# **INVITATION TO BID**

ITB UNDP HIST 030-16 Design and Construction of a new pharmaceutical warehouse in Chipata, Zambia



Empowered lives. Resilient nations.

**United Nations Development Programme** 

# **SECTION 1. LETTER OF INVITATION**

December 2016.

UNDP ITB UNDP HIST 030-16 Design and Construction of a new medical warehouse in Chipata, Zambia

The United Nations Development Programme hereby invites you to submit a Bid to this Invitation to Bid (ITB) for the above-referenced subject.

This ITB includes the following documents:

Section 1: This Letter of Invitation Section 2: Instructions to Bidders (including Data Sheet) Section 3: Schedule of Requirements and Technical Specifications **Bid Submission Form** Section 4: Section 5: Documents Establishing the Eligibility and Qualifications of the Bidder Section 6: **Technical Bid Form** Section 7: **Price Schedule Form** Section 8: Form for Bid Security Section 9: Form for Performance Security Section 10: Form for Advanced Payment Guarantee Section 11: Contract to be Signed, including General Terms and Conditions Annexes: Including relevant drawings / designs (Section 12), geotechnical surveys (section 13), and other relevant documentation (Section 14 & 15) Chipata warehouse design and construction, Section 7, Price Schedule Excel Format

Your offer, comprising of a Technical Bid and Price Schedule, in separate sealed envelopes / files, should be submitted in accordance with Section 2, and **be received before Thursday 9th February 2017, 12:00 Hours Copenhagen Local Time (CET)**. Bidders are requested to make use of Annex titled "Chipata warehouse design and construction Section 7, Price Schedule Excel format", when submitting their price schedules in response to this Bid.

A pre-bid meeting will take place as per the following schedule:

0	Pre-bid meeting Date & Time and Site visit info			
Location				
Thursday 5th January 2017 10 a.m. at MSL Central Warehouse, Plot 6446, Mukwa road PO Box 30207 Lusaka www.medstore.co.zm	It can be interesting for bidders to familiarize with the location and characteristics of the site where the pharmaceutical warehouse shall be constructed. Arrangements for such visits can be made on ad-hoc basis during the period from tender publication to deadline for submission of offers.			
Gathering of bidders shall be at 10 am inside the Administration Building at Medical Stores Limited in Lusaka in object of an information meeting.	IMPORTANT In order to ensure site access at the time of planned bidder's visit, bidders shall notify the following UNDP/MoH/MSL appointed focal points, at least 48 hours in advance, of their planned visit. guy.rino.meyers@undp.org, maelo.mwiinga@undp.org dick.kampamba@undp.org			

Bidders are advised to attend the pre-bid meeting and to undertake one or several site visit/s (on their own cost and responsibility). Arrangements have been made for a bidder's meeting be held as per above schedule containing date, time and location. Bidders will be required to sign an attendance form. Any clarification or changes to the bid solicitation resulting from the site visit will be included as an amendment to the bid solicitation.

The pre-bid meeting minutes, and any further enquiries received on or before the deadline stated in the ITB, will be documented and posted on the designated UNDP website. No inquiries will be accepted after 5 working days prior to the deadline for submission of bids stated in the ITB.

You are kindly requested to submit a communication to UNDP on the following e-mail addresses advising whether your company intends to submit a BID. If that is not the case, UNDP would appreciate your indicating the reason, for our records. <u>alfonso.buxens@undp.org</u>, <u>pranisha.bajracharya@undp.org</u> and <u>guy.rino.meyers@undp.org</u>.

Should you require any clarification, kindly communicate with the contact person identified in the attached Data Sheet as the focal point for queries on this ITB.

This letter is not to be construed in any way as an offer to contract with your company.

UNDP looks forward to receiving your Bid and thanks you in advance for your interest in UNDP procurement opportunities.

Yours sincerely,

Guy Rino Meyers, GF HIST PSM Team Lead.

# SECTION 2: INSTRUCTION TO BIDDERS

#### Definitions

- a) "Bid" refers to the Bidder's response to the Invitation to Bid, including the Bid Submission Form, Technical Bid and Price Schedule and all other documentation attached thereto as required by the ITB.
- b) "Bidder" refers to any legal entity that may submit, or has submitted, a Bid for the supply of goods and provision of related services requested by UNDP.
- c) "Contract" refers to the legal instrument that will be signed by and between the UNDP and the successful Bidder, all the attached documents thereto, including the General Terms and Conditions (GTC) and the Appendices.
- d) "Country" refers to the country indicated in the Data Sheet.
- e) "Data Sheet" refers to such part of the Instructions to Bidders used to reflect conditions of the tendering process that are specific for the requirements of the ITB.
- f) "Day" refers to calendar day.
- g) "Goods" refer to any tangible product, commodity, article, material, wares, equipment, assets or merchandise that UNDP requires under this ITB.
- h) "Government" refers to the Government of the country where the goods and related services provided/rendered specified under the Contract will be delivered or undertaken.
- i) "Instructions to Bidders" refers to the complete set of documents which provides Bidders with all information needed and procedures to be followed in the course of preparing their Bid
- j) "ITB" refers to the Invitation to Bid consisting of instructions and references prepared by UNDP for purposes of selecting the best supplier or service provider to fulfil the requirement indicated in the Schedule of Requirements and Technical Specifications.
- k) "LOI" (Section 1 of the ITB) refers to the Letter of Invitation sent by UNDP to Bidders.
- "Material Deviation" refers to any contents or characteristics of the bid that is significantly different from an essential aspect or requirement of the ITB, and (i) substantially alters the scope and quality of the requirements; (ii) limits the rights of UNDP and/or the obligations of the offeror; and (iii) adversely impacts the fairness and principles of the procurement process, such as those that compromise the competitive position of other offerors.
- m) "Schedule of Requirements and Technical Specifications" refers to the document included in this ITB as Section 3 which lists the goods required by UNDP, their specifications, the related services, activities, tasks to be performed, and other information pertinent to UNDP's receipt and acceptance of the goods.
- n) "Services" refers to the entire scope of tasks related or ancillary to the completion or delivery of the goods required by UNDP under the ITB.

