National Dept of Health in collaboration with Western Cape Dept Health and Institute of Health Programs and Systems

NEC3 CONTRACT: ECSC3
16B – Delivery & Maintenance of Infrastructure

Template Version 7.06 – October 2019

TENDER No : **IHPS-004-2025**

PROJECT TITLE : **Enabling Works for PSA Generator Plants**

TENDER CLOSING : **12:00 on 27 August 2025**

DEPARTMENT (EMPLOYER)		**DEPARTMENT'S REPRESENTATIVE (EMPLOYER'S AGENT)**	
DEPARTMENT OF HEALTH & WELLNESS, NATIONAL DEPARTMENT OF HEALTH, INSTITUTE OF HEALTH PROGRAMS & SYSTEMS		**Siyanda Khohli**	
PHYSICAL ADDRESS	**POSTAL ADDRESS**	**PHYSICAL ADDRESS**	**POSTAL ADDRESS**
C/o Mike Pienaar Blvd & Frans Conradie Drive BELVILLE 7530	Private Bag X21 PAROW 7499	C/o Mike Pienaar Blvd & Frans Conradie Drive BELVILLE 7530	Private Bag X21 PAROW 7499
Contact: Siyanda Khohli/Siphesihle Mthethwa Email: requisitions@ihps-sa.org		Contact: Siyanda Khohli	

NOTE:

All returnable documents as listed on page 10 in this document, including the Form of Offer C1.1 on page 38 must be completed in full and signed. The entire document, from page 1 through 80 must be submitted with your bid.

Name of Tenderer: ……..

Contact Number: ……

E-mail: ……

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Enabling Works for PSA Generator Plants

IMPORTANT NOTICE: Please DO NOT disassemble or dismember this document. DO NOT insert any attached pages to returnable schedules within the page sequence of the document. All additional pages must be attached AFTER the last page of the document and clearly marked to which returnable schedule they belong.

CONTENTS

This tender must be completed in **black ink** document contains “Returnable Documents and Schedules” which must be fully completed and signed, in terms of submitting a tender offer.

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Part T1: Tendering procedures

National Dept of Health in collaboration with Western Cape Dept Health and Institute of Health Programs and Systems

Enabling Works for PSA Generator Plants

T1.1 Tender notice and invitation to tender

The, WESTERN CAPE DEPARTMENT OF HEALTH & WELLNESS, NATIONAL DEPARTMENT OF HEALTH, & INSTITUTE OF HEALTH PROGRAMS & SYSTEMS (*Employer*), invites tenders for Tender No. **IHPS-004-2025: Enabling Works for PSA Generator Plants.**

It is estimated that tenderers should have a CIDB contractor grading designation of **4GB** or higher.
Preferences are allocated to tenderers for Broad-Based Black Economic Empowerment (B-BBEE) status level of contribution.

Queries relating to the **technical specification** of these documents may be addressed to:
Name : Siyanda Khohli
E-mail : requisitions@ihps-sa.org

Queries relating to the **procurement process** may be addressed to:
Siphesihle Mthethwa
E-mail : requisitions@ihps-sa.org

Telegraphic, telephonic, telex, facsimile, e-mail, copied and late tenders will not be accepted

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

A compulsory site/clarification meeting with representatives of the *Employer* will take place at:
Location: Karl Bremer Hospital (The Boiler House) Training Center
Date: 14 August 2025
Starting Time: 09:00

Supplier Database Registration

All Services Providers must be registered on:

a) Western Cape Supplier Evidence Bank (WCSEB)

b) Central Supplier Database

All perspective service provide are invited to register as a supplier on the Western Cape Supplier Evidence Bank. Enquiries regarding the registration process may be referred to the provincial treasury at Western Cape Supplier Helpdesk on (021) 8335361/ wcseb@westerncape.gov.za .

All prospective Service providers who are not registered on the CSD are requested to self-register via www.csd.gov.za .

Should assistance be required for registration on the WCSEB you may contact the help centre at 021 833 5361 or an email can be directed to wcseb@westerncape.gov.za .

All Service Providers who are currently registered on the western Cape Supplier Evidence Bank are also invited to update their status by contacting the Western Cape Supplier Helpdesk (021) 833 5361 / wcseb@westerncape.gov.za.

All Service Providers duly registered on the WCSEB are also requested to annually update their WCBD4, Declaration of interest as well as their B-BBEE Rating or Sworn Affidavit in their original formats to the address below (Copies, Faxed or emailed copies will not be accepted)

Provincial Treasury, Waterford Place, 2nd Floor, Century City, Cape Town, or

Private Bag X9165, Cape Town, 8000

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T1.2 Tender Data

The Conditions of Tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement as per Board Notice 136 of 2015 in Government Gazette 38960 of 10 July 2015 and the erratum notices issued thereafter (see www.cidb.org.za).

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this bid. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard Conditions of Tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

The additional Conditions of Tender are:

Clause Number	**Tender Data**
F.1	**General**
F.1.1	The *Employer* is WESTERN CAPE DEPARTMENT OF HEALTH & WELLNESS, NATIONAL DEPARTMENT OF HEALTH, & INSTITUTE OF HEALTH PROGRAMS & SYSTEMS.
F.1.2	Tender Documents The Tender Document (this document), issued by the *Employer* and comprising the following parts: **Part T: The Tender** **Part T1: Tendering Procedures** T1.1 Tender notice and invitation to tender T1.2 Tender Data **Part T2: Returnable Documents** T2.1 List of returnable documents T2.2 Returnable schedules **Part C: The Contract** **Part C1: Agreement and Contract Data** C1.1 Form of Offer and Acceptance C1.2 Contract Data Contract Data Part One: Data provided by the *Employer* Contract Data Part Two: Data provided by the *Contractor* **Part C2: Pricing Data** C2.1 Pricing assumptions & instructions C2.2 Pricing schedule **Part C3: Scope of Work** **Part C4: Site information** **Appendix: Drawings, schematics & annexures** This tender document contains the “Returnable Documents” which must be completed and signed, in terms of submitting a tender offer.
F.1.4	The *Employer’s* Agent is: Name: **Siyanda Khohli** Address: C/o Mike Pienaar Blvd & Frans Conradie Drive BELVILLE 7530

F.1.5.3 Parties to contract

Notwithstanding the fact that the document is issued under the auspices of the *Employer* , the contract will be between the successful tenderer and the WESTERN CAPE DEPARTMENT OF HEALTH & WELLNESS, NATIONAL DEPARTMENT OF HEALTH, AND THE INSTITUTE OF HEALTH PROGRAMS & SYSTEMS (IHPS)

F.2 Tenderer's obligations

F.2.1 Only those tenderers who are registered with the CIDB and who satisfy the grading requirement of a CIDB grading of a **4GB** or higher, as calculated in terms of the CIDB regulations, are eligible to have their tenders evaluated.

F.2.7 The arrangements for a compulsory site/clarification meeting are:
A compulsory site/clarification meeting with representatives of the *Employer* will take place at:

Location:	Karl Bremer Hospital (The Boiler House) Training Center
Date:	14 August 2025
Starting Time:	09:00

THE FOLLOWING CONDITIONS APPLY:

(a) Failure to attend the meeting will automatically disqualify the tenderer.
(b) After official start of the meeting by the chairperson, late arrivals will as a general rule not be allowed into the meeting. However, the chairperson may, at his sole discretion, delay the official start of the meeting or decide to allow late arrivals into the meeting if he deems this to be appropriate in terms of prevailing circumstances at the time (e.g. traffic congestion, ineffective venue directions, etc), and if deemed to be in the interest of the *Employer*.
(c) Tenderers must complete and sign the meeting attendance register. Failure to complete and sign the attendance register will disqualify the tenderer.
(d) Tenderers must complete and sign the clarification meeting certificate (returnable Schedule 8 on page 35 in this document, copies of which will be made available at the meeting to tenderers who are not in possession of a tender document). The clarification meeting certificate must be counter-signed by a designated representative of the *Employer* at the time of the meeting, who will be identified at the meeting. Failure to include a duly completed, signed and counter-signed clarification meeting certificate in the tender submission, will disqualify the tender.
(e) Addenda may be issued to all tenderers who attended the clarification meeting.
(f) Tenderers must be represented by a person who is suitably qualified and experienced to comprehend the implications of the work involved.

F.2.7.1 Written and verbal instructions given to tenderers at the clarification meeting and which are recorded in the *Employer's* minutes of the meeting, form part of the Conditions of Tender. Failure to comply with such instructions will disqualify the tender.

F.2.10.5 The rates and prices offered by the tenderer must be physically written into the pricing schedule of this tender document, completed in full and signed. Failure to do so will disqualify the tender. Printouts of electronic spreadsheets or any form of substitute for the returnable pages of the pricing schedule are not accepted for this tender.

F.2.11 **PLEASE NOTE: No alterations/corrections to inserted information in the document (including pricing) may be performed by erasing or using masking fluid ("Tipp-Ex" or similar) on any submitted page.**
Alterations/corrections to inserted information may only be performed as follows:
Strike a line through the incorrect information, write the corrected information as appropriate (under, above or next to the information to be corrected), and initial at every incidence of alteration/correction.

Tender submissions with alterations/corrections not in compliance with the requirements as described above, will be rejected.

F.2.12 No alternative tender offers will be considered.

F.2.13.2 **PLEASE NOTE: The complete tender document comprising pages 1 through 80 must be returned to the *Employer* when submitting a tender offer. If the pricing schedule or parts thereof are contained in the Appendix to this document, the duly completed pricing schedule or parts thereof must be returned with the tender document. Failure to do so will invalidate the tender.** Other drawings, schematics or annexures in the Appendix need NOT be returned with the tender offer, unless there are specific instructions for a specific item to be returned, or if the tenderer wishes to utilise any item for clarification purposes when submitting an alternative tender offer, when applicable.

F.2.13.4 The tender must be signed by a person duly authorized to do so. Tenders submitted by joint ventures of two or more firms must be accompanied by the document of formation of the joint venture, authenticated by a notary public or other official deputed to witness sworn statements, in which is defined precisely the conditions under which the joint venture will function, its period of duration, the persons authorised to represent and obligate it, the participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning.

F.2.13.6 A two-envelope procedure will not be followed.

F.2.14 The *Employer* requires tenderers to return a fully priced Price List with the tender submission. ALL ITEMS in the Price List must be priced, subject to the following:

a) Where pricing for any item is intentionally included in the rate or Price of another item, this must in every instance be clearly indicated so by the tenderer and cross-referenced to the item in question in the Price List. **Tenders showing a pattern of unpriced items without due reference to where the omitted Prices are included in other items in the Price List, will be disqualified.**
b) **Summarising parts or sections of the Price List into single lump sums or rates without providing the breakdown of pricing of items as per the Price List, is not acceptable and will disqualify the tender**.
c) Where an item is encountered against which no Price or rate is entered and it can be reasonably attributed to error on the part of the tenderer, that item will be treated as covered by other Prices or rates in the Price List.

F.2.15 The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender. Telephonic, telegraphic, telex, facsimile, copied or e-mailed tender offers will not be accepted.

F.2.16 The tender offer validity period is **90 days**. The *Employer* reserves the right to extend the validity period for any additional period if deemed in the interest of the *Employer*.

F.3 The *Employer's* undertakings

F.3.8 Test for responsiveness: Tenders will be considered non-responsive if:

- the tender is not in compliance with specifications;
- the tenderer has not fully completed and signed where required, all the returnable documents as listed in Part T2 of this tender document;
- the tenderer has failed to clarify or submit any supporting documentation within seven days of being requested to do so in writing.

F.3.9.2 Arithmetical errors and discrepancies

- If pricing for the tender is a lump sum offer without a breakdown of rates and prices in a pricing schedule and there is a discrepancy between the amount in words and the amount in figures, the amount in words shall govern.
- If a pricing schedule in the form of a bill of quantities, a price list, activity schedule or other format applies, the employer shall check all substantively responsive tenders for errors and discrepancies in the pricing schedule and offer form, and correct such errors and discrepancies in the following manner:
  - Where there is a discrepancy between the unit rate and the total price for any line item that is obtained by multiplying the unit rate and the quantity stated for that line item, the unit rate shall prevail and the total price for that line item shall be corrected, unless in the opinion of the *Employer* there is an obvious misplacement of the decimal point in the unit rate, in which case the total price for that line item shall prevail and the unit rate shall be corrected.
  - Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's summation of prices, the total of the prices tendered shall govern, and the tenderer will be asked to revise selected item prices (and their rates if a pricing schedule applies) to achieve the tendered total of the prices.
  - Where there is a discrepancy between the total of the prices in the pricing schedule and the total tender amount, or a discrepancy between the total amount in words and the total amount in figures, the amount corresponding to the correct total of the prices in the pricing schedule shall prevail and the others corrected.
- Tenderers shall be notified by the *Employer* of corrections made in accordance with F.3.9.2 and requested to accept the corrections. If the tenderer fails to accept the corrections so notified within a stated period after receipt of the *Employer's* request to do so, the tender will be rejected.

F.3.11 The procedure for the evaluation of responsive tenders is **Method 1 (Price and Preference)**

Price will be scored using the Formula $\mathbf{P_s = 80(1-((P_t - P_{min})/P_{min})}$ where:
1. P_s is the number of points scored for comparative price of tender under consideration;
2. P_{min} is the comparative price of the lowest acceptable tender offer;
3. P_t is the comparative price of tender offer under consideration.

Preference will be scored as follows:
Up to 20 tender evaluation points will be awarded to tenderers who complete SBD 6.1 preference certificate schedule and who are found to be eligible for the preference claimed. The maximum attainable combined score for price and preference is 80+20=100 points.

All responsive tender offers are subject to a comprehensive risk assessment in terms of:
1. Financial viability and sustainability;
2. Evaluation and validation of the required information provided by the tenderer in inter alia returnable schedules.

The *Employer* reserves the right to request, in writing, additional information from tenderers to clarify their offer if deemed necessary for risk assessment purposes. Failure on the part of the tenderer to provide the additional information within seven days after receipt of such a request will disqualify the tender. Tender offers which present an unacceptable high risk to the *Employer* in terms of one or both of the risk assessment criteria above, will be rejected.

F.3.13.1 Tender offers will only be considered if:
1. the tenderer is registered on the Western Cape Supplier Evidence Bank (WCSEB) and his registration is not suspended by close of tender.
2. the tenderer must be registered on the Central Supplier Database (CSD) and must be tax compliant as verified through the CSD.
3. The tenderer is tax compliant on the SARS e-Filing system as at the closing date of the tender;
4. the tenderer is registered with the Construction Industry Development Board (CIDB) in the appropriate contractor grading designation (if applicable) stated in this Tender Data by close of tender;
5. the tenderer submits **this complete tender document from page 1 to page 80 inclusive, with all returnable schedules duly completed and priced as per the instructions pertaining to each schedule and section, and requirements stated in this Tender Data at the close of tender;**
6. the tenderer or any of its directors 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;
7. the tenderer has not:
   - abused the *Employer's* Supply Chain Management System, evidence of which can be clearly demonstrated by the *Employer*;
   - failed to complete any previous contract due to the tenderer's own fault for any organ of state within the last 2 years;
   - submitted more than one offer (including participation in joint venture arrangements with others), and
8. has completed the Compulsory Enterprise Questionnaire, Declaration of Interests (SBD 4) 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.

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Part T2: Returnable documents

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T2.1 List of returnable documents

IMPORTANT: The tenderer must complete all returnable schedules. Use the "Check" column to tick completion of each returnable schedule as a verification procedure to ensure all schedules are duly completed. **Failure to complete all returnable schedules will invalidate the tender.** Please see instructions for completion of returnable schedules under heading T2.2 following on the next page.

1. Returnable schedules required for tender evaluation and contracting purposes

Schedule No	Schedule Description & Location		Check
	Tender Schedules:		
1	Tendering entity and authority of signatory	Page 13	☐
2	Compulsory Enterprise Questionnaire	Page 19	☐
3	SBD 6.1(a): Preference Certificate (80:20)	Page 22	☐
4	SBD4: Declaration of interest	Page 27	☐
5	Addenda / Notices issued to tenderers	Page 32	☐
6	Schedule of work experience	Page 33	☐
7	Clarification meeting certificate	Page 35	☐
	Contract Schedules:		
8	C1.1 Form of Offer and Acceptance	Page 38	☐
9	C1.2 Contract Data Part Two: Data provided by the *Contractor*	Page 45	☐
10	Pricing Summary	Page 49	☐
11	Price List	Page 50	☐
12	Works Information required from *Contractor*	Page 69	☐
13	Amendments by *Contractor*	Page 70	☐
14	*Contractor's* Equipment schedule	Page 72	☐
15	*Contractor's* schedule of subcontractors	Page 73	☐
16	*Contractor's* proposed work programme	Page 74	☐
17	*Contractor's* health & safety plan	Page 75	☐

2. Returnable Documents to be submitted with bid

Document	Check
• SBD 4, SBD 6.1, SBD 8 and SBD 9	☐
• Proof of registration as a contractor registered on the CIDB Register of Contractors, the minimum grading designation of which is specified in the Tender Data.	☐
• CSD Registration Report, not older than three months, including successful bank verification details.	☐
• Proof of registration as a supplier on the WCSEB.	☐
• Valid SARS Tax Compliance status pin. (If the status is not compliant at time and date of Tender Closing, the Tenderer will be disqualified)	☐

• A valid Letter of Good standing from the Department of Labour (Please note that the nature of business listed on the Letter must be related to construction work.).	☐
• Copy of the SAQCC Authorized Compressed Gases Practitioner Card of a practitioner who is within the employment of the Tendering company or the within the employment of the listed medical gas sub-contractor to the Tendering company, and who is registered in that company's name.	☐

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T2.2 Returnable schedules

Important information for completing returnable schedules

1. The returnable schedules list T2.1 shows all the returnable schedules which need to be completed and returned for tender evaluation and contracting purposes. This list includes both document-standard and project-specific schedules. List T2.1 should be used as a checklist by the tenderer to verify that all returnable schedules have been duly completed, to avoid the tender being rejected as non-responsive due to an incomplete submission.
2. Each returnable schedule is numbered, starting at Schedule 1 and following a consecutively incremented whole number sequence through the tender document to the final schedule number assigned, as per the returnable schedules list.
3. Although all returnable schedules are numbered and follow in numeric sequence, they are not all grouped together in a single location in this tender document. Returnable schedules are divided into 2 groups:
   i. Tender Schedules
   ii. Contract Schedules

   The first group of schedules (Tender Schedules) follow directly from here on forward in Part T2.2, with the remainder (Contract Schedules) following in various sub-sections of Part C of this tender document. Contract Schedules become part of the contract document after tender award. Schedules can be quickly located by their document page number given in the list of returnable schedules T2.1.
4. The tenderer must furnish all the information required for each returnable schedule with the indicated amount of detail to ensure compliancy of the tender with responsiveness criteria. Please note: If any returnable schedule or part thereof is not applicable to the tenderer, that schedule or part thereof must be clearly marked “Not Applicable” (N/A), and not simply left blank. Schedules left blank without any indication of response by the tenderer to the requested information in the schedule, will be taken as an omission of the requested information.
5. Some schedules may either require, or have as an option, additional pages of information to be appended by the tenderer when submitting the tender. In each case the exact number of additional pages must be indicated in the space provided on that schedule or indicated as NIL if no additional pages are appended. All appended pages must be clearly marked with the schedule number to which they belong.
6. All returnable schedules require the signature of the tenderer’s authorised signatory where indicated and the date. Unsigned schedules, unless they are clearly marked “Not Applicable” by the tenderer, will render your tender invalid.

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SCHEDULE 1: Tendering entity and authority of signatory

The purpose of this Schedule is to obtain the necessary information about the tendering entity, and to establish authority of the signatory to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender, as well as to sign any contract, and any and all documentation, resulting from the award of the tender to the tendering entity.

INSTRUCTIONS FOR COMPLETING SCHEDULE 1:

Tendering entities may be sole proprietors, partnerships, trusts, companies, close corporations or consortia / joint ventures. Schedule 1 must be completed as follows:

- If the tendering entity is a sole proprietor, trust, partnership, company or close corporation, complete both this page and Section 1 of this Schedule, and clearly mark Section 2 (both 2.1 and 2.2) as "Not Applicable".
- If the tendering entity is a consortium or joint venture, then complete both this page and Section 2 (both 2.1 and 2.2) of this Schedule and clearly mark Section 1 as "Not Applicable".
- The contact details below must be the officially designated contact addresses which will be used by the *Employer* for any and all communication in regard to this tender, and if the tender is awarded, also during the execution of the contract.

THE TENDERING ENTITY IS: (*Circle the applicable option)

*A Sole Proprietor / Partnership / Trust / Company / Close Corporation / Consortium / Joint Venture.

NAME OF THE TENDERING ENTITY:

……..
(Legally correct full name of the tendering entity)

CONTACT DETAILS:

Physical Address:……

……...

……

…… (Postal Code)

Telephone number: …….

Mobile number: …….

Email address: ……..

Schedule 1 continues with Section 1 on the next page.

Section 1: Resolution of board of *Trustees/Directors/Members/Partners

Notes:
1. *Delete which is not applicable.
2. IMPORTANT: This resolution must be signed by ALL the trustees/directors/members/partners of the tendering entity.
3. Should the number of trustees/directors/members/partners exceed the space available below, additional names and signatures must be supplied on a separate page.

RESOLUTION by the *Proprietor/Board of *Trustees/Directors/Members/Partners of:

……..
(Legally correct full name and registration number, if applicable, of the tendering entity)

Taken at …….. On ……
(Place) (Date)

	Name of Proprietor/Trustee/Director/Member/Partner	Capacity	Signature
1			
2			
3			
4			
5			
6			

(Append separate page if not enough space)

RESOLVED that:

1. The entity submits a bid to the Western Cape Department of Health & Wellness in respect of Tender No: **IHPS-004-2025: Enabling Works for PSA Generator Plants**

2. *Mr/Mrs/Ms: …….

in *his/her capacity as: ……
(Position in the entity)

and who will sign as follows:

AUTHORISED SIGNATURE OF TENDERER

be, and is hereby, authorised to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender, as well as to sign any contract, and any and all documentation, resulting from the award of the bid to the entity mentioned above.

Date:……..

Number of additional pages appended by the tenderer to this Schedule: .....(If nil, enter NIL).

Section 2.1: Resolution to enter into Consortium / Joint Venture

Notes:
1. *Delete which is not applicable
2. A separate copy of this Section 2.1 must be duly completed, signed and submitted for each consortium/joint venture partner.
3. IMPORTANT: This resolution must be signed by ALL the trustees/directors/members/partners of the entity entering into the consortium/joint venture.
4. Should the number of representatives exceed the space available below, additional names and signatures must be supplied on a separate page.

RESOLUTION by the *Proprietor/Board of *Trustees/Directors/Members/Partners of:

……..
(Legally correct full name and registration number, if applicable, of the entity)

Taken at …….. On ……
(Place) (Date)

	Name of Proprietor/Trustee/Director/Member/Partner	**Capacity**	**Signature**
1			
2			
3			
4			
5			
6			

(Append separate page if not enough space)

RESOLVED that:

1. The entity submits a bid, in consortium/joint venture with the following entities to the Western Cape Department of Health & Wellness in respect of Tender No **IHPS-004-2025: Enabling Works for PSA Generator Plants**

	Full legally correct name of entity	**Registration No** (if applicable)
1		
2		
3		
4		
5		
6		

(Append separate page if not enough space)

2. *Mr/Mrs/Ms: …….

in *his/her capacity as: ……
(Position in the entity)

and who will sign as follows:

AUTHORISED SIGNATURE

be, and is hereby authorised to sign a consortium/joint venture agreement with the parties listed under item 1 above, and any and all other documents and/or correspondence in connection with and relating to the consortium/joint venture, in respect of the tender described in item 1 above.

3. The entity accepts joint and several liability with the parties listed under item 1 above for the due fulfilment of the obligations of the consortium/joint venture deriving from, and in any way connected with, the contract to be entered into with the Department in respect of the tender under item 1 above.

4. The entity chooses as its domicilium citandi et executandi for all purposes arising from this consortium/joint venture agreement and the contract with the Department in respect of the tender under item 1 above, the physical address and contact details as furnished on the first page of this Schedule.

Date:……..

Number of additional pages appended by the tenderer to this Schedule: .....(If nil, enter NIL).

Section 2.2: Resolution to bid as Consortium / Joint Venture

Notes:
1. IMPORTANT. This resolution must be signed by ALL the representatives of the bidding consortium/joint venture.
2. Should the number of representatives exceed the space available below, additional names and signatures must be supplied on a separate page.
3. Enter the entity details and representative details in the same and corresponding numerical sequence into the respective tables below.

RESOLUTION of a meeting of the duly authorised representatives of the following legal entities who have entered into a consortium/joint venture to jointly tender for Tender No: **IHPS-004-2025: Enabling Works for PSA Generator Plants**

	Full legally correct name of entity	**Registration No** (if applicable)
1		
2		
3		
4		
5		
6		

(Append separate page if not enough space)

Held at …….... On……
(Place) (Date)

	Name of authorised representative	**Capacity**	**Signature**
1			
2			
3			
4			
5			
6			

(Append separate page if not enough space)

RESOLVED that:

A. The abovementioned entities submit a bid in consortium/ joint venture to the Department in respect of the tender mentioned above.

B. *Mr/Mrs/Ms: …….

in *his/her capacity as: ……
(Position in the bidding consortium/joint venture)

and who will sign as follows:

AUTHORISED SIGNATURE OF TENDERER

be, and is hereby, authorised to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender, as well as to sign any contract, and any and all documentation, resulting from the award of the tender to the entities in the consortium/joint venture mentioned above.

C. The entities constituting the consortium/joint venture, notwithstanding its composition, shall conduct all business under the name and style of:

……
(Consortium/joint venture name)

D. The entities to the consortium/joint venture accept joint and several liability with the parties above for the due fulfillment of the obligations of the consortium/joint venture deriving from, and in any way connected with, the contract to be entered into with the Department in respect of the tender mentioned above.

E. Any of the entities to the consortium/joint venture intending to terminate the consortium/joint venture agreement, for whatever reason, shall give the Department 30 days written notice of such intention. Notwithstanding such decision to terminate, the entities shall remain jointly and severally liable to the Department for the due fulfillment of the obligations of the consortium/joint venture as mentioned under item D above.

F. No entity to the consortium/joint venture shall, without the prior written consent of the other entities to the consortium and of the Department, cede any of its rights or assign any of its obligations under the consortium/joint venture agreement in relation to the contract with the Department referred to herein.

G. The entities choose as domicilium citandi et executandi of the consortium/joint venture for all purposes arising from the consortium/joint venture agreement and the contract with the Department in respect of the tender mentioned above, the physical address and contact details as furnished on the first page of this Schedule.

Date:……..

Number of additional pages appended by the tenderer to this Schedule: .....(If nil, enter NIL).

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Enabling Works for PSA Generator Plants

SCHEDULE 2: Compulsory Enterprise Questionnaire

Note: In the case of a consortium/joint venture, separate enterprise questionnaires as per this schedule in respect of each consortium/joint venture partner must be completed and submitted.

Section 1: **Name of enterprise:**……

Address of enterprise:……

……

……

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

Section 3.1: **CIDB registration number, if any:**

……

Section 3.2: **Western Cape Supplier Evidence Bank Registration Number:**

……
.

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 append separate page if more than 6 partners

Section 5: **Particulars of companies and close corporations**

Company registration number……

Close corporation number……

Tax reference number……

Section 6: Record of service of the state

Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:

- ☐ a member of any municipal council
- ☐ a member of any provincial legislature
- ☐ a member of the National Assembly or the National Council of Province
- ☐ a member of the board of directors of any municipal entity
- ☐ an official of any municipality or municipal entity
- ☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)
- ☐ a member of an accounting authority of any national or provincial public entity
- ☐ an employee of Parliament or a provincial legislature

If any of the above boxes are marked, disclose the following:

Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder	**Name of institution, public office, board or organ of state and position held**	**Status of service (tick appropriate column)**	
		current	**Within last 12 months**

Append separate page if not enough space

Section 7: Record of spouses, children and parents in the service of the state

Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months been in the service of any of the following:

- ☐ a member of any municipal council
- ☐ a member of any provincial legislature
- ☐ a member of the National Assembly or the National Council of Province
- ☐ a member of the board of directors of any municipal entity
- ☐ an official of any municipality or municipal entity
- ☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)
- ☐ a member of an accounting authority of any national or provincial public entity
- ☐ an employee of Parliament or a provincial legislature

Name of spouse, child or parent	**Name of institution, public office, board or organ of state and position held**	**Status of service (tick appropriate column)**	
		current	**Within last 12 months**

Append separate page if not enough space

The undersigned, who warrants that he/she is duly authorised 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;

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.

AUTHORISED SIGNATURE OF TENDERER

Signatory Name…….

Signatory Position/Capacity:……

Date:…….

Number of additional pages appended by the tenderer to this Schedule: .....(If nil, enter NIL).

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Enabling Works for PSA Generator Plants

SCHEDULE 3: SBD 6.1(a): PREFERENCE CERTIFICATE (80:20) PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

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

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

1. GENERAL CONDITIONS

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

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

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

The applicable preference point system for this tender is the 80/20 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 tender are allocated as follows:

	POINTS
PRICE	**80**
SPECIFIC GOALS	**20**
Total points for Price and SPECIFIC GOALS	**100**

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.

1.5 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 proposals, 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 Offer invitation, and includes all applicable taxes.

(d) **"tender for income-generating contracts"** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and

(e) **"The Act"** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 PREFERENCE POINT SYSTEMS

A maximum of 80 points is allocated for price on the following basis: **80/20**

$$\boldsymbol{Ps = 80\left(1 - \frac{Pt - P\,min}{P\,min}\right)}$$

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 whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of:

(a) an invitation for tender for income-generating contracts, of 80/20 preference points 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 either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system, then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

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

***(Note to organs of state: 80/20 preference point system is applicable, corresponding points must also be indicated as such. Note to tenderers: The tenderer must indicate how they claim points for each preference point system.*)**

DECLARATION WITH REGARD TO COMPANY/FIRM

The specific goals allocated points in terms of this tender	**Number of points allocated (80/20 system)**	**Number of points claimed (80/20 system) (To be completed by the Tenderer)**
Black Ownership: *Enterprise Owned by Black Persons i.e., Africans, Coloured, Indians, and Others as defined by the Constitution of South Africa* ▪ 51% or more Black owned enterprises ▪ 10%- 50% Black ownership ▪ Less than 10% Black Ownership	 8 4 0	
Women Ownership ▪ 51% or more Women Ownership ▪ 10%- 50% Women Ownership ▪ Less than 10% Women Ownership	 6 3 0	
Disability ▪ 51% or more Disability Ownership ▪ 50%- 10% Disability Ownership ▪ Less than 10% Disability Ownership	 2 1 0	
Locality ▪ Within Western Cape ▪ Outside Western Cape	 4 0	
Total	**20**	

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm…….

4.4. Company registration number: ……...

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

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

i) The information furnished is true and correct.

ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.

iii) In the event of a contract being awarded because of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct.

iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –

(a) disqualify the person from the tendering process.

(b) recover costs, losses, or damages it has incurred or suffered as a result of that person's conduct.

(c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation.

(d) recommend that the tenderer or contractor, its shareholders, and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and

(e) forward the matter for criminal prosecution, if deemed necessary.

AUTHORISED SIGNATURE OF TENDERER

Date: ……

WITNESSES (Signature & Name):

1. **……**
2. **……**

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Enabling Works for PSA Generator Plants

SCHEDULE 4: SBD 4: DECLARATION OF INTERESTS, BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES AND INDEPENDENT BID DETERMINATION

1. To give effect to the requirements of the Western Cape Procurement (Business Interest of Employees) Act No 8 of 2010, Practice Note 4 of 2006 Declaration of Bidders Past SCM Practices-(SDB8), Instruction note Enhancing Compliance Monitoring and Improving Transparency and Accountability in Supply Chain Management SBD 4 Declaration of Interest, Practice Note 2010 Prohibition of Restrictive practices SBD9, Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998 as amended together with its associated regulations,the Prevention and Combating of Corrupt Activities Act No 12 of 2004 and regulations pertaining to the tender defaulters register, Paragraph 16A9 of the National Treasury Regulations and/or any other applicable legislation.
2. All prospective bidders intending to do business with the Institution must be registered on the central procurement database on this prescribed form.
3. **Definitions**

"Bid" includes a price quotation, advertised competitive bid, limited bid or proposal

"Bid rigging (or collusive bidding)" occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors

''business interest'' means —
(a) a right or entitlement to share in profits, revenue or assets of an entity;
(b) a real or personal right in property;
(c) a right to remuneration or any other private gain or benefit, and includes any interest contemplated in paragraphs (a), (b) or (c) acquired through an intermediary and any potential interest in terms of any of those paragraphs;

"Consortium or Joint Venture" means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract;

''employee'' means a person employed by the Institution, whether permanently or temporarily, including —
(a) an employee as contemplated in section 8 of the Public Service Act;
(b) a person appointed in terms of section 12A of the Public Service Act;
(c) a person transferred or seconded to the Institution or a provincial public entity in terms of section 15 of the Public Service Act; and
(d) an educator as defined in the Employment of Educators Act, 1998 (Act 76 of 1998), and includes a member of the board or other controlling body of a provincial public entity;

''entity'' means any —
(a) association of persons, whether or not incorporated or registered in terms of any law, including a company, corporation, trust, partnership, close corporation, joint venture or consortium; or
(b) sole proprietorship;

''entity conducting business with the Institution'' means an entity that contracts or applies or tenders for the sale, lease or supply of goods or services to the Province

"Family member" means a person's —
(a) spouse; or
(b) child, parent, brother or sister, whether such a relationship results from birth, marriage or adoption;

''intermediary'' means a person through whom an interest is acquired, and includes—
(a) a person to whom is granted or from whom is received a general power of attorney; and
(b) a representative or agent;

"**Institution**" means —
Western Cape Government

"Provincial Government Western Cape (PGWC)" means
(a) the Institution of the Western Cape, and
(b) a provincial public entity;

"RWOPS" means — Remunerative Work Outside the Public Service

''spouse'' means a person's —
(a) partner in marriage;
(b) partner in a customary union according to indigenous law; or
(c) partner in a relationship in which the parties live together in a manner resembling a marital partnership or customary union;

4. Any legal person, including persons employed by the Institution, or their family members, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the PG, or to their family member, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where the bidder is employed by the Institution; and/or
5. The bid of any bidder may be disregarded if that bidder or any of its directors have abused the institution's supply chain management system; committed fraud or any other improper conduct in relation to such system; or failed to perform on any previous contract.
6. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging). Collusive bidding is a *per se* prohibition meaning that it cannot be justified under any grounds.
7. Communication between partners in a joint venture or consortium will not be construed as collusive bidding.
8. 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.

