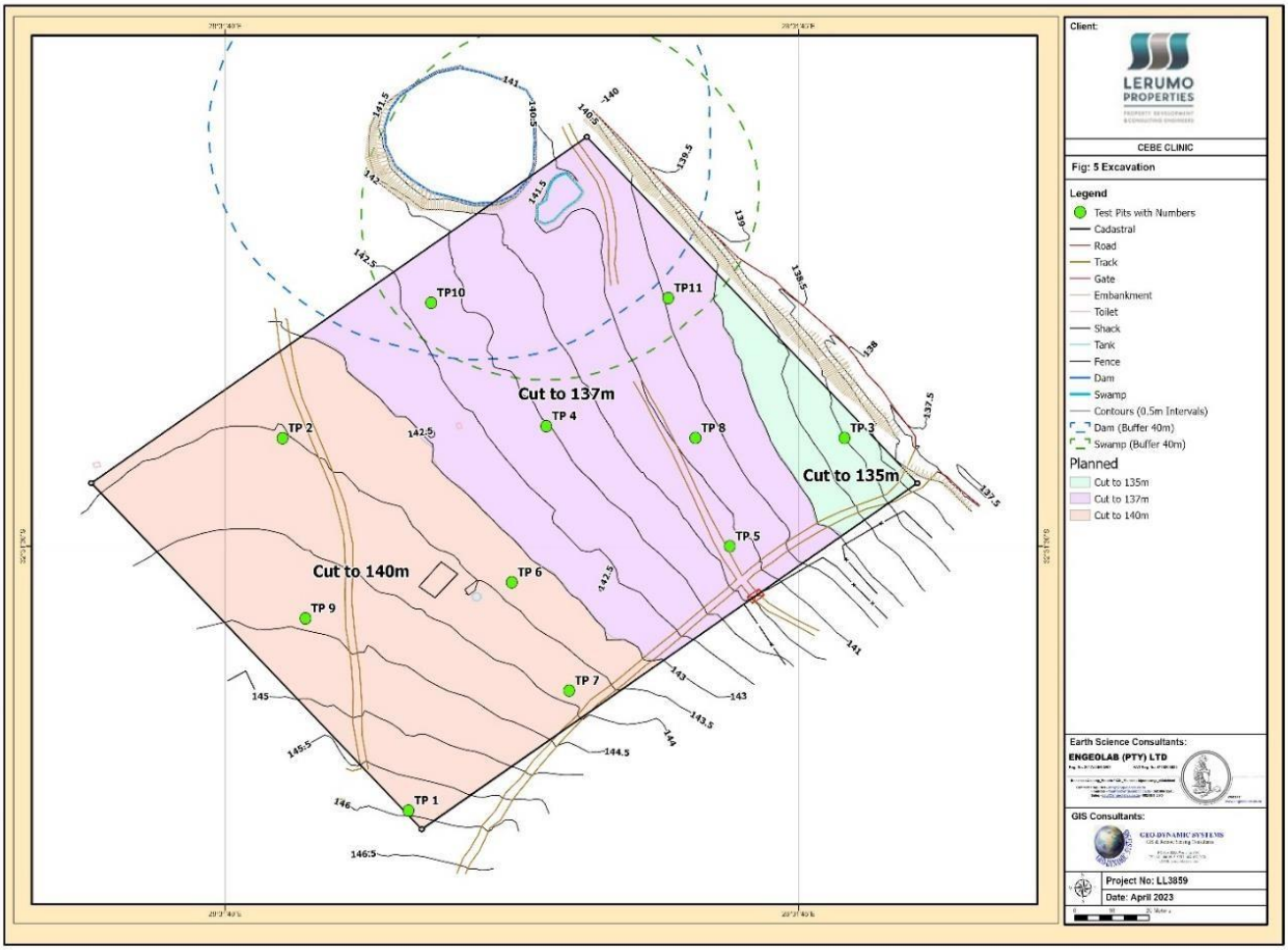
9.5 Settlement and Bearing Capacity

The recorded collapse potential is 4%, implying that, in accordance with the Guiding Values of Collapse Potential (after Jennings & Knight, 1975 – Ref. 4), the severity of the collapse problem reflects foundation soils with 'moderate trouble'.