 o) "Supplemental Information to the ITB" refers to a written communication issued by UNDP to prospective Bidders containing clarifications, responses to queries received from prospective Bidders, or changes to be made in the ITB, at any time after the release of the ITB but before the deadline for the submission of Bid.

# A. GENERAL

- UNDP hereby solicits Bids as a response to this Invitation to Bid (ITB). Bidders must strictly adhere
  to all the requirements of this ITB. No changes, substitutions or other alterations to the rules and
  provisions stipulated in this ITB may be made or assumed unless it is instructed or approved in
  writing by UNDP in the form of Supplemental Information to the ITB.
- 2) Submission of a Bid shall be deemed as an acknowledgement by the Bidder that all obligations stipulated by this ITB will be met and, unless specified otherwise, the Bidder has read, understood and agreed to all the instructions in this ITB.
- Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of any Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this ITB.
- 4) UNDP implements a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical practices, and obstruction. UNDP is committed to preventing, identifying and addressing all acts of fraud and corrupt practices against UNDP as well as third parties involved in UNDP activities. (See <a href="http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html">http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html</a> for full description of the policies)
- 5) In responding to this ITB, UNDP requires all Bidders to conduct themselves in a professional, objective and impartial manner, and they must at all times hold UNDP's interests paramount. Bidders must strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. All Bidders found to have a conflict of interest shall be disqualified. Without limitation on the generality of the above, Bidders, and any of their affiliates, shall be considered to have a conflict of interest with one or more parties in this solicitation process, if they:
  - 5.1 Are, or have been associated in the past, with a firm or any of its affiliates which have been engaged UNDP to provide services for the preparation of the design, Schedule of Requirements and Technical Specifications, cost analysis/estimation, and other documents to be used for the procurement of the goods and related services in this selection process;
  - 5.2 Were involved in the preparation and/or design of the programme/project related to the goods and related services requested under this ITB; or
  - 5.3 Are found to be in conflict for any other reason, as may be established by, or at the discretion of, UNDP.

In the event of any uncertainty in the interpretation of what is potentially a conflict of interest, Bidders must disclose the condition to UNDP and seek UNDP's confirmation on whether or not such conflict exists.

- 6 Similarly, the following must be disclosed in the Bid :
  - 6.1 Bidders who are owners, part-owners, officers, directors, controlling shareholders, or key personnel who are family of UNDP staff involved in the procurement functions and/or the

Government of the country or any Implementing Partner receiving the goods and related services under this ITB; and

6.2 Others that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices.

#### Failure of such disclosure may result in the rejection of the Bid.

- 7 The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's further evaluation and review of various factors such as being registered as an independent entity, the extent of Government ownership/share, receipt of subsidies, mandate, access to information in relation to this ITB, and others that may lead to undue advantage against other Bidders, and the eventual rejection of the Bid.
- 8 All Bidders must adhere to the UNDP Supplier Code of Conduct, which may be found at this link: <u>http://www.undp.org/content/dam/undp/documents/procurement/documents/UNDP\_supplier\_code\_of\_c</u> <u>onduct.pdf</u>.

# B. CONTENTS OF BID

#### 9 Sections of Bid

Bidders are required to complete, sign and submit the following documents:

- 9.1 Bid Submission Cover Letter Form (see ITB Section 4);
- 9.2 Documents Establishing the Eligibility and Qualifications of the Bidder (see ITB Section 5);
- 9.3 Technical Bid (see prescribed form in ITB Section 6);
- 9.4 Price Schedule (see prescribed form in ITB Section 7);
- 9.5 Bid Security, if applicable (if required and as stated in the DS nos. 9-11, see prescribed Form in ITB Section 8);
- 9.6 Any attachments and/or appendices to the Bid (including all those specified under the
- 9.7 Data Sheet)

#### 10 Clarification of Bid

- 10.1 Bidders may request clarification of any of the ITB documents no later than the number of days indicated in the Data Sheet (DS no. 16) prior to the Bid submission date. Any request for clarification must be sent in writing via courier or through electronic means to the UNDP address indicated in the Data Sheet (DS no. 17). UNDP will respond in writing, transmitted by electronic means and will transmit copies of the response (including an explanation of the query but without identifying the source of inquiry) to all Bidders who have provided confirmation of their intention to submit a Bid.
- 10.2 UNDP shall endeavor to provide such responses to clarifications in an expeditious manner, but any delay in such response shall not cause an obligation on the part of UNDP to extend the submission date of the Bid, unless UNDP deems that such an extension is justified and necessary.