SECTION A: DETAILS OF THE ENTITY

A1.	*Name of the Entity*	
A2.	*Entity registration Number (where applicable)*	
A3.	*Entity Type*	
A4.	*Tax Reference Number*	

A5. *Full details of directors, shareholder, member, partner, trustee, sole proprietor or any persons with a right or entitlement to share in profits, revenue or assets of an entity, of the entity should be disclosed in the Table A below.*

TABLE A

FULL NAME	DESIGNATION *(Where a director is a shareholder, both should be confirmed.)*	IDENTITY NUMBER	PERSONAL TAX REFERENCE NO.	PERCENTAGE INTEREST IN THE ENTITY

(if not enough space, attach additional pages)

SECTION B: DECLARATION OF THE BIDDER'S INTEREST

To disclose relationships between the bidding entity and persons listed in Table A and any employees of the Institution; and to restrict business interest of Institution employees' according to section 2 (1) of the Western Cape Procurement (Business Interest of Employees) Act of 2010, bidding entity must give the following details. A Institution employee taking remunerative work outside public enterprise should first obtain necessary approval (RWOP), failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.

B1.	Are any persons listed in Table A employees of the Institution? ***(If yes, complete Table B and attached "RWOP")***	NO	YES
B2.	Are any employees of the entity also employees of the Institution? ***(If yes complete Table B and attached "RWOP")***	NO	YES
B3.	Are any family members of the persons listed in Table A employees of the Institution? ***(If yes complete Table B)***	NO	YES

TABLE B

Details of persons connected with the bidder who are employees of the Institution as defined should be disclosed in Table B below.

FULL NAME OF INSTITUTION EMPLOYEE	**IDENTITY NUMBER**	**PROVINCIAL DEPARTMENT/ ENTITY OF EMPLOYMENT**	**DESIGNATION / RELATIONSHIP TO BIDDER****	**INSTITUTION EMPLOYEE NO./PERSAL NO.**(*Indicate if not known*)	**PERCENTAGE INTEREST.**

(if not enough space, attach additional pages)

SECTION C: PERFORMANCE MANAGEMENT AND BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

To enable the prospective bidder to provide evidence of past and current performance with the Institution.

C1.	Did the entity conduct business with the Institution in the last twelve months? ***(If yes complete Table C)***	NO	YES

C2.
TABLE C

Complete the below table to the maximum of the last 5 contracts.

NAME OF CONTRACTOR	PROVINCIAL DEPARTMENT OR PROVINCIAL ENTITY	TYPE OF SERVICES OR COMMODITY	CONTRACT / ORDER NUMBER	PERIOD OF CONTRACT	VALUE OF CONTRACT

(if not enough space, attach additional pages)

C3.	Is the entity or its principals listed on the National Database as companies or persons prohibited from doing business with the public sector?	NO	YES
C4.	Is the entity or its principals listed on the National Treasury Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No. 12 of 2004)? *(To access this Register enter the National Treasury's website, www.treasury.gov.za, click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number (012) 3265445.)*	NO	YES
C5.	If yes to C3 or C4, were you informed in writing about the listing on the database of restricted suppliers or Register for Tender Defaulters by National Treasury?	NO	YES
C6.	Was the entity or persons listed in Table A convicted for fraud or corruption during the past five years in a court of law (including a court outside the Republic of South Africa)?	NO	YES

SECTION D: DULY AUTHORISED REPRESENTATIVE TO DEPOSE TO AFFIDAVIT
The form should be signed by a duly authorised representative of the entity before a commissioner of oaths.

I, ... hereby swear/affirm;

i. that the information disclosed above is true and accurate;
ii. that I understand the content of the document;
iii. the entity undertakes to independently arrive at any offer at any time to the Institution without any consultation, communication, agreement or arrangement with any competitor. In addition, that there will be no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to the Institution.
iv. that the entity or its representative are aware of and undertakes not to disclose the terms of any bid, formal or informal, directly or indirectly, to any competitor, prior to the awarding of the contract.

DULY AUTHORISED REPRESENTATIVE'S SIGNATURE

I certify that before administering the oath/affirmation I asked the deponent the following questions and wrote down his/her answers in his/her presence:

1.1 Do you know and understand the contents of the declaration?
ANSWER: ……

1.2 Do you have any objection to taking the prescribed oath?
ANSWER: ……..

1.3 Do you consider the prescribed oath to be binding on your conscience?
ANSWER: …….

1.4 Do you want to make an affirmation?
ANSWER: …….

2. I certify that the deponent has acknowledged that he/she knows and understands the contents of this declaration, which was sworn to/affirmed before me and the deponent's signature/thumbprint/mark was place thereon in my presence.

……
SIGNATURE **FULL NAMES**

Commissioner of Oaths

Designation (rank) ……ex officio: Republic of South Africa

Date: ……Place ……

Business Address: …….

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SCHEDULE 5: Addenda / Notice(s) issued to tenderers

We confirm that the following communications / addenda / notice(s) to tenderers received from the *Employer* before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer (If no addenda/notices mark schedule NIL, if not enough space, attach additional pages):

ADDENDUM No	DATE	SUBJECT MATTER OF ADDENDUM / NOTICE

Documentary evidence of addenda / notices issued to tenderers indicating proof of receipt must accompany this Schedule.

AUTHORISED SIGNATURE OF TENDERER

Date:…….

Number of additional pages appended by the tenderer to this Schedule: .....(If nil, enter NIL)

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SCHEDULE 7: Schedule of work experience

The tenderer must provide in the spaces provided below a list of the last five completed contracts of a similar nature as this tender which were awarded to him, as well as those currently being undertaken. This information is subject to verification and tenderers must note that the adequacy of the contractor's work experience will be material in the *Employer's* risk assessment for awarding this contract.

COMPLETED CONTRACTS			
EMPLOYER (NAME, TEL No and FAX No)	NATURE OF WORK	VALUE (R)	DATE COMPLETED

(Append separate page if not enough space)

CURRENT CONTRACTS			
EMPLOYER (NAME, TEL No and FAX No)	NATURE OF WORK	VALUE (R)	ANTICIPATED COMPLETION DATE

(Append separate page if not enough space)

AUTHORISED SIGNATURE OF TENDERER

Date:…….

Number of additional pages appended by the tenderer to this Schedule: .....(If nil, enter NIL)

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SCHEDULE 8: Clarification meeting certificate

Note: This site/clarification meeting certificate must be taken along to the meeting, completed and signed by a duly authorised and knowledgeable representative of the tenderer, able to comprehend and interpret site conditions and information conveyed, thereby enabling the tenderer to put forward an informed bid, with full understanding of the factors likely to influence the work and cost thereof. This certificate MUST be countersigned by a representative of the *Employer* at the time of the meeting, failure of which will render the tender non-compliant and invalid. The attendance register at the site/clarification meeting must also be signed by the tenderer's representative.

This is to certify that I, ……
(Name)

representing: ……
(Tenderer)

attended the site clarification meeting on: ……
(Date)

held at: ……
(Place)

I am sufficiently knowledgeable and experienced to be able to understand all aspects of the tender and work to be undertaken as described in this tender document. I have made myself familiar, as far as is practically possible, with all local conditions, risks, contingencies and other circumstances likely to influence the execution of the work and the cost thereof. I further certify that I am satisfied with the description of the work and explanations given at the clarification meeting and that I understand fully the work to be done, as specified and implied, in the execution of this contract.

SIGNED ON BEHALF OF TENDERER

SIGNED ON BEHALF OF *Employer*

Name of *Employer's* Representative: Siyanda Khohli

Date: 14 August 2025

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Enabling Works for PSA Generator Plants

NEC3 CONTRACT: ECSC3
16B – Delivery & Maintenance of Infrastructure

A contract between the Western Cape Department of Health & Wellness, National Department of Health, & Institute of Health Programs & Systems

Name of *Contractor*: ……

The Contract

NOTE: The complete contract documentation comprises the following:

- **This document, from and including page 1 forward, up to and including the last page (page 80) in this document page count;**
- **All items included by reference or otherwise in this document;**
- **All addenda/notices issued by the *Employer* to tenderers prior to tender closing;**
- **All deviations included in the Schedule of Deviations on page 40 of this document;**
- **All additional pages appended by the tenderer to returnable Contract Schedules which are accepted by the *Employer*.**

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Part C1: Agreement and Contract Data

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C1.1 Form of Offer and Acceptance

SCHEDULE 9 : C1.1 Form of Offer and Acceptance

The *Contractor's* Offer

The *Employer*, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of: **Tender No: IHPS-004-2025 - Enabling Works for PSA Generator Plants.**

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 authorised, signing this Offer, the tenderer offers to perform all of the obligations and liabilities of the *Contractor* under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the *conditions of contract* identified in the Contract Data.

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

…….

…….Rand (in words);

R…… (in figures).

This offer may be accepted by the *Employer* by signing the *Employer's* 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.

For the tenderer:

	Tenderer MUST complete the following:
AUTHORISED SIGNATURE OF TENDERER	CIDB Reg No…….....
	CSD Reg No…….....
	WCSEB Reg No…….....
	B-BBEE Status Level…….

Name of Organisation: ……..

Name and Capacity of signatory: ……..

Address of organisation: …….

……

Name and signature of witness: ……...

……

Date: ……

The *Employer's* Acceptance

By signing this 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: Agreement and Contract Data, (which includes this agreement)
Part C2: Pricing data
Part C3: Scope of work.
Part C4: Site information

and drawings, schedules and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto as listed in the tender schedules as well as any changes to the terms of the offer agreed by the tenderer and the *Employer* during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

The tenderer shall arrange for the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of this contract. Failure to fulfil any of these obligations in accordance with the terms stipulated, shall constitute a repudiation of this Agreement.

This Agreement comes into effect on the *starting date* as stated in the Contract Data.

For the *Employer:* **National Dept of Health in collaboration with Western Cape Dept Health and Institute of Health Programs and Systems**
C/o Mike Pienaar Blvd
& Frans Conradie Drive
BELVILLE
7530

SIGNATURE OF *Employer*

Name: ……...

Capacity: ……..

Name and signature of witness: ……...

……

Date: …….

Schedule of Deviations

(Append separate page if not enough space)

1 Subject: ……

Details: ……

……

……

2 Subject: ……

Details: ……

……

……

3 Subject: ……

Details: ……

……

……

4 Subject: ……

Details: ……

……

……

5 Subject: ……

Details: ……

……

……

6 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 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.

For the Tenderer:

AUTHORISED SIGNATURE OF TENDERER

Name: ……...

Capacity: ……..

Name and address of organisation: …….

……

Name and signature of witness: ……...

……

Date: …….

For the *Employer:* **National Dept of Health in collaboration with Western Cape Dept Health and Institute of Health Programs and Systems**
C/o Mike Pienaar Blvd
& Frans Conradie Drive
BELVILLE
7530

SIGNATURE OF *Employer*

Name: ……...

Capacity: ……..

Name and signature of witness: ……...

……

Date: …….

Number of additional pages appended by the tenderer to this schedule: .....(If nil, enter NIL).

National Dept of Health in collaboration with Western Cape Dept Health and Institute of Health Programs and Systems Error! Reference source not found.

Enabling Works for PSA Generator Plants

Contract Data

C1.2 Contract Data Part One

Data provided by the *Employer*

1 General

- The *conditions of contract* are the core clauses and Z: Additional conditions of contract of the NEC3 Engineering and Construction Short Contract (June 2005), available from ECS Associates (Tel 011-803-3008, email admin@ecs.co.za), tenderers to obtain copies at their own cost.
- The *Employer* is (Clause 10.1)
  DEPARTMENT OF HEALTH & WELLNESS, NATIONAL DEPARTMENT OF HEALTH, INSTITUTE OF HEALTH PROGRAMS & SYSTEMS

  Address: C/o Mike Pienaar Blvd
  & Frans Conradie Drive
  BELVILLE
  7530
- The *completion date* is the date following **16 weeks after the *starting date***. (Clause 11.2(2)).
- The *site* is as described in the Site Information of this Contract Data (Clause 11.2(12)).
- The *works* are **Tender No: IHPS-004-2025 Enabling Works for PSA Generator Plants** (Clause 11.2(13)).
- The *period for reply* is **2 weeks** (Clause 13.2).
- The *Employer* gives access to the *site* **within 3 (three) weeks of the *starting date,* subject to receipt of all the required information and documents as stated in the letter of notification of appointment of the *Contractor* by the *Employer*.** A delay by the *Contractor* to provide the required information and documents to the satisfaction of the *Employer* within three weeks of the *starting date* will delay access and is not a compensation event (Clause 15.2).

3 Time

- The *starting date* is **the date of receipt of the letter of notification of appointment of the *Contractor* by the *Employer*** (in the case of email notification the date on which the email is sent by the *Employer*) (Clause 30.1).

4 Defects

- The *defects date* is **52 weeks** after Completion (Clause 40.1).
- The *defect correction period* is **2 weeks** (Clause 41.3).

5 Payment

- The *delay damages* are **R5000.00 per day** (Clause 50.5).
- The *assessment day* is the **last** day of each month (Clause 50.1).
- The *retention* is **5% (five percent) excluding VAT of the contract value**, attained by payment reduction of 10% (ten percent) of the value certified in payment certificates until the *retention* amount is reached (Clause 50.6).
- Delete the entire content of Clause 50.4 and replace with the following:
  The *Employer* certifies a payment within one week of receipt of the *Contractor's* application for payment.
  The *Employer* corrects any wrongly assessed amount due in the payment certificate (Clause 50.4).
- Delete the entire content of Clause 51.1 and replace with the following:
  The *Contractor* prepares a tax invoice for the exact amount certified. The *Contractor* submits the tax invoice together with the corresponding payment certificate to the *Employer* for payment. Incomplete and

incorrect payment submissions are returned within one week to the *Contractor* for correction. Payment is made within thirty days of receipt of a complete and correct *Contractor's* payment submission (Clause 51.1).

8 Indemnity, insurance and liability

- The Contractor is liable to the Employer for loss of or damage to the Employer's property up to a value of **200% of the Work Package value exclusive of VAT or a minimum of R1 000 000 cover exclusive of VAT, whichever is greater,** for any one event (Clause 80.1).
- The minimum amount of cover for the first insurance stated in the Insurance Table is up to a value of 200% of the Work Package value exclusive of VAT or a minimum of R1 000 000 cover exclusive of VAT, whichever is greater, for any one event (Clause 82.1) (Works insurance)
- The minimum amount of cover for the second insurance stated in the Insurance Table is the replacement cost of the contractor's equipment, plant and materials to be utilised for the project (Clause 82.1) (Contractor's all risk insurance)
- The minimum amount of cover for the third insurance stated in the Insurance Table is **R10 000 000 (ten million rand)** (Clause 82.1). (Public liability)
- The minimum amount of cover for the fourth insurance stated in the Insurance Table is **R10 000 000 (ten million rand)** (Clause 82.1). (Insurance for Contractor's employees)

9 Termination and dispute resolution

- The *Adjudicator* is the person selected by the Parties as follows: A Party may at any time notify the other Party of the names of two persons chosen from the panel of NEC *Adjudicators* set up by the Joint Civils Division of the Institution of Civil Engineers (ICE)(UK) and the South African Institution for Civil Engineering (SAICE) (see www.jointcivils.co.za) whose availability to act as the *Adjudicator*, has been confirmed by the notifying Party. The other party selects one of the two persons chosen to be the *Adjudicator* within the *period for reply* of receiving the notice, failing which the person chosen by the notifying Party will be the *Adjudicator*. The Parties appoint the *Adjudicator* under the NEC3 Adjudicator's Contract, June 2005. (Clause 93.1).
- The *Adjudicator nominating body* is The Chairman of the Joint Civils Division of the Institution of Civil Engineers (ICE)(UK) and the South African Institution for Civil Engineering (SAICE) (see www.jointcivils.co.za) (Clause 93.2(2)).
- The *tribunal* is **arbitration** (Clause 93.4).
- The *arbitration procedure* is **as set out in the Rules of the Arbitration Foundation of Southern Africa** (Clause 93.4).

Z: Additional conditions of contract

Z1 No clause

Z2 Identified and defined terms
The Contract Date is the date this contract came into existence.

Z3 Acts or omissions by mandataries
In terms of Section 37(2) of the Occupational health and Safety Act of 1993 (Act 85 of 1993), the *Contractor* hereby agrees that the *Employer* is relieved of any and all of its liabilities in terms of Section 37(1) of this Act in respect of any acts or omissions of the *Contractor* and his employees to the extent permitted by this Act, and that this contract comprises the written agreement between the *Employer* and the *Contractor* contemplated in section 37(2).

Z4 Maintenance of mandatory registrations
The *Contractor* ensures that his registrations with the Construction Industry Development Board (CIDB) and as a supplier on the Western Cape Supplier Evidence Bank (WCSEB) and the Central Supplier Database (CSD) are maintained until the Completion of the whole of the *works*.

Z5 Compliance with good labour practice
The *Contractor* is registered with, and provides a Certificate of Compliance issued by, the Building Industry Bargaining Council (BIBC) in terms of clause 6A of the Collective Agreement as published in the Government Gazette No 25769 dated 28 November 2003. The *Contractor* complies with all BIBC requirements in terms of registration and remuneration of employees in the Working Areas, and remains in good standing with the BIBC during the execution of the contract.

Z7 Price adjustment for inflation

Z7.1 Price adjustment factor

- All rates will be adjusted on the anniversary of the contract by applying Haylett Workgroup 180 as prepared by Statistics South Africa (www.statssa.gov.za).

Z7.2 Price adjustment
After each anniversary, amounts due includes an amount for price adjustment which is

- For the rates and lump sums in the Price List, the change in the rates and lump sums included in the Price for Work Done to Date since the last assessment of the amount due multiplied by the price adjustment factor calculated at the last anniversary before the assessment.

Z7.3 Compensation events
The Defined Cost for compensation events is assessed using the Defined Cost current at the time of assessing the compensation event.

Z7.4 Exemptions and constraints
Exemptions and constraints applicable to price adjustment for this contract are as stated in the Contract Data.

Z8 No Clause

Z9 No gifts/tokens/invitations from the *Contractor* to *Employer's* officials
Although there are formal prescripts and mechanisms in place to regulate and record the receipt of small tokens/gifts/invitations from contractors and service providers, officials of the *Employer* are actively discouraged from accepting any such gifts/tokens/invitations. In terms of this contract, the *Contractor* shall not offer any gift/token/invitation which carries any monetary benefit, irrespective of value, directly or indirectly, to any official in the *Employer's* service, before or after completion of this contract.

Z10 No clause

Z11 Non-working days and the December/January builders' break

Z11.1 Non-working days stated in the Contract Data are added to delays to the Completion Date assessed due to compensation events.

Z11.2 Inclusion or exclusion of the annual December/January builders' break in determining and influencing the Completion Date set at the Contract Date is as stated in the Contract Data, omission of which means INCLUSION by default.

If Completion is delayed until after the start of the builders' break, the full period of the builders' break is added in addition to delays to the Completion Date due to compensation events **only if**

- the annual builders' break was EXCLUDED when setting the Completion Date at the Contract Date, and
- the delay to Completion is not the *Contractor's* fault.

Contract Data for Z11:

- There are no non-working days when assessing delays to the Completion Date due to compensation events (Clause Z11.1).
- The full period of the annual builders' break of approximately 4 weeks in December/January during execution of this contract is **INCLUDED** in the Completion Date as set at the Contract Date and will NOT be added to any other delays due to compensation events (Clause Z11.2).

Z12 No Clause

Z13 The *Contractor* provides this additional insurance to the insurances listed in the Insurance Table: A Coupon Policy for Special Risks Insurance issued by the South African Special Risks Insurance Association (SASRIA).

Z14 No clause

Z15 No clause

Z16 Payment of subcontractors by the *Contractor*
The *Contractor* pays a subcontractor within one week for all subcontracted work which in terms of this contract has been certified and paid to the *Contractor*.

Z17 No Clause

Z18 No clause

Z19 Cost of preparation of quotations for compensation events
All costs associated with the preparation of quotations for compensation events for this contract are the *Contractor's* risk and are not reimbursable by the *Employer*.

Z20 *Contractor's* site attendance register
The *Contractor* keeps an attendance register detailing identity, sign-in and sign-out by all people entering the site or location where the *works* is provided, details of which are made available to the *Employer* upon request.

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Contract Data

C1.2 Contract Data Part Two

SCHEDULE 10: Data provided by the *Contractor* (the *Contractor's* offer)

1 General

- The *Contractor* is (Clause 10.1):

  Name: …….

  Address: …….

  ……..

  Telephone: ……

  Email Address: ……..

- The tendered total of the Prices is in **Part C1.1: Form of Offer and Acceptance** of this document (Clause 11.2(10)).
- The Price List is **in Part C2: Pricing Data of this document** (Clause11.2(10)).
- The percentage for overheads and profit added to the Defined Cost for people is……% (max 15% allowed)(Clause 11.2(5)).
- The percentage for overheads and profit added to other Defined Cost is ……% (max 15% allowed)(Clause 11.2(5)).

AUTHORISED SIGNATURE OF TENDERER

Date:……..

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Part C2: Pricing Data

National Dept of Health in collaboration with Western Cape Dept Health and Institute of Health Programs and Systems

Enabling Works for PSA Generator Plants

C2.1 Pricing assumptions & instructions

Pricing assumptions & instructions

1. GENERAL

1.1 It will be assumed that prices included in the pricing schedule 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).

1.2 The *Contractor* is paid for completed work i.e. work without Defects. This is a re-measurement contract and the Price List comprises only items measured in terms of the standard method of measurement using quantities and rates or stated as lump sums. Value related items are not used. Time related items are items measured using rates where the rate is a unit of time.

1.3 The method of measurement is according to the Sixth Edition of the Standard System of Measuring Builder's Work, amended 1999, published by the Association of South African Quantity Surveyors as well as the Model Preambles for Trades (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors, and, where applicable, the latest release of the Civil Engineering Standard Method of Measurement: South African Edition.

1.4 Use is made of method related charges for Equipment applied to Providing the Works based on durations shown in the Accepted Programme (if applicable), fixed charges for the use of Equipment that is required throughout the construction phase, time related charges for people working in a supervisory capacity for the period required, and lump sum charges for other facilities or services not directly related to performing work items typically included in other parts of the Price List.

1.5 The Price List needs to be read in conjunction with the drawings identified in the Works Information.

1.6 In the event of any ambiguity or inconsistency between the statements in the *method of measurement* and this section, the interpretation given in these pricing assumptions, the latter shall prevail.

1.7 The units of measurement described in the Price List are metric units abbreviated as follows:

Abbreviation	Unit
%	percent
h	hour
ha	hectare
kg	kilogram
kl	kilolitre
km	kilometre
km-pass	kilometre-pass
kPa	kilopascal
kW	kilowatt
l	litre
m	metre
mm	millimetre
m^2	square metre
m^2-pass	square metre pass
m^3	cubic metre
m^3-km	cubic metre-kilometre
MN	meganewton
MN.m	meganewton-metre

MPa	megapascal
No.	number
Prov sum	provisional sum
PC-sum	prime cost sum
R/only	Rate only
sum	Lump sum
t	ton (1000kg)
W/day	Work day

1.8 For the purpose of the Price List, the following words have the meanings hereby assigned to them:

Unit: The unit of measurement for each item of work as defined in the relevant Standards or Specifications stated in the Works Information of this document.

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

Rate: The agreed payment per unit of measurement.

Price: The product of the quantity and the agreed rate for an item, or an agreed amount for an item, the extent of which is described in the Price List but the quantity of work of which is not measured in any units.

1.9 Descriptions in the Price List are abbreviated and comply generally with those in the Standards or Specifications stated in Works Information of this document.

1.10 Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made in the quantities for waste.

1.11 The Prices and rates stated for each item in the Price List shall be treated as being fully inclusive of all work, risks, liabilities, obligations, overheads, profit and everything necessary as incurred or required by the *Contractor* in carrying out or providing that item.

1.12 An item against which no Price is entered will be treated as covered by other Prices or rates in the Price List.

1.13 All Prices in the Price List exclude VAT, while the total of Prices reflected in the *Contractor's* Offer includes VAT.

1.14 Where the Works Information requires detailed shop drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and Prices tendered for such items.

1.15 Those parts of the contract to be constructed using labour-intensive methods (if applicable) have been marked as such in the pricing schedule and Works Information. The *works*, or parts of the *works* so designated are to be constructed using labour-intensive methods only, and pricing for such items must make provision for this accordingly. The use of equipment to provide such works, other than Equipment specifically provided for in the Works Information, is not allowed and in contravention of the contract. The items designated as labour-intensive are not necessarily an exhaustive list of all the activities which must be done labour-intensively, and this instruction does not override any of the requirements in the general labour intensive specification in the Works Information.

1.16 In the event of any discrepancy between the total of the Prices in the Price Summary of the Price List and the amount carried forward to the *Contractor's* Offer, the amount in the *Contractor's* Offer prevails.

2. COMPENSATION EVENTS

2.1 Payment for items in the Price List which are associated with any budgetary allowances, provisional sums and prime costs are dealt with in the same manner as payment for compensation events, i.e. Defined Cost plus the percentage/s for overheads and profit as stated in the Contract Data.

3. THE TOTAL FINANCIAL OFFER FOR THIS TENDER

3.1 The financial offer of this tender is the total price reflected in the Pricing Summary of the Price List and, subsequently, in the *Contractor's* Offer.

4. MATERIAL CONFLICT WITH CONDITIONS OF CONTRACT

4.1 PLEASE NOTE: If anything in this Price List materially contradicts or is in conflict with any stipulation in the *conditions of contract*, the stipulation in the *conditions of contract* shall prevail.

National Dept of Health in collaboration with Western Cape Dept Health and Institute of Health Programs and Systems

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C2.2 Pricing schedule

SCHEDULE 11: Pricing Summary

TOTAL PRICE OFFER FOR THIS CONTRACT

The total price offer, EXCLUSIVE of VAT for all work specified in the Price List, is as follows:

Price carried from Pricing Schedule Section 1:	R……
Price carried from Pricing Schedule Section 2:	R……
Price carried from Pricing Schedule Section 3:	R……
Price carried from Pricing Schedule Section 4:	R……
Price carried from Pricing Schedule Section 5:	R……
Price carried from Pricing Schedule Section 6:	R……
Price carried from Pricing Schedule Section 7:	R……
Price carried from Pricing Schedule Section 8:	R……
Price carried from Pricing Schedule Section 9:	R……
Price carried from Pricing Schedule Section 10:	R……
Price carried from Pricing Schedule Section 11:	R……N/A……
Subtotal	R……
Add VAT at 15%	R……
TOTAL PRICE OFFER	R……

This total price offer is to be carried over to C1.1: Form of Offer and Acceptance on page 38 of this document.

AUTHORISED SIGNATURE OF TENDERER

Date:……

National Dept of Health in collaboration with Western Cape Dept Health and Institute of Health Programs and Systems

Enabling Works for PSA Generator Plants

C2.2 Pricing schedule

SCHEDULE 12: Price List

The Price List for this contract **is in Annexure 1 in the Appendix** to this document, and consists of the following sections:

- Section 1: (Builder's Works- Ceres Hospital)
- Section 2: (General)
- Section 3: (Builder's Works-Beaufort west Hospital)
- Section 4: (General)
- Section 5: (Builder's Works- Vredendal hospital)
- Section 6: (General)
- Section 7: (Builder's Works-Brooklyn Chest Hospital)
- Section 8: (General)
- Section 9: (Builder's Works- Wesfleur Hospital)
- Section 10: (General)
- Section 11: (Travelling rates)

IMPORTANT: Please note the following:

1. Ensure that the fully priced Annexure 1 is attached after the last page of this document and returned with your bid submission. Failure to do so will invalidate your tender.
2. Ensure that the pricing totals in Annexure 1 are carried as appropriate to the Pricing Summary on page 49 of this document, and the total of the Prices from there to the Form of Offer and Acceptance on page 38 of this document. Failure to do so will invalidate your tender.
3. Please check the Tender Data (clause F.2.10.5) for the requirements pertaining to submission of the priced document, and ensure that you comply with the stipulations thereof. Failure to comply will invalidate your tender.
4. All information given in the Works Information must be taken into account for pricing. Unrealistic pricing in terms of the envisaged work will render your tender high-risk, and therefore ineligible for award.
5. All items in Annexure 1 are to be priced EXCLUSIVE of VAT.
6. All items in the Annexure 1 must be priced. Non-priced items may render your bid invalid – please see the Tender Data (clause F.2.14) for details.

AUTHORISED SIGNATURE OF TENDERER

Date:…….

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Part C3: Scope of Work

National Dept of Health in collaboration with Western Cape Dept Health and Institute of Health Programs and Systems

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Works Information

Preamble to Works Information

NEC3 defined terms and terms identified in the Contract Data

The *works* are to be executed in accordance with the Works Information forming part of the NEC3 *conditions of contract* as described in the Contract Data of this document. The Works Information is meant to convey all relevant information required for the execution of the *works* clearly and unambiguously by following the formatting requirements of the *conditions of contract*, with due reference to defined terms and terms identified in the Contract Data.

Clause 11.1 of the *conditions of contract* stipulates that terms identified in the Contract Data are in italics, and defined terms have capital initials.

While every effort is made to ensure that the Works Information conforms in full to these formatting requirements, there will always be a possibility that some defined terms and terms identified in the Contract Data may not be formatted in the prescribed manner in the Works Information. This possibility increases when the Works Information is voluminous and comprises different parts compiled by different contributors and disciplines.

THEREFORE, PLEASE NOTE:
For the purposes of clarity and to remove any ambiguity in regard to defined terms and terms identified in the Contract Data, the following shall apply:

- All terms identified in the Contract Data which appear in the Works Information and which are not in italics, shall be read as if they are in italics, and
- all defined terms which appear in the Works Information and which do not have capital initials, shall be read as if they have capital initials.

Material conflict with *conditions of contract*

PLEASE NOTE: If anything in the Works Information materially contradicts or is in conflict with any stipulation in the *conditions of contract*, the stipulation in the *conditions of contract* shall prevail.

National Dept of Health in collaboration with Western Cape Dept Health and Institute of Health Programs and Systems

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Works Information

1. Description of the *works*

1.1 Overview

The contract is to create the necessary **building infrastructure** for Pressure Swing Adsorption Medical Oxygen Generators (PSA).

This specification outlines the requirements for the preparation and installation of PSA (Pressure Swing Adsorption) Oxygen Generators at various healthcare facilities. The scope shall include all requirements pertaining to Demolition & alterations, Earthworks, Waterproofing, External Works, Structural Steel, Roof Covering, Medical Gas (Oxygen) reticulation piping.

1.2 Location of the *works*

The PSAs will be installed at the following Hospitals:

- Beaufort West Hospital
- Brooklyn Chest Hospital
- Ceres Hospital
- Wesfleur Hospital
- Vredendal Hospital

National Dept of Health in collaboration with Western Cape Dept Health and Institute of Health Programs and Systems

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Works Information

2. List of drawings, schematics & annexures

The *works* are to be executed in accordance with the following design drawings, schematic representations and annexures which form part of this contract. The list below indicates which items are included in the Appendix to this document, and which are issued separately due to size or other considerations. It is the responsibility of tenderers to ensure they have obtained and considered all the listed items for preparing their bid, which is the assumption when tenders are evaluated.

Identification	Size	Description	Included in Appendix
Annexure 1	A4	Price List (Page 1-112)	Yes
Annexure 2	A4	Schematics (Page 1-1, Page 1-1, Page 1-1& Page 1-1)	Yes
Annexure 3	A4	OHS Specification (Page 1-50)	Yes

National Dept of Health in collaboration with Western Cape Dept Health and Institute of Health Programs and **Systems**Error! Reference source not found.

Enabling Works for PSA Generator Plants

Works Information

3. Specifications, standards and workmanship

The *works* are to be executed subject to these specifications, standards and workmanship requirements. Please note that compliance with all these specifications and standards, including requirements in terms of qualifications, accreditation (where applicable) and work experience of both the tendering entity and its key people will be material in the *Employer's* risk assessment for awarding this contract.

DETAILED SPECIFICATIONS

Measurements, Sizes & Scaling

Drawings supplied are to be assumed not to be to scale and is only supplied to identify the nature of work to be conducted.

While measurements in the BoQ have been attempted to be as accurate as possible the onus is still on the contractor to confirm if in doubt. Measurements of the existing fence and the bundle wall a guide only and need to be measured up by the contractor or his appointed fence specialist.

The BoQ only specifies units, areas in square and cubic metres and lengths in metres. Unless specific mention is made in the BoQ on a specific piece of material or method, all detailed specifications w r t materials & methods are contained in this specification. Pricing should therefore be done according to the quantities on the BoQ but in conjunction with the detailed technical description in this document and any supplied drawings, schematics or other documentation.

Interpretation of Specifications and Items in the Bill

The successful suppliers shall be deemed co-responsible for the correctness of the specifications and bill in terms of the following:

It will be reasonably assumed that having seen the facility and having read the bidding documents in full and by putting forth a tender, the framework suppliers is in agreement with the materials and methods described and shall wilfully and consciously forfeit any future claim with regards to possible different or miss-interpretation of the documents or given measurements.

Unless specifically mentioned, it shall be assumed that whenever a component is mentioned in the specification or bill of quantities, it automatically includes all items associated with it and with the type of installation ie elbows, tee's fasteners, sealants, joints etc.

Where a BOQ item does not include any part, work, material or component that is mentioned in the description of the item in the technical specification, the contractors shall price the item complete as described in the technical specification, even though specific mention is not made to the omitted item in the BOQ. No claim for additional costs shall be entertained where such item is not mentioned specifically in the BOQ but is indicated on the technical specification or drawings provided.