The estimated collapse settlement for strip footings on these clayey subsoils is some 3mm. However, the low bearing capacity of 90KPa reflected by the DPSH penetration data and the low shear strength that was obtained from the DMT data in the top 3m of low active, soft excavatible soils that cover the bedrock, indicate that these soils are unsuitable as a founding medium. It is recommended that the 'problem' soils be removed below the footprint of the proposed clinic as well as the loose standing structures and be cut to spoil in any of the three different levels as indicated by Figure 5 below.

An alternative construction type comprising deep strip foundations founding on competent mudstone, some 1.5 - 2m below natural ground level can be considered. Note that competent mudstone has an estimated bearing capacity of 750KPa with negligible settlement.

Figure 5: Excavation



10. CONCLUSIONS and RECOMMENDATIONS

It is therefore recommended that: -

i) two foundation options be considered and as follows: -

OPTION 1: Deep strip foundations or: -

OPTION 2: Removal of in situ material below the footprint of the clinic and loose standing buildings.

Both options require strip foundations to found on competent mudstone below the problem horizon. Structures with deep strip foundations will also require suspended floors. Adequate drainage precautions are required for both options and concrete lined upslope interception drains should also be installed.

It is further recommended that the current layout of the clinic be reviewed and the axis of the structure be swung through 90° so that the clinic is positioned along an east-west axis, placed within a singular cut – that is the purple area (the middle cut to 137m) – indicated on Figure 5 on the previous page.

ii) good compaction control of any layer works is to be carried out to ensure that required densities are achieved;

iii) trenches/excavations/cuts need to be either shored or flattened to less than 60° from horizontal;

iv) material that had been cut-to-spoil may be re-used for the small earth embankment dam;
v) cognisance must be taken of the site soil's corrosive tendency;
vi) wearing course material for access roads and fills can be sourced from the local borrow pit but will require grid rolling to reduce the mudstone tabular blocks to workable sizes.

11. APPENDICES

Appendix A: Test Pit Profiles
Appendix B: Lab Test Results
Appendix C: DPSH Results Appendix
D: DMT Data

12. REFERENCES BIBLIOGRAPHY

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REF 2: TRH 14:1985. GUIDELINES FOR ROAD CONSTRUCTION MATERIALS. Committee for State Road Authorities. Published by Department of Road Transport.

REF 3: BRINK, A.B.A., PARTRIDGE, T.C. & WILLIAMS, A.A.B., 1982. Soil Survey For Engineering, Chapter 4, pp102.

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PART 2

GEOHYDROLOGICAL INVESTIGATION

CEBE CLINIC – PHASE 1

Province of the
EASTERN CAPE
PUBLIC WORKS & INFRASTRUCTURE

LERUMO
PROPERTIES
PROPERTY DEVELOPMENT
& CONSULTING ENGINEERS

PROJECT: **LL3859**

DATE: MAY 2023

VERSION: **INTERIM REPORT – PHASE 1**

BY: **P.G. HANSMEYER** Pri.Sci.Nat.

ENGEOLAB (PTY) LTD

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9 May 2023

OUR REFERENCE: LL3859: PART 2: PHASE 1 **THE**

PROJECT MANAGER
LERUMO PROPERTIES
SUITE 15
NEDBANK HOUSE
DURBAN
4001

Attention: Mr. Kuhle Mthonjeni MSc. Eng.
RE: GEOLOGICAL REPORT: PHASE 1 – CEBE CLINIC PROPOSED GROUNDWATER DEVELOPMENT

Dear Sir,

The development of the groundwater resources on the above site forms Part 2 of the overall appointment. The appended documentation reflects the results of an aerial photographic interpretation as well as a geophysical survey both which form part of the groundwater assessment carried out on the site indicated on the Locality Plan, Figure 1 on the following page.

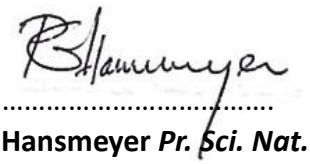
A borehole drill site was marked on the clinic's premises close to the future gate in the south-eastern corner of the terrain. The second step will be to drill the borehole sequentially followed by the pumptesting phase – that is Phase 2. The analyses of the water samples and the assessment of the water quality and reporting comprise the final phase.

The undersigned had procured a reliable drilling contractor that can complete the last two phases as well as the supply and installation of a water tank and pumps. However, the budget will have to be reviewed and approved.

The geohydrological potential of the site is low to medium and in the event of a dry or low yielding borehole, a second site will have to be identified. This will invariably be outside the clinic's premises and consent will have to be obtained from the community.

We trust that this meets with your requirements in this regard.