#### 11 Amendment of Bid

11.1 At any time prior to the deadline for submission of Bid, UNDP may for any reason, such as in response to a clarification requested by a Bidder, modify the ITB in the form of a Supplemental Information to the ITB. All prospective Bidders will be notified in writing of all

changes/amendments and additional instructions through Supplemental Information to the ITB and through the method specified in the Data Sheet (DS No. 18).

11.2 In order to afford prospective Bidders reasonable time to consider the amendments in preparing their Bid, UNDP may, at its discretion, extend the deadline for submission of Bid, if the nature of the amendment to the ITB justifies such an extension.

# C. PREPARATION OF BID

#### 12 Cost

The Bidder shall bear any and all costs related to the preparation and/or submission of the Bid, regardless of whether its Bid was selected or not. UNDP shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the procurement process.

#### 13 Language

The Bid, as well as any and all related correspondence exchanged by the Bidder and UNDP, shall be written in the language (s) specified in the Data Sheet (DS No. 4). Any printed literature furnished by the Bidder written in a language other than the language indicated in the Data Sheet, must be accompanied by a translation in the preferred language indicated in the Data Sheet. For purposes of interpretation of the Bid, and in the event of discrepancy or inconsistency in meaning, the version translated into the preferred language shall govern. Upon conclusion of a contract, the language of the contract shall govern the relationship between the contractor and UNDP.

#### 14 Bid Submission Form

The Bidder shall submit the Bid Submission Form using the form provided in Section 4 of this ITB.

#### 15 Technical Bid Format and Content

Unless otherwise stated in the Data Sheet (DS no. 28), the Bidder shall structure the Technical Bid as follows:

- 15.1 Expertise of Firm/Organization this section should provide details regarding management structure of the organization, organizational capability/resources, and experience of organization/firm, the list of projects/contracts (both completed and on- going, both domestic and international) which are related or similar in nature to the requirements of the ITB, manufacturing capacity of plant if Bidder is a manufacturer, authorization from the manufacturer of the goods if Bidder is not a manufacturer, and proof of financial stability and adequacy of resources to complete the delivery of goods and provision of related services required by the ITB (see ITB Clause 18 and DS No. 26 for further details). The same shall apply to any other entity participating in the ITB as a Joint Venture or Consortium.
- 15.2 Technical Specifications and Implementation Plan this section should demonstrate the Bidder's response to the Schedule of Requirements and Technical Specifications by identifying the specific components proposed; how each of the requirements shall be met point by point; providing a detailed specification and description of the goods required, plans and drawings where needed; the essential performance characteristics, identifying the works/portions of the work that will be subcontracted; a list of the major subcontractors, and demonstrating how the bid meets or exceeds the requirements, while ensuring appropriateness of the bid to the local conditions and the rest of the project operating environment during the entire life of the goods provided. Details of technical bid must be laid out and supported by an Implementation Timetable, including Transportation and Delivery

Schedule where needed, that is within the duration of the contract as specified in the Data Sheet (DS noS. 29 and 30).

Bidders must be fully aware that the goods and related services that UNDP require may be transferred, immediately or eventually, by UNDP to the Government partners, or to an entity nominated by the latter, in accordance with UNDP's policies and procedures. All bidders are therefore required to submit the following in their bids :

- A statement of whether any import or export licences are required in respect of the goods to be purchased or services to be rendered, including any restrictions in the country of origin, use or dual use nature of the goods or services, including any disposition to end users;
- b) Confirmation that the Bidder has obtained license of this nature in the past, and have an expectation of obtaining all the necessary licenses, should their bid be rendered the most responsive; and
- c) Complete documentation, information and declaration of any goods classified or may be classified as "Dangerous Goods".
- 15.3 Management Structure and Key Personnel This section should include the comprehensive curriculum vitae (CVs) of key personnel that will be assigned to support the implementation of the technical bid, clearly defining their roles and responsibilities. CVs should establish competence and demonstrate qualifications in areas relevant to the requirements of this ITB.

In complying with this section, the Bidder assures and confirms to UNDP that the personnel being nominated are available to fulfil the demands of the Contract during its stated full term. If any of the key personnel later becomes unavailable, except for unavoidable reasons such as death or medical incapacity, among other possibilities, UNDP reserves the right to render the Bid non-responsive. Any deliberate substitution of personnel arising from unavoidable reasons, including delay in the implementation of the project of programme through no fault of the Bidder, shall be made only with UNDP's acceptance of the justification for substitution, and UNDP's approval of the qualification of the replacement who shall be either of equal or superior credentials as the one being replaced.

- 15.4 Where the Data Sheet requires the submission of the Bid Security, the Bid Security shall be included along with the Technical Bid. The Bid Security may be forfeited by UNDP, and reject the Bid, in the event of any or any combination of the following conditions:
  - a) If the Bidder withdraws its offer during the period of the Bid Validity specified in the Data Sheet (DS no. 11), or;
  - b) If the Bid Security amount is found to be less than what is required by UNDP as indicated in the Data Sheet (DS no. 9), or;
  - c) In the case the successful Bidder fails:
    - (i) to sign the Contract after UNDP has awarded it;
    - (ii) to comply with UNDP's variation of requirement, as per ITB Clause 35; or
    - (iii) to furnish Performance Security, insurances, or other documents that UNDP may require as a condition to rendering effective the contract that may be awarded to the Bidder.