PROJECT SPECIFICATION

1. General

This specification outlines the requirements for the preparation and installation of PSA (Pressure Swing Adsorption) Oxygen Generators at various healthcare facilities, including Beaufort West Hospital, Vredendal Hospital, Ceres Hospital, Brooklyn Chest Hospital, and Wesfleur Hospital.

2.1 Demolitions and alterations

2.1.1 Handling of Asbestos containing materials

The Tenderer must provide costs for the appointment and delivery of services of a Registered and Licensed subcontractor to handle completely the demolition of Asbestos related products and safe carting and disposal of all Asbestos related products off site to a designated disposal area indicated by the Local Municipality and the Department of Water Affairs and Forestry.

For the removal of the existing Asbestos Cement Roof cover, the Contractor must strictly comply with the Occupational Health and Safety Legislation in terms of Section 20 of the Environmental Conservation Act, 1989 (Act 73 of 1989).

The section states that waste may only be disposed of on a site that is permitted by the Department of Water Affairs and Forestry.

Other applicable legislation includes the:

- Occupational Health and Safety Act (OHSA) (Act 85 of 1993)
- ASBESTOS ABATEMENT REGULATIONS 2020 as amended 2022
- Asbestos Regulations, 2001
- Mine and Safety Act (Act of 1996)
- National Environmental Management Act (Act107 of 1998)

In order to cost the handling of Asbestos containing material, please scrutinize the above legislation thoroughly.

2.1.2 Demolitions and Works on Site

All demolition work will be done at various premises, which are operational and therefore the Contractor has to allow for the protection of occupants, visitors, etc. as not to endanger their activities and to provide the necessary cautioning signage and hoarding to protect them.

All demolitions and works on site must be carried out carefully and in the safest possible manner and the Contractor is to make a thorough examination and take all necessary precautions before proceeding with work. The utmost care is to be observed to avoid structural or other damages in the remaining portions of the nearby existing buildings.

Special care is to be exercised not to interfere with any electrical, mechanical or gas installation and notice to be given to the Employer's Agent when any disconnections, removal of wires, etc. are necessary and the Contractor is to afford every facility to the workmen carrying out this work.

The Contractor shall not remove or interfere with any furniture, fittings or similar articles unless specially mentioned in the following items and shall provide adequate notice to the Employer's Agent prior to the removal of such articles from parts of the building which are to be altered, in order that the Contractor may commence work in such parts.

The Contractor will be held solely responsible for any damages to persons and property and for the safety of the structures and at the Contractor's expense must make good any damage that may occur**.**

2.1.3 Damage and repair services

Should the Contractor damage any services which are to remain in operation or any other services which have not yet been disconnected prior to removal, then the Contractor will be held solely responsible for such damage and any further resultant damage.

The Contractor shall at the Contractor's expense make all necessary arrangements for disconnection and repairs with all relevant Authorities and shall pay fees and charges levied and the Contractor shall immediately notify the Employer's Agent and the Authorities concerned of any such occurrences.

2.1.4 Disposal of Material

All existing materials specified to be "REMOVED", "DEMOLISHED and REMOVED", "HACKED UP", etc. becomes the property of the Contractor, unless otherwise specified. These materials and all debris, rubbish and earth must be left clean and unencumbered. The Contractor must make his own arrangements for dumping and shall pay fees and charges levied.

If any materials to be "REMOVED" are sound and considered suitable for any portion of the new work, they must be thoroughly cleaned off and stacked on site for inspection by the Employer's Agent. The approval of the Employer's Agent must be obtained before any such materials are re-used in the new work.

All existing material specified to be "TAKEN DOWN" and "SET ASIDE FOR RE-USE" or "TAKEN DOWN AND SET ASIDE" shall remain the property of the Employer and must be cleaned off, cleared of nails, etc. and neatly stacked and stocked and stored on site by the Contractor where directed and carefully handled during taking down, storage and re-fixing. The Contractor will be held responsible for the safety of these materials and must take all necessary precautions and any damage or loss that may occur must be made good at the Contractor's own expense.

2.1.5 Prices

Prices for demolitions shall include for the demolition and removal of the defected part of the structures, i.e. roof, walls, windows, doors, floors, ceilings, all installations, fittings, sanitary ware and plumbing, including excavations for and grubbing up and removing all foundations, drainage pipes, etc. and filling in, compacting and levelling.

2.1.6 Electrical Services

The Contractor shall comply with the specification issued by the Electrical/Mechanical Engineer. All services shall be deemed to be live and all necessary provisions shall be made.

2.1.7 Trees

No trees shall be removed or damaged, unless indicated in the following items or instructed by the Employer's Agent to be removed. The Contractor shall take adequate approved measures to protect all trees, not to be removed, in close proximity to the works and all other Contractor activities.

2.2 General

The Contractor shall conduct a survey of services, namely water supply, stormwater, sewage, gas, and electrical in the vicinity of all buildings and structures to be demolished and agree the exact method of dealing with these services with the Employer's Agent prior to commencing work.

The water supply to each structure shall be shut off at the nearest isolating point, should it exist, which serves that particular structure. Should such an isolating point not exist then one shall be provided by the Contractor in an agreed position, in close proximity to the demolished structure. A brick chamber shall be constructed around each new isolating point.

Water pipes and services that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the Employer's Agent.

The nearest manhole(s) to each line serving each demolished part of the building shall be identified and the incoming pipe(s) from that structure blanked off within that manhole.

The Contractor must water the works by jet or spray from a hose to sufficiently prevent nuisance from dust.

The Contractor will be required to take all dimensions affecting the existing buildings on site and will be held solely responsible for the accuracy of all dimensions.

The Contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He/she shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the Employer's Agent.

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

2.3 Material

Materials from alterations except where described to be re-used or handed over. Becomes the property of the Contractor. Materials that are not wanted by the Contractor nor the Employer must be regularly carted from the site and not allowed to accumulate on or around the site. Old/used materials are not to be used for new work except where specifically described as being set aside for reuse.

Where certain materials or articles from demolitions or alterations are described as to be handed over by the Contractor to the Employer's Agent, such materials or articles shall be properly stored by the Contractor until handing over thereof. The Contractor must obtain an official receipt listing the materials or articles and dates of handover. If the Contractor fails to submit the receipt when requested to do so, it shall be deemed that the materials or articles are still in his/her possession, and he/she will be held liable to the Employer for the full replacement value thereof which amount will be deducted from any monies due to the Contractor.

2.4 Concrete, Formwork and Reinforcement.

2.4.1 Concrete

Concrete, formwork and reinforcement to be in accordance with SANS 1200 G. Reinforcement to conform to SANS 920, reinforcement detailing to conform to SANS 10144, and bending dimensions to conform to SANS 282. Cement to comply with the requirements of SANS 50197-1. Use CEM I 42,5 or higher.

For exposed concrete, and concrete on or below ground, the total alkali content (ie. the product of the Na2O-equivalent of the cement and the cement content of the concrete) must be limited to a maximum of 2,1 kg/m3 of concrete, if such concrete is made with alkali-reactive aggregates.

a). Required minimum characteristic concrete strength at 28 days (unless noted otherwise):

- Unreinforced concrete (e.g. blinding & strip footings) ... 15 MPa/25 Agg.
- Bases and foundation beams (non-aggressive soil) …….. 25 MPa/25 Agg.

- Bases and foundation beams (Aggressive soil) …… 30 MPa/25 Agg.
- Concrete surface beds…… 30 MPa/19 Agg.
- Columns…… …….. 30 MPa/19 Agg.
- Walls…….. 30 MPa/19 Agg.
- Suspended beams and slabs……. 30 MPa/19 Agg.
- No-fines concrete…….. 4,8 MPa/19 Agg.

b) In addition to the above strength requirements, the maximum free water/cement ratio shall, for durability purposes, be subject to the following limits:

- Very severe exposure conditions (e.g. all elements exposed to seawater, seawater spray, salts, sulphates, chlorides, highly corrosive fumes, etc.)……..…….. 0.43
- Severe exposure conditions (e.g. all elements exposed to driving rain, alternate wetting and drying, fresh water, salt-laden air, and elements in or on aggressive soil)…… 0.48
- Moderate exposure conditions (sheltered, buried in non-aggressive soil, etc.):

  Slabs laid on ground…… 0.53
- All other elements……..… (No limit, ratio based on strength & workability criteria only)
- Ground slabs to be cast on selected clean cohesionless material, compacted to 100% Modified AASHTO density. Unreinforced slabs to be cast in approximately square panels with maximum side length not exceeding 30 times the slab thickness. All joints to be positioned and formed in accordance with detail drawings.
- All movement joints to be 10mm wide, formed by gluing an approved closed cell expanded polyethylene joint filler to the 1st cast concrete. Joint sealing to Architect's specifications.
- All bases are located centrally underneath columns unless otherwise specified.
- All foundations are to be founded on competent material, and final founding levels are to be determined in consultation with the Project Manager.
- Provide 50mm unreinforced concrete blinding under all bases, ground beams and pit floor slabs.
- Minimum concrete cover to any reinforcing bar, including links, to be as tabulated below unless otherwise specified:
- Concrete in contact with the ground……. 50mm
- Slab top surfaces: External…….. 40mm
- Internal……..30mm
- Slab soffits……30mm
- Beams, columns and walls: External……. 40mm
- Internal……..30mm
- Provide all new exposed concrete corners with 25mm x 25mm chamfers, unless otherwise specified by the Project Manager. Where tying in to existing concrete member, chamfers to match unless otherwise specified.
- Curing and protection of concrete shall be carried out strictly in accordance with Clause 5.5.8 of SANS 1200 G.
- Shutter removal and propping procedures to be discussed with and approved by the Project Manager.

2.4.2 Testing

Quality control:

- All mix designs to comply with SANS 10100-2:1992 and to be submitted to the Engineer for approval, prior to any concrete being cast.
- Testing of concrete to be in compliance with SANS 1200 G and SANS 10100-2:1992.
- All testing to be carried out by an approved independent laboratory.
- Frequency of testing: At least one sample (a sample being 3 concrete cubes) for 28 day testing shall be taken from each day's casting, and from at least every 50m3 of concrete of each mix design placed per day.

- Initially, for the first 3 pours of every mix design, an additional sample (a sample being 3 concrete cubes) to be taken and tested at 7 days.
- The Contractor may elect to continue taking additional 7 day test cubes for early strength testing, to his account. These shall not be used for assessment of strength as per the above testing procedures.
- A concrete control register to be kept on site recording the following for each cube result:

a. Unique cube number

b. Location placed

c. Concrete mix description and source e.g. Readymix or site batch, to be clearly identified

d. Date cast

e. Date tested

f. Age tested

- All cube test results to be submitted to the Engineer within 1 week of the test date.
- No-fines concrete blocks must be tested to confirm adequate permeability performance.

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 Employer's Agent. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Employer's Agent.

2.4.3 Formwork

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 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".

Description 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.

Formworks to soffits of solid etc. shall be deemed to be slabs not exceeding 250mm thick unless otherwise described.

Shutter removal and propping procedures to be discussed with and approved by the Project Manager**.**

2.5 Waterproofing

2.5.1 Installation by Approved Waterproofing Contractor

Waterproofing to roofs, basements, parking decks, etc. must be installed by Manufacturer approved contractors.

2.5.2 Preparation of Substrates & Surfaces

Substrates and surfaces must be smooth, clean, free of contaminants and dry.

Substrates and surfaces must be prepared in accordance with manufacturer's instructions.

The Contractor is to allow for the cost of substrate preparation in the rates for Waterproofing items**.**

2.5.3 Waterproofing

Waterproofing of roofs, basements, etc. shall adhere to the required warranties and guarantees specified in the Price List. 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.

The method of application to be discussed with and approved by the Employer's Agent before implementation**.**

2.6 Earthworks

2.6.1 Nature of ground

The Tenderer shall acquaint him/herself by personal examination of the nature of the ground. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" and where conditions of a more difficult character are indicated these are separately measured. Generally, the nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock".

2.6.2 Classification for excavation purposes

Method of classification – The Tenderer may use any method they choose to excavate any class of material, but their chosen method of excavation shall not determine the classification of the excavation. The Employers Agent will decide on the classification of the materials, as reflected in SABS 1200 D-1988 cl 3.1.2.

2.6.3 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 stockpiles situated on the building site.

2.6.4 Filling

Notwithstanding the reference to prescribed multiple handling in the Standard System of Measuring Building Work, latest edition, prices for filling and backfilling shall include for all selection and any necessary multiple handling of material.

2.6.5 General

All trenches shall be backfilled with material selected from trench excavations and compacted to a minimum density of 90% Mod AASHTO, unless otherwise specified.

2.7 Roof Covering

2.7.1 General

All work dealing with fibre/asbestos cement is to be executed in strict accordance with the applicable Regulations.

All cutting or drilling of fibre cement products to be done in an isolated area.

Existing sheets and rainwater goods, eaves and verges must be comprehensively protected against damage. No walking directly on the roof sheets will be allowed and rates for all work are to include for protective timber board gangways or similar approved or equivalent products.

Roof tiling to be fitted in accordance with SANS 10062 and to comply with local regulations and the manufacturer's recommendations, applicable to the locality and roof pitch, with all perimeter tiles mechanically fixed.

Roof tiling to be manufactured in accordance with SANS 542 code of practice of approved colour, including matching fittings and accessories.

2.7.2 Damage and repairs to services

Should the Contractor damage any services which are to remain in operation or any services which have not yet been disconnected prior to removal, then the Contractor will be held solely responsible for such damage and any further resultant damage.

The Contractor shall immediately notify the Employer's Agent, and the Authorities concerned and shall at his/her own cost make all necessary arrangements for disconnection and repairs with the relevant Authorities and shall pay all fees and charges levied.

2.7.3 Metal roof sheeting

Roof sheeting shall adhere to the required warranties and guarantees specified in the Price List. Please note that the sheeting supplier / installer through the Contractor should timeously (before installation) inform the Employer's Agent of any aspect of the installation or the environment in which the sheeting is used or the application that could have a negative effect on the warrantees (e.g. bending the sheets, the fixings, etc.).

2.7.4 Straight cutting

Descriptions of all roof coverings are deemed to include for all straight cutting.

2.7.5 Roof covering replacement

Replacement of roof coverings must be inspected and approved by a registered engineer/technologist prior to any work being executed. Approvals to align with the municipal By-laws.

2.8 Structural Steelwork

2.8.1 General

All steelwork to be manufactured in accordance with SANS 2001-CS1: 2005.

All relevant dimensions shall be checked by the Contractor on site before manufacturing and erection of structural steel commences.

Any discrepancies shall be brought to the attention of the Employer's Agent.

Grade of steel:

Unless otherwise specified on the design drawings, the following grades of steel shall be used:

- Hot-rolled sections (other than angles with leg lengths of 50mm or less), plates and tubular sections – S355JR
- Holding down bolts - 300WA minimum
- Cold formed purlins & girts, gutters, downpipes and angles with leg lengths of 50mm or less, and flats of 90mm width or less - Commercial Quality (minimum fy = 200 MPa)

Test certificates of all steel used for the works shall be submitted to the Employer's Agent on request.

Anchor bolts to be installed in accordance with the steel manufacturer's approved anchor bolt layout drawing.

Welds shall conform to SANS 10167 (2004) and SANS 10044-1 (2004).

All welding and surface preparation shall be discussed, inspected and approved by the Employer's Agent in conjunction with the SANS, or other approved inspection agency.

All fillet welds to be 6mm continuous fillet welds unless otherwise specified (use E7018 welding rods or similar).

All plates to be 6mm thick unless otherwise specified.

Site welding shall not be permitted without the written consent of the Employer's Agent.

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.

Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete. Where anchor bolts are described as embedded in sides or soffits of concrete it shall be deemed to include holes through formwork.

All base plates to be caulked with tightly rammed 1: 1 semi-dry sand: cement grout.

Purlins and sheeting rails to be continuous over a minimum of two bays unless otherwise specified.

The sequence of erection of the structure is the responsibility of the Contractor. The Contractor shall be responsible for and ensure stability of the structure during erection and until all elements have been erected and fixed in position. Where temporary bracing or propping is necessary, the Contractor shall be responsible for the design, erection, maintenance and removal (where necessary) of such supports.

A complete set of shop drawings must be submitted to, inspected and approved by the Employer's Agent before fabrication commences.

The Contractor shall design, where necessary, gussets of sufficient strength and size to obtain the required yield strength.

All structural steel bolts shall be grade 8.8 unless otherwise noted.

All structural steelwork to be fabricated and erected in accordance with SABS 1200H.

Anchor bolts to new concrete shall be cast into. Anchor bolts to existing concrete shall be drilled into existing concrete.

All structural steelwork to be galvanised.

2.8.2 Anti-corrosive treatment:

a. Galvanizing

- All hot dip galvanising to be in accordance with SANS 121 (ISO 1461).
- All lipped channels to be hot dip galvanized.
- All gutters to be hot dip galvanized (see below for painting).

b. Painting of raw steel to be in accordance with SANS 1200-HC.

- All steel surfaces to be cleaned of unwanted materials and sand-blasted to Swedish Standard SIS 055900 of 1967 to Sa 2½. Blast profile 40 – 70 Microns.
- Apply a prime coat of zinc phosphate to a minimum dry film thickness (DFT) of 45 Microns.
- Apply a finishing coat of micaceous iron oxide by brush or airless spray to a DFT of 40 Microns.
- Apply a second finishing coat of Enamel by brush or airless spray to a DFT of 35 Microns, to colour as specified by the Employer's Agent.

- Erection bolts are to be degreased prior to erection and to be painted to the above specification after erection.
- All damaged paint areas to be touched up to the original specification after completion of erection.

c. Painting of hot dip galvanized gutters (paint only inside of gutters):

- Chemically clean steelwork with Galvanized Iron Cleaner.
- Water rinse and allow to dry.
- Apply two coats of approved bituminous paint to a total DFT of 100 Microns.

Note: Welding of gutter joints is to be coated with "Zincfix" or other approved coating prior to painting.

d. Painting of hot dip galvanized steel, other than gutters (ISO 9223 exposure Class reference given):

Class C3:

- Chemically clean steelwork with Galvanized Iron Cleaner.
- Water rinse and allow to dry.
- Apply a primer (compatible with zinc) to a DFT of 75-150 Microns within 4 hours of cleaning.
- Apply a finishing coat of acrylic to a DFT of 40-60 Microns, to colour as specified by the Project Manager.

Class C4:

- Chemically clean steelwork with Galvanized Iron Cleaner.
- Water rinse and allow to dry.
- Apply an epoxy primer (compatible with zinc) to a DFT of 50-60 Microns within 4 hours of cleaning.
- Apply a finishing coat of polyurethane to a DFT of 60-90 Microns, to colour as specified by the Project Manager**.**

Class C5:

- Chemically clean steelwork with Galvanized Iron Cleaner.
- Water rinse and allow to dry.
- Apply an epoxy primer (compatible with zinc) to a DFT of 50-60 Microns within 4 hours of cleaning.
- Apply an intermediate coat of High Build MIO epoxy to a DFT of 100-150 Microns, to colour as specified by the Project Manager.
- Apply a finishing coat of polyurethane to a DFT of 60-90 Microns, to colour as specified by the Project Manager**.**

Note: Preparation for a duplex system concerns the preparation of the hot dip galvanized surface suitable to accept the subsequent coatings. Two forms of surface preparation are recommended.

i) Chemical cleaning with Galvanized Iron Cleaner.

ii) SWEEP blasting (micro-blast) but not shot blasting.

All paint to be sourced from an approved paint manufacturer and to be applied in accordance with the manufacturer's specifications.

2.9 Medical Gas (Oxygen) Reticulation piping

2.9.1 Registration of Gas Practitioner

Only contractors registered with SAQCC (South African Qualification and Certificate Committee for Gas) as an authorised Gas Practitioner to work on gas and gas systems shall be considered for the works.

2.9.2 Quality of Medical Gas ("MG") copper tubing

All medical gas piping quality, workmanship and installation will comply with paragraph 3 of the Standard Specification.

2.9.3 Pipe sizing and routing

Only capillary hard solder fittings for MG copper class 2 tubing, shall be used. The fittings shall be degreased similar to the Medical Grade copper tubing. On site swedging is not acceptable unless carried out by technicians approved by the duly appointed Engineer/Technologist/Technician (Mechanical).

Medical grade copper tubes joined by means of fittings suitable for capillary hard soldering shall be jointed with hard solder, not soft solder, with working temperatures between 600 *C and 700 *C, using:

a) Self-fluxing copper/phosphorous/over 7 % content silver rod similar to Afrox Silbralloy.

The recommended heating source shall be an oxygen-liquified petroleum gas flame.

(b) When using self-fluxing hard solder care must be taken to ensure that the joint is not overheated. Oxygen - Acetylene gas flames must be used with special care.

2.9.4 Pipe supports

Where visible, interior wall mounted piping shall be secured in brass or plastic type holder brackets which can be used on tubing up to 50 mm outside diameter. Pipe runs in roof spaces, covered ways, under eaves and on the outside of buildings, i.e. where not in a space normally inhabited, shall be secured with brass type holder brackets for tubing up to 50 mm outside diameter. Other types of holder brackets which Tenderers may wish to offer, must first receive the approval of the duly appointed official (Mechanical).

The centre distance of supports shall not exceed the following up to and including:

Up	to	10 mm outside diameter pipe	-	1,00 m
12	to	15 mm outside diameter pipe	-	1,25 m
		22 mm outside diameter pipe	-	1,80 m
		28 mm outside diameter pipe	-	2,50 m
		35 mm to 76 mm outside dia.		3,00m

2.9.5 Pipe bends

Bends in Class 2 tubing shall be free from flattening, buckling or thinning of the tube wall at any point. Form bends are permissible up to 28 mm. Elbow type fittings shall not be used unless for special purposes specified in the contract. Only slow bends shall be used.

2.9.6 Painting

Pipe support brackets and clamps shall be dipped galvanised to SABS 763. In addition, they shall be painted for protection with lead plumbate followed by two finishing coats of enamel paint in accordance with the paint manufacturer's recommendations. The piping shall be painted and labelled to comply with the Identification Colour Marking specified in the WC Health Technical Memorandum No 72 Medical Gas Pipeline Systems at Healthcare Facilities.

2.9.7 Pipe Markings and Directional Flow

Pipelines shall be marked with the gas name and/or symbol adjacent to shut-off valves, at junctions and changes in direction, before and after walls and partitions, etc., at intervals no more than 5m.

Marking shall:

a) Be in accordance with ISO 5359 colour coding.

b) Use letters not less than 10mm high got gas type identification.

c) Provide directional arrows at pipe branches, directional changes, both sides of wall / slab penetrations and at 10m intervals on straight runs.

d) Adhesive markers allowed only on inside of the building, roof spaces, covered walkways and under eaves. Pain on the outside of building.

e) Directional flow arrows must be 10mm on pipes up to 22mm and 20mm for bigger pipes. Arrow length must be 3 times to pipe diameter.

2.9.8 Isolating valves

Isolating valves shall be three-part stainless ball valves. The contractor shall allow for the connection to a copper medical gas line provided by others.

All valves and fittings shall be clean and degreased and supplied to site in individual heat-sealed plastic bags which may only be opened just prior to installation.

2.9.9 Testing & Commissioning

The medical gas system installation, testing and commissioning works shall only be done by a registered SAQCC installer. With any new medical gas installation, extension or replacement, the following must be done before the new system is connected to the existing installation:

a. 24-hour charted pressure test to be witnessed and signed off when the test starts and ends by the Health Engineering representative – Medical Gas Chief Artisan of the Directorate: Engineering and Technical Support;

b. Purity test to be witnessed by the Medical Gas Chief Artisan of the Directorate: Engineering and Technical Support;

c. Continuity test to be witnessed by the Medical Gas Chief Artisan of the Directorate: Engineering and Technical Support;

d. For tie–ins or connection to new plant, a planned shutdown must be arranged, and the Facility Head must be informed in writing so that timeous arrangements can be made. The Medical Gas Chief Artisan must witness the tie-in;

e. The contractor shall provide all the prescribed calibrated test equipment and quality control certification at the time of the inspection.

It is important that the contractor do the necessary checks prior to the official testing being witnessed by the Medical Gas Chief Artisan.

- Waterproofing.
- Earthworks.
- External work
- Structural Steel.
- Roof covering
- Medical gas (Oxygen) reticulation piping

3. Quality of Materials

All materials shall be of high quality. Where a South African standard or norm exist the material tendered on / supplied shall conform to this standard. In the absence thereof the Departmental representative shall be consulted for written approval of such items.

The word “SIMILAR” or “EQUAL TO / IN” or the use of Brand Names in this specification is by no means an indication of where to source material from. It is used to indicate a standard. The onus will be on the tenderer to provide documentary proof that the material he/she has on offer does indeed conform to or exceed that of the Material named in the specification.

The Term ‘Supply and Install” is not used throughout this document. It is however intended that wherever material is listed for installation, the term shall mean for such material to have been quoted on and be supplied to site by the contractor as well.

4. Concrete plinth with containers

a. The schematic illustrations above represent the proposed new PSA (Oxygen Generator Plant) structure, which will be constructed using the materials specified in the notes accompanying the issued drawings. The structural posts are designed to support the weight of the new steel roof structure. All steelwork is to be hot dip galvanized for corrosion protection. Any holes drilled onsite in the galvanized posts must be treated with an approved rust-inhibiting coating to maintain the integrity of the protective finish.

b. The sketches above provide schematic illustrations of the proposed new 3000 mm high high-risk fence (Clear-Vue or similar approved) to be constructed around the PSA generator enclosure for security purposes. The fence shall be fixed onto 70 x 70 x 3 mm galvanized square tube posts, securely mounted to the concrete surface using suitable expansion bolts.

Earthworks and concrete works

- Set out the area where the concrete plinth will be constructed and excavate to 400mm beyond the area.
- Excavate to a depth of ±500mm below the final required paved level. (This should allow for a foundation of 150mm, together with the thickness of the concrete surface bed and bedding material used.)
- All tree roots or stumps and other plant matter should be removed (refer to Bills of Quantities).
- In-situ material must be excavated to the correct falls (slope).
- Compact the Soil Sub-grade Use a plate or roller compactor to compact the earth after excavation. If a plate compactor is used, ensure its weight is at least 75kg. A jumping jack tamper could also be used in difficult to reach areas. Compact the earth to the point of refusal .Create the Base/Foundation
- Source G7 material from a local builder’s merchant, or a quarry for larger quantities as the base layer of 150mm thickness and C4 material in accordance with SABS 1200 DM compacted to 98% Mod AASHTO density.
- Use a rake to even out the C4 material and compact layers of 150mm. Do not attempt to compact layers of more than 150mm. It won’t compact sufficiently.
- The base should extend 300mm beyond the area , including the edge restraint.
- The concrete shall achieve a characteristic compressive strength of 25 MPa at 28 days in accordance with SANS 2001-CC1 or relevant local standards.
- Minimum cement content: 300–320 kg/m³ (adjust based on exposure conditions and durability requirements).

- The maximum water-to-cement ratio shall not exceed 0.60 to ensure durability and proper strength development.
- Aggregates shall comply with SANS 1083 or equivalent standard.
- Maximum nominal aggregate size: 19 mm (unless otherwise specified).
- Slump: 75–100 mm (standard range for general use; may vary depending on placement method and reinforcement congestion).
- Approved admixtures (e.g., plasticizers, retarders) may be used to improve workability or control setting time, subject to engineer's approval.
- All concrete must be cured for a minimum of 7 days using approved methods (e.g., water curing, curing compounds, or wet coverings).
- Concrete shall be placed without segregation and adequately compacted using mechanical vibrators to remove entrapped air.
- Formwork shall be designed for the required finish and strength.
- All exposed concrete surfaces shall be finished to the standard specified in project documents.
- Minimum of one set of three cubes per 25 m³ of concrete poured (or per day's pour) shall be taken for compressive strength testing
- Compact the Base Material
- Compact the foundation with a plate or roller compactor.
- Never attempt to compact layers thicker than 150mm. They will not compact sufficiently. It is preferable to compact in 2 layers (lifts) of 75mm.
- Ensure the material is sufficiently moist when compacting. If you can make a ball in your hand with the C4, it is sufficiently moist. Compact this material to the point of refusal. Depending on the size and weight of the roller and compactor, you need 3 to 8 passes in order to compact the material sufficiently. Compact to 98% Mod AASHTO density for heavily trafficked sites.

Bedding

- Bedding sand should be moist when bedding pavers (not saturated with water, just moist). The sand should contain 4-8% moisture, to help it compact and prevent it from blowing away.
- The sand bed must be laid slightly in advance of the placement of the units, but only to the extent that the particular area of paving can be completed on the same day. With the sun baking down, it should be limited to a few hours at a time and its moisture content should be continuously assessed on site. When bedding sand becomes dry, it should be raked back into a heap, moistened and spread out again.

IMPORTANT NOTES:

The contractor shall at his own cost get a specialist representative of the company of which products they will use to visit the site and write a recommendation for the preparation and application of their products on the asphalt surfaces where it will be used. The recommendations of the product/paint specialist shall be implemented, and the product application/painting shall be so done as to ensure a product guarantee from the product specialist. Health Department Engineering will approve the recommendation of the product specialist before any work commence. Work will only start once the Safety plan is handed in and approved by the Employer's Agent.

Hold points will be inspection of the surface preparation, application of bonding liquid and final product applications according to the manufacturer's instructions.

Works Information

4. Constraints on how the *Contractor* Provides the Works

4.1 *Employer's* Site access control, permits, Site regulations and security control.

4.2 People restrictions on Site, hours of work, conduct and records.

4.3 Health & Safety on Site including measures against disease and epidemics. First Aid facilities and emergency arrangements.

4.4 Environmental controls, fauna & flora, dealing with objects of historical interest.

4.5 Title to materials from demolition and excavation.

4.6 Liaison with and acceptance from statutory authorities and/or land owners.

4.7 Working Areas including sharing thereof by other contractors and Others.

Employer's direct contractors

The *Employer* may instruct work to be executed and installed in the *works* by one or more direct contractors, with the understanding that:

- The *Contractor* permits all such work by direct contractors;
- The type and extent of such work is described in the tender document, and the *Contractor* makes reasonable provision in his work programme for such work;
- The payment of direct contractors is the responsibility of the *Employer*;
- A direct contractor is subject to reasonable controls as required by the *Contractor*, and
- All direct contractors, the work or installations undertaken, insurances related thereto and the associated risks including expense or loss caused by direct contractors, are the direct responsibility of the *Employer*.

4.8 *Contractor's* Equipment, scaffolding, rigs, heavy lifts and craneage, including removal from the Working Areas and records.

4.9 Site services and facilities: power, water, waste disposal, telecoms, ablutions, fire protection, lighting.

4.10 Advertising, notice boards, photography and progress photographs.

4.11 Offices, office equipment and laboratories.

4.12 Vehicles.

4.13 Restrictions to Site access, roads, walkways and barricades.

4.14 Existing premises, adjoining properties and checking the work of Others.

4.15 Setting out and boundary control.

4.16 Excavations and associated water control.

4.17 Dealing with underground services, other existing services, cable and pipe trenches and covers.

4.18 Control of noise, dust, water and waste.

4.19 Sequences of construction or installation, samples and mock-ups.

4.20 Giving notice of work to be covered up.

4.21 Hook ups to existing works.

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Works Information

5. Requirements for the programme

5.1 The *Contractor* submits a first programme to the *Employer* for acceptance within **two weeks** of access to the *site*.

5.2 The *Contractor* shows on each programme which he submits for acceptance

- the starting date, access date/s and the Completion Date,
- planned Completion,
- the order and timing of the operations which the *Contractor* plans to do in order to Provide the Works,
- the order and timing of the work of the *Employer* and others as last agreed with them by the *Contractor* or, if not so agreed, as stated in this Works Information,
- the dates when the *Contractor* plans to complete work needed to allow the *Employer* and others to do their work,
- provisions for
    - float,
    - time risk allowances,
    - health and safety requirements and
    - the procedures as set out in this contract,
- the dates when, in order to Provide the Works in accordance with this programme, the *Contractor* will need
    - access to a part of the site if later than its access date,
    - acceptances,
    - Plant and Materials and other things to be provided by the Employer and,
    - information from others,
- for each operation, a statement of how the *Contractor* plans to do the work identifying the principal Equipment and other resources which he plans to use and
- other information which this Works Information requires the *Contractor* to show on a programme submitted for acceptance.

5.3 Within two weeks of the *Contractor* submitting a programme to him for acceptance, the *Employer* either accepts the programme or notifies the *Contractor* of his reasons for not accepting it. A reason for not accepting a programme is that

- the *Contractor's* plans which it shows are not practicable,
- it does not show the information which this contract requires,
- it does not represent the *Contractor's* plans realistically or
- It does not comply with the Works Information.

5.4 When revising the programme, the *Contractor* shows on each revised programme

- the actual progress achieved on each operation and its effect upon the timing of the remaining work,
- the effects of implemented compensation events,
- how the *Contractor* plans to deal with any delays and to correct notified Defects and
- any other changes which the *Contractor* proposes to make to the currently accepted programme.

5.5 The *Contractor* submits a revised programme to the *Employer* for acceptance

- within the period for reply after the *Employer* has instructed him to,
- when the *Contractor* chooses to and, in any case,
- at no longer than an interval of every four weeks from the *starting date* until Completion of the whole of the *works*.

5.6 Acceptance of any programme where anticipated Completion is shown to be later than the Completion Date, does not alter the Completion Date nor negate the *Contractor's* liability for *delay damages*.

5.7 All compensation event claims for events arising after the Completion Date which would not have had any effect if the contract had been completed by the Completion Date, remain the *Contractor's* risk.

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Works Information

6. Services and other things provided by the *Employer*

Where available, water and/or electricity will be made accessible to the *Contractor*, however, the *Employer* does not guarantee such availability and the responsibility for water and electricity provision is that of the *Contractor*. No other services or other things are provided by the *Employer. Contractor* must provide own.