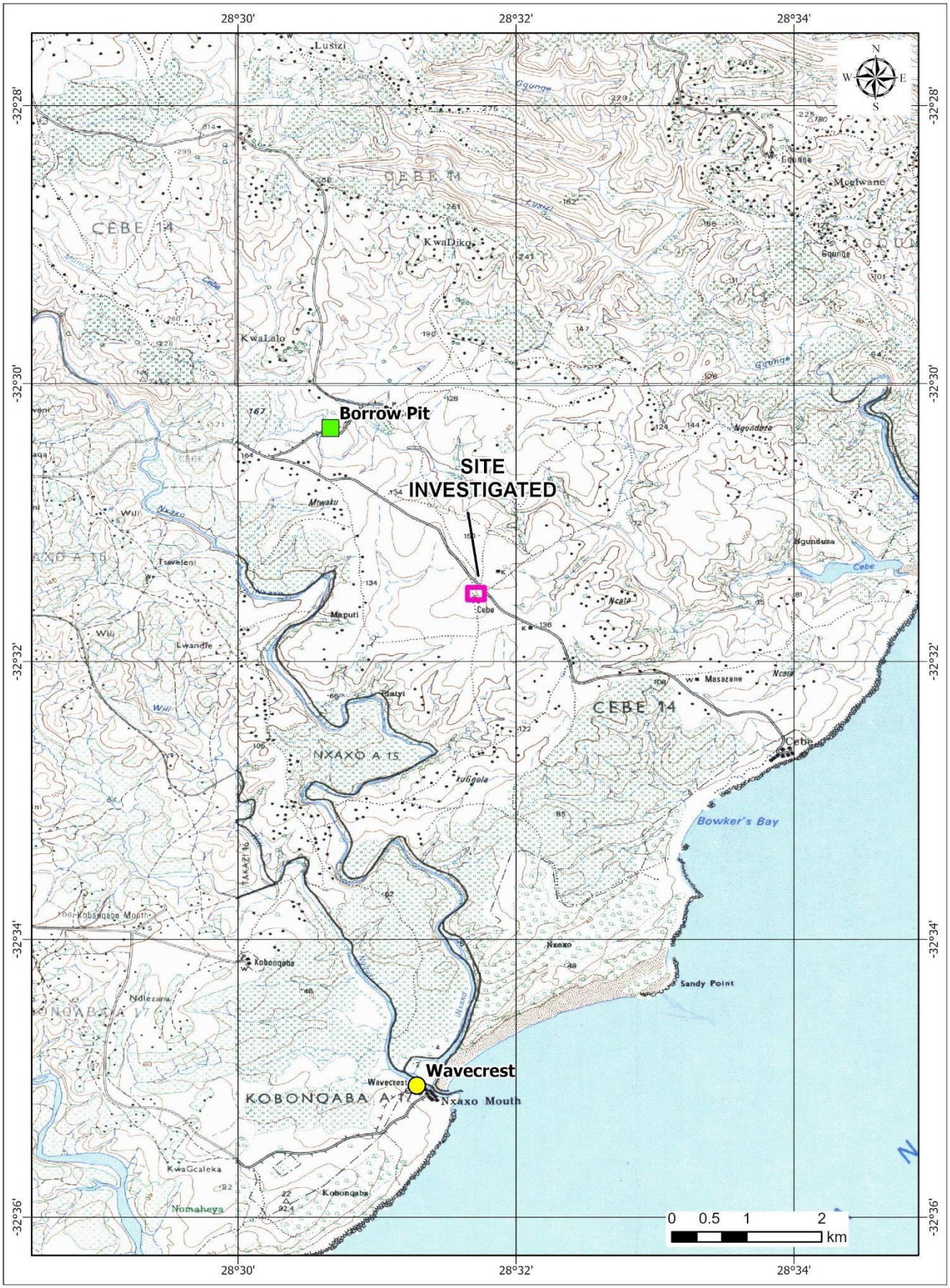
Yours Faithfully,



……. **P.G.**

Hansmeyer *Pr. Sci. Nat.*

Figure 1: Locality Plan



28°30'
28°32'
28°34'
-32°28'
-32°30'
-32°32'
-32°34'
-32°36'
Borrow Pit
SITE INVESTIGATED
Wavecrest
CEBE 14
NXAXO A 15
KOBONQABA A 17
Bowker's Bay
Sandy Point
Nxaxo Mouth
Cebe
Lusizi
KwaDiko
KwaLalo
Maputi
Lwandle
Tsweleni
Ngunduza
Masazane
Nxaxo
Kobonqaba
Ndlezana
KwaGcaleka
Nomaheya
0 0.5 1 2
km