#### 16 Price Schedule

The Price Schedule shall be prepared using the attached standard form (Section 7). It shall list all major cost components associated with the goods and related services, and the detailed breakdown of such costs. All goods and services described in the Technical Bid must be priced separately on a one-to-one correspondence. Any output and activities described in the Technical Bid but not priced in the Price

Schedule, shall be assumed to be included in the prices of the items or activities, as well as in the final total price of the bid.

#### 17 Currencies

All prices shall be quoted in the currency indicated in the Data Sheet (DS no. 15). However, where Bids are quoted in different currencies, for the purposes of comparison of all Bid:

- 17.1 UNDP will convert the currency quoted in the Bid into the UNDP preferred currency, in accordance with the prevailing UN operational rate of exchange on the last day of submission of Bid; and
- 17.2 In the event that the Bid found to be the most responsive to the ITB requirement is quoted in another currency different from the preferred currency as per Data Sheet (DS no. 15), then UNDP shall reserve the right to award the contract in the currency of UNDP's preference, using the conversion method specified above.

#### 18 Documents Establishing the Eligibility and Qualifications of the Bidder

- 18.1 The Bidder shall furnish documentary evidence of its status as an eligible and qualified vendor, using the forms provided under Section 5, Bidder Information Forms. In order to award a contract to a Bidder, its qualifications must be documented to UNDP's satisfactions. These include, but are not limited to the following:
  - a) That, in the case of a Bidder offering to supply goods under the Contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' manufacturer or producer to supply the goods in the country of final destination;
  - b) That the Bidder has the financial, technical, and production capability necessary to perform the Contract; and
  - c) That, to the best of the Bidder's knowledge, it is not included in the UN 1267 List or the UN Ineligibility List, nor in any and all of UNDP's list of suspended and removed vendors.
- 18.2 Bids submitted by two (2) or more Bidders shall all be rejected by UNDP if they are found to have any of the following:
  - a) they have at least one controlling partner, director or shareholder in common; or any one of them receive or have received any direct or indirect subsidy from the other/s; or
  - b) they have the same legal representative for purposes of this ITB; or
  - c) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of, another Bidder regarding this ITB process;
  - d) they are subcontractors to each other's bid, or a subcontractor to one bid also submits another Bid under its name as lead Bidder; or
  - e) an expert proposed to be in the bid of one Bidder participates in more than one Bid received for this ITB process. This condition does not apply to subcontractors being included in more than one Bid.

#### 19 Joint Venture, Consortium or Association

If the Bidder is a group of legal entities that will form or have formed a joint venture, consortium or association at the time of the submission of the Bid, they shall confirm in their Bid that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the joint venture jointly and severally, and this shall be duly evidenced by a duly notarized Agreement among the legal entities, which shall be submitted along with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the designated lead entity, who shall be acting for and on behalf of all entities that comprise the joint venture.

After the bid has been submitted to UNDP, the lead entity identified to represent the joint venture shall not be altered without the prior written consent of UNDP. Furthermore, neither the lead entity nor the member entities of the joint venture can:

- a) Submit another Bid, either in its own capacity; nor
- b) As a lead entity or a member entity for another joint venture submitting another Bid.

The description of the organization of the joint venture/consortium/association must clearly define the expected role of each of the entity in the joint venture in delivering the requirements of the ITB, both in the bid and in the Joint Venture Agreement. All entities that comprise the joint venture shall be subject to the eligibility and qualification assessment by UNDP.

Where a joint venture is presenting its track record and experience in a similar undertaking as those required in the ITB, it should present such information in the following manner:

- a) Those that were undertaken together by the joint venture; and
- b) Those that were undertaken by the individual entities of the joint venture expected to be involved in the performance of the services defined in the ITB.

Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the joint venture or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials.

If the Bid of a joint venture is determined by UNDP as the most responsive Bid that offers the best value for money, UNDP shall award the contract to the joint venture, in the name of its designated lead entity, who shall sign the contract for and on behalf of all the member entities.

#### 20 Alternative Bid

Unless otherwise specified in the Data Sheet (DS nos. 5 and 6), alternative bid shall not be considered. Where the conditions for its acceptance are met, or justifications are clearly established, UNDP reserves the right to award a contract based on an alternative bid.

#### 21 Validity Period

- 21.1 Bid shall remain valid for the period specified in the Data Sheet (DS no. 8), commencing on the submission deadline date also indicated in the Data Sheet (DS no. 21). A Bid valid for a shorter period shall be immediately rejected by UNDP and rendered non- responsive.
- 21.2 In exceptional circumstances, prior to the expiration of the Bid validity period, UNDP may request Bidders to extend the period of validity of their Bid. The request and the responses shall be made in writing, and shall be considered integral to the Bid.