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Enabling Works for PSA Generator Plants

Works Information

SCHEDULE 13: Works Information required from *Contractor*

The *Employer* requires the following information pertaining to the work for this contract to be furnished at the time of tender. The tenderer must provide ALL the information as stipulated in this schedule. Where required information is not available before the close of tender, the tenderer must mark such item/s clearly as "Not Available" where appropriate on this schedule **and not simply leave such items blank**.

When electrical and plumbing works are required as part of the tender, the *Contractor* will furnish the Employer's Agent with proof of compliance on request, as follows:

a) All electrical subcontractors must be registered as an Electrical *Contractor* with the Department of Labour, with the Workmen's Compensation Commissioner, the Unemployment Insurance Commissioner to qualify for Electrical Work for this contract.
b) All persons and/or subcontractors undertaking plumbing works must be registered as a Licensed Plumber/s with the Plumbing Industry Registration Board of South Africa (PIRB).

AUTHORISED SIGNATURE OF TENDERER

Date:…….

Number of additional pages appended by the tenderer to this Schedule: .....(If nil, enter NIL)

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Enabling Works for PSA Generator Plants

Works Information

SCHEDULE 14: Amendments by *Contractor*

The tenderer should record any amendments (i.e. deviations, qualifications, alterations or modifications) he may wish to make to the tender documents in this Schedule. Alternatively, a tenderer may state such amendments in a covering letter and append such letter to this Schedule.

The tenderer's attention is drawn to clause F.3.8 of the Standard Conditions of Tender referenced in the Tender Data regarding the *Employer's* handling of material deviations and qualifications. If no amendments are allowed for this tender, clause F.3.8 will state so and same would also be indicated in the table below. If amendments are allowed but none desired by the tenderer, this Schedule is to be marked NIL in the table below.

IMPORTANT: No alternative tender will be considered unless a tender free of qualifications and strictly on the basis of the Tender Documents is also submitted.

PAGE / ITEM	CLAUSE / DESCRIPTION
	NO ALTERATIONS/AMENDMENTS BY CONTRACTOR ALLOWED FOR THIS CONTRACT. TENDERER MUST SIGN SCHEDULE TO ACKNOWLEDGE.

(If not enough space, attach additional pages. If no amendments are desired, mark NIL.)

AUTHORISED SIGNATURE OF TENDERER

Date:……

Number of additional pages appended by the tenderer to this Schedule: .....(If nil, enter NIL)

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Enabling Works for PSA Generator Plants

Works Information

SCHEDULE 15: *Contractor's* Equipment schedule

The tenderer must furnish the details of the equipment required for the execution of this contract. The tenderer must differentiate, where applicable, between Equipment immediately available, Equipment which will become available by virtue of outstanding orders, and Equipment to be acquired or hired for the *works* should the tenderer be awarded the contract.

EQUIPMENT DESCRIPTION (Type, size, capacity, etc)	AVAILABLE (A) ON ORDER (O) HIRED (H)	NUMBER OF

(Append separate page if not enough space, or enter NIL if nil)

AUTHORISED SIGNATURE OF TENDERER

Date:……

Number of additional pages appended by the tenderer to this Schedule: .....(If nil, enter NIL)

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Enabling Works for PSA Generator Plants

Works Information

SCHEDULE 16: *Contractor's* schedule of subcontractors

The tenderer herby notifies the *Employer* of his intention to use the following subcontractors for work in this contract. Acceptance of this tender does not constitute approval of all or any of the listed subcontractors by the *Employer*. Should any of the subcontractors not be approved subsequent to acceptance of this tender, this in no way invalidates this tender, and the tendered unit rates for the various items of work remain final and binding, even in the event of a subcontractor not listed below being approved by the *Employer*.

WORK TYPE OR CATEGORY	SUBCONTRACTOR (Name, address, contact person, phone, fax, organisation details, experience)	WORK ITEMS (As per *bill of quantities*)	ESTIMATED COST
		TOTAL SUBCONTRACTED AMOUNT *(Excluding VAT)*	**R**

(Append separate page if not enough space, or enter NIL if nil)

AUTHORISED SIGNATURE

Date:……

Number of additional pages appended by the tenderer to this Schedule: .....(If nil, enter NIL)

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Enabling Works for PSA Generator Plants

Works Information

SCHEDULE 17: *Contractor's* proposed work programme

The tenderer must append a proposed work breakdown and programme, reflecting the proposed sequence and rate of execution of the various activities comprising the work for the contract, to this schedule page.

This programme must be in the form of a sufficiently detailed bar chart (Gantt chart) or similar acceptable time/activity form as per the Works Information reflecting the proposed sequence and rate/duration of the various activities and the quantities of work that will be carried out every week under each of the items comprising the work scope for this contract. Working hours for the execution of this contract must be indicated, and the programme must clearly indicate project milestones where applicable and the critical path of the activities through the work schedule.

The tenderer must take into account all requirements as per the project specifications referenced in the Contract Data of this document when drawing up the programme.

The *Contractor* will only be given access to start work after approval of their detailed Work Programme, which must be submitted to the *Employer* within one week after award of this contract.

AUTHORISED SIGNATURE

Date:…….

Number of Proposed Work Programme pages appended by the tenderer to this Schedule: .....

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Works Information

SCHEDULE 18: *Contractor's* health & safety plan

Tenderers are to note the requirements of the Occupational Health and Safety (OHS) Act No. 85 of 1993, and the Construction Regulations 2014 issued in terms of Section 43 of the Act. The tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.

In this regard the *Contractor* shall submit a detailed Health and Safety Plan in respect of the Works in order to demonstrate the necessary competencies and resources to perform the Works all in accordance with the Act and Regulations. The Health and Safety Plan shall cover inter-alia the following details:

- The safety management structure including the names of all designated persons such as the construction supervisor and any other competent persons;
- Safety method statements and procedures to be adopted to ensure compliance with the OHS Act.

Aspects to be dealt with include:

- Public vehicular and pedestrian traffic accommodation measures;
- Control of the movement of construction vehicles;
- The storage and use of materials;
- The use of tools, vehicles and plant;
- Temporary support structures;
- Dealing with working at height;
- The use of batch plants;
- Excavation work;
- Demolition work;
- Security, access control and the exclusion of unauthorised persons.
- The provision and use of temporary services;
- Compliance with way leaves, permissions and permits;
- Safety equipment, devices and clothing to be employed;
- Emergency procedures;
- Provision of welfare facilities;
- Induction and training;
- Provision and maintenance of the health and safety file and other documentation;
- Arrangements for monitoring and control to ensure compliance with the safety plan.

Tenderers are to note that the *Contractor* is required to ensure that all sub-contractors or others engaged in the performance of the contract also comply with the above requirements.

The *Contractor* will only be given access to start work after approval of his detailed Health and Safety Plan, which must be submitted to the *Employer* within one week after award of this contract.

AUTHORISED SIGNATURE OF TENDERER

Date:…….

Number of additional pages appended by the tenderer to this Schedule: .....(If nil, enter NIL)

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Part C4: Site Information

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Site Information

Description of the Site

Facility : Beaufort west Hospital,

Address : Hospital Hill, Beaufort West, 6970,

Facility: Vredendal hospital

Van Der Stel St, Vredendal, 8160,

Facility: Ceres Hospital

Riverkant Street, Ceres, 683,

Facility: Brooklyn Chest Hospital, Wesfleur Hospital

Stanberry Road, Ysterplaat, 7425,

Facility: Wesfleur Hospital

Wesfleur Circle, Atlantis 7349

Contact person at facility:

Contact Person : Clement Makhwela (Beaufort west Hospital – Chief Artisan - 023-4148200),
Albertus Rossouw (Vredendal Hospital – Artisan Foreman - 027-2132039)
Clint Gabriels (Ceres Hospital – Artisan Foreman - 023-3169600),
Tulani Jumba (Brooklyn Chest Hospital - 021-5087465),
Ricardo Cupido (Wesfleur Hospital - 021-5718040)

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Appendix: Drawings, schematics & annexures

The Appendix to this contract is a separate document, independent of the main contract document (this document) and does not follow, or integrate with, the page numbering sequence of the main contract document. The Appendix contains the **Price List** as well as drawings, schematics and annexures ("items") which are referenced in this document, and which are indicated as included in the Appendix.

PLEASE NOTE:
ALL items which are referenced in the main contract document form part of the complete contract documentation for this contract, irrespective of whether they are physically included in the Appendix or not. It is the responsibility of the tenderer to ensure he acquires and considers all the items referenced in this document in the preparation of his tender, which is the assumption when tenders are evaluated.

The Appendix consists of a total of **166** pages of various sizes and orientation, as a separate document.

ANNEXURE 1

1.Price schedule

CERES HOSPITAL					
Item	Discription	Unit	Quantity	Rate	Amount
	SECTION NO. 1 **BILL NO. 1** **ALTERATIONS** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES Demolitions and Works on Site All demolitions and works on site must be carried out carefully and in the safest possible manner and the Contractor is to make a thorough examination and take all necessary precautions before proceeding with the work. The utmost care is to be observed to avoid any structural or other damage in the remaining portions of the existing building Special care is to be exercised not to interfere with any electrical installation, and notice is to be given to the Representative/Agent when any disconnections, removal of wires, etc. necessary and the Contractor is to afford every facility to the workmen carrying out his work The Contractor shall not remove or interfere with any furniture, fittings or similar articles unless specially mentioned in the following items and shall give adequate notice to the Old materials to become property of the contractor Old materials from alterations except where described to be re-used or handed over, become the property of the contractor				

	Old materials to be carted away Old materials from alterations except where described as re-used or handed over, as well as all rubbish, etc. must be regularly carted from the site and not be allowed to accumulate on or around the site. View site Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials salvageable from the alterations. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained General The contractor shall carry out the whole works with as little mess and noise as possible and with a minimum of disturbance to the occupants of the building. The contractor shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the Project Manager Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent					

	Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary				
	The contractor will be required to take all dimensions affecting the existing				
	TEMPORARY FENCING				
	Temporary fence panels, etc including removal:				
1	Galvanised steel panels approximately 2m high of suitable steel framing, vertical and horizontal supports filled on both sides with suitable mesh.	m	44		
2	Relocate the 6m x 2.45m shipping container to the designated location within the facility..	No	1		
	Carried forward				

	Brought forward				
	Taking out and removing steel gates, security gates, etc:				

3	Steel security double gate exceeding not exceeding 2.5m2.	No	1		
4	Palisade fence 1800mm high comprising the 35 x 35 x 3mm wall thickness profile vertical pales at 152mm centres with top of pale shaped to form a spearhead including 50 x 50 x 5mm angle section continuous top and bottom rail bolted to 75 x 75 x 3mm galvanised poles at 1500mm centres including concrete bases.	m	10		
	Carried forward to summary of section No.1				
	SECTION NO. 1				

	BILL NO. 1 **ALTERATIONS** **IHPS-004-2025** **SECTION NO. 1** **BILL NO. 2** **EARTHWORKS** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES Nature of ground Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes Nature of ground A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured Carting away of excavated material Descriptions of carting away of excavated material shall be deemed SITE CLEARANCE, ETC.				

	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	22		
2	Stripping average 150mm thick layer of top soil and stockpiling on site	m2	22		
	EXCAVATION, FILLING, ETC.				
	Excavation in earth not exceeding 2m deep:				
3	Reduced levels under floors	m3	11		
	Extra over all excavations for carting away:				
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	11		
	Risk of collapse of excavations:				
5	Sides of trench and hole excavations not exceeding 1,5m deep	m2	14		
	Keeping excavations free of water:				
6	Keeping excavations free of all water other than subterranean water	item	2		
	Earth filling supplied by the contractor compacted to 98% Mod AASHTO density:				
7	Under floors, steps, pavings, etc.	m3	15		
	Carried forward				

Setion No. 1
Bill No. 2
Earthworks

	IHPS-004-2025				
	Brought forward				
	Saw cut existing surface:				
8	Sawcut existing asphalt surface.	m	32		
	Surface patching:				
9	Apply Tack Coat using 30% stable grade emulsion at 1litre/m2	m2	36		
10	Construct new 40mm thick continously graded asphalt surface using 60/70 penetration grade bitumen	m2	36		
11	Construction of chemically stabilized base from excavations	m3	5		
	Carried forward to summary of section No.1				
	SECTION NO. 1				
	BILL NO. 2				

	EARTHWORKS **IHPS-004-2025** **SECTION NO. 1** **BILL NO. 3** **CONCRETE, FORMWORK AND** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES 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. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. Formwork Description 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				
	Formworks to soffits of solid etc. shall be deemed to be slabs not exceeding 250mm thick unless otherwise described				
	Formwork to sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	REINFORCED CONCRETE				
	25MPa/19mm concrete:				
1	Slabs including beams and inverted beams	m3	13		
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
2	Surface blinding under footings and bases	m3	4		
	Carried forward				

	Brought forward				
	TEST BLOCKS				
3	Making and testing 150 x 150 x 150mm concrete strength test cube	No	4		
	CONCRETE SUNDRIES				
	Curing surfaces of concrete with an approved curing compound applied as per manufacturer's instructions:				
4	Horizontal top surfaces	m2	64		
	Finishing top surfaces of concrete smooth with a wood float:				
5	Surface beds, slabs, etc.	m2	64		
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides:				
6	Edges exceeding 300mm high	m2	64		
	REINFORCEMENT				
	Mild steel reinforcement to structural concrete work:				
7	10mm Diameter bars	t	0.54		
8	12mm Diameter bars	t	0.19		
9	12mm Diameter 610mm bar casted into 300mm into concrete and the other side wrapped with builders wrapp for horizontal movement of the slab.	No	64		
	Carried forward				

	Brought forward				
	MOVEMENT JOINTS ETC.				
	"Malthoid" slip joints between horizontal concrete and brick surfaces including cement mortar bed:				
10	Not exceeding 300mm wide	m	16		
	Boxing in rough formwork to form:				
11	25 x 25mm Horizontal chamfer at edge	m	32		
12	25 x 25mm Vertical chamfer at corner	m	2		
	Carried forward to summary of section No.1				
	Section No.1 **Bill No 3** **Concrete, Formwork and reinforcement** **IHPS-004-2025**				

	SECTION NO. 1 **BILL NO. 4** **EXTERNAL WORK** PREAMBLES For preambles refer to "Model Preambles for Trades" Cutting down and removing, grubbing up roots and filling in holes				
1	Tree exceeding 500mm and not exceeding 1000mm girth	No	2		
	FENCING PVC coated steel fencing: "Betafence Betaview" or equally approved security fence and gates with PVC coating over hot dipped galvanised steel mesh, incorporating horizontal flanges, single and double bolt tamper proof spider fixator fixing system, steel posts, gates, including zinc plated steel tamper proof bolts, etc.				
2	Security fence 3000mm high with 76,2 x 12,7mm aperture centres comprising 3mm high tensile wire mesh bolted to posts with tamper proof through bolts (posts elsewhere)	m	14		
	Carried forward				

	Brought forward				
	Double gate 2600 x 3000mm high overall, with each leaf comprising 60 x 40mm mild steel rectangular frame tubing 3mm thick, incorporating one horizontal bracing piece positioned centrally and offset to accommodate fencing panels, including mild steel 30 x 30mm equal angles 3mm thick	No.	1		
	Carried forward to summary of section No.1				
	Section No.1 **Bill No. 4** **External work** **IHPS-004-2025**				

	SECTION NO. 1 **BILL NO. 5** **ROOF COVERINGS** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES The supplementary preambles reflected elsewhere in these Bills of Quantities apply equally to this trade Metal roof sheeting Contractor to provide a 20 year guarantee for both the material and the paintwork of the sheeting Please note that the sheeting supplier / installer through the contractor should timeously (before installation) inform the Principal Agent of any aspect of the installation or the environment in which the sheeting is used or the application that could have a negative affect the warrantees (e.g. bending the sheets, the fixings, etc.)					

	0.53mm Galvanized IBR roof sheeting, coated steel G550with a clean COLORBOND white colour coated finish to one side with mountain mist backing coat and accessories fixed to existing timber purlins or rails at 760mm centres				
1	Roof covering with pitch not exceeding 25 degrees UNDERLAY TO TILED ROOFS	m2	81		
	75mm factorylite industrial roofing insulation laid over steel rafters at 760mm centres) fixedconcurrent with steel purlins etc. including straining wires at 376mm centres laid over purlins.				
2	Factorylite laid over purlins at approximately 900mm centres) and fixed concurrent with roof covering including galvanized steel straining wires.	m2	81		
	Carried forward to summary of section No.1				
	Section No.1 **Bill No. 5** **Roof Covering** **IHPS-004-2025**				

	SECTION NO. 1 **BILL NO. 6** **WATERPROOFING** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES Installation by Approved Waterproofing Contractor Waterproofing to roofs, basements, parking decks, etc. Must be installed by Manufacturer approved contractors. Preparation of Substrates & Surfaces Substrates and surfaces must be smooth, clean, free of contaminants and dry Substrates and surfaces must be prepared in accordance with manufacturer's instructions The contractor is to allow for the cost of substrate preparation in the rates for Waterproofing items 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 The method of application to be discussed with and approved by the Project Manager before implementation					

	One layer of 250 micron waterproof sheeting sealed at laps Pressure Sensitive Tape:				
1	Under surface beds	m2	74		
	Carried forward to summary of section No.1				
	Section No. 1 **Bill No.6** **Waterproofing** **IHPS-004-2025**				

	SECTION NO. 1 **BILL NO. 7** **STRUCTURAL STEELWORK** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES 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 expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete. Where anchor bolts are described as embedded in sides or soffits of concrete it shall be deemed to include holes through formwork. Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.					

	Welded beams in single lengths with flat section bearer and connection plates bolted to Steel posts:				
1	250 x 75 x 20 x 2,5 Lipped channel section beam	t	0.33		
2	150 x 50 x 20 x 3mm Thick cold-formed lipped channel purlins with three angled cleats welded to channel and two times holed to accommodate M10 bolts.	t	0.47		
3	75 x 50 x 20 x 2,5 Lipped channel section purlin.	t	0.33		
4	Angle section bracing	t	0.25		
5	40x40x40x3mm angle iron rafter support fixed onto the shiiping container and bolted onto the steel rafters	t	0.4		
	GALVANISED STEEL POSTS				
7	70 x 70 x 3mm Galvanised mild steel post	No	8		
8	225 x 225mm base plates four times holed for bolts	No	8		
	Truss Hangers, connectors, ETC				
9	90º x 770x1.6mm huricane clips fixed to channel purlins as per manufactures instruction	No	166		
	Carried forward				

	Brought forward				
10	100 x 100mm L-shaped galvanised steel brackets 3mm thick, holed twice on each leaf to accommodate M10 bolts	No	186		
	BOLTS, FASTENERS, ETC				
11	16mm Diameter zinc plated expansion anchor with 120mm loose bolt for fixing steel posts to slab.	No	32		
12	10mm zinc plated bolts for fixing brackets to lipped channels.	No	56		
13	M16 holding down bolts 350mm long including 70 x 70mm washers.	No	136		
	Carried forward to summary of section No.1				

	SECTION NO. 1 **Bill No.8** **MEDICAL GAS (OXYGEN) RETICULATION PIPING** **SUPPLEMENTRY PREAMBLES** All pipe dimaters are outside diameters The rates shall cover the cost of provision of the pipes complete with coupling, and the costs of the handling, inspecting, transporting, bedding, laying, jointing, cutting, testing and, when relevent, disinfecting of the pipes and the joints. Tenderers are referred to the specification accompanying these bills of quantities, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification **Copper pipes and fittings:** Fittings shall be degreased similar to the Medical Grade copper tubing. On site swedging is not acceptable unless carried out by technicians approved by the duly appointed Engineer/Technologist/Technician (Mechanical). Medical grade copper tubes joined by means of fittings suitable for capillary hard soldering shall be jointed with hard solder, not soft solder, with working temperatures between 600 °C and 700 °C, using: a) Self-fluxing copper/phosphorous/over 7 % content silver rod similar to Afrox Silbralloy. The recommended heating source shall be an oxygen-liquified petroleum gas flame.					

b) When using self-fluxing hard solder care must be taken to ensure that the joint is not overheated. Oxygen - Acetylene gas flames must be used with special care.

Pipe Supports and Painting

Pipe support brackets and clamps shall be .dipped galvanised to SABS 763. In addition, they shall be painted for protection with lead plumbate followed by two finishing coats of enamel paint in accordance with the paint manufacturer's recommendations. The piping shall be painted and labelled.

Pipe Bends

Bends in Class 2 tubing shall be free from flattening, buckling or thinning of the tube wall at any point. Form bends are permissible up to 28 mm. Elbow type fittings shall not be used unless for special purposes specified in the contract. Only slow bends shall be used.

Fixing of pipes:

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

Only SAQCC-Gas authorised practitioners who is registered as a Medical Gas (oxygen) practitioner, authorised to install and maintain Medical Oxygen installations are permitted to carry out installations.

	U-channels				
1	Galvanised U-channel 75x50x20x2mm	m	30		
	Class 2 copper piping and fittings:				
	Supply and Installation of Medical Grade ("MG") gas piping with the necessary fittings, hangers, brackets, fixing materials, cleaning, marking & testing as per the project specification. Piping shall be colour coded painted (3 coats enamel) as specified.				
2	ø22mm Pipe	m	50		
3	ø22mm Tee	No	1		
	Stainless steel fittings:				
4	ø22mm three-part ball valves	No	5		
5	ø22mm non-return valves	No	2		
	Shut down and cut in:				
6	Cutting and connecting into the Existing Gas System with supervision from the hospital technical staff.	sum	1		
	Testing:				
7	Allow for a 24 hour pressure test as per our Standard Specification for Medical Gas Installations. To be witnessed and signed off by the Employer's Agent. After a successful pressure test purity and continuity tests will be witnessed and signed off by the Employer's Agent.	Item	1		
	Carried forward to summary of section no.1				
	Section no.1 **Bill No. 8** **Medical Gas (Oxygen) Reticulation** **IHPS-004-2025**				

SUMMARY OF SECTION NO.1

Bill N	Description	Amount
1	**Alterations**	**R -**
2	**WATERPROOFING**	**R -**
3	**EARTHWORKS**	**R -**
4	**Concrete, Formwork and reinforcement**	**R -**
5	**External work**	**R -**
		R -
6	**ROOF COVERINGS**	**R -**
7	**STRUCTURAL STEELWORK**	**R -**
8	**Medical Gas (Oxygen) Reticulation**	**R -**

Section No. 2- General

Item	Description	Unit	QTY	Rate	Amount
1	Guarantee for period of 12 months for work completed for the Department for all facilities.	Item	1		R -
2	Health and Safety Plan, Construction Program, Compliance with all listed Regulations and other legal paperwork and submit a copy to the Employer's Agent.	Item	1		R -
3	Site establishment, scaffolding, security, etc.	Item	1		R -
4	Preliminary and general and working 7 days a week.	Item	1		R -
5	Insurance to comply with NEC 3	Months	4		R -
6	Contingency (for approval by Employer's Agent if deemed necessary).	Item	1	R 55,000.00	R 55,000.00
7	Other not mentioned(State if required)	Item	1		

FINAL SUMMARY

		AMOUNT	
	Sub-total: Builders Work	**R**	**-**
	Sub-total: General	**R**	**-**
	Sub-total	**R**	**-**
	Add 15% VAT	**R**	**-**
	Total	**R**	**-**

BAUFORT WEST HOSPITAL				
SECTION NO. 1 **BILL NO. 1** **EARTHWORKS** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES Nature of ground Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes Nature of ground A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured 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				

	SITE CLEARANCE, ETC.				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	22		
2	Stripping average 150mm thick layer of top soil and stockpiling on site	m2	22		
	EXCAVATION, FILLING, ETC.				
	Excavation in earth not exceeding 2m deep:				
3	Reduced levels under floors	m3	11		
	Extra over all excavations for carting away:				
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	11		
	Risk of collapse of excavations:				
5	Sides of trench and hole excavations not exceeding 1,5m deep	m2	14		
	Keeping excavations free of water:				
6	Keeping excavations free of all water other than subterranean water.	item	2		
	Earth filling supplied by the contractor compacted to 98% Mod AASHTO density:				
7	Under floors, steps, pavings, etc..	m3	15		
	Carried forward				

	Brought forward				
	Saw cut existing surface:				
8	Sawcut existing asphalt surface	m	32		
	Surface patching:				
9	Apply Tack Coat using 30% stable grade emulsion at 1litre/m2	m2	36		
10	Construct new 40mm thick continously graded asphalt surface using 60/70 penetration grade bitumen	m2	36		
11	Construction of chemically stabilized base from excavations	m3	5		
	Carried forward to summary of section No.1				

Section No. 3
Bill No.1
Earthworks
IHPS-004-2025

SECTION NO. 3

BILL NO. 2

CONCRETE, FORMWORK AND REINFORCEMENT

PREAMBLES

For preambles refer to "Model Preambles for Trades"

SUPPLEMENTARY PREAMBLES

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. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect.

Formwork

Description 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				
	Formworks to soffits of solid etc. shall be deemed to be slabs not exceeding 250mm thick unless otherwise described				
	Formwork to sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	REINFORCED CONCRETE				
	25MPa/19mm concrete:				
1	Slabs including beams and inverted beams(Framework item No.338)	m3	13		
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
2	Surface blinding under footings and bases	m3	4		
	Carried forward				

	Brought forward				
	TEST BLOCKS				
3	Making and testing 150 x 150 x 150mm concrete strength test cube	No	4		
	CONCRETE SUNDRIES				
	Curing surfaces of concrete with an approved curing compound applied as per manufacturer's instructions:				
4	Horizontal top surfaces	m2	64		
	Finishing top surfaces of concrete smooth with a wood float:				
5	Surface beds, slabs, etc.	m2	64		
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides:				
6	Edges exceeding 300mm high.	m2	64		
	REINFORCEMENT				
	Mild steel reinforcement to structural concrete work:				
7	10mm Diameter bars)	t	0.54		
8	12mm Diameter bars	t	0.19		
9	12mm Diameter 610mm bar casted into 300mm into concrete and the other side wrapped with builders wrapp for horizontal movement of the slab.	No	64		
	Carried forward				

	Brought forward				
	MOVEMENT JOINTS ETC.				
	"Malthoid" slip joints between horizontal concrete and brick surfaces including cement mortar bed:				
10	Not exceeding 300mm wide	m	16		
	Boxing in rough formwork to form:				
11	25 x 25mm Horizontal chamfer at edge	m	32		
12	25 x 25mm Vertical chamfer at corner	m	2		
	Carried forward to summary of section No.1				
	Section No.3				
	Bill No. 2				
	Concrete, formwork snd reinforcement				
	IHPS-004-2025				

	SECTION NO. 3 **BILL NO. 3** **EXTERNAL WORK** PREAMBLES For preambles refer to "Model Preambles for Trades" FENCING PVC coated steel fencing: "Betafence Betaview" or equally approved security fence and gates with PVC coating over hot dipped galvanised steel mesh, incorporating horizontal flanges, single and double bolt tamper proof spider fixator fixing system, steel posts, gates, including zinc plated steel tamper proof bolts, etc.				
1	Security fence 3000mm high with 76,2 x 12,7mm aperture centres comprising 3mm high tensile wire mesh bolted to posts with tamper proof through bolts (posts elsewhere).	m	14		
	Carried forward				

	Brought forward				
4	Double gate 2600 x 3000mm high overall, with each leaf comprising 60 x 40mm mild steel rectangular frame tubing 3mm thick, incorporating one horizontal bracing piece positioned centrally and offset to accommodate fencing panels, including mild steel 30 x 30mm equal angles 3mm thick welded to tubular frame along the internal edges of the frame to support fencing panels, 150 x 150mm box opening (positioned adjacent and aligned level to the box opening of the adjacent gate leaf) comprising 60 x 40mm steel rectangular tubing welded to frame and positioned 1600mm from the bottom of frame and incorporating a horizontal lockable barrrel bolt for locking internally against adjacent leaf (with vertical 200mm drop bolt on adjacent leaf with galvaninsed keep in floor), with the frame and angles, etc. all hot dipped galvanised and powder coated, and each leaf fill-in vertically with 3mm diameter high tensile hot dipped galvanised and PVC coated "Betafence Betaview" or equally approved wire mesh fencing panels with 76,2 x 12,7mm aperture centres and 50mm reinforcing bent flanges secured with spider fixators and vandal proof bolts, all finished flush with frame, 78mm brass Viro or equally approved rust resistant insurance padlock with three keyed-alike keys.	No.	1		
	Carried forward to summary of section No.1				
	Section No.3 **Bill No.3** **External work** **IHPS-004-2025**				

	SECTION NO. 3 **BILL NO. 4** **ROOF COVERINGS** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES The supplementary preambles reflected elsewhere in these Bills of Quantities apply equally to this trade Metal roof sheeting Contractor to provide a 20 year guarantee for both the material and the paintwork of the sheeting Please note that the sheeting supplier / installer through the contractor should timeously (before installation) inform the Principal Agent of any aspect of the installation or the environment in which the sheeting is used or the application that could have a negative affect the warrantees (e.g. bending the sheets, the fixings, etc.)					

	0.53mm Galvanized IBR roof sheeting, coated steel G550with a clean COLORBOND white colour coated finish to one side with mountain mist backing coat and accessories fixed to existing timber purlins or rails at 760mm centres				
1	Roof covering with pitch not exceeding 25 degrees .	m2	81		
	UNDERLAY TO TILED ROOFS				
	75mm factorylite industrial roofing insulation laid over steel rafters at 760mm centres) fixedconcurrent with steel purlins etc. including straining wires at 376mm centres laid over purlins.				
2	factorylite laid over purlins at approximately 900mm centres) and fixed concurrent with roof covering including galvanized steel straining wires..	m2	81		
	Carried forward to summary of section No.1				
	Section No.3 **Bill No.4** **Roof Coverings** **IHPS-004-2025**				

	SECTION NO. 3 **BILL NO. 5** **WATERPROOFING** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES Installation by Approved Waterproofing Contractor Waterproofing to roofs, basements, parking decks, etc. Must be installed by Manufacturer approved contractors. Preparation of Substrates & Surfaces Substrates and surfaces must be smooth, clean, free of contaminants and dry Substrates and surfaces must be prepared in accordance with manufacturer's instructions The contractor is to allow for the cost of substrate preparation in the rates for Waterproofing items 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 The method of application to be discussed with and approved by the Project Manager before implementation					

	One layer of 250 micron waterproof sheeting sealed at laps Pressure Sensitive Tape:				
1	Under surface beds	m2	74		
	Carried forward to summary of section No.1				

Section No.3
Bill No.5
Waterproofing
IHPS-004-2025

	SECTION NO. 1 **BILL NO. 6** **STRUCTURAL STEELWORK** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES 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 expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete. Where anchor bolts are described as embedded in sides or soffits of concrete it shall be deemed to include holes through formwork. Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.					

	Welded beams in single lengths with flat section bearer and connection plates bolted to Steel posts:				
1	250 x 75 x 20 x 2,5 Lipped channel section beam.	t	0.33		
2	150 x 50 x 20 x 3mm Thick cold-formed lipped channel purlins with three angled cleats welded to channel and two times holed to accommodate M10 bolts..	t	0.47		
3	75 x 50 x 20 x 2,5 Lipped channel section purlin.	t	0.33		
4	Angle section bracing.	t	0.25		
5	40x40x40x3mm angle iron rafter support fixed onto the shiiping container and bolted onto the steel rafters.	t	0.4		
6	Angle section sag rails.	t	0.22		
	GALVANISED STEEL POSTS				
7	70 x 70 x 3mm Galvanised mild steel post.	No	8		
8	225 x 225mm base plates four times holed for bolts.	No	8		
	Truss Hangers, connectors, ETC				
9	90º x 770x1.6mm huricane clips fixed to channel purlins as per manufactures instruction.	No	166		
	Carried forward				

	Brought forward				
10	100 x 100mm L-shaped galvanised steel brackets 3mm thick, holed twice on each leaf to accommodate M10 bolts.	No	186		
	BOLTS, FASTENERS, ETC				
11	16mm Diameter zinc plated expansion anchor with 120mm loose bolt for fixing steel posts to slab..	No	32		
12	10mm zinc plated bolts for fixing brackets to lipped channels..	No	56		
13	M16 holding down bolts 350mm long including 70 x 70mm washers..	No	136		
	Carried forward to summary of section No.1				
	SECTION NO. 3 **Bill no. 6** **Structural Steelwork** **IHPS-004-2025**				

	SECTION NO. 3 **Bill No.7** **MEDICAL GAS (OXYGEN) RETICULATION PIPING** **SUPPLEMENTRY PREAMBLES** All pipe dimaters are outside diameters The rates shall cover the cost of provision of the pipes complete with coupling, and the costs of the handling, inspecting, transporting, bedding, laying, jointing, cutting, testing and, when relevent, disinfecting of the pipes and the joints. Tenderers are referred to the specification accompanying these bills of quantities, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification **Copper pipes and fittings:** Fittings shall be degreased similar to the Medical Grade copper tubing. On site swedging is not acceptable unless carried out by technicians approved by the duly appointed Engineer/Technologist/Technician (Mechanical). Medical grade copper tubes joined by means of fittings suitable for capillary hard soldering shall be jointed with hard solder, not soft solder, with working temperatures between 600 °C and 700 °C, using: a) Self-fluxing copper/phosphorous/over 7 % content silver rod similar to Afrox Silbralloy. The recommended heating source shall be an oxygen-liquified petroleum gas flame.					

b) When using self-fluxing hard solder care must be taken to ensure that the joint is not overheated. Oxygen - Acetylene gas flames must be used with special care.

Pipe Supports and Painting

Pipe support brackets and clamps shall be .dipped galvanised to SABS 763. In addition, they shall be painted for protection with lead plumbate followed by two finishing coats of enamel paint in accordance with the paint manufacturer's recommendations. The piping shall be painted and labelled.

Pipe Bends

Bends in Class 2 tubing shall be free from flattening, buckling or thinning of the tube wall at any point. Form bends are permissible up to 28 mm. Elbow type fittings shall not be used unless for special purposes specified in the contract. Only slow bends shall be used.

Fixing of pipes:

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

Only SAQCC-Gas authorised practitioners who is registered as a Medical Gas (oxygen) practitioner, authorised to install and maintain Medical Oxygen installations are permitted to carry out installations.