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INTERIM REPORT – PHASE 1
GEOHYDROLOGICAL INVESTIGATION – CEBE CLINIC

1. Introduction

Cebe Clinic requires a sustainable water supply to operate sufficiently and as part of the overall appointment, Engeolab (Pty)Ltd was appointed to conduct a groundwater investigation and procure the services of a reliable drilling contractor. The groundwater investigation and development constitute Part 2 of the appointment by Lerumo Engineers with Part 1 comprising the geotechnical investigation of the site

The fieldwork was carried out on Monday, 3 April 2023, the field data was captured, analysed and the borehole position pegged the following day.

2. Site Location

The area of investigation is located some 45km due east of Butterworth and 5km from the coast – refer to the Locality Plan, Figure 1 in the beginning of the report. The site layout is presented by the Site Plan, Figure 2 below.

Figure 2: Site Plan

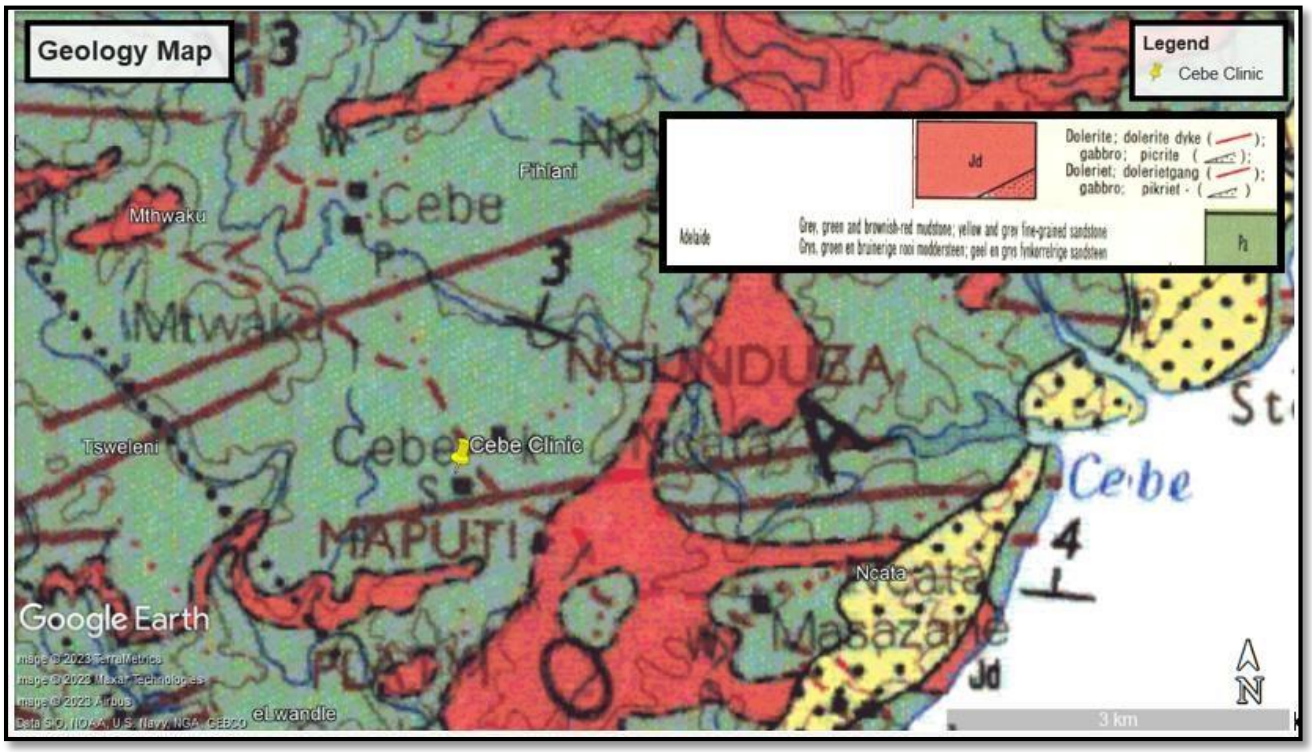
3. Geology

Information gleaned from the geological series 3228 Kei Mouth (scale 1:250,000) indicates that the site is underlain by sediments – that is mudstone and sandstone of the Adelaide Group – refer to the Regional Geology, Figure 3 below.