#### 22 Bidder's Conference

When appropriate, a Bidder's conference will be conducted at the date, time and location specified in the Data Sheet (DS no. 7). All Bidders are encouraged to attend. Non-attendance, however, shall not result in disqualification of an interested Bidder. Minutes of the Bidder's conference will be either posted on the UNDP website, or disseminated to the individual firms who have registered or expressed interest with the contract, whether or not they attended the conference. No verbal statement made during the conference shall modify the terms and conditions of the ITB unless such statement is specifically written in the Minutes of the Conference, or issued/posted as an amendment in the form of a Supplemental Information to the ITB.

# D. SUBMISSION AND OPENING OF BID

#### 23 Submission

- 23.1 The Technical Bid and the Price Schedule must be submitted together and sealed together in one and the same envelope, delivered either personally, by courier, or by electronic method of transmission. If submission will not be done by electronic means, the Technical Bid and Price Schedule must be sealed together in an envelope whose external side must :
  - a) Bear the name of the Bidder;
  - b) Be addressed to UNDP as specified in the Data Sheet (DS no.20); and
  - c) Bear a warning not to open before the time and date for Bid opening as specified in the Data Sheet (DS no. 24).

If the envelope is not sealed nor labeled as required, the Bidder shall assume the responsibility for the misplacement or premature opening of Bid due to improper sealing and labeling by the Bidder.

- 23.2 Bidders must submit their Bid in the manner specified in the Data Sheet (DS nos. 22 and 23). When the Bid is expected to be in transit for more than 24 hours, the Bidder must ensure that sufficient lead time has been provided in order to comply with UNDP's deadline for submission. UNDP shall indicate for its record that the official date and time of receiving the Bid is the actual date and time when the said Bid has physically arrived at the UNDP premises indicated in the Data Sheet (DS no. 20).
- 23.3 Bidders submitting Bid by mail or by hand shall enclose the original and each copy of the Bid, in separate sealed envelopes, duly marking each of the envelopes as "Original Bid" and the others as "Copy of Bid". The two envelopes, consisting of original and copies, shall then be sealed in an outer envelope. The number of copies required shall be as specified in the Data Sheet (DS no. 19). In the event of any discrepancy between the contents of the "Original Bid" and the "Copy of Bid", the contents of the original shall govern. The original version of the Bid shall be signed or initialed by the Bidder or person(s) duly authorized to commit the Bidder on every page. The authorization shall be communicated through a document evidencing such authorization issued by the highest official of the firm, or a Power of Attorney, accompanying the Bid.
- 23.4 Bidders must be aware that the mere act of submission of a Bid, in and of itself, implies that the Bidder accepts the General Contract Terms and Conditions of UNDP as attached hereto as Section 11.

#### 24 Deadline for Submission of Bid and Late Bids

Bid must be received by UNDP at the address and no later than the date and time specified in the Data Sheet (DS no. 20 and 21).

UNDP shall not consider any Bid that arrives after the deadline for submission of Bid. Any Bid received by UNDP after the deadline for submission of Bid shall be declared late, rejected, and returned unopened to the Bidder.

#### 25 Withdrawal, Substitution, and Modification of Bid

25.1 Bidders are expected to have sole responsibility for taking steps to carefully examine in detail the full consistency of its Bid to the requirements of the ITB, keeping in mind that

material deficiencies in providing information requested by UNDP, or lack clarity in the description of goods and related services to be provided, may result in the rejection of the Bid. The Bidder shall assume any responsibility regarding erroneous interpretations or conclusions made by the Bidder in the course of understanding the ITB out of the set of information furnished by UNDP.

- 25.2 A Bidder may withdraw, substitute or modify its Bid after it has been submitted by sending a written notice in accordance with ITB Clause 23, duly signed by an authorized representative, and shall include a copy of the authorization (or a Power of Attorney). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be received by UNDP prior to the deadline for submission and submitted in accordance with ITB Clause 23 (except that withdrawal notices do not require copies). The respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," or MODIFICATION".
- 25.3 Bid requested to be withdrawn shall be returned unopened to the Bidders.
- 25.4 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bid and the expiration of the period of Bid validity specified by the Bidder on the Bid Submission Form or any extension thereof.

#### 26 Bid Opening

UNDP will open the Bid in the presence of an ad-hoc committee formed by UNDP of at least two (2) members. If electronic submission is permitted, any specific electronic Bid opening procedures shall be as specified in the Data Sheet (DS no. 23).

The Bidders' names, modifications, withdrawals, the condition of the envelope labels/seals, the number of folders/files and all other such other details as UNDP may consider appropriate, will be announced at the opening. No Bid shall be rejected at the opening stage, except for late submission, for which the Bid shall be returned unopened to the Bidder.

#### 27 Confidentiality

Information relating to the examination, evaluation, and comparison of Bid, and the recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process, even after publication of the contract award.

Any effort by a Bidder to influence UNDP in the examination, evaluation and comparison of the Bid or contract award decisions may, at UNDP's decision, result in the rejection of its Bid.

In the event that a Bidder is unsuccessful, the Bidder may seek a meeting with UNDP for a debriefing. The purpose of the debriefing is discussing the strengths and weaknesses of the Bidder's submission, in order to assist the Bidder in improving the bid presented to UNDP. The content of other bid and how they compare to the Bidder's submission shall not be discussed.