	Class 2 copper piping and fittings: Supply and Installation of Medical Grade ("MG") gas piping with the necessary fittings, hangers, brackets, fixing materials, cleaning, marking & testing as per the project specification. Piping shall be colour coded painted (3 coats enamel) as specified.				
4	ø22mm Pipe.	m	23		
5	ø22mm Tee.	No	1		
	Stainless steel fittings:				
6	ø22mm three-part ball valves.	No	5		
7	ø22mm non-return valves .	No	2		
	Shut down and cut in:				
8	Cutting and connecting into the Existing Gas System with supervision from the hospital technical staff..	sum	1		
	Testing:				
9	Allow for a 24 hour pressure test as per our Standard Specification for Medical Gas Installations. To be witnessed and signed off by the Employer's Agent. After a successful pressure test purity and continuity tests will be witnessed and signed off by the Employer's Agent..	Item	1		
	Carried forward to summary of section no.1 **Section no.3** **Bill No. 7** **Medical Gas (Oxygen) Reticulation Piping** **IHPS-004-2025**				

SUMMARY OF SECTION NO.3

Bill N	Description	Amount
1	**WATERPROOFING**	
2	**EARTHWORKS**	
3	**Concrete, formwork snd reinforcement**	
4	**External work**	
5	**ROOF COVERINGS**	
6	**STRUCTURAL STEELWORK**	
7	**Medical Gas (Oxygen) Reticulation Piping**	

SECTION NO. 4 GENERAL

Item	Description	Unit	QTY	Rate	Amount
1	Health and Safety Plan, Construction Program, Compliance with all listed Regulations and other legal paperwork and submit a copy to the Employer's Agent.	Item	1		
2	Site establishment, scaffolding, security, etc.	Item	1		
3	Preliminary and general and working 7 days a week.	Item	1		
4	Insurance to comply with NEC 3 for all facilities	Item	4		
5	Contingency (for approval by Employer's Agent if deemed necessary).	Item	1	R 54,000.00	R 54,000.00
6	Other not mentioned(State if required).	Item	1		

FINAL SUMMARY

		AMOUNT	
	Sub-total: Builders Work	R	-
	Sub-total: General	R	-
	Sub-total	R	-
	Add 15% VAT	R	-
	Total	R	-

VREDENDAL HOSPITAL					
	SECTION NO. 5 **BILL NO. 1** **EARTHWORKS** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES Nature of ground Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes Nature of ground A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured 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				

	SITE CLEARANCE, ETC.				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc..	m2	22		
2	Stripping average 150mm thick layer of top soil and stockpiling on site.	m2	22		
	EXCAVATION, FILLING, ETC.				
	Excavation in earth not exceeding 2m deep:				
3	Reduced levels under floors.	m3	11		
	Extra over all excavations for carting away:				
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	11		
	Risk of collapse of excavations:				
5	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	14		
	Keeping excavations free of water:				
6	Keeping excavations free of all water other than subterranean water.	item	2		
	Earth filling supplied by the contractor compacted to 98% Mod AASHTO density:				
7	Under floors, steps, pavings, etc..	m3	15		
	Carried forward				

	Brought forward				
	Saw cut existing surface:				
8	Sawcut existing asphalt surface.	m	32		
	Surface patching:				
9	Apply Tack Coat using 30% stable grade emulsion at 1litre/m2.	m2	36		
10	Construct new 40mm thick continously graded asphalt surface using 60/70 penetration grade bitumen.	m2	36		
11	Construction of chemically stabilized base from excavations.	m3	5		
	Carried forward to summary of section No.1				

Section No.5
Bill No.1
Earthworks
IHPS-004-2025

	SECTION NO. 5 **BILL NO. 2** **CONCRETE, FORMWORK AND REINFORCEMENT** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES 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. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. Formwork Description 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				
	Formworks to soffits of solid etc. shall be deemed to be slabs not exceeding 250mm thick unless otherwise described				
	Formwork to sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	REINFORCED CONCRETE				
	25MPa/19mm concrete:				
1	Slabs including beams and inverted beams.	m3	13		
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
2	Surface blinding under footings and bases.	m3	3.2		
	Carried forward				

	Brought forward				
	TEST BLOCKS				
3	Making and testing 150 x 150 x 150mm concrete strength test cube.	No	4		
	CONCRETE SUNDRIES				
	Curing surfaces of concrete with an approved curing compound applied as per manufacturer's instructions:				
4	Horizontal top surfaces.	m2	64		
	Finishing top surfaces of concrete smooth with a wood float:				
5	Surface beds, slabs, etc..	m2	64		
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides:				
6	Edges exceeding 300mm high.	m2	64		
	REINFORCEMENT				
	Mild steel reinforcement to structural concrete work:				
7	10mm Diameter bars.	t	0.54		
8	12mm Diameter bars.	t	0.19		
9	12mm Diameter 610mm bar casted into 300mm into concrete and the other side wrapped with builders wrapp for horizontal movement of the slab..	No	64		
	Carried forward				

	Brought forward				
	MOVEMENT JOINTS ETC.				
	"Malthoid" slip joints between horizontal concrete and brick surfaces including cement mortar bed:				
10	Not exceeding 300mm wide.	m	16		
	Boxing in rough formwork to form:				
11	25 x 25mm Horizontal chamfer at edge.	m	32		
12	25 x 25mm Vertical chamfer at corner.	m	2		
	Carried forward to summary of section No.1				
	Section No.5 **Bill No. 2** **Concrete, formwork and reinforcement** **IHPS-004-2025**				

	SECTION NO. 5 **BILL NO. 3** **EXTERNAL WORK** PREAMBLES For preambles refer to "Model Preambles for Trades" Cutting down and removing, grubbing up roots and filling in holes				
1	Tree exceeding 500mm and not exceeding 1000mm girth .	No	2		
	FENCING PVC coated steel fencing: "Betafence Betaview" or equally approved security fence and gates with PVC coating over hot dipped galvanised steel mesh, incorporating horizontal flanges, single and double bolt tamper proof spider fixator fixing system, steel posts, gates, including zinc plated steel tamper proof bolts, etc.				
2	Security fence 3000mm high with 76,2 x 12,7mm aperture centres comprising 3mm high tensile wire mesh bolted to posts with tamper proof through bolts (posts elsewhere).	m	14		
	Carried forward **Section No.5** **Bill No.3** **External Work** **IHPS-004-2025**				

	Brought forward				
4	Double gate 2600 x 3000mm high overall, with each leaf comprising 60 x 40mm mild steel rectangular frame tubing 3mm thick, incorporating one horizontal bracing piece positioned centrally and offset to accommodate fencing panels, including mild steel 30 x 30mm equal angles 3mm thick welded to tubular frame along the internal edges of the frame to support fencing panels, 150 x 150mm box opening (positioned adjacent and aligned level to the box opening of the adjacent gate leaf) comprising 60 x 40mm steel rectangular tubing welded to frame and positioned 1600mm from the bottom of frame and incorporating a horizontal lockable barrrel bolt for locking internally against adjacent leaf (with vertical 200mm drop bolt on adjacent leaf with galvaninsed keep in floor), with the frame and angles, etc. all hot dipped galvanised and powder coated, and each leaf fill-in vertically with 3mm diameter high tensile hot dipped galvanised and PVC coated "Betafence Betaview" or equally approved wire mesh fencing panels with 76,2 x 12,7mm aperture centres and 50mm reinforcing bent flanges secured with spider fixators and vandal proof bolts, all finished flush with frame, 78mm brass Viro or equally approved rust resistant insurance padlock with three keyed-alike keys.	No.	1		
	Carried forward to summary of section No.1				
	Section No.5 **Bill No.3** **External work** **IHPS-004-2025**				

	SECTION NO. 5 **BILL NO. 4** **ROOF COVERINGS** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES The supplementary preambles reflected elsewhere in these Bills of Quantities apply equally to this trade Metal roof sheeting Contractor to provide a 20 year guarantee for both the material and the paintwork of the sheeting Please note that the sheeting supplier / installer through the contractor should timeously (before installation) inform the Principal Agent of any aspect of the installation or the environment in which the sheeting is used or the application that could have a negative affect the warrantees (e.g. bending the sheets, the fixings, etc.)					

	0.53mm Galvanized IBR roof sheeting, coated steel G550with a clean COLORBOND white colour coated finish to one side with mountain mist backing coat and accessories fixed to existing timber purlins or rails at 760mm centres					
1	Roof covering with pitch not exceeding 25 degrees .	m2	81		R	-
	UNDERLAY TO TILED ROOFS					
	75mm factorylite industrial roofing insulation laid over steel rafters at 760mm centres) fixedconcurrent with steel purlins etc. including straining wires at 376mm centres laid over purlins.					
2	Factorylite laid over purlins at approximately 900mm centres) and fixed concurrent with roof covering including galvanized steel straining wires..	m2	81			
	Carried forward to summary of section No.1					
	Section no.5 **Bill No.4** **Roof Coverings** **IHPS-004-2025**					

	SECTION NO. 5 **BILL NO. 5** **WATERPROOFING** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES Installation by Approved Waterproofing Contractor Waterproofing to roofs, basements, parking decks, etc. Must be installed by Manufacturer approved contractors. Preparation of Substrates & Surfaces Substrates and surfaces must be smooth, clean, free of contaminants and dry Substrates and surfaces must be prepared in accordance with manufacturer's instructions The contractor is to allow for the cost of substrate preparation in the rates for Waterproofing items 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 The method of application to be discussed with and approved by the Project Manager before implementation					

	One layer of 250 micron waterproof sheeting sealed at laps Pressure Sensitive Tape:				
1	Under surface beds.	m2	74		
	Carried forward to summary of section No.1				
	Section No.5 **Bill No.5** **Waterproofing** **IHPS-004-2025**				

	SECTION NO. 5 **BILL NO. 6** **STRUCTURAL STEELWORK** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES 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 expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete. Where anchor bolts are described as embedded in sides or soffits of concrete it shall be deemed to include holes through formwork. Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.					

	Welded beams in single lengths with flat section bearer and connection plates bolted to Steel posts:				
1	250 x 75 x 20 x 2,5 Lipped channel section beam.	t	0.33		
2	150 x 50 x 20 x 3mm Thick cold-formed lipped channel purlins with three angled cleats welded to channel and two times holed to accommodate M10 bolts..	t	0.47		
3	75 x 50 x 20 x 2,5 Lipped channel section purlin.	t	0.33		
4	Angle section bracing.	t	0.25		
5	40x40x40x3mm angle iron rafter support fixed onto the shiiping container and bolted onto the steel rafters.	t	0.4		
6	Angle section sag rails.	t	0.22		
	GALVANISED STEEL POSTS				
7	70 x 70 x 3mm Galvanised mild steel post.	No	8		
8	225 x 225mm base plates four times holed for bolts.	No	8		
	Truss Hangers, connectors, ETC				
9	90º x 770x1.6mm huricane clips fixed to channel purlins as per manufactures instruction.	No	166		
	Carried forward				

	Brought forward				
10	100 x 100mm L-shaped galvanised steel brackets 3mm thick, holed twice on each leaf to accommodate M10 bolts.	No	186		
	BOLTS, FASTENERS, ETC				
11	16mm Diameter zinc plated expansion anchor with 120mm loose bolt for fixing steel posts to slab..	No	32		
12	10mm zinc plated bolts for fixing brackets to lipped channels.	No	56		
13	M16 holding down bolts 350mm long including 70 x 70mm washers..	No	136		
	Carried forward to summary of section No.1				

Section No.5
Bill No.6
Structural Steelwork
IHPS-004-2025

	SECTION NO. 5 **Bill No.7** **MEDICAL GAS (OXYGEN) RETICULATION PIPING** **SUPPLEMENTRY PREAMBLES** All pipe dimaters are outside diameters The rates shall cover the cost of provision of the pipes complete with coupling, and the costs of the handling, inspecting, transporting, bedding, laying, jointing, cutting, testing and, when relevent, disinfecting of the pipes and the joints. Tenderers are referred to the specification accompanying these bills of quantities, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification **Copper pipes and fittings:** Fittings shall be degreased similar to the Medical Grade copper tubing. On site swedging is not acceptable unless carried out by technicians approved by the duly appointed Engineer/Technologist/Technician (Mechanical). Medical grade copper tubes joined by means of fittings suitable for capillary hard soldering shall be jointed with hard solder, not soft solder, with working temperatures between 600 °C and 700 °C, using: a) Self-fluxing copper/phosphorous/over 7 % content silver rod similar to Afrox Silbralloy. The recommended heating source shall be an oxygen-liquified petroleum gas flame. b) When using self-fluxing hard solder care must be taken to ensure that the joint is not overheated. Oxygen - Acetylene gas flames must be used with special care.					

	Pipe Supports and Painting Pipe support brackets and clamps shall be .dipped galvanised to SABS 763. In addition, they shall be painted for protection with lead plumbate followed by two finishing coats of enamel paint in accordance with the paint manufacturer's recommendations. The piping shall be painted and labelled. **Pipe Bends** Bends in Class 2 tubing shall be free from flattening, buckling or thinning of the tube wall at any point. Form bends are permissible up to 28 mm. Elbow type fittings shall not be used unless for special purposes specified in the contract. Only slow bends shall be used. **Fixing of pipes:** 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 **Only SAQCC-Gas authorised practitioners who is registered as a Medical Gas (oxygen) practitioner, authorised to install and maintain Medical Oxygen installations are permitted to carry out installations.**					

	U-channels				
1	Galvanised U-channel 75x50x20x2mm.	m	7		
	Class 2 copper piping and fittings:				
	Supply and Installation of Medical Grade ("MG") gas piping with the necessary fittings, hangers, brackets, fixing materials, cleaning, marking & testing as per the project specification. Piping shall be colour coded painted (3 coats enamel) as specified.				
2	ø22mm Pipe.	m	25		
3	ø22mm Tee.	No	1		
	Stainless steel fittings:				
4	ø22mm three-part ball valves.	No	5		
5	ø22mm non-return valves .	No	2		
	Shut down and cut in:				
6	Cutting and connecting into the Existing Gas System with supervision from the hospital technical staff..	sum	1		
	Testing:				
7	Allow for a 24 hour pressure test as per our Standard Specification for Medical Gas Installations. To be witnessed and signed off by the Employer's Agent. After a successful pressure test purity and continuity tests will be witnessed and signed off by the Employer's Agent.	Item	1		
	Carried forward to summary of section no.5				
	Section No.5 **Bill No. 7** **Medical Gas (Oxygen) Reticulation Piping** **IHPS-004-2025**				

Summary of Section No.5

Bill N	Description	Amount
1	**WATERPROOFING**	
2	**Earthworks**	
3	**Concrete, formwork and reinforcement**	
4	**External work**	
5	**ROOF COVERINGS**	
6	**STRUCTURAL STEELWORK**	
7	**MEDICAL GAS (OXYGEN) RETICULATION PIPING**	

SECTION NO. 6- General

Item	Description	Unit	QTY	Rate	Amount
1	Health and Safety Plan, Construction Program, Compliance with all listed Regulations and other legal paperwork and submit a copy to the Employer's Agent.	Item	1		
2	Site establishment, scaffolding, security, etc.	Item	1		
3	Preliminary and general and working 7 days a week.	Item	1		
5	Contingency (for approval by Employer's Agent if deemed necessary).	Item	1	R 50,000.00	R 50,000.00
6	Other not mentioned(State if required).	Item	1		

FINAL SUMMARY

		AMOUNT	
	Sub-total: Builders Work	**R**	**-**
	Sub-total: General	**R**	**-**
		R	**-**
	Sub-total	**R**	**-**
	Add 15% VAT	**R**	**-**
	Total	**R**	**-**

BROOKLYN CHEST HOSPITAL				
SECTION NO. 7 **BILL NO. 1** **EARTHWORKS** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES Nature of ground Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes Nature of ground A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured 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				

	SITE CLEARANCE, ETC.				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc..	m2	22		
2	Stripping average 150mm thick layer of top soil and stockpiling on site.	m2	22		
	EXCAVATION, FILLING, ETC.				
	Excavation in earth not exceeding 2m deep:				
3	Reduced levels under floors.	m3	11		
	Extra over all excavations for carting away:				
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	11		
	Risk of collapse of excavations:				
5	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	14		
	Keeping excavations free of water:				
6	Keeping excavations free of all water other than subterranean water.	item	2		
	Earth filling supplied by the contractor compacted to 98% Mod AASHTO density:				
7	Under floors, steps, pavings, etc..	m3	15		
	Carried forward				

	Brought forward				
	Saw cut existing surface:				
8	Sawcut existing asphalt surface.	m	32		
	Surface patching:				
9	Apply Tack Coat using 30% stable grade emulsion at 1litre/m2.	m2	36		
10	Construct new 40mm thick continously graded asphalt surface using 60/70 penetration grade bitumen.	m2	36		
11	Construction of chemically stabilized base from excavations.	m3	5		
	Carried forward to summary of section No.1				

Section No.7
Bill No.1
Earthworks
IHPS-004-2025

SECTION NO. 7

BILL NO. 2

CONCRETE, FORMWORK AND REINFORCEMENT

PREAMBLES

For preambles refer to "Model Preambles for Trades"

SUPPLEMENTARY PREAMBLES

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. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect.

Formwork

Description 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				
	Formworks to soffits of solid etc. shall be deemed to be slabs not exceeding 250mm thick unless otherwise described				
	Formwork to sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	REINFORCED CONCRETE				
	25MPa/19mm concrete:				
1	Slabs including beams and inverted beams.	m3	13		
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
2	Surface blinding under footings and bases.	m3	4		
	Carried forward				

	Brought forward				
	TEST BLOCKS				
3	Making and testing 150 x 150 x 150mm concrete strength test cube.	No	4		
	CONCRETE SUNDRIES				
	Curing surfaces of concrete with an approved curing compound applied as per manufacturer's instructions:				
4	Horizontal top surfaces.	m2	64		
	Finishing top surfaces of concrete smooth with a wood float:				
5	Surface beds, slabs, etc..	m2	64		
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides:				
6	Edges exceeding 300mm high.	m2	64		
	REINFORCEMENT				
	Mild steel reinforcement to structural concrete work:				
7	10mm Diameter bars.	t	0.54		
8	12mm Diameter bars.	t	0.19		
9	12mm Diameter 610mm bar casted into 300mm into concrete and the other side wrapped with builders wrapp for horizontal movement of the slab..	No	64		
	Carried forward				

Section No.7
Bill No. 2
Concrete, formwork and reinforcement
IHPS-004-2025

	Brought forward				
	MOVEMENT JOINTS ETC.				
	"Malthoid" slip joints between horizontal concrete and brick surfaces including cement mortar bed:				
10	Not exceeding 300mm wide.	m	16		
	Boxing in rough formwork to form:				
11	25 x 25mm Horizontal chamfer at edge.	m	32		
12	25 x 25mm Vertical chamfer at corner.	m	2		
	Carried forward to summary of section No.1				
	Section No.7 **Bill No. 2** **Concrete, formwork and reinforcement** **IHPS-004-2025**				

	SECTION NO. 7 **BILL NO. 3** **EXTERNAL WORK** PREAMBLES For preambles refer to "Model Preambles for Trades" Cutting down and removing, grubbing up roots and filling in holes				
1	Tree exceeding 500mm and not exceeding 1000mm girth .	No	2		
	FENCING PVC coated steel fencing: "Betafence Betaview" or equally approved security fence and gates with PVC coating over hot dipped galvanised steel mesh, incorporating horizontal flanges, single and double bolt tamper proof spider fixator fixing system, steel posts, gates, including zinc plated steel tamper proof bolts, etc.				
2	Security fence 3000mm high with 76,2 x 12,7mm aperture centres comprising 3mm high tensile wire mesh bolted to posts with tamper proof through bolts (posts elsewhere).	m	14		
	Carried forward				

	Brought forward				
4	Double gate 2600 x 3000mm high overall, with each leaf comprising 60 x 40mm mild steel rectangular frame tubing 3mm thick, incorporating one horizontal bracing piece positioned centrally and offset to accommodate fencing panels, including mild steel 30 x 30mm equal angles 3mm thick welded to tubular frame along the internal edges of the frame to support fencing panels, 150 x 150mm box opening (positioned adjacent and aligned level to the box opening of the adjacent gate leaf) comprising 60 x 40mm steel rectangular tubing welded to frame and positioned 1600mm from the bottom of frame and incorporating a horizontal lockable barrrel bolt for locking internally against adjacent leaf (with vertical 200mm drop bolt on adjacent leaf with galvaninsed keep in floor), with the frame and angles, etc. all hot dipped galvanised and powder coated, and each leaf fill-in vertically with 3mm diameter high tensile hot dipped galvanised and PVC coated "Betafence Betaview" or equally approved wire mesh fencing panels with 76,2 x 12,7mm aperture centres and 50mm reinforcing bent flanges secured with spider fixators and vandal proof bolts, all finished flush with frame, 78mm brass Viro or equally approved rust resistant insurance padlock with three keyed-alike keys.	No.	1		
	Carried forward to summary of section No.1				**R -**
	Section No.7 **Bill No.3** **External work** **IHPS-004-2025**				

	SECTION NO. 7 **BILL NO. 4** **ROOF COVERINGS** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES The supplementary preambles reflected elsewhere in these Bills of Quantities apply equally to this trade Metal roof sheeting Contractor to provide a 20 year guarantee for both the material and the paintwork of the sheeting Please note that the sheeting supplier / installer through the contractor should timeously (before installation) inform the Principal Agent of any aspect of the installation or the environment in which the sheeting is used or the application that could have a negative affect the warrantees (e.g. bending the sheets, the fixings, etc.)					

	0.53mm Galvanized IBR roof sheeting, coated steel G550with a clean COLORBOND white colour coated finish to one side with mountain mist backing coat and accessories fixed to existing timber purlins or rails at 760mm centres					
1	Roof covering with pitch not exceeding 25 degrees .	m2	81		R	-
	UNDERLAY TO TILED ROOFS					
	75mm factorylite industrial roofing insulation laid over steel rafters at 760mm centres) fixedconcurrent with steel purlins etc. including straining wires at 376mm centres laid over purlins.					
2	factorylite laid over purlins at approximately 900mm centres) and fixed concurrent with roof covering including galvanized steel straining wires..	m2	81			
	Carried forward to summary of section No.1					
	Section No.7 **Bill No.4** **Roof Covering** **IHPS-004-2025**					

	SECTION NO. 7 **BILL NO. 5** **WATERPROOFING** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES Installation by Approved Waterproofing Contractor Waterproofing to roofs, basements, parking decks, etc. Must be installed by Manufacturer approved contractors. Preparation of Substrates & Surfaces Substrates and surfaces must be smooth, clean, free of contaminants and dry Substrates and surfaces must be prepared in accordance with manufacturer's instructions The contractor is to allow for the cost of substrate preparation in the rates for Waterproofing items 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 The method of application to be discussed with and approved by the Project Manager before implementation					

	One layer of 250 micron waterproof sheeting sealed at laps Pressure Sensitive Tape:				
1	Under surface beds.	m2	74		
	Carried forward to summary of section No.1				
	Section No.7 **Bill No.5** **Waterproofing** **IHPS-004-2025**				

	SECTION NO. 1 **BILL NO. 6** **STRUCTURAL STEELWORK** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES 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 expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete. Where anchor bolts are described as embedded in sides or soffits of concrete it shall be deemed to include holes through formwork. Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.					

	Welded beams in single lengths with flat section bearer and connection plates bolted to Steel posts:				
1	250 x 75 x 20 x 2,5 Lipped channel section beam	t	0.33		
2	150 x 50 x 20 x 3mm Thick cold-formed lipped channel purlins with three angled cleats welded to channel and two times holed to accommodate M10 bolts.	t	0.47		
3	75 x 50 x 20 x 2,5 Lipped channel section purlin.	t	0.33		
4	Angle section bracing	t	0.25		
5	40x40x40x3mm angle iron rafter support fixed onto the shiiping container and bolted onto the steel rafters.	t	0.4		
6	Angle section sag rails.	t	0.22		
	GALVANISED STEEL POSTS				
7	70 x 70 x 3mm Galvanised mild steel post.	No	8		
8	225 x 225mm base plates four times holed for bolts.	No	8		
	Truss Hangers, connectors, ETC				
9	90º x 770x1.6mm huricane clips fixed to channel purlins as per manufactures instruction.	No	166		
	Carried forward				
	Section No.7 **Bill No.6** **Structural Steelwork** **IHPS-004-2025**				

	Brought forward				
10	100 x 100mm L-shaped galvanised steel brackets 3mm thick, holed twice on each leaf to accommodate M10 bolts.	No	186		
	BOLTS, FASTENERS, ETC				
11	16mm Diameter zinc plated expansion anchor with 120mm loose bolt for fixing steel posts to slab..	No	32		
12	10mm zinc plated bolts for fixing brackets to lipped channels..	No	56		
13	M16 holding down bolts 350mm long including 70 x 70mm washers..	No	136		
	Carried forward to summary of section No.1				
	Section No.7 **Bill No.6** **Structural Steelwork** **IHPS-004-2025**				

	SECTION NO. 7 **Bill No.7** **MEDICAL GAS (OXYGEN) RETICULATION PIPING** **SUPPLEMENTRY PREAMBLES** All pipe dimaters are outside diameters The rates shall cover the cost of provision of the pipes complete with coupling, and the costs of the handling, inspecting, transporting, bedding, laying, jointing, cutting, testing and, when relevent, disinfecting of the pipes and the joints. Tenderers are referred to the specification accompanying these bills of quantities, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification **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' **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 **Copper pipes and fittings:**					

Fittings shall be degreased similar to the Medical Grade copper tubing. On site swedging is not acceptable unless carried out by technicians approved by the duly appointed Engineer/Technologist/Technician (Mechanical).

Medical grade copper tubes joined by means of fittings suitable for capillary hard soldering shall be jointed with hard solder, not soft solder, with working temperatures between 600 °C and 700 °C, using:

a) Self-fluxing copper/phosphorous/over 7 % content silver rod similar to Afrox Silbralloy. The recommended heating source shall be an oxygen-liquified petroleum gas flame.

b) When using self-fluxing hard solder care must be taken to ensure that the joint is not overheated. Oxygen - Acetylene gas flames must be used with special care.

Pipe Supports and Painting

Pipe support brackets and clamps shall be .dipped galvanised to SABS 763. In addition, they shall be painted for protection with lead plumbate followed by two finishing coats of enamel paint in accordance with the paint manufacturer's recommendations. The piping shall be painted and labelled.

Pipe Bends

Bends in Class 2 tubing shall be free from flattening, buckling or thinning of the tube wall at any point. Form bends are permissible up to 28 mm. Elbow type fittings shall not be used unless for special purposes specified in the contract. Only slow bends shall be used.

	Fixing of pipes: 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 **Only SAQCC-Gas authorised practitioners who is registered as a Medical Gas (oxygen) practitioner, authorised to install and maintain Medical Oxygen installations are permitted to carry out installations.**					

	Excavation in earth not exceeding 2m deep:				
1	Trenches.	m³	8		
	Earth filling supplied by the contractor compacted to 98% Mod AASHTO density:				
2	Backfilling to trenches, holes, etc.	m³	1		
	Service Channels				
3	Reinforced concrete U-Channel 450x450.	m	20		
4	Reinforced concrete cover for U-Channel 1200x450x75.	m	20		
	Class 2 copper piping and fittings:				
	Supply and Installation of Medical Grade ("MG") gas piping with the necessary fittings, hangers, brackets, fixing materials, cleaning, marking & testing as per the project specification. Piping shall be colour coded painted (3 coats enamel) as specified.				
5	ø22mm Pipe.	m	22		
6	ø22mm Tee.	No	1		
	Stainless steel fittings:				
7	ø22mm three-part ball valves.	No	5		
8	ø22mm non-return valves .	No	2		
	Shut down and cut in:				
9	Cutting and connecting into the Existing Gas System with supervision from the hospital technical staff..	sum	1		
	Testing:				
10	Allow for a 24 hour pressure test as per our Standard Specification for Medical Gas Installations. To be witnessed and signed off by the Employer's Agent. After a successful pressure test purity and continuity tests will be witnessed and signed off by the Employer's Agent..	Item	1		
	Carried forward to summary of section No.7.				
	Section No.7 **Bill No 7** **MEDICAL GAS (OXYGEN) RETICULATION PIPING**				

Summary of section No.7

Bill N	Description	Amount
1	**WATERPROOFING**	
2	**earthworks**	
3	**concrete, formwork and reinforcement**	
4	**external work**	
5	**ROOF COVERINGS**	
6	**STRUCTURAL STEELWORK**	
7	**MEDICAL GAS (OXYGEN) RETICULATION PIPING**	

SECTION NO. 8- GENERAL

Item	Description	Unit	QTY	Rate	Amount
1	Health and Safety Plan, Construction Program, Compliance with all listed Regulations and other legal paperwork and submit a copy to the Employer's Agent.	Item	1		
2	Site establishment, scaffolding, security, etc.	Item	1		
3	Preliminary and general and working 7 days a week.	Item	1		
5	Contingency (for approval by Employer's Agent if deemed necessary).	Item	1	R 55,000.00	R 55,000.00
6	Other not mentioned(State if required).	Item	1		

FINAL SUMMARY

		AMOUNT	
	Sub-total: Builders Work	**R**	**-**
	Sub-total: General	**R**	**-**
	Sub-total	**R**	**-**
	Add 15% VAT	**R**	**-**
	Total	**R**	**-**

WESFLEUR HOSPITAL				
SECTION NO. 9 **BILL NO. 1** **ALTERATIONS** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES Demolitions and Works on Site All demolitions and works on site must be carried out carefully and in the safest possible manner and the Contractor is to make a thorough examination and take all necessary precautions before proceeding with Old materials to become property of the contractor Old materials from alterations except where described to be re-used or handed over, become the property of the contractor Old materials to be carted away Old materials from alterations except where described as re-used or handed over, as well as all rubbish, etc. must be regularly carted from the site and not be allowed to accumulate on or around the site. View site Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials salvageable from the alterations. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained				

	General				
	The contractor shall carry out the whole works with as little mess and noise as possible and with a minimum of disturbance to the occupants of the building. The contractor shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the Project Manager				
	Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent				
	Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary				
	The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc.)				
	TEMPORARY FENCING				
	Breaking up and removing reinforced concrete, includingcutting off and removing reinforcement:				
1	Concrete kerbs.	m	22		
2	Relocate the 6m high LED lights including rerouting electrica line.	No	2		
	Carried forward to summary of section No.1				
	Section No.9 **Bill No.1** **Alterations** **IHPS-004-2025**				

	SECTION NO. 9 **BILL NO. 2** **EARTHWORKS** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES Nature of ground Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes Nature of ground A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured 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					

	SITE CLEARANCE, ETC.				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc..	m2	22		
2	Stripping average 150mm thick layer of top soil and stockpiling on site.	m2	22		
	EXCAVATION, FILLING, ETC.				
	Excavation in earth not exceeding 2m deep:				
3	Reduced levels under floors.	m3	11		
	Extra over all excavations for carting away:				
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	11		
	Risk of collapse of excavations:				
5	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	14		
	Keeping excavations free of water:				
6	Keeping excavations free of all water other than subterranean water.	item	2		
	Earth filling supplied by the contractor compacted to 98% Mod AASHTO				
7	Under floors, steps, pavings, etc.	m3	15		
	Saw cut existing surface:				
	Carried forward				

	Brought forward				
8	Sawcut existing asphalt surface.	m	32		
	Surface patching:				
9	Apply Tack Coat using 30% stable grade emulsion at 1litre/m2.	m2	36		
10	Construct new 40mm thick continously graded asphalt surface using 60/70 penetration grade bitumen.	m2	36		
11	Construction of chemically stabilized base from excavations.	m3	5		
	Carried forward to summary of section No.1				

Section No.9
Bill No.2
Earthworks
IHPS-004-2025

	SECTION NO. 9 **BILL NO. 3** **CONCRETE, FORMWORK AND REINFORCEMENT** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES 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. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. Formwork Description 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 Formworks to soffits of solid etc. shall be deemed to be slabs not exceeding 250mm thick unless otherwise described				

	Formwork to sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	REINFORCED CONCRETE				
	25MPa/19mm concrete:				
1	Slabs including beams and inverted beams.	m3	8		
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
2	Surface blinding under footings and bases.	m3	45		
	TEST BLOCKS				
3	Making and testing 150 x 150 x 150mm concrete strength test cube.	No	4		
	CONCRETE SUNDRIES				
	Curing surfaces of concrete with an approved curing compound applied as per manufacturer's instructions:				
4	Horizontal top surfaces.	m2	45		
	Finishing top surfaces of concrete smooth with a wood float:				
	Carried forward				
	SECTION NO. 9 **BILL NO. 3** **CONCRETE, FORMWORK AND REINFORCEMENT** **IHPS-004-2025**				

	Brought forward				
5	Surface beds, slabs, etc..	m2	45		
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides:				
6	Edges exceeding 300mm high.	m2	38		
	REINFORCEMENT				
	Mild steel reinforcement to structural concrete work:				
7	10mm Diameter bars.	t	0.28		
8	12mm Diameter bars.	t	0.12		
9	12mm Diameter 610mm bar casted into 300mm into concrete and the other side wrapped with builders wrapp for horizontal movement of the slab at 250mm centers..	No	28		
	MOVEMENT JOINTS ETC.				
	"Malthoid" slip joints between horizontal concrete and brick surfaces including cement mortar bed:				
9	Not exceeding 300mm wide.	m	18		
	Boxing in rough formwork to form:				
10	25 x 25mm Horizontal chamfer at edge.	m	35		
11	25 x 25mm Vertical chamfer at corner.	m	2		
	Carried forward to summary of section No.1				

Section No.9
Bill No.3
Concrete, formwork and reinforcement
IHPS-004-2025

	SECTION NO. 9				
	BILL NO. 4				
	EXTERNAL WORK				
	PREAMBLES				
	For preambles refer to "Model Preambles for Trades"				
	Cutting down and removing, grubbing up roots and filling in holes				
1	Tree exceeding 500mm and not exceeding 1000mm girth .	No	2		
	FENCING				
	PVC coated steel fencing:				
	"Betafence Betaview" or equally approved security fence and gates with PVC coating over hot dipped galvanised steel mesh, incorporating horizontal flanges, single and double bolt tamper proof spider fixator fixing system, steel posts, gates, including zinc plated steel tamper proof bolts, etc.				
2	Security fence 3000mm high with 76,2 x 12,7mm aperture centres comprising 3mm high tensile wire mesh bolted to posts with tamper proof through bolts (posts elsewhere).	m	4		
	Carried forward				