The bedrock dips about 4° to the north, emulating the topography. No outcrops were encountered and bedrock was only exposed in the gravel road's verges, deeper cuttings and in the rutted travelling lanes. Elsewhere, the sediments are exposed along the southern rim of the oval-shaped pan in the north-western corner of the site.

Several dolerite intrusions (red colouring on map) occur within close proximity of the site, but none were encountered on the site itself.

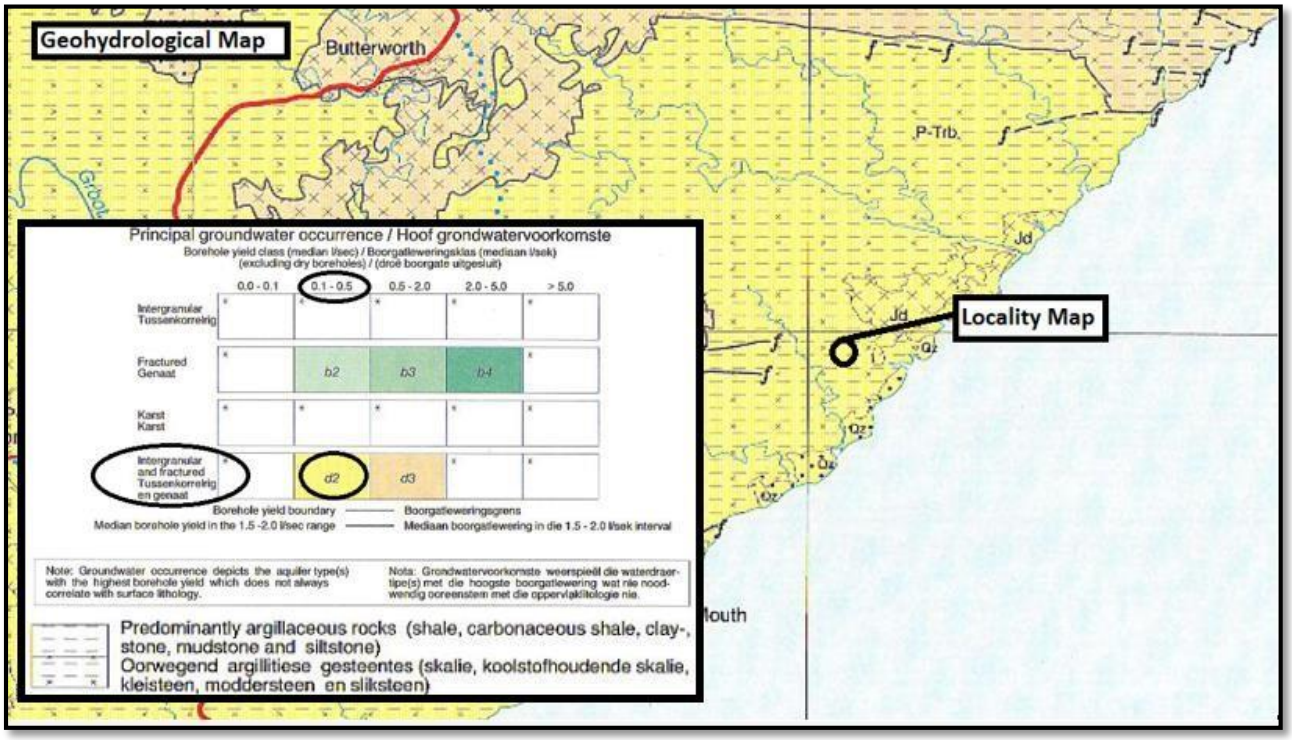
Figure 3: Geology Map



4. Hydrogeological Aspects - Aquifer Types

Based on the 3126 Queenstown Hydrological Series printed to a scale of 1:500,000, the principal groundwater occurrence is associated with an intergranular and fractured secondary aquifer with yields ranging from 0.1 – 0.5l/s – refer to Figure 4 on the following page.

Figure 4: Geohydrology Legend



5. Geophysical Survey Overview

Magnetic, electromagnetic and resistivity methods were employed to conduct two traverses on the site – refer to Figure 5, the Geophysical Map below. The field data is attached as Appendix A to the report.