# E. EVALUATION OF BID

#### 28 Preliminary Examination of Bid

UNDP shall examine the Bid to determine whether they are complete with respect to minimum documentary requirements, whether the documents have been properly signed, whether or not the Bidder is in the UN Security Council 1267/1989 Committee's list of terrorists and terrorist financiers, and in UNDP's list of

suspended and removed vendors, and whether the Bid are generally in order, among other indicators that may be used at this stage. UNDP may reject any Bid at this stage.

#### 29 Evaluation of Bid

- 29.1 UNDP shall examine the Bid to confirm that all terms and conditions under the UNDP General Terms and Conditions and Special Conditions have been accepted by the Bidder without any deviation or reservation.
- 29.2 The evaluation team shall review and evaluate the Bids on the basis of their responsiveness to the Schedule of Requirements and Technical Specifications and other documentation provided, applying the procedure indicated in the Data Sheet (DS No. 25). Absolutely no changes may be made by UNDP in the criteria after all Bids have been received.
- 29.3 29.1UNDP reserves the right to undertake a post-qualification exercise, aimed at determining, to its satisfaction the validity of the information provided by the Bidder. Such post- qualification shall be fully documented and, among those that may be listed in the Data Sheet (DS No.33), may include, but need not be limited to, all or any combination of the following :
  - a) Verification of accuracy, correctness and authenticity of the information provided by the bidder on the legal, technical and financial documents submitted;
  - b) Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team;
  - c) Inquiry and reference checking with Government entities with jurisdiction on the bidder, or any other entity that may have done business with the bidder;
  - d) Inquiry and reference checking with other previous clients on the quality of performance on on-going or previous contracts completed;
  - e) Physical inspection of the bidder's plant, factory, branches or other places where business transpires, with or without notice to the bidder;
  - f) Testing and sampling of completed goods similar to the requirements of UNDP, where available; and
  - g) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.

#### 30 Clarification of Bid

To assist in the examination, evaluation and comparison of bids, UNDP may, at its discretion, ask any Bidder to clarify its Bid.

UNDP's request for clarification and the Bidder's response shall be in writing. Notwithstanding the written communication, no change in the prices or substance of the Bid shall be sought, offered, or permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by UNDP in the evaluation of the Bid, in accordance with ITB Clause 35.

Any unsolicited clarification submitted by a Bidder in respect to its Bid, which is not a response to a request by UNDP, shall not be considered during the review and evaluation of the Bid.

#### 31 Responsiveness of Bid

UNDP's determination of a Bid's responsiveness will be based on the contents of the Bid itself.

A substantially responsive Bid is one that conforms to all the terms, conditions, and specifications of the ITB without material deviation, reservation, or omission.

If a Bid is not substantially responsive, it shall be rejected by UNDP and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.

#### 32 Nonconformities, Reparable Errors and Omissions

- 32.1 Provided that a Bid is substantially responsive, UNDP may waive any non-conformities or omissions in the Bid that, in the opinion of UNDP, do not constitute a material deviation.
- 32.2 Provided that a Bid is substantially responsive, UNDP may request the Bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 32.3 Provided that the Bid is substantially responsive, UNDP shall correct arithmetical errors as follows:
  - a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of UNDP there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
  - b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
  - c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to the above.
- 32.4 If the Bidder does not accept the correction of errors made by UNDP, its Bid shall be rejected.

# F. AWARD OF CONTRACT

#### 33 Right to Accept, Reject, or Render Non-Responsive Any or All Bid

UNDP reserves the right to accept or reject any Bid, to render any or all of the Bids as non-responsive, and to reject all Bids at any time prior to award of contract, without incurring any liability, or obligation to inform the affected Bidder(s) of the grounds for UNDP's action. Furthermore, UNDP is not obligated to award the contract to the lowest price offer.

UNDP shall also verify, and immediately reject their respective Bid, if the Bidders are found to appear in the UN's Consolidated List of Individuals and Entities with Association to Terrorist Organizations, in the List of Vendors Suspended or Removed from the UN Secretariat Procurement Division Vendor Roster, the UN Ineligibility List, and other such lists that as may be established or recognized by UNDP policy on Vendor Sanctions. (See <a href="http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html">http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html</a>)

#### 34 Award Criteria

Prior to expiration of the period of Bid validity, UNDP shall award the contract to the qualified and eligible Bidder that is found to be responsive to the requirements of the Schedule of Requirements and Technical Specification, and has offered the lowest price (See DS No. 32).

#### 35 Right to Vary Requirements at the Time of Award

At the time of award of Contract, UNDP reserves the right to vary the quantity of the goods and/or related services, by up to a maximum twenty five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

#### 36 Contract Signature

Within fifteen (15) days from the date of receipt of the Contract, the successful Bidder shall sign and date the Contract and return it to UNDP.

Failure of the successful Bidder to comply with the requirement of ITB Section F.3 and this provision shall constitute sufficient grounds for the annulment of the award, and forfeiture of the Bid Security if any, and on which event, UNDP may award the Contract to the Bidder with the second highest rated Bid, or call for new Bid.

#### 37 Performance Security

A performance security, if required, shall be provided in the amount and form provided in Section 9 and by the deadline indicated in the Data Sheet (DS no. 14), as applicable. Where a Performance Security will be required, the submission of the said document, and the confirmation of its acceptance by UNDP, shall be a condition for the effectivity of the Contract that will be signed by and between the successful Bidder and UNDP.