	Brought forward				
3	Double gate 2600 x 3000mm high overall, with each leaf comprising 60 x 40mm mild steel rectangular frame tubing 3mm thick, incorporating one horizontal bracing piece positioned centrally and offset to accommodate fencing panels, including mild steel 30 x 30mm equal angles 3mm thick welded to tubular frame along the internal edges of the frame to support fencing panels, 150 x 150mm box opening (positioned adjacent and aligned level to the box opening of the adjacent gate leaf) comprising 60 x 40mm steel rectangular tubing welded to frame and positioned 1600mm from the bottom of frame and incorporating a horizontal lockable barrrel bolt for locking internally against adjacent leaf (with vertical 200mm drop bolt on adjacent leaf with galvaninsed keep in floor), with the frame and angles, etc. all hot dipped galvanised and powder coated, and each leaf fill-in vertically with 3mm diameter high tensile hot dipped galvanised and PVC coated "Betafence Betaview" or equally approved wire mesh fencing panels with 76,2 x 12,7mm aperture centres and 50mm reinforcing bent flanges secured with spider fixators and vandal proof bolts, all finished flush with frame, 78mm brass Viro or equally approved rust resistant insurance padlock with three keyed-alike keys.	No.	1		
	Carried forward to summary of section No.1				
	Section No.9 **Bill No.4** **External Work** **IHPS-004-2025**				

	SECTION NO. 9 **BILL NO. 5** **ROOF COVERINGS** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES The supplementary preambles reflected elsewhere in these Bills of Quantities apply equally to this trade Metal roof sheeting Contractor to provide a 20 year guarantee for both the material and the paintwork of the sheeting Please note that the sheeting supplier / installer through the contractor should timeously (before installation) inform the Principal Agent of any aspect of the installation or the environment in which the sheeting is used or the application that could have a negative affect the warrantees (e.g. bending the sheets, the fixings, etc.) 0.53mm Galvanized IBR roof sheeting, coated steel G550with a clean COLORBOND white colour coated finish to one side with mountain mist backing coat and accessories fixed to existing timber purlins or rails at 760mm centres				
1	Roof covering with pitch not exceeding 25 degrees.	m2	18		
	Carried forward				

	Brought forward				
	UNDERLAY TO TILED ROOFS				
	Polypropylene underlay with 150mm overlapped joints, fixed over trusses and under tiling battens with and including galvanised clout nails:				
2	To roofs with pitch not exceeding 25 degrees.	m2	18		
	Carried forward to summary of section No.1				
	Section No 9 **Bill No. 5** **Roof covering** **IHPS-004-2025**				

	SECTION NO. 9 **BILL NO. 6** **WATERPROOFING** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES Installation by Approved Waterproofing Contractor Waterproofing to roofs, basements, parking decks, etc. Must be installed by Manufacturer approved contractors. Preparation of Substrates & Surfaces Substrates and surfaces must be smooth, clean, free of contaminants and dry Substrates and surfaces must be prepared in accordance with manufacturer's instructions The contractor is to allow for the cost of substrate preparation in the rates for Waterproofing items 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 The method of application to be discussed with and approved by the Project Manager before implementation					

	One layer of 250 micron waterproof sheeting sealed at laps Pressure Sensitive Tape:				
1	Under surface beds.	m2	74		
	Carried forward to summary of section No.1				
	Section No. 9 Bill No. 6 Waterproofing IHPS-004-2025				

	SECTION NO. 9 **BILL NO. 7** **STRUCTURAL STEELWORK** PREAMBLES For preambles refer to "Model Preambles for Trades" SUPPLEMENTARY PREAMBLES 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 expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete. Where anchor bolts are described as embedded in sides or soffits of concrete it shall be deemed to include holes through formwork. Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete. Welded beams in single lengths with flat section bearer and connection plates bolted to concrete columns:					

1	250 x 75 x 20 x 2,5 Lipped channel section beam.	t	0.12		
2	150 x 50 x 20 x 3mm Thick cold-formed lipped channel purlins with three angled cleats welded to channel and two times holed to accommodate M10 bolts..	t	0.25		
3	75 x 50 x 20 x 2,5 Lipped channel section purlin.	t	0.4		
4	Angle section bracing.	t	0.15		
5	40x40x40x3mm angle iron rafter support fixed onto the shiiping container and bolted onto the steel rafters.	t	0.2		
	GALVANISED STEEL POSTS				
7	70 x 70 x 3mm Galvanised mild steel post.	No	4		
8	225 x 225mm base plates four times holed for bolts.	No	4		
	Truss Hangers, connectors, ETC				
9	90º x 770x1.6mm huricane clips fixed to channel purlins as per manufactures instruction.	No	56		
10	100 x 100mm L-shaped galvanised steel brackets 3mm thick, holed twice on each leaf to accommodate M10 bolts.	No	56		
	BOLTS, FASTENERS, ETC				
11	16mm Diameter zinc plated expansion anchor with 120mm loose bolt for fixing steel posts to slab..	No	22		
12	10mm zinc plated bolts for fixing brackets to lipped channels..	No	22		
13	M16 holding down bolts 350mm long including 70 x 70mm washers..	No	56		
	Carried forward to summary of section No.1				
	SECTION NO. 9 **Bill No.7** **Structural Steelwork** **IHPS-004-2025**				

	MEDICAL GAS (OXYGEN) RETICULATION PIPING **SUPPLEMENTRY PREAMBLES** All pipe dimaters are outside diameters The rates shall cover the cost of provision of the pipes complete with coupling, and the costs of the handling, inspecting, transporting, bedding, laying, jointing, cutting, testing and, when relevent, disinfecting of the pipes and the joints. Tenderers are referred to the specification accompanying these bills of quantities, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification **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' **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					

	Copper pipes and fittings: Fittings shall be degreased similar to the Medical Grade copper tubing. On site swedging is not acceptable unless carried out by technicians approved by the duly appointed Engineer/Technologist/Technician (Mechanical). Medical grade copper tubes joined by means of fittings suitable for capillary hard soldering shall be jointed with hard solder, not soft solder, with working temperatures between 600 °C and 700 °C, using: a) Self-fluxing copper/phosphorous/over 7 % content silver rod similar to Afrox Silbralloy. The recommended heating source shall be an oxygen-liquified petroleum gas flame. b) When using self-fluxing hard solder care must be taken to ensure that the joint is not overheated. Oxygen - Acetylene gas flames must be used with special care. **Pipe Supports and Painting** Pipe support brackets and clamps shall be .dipped galvanised to SABS 763. In addition, they shall be painted for protection with lead plumbate followed by two finishing coats of enamel paint in accordance with the paint manufacturer's recommendations. The piping shall be painted and labelled.					

	Pipe Bends Bends in Class 2 tubing shall be free from flattening, buckling or thinning of the tube wall at any point. Form bends are permissible up to 28 mm. Elbow type fittings shall not be used unless for special purposes specified in the contract. Only slow bends shall be used. **Fixing of pipes:** 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 **Only SAQCC-Gas authorised practitioners who is registered as a Medical Gas (oxygen) practitioner, authorised to install and maintain Medical Oxygen installations are permitted to carry out installations.**					

	Excavation in earth not exceeding 2m deep:				
1	Trenches.	m³	8		
	Earth filling supplied by the contractor compacted to 98% Mod AASHTO density:				
2	Backfilling to trenches, holes, etc..	m³	1		
	Service Channels				
3	Reinforced concrete U-Channel 450x450(New item	m	20		
4	Reinforced concrete cover for U-Channel 1200x450x75.	m	20		
	Class 2 copper piping and fittings:				
	Supply and Installation of Medical Grade ("MG") gas piping with the necessary fittings, hangers, brackets, fixing materials, cleaning, marking & testing as per the project specification. Piping shall be colour coded painted (3 coats enamel) as specified.				
5	ø22mm Pipe.	m	35		
6	ø22mm Tee	No	1		
	Stainless steel fittings:				
7	ø22mm three-part ball valves.	No	5		
8	ø22mm non-return valves .	No	2		
	Shut down and cut in:				
9	Cutting and connecting into the Existing Gas System with supervision from the hospital technical staff..	sum	1		
	Testing:				
10	Allow for a 24 hour pressure test as per our Standard Specification for Medical Gas Installations. To be witnessed and signed off by the Employer's Agent. After a successful pressure test purity and continuity tests will be witnessed and signed off by the Employer's Agent.	Item	1		
	Carried forward to summary of section No.1				
	Section No 9 **Bill No.8** **Medical Gas (Oxygen) Reticulation piping** **IHPS-004-2025**				

SUMMARY OF SECTION NO.9

Bill N	Description	Amount
1	**Alterations**	
2	**WATERPROOFING**	
3	**EARTHWORKS**	
4	**Concrete, formwork and reinforcement**	
5	**External Work**	
6	**ROOF COVERINGS**	
7	**STRUCTURAL STEELWORK**	
8	**MEDICAL GAS (OXYGEN) RETICULATION PIPING**	

SECTION NO. 10 General

Item	Description	Unit	QTY	Rate	Amount
1	Health and Safety Plan, Construction Program, Compliance with all listed Regulations and other legal paperwork and submit a copy to the Employer's Agent.	Item	1		
2	Site establishment, scaffolding, security, etc.	Item	1		
3	Preliminary and general and working 7 days a week.	Item	1		
5	Contingency (for approval by Employer's Agent if deemed necessary).	Item	1	R 45,000.00	R 45,000.00

FINAL SUMMARY

		AMOUNT	
	Sub-total: Builders Work	R	-
	Sub-total: General	R	-
	Sub-total	R	-
	Add 15% VAT	R	-
	Total	R	-

SECTION NO. 11- TRAVELLING RATES

Item	Description	Unit	Quantity	Rate	Amount
1	Travel rate- one visit from workshop to the site and back (please list distance)	Km	1		Rate only
2	Semi skilled Artisan	R/day	1		Rate only
3	Semi skilled Artisan	R/day	1		Rate only
4	Labourer	R/day	1		Rate only
5	Contract Manager or site Supervisor	R/day	1		Rate only
6	Specialist Contractor	R/day	1		Rate only
7	Consultant	R/day	1		Rate only
8	Other (Please State)	R/day	1		Rate only

PRICE SUMMARY

Section No.1,3,5,7,9	Builders work (Ceres Hospital)	R	-
	Builders work (Beaufort West hospital)	R	-
	Builders work (Vredendal Hospital)	R	-
	Builders work (Brooklyn Hospital)	R	-
	Builders work (Wesfleur hospital)	R	-
	Sub-total : Builders Work	R	-
Section No.2,4,6,8,10	General (Ceres hospital)	R	-
	General (Beaufort west hospital)	R	-
	General (Vredendal Hospital)	R	-
	General (Brooklyn Chest Hospital)	R	-
	General (Wesfleur Hospital)	R	-
	Sub-total : General	R	-
	Sub-total	R	-
	Add 15% VAT	R	-
	Total	R	-

AUTHORISED SIGNATURE

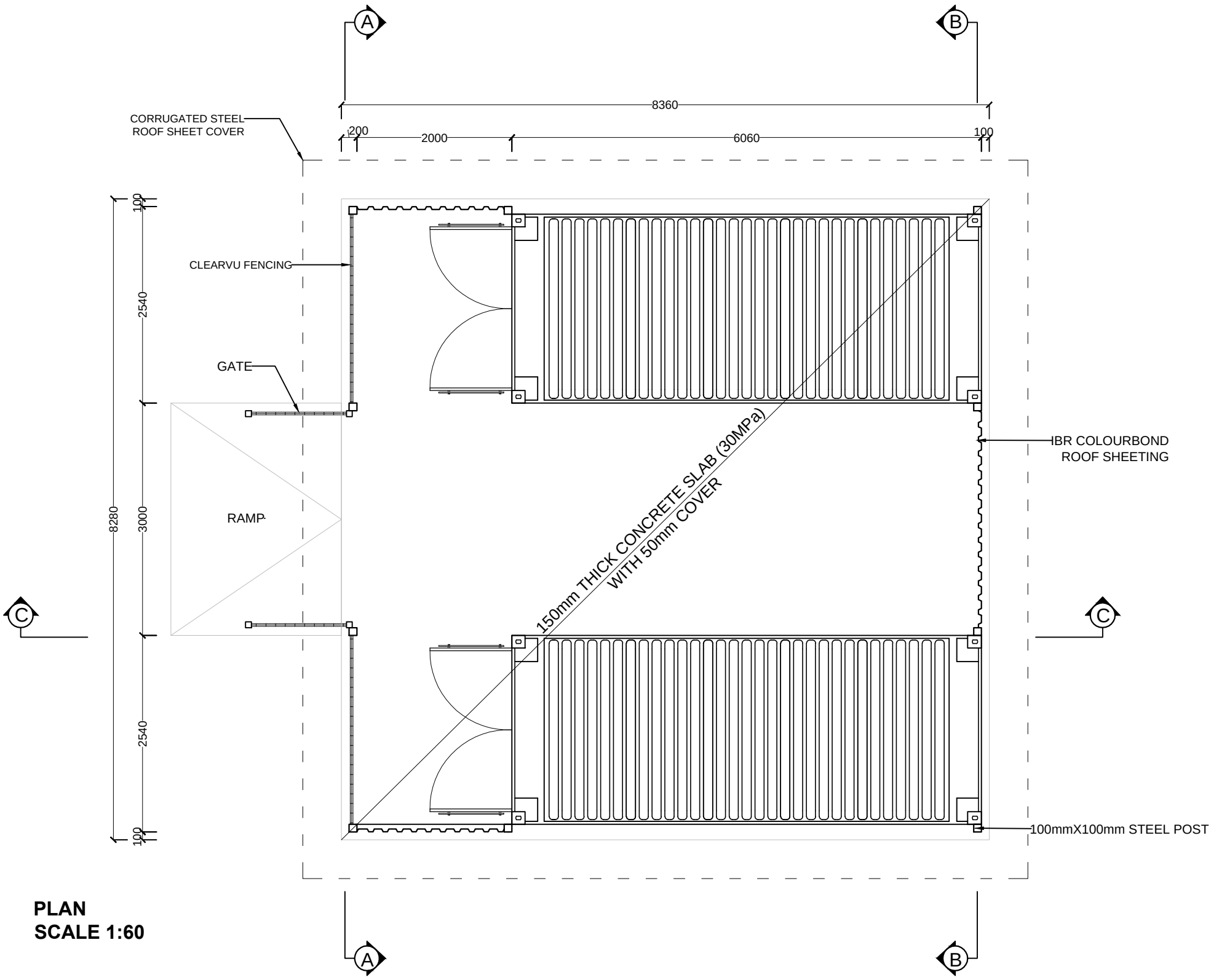
SUPPLIER :

COMPANY REPRESENTETIVE :

DATE :

ANNEXURE 2

1. Schematic 1
2. Schematic 2
3. Schematic 3
4. Schematic 4



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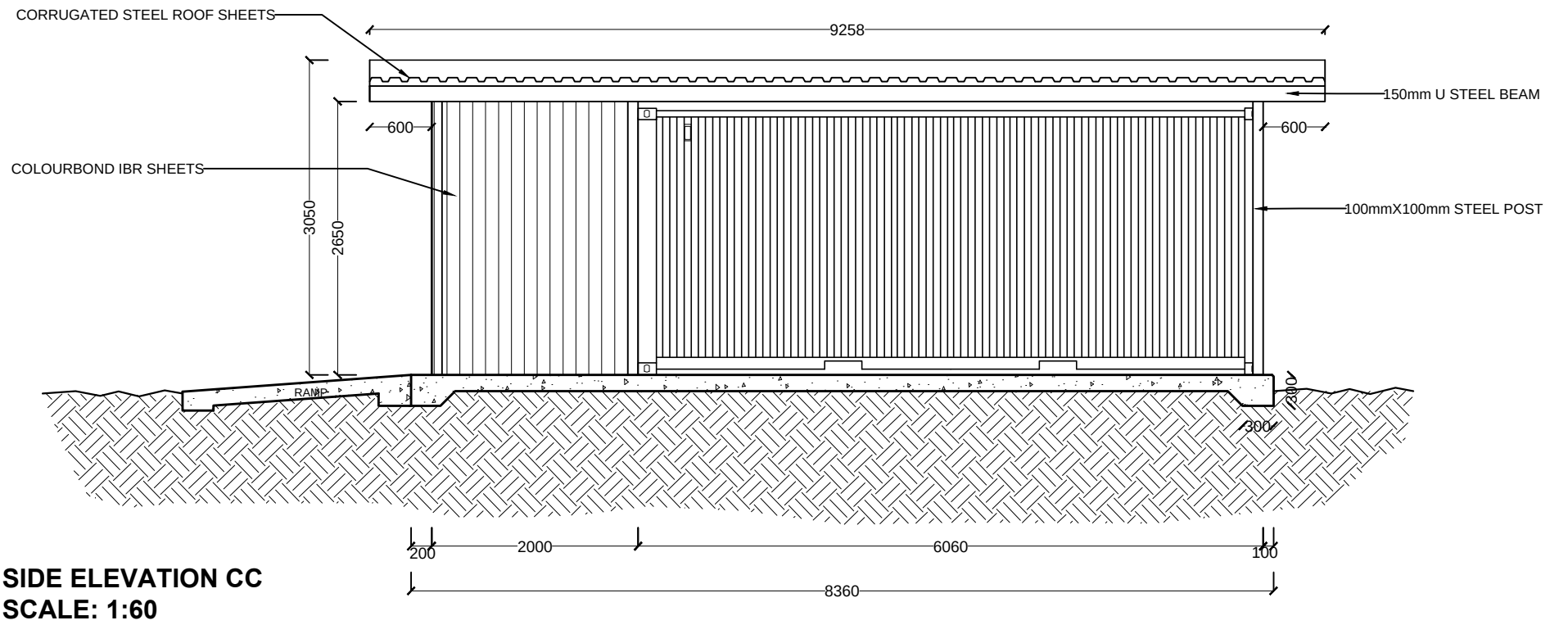

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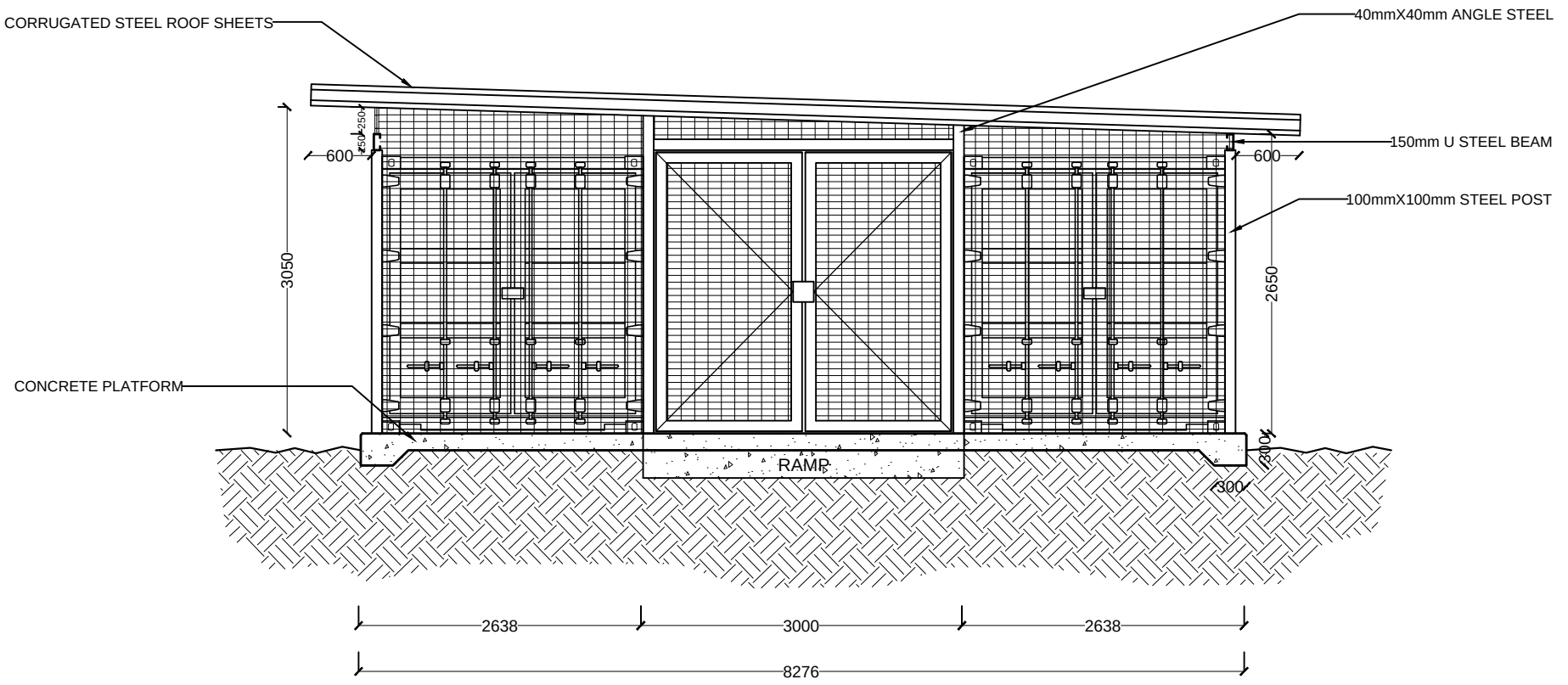

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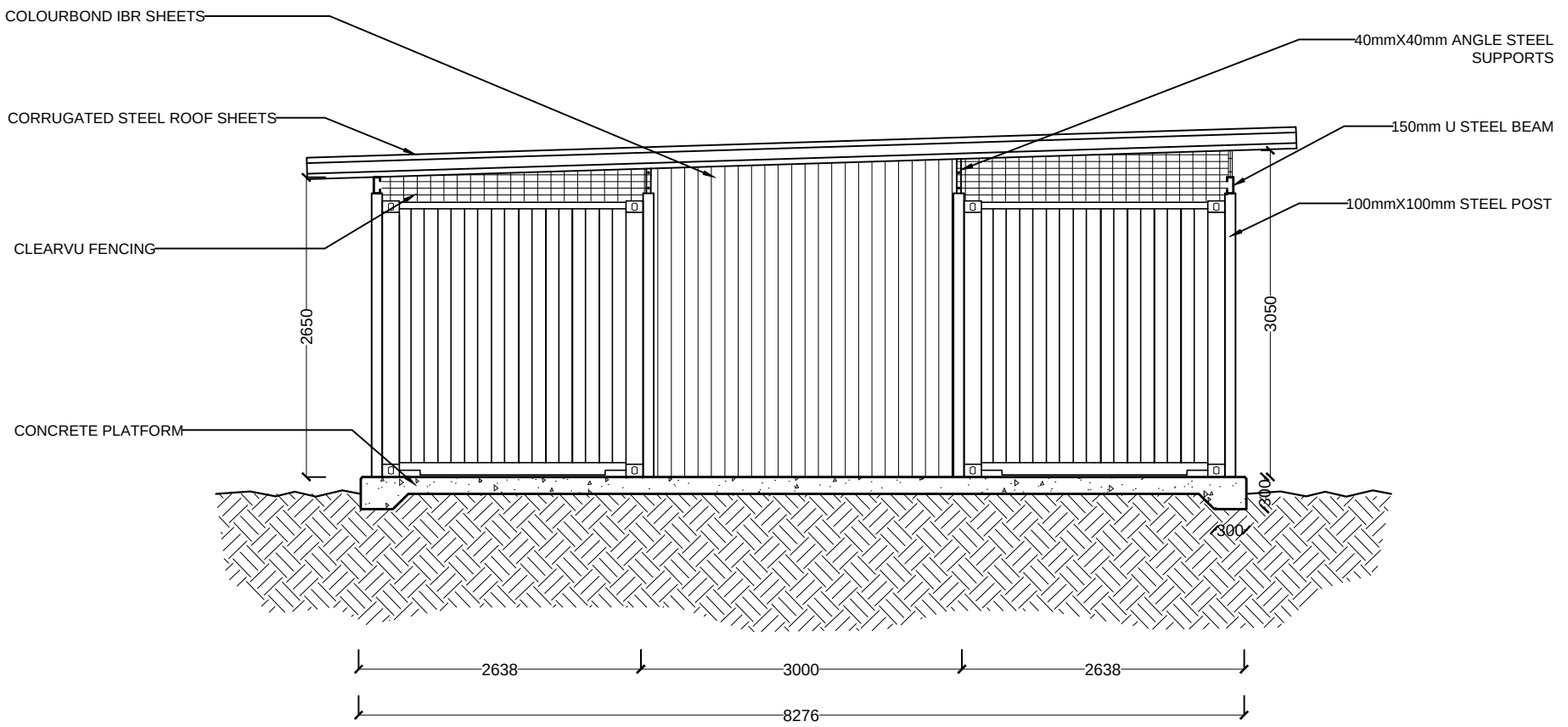

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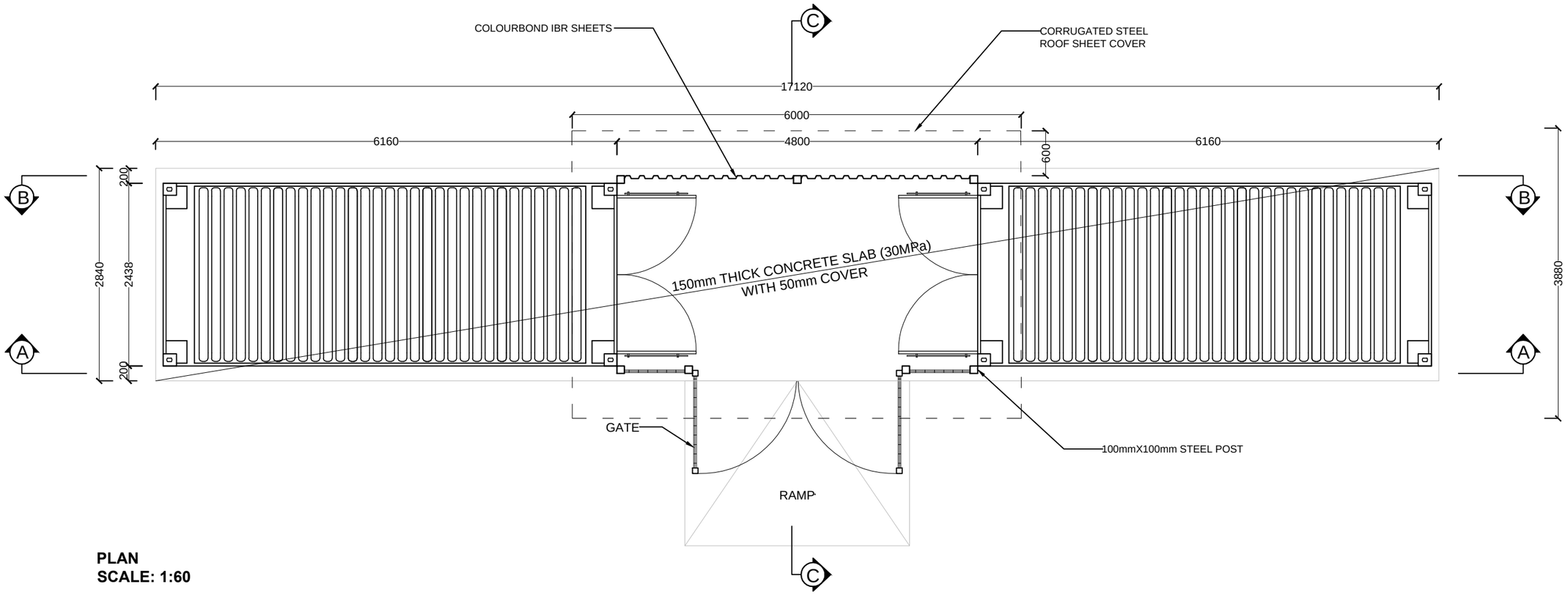

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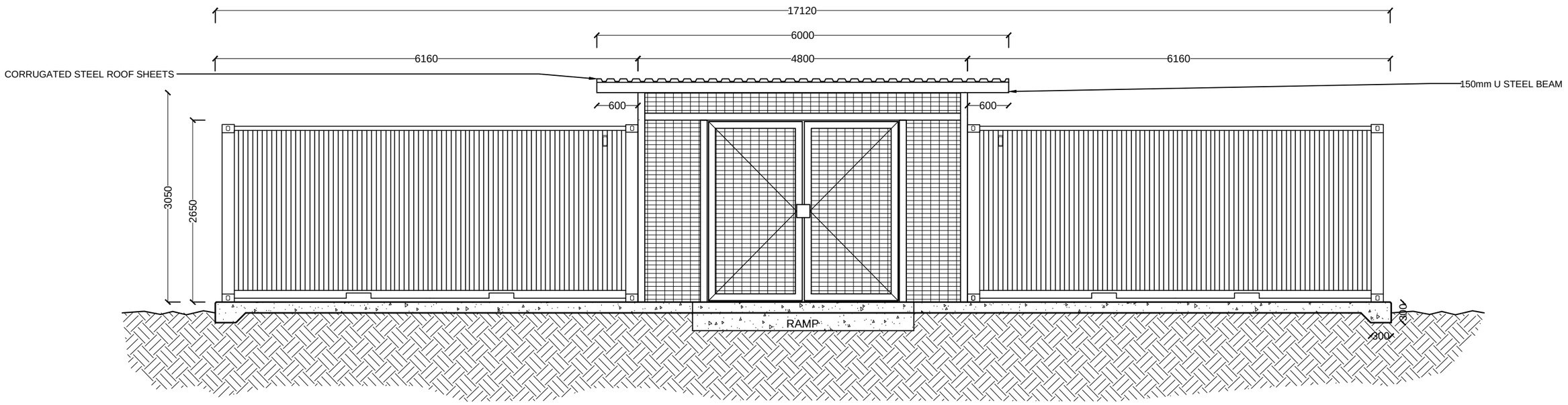

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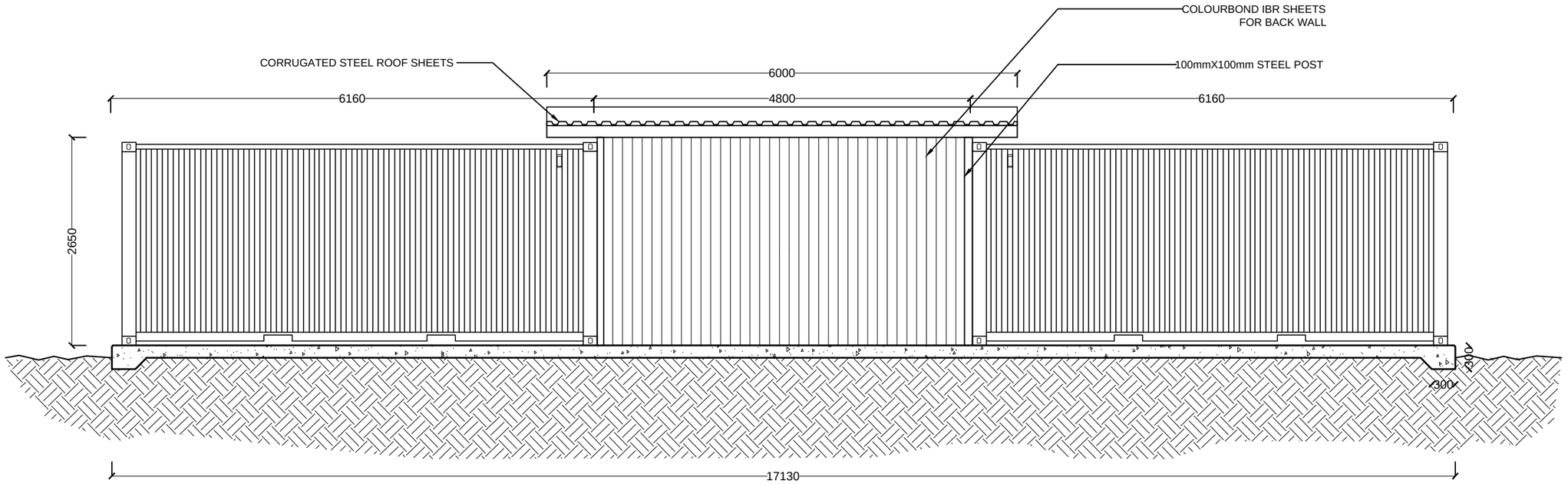

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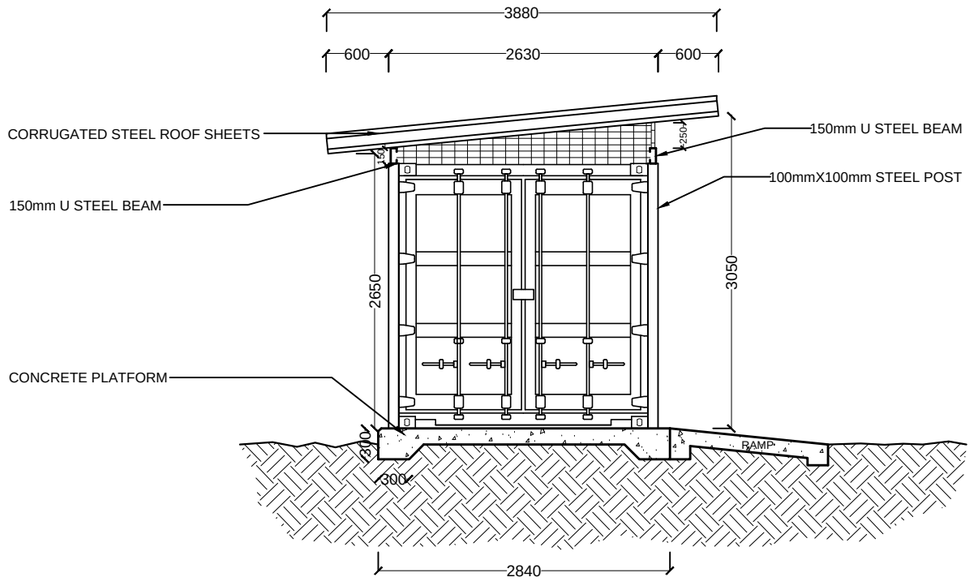

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ANNEXURE 3

1. OHS SPECIFICATION

PROVINCIAL GOVERNMENT WESTERN CAPE

DEPARTMENT OF HEALTH – ENGINEERING & SUPPORT SERVICES

GUIDELINE HEALTH AND SAFETY SPECIFICATION

FOR

CONSTRUCTION AND MAINTENANCE WORK AT HOSPITALS AND OTHER HEALTH INSTITUTIONS

Health Directorate Engineering
Karl Bremer Hospital
Private Bag X21, Parow, 7499
Tel: 021 – 918 1702
March 2012

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PART 1. INTRODUCTION

1.1 Introduction to the Health and Safety Specification

The Construction Regulations (18 July 2003) places the responsibility on the Contractor to prepare a Health & Safety Plan, which informs the appointed contractor's workforce on all the risks not successfully eliminated during design.