Figure 5: Geophysical Map

Details of the site location and drill depth are summarized in Table 5-1 below. The borehole site was pegged using a wooden stake imbedded in a rock cairn. The site was also shown to the community members that were present on the site.

Table 5-1: Geophysical Investigation Results – Proposed Drilling Position

Name on Map	Traverse Number	Latitude	Longitude	Recommended Drilling Depth (m)	Drill Priority
Proposed Borehole Position	Traverse 1 @ 5m	S32°31'32"	E028°31'41.8"	180	1

6. Recommendations

- The recommended drill depth is 180m and some 30m of casing will be required to sleeve the top weathered section. However, should deeper adverse drilling conditions be encountered the casing may have to extend to borehole end-depth.
- The drilling should be carried out in accordance with the Development, Maintenance and Management of Groundwater Sources – SA Code of Practice, Ref. SANS 10299: Part 2, Drilling.
- Once completed, the borehole yield should be determined in accordance with the SA Code of Practice, Ref. SANS 10299: Part 4 – Test Pumping of Groundwater Boreholes.
- A water sample should also be taken and submitted for analyses to determine the water quality in terms of the chemical and bacteriological content.

7. Appendices

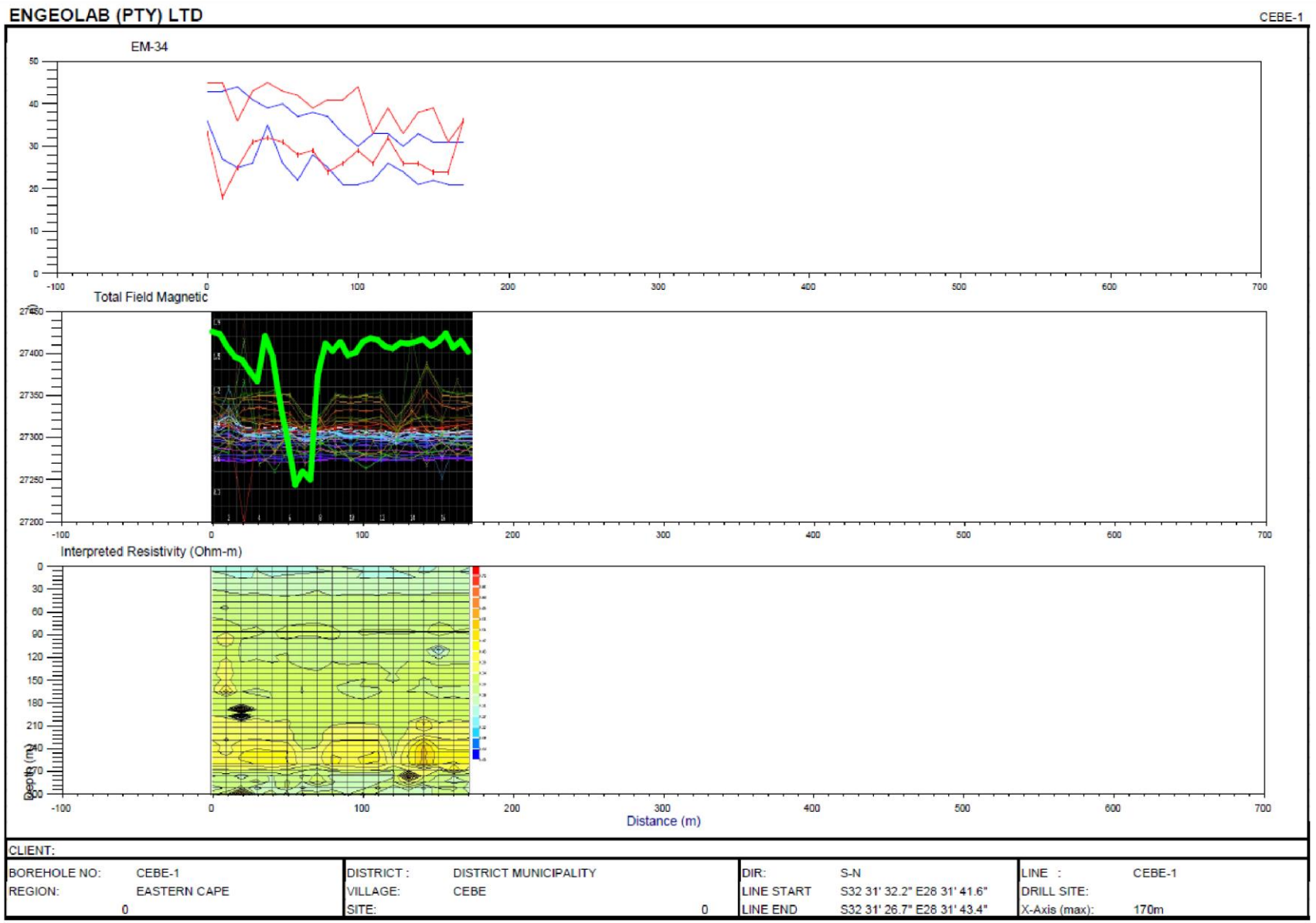
7.1 Appendix A – Geophysical Investigation Results