#### 38 Bank Guarantee for Advanced Payment

Except when the interests of UNDP so require, it is the UNDP's preference to make no advanced payment(s) on contracts (i.e., payments without having received any outputs). In the event that the Bidder requires an advanced payment upon contract signature, and if such request is duly accepted by UNDP, and the said advanced payment exceeds 20% of the total

Bid price, or exceed the amount of USD 30,000, UNDP shall require the Bidder to submit a Bank Guarantee in the same amount as the advanced payment. A bank guarantee for advanced payment shall be furnished in the form provided in Section 10.

#### 39 Vendor Protest

UNDP's vendor protest procedure provides an opportunity for appeal to those persons or firms not awarded a purchase order or contract through a competitive procurement process. In the event that a Bidder believes that it was not treated fairly, the following link provides further details regarding UNDP vendor protest procedures: http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html

# **Instructions to Bidders**

# DATA SHEET

The following data for the supply of goods and related services shall complement / supplement the provisions in the Instruction to Bidders. In the case of a conflict between the Instruction to Bidders and the Data Sheet, the provisions in the Data Sheet shall prevail.

DS No	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
1		Project Title:	New pharmaceutical warehouse for the Medical Stores Limited (MSL) in Chipata.
2		Title of Goods/Services/ Work Required:	Design and construction of a new pharmaceutical warehouse in Chipata, Zambia to be operated by the Medical Stores Limited (MSL), consisting on the requirements as outlined in Section 3 of this ITB and including air conditioning, office space and related services.
3		Country:	Zambia
4	C.9		Each offer submitted in response to this ITB shall contain the following information / documentation for UNDP to determine its fulfilment of the eligibility criteria. For each point below applicants are required to complete and submit information / documentation as required in Section 5 included in this ITB.
		Minimum eligibility and qualification criteria;	- Certificate of Registration of the business, including Articles of Incorporation, or equivalent document if bidder is not a corporation. In case of association / consortium / joint venture all parties to the association are required to submit the corresponding certificate of Registration (See Section 5.16).
			- Tax Registration/Payment Certificate issued by the Internal Revenue Authority evidencing that the bidder is updated with its tax payment obligations, or Certificate of Tax exemption, if any such privilege is enjoyed by the bidder. In case of association / consortium / joint venture all parties to the association are required to submit the corresponding tax registration (See Section 5.16)
			- Confirmation of non-inclusion of the bidder (or any of the parties in case of association / consortium / joint venture) in any of the UNDP / UN ineligibility lists (See Section 5.16).
			<ul> <li>If the offer is submitted by an association / consortium / joint venture, it shall include a document signed by all parties to the association confirming the establishment of such association /</li> </ul>

DS No	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
			consortium / joint venture and clearly determining what is the party appointed as the Lead Party (See Section 5, form 2.16 and Section 5 Form 3)
			<ul> <li>Bidders and all parties constituting the Applicant shall not have a conflict of interest. Bidders shall be considered to have a conflict of interest if they are involved as a consultant in the preparation of the design or technical specifications of the works that are subject of this prequalification.</li> </ul>
			<ul> <li>Non-performance of a contract did not occur within the last 2 years prior to the deadline for offer submission, based on all information on fully settled disputes of litigation. In case of association / consortium / joint venture all parties to the association the requirements apply to each of the parties (See Section 5, Form 2, 15).</li> </ul>
			Each offer in response to this ITB shall contain the corresponding information / documentation for UNDP to determine its fulfilment of the following minimum qualifying criteria.
			- All information regarding any past and current litigation during the last three (3) years, in which the applicant is involved, indicating the parties concerned, the subject of the litigation, the amounts involved, and the final resolution if already concluded shall be submitted in accordance. All pending litigation shall in total not represent more than 50% of the Applicant's net worth (See Section 5, form 4).
			- A minimum documented 3 years of general experience in civil works, in the role of contractor, major subcontractor and/or management contractor. In cases of Association / consortium / joint venture, the lead party shall fulfil this minimum requirement (see Section 5, Form 5).
			<ul> <li>Minimum average annual turnover of US\$ 3 Million calculated as total payments received for contracts in progress or completed within the last 3 years, or in a same period over the last 6 years. In cases of Association / consortium / joint venture, the combined turnover of the parties shall fulfil this minimum requirement (See Section 5, Form 6)</li> </ul>
			<ul> <li>Participation as contractor, management contractor and/or major subcontractor in at least 2 contracts within the last 5 years that have been successfully and substantially (80% or more)</li> </ul>