1.2 Purpose of the Health and Safety Specification

To assist in achieving compliance with the Occupational Health & Safety Act 85/1993 and the now promulgated Construction Regulations (18 July 2003, R1010) in order to reduce incidents and injuries. This specification shall act as the basis for the drafting of the construction Health & Safety Plan by the Contractor and all subsequent Health & Safety Plans by Sub - Contractors.

It includes arrangements made by the OHS Agent to ensure that the parties involved in the project co-operate and co-ordinate their activities, to remove or minimise the risks to health and safety of those who are involved in the construction or maintenance project, or who may be affected by their work activities.

This document sets out the requirements, under a number of pieces of Health and Safety Legislation, for the successful health and safety management of the Project by the Contractor in accordance with the requirements set out in this Health and Safety Specification. **The Contractor must integrate their own health and safety policy and arrange documents.**

The format is in line with the requirements of Regulation 5(1) of the Construction Regulations 2003, R1010, for a health and safety plan to be further developed **before** the commencement of construction.

1.3 Implementation of the Health and Safety Specification

This specification forms an integral part of the project, and the Contractor **is required to use it** when drawing up their project-specific construction Health & Safety Plan. The Contractor shall forward a copy or the applicable part of this specification to all Sub -Contractors, so that they can in turn prepare Health & Safety plans relating to their works. The Construction Health and Safety Plan must be handed to OHS before commencing with any work on site.

1.4 Definitions

- ***"Client"*** means any person for whom construction or maintenance work is performed.
- ***"Contractors"*** means an employer, as defined in Section 1 of the Act, who performs construction work and includes Principal Contractors.
- ***"Designer"*** means any of the following persons –

  (i) a person who prepares a design;
  (ii) a person who checks and approves a design;
  (iii) a person who arranges for any person to work under his control (including an employee of his, where he is the employer) to prepare a design, as well as;
  (iv) an architect or engineer contributing to, or having overall responsibility for the design;
  (v) building services engineer designing details for fixed plant;
  (vi) surveyor specifying articles or drawing up specifications;
  (vii) contractor carrying out design work as part of a design and build project;
  (viii) temporary works engineer designing formwork and false work; and
  (ix) interior designer, shop-fitter and landscape architect.

- ***"Principal Contractor"*** means an employer, as defined in Section1 of the Act who performs construction work and is appointed by the client to be in overall control and management of a part of or the whole of the construction site.

PART 2. HEALTH AND SAFETY SPECIFICATION

Project Details:

Client:		Department of Health
Project name	:	
Date	:	
Project Address	:	
Construction Duration	:	
Nominated OHS Agent	:	
Contact	:	
Department of Labour's Local Office	:	
The Development Brief	:	

2.1 General Project Information Sheet

Development:

The hospital will be a patient-centered healing environment which is an accessible, sustainable, state of the art African hospital.

2.2 Health and Safety Aims

The aim of this Health and Safety Specification is to ensure that health and safety management will be planned into the work undertaken by the Principal Contractor on this specific project to achieve the following:

- To put into practical effect the commitment made by the Principal Contractor in their own health and safety policy statement;
- To ensure that, where necessary, the changes in attitude of all those involved with the project take place. The result should be the acceptance of responsibility, towards the health and safety objectives;
- To develop further good health and safety management practices on this contract and future contracts undertaken by Public Works Department.

Other aims specific to this Project:

- To ensure that high standards of health and safety performance are achieved in:

    a) Co-operation with the OHS Agent and other contractors involved on the project.
    b) Reducing accidents, ill health and injury to persons and damage to property, when undertaking work on the project.

2.3 Health and Safety Targets

The following health and safety targets have been set for achievement during the period of this project.

- The achievement, by the Principal Contractor, of an accident-free project, as far as possible, with the prevention of all accidents, and the achievement of a “no lost time” accident rate.
- The workforce’s co-operation in ensuring that safety is everybody’s responsibility.
- A proactive approach to health and safety by the construction management team.
- That safe working will be a condition of employment in all contractors’ organisations.

2.4 Responsibilities

The Client

Health Department – Engineering & Support Services, on behalf of the Client is responsible for implementing the Client’s requirements for health and safety on the project. The Client will ensure adequate information is available to all parties, to ensure they can perform their duties under the requirements of this document and relevant statutory legislation.

Health Engineering & Support Services has appointed competent Engineers and a competent Principal Contractor to manage health and safety on this project. The Client may amend, vary or terminate these appointments as appropriate.

Client’s OHS Agent

Mr. A Thomas of Health Department is the appointed OHS Agent for the project.

He is responsible for representing the Client (Health Department) on the project and for co-ordinating the Design Team, with reference to the design risk assessment processes.

The Client's Design Team

The Design Team is responsible for:

- Design principles and design assumptions for the structures where the knowledge of these principles or assumptions is necessary for the safety of those who will work on or in the structure (meaning all "elements" e.g. buildings, structures, walls, etc.). For example, these must identify any states of instability during erection including any suggested methods or sequence of assembly. Where assumptions have been made then appropriate control measures may need to be included here, as information for those who will plan the work.

- Arrangements for the co-ordination of on-going design work and handling design changes (design changes arising from whatever causes, for example: Client changes, Designer changes, Contractor changes, on-site circumstances causing variations, etc).

- Significant (including unusual or difficult to manage) Health and Safety hazards or risks identified during design (that it has not been possible to eliminate by design).

- Specified materials or substances with associated significant Health and Safety hazards requiring particular precautions. (This would particularly include fire hazards.)

- Specific risks or difficult to manage issues inherent in the design where the Principal Contractor (or the Contractor) will be required to state how they will avoid or control them.

- Weights and centre of gravity of unusual or significant elements intended (or likely) to be lifted into position. Examples of significant hazards where Designers always need to provide information include:

  - Hazardous or flammable substances specified in the design, eg. epoxy grouts, fungicidal paints, or those containing isocyanides;
  - Features of the design and sequences of assembly or disassembly that are crucial to safe working;
  - Specific problems and possible solutions, for example: arrangements to enable the removal of a large item of plant from a work area / building;
  - Structures that create problems;
  - Heavy or awkward prefabricated elements likely to create risks in handling.

The designer must also conduct a final inspection and issue a certificate of successful completion.

Principal Contractor

The Principal Contractor appointed for the project will take the Health and Safety specification and develop a health and safety plan for approval by Health Department Safety Officer.

The detailed Health and Safety plan will set out clearly the Principal Contractor's management systems for managing health and safety on the contract in accordance with Health Departments health and safety requirements set out in this document, the designer's risk information and any relevant health and safety legislation.

The Health and Safety plan will be kept up to date by the Principal Contractor to include other contractors' risk control management information.

The Principal Contractor will co-operate with Health Department in all aspects of complying with the duties laid upon them by the Construction Regulations (18 July 2003, R1010).

All comments contained in this section require specific measures to be incorporated into the construction health and safety plan. **The Principal Contractor must not allow work to commence on site before an adequate construction health and safety plan is developed and approved.**

The plan must contain the method statements and procedures for the project, before work starts on site. Further risk assessments and method statements must be carried out where the works may change, due to design changes.

The construction phase health and safety plan, developed by the Principal Contractor must also take into account current health and safety legislation and associated codes of practice.

(i) The following risk assessments are required:

- All task oriented risks – particularly working from heights
- Equipment risks
- Physical risks
- Ergonomical risks

Please refer to Annexure 6 for template completion "Risk Assessment Record" and "Method statements to be co-ordinated by the Principal Contractor / Contractor's management team".

(ii) Procedures are required to cover the following:

- Arrangements for emergency fire and first aid facilities.
- Traffic management arrangements to protect site staff and public from the road and other construction works.
- Arrangements for dealing with emergency situations, overhead and underground services.
- Selection and maintenance of plant and equipment.
- Selection of competent staff.

The following method statements and procedures MUST be available before work starts on site:

- Establishment of site welfare, first aid and emergency procedures (fire and security, etc).
- Arrangements for emergency service vehicles access to the premises.
- Traffic management arrangements.
- Public protection arrangements.
- Protection to overhead and underground services.

iv. **Immediate details expected of the Principal Contractor**

Site Staff:	List to be handed to the Department of Health Rep immediately
Site Operatives:	List to be handed to the Department of Health Rep immediately
Sub Contractors:	List to be handed to the Department of Health Rep immediately
Specialist Contractors:	Full list to be handed to the U-HSE immediately
Site Plant:	List of site plant/equipment to be handed to the Department of Health Rep immediately

Contractors

Each contractor will be required to co-operate with the Principal Contractor and provide information on risk assessments, method statements, etc. for inclusion in the Health and Safety plan prepared by the Principal Contractor. In addition, each contractor will comply with the site rules and any reasonable instructions formulated by the Principal Contractor, in accordance with current relevant health and safety legislation.

Contractors will provide adequate information to the Principal Contractor who in turn will supply this information at monthly intervals to the Department of Health Representative.

2.5 Project Overview

Information reviewed by the OHS Agent

a) Site Details

Maintenance work to be undertaken on single and multi story buildings.

b) Advice to Client

You are advised to promptly provide the Principal Contractor and his / her Agent with any information which might affect the Health and Safety of any person at work, carrying out maintenance and construction work, for example: existing services above and below ground, other surveys available pertaining to this site which may affect the construction or maintenance works (i.e. Geotechnical Survey; Asbestos Survey / Inventory).

Any planning restrictions placed on the development by the local authority planning office.

Requirements to maintain access for emergency service vehicles.

Appoint a competent and well resourced Principal Contractor for the construction works.

If an OHS Agent is appointed the Client is responsible for assuring that the OHS Agent has the necessary competency and resource levels for the project.

c) Construction Materials

Common materials and substances used during construction or maintenance may present health and safety hazards requiring the contractor to carry out other risk assessments.

Contractors should be aware of their duties under current regulations to identify hazardous materials or activities and undertake adequate assessment and implement the required control measures (i.e. Duty of Care).

Safety method statements and the provision of job safety instructions (for operatives) is an essential outcome of their risk assessment process.

d) Site Wide Elements

Your Construction Health and Safety Plan should include details of the following:

- The positioning of the site access and egress points to ensure that any nuisance or risk to the adjacent properties is minimised and controlled. This should be away from the adjacent occupied and sensitive premises.
- The location of temporary site accommodation to ensure that adjacent sensitive properties are not subjected to any nuisance arising from the use of the facilities.
- The location of unloading, layout and storage areas to reduce and minimise excessive manual handling of construction materials, damage to adjacent property and the security of the plant, equipment and materials.
- The planning of traffic and pedestrian routes, outside the site, to ensure adequate protection for employees, public footpath and road users. The use of suitable barriers, signs and the appointment of a signaller should be adopted to provide the required level of protection. The site must be enclosed by a ring fence / barrier system.
- The arrangements for the reception of prospective visitors.

2.6 Reference and Related Procedures

Health and Safety

The Occupational Health and Safety Act (No. 85 of 1993)

The Construction Regulations (18 July 2003)

All other relevant Health and Safety Legislation

2.7 Organisational Arrangements

Site Rules

The Principal Contractor's organisational arrangements for health and safety on the project must include that of other contractors involved. Site rules must be developed by the Principal Contractor to ensure that the restrictions, outlined in this Health and Safety Specification, are met. In particular, arrangements and site rules must be developed to ensure that construction or maintenance works do no put at risk the health and safety of the general public and the occupiers' employees. Generally, your health and safety policy and construction health and safety plan will be to specify site rules such as the wearing of personal protective equipment and no drinking or drugs, etc on site.

Hot Work Permits:

Hot work requires daily permits from the Client's responsible person and includes items listed below:

- Metal cutting or burning, angle grinding
- Arc welding, soldering, brazing and gas welding

Such work shall be attended by the responsible Principal Contractor personnel and can be halted at any time for any reason.

Security:

- Do not allow any person to climb over, get through or under any fence.
- Do not allow your employees to visit or trespass on any part of the premises other than their place of work.
- Do not allow your employees to remove from the premises anything, including your equipment and employee's own tools. Be aware that Health Department reserves the right to search any person, contractors and employees, both when entering and leaving the premises.
- Do not allow your employees to use short cuts when operating plants.
- Do not take fire arms or liquor onto the premises.
- Do not discuss your observations regarding plant layout, products stored, etc with any outsiders.
- Be aware that you are responsible for the safe keeping, distribution and return on completion of all Health Department's issued drawings and technical information.
- Ensure that your workforce display, and returns at the end of the day, the temporary work permits issued by the responsible person.

Smoking:

- Ensure that all your employees are made aware that the Health Facility site is a **NO SMOKING AREA.** (Designated smoking areas to be identified).

Temporary Structures:

- Ensure complete safety of the work and personnel through all stages of construction and/or maintenance.

- Ensure adequate protection of temporary or uncompleted structures against storm damage.

The Principal Contractor must demonstrate a management structure for ensuring health and safety co-operation and co-ordination between all parties to the contract. This will include the development of a communications strategy between the appointed Principal Contractor, Contractors, Client, Design Team and Client's OHS Agent.

The Principal Contractor must ensure that an effective chain of communication exists, clearly showing that all levels of employees engaged on the contract participate in the communication process for health and safety concerns.

Regular meetings will be established between the parties where health and safety performance will be discussed. Minutes must be kept and distributed for action following the conclusion of each meeting.

Emergency and incident procedures must be developed and clearly co-ordinated between parties involved.

A security strategy must be developed by the Principal Contractor who must then communicate and co-ordinate that strategy to all parties to the contract.

2.8 Continuing Liaison

Procedures for liaison to continue between all parties throughout the project should include the particular points listed below.

All unforeseen eventualities which may occur during construction or maintenance and which affect previously recognised health and safety issues or resources should be reported to the OHS Agent.

The OHS Agent should be informed of all new designs, which may affect health and safety.

Arrangements should be made by the Principal Contractor with other contractors to ensure any information required for the health and safety file (see the following list), which is generated by the contractors' work, is stored and passed to the Principal Contractor prior to completion of their specific works. This will include the following:

- As built drawing(s) of the structure
- General details of the materials used in the construction process
- Details of the plan and equipment supplied and fitted
- Service details – gas, water, electricity, communications (telephone, cable, TV, etc)
- Specific maintenance details or requirements (plant, equipment, fixtures and fittings – where applicable)
- Suppliers' brochures for health and safety information (use, maintenance and repairs)
- All Agreements, Safety Committee minutes and nominated competent individuals, etc.
- All training records – i.e. special training needs, induction and visitor inductions.

PART 3. GUIDANCE NOTES - "GOOD MANAGEMENT PRACTICE" FOR THE APPOINTED PRINCIPAL CONTRACTOR

This section contains the recommended Principal Contractor's essential elements, on how the contract must be managed. This is to ensure that the health and safety aims and targets will be achieved and to ensure the health and safety of those employed on the contract, or affected by the operation of the contract. As follows:

3.1 Scope

This Health & Safety specification covers the requirements for eliminating and mitigating the potential risks for incidents and injuries on this particular project

The scope also addresses legal compliance, hazard identification and risk assessment, risk control, and promoting a health and safety culture amongst those working on the project. **The specification also makes provision for the protection of those persons other than employees.**

3.2 Interpretations

3.2.1 Application

This Health & Safety Specification is a compliance document drawn up in terms of South African legislation and is therefore binding. It must be read in conjunction with relevant legislation as noted previously.

3.2.2 Definitions

The definitions as listed in the Occupational Health & Safety Act 85/1993 and Construction Regulations (18th July 2003, R1010) shall apply.

3.3 Minimum Administrative Requirements

3.3.1 Notification of Intention to Commence Construction Work

The Principal Contractor shall notify the Provincial Director of the Department of Labour in writing before construction work commences. A copy of this notification must be forwarded to the OHS Agent on appointment. This notification must be signed by the Client / Agent.

3.3.2 Assignment of the Principal Contractor's / Contractor's Responsible Persons to Supervise Health and Safety on Site

The Principal Contractor shall submit supervisory appointments in terms of Section 16.2 of the OHS Act 85/1993 and Construction Regulation 6.1 and 6.2. Proof of competency must be included. See Annexure 2.

3.3.3 Competency of the Principal Contractor's Appointed Responsible Persons

Contractors' competent persons for the various risk management portfolios shall fulfil the criteria as stipulated under the definition of Competent in accordance with the Construction Regulations (July 2003, R1010). **Proof of competence** for the various appointments must be included. For the purpose of this contract, the most important competent persons would include but not be limited to: construction supervisor, scaffold erectors; scaffold inspector; scaffold supervisors; formwork and support work inspector; ladder inspectors; excavation inspectors; electrical installation inspectors; portable electrical tools inspectors; lifting machine and equipment inspector; lifting machine operators; banks man; vehicle operators; fire equipment inspector; first aid co-ordinator, emergency co-ordinator, etc.
All appointments must be in writing and acceptance thereof by way of signature by the appointed person.

3.3.4 Compensation of Occupational Injuries and Diseases Act 130 of 1993 (COIDA)

The Principal Contractor shall submit a letter of good standing with its Compensation Insurer to the OHS Agent as proof of registration. Contractors shall submit proof of registration to the Principal Contractor before they commence work on site.

3.3.5 Occupational Health and Safety Policy

The Principal Contractor and all Contractors shall submit a Health and Safety Policy signed by their Chief Executive Officer. The Policy must outline company objectives and how they will be achieved, implemented and maintained by the Company / Contractor.

3.3.6 Health and Safety Organogram

The Principal Contractor and all Contractors shall submit an organogram, outlining the Health and Safety Site Management Structure including the relevant appointments/competent persons. In cases where appointments have not been made, the organogram shall reflect the intended positions. The organogram shall be updated when there are any changes in the Site Management Structure. This must be supplied to the OHS Agent within 7 working days.

3.3.7 Preliminary Hazard Identification and Risk Assessment and Progress Hazard Identification and Risk Assessment

The Principal Contractor shall cause a hazard identification to be performed by a competent person before commencement of construction work. The risks associated with the hazards identified, must be assessed and shall form part of the construction phase health and safety plan submitted for approval by the OHS Agent. The risk assessment must include;

a) A list of hazards identified as well as potentially hazardous tasks;
b) A documented risk assessment based on the list of hazards and tasks;
c) A set of safe working procedures (method statements) to eliminate, reduce and/or control the risks assessed;
d) A monitoring and review procedure of the risk assessment as the risks change.

Contractors shall also cause hazard identification, risk assessments and method statements to be performed and submitted to the Principal Contractor with their health & safety plans. The risk assessment documents must also be reviewed from time to time by the Contractors.

The Principal Contractor shall ensure that all Contractors are informed, instructed and trained by a competent person regarding any hazards, risks and related safe work procedures before any work commences and thereafter at regular intervals as the risks change and as new risks develop.

The Principal Contractor shall be responsible for ensuring that all persons who could be negatively affected by its operations are informed and trained according to the hazards and risks and are conversant with the safe work procedures, control measures and other related rules (a tool box talk strategy to be implemented, covering site specific Health and Safety Issues).

3.3.8 Health and Safety Representatives

The Principal Contractor and all Contractors shall ensure that Health and Safety Representative(s) are appointed under consultation (as per General Administrative Regulations, 2003, R1010) and trained to carry out their functions. The appointment must be in writing. The Health and Safety Representative shall carry out regular inspections, keep records and report all findings to the Responsible Person forthwith and at monthly health & safety meetings.

3.3.9 Health and Safety Committee Meetings

The Principal Contractor shall ensure that project health and safety meetings are held monthly and minutes are kept on record. Meetings must be chaired by the Principal Contractor's Construction Supervisor (CR 6.1 Person). All Health & Safety Representatives shall attend the monthly health & safety meetings. Safety Representatives shall table a report with supporting documents as set out in the annexures attached. Contractors shall also have their own internal

health & safety committees in accordance with the OHS Act 85/1993 and minutes of their meetings shall be forwarded to the Principal Contractor on a monthly basis.

3.3.10 Health and Safety Training

3.3.10.1 Induction

The Principal Contractor shall ensure that all site personnel undergo a site-specific health & safety induction training session before starting work. A record of attendance shall be kept in the health & safety file. **Every employee must carry proof of induction training completion.** A suitable venue must be available to house this training.

3.3.10.2 Awareness

The Principal Contractor shall ensure that, on site, periodic toolbox talks take place at least once per week. These talks should deal with risks relevant to the construction work at hand. A record of attendance shall be kept in the health & safety file. All Contractors have to comply with this minimum requirement.

3.3.10.3 Competency

All competent persons shall have the knowledge, experience, training, and qualifications specific to the work they have been appointed to supervise, control, and carry out. This will have to be assessed on a regular basis e.g. periodic audits by the OHS Agent, progress meetings, etc. The Principal Contractor is responsible to ensure that competent Contractors are appointed to carry out construction work.

Typical Training Courses

The typical training courses, which will fill the requirements of the above criteria are:

General Record Keeping

The Principal Contractor and all Contractors shall keep and maintain Health and Safety records to demonstrate compliance with this Specification, with the OHS Act 85/1993, and with the Construction Regulations (July 2003, R1010). The Principal Contractor shall ensure that all records of incidents/accidents, training, inspections, audits, etc. are kept in a health & safety file held in the site office. The Principal Contractor must ensure that every Contractor opens and maintains its own health & safety file and makes it available on request. All files will be consolidated on completion of the project and handed over to the Client on completion of the contract.

3.3.12 Health & Safety Audits, Monitoring and Reporting

The OHS Agent shall conduct monthly health & safety audits of the work operations including a full audit of physical site activities as well as an audit of the administration of health & safety. The Principal Contractor is obligated to conduct similar audits on all Contractors appointed by it. Detailed reports of the audit findings and results shall be reported on at all levels of project management meetings/forums. Copies of the Client's audit reports shall be kept in the Client's Health & Safety File while the Principal Contractor's audit reports shall be kept in its file. Copies of all reports must be forwarded to the OHS Agent. Contractors have to audit their contractors and keep records of these audits in their health & safety files, available on request. (Displayed in site office).

3.3.13 Emergency Procedures

The Principal Contractor shall submit a detailed Emergency Procedure for approval by the OHS Agent prior to commencement on site. The procedure shall detail the response plan including the following key elements:

- List of key competent personnel;
- Details of emergency services;
- Actions or steps to be taken in the event of the specific types of emergencies;
- Information on hazardous material/situations.

Emergency procedure(s) shall include, but shall not be limited to, fire, hazardous material spills, accidents to employees, use of hazardous substances, bomb threats, major incidents/accidents, etc. The Principal Contractor shall advise the OHS Agent in writing forthwith, of any emergency situations, together with a record of action taken. A contact list, of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc) must be maintained and be available to site personnel. This list must be displayed in the site office (when applicable) at all times.

3.3.14 First Aid Boxes and First Aid Equipment

The Principal Contractor and all Contractors shall appoint First Aider(s) in writing. The appointed First Aider(s) must be in possession of valid first aid certificates, to be kept on site. The Principal Contractor shall provide an on-site First Aid Station with first aid facilities, including first aid boxes adequately stocked at all times. All Contractors with more than 5 employees shall supply their own first aid box. Contractors with more than 10 employees shall have a trained, certified first aider on site at all times.

3.3.15 Accident / Incident Reporting and Investigation

Injuries are to be categorised into first aid; medical; disabling; and fatal. The Principal Contractor must stipulate in its Health & Safety Plan how it will handle each of these categories. When reporting injuries to the OHS Agent, these categories shall be used. All injuries shall be investigated by the Principal Contractor, with a report being forwarded to the OHS Agent forthwith. All Contractors have to report all injuries to the Principal Contractor forthwith and submit a monthly report detailing the injuries. The Principal Contractor must report all injuries to the OHS Agent in the form of a detailed injury report at least monthly.

The Principal Contractor to report on incidents to the Department of Labour at all the General Administrative Legislative Requirements (June 2003, R1010).

3.3.16 Hazards and Potentially Hazardous Situations

The Principal Contractor shall immediately notify other Contractors as well as the OHS Agent of any hazardous or potentially hazardous situations that may arise during performance of construction activities.

3.3.17 Personal Protective Equipment (PPE) and Clothing

The Principal Contractor shall ensure that all workers are issued and wear hard hats, safety footwear and overalls. The Principal Contractor and all Contractors shall make provision and keep adequate quantities of SABS approved PPE on site at all times. The Principal Contractor shall clearly outline procedures to be taken when PPE or Clothing is:

- Lost or stolen;
- Worn out or damaged.

The above procedure applies to Contractors and their contractors, as they are all Employers in their own right.

3.3.18 Occupational Health and Safety Signage

The Principal Contractor shall provide adequate on-site OHS signage. Including but not limited to: ‘no unauthorised entry’, ‘report to site office’, ‘site office’, ‘beware of overhead work’, ‘hard hat area’, “All incidents, accidents and illnesses to be reported to First Aider. Signage shall be

posted up at all entrances to site as well as on site in strategic locations e.g. access routes, stairways, entrances to structures and buildings, scaffolding, and other potential risk areas/operations.

3.3.19 Permits

Permits may include the following:

- Work for which a fall prevention plan is required
- Medical condition – heights (check Construction Regulations)
- Confined spaces

3.3.20 Contractors

The Principal Contractor shall ensure that all Contractors under its control comply with this Specification, the OHS Act 85/1993, Construction Regulations (July 2003, R1010), and all other relevant legislation that may relate to the activities directly or indirectly. The Contractor, when appointing other Contractors, shall mutatis mutandis ensure compliance as if it was the Principal Contractor.

3.3.21 Construction Health & Safety Officer

A full time construction health & safety officer (in terms of Construction Regulation 6.6) will be required to co-ordinate the health & safety portfolio. The portfolio should include but not be limited to:

a) Induction training;
b) Health & safety audits including audits of contractors;
c) Maintain the Principal Contractor's health & safety file and audit Contractors' health & safety plans and files;
d) Investigate near misses, incidents and accidents;
e) Co-ordinate that inspections are carried out by competent persons, and that records are kept in registers.
f) Co-ordinate the function of reviewing the risk assessment document;
g) Assisting with method statements and checking whether they are being implemented by the responsible persons on site.

3.4 Physical Requirements

3.4.1 Housekeeping on Construction sites (Construction Regulation 25 (a – e))

1. The contractor will ensure that suitable housekeeping is continuously implemented on this site, including provisions for the-
   (1) proper storage of materials and equipment and
   (2) removal of scrap, waste and debris at appropriate intervals.
2. Loose materials required for use, are not placed or allowed to accumulate on the site..

3.4.2 Excavations, Shoring, Dewatering or Drainage

The Principal Contractor and any relevant Contractors shall make provision in their tender for shoring, dewatering or drainage of any excavation as per this specification.

The Contractor shall make sure that:
a) The excavations are inspected before every shift and a record is kept;
b) Safe work procedures have been communicated to the workers;
c) The safe work procedures are enforced and maintained by the Contractor's
d) The requirements of Construction Regulation 11 are adhered to.

3.4.3 Edge Protection and Penetrations

The Principal Contractor must ensure that all exposed edges and openings are guarded and demarcated at all times until permanent protection has been erected. The Principal Contractor's risk assessment must include these items: protection of decking edges, finished

floor slab edges, stairways, floor penetrations, lift shafts, and all other openings and areas where a person may fall. No exposed edges and other openings will be tolerated. Many projects or maintenance is done on multi-level structures and the risk of persons falling or materials falling onto persons are high. Barricading must be a priority on this project and must be erected as soon as possible.

3.4.4 Stacking of Materials

The Principal Contractor and other relevant Contractors shall ensure that there are sufficient appointed stacking supervisors and all materials, formwork and all equipment are stacked and stored safely. The site is fairly extensive, however space may present a problem, but this is not a reason for poor stacking and storage techniques. Double handling of material should be avoided and for this purpose, pallets and other stacking options should be used.

3.4.5 Speed Restrictions

The Principal Contractor shall ensure that all persons in its employ, all Contractors, and all those visiting the site are aware and comply with the site speed restrictions set at 5 km/hr. If at all possible, separate vehicle and pedestrian access routes shall be provided, if at all possible maintained, controlled, and enforced.

3.4.6 Access to Site

There is a possibility that as work progresses to an advanced stage, heavy vehicles entering the site may not be able to turn around on site and will therefore have to reverse off site. Special care to be taken in this regard.

3.4.7 Hazardous Chemical Substances (HCS)

The Principal Contractor and other relevant Contractors shall provide the necessary training and information regarding the use, transport, and storage of HCS. The Principal Contractor shall ensure that the use, transport, and storage of HCS are carried out as prescribed by the HCS Regulations.

The Contractor shall ensure that all hazardous chemicals on site have a Material Safety Data Sheet (MSDS) on site and the users are made aware of the hazards and precautions that need to be taken when using the chemicals. The First Aiders must be made aware of the MSDS and how to treat HCS incidents appropriately.

3.5 Plant and Machinery

3.5.1 Construction Plant

“Construction Plant” includes all types of plant including but not limited to, cranes, piling rigs, excavators, road vehicles, and all lifting equipment.

The Principal Contractor shall ensure that all such plant complies with the requirements of the OHS Act 85/1993 and Construction Regulations (July 2003, R1010). The Principal Contractor and all relevant Contractors shall inspect and keep records of inspections of the construction plant used on site. Only authorised/competent persons are to use machinery and the appropriate supervision must be provided. The appropriate PPE and clothing must be provided and maintained in good condition at all times.

3.5.2 Vessels under Pressure (VuP) and Gas Bottles

The Principal Contractor and all relevant Contractors shall comply with the Vessels under Pressure Regulations, including:

- Providing competency and awareness training to the operators;
- Providing PPE or clothing;
- Inspecting equipment regularly (3-monthly) and keep records of inspections;

3.5.3 Fire Extinguishers and Fire Fighting Equipment

The Principal Contractor and relevant Contractors shall provide adequate, regularly serviced fire fighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The appropriate notices and signs must be posted up as required.

3.5.4 Hired Plant and Machinery

The Principal Contractor shall ensure that any hired plant and machinery used on site is safe for use (including load test certificates, road worthy certificates, inspection registers). The necessary requirements as stipulated by the OHS Act 85/1993 and Construction Regulations (July 2003, R1010) shall apply. The Principal Contractor shall ensure that operators hired with machinery are competent and that certificates are kept on site in the health & safety file. All relevant Contractors must ensure the same. Particular care is to be exercised when planning for crane positioning.

3.5.5 Scaffolding / Working at Heights

Working at heights includes any work that takes place in an elevated position. The Contractor must submit a risk-specific fall prevention plan in accordance with the Construction Regulations (July 2003, R1010) before this work is undertaken. The fall prevention plan must be approved by the OHS Agent, **before** work may commence, and a permit to operate will be issued. Scaffolding must comply with the requirements of SABS 085-2000.

All external scaffolding must be secured using box-around-column ties or other fixed tie methods. All scaffold platforms must be fully boarded and be complete with guardrails and toe boards. Safe and convenient access must be provided to all working platforms. Particular care is required when lifting and placing long lengths of roof sheeting in windy conditions.

3.5.6 Formwork and Support work for Structures

The Principal Contractor shall ensure that the provisions of the Construction Regulation 10 are adhered to. These provisions must include but not be limited to ensuring that all equipment used is examined for suitability before use; that all formwork and support work is inspected by a competent person immediately before, during and after placement of concrete or any other imposed load and thereafter on a daily basis until the formwork and support work has been removed. Records of all inspections must be kept in a register on site.

3.5.7 Lifting Machines and Tackle

The Principal Contractor and all Contractors shall ensure that lifting machinery and tackle are inspected before use and thereafter in accordance with the Driven Machinery Regulations and the Construction Regulations (section 20). There must be competent lifting machinery and lifting tackle inspectors who must inspect the equipment daily, before use, taking into account that:

- All lifting machines and tackle must carry a load test certificate and must have an inspection register.
- All lifting machinery and tackle has a safe working load clearly indicated;
- Regular inspection and servicing is carried out;
- Records are kept of inspections and of service certificates;
- There is proper supervision in terms of guiding the loads that includes trained banks man to direct lifting operations and check lifting tackle;
- The tower crane bases have been approved by an engineer (IF USED);
- The operators are competent as well as physically and psychologically fit to work and in possession of a medical certificate of fitness to be available on site.

3.5.8 Ladders, Ladder Work and Access to Elevated Areas

The Principal Contractor shall ensure that all ladders are inspected monthly, are in good safe working order, are the correct height for the task, extend at least 1m above the landing, fastened and secured, and at a safe angle. Records of inspections must be kept in a register on site. Contractors using their own ladders must ensure the same.

The Principal Contractor shall provide safe and convenient access to all working areas. Where high volumes of pedestrian traffic require access, the appropriate scaffold stairway towers and permanent stairways must be made available. Contractors who use ladders to perform work must ensure that such ladders are safe for use and inspected monthly, a record must be kept in their health & safety file.

3.5.9 General Machinery

The Principal Contractor and relevant Contractors shall ensure compliance with the Driven Machinery Regulations, which includes inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE and clothing, and training those who operate machinery.

3.5.10 Portable Electrical Tools and Explosive Powered Tools

The Contractor shall ensure that use and storage of all explosive powered tools and portable electrical tools are in compliance with relevant legislation. The Contractor shall ensure that all electrical tools, electrical distribution boards, extension leads, and plugs are kept in safe working order. Regular inspections and toolbox talks must be conducted to make workers aware of the dangers and control measures to be implemented e.g. personal protection equipment, guards, etc.