APPENDIX A

GEOPHYSICAL INVESTIGATION RESULTS

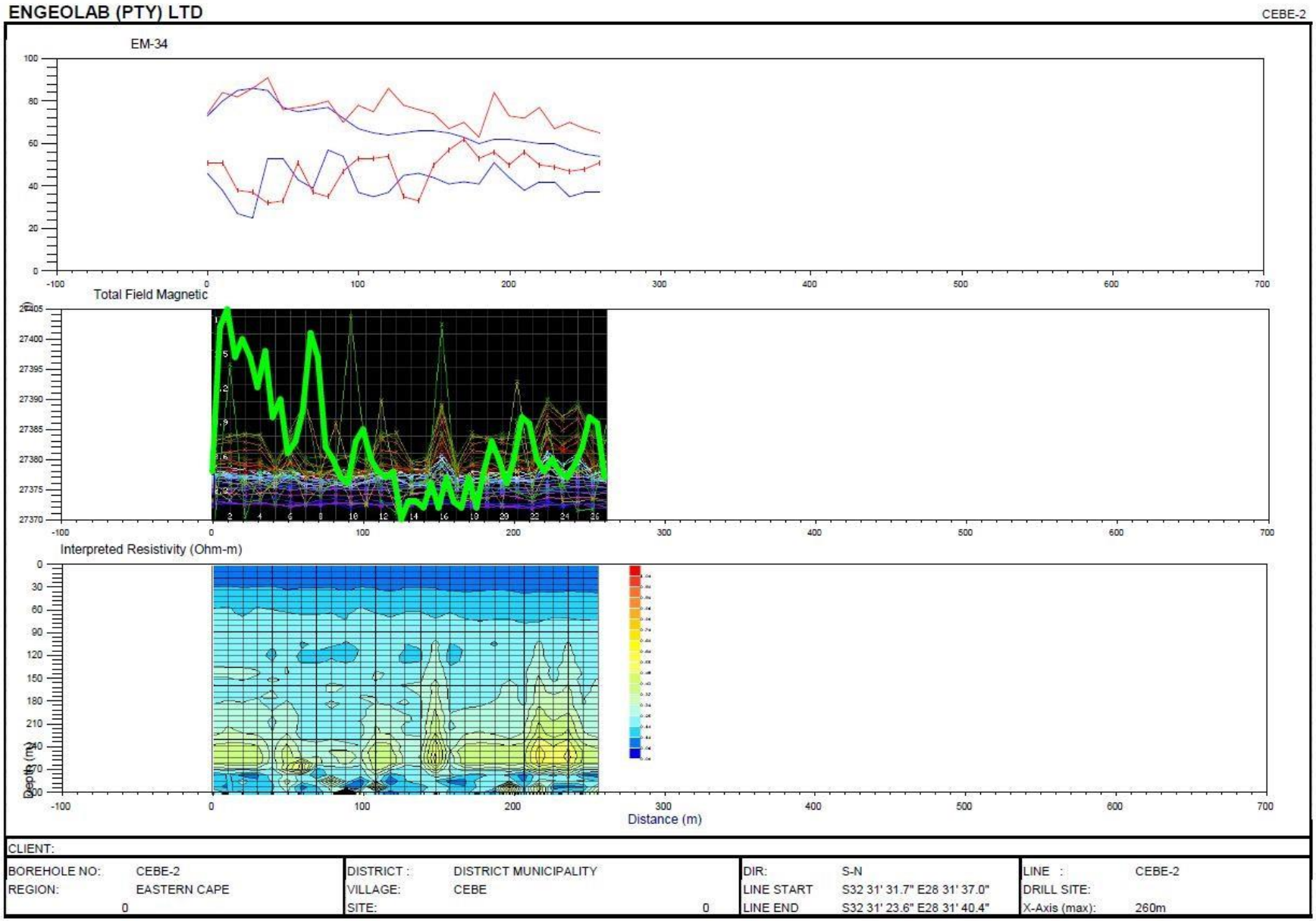
Geophysical Traverse Line _ Cebe

-1



-2

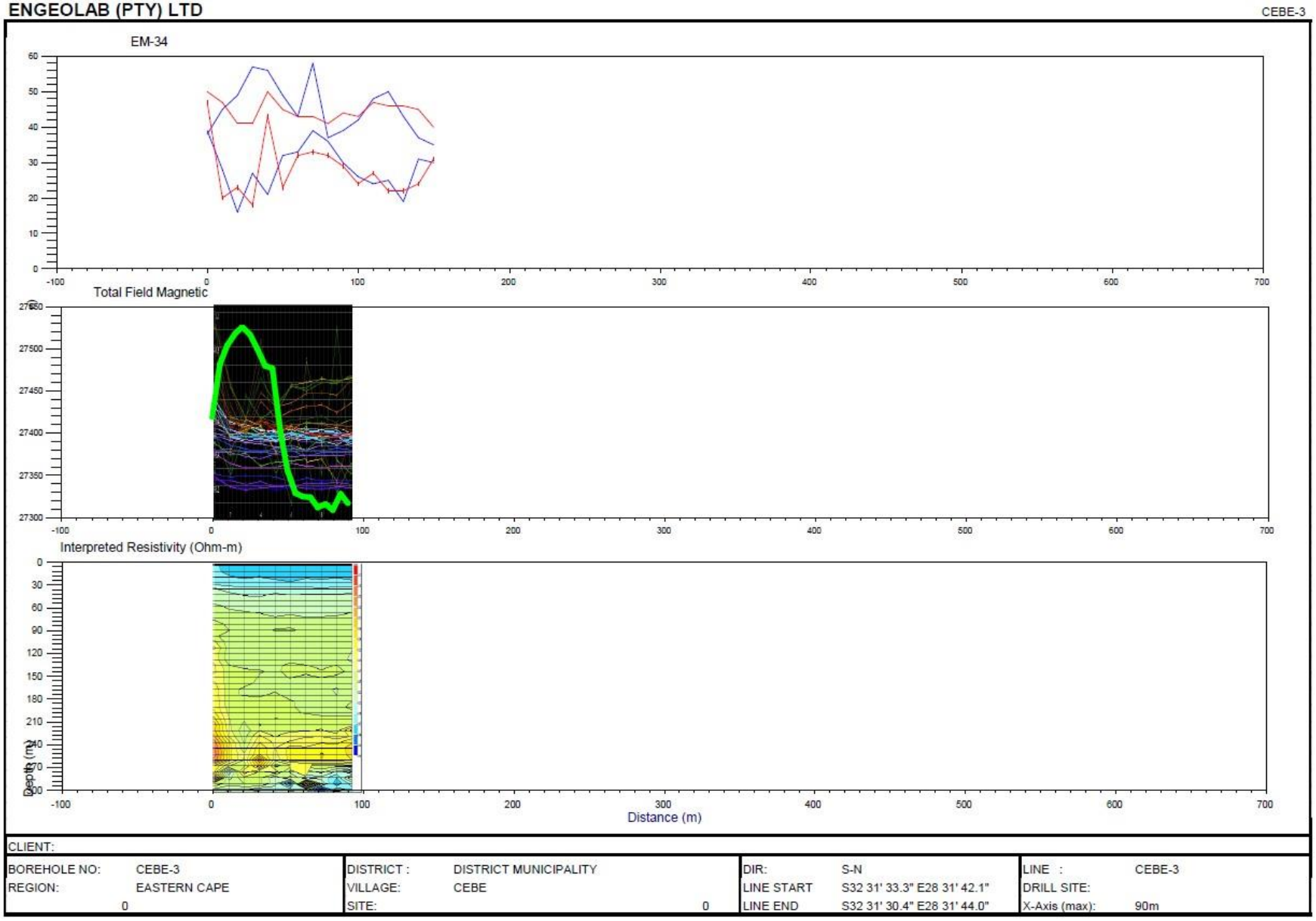
Geophysical Traverse Line _ Cebe



Geophysical Traverse Line _ Cebe

-3

Geophysical Traverse Line _ Cebe



Geophysical Traverse Line _ Cebe

ANNEXURE 6 – DRAWINGS