DS No	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
			completed and that include works of similar nature (See Section 5, Form 7 & 13).
			<ul> <li>At least one of the contracts shall demonstrate earlier experience in Zambia. In cases of Association / consortium / joint venture, the combined parties shall fulfil this minimum requirement (See Section 5, Form 6)</li> </ul>
			<ul> <li>Similarity will be assessed by verifying earlier experience in one or more of the following areas;</li> <li>Rehabilitation of warehouses (minimum 1,500 m2)</li> <li>Construction of warehouses (minimum 2,000 m2)</li> <li>Rehabilitation and construction of pharmaceutical grade infrastructure.</li> <li>Energy efficiency solutions for storage infrastructure</li> <li>Precise floor leveling.</li> </ul>
			In cases of Association / Consortium / Joint venture, at least one of the parties shall document fulfilment of the minimum relevant experience in above area.
			- Bidders are required to submit statement of Satisfactory Performance from 3 relevant Clients. Such statements shall be dated six months or less, before the deadline for submission of bids in response to this ITB.
			<ul> <li>Submission of documentary evidence, in the way of signed CVs, demonstrating that the Bidder has the following minimum key personnel (See Section 5, Form 8)</li> </ul>
			<ul> <li>A Team leader with minimum 10 years of experience in the management civil construction works.</li> <li>One or more structural engineers, each with a</li> </ul>
			<ul> <li>minimum 5 years of experience in the design, rehabilitation and/or construction of vertical works.</li> <li>One or more quantity surveyors, each with a minimum of 5 years experience.</li> </ul>
			<ul> <li>One or more energy engineers, each with a minimum of 5 years of experience in the design, supply and installation of temperature control systems.</li> </ul>
			<ul> <li>One or more warehouse specialists, each with a minimum 5 year experience in the design, construction and/or supervision of warehouse civil works.</li> </ul>
			<ul> <li>Availability of one or several design consultants, who are legally authorized to submit designs to local authorities for scrutiny an approval.</li> </ul>
			- Confirmation that the Bidder has the ability to

DS No	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
			mobilize the required equipment for it to be on-site within 45 days after issuance of a contract award.
			- Bidders are required to complete a list of main construction and related equipment that has been used by the Applicant over the last two years, including details regarding ownership of the equipment and/or evidence of access to it through agreed rental / leasing arrangements (See Section 5, Form 9.)
			<ul> <li>Bidders are required to submit Information on the software used by the company for design and management.</li> </ul>
			- Confirmation that the Bidder has a local registered representative in Zambia, with a permanent presence in Lusaka and that will be permanently available in Chipata during the duration of any works contracted resulting from this Bid and who will act as the main operational focal point for daily contact between the Employer and Contractor (See Section 5, Form 10). This requirement only applies to bidders that are not national legal entities / companies of Zambia.
			<ul> <li>Submission of audited balance sheets1 for the last two years to demonstrate;</li> </ul>
			the current soundness of the applicant's financial position and its prospective long term profitability, including;
			<ul> <li>Capacity to have a minimum cash flow amount of U\$ 300,000. In cases of association / consortium / joint venture, the lead party shall fulfil this minimum requirement.</li> </ul>
			- See also Section 5, form 11 and 12 for additional financial information required to be completed by each bidder.
	C.13	Language of the	<ul> <li>Submission of a detail of the present workload executed by the Bidder, including details of nature, scope, complexity, value, as well as anticipated time for completion of the corresponding works. See form 13.</li> <li>English</li> </ul>
		Bid:	ů –
6	C.20	Conditions for Submitting Bid for Parts or sub-parts of the Total Requirements	Not allowed

DS No	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
7	C.20	Conditions for Submitting Alternative Bid	Shall not be considered
8	C.22	Site visit / Pre- bidder's conference.	Part 1. Site visit / inspection: It can be interesting for bidders to familiarize with the location and characteristics of the site where the pharmaceutical warehouse shall be constructed. Arrangements for such visits can be made on ad-hoc basis during the period from tender publication to deadline for submission of offers.
			IMPORTANT In order to ensure site access at the time of planned bidder's visit, bidders shall notify the following UNDP/MoH/MSL appointed focal points, at least 48 hours in advance, of their planned visit. guy.rino.meyers@undp.org, maelo.mwiinga@undp.org dick.kampamba@undp.org
			Part 2: pre-bidder's information meeting: Thursday 5th January 2017 10 a.m. at MSL Central Warehouse, Plot 6446, Mukwa road PO Box 30207 Lusaka www.medstore.co.zm
			Gathering of bidders shall be at 10 am inside the Administration Building at Medical Stores Limited in Lusaka in object of an information meeting. The UNDP focal point for this arrangement is: Mr. Guy Rino Meyers, Ms. Maelo Mwiinga and Mr. Dick Kampamba E-mail: <u>guy.rino.meyers@undp.org</u> , <u>maelo.mwiinga@undp.org</u> <u>dick.kampamba@undp.org</u>
			Important: Any bidder opting to participate in the information meeting shall notify the above indicated focal points, with a MINIMUM 48 hour notice. The notification shall also include the name of the appointed representative/s who will be attending the site-visit representing the proposer. Each proposer may be represented by a maximum of 2 representatives. Each representative must carry and produce a suitable identification card / ID.
			UNDP will prepare and disseminate minutes of the pre- bid conference / information meeting. Only the

DS No	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
			information contained in these minutes will be binding. The minutes will constitute an integral part of the ITB documentation / process.
9	C.21.1	Period of Bid Validity commencing on the submission date	120 days
10	B.9.5 C.15.4 b)	Bid Security	Required in the Amount of USD 30,000
11	B.9.5	Acceptable forms of Bid Security	Bank Guarantee (See Section 8 for template) Any Bank-issued Check / Cashier's Check / Certified