The Contractor shall consider the following:

- A competent person undertakes routine inspections and records are kept;
- Only authorised trained persons use the tools;
- The safe working procedures apply;
- Awareness training is carried out and compliance is enforced at all times; and
- PPE and clothing is provided and maintained.
- A register indicating the issue and return of all explosive round;
- Signs to be posted up in the areas where explosive powered tools are being used.

3.5.11 Public and Site Visitor Health & Safety

The Principal Contractor shall ensure that every person working on or visiting the site, as well as the public in general, shall be made aware of the dangers likely to arise from site activities, including the precautions to be taken to avoid or minimise those dangers. Appropriate health and **safety notices and signs** shall be posted up, but shall not be the only safety measure taken.

Both the OHS Agent and the Principal Contractor have a duty in terms of the OHS Act 85/1993 to do all that is reasonably practicable to prevent members of the public and site visitors from being affected by the construction activities. The site will be protected with **permanent hoarding/fencing** and access will be controlled. Site perimeters may need to change as the construction work progresses. The contractor must plan how to ensure the hoarding remains current and effective. These arrangements must be included in the Construction Health and Safety Plan.

Site visitors must be briefed on the hazards and risks that they may be exposed to and what measures should be taken to control these hazards and risks. A record of these 'inductions' must be kept on site in accordance with the Construction Regulations. All visitors must report to the site office where they should receive relevant health & safety information. The site office should be strategically located so that site visitors are not exposed to risks prior to reporting at the office.

3.5.12 Night Work

The Principal Contractor must ensure that adequate lighting is provided to allow for work to be carried out safely if required.

3.5.13 Transport of Workers

The Principal Contractor and other Contractors **shall not**:

- Transport persons together with goods or tools unless there is an appropriate area or section to store goods and tools;
- Transport persons in a non-enclosed vehicle, e.g. truck. There must be an adequate canopy (properly covering the back and top) and suitable sitting area. Workers shall not be permitted to stand or sit at the edge of the transporting vehicle;
- Transport workers in LDVs unless they are closed/covered and have the correct number of seats for the passengers.

3.6 Occupational Health

3.6.1 Occupational Hygiene

Exposure of workers to occupational health hazards and risks is very common in any work environment, especially in construction. Occupational exposure is a major problem and leads to medical conditions like cancers, skin disorders, noise induced hearing loss, etc. All Contractors must ensure that adequate health and hygiene measures are put in place to prevent exposure to these hazards. Prevent inhalation, ingestion, absorption, and noise induction. Site-specific health risks are tabled in Annexure 5, e.g. cement dust, wet cement, wood-dust, noise, etc.

PSITTACOSIS – This disease is acquired by contact with infected birds. The disease varies from a flu-like illness to pneumonia with the possible involvement of other organs. Usually through inhalation of dust or aerosol contaminated by bird faeces or nasal discharge. The organism can survive many months in dry dust. Person to person spread has also been reported. Incubation period usually 4 – 15 days, disease varies from flu-like illness with a fever, headache, joint and muscle pains of a few days to pneumonia and possible endocarditis and hepatitis. Early detection and treatment normally results in complete recovery, although delay or susceptible individuals may progress to more severe illness or even death.

CONTROL OF EXPOSURE – Good general ventilation is required. Cleaning procedures should avoid creating aerosols and dust, no high pressure jetting. Work techniques should be designed to keep the worker's breathing zone away from possible aerosol (dust) clouds, avoid the need for close approach during demolition. High levels of faeces / dust should, where possible, be enclosed with local exhaust ventilation. Handling systems, e.g. for waste, diseased birds, and feathers should be enclosed where reasonable practicable. All bird waste to be contained in polythene sacks sealed and disposed of by an approved contractor. Respiratory protective equipment (RPE) is most likely to be needed when demolition work is in progress. Personal Protective Equipment (PPE) as appropriate should be worn i.e. hand protection, disposable hooded coverall and eye protection. Good standards of personal hygiene and of washing facilities with separate eating facilities should be provided. Employees and visitors should be alerted to the potential hazard and of the precautions which they need to adopt also the need to seek help from and inform their doctor if illness develops.

3.6.2 Welfare Facilities

The Principal Contractor must supply sufficient number of clean, hygienic toilets (1 toilet per 30 workers), changing facilities, hand washing facilities, soap, toilet paper, and hand drying material must be provided. Waste bins with lids must be strategically placed and emptied regularly. Safe, clean storage areas must be provided for workers to store personal belongings and personal protective equipment. Workers should not be exposed to hazardous materials/substances while eating and must be provided with sheltered eating areas. Adequate potable water must be provided.

3.6.3 Alcohol and other Drugs

No alcohol and other drugs will be allowed on site. No person may be under the influence of alcohol or any other drugs while on the construction site. Any person on prescription drugs must inform his/her superior, who shall in turn report this to the Principal Contractor forthwith. Any person suffering from any illness/condition that may have a negative effect on his/her safety performance must report this to his/her superior, who shall in turn report this to the Principal Contractor forthwith.

Any person suspected of being under the influence of alcohol or other drugs must be sent home immediately, to report back the next day for a preliminary inquiry. A comprehensive disciplinary procedure should be followed by the Contractors and a copy of the disciplinary action must be forwarded to the Principal Contractor for its records.

3.7 Monitoring Site Health and Safety

Monitoring of health and safety on the project will take place in accordance with the Client's requirements, as recorded below, in accordance with relevant health and safety legislation, and at two levels, namely:

Level 1:	The OHS Agent (Legal Compliancy Audit)
Level 2:	The Principal Contractor (2a + 2b)

Please refer to Annexure 6 for template completion "The Contract: Carried out by the OHS Agent", "Workplace: Carried out by Safety Representatives" and "The Contract: Carried out by Safety Officer"

Records of contractors' monitoring shall be kept on site, provided to the OHS Agent and the Principal Contractor for analysis, action and record purposes.

Please Note:

All contractors engaged on the contract will be required to submit their health and safety policy document and a method statement for the works they are to carry out.

Please refer to Annexure 6 for template completion – "Contractor and Sub-Contractor Interface Record"

PART 4. CLOSE OUT REPORT

A close out report is an essential part of the Client's development for future Health and Safety Plans, and revision of Health and Safety procedures for managing Health and Safety on subsequent projects.

All Contractors working on the contract will be required, as a minimum, to complete the attached questionnaire and hand it to the Principal Contractor's Management Team responsible for the contract.

The Principal Contractor's Management Team will co-ordinate the completed questionnaires and integrate the results into the completed report, which must be included in the OHS file.

A copy of the report, and any supporting documentation, is to be returned to the OHS Agent and Principal Contractor's Managing Director for analysis and review.

Additional information should be provided by the appointed Principal Contractor in order to review the Contractors' Health and Safety performance on the Project.

PART 5. ACKNOWLEDGEMENT OF RECEIPT

This document must be completed by the appointed Principal Contractor and all Sub - Contractors on this Project.

Acknowledgement of receipt:

I, _____ representing

_____ Principal Contractor /

Contractor / Employer

have satisfied myself with the content of the "Construction Health and Safety Specification" and shall ensure that the Principal Contractor / Contractor and its personnel comply with all obligations / requirements in respect thereof.

_____ _____

Signature of Principal Contractor / Contractor Date

_____ _____

Signature Date
Department of Health Safety Officer

ANNEXURE 1

PRINCIPAL CONTRACTOR'S DOCUMENTED "HEALTH AND SAFETY PLAN" (CONSTRUCTION REGULATION 5.1, R1010)

1. Introduction

This guidance sheet gives guidance on the important issues that could be included in the Principal Contractor's Health and Safety Plan for the maintenance or construction project.

The Construction Regulations (R1010) are aimed at improving overall management and co-ordination of Health, Safety and Welfare throughout the Construction or maintenance phase of the projects, to reduce the large number of serious and fatal accidents and cases of ill health, which occur every year in the Construction Industry.

Under the Construction Regulations (R1010), the Principal Contractor is required to develop the Health and Safety Plan before work commences on site and to keep it up to date throughout the maintenance/ construction contract. The degree of detail required in the Health and Safety Plan for the construction/ maintenance contract and the time and effort in preparing it should be in proportion to the nature, size and level of Health and Safety risks involved in the contract. Projects involving minimal risks will call for simple, straight forward plans. Large projects or those involving significant risks will need more detail.

2. What should the Maintenance/ Construction Health and Safety Plan Cover

The Maintenance/ Construction Health and Safety Plan should set out the arrangement for ensuring the Health and Safety of everyone carrying out the maintenance/ construction work and all the workers who may be affected by it.

The Plan should deal with:

- The arrangements for the Management of Health and Safety of the maintenance & construction wok;
- The monitoring systems for checking that the Health and Safety Plan is being followed;
- Health and Safety Risk Assessments to those at work, and others, arising from the maintenance & construction work, and from other work in premises where maintenance or construction work may be carried out.

3. What should go in the Maintenance & Construction Health and Safety Plan

Not all information relating to the contract may be available to fully develop the Health and Safety Plan before the start of the contract. This could be because not all the design work may have been completed or many of the Contractors who will be carrying out the work have yet to be appointed. However, site layout drawings covering the project at different stages, completed design information and lists of maintenance schedules and the Health and Safety Specification will be valuable in developing the Health and Safety Plan so that:

- The general framework is in place; and
- It deals with the key tasks during the initial work stages

The Health and Safety Plan will need to be added to, reviewed and updated as the contract develops, further specifications or requirements and maintenance schedules is completed, information from the Contractors starting work becomes available, unforeseen circumstances or variations to planned circumstances arise, etc.

BASIC GUIDANCE ON THE REQUIRED CONTENTS OF THE MAINTENANCE & CONSTRUCTION HEALTH AND SAFETY PLAN

A. Project Description

- A description of the Contract
- A general statement of Health and Safety principles and objectives for the Contract
- Information about restrictions which may affect the work (e.g. neighbouring buildings, utility services, vehicular and pedestrian traffic flows and restrictions from the work activities of the Client).

B. General Administrative Requirements

Contractor to supply the following:

- Company Health and Safety Policy
- Department of Labour Notification
- Workman's Compensation Registration (letter of good standing)
- Start-up Procedure Checklist

C. Management

Contractor to supply the following:

- Management Organogram for the project
- All legal appointments for the project
- Arrangement for the Principal Contractor to give directions and to co-ordinate other Contractors

D. Standard Setting

Principal Contractor to supply the following:

Health and Safety standards to which the contract will be carried out (can be statutory requirements or higher standards that the Client may require – i.e. added rules).

E. Information to Contractor

Principal Contractor to supply the following:

Means for informing Contractors about risks to their Health and Safety arising from the environment in which the contract is to be carried out and the construction work itself.

F. Selection Procedures

Principal Contractor to supply the following:

- All Contractors, the self-employed and designers to be appointed by the Principal Contractor are competent and will make adequate provision for Health and Safety;

- List of Contractors indicating compliance criteria
- Contractor Safety Induction – proof thereof
- Contractor Safety Meetings – proof thereof
- Section 37.2 Mandatory Agreements – in terms of OHS Act 85/1993

- Suppliers of material to the Principal Contractor will provide adequate Health and Safety information to support their products;
  - Section 37.2 Mandatory Agreements – in terms of OHS Act 85/1993
- Machinery and other plant supplied for common use will be properly selected, used and maintained and the operator training will be provided;
  - Section 37.2 Mandatory Agreements – in terms of OHS Act 85/1993

G. Communications and Co-operation

Principal Contractor to supply the following:

- Means for communicating and passing information between Project Team (including the Client and any Client's representatives) the Designers, the OHS agent, the Principal Contractor, other Contractors, Workers on site and others whose Health and Safety may be affected;
- Arrangements for securing co-operation between Contractors for Health and Safety purposes;
- Arrangements for Management meetings and initiatives by which the Health and Safety objectives of the project are to be achieved;
  - Health and Safety Representative – their requirements
  - Committee Meeting Minutes and Agenda
  - Appointment of Committee Members

H. Activities with Risk to Health and Safety

Principal Contractor to supply the following:

Arrangements need to be made for the identification and effective management of activities with risk to Health and Safety, by carrying out risk assessments, incorporating those prepared by other Contractors, and also safety method statements which result. These activities may be specific to a particular trade (e.g. false work) or to site-wide issues, and may include:

- The storage and distribution of materials;
- The movement of vehicles on site, particularly as this affects pedestrian and vehicular safety;
- Control and disposal of waste;
- The provision and use of common means of access and places of work;
- The provision and use of common mechanical plant;
- The provision and use of temporary services (e.g. electricity);
- Temporary support structure (e.g. false work);
- Commissioning, including the use of permit-to-work systems;
- Protection from falling materials;
- Exclusion of unauthorized people;
  - Noise Programme – requirements
  - Risk Assessments in terms of Hazardous Chemicals/Substances

Control measure to deal with these should be clearly set-out, including protection of members of the public.

I. Emergency Procedures

Principal Contractor to supply the following:

Emergency arrangements for dealing with and minimising the effects of injuries, fire and other dangerous occurrences.

- Emergency Plan
- Emergency Telephone List
- Fire Precautions
- First Aid Arrangements

J. Reporting of Accidents and Incidents

Principal Contractor to supply the following:

Arrangements for passing information to the Principal Contractor about accidents, ill health and dangerous occurrences that require to be notified to the Department of Labour under the General Administrative Regulations:

- Accident/Incident Processing
- Accident Procedure
- Monthly Injury Information

K. Welfare Facilities

Principal Contractor to supply the following:

The arrangements for the provision and maintenance of welfare facilities as per the Construction Regulations (R1010).

L. Information and Training for People on Site

Principal Contractor to supply the following:

Arrangements need to be made by which the Principal Contractor will check that people on site have been provided with:

- Training Guidelines
- Induction Training and proof of attendance
- Site Visitor Information
- Toolbox Talks
- Display of Statutory Notices
- Specific Training for Legal Appointments

M. Site Rules

Principal Contractor to supply the following:

Arrangements for making site rules and for bringing them to the attention of those affected. The rules should be set out in the Health and Safety Plan. There may be separate rules for Contractors, Workers, Visitors and other specific groups.

N. Health and Safety File

Principal Contractor to supply the following:

Arrangements for passing on information to the OHS Agent for the preparation of the Health and Safety file. All documents required by law in the Construction Regulations R1010 (Regulation 5.7, 5.8 and 5.9).

O. Arrangements for Monitoring

Principal Contractor to supply the following:

Arrangements should be set out for the monitoring systems to achieve compliance with:

- Legal requirements (minimum monthly audit and reports thereof);
- The Health and Safety rules developed by the Principal Contractor through regular planned checks and by carrying out investigations of incidents (whether causing injury, loss or near miss) and complaints.
- Daily inspection by Health and Safety Representative;
- All legal required inspection Site Registers to be kept up to date;
- Co-operation and regular meetings between senior management and those who provide Health and Safety advice to them.

LEGAL APPOINTMENTS (ANNEXURE 1)
OCCUPATIONAL HEALTH AND SAFETY ACT 85/1993

No	OHS Act Ref.	Appointment	Name of Appointee
1	Section 16	Overall Authority and Accountability	
2	Section 16(2)	Assignment of Duties	
3	CR 6(1)	Construction Supervisor	
4	CR 6(2)	Subordinate Construction Supervisor	
5	GMR 2(1)	Supervision of Machinery (not for construction sites)	
6	Section 17	Health and Safety Representative	
7	CR 14(2)	Scaffold Erector, Supervisor, Inspector (separate appointments)	
8	CR 11(1)	Excavation Inspector	
9	GSR 3(4)	First Aiders	
10	CR 27(h)	Fire Equipment Inspector	
11	EMR 9	Portable Electrical Tool Inspector	
12	CR 17(8)(a)	Materials Hoist Inspector	
13	DMR 18(5)	Lifting Machinery and Equipment Inspector	
14	DMR 18(6)	Lifting Tackle Inspector	
15	GSR 13(a)	Ladder Inspector	
16	HSC Regs	Hazardous Chemical Substances Inspector	
17	CR 19(2)(b)	Explosive Powered Tools Inspector	
18	GSR 3	Emergency Procedure Coordinator	
19	CR 10(a)	Formwork and Support Work Inspector	
20	CR 15(1)	Suspended Platforms Supervisor	
21	CR 18(1)	Batch Plant Supervisor	
22	CR 21(j)	Construction Vehicle and Mobile Plant Inspector	
23	CR22(e)	Electrical Installation and Machinery Responsible Person	
24	CR 26(a)	Stacking and Storage Supervisor	
25	DMR 18(11)	Crane Manager	
26	DMR 18(11)	Crane Supervisor	
27	DMR 18(11)	Crane Operator	
28	DMR 18(11)	Crane Banks man	

KEYS:

CR	=	Construction Regulations
EMR	=	Electrical Machinery Regulations
DMR	=	Driven Machinery Regulations
GMR	=	General Machinery Regulations
ER	=	Environmental Regulations
GSR	=	General Safety Regulations
HSC	=	Hazardous Chemical Substances Regulations

HEALTH AND SAFETY SPECIFICATION (HSS)

ANNEXURE 2

The Principal Contractor and Contractors must submit documents to legally comply with the Construction Regulations (R1010), where applicable with the construction phase H&S plan.

HSS Item No.	Requirement	OHSA Requirement	Submission Date
3.3.1	Notification of Intention to Commence Maintenance/Construction / Building Work	Complete Schedule 1 (Construction Regulations)	Before commencement on site
3.3.2	Assignment of Responsible Persons to Supervise Construction Work	OHS Act (section 16.2) & Construction Reg 6	Before commencement on site
3.3.3	Competence of Responsible Persons	OHS Act (section16.2) & Construction Reg 6	Together with H&S plan
3.3.4	Compensation of Occupational Injuries and Diseases – proof of registration	COIDA	Together with H&S plan
3.3.5	Occupational Health and Safety Policy	OHS Act	Together with H&S plan
3.3.6	Health and Safety Organogram	Client Requirement	Together with H&S plan
3.3.7	Initial Hazard Identification and Risk Assessment based on the Client's assessment	Construction Regs.	Together with H&S plan
3.3.8	Health and Safety Representative	OHS Act	Submit as soon as there are more than 20 employees on site

ASSIGNMENT OF
PRINCIPAL CONTRACTOR'S RESPONSIBLE PERSONS

ANNEXURE 3

The Principal Contractor shall make the following appointments according to the initial risk assessment: (further appointments could become necessary as the project progresses). Contractors shall make the relevant appointments as per their operations. The Client reserves the right to insist on any appointment/s as determined by its risk assessment of the Contractor concerned.

Appointment	OHSA Reference	Requirement
CEO Assignee	Section 16(2)	A competent person to assume the overall H&S responsibility – Principal Contractor's Responsible Person
Construction Work Supervisor	CR 6.1	A competent person to supervise and be responsible for Health & Safety related issues on site.
Subordinate Construction Work Supervisors	CR 6.2	A competent person to assist with daily supervision of maintenance/ construction / building work. The person(s) assist the Construction Work Supervisor.
Health & Safety Representative(s)	Section 17	A competent person(s) to assist with identifying risks, attend H&S meetings, conduct inspections, assist with investigations, etc.
Health & Safety Committee Member(s)	Section 19	The 16.2 Person, all 6.1 Persons, all 6.2 Person, H&S Reps., H&S officer.
Incident Investigator	GAR 8	A competent person to investigate incidents / accidents on site and could be: • The 6.1 or 6.2 Person • H&S Representative • Member of the H&S Committee • H&S officer
Risk assessment co-ordinator	CR 7	A competent person to co-ordinate all risk assessments on behalf of the Principal Contractor. The same applies to Contractors.
Fall protection plan co-ordinator	CR 8	A competent person to prepare & amend the fall protection plan.
First Aiders	GSR 3	A qualified person to address all on site first aid cases.
Machinery Inspector	GSR 2.1	A competent person to supervise machinery.
Lifting machine & equipment inspector	DMR 18	A competent person to inspect lifting machines, equipment.
Lifting tackle inspector	DMR 18	A competent person to inspect lifting tackle.

Annexure 3 continued

Scaffolding Inspector	SABS 085	A competent person to inspect scaffolding before use and every time after bad weather, etc.
Scaffolding erector	GSR 13D	A competent person to erect scaffolding.
Scaffolding supervisor	SABS 085	A competent person to supervise scaffolding.
Formwork & support work inspector	CR 10	A competent person to inspect formwork & support work.
Excavation Inspector	CR 11	A competent person to inspect excavation work and ensure that approved safe working procedures are followed at all times.
Ladder Inspector	GSR 13A	A competent person to inspect ladders daily and ensure they are safe for use, keeping monthly record.
Stacking Supervisor	CR 26	A competent person to supervise all stacking and storage operations.
Explosive powered tools inspector/supervisor	CR 19	A competent person to inspect & clean the tools daily and controlling all operations thereof.
Temporary electrical installations supervisor	CR 22	A competent person to control all temporary electrical installations.
Fire-fighting equipment inspector	CR 27	A competent person to inspect fire-fighting equipment.
Construction health & safety officer	CR6	A competent person to fulfil the functions as laid down in 3.3.21 of the “Good Management Practice”.

ANNEXURE 4

The Principal Contractor shall comply but not be limited to the following requirements: Report on these to the Client/Client's OHS Agent at progress meetings or at least monthly which ever is sooner.
Sub Contractors shall comply and report to the Principal Contractor on a monthly basis. A report with supporting documents shall be tabled at the Principal Contractor's monthly Health & Safety meeting.

What	When	Output	Accepted by Client with date
Construction-phase Health & Safety Plan	At tender	Principal Contractor to report on status of Contractors' health & safety plans	
Health & Safety File	Open file when construction begins and maintain throughout.	Have file on hand at meetings	
Induction training	Every worker before he/she starts work.	Attendance registers	
Awareness Training (Tool Box Talks)	At least weekly	Attendance registers	
Health & Safety Meetings	Monthly	Meeting minutes	
Health & Safety Reports	Monthly	Report covering: • Incidents / accidents and investigations • Non conformances by employees & contractors • Internal & External H&S audit reports	
Emergency procedures	Weekly evaluation of procedure	Table procedure in writing as well as tel. numbers	
Risk assessment	Updated and signed off at least monthly	Documented risk assessment	
Method statements (safe work procedures)	Drawn up before workers are exposed to new risks	Documented set of safe work procedures (method statements) updated and signed off	

Annexure 4 continued

General Inspections	Weekly & daily	OHS Act compliance: Registers • Scaffolding • Rope hanging • Excavations • Formwork & support work • Explosive tools • Temporary electrical installations	General Inspections
General Inspections	Monthly	• Fire fighting equipment • Portable electrical equipment • Ladders	
General Inspections	3-monthly	• Lifting tackle • Oxy-acetylene cutting & welding sets • Fall prevention and arrest equipment	
General Inspections	6-monthly	• Lifting machines	
Load tests / performance tests	Annually / once erected, before use	• Lifting machines	
List of Contractors	List to be updated weekly	Table list, number of workers and Company tel. numbers	
Workman's Compensation	Update weekly	Table a list of Contractors' workman's compensation proof of good standing	
Construction site rules & Section 37.2 Mandatory Agreement	Update weekly	Table a report of all signed up Mandatories	

ANNEXURE 5

RISK ASSESSMENT

TASK ORIENTATED RISKS

Rating	Task / situation	Personal protective equipment	Risk to safety	Risk to health	Preventative action	Risk to Environment
High	Excavations Mechanical	Overalls, hard hats, safety shoes	Mechanical malfunction Machine topple over Machine collision Underground services	Gases from burst pipes, etc	Training, pre-use checks, inspections, outriggers fully extended, awareness of other machines, Pre-excavation checks with engineer	Cutting down of protected trees, etc Check with Dept of Environmental Affairs
High	Excavation by Hand	Overalls, hard hats, safety shoes	Heat related illness Cuts and lacerations Collapse of excavation	Complications resulting from repetitive work	Training, increase fluid intake, PPE, inspections	-
High	Backfilling	Overalls, hard hats, safety shoes	Live burials of personnel	Death fractures	Check all areas before backfilling, evacuate all personnel	-
High	Fixing re-bar (elevated)	Overalls, hard hats, safety shoes, gloves, goggles, fall prevention where necessary		Injuries, cuts and bruises, eye injuries	Safe platforms, access provided, fall prevention plan, gloves to prevent cuts, eye protection to prevent injury	Off cuts
High	Formwork & support work	Overalls, hard hats, safety shoes, aprons	Falls, injuries, fractures, death	Dermatitis from coming into contact with degreasers	Training, safety belts, method statements	Spillage of oils and degreasers into ground water, etc.
High	Stripping of Formwork & support work	Overalls, hard hats, safety shoes	Falling shutter boards Falls from stripping edgework	Lacerations fractures	Housekeeping principles Training, use of harnesses	

TASK ORIENTATED RISKS (Continued)

Medium	Brick work General	Overalls, hard hats, safety shoes, gloves	Back injuries – handling heavy loads Unsafe scaffolding	Complications from repetitive work	Training in manual handling Use of lifting equipment	-
Medium	Plastering	Overalls, hard hats, safety shoes, gloves	Unsafe scaffolding	Chemical reaction in wet cement causes Dermatitis	Barrier creams prevent this	-
Medium	Cement and Concrete Mixing	Overalls, hard hats, safety shoes, gloves, ear muffs	Concrete mixer causing injury	Ingestion, inhalation of cement, noise Contact with skin	Training, correct use of PPE, barrier creams	-
High	Roof work	Overalls hard hats, safe shoes, gloves, harnesses and lifelines	Falls from roof height Materials falling from heights	Death fractures, lacerations	Training, fall arrest equip, Lower waste material from roof, Fall prevention plan	-
High	Roof Sheeting at Heights	Overalls, hard hats, safe shoes, gloves, harnesses and lifelines	Falling off Wet weather work Windy conditions Angle grinder use	Cuts/laceration Objects falling Electrical shocks	Training, safety belts, life lines Pre-inspection, guard in place Barricade/demarcate areas below Fall prevention plan	-

TASK ORIENTATED RISKS (Continued)

High	Scaffolding Erection and Dismantling	Overalls, hard hats, safety shoes, gloves, harnesses and lifelines	Falls Falling objects Collapsing of scaffold	Death, fractures, Lacerations, Paralyses, concussion	Training, qualified erectors only, level & plumb, tie scaffolding, scaffold in good order	-
High	Work in elevated positions (Scaffolds)	Overalls, hard hats, safety shoes, gloves, harnesses and lifelines	Falls from heights Falling objects	Death, fractures, Lacerations, Paralyses, concussion	Training, safety belts, life lines Fall prevention plan	
High	Work in elevated positions, eg decks, staircases	Overalls, hard hats, safety shoes, gloves, harnesses and lifelines	Falls from heights Materials falling from heights	Death, fractures, Lacerations, Paralyses, concussion	Training, safety belts, life lines Barricade all sides adequately Fall prevention plan	-
High	Ladder Usage	Hard hats, safety shoes	Falls, unsafe ladders, incorrect height, too long, not secured	fractures, Lacerations, concussion	Training, pre-use checks, monthly inspections, correct length for task, secure at top and bottom, skid pads on ladder, use both hands to climb	-
High	Falls (on the ground)	Hard hats, safety shoes		Injuries and bruises fractures	Training, good house keeping	-
High	Electrical Installations (Temporary)	Overalls, hard hats, safety shoes, gloves, etc	Exposed switches and wires Cables lying in pools of water Un-insulated cables and wires	Electric Burns, electrocution	Tidy up all wires and cover Suspend all cable above ground Regular inspections and maintenance	-
Medium	Load & unload by Hand	Gloves		Back and hand injuries falls	Training, clear task communication	-

TASK ORIENTATED RISKS (Continued)

Low	Hauling	Hard hats, safety shoes	Material spilling from trucks Travelling trucks generating dust Driver fatigue leading to accidents Brake failure on trucks resulting in collisions Collision with other vehicles	Eye irritations, physical injuries	Tally clerk to check load levels Gravel haul road kept wet by watering Check fitness of driver Pre-use inspections using checklists Road worthy certificates Brake testing before daily work Speed limit kept at 5km/h on site	-
High	Demolitions	Hard hats, Safety Shoes, Safety Goggles and gloves	Materials / Rubble falling Material spilling from trucks Travelling trucks generating dust Driver fatigue leading to accidents Brake failure on trucks resulting in collisions Collision with other vehicles	Eye irritations, physical injuries	Tally clerk to check load levels Gravel haul road kept wet by watering Check fitness of driver Pre-use inspections using checklists Road worthy certificates Brake testing before daily work Speed limit kept at 5km/h on site	-

EQUIPMENT RISKS

Rating	Task / Situation	Personal Protective Equipment	Risk to Safety	Risk to Health	Preventative Action	Risk to Environment
Medium	Electric Drill	Overalls, hard hats, safety shoes, goggles	Electrical shocks, drill bits breaking and splintering	Eye injuries, general injuries	Training, only competent user, pre-use check, monthly inspections, work piece secure	-
High	Angle Grinder	Overalls, hard hats, safety shoes, goggles	Blades shattering	Electrical shocks, severe injuries, lacerations, loss of sight	Training, only competent user, pre-use check, monthly inspections, work piece secure	-
Medium	Skill Saw	Overalls, hard hats, safety shoes, goggles	Guard malfunction, blade shattering	Electrical shocks, severe injuries	Training, only competent user, pre-use check, monthly inspections, work piece secure	-
Medium	Extension Leads	Overalls, hard hats, safety shoes, goggles	Trips and falls	Electrical shocks, fractures, Electrocutions	Training, pre-use inspection, maintenance	-
High	Hand Tools	Overalls, hard hats, safety shoes, goggles	Breaking / splintering	Cuts, bruises	Training, use correct tool for the task, inspections	-
High	Compressed Air Tools	Overalls, hard hats, safety shoes, goggles	Disintegration	Injuries, ruptured eardrums, eyes	Training, pre-use inspections	-
High	Driving Vehicles	Safety belts	Accidents, Passengers Un-roadworthy vehicles, Road and weather conditions, Other road users	Fractures Lacerations Death Concussion	Licensed drivers only, obey rules, Seated not leaning on opening sides Inspections of vehicle Fit to drive, sober Reduce speed, be alert, Enclosed vehicle	-
High	Cranes	Overalls, hard hats, safety shoes	Falling loads, swinging loads, cranes falling	Noise (mobile crane) Death, Fractures Lacerations Concussions	Load tests, inspections, maintenance, trained operators, banks man	

PHYSICAL RISKS

Rating	Situation	Personal Protective Equipment	Risk to Safety	Risk to Health	Preventative Action	Risk to Environment
Medium	Noise (General Machinery)	Ear plugs, ear muffs	-	Noise induced hearing loss	Training of personnel Designate noise areas	Noise pollution
Medium	Vibration (General Machinery)	Ear plugs, ear muffs, gloves	-	May result in kidney complications White finger	Training, rest breaks	-
Medium	Hot & Humid Work Area	Fans, liquids to drink	Dehydration	Heat exhaustion and heat stroke Deaths	Adequate drinking water Training to identify symptoms. Vitamin & mineral supplements	-
Medium	Bad Lighting	Artificial lighting	Injuries, falls, death	-	Adequate lighting Emergency lighting	-
High	Fire Prevention	Overalls, hard hats, safety shoes, aprons, fire extinguishers	Combustible refuse: paper & plastics Flammable liquids: petrol, diesel, etc Electrical equipment	Burns Loss of limbs Death Disfiguration	Training, housekeeping, segregated storage of materials	-

ERGONOMICAL RISKS

Rating	Task / Situation	Personal Protective Equipment	Risk to Safety	Risk to Health	Preventative Action	Risk to Environment
Medium	Visual Workplace	-	Falls from heights Materials falling from heights, tripping over materials	-	Housekeeping	-
Medium	Awkward Postures	Back braces	-	Health complication from bad postures	Sufficient access to areas	-
High	Manual Lifting	Back braces	-	Back muscle injuries Slip discs	Training in SWP's Use of lifting equipment	-

GENERAL TEMPLATES FOR COMPLETION

ANNEXURE 6

- Record of Responsibilities
- Risk Assessment Records
- Contractor / Sub-contractor Interface Record
- Method Statement to be co-ordinated by the Principal Contractor's Management Team
- Training Record
- Level 1: The Contract – Carried out by the OHS Agent
- Level 2a: Workplace – Carried out by Safety Representatives
- Level 2b: The Contract – Carried out by the Safety Officer
- Contractors / Sub-contractors Questionnaire

Record of Responsibilities

Position	Name	Responsibility

Risk Assessment Record

Hazard	Risk	Action to be taken	Action by	Date by

(Level of risk from risk rating documents.)

Contractor and Sub-Contractor Interface Record

Company Name	Construction Supervisor	Telephone Number	Policy	Method Statement

Method Statement to be co-ordinated by the Principal Contractor's Management Team

Date	File Reference	Method Statement and Permit to work title or work activity	Action by	Date

Training Record

Activity	Brief Description of Training Required	Responsible Person	Comments

Level 1 **The Contract: Carried out by OHS Agent**

Frequency	Area of Responsibility	Responsible Person	Date	Signature

Records of contractors' monitoring shall be kept on site, provided to the Client and the Principal Contractor for analysis, action and record purposes.

Level 2a **Workplace: Carried out by Safety Representatives**

Frequency	Area of Responsibility	Responsible Person	Date	Signature

Level 2b **The Contract: Carried out by the Safety Officer**

Frequency	Area of Responsibility	Responsible Person	Date	Signature

CONTRACTORS / SUB-CONTRACTORS QUESTIONNAIRE

Was the safety organisation and other instructions clearly indicated to you?

Was the resultant communication effective?

Was the allocation of responsibilities to you, by the Principal Contractor, realistic?

Were risk assessments carried out?

Were the implemented control measures effective?

Were the control measures clearly indicated to you?

Were any particular problems encountered with the Principal Contractor, Sub-Contractor, or other appointed persons?

Were site safety rules and procedures clearly and effectively communicated to you?

Were the emergency procedures communicated effectively to you?

Was the monitoring of Health and Safety carried out satisfactorily?

Have you any other general remarks, which should be brought to the attention of the Principal Contractor's Management Team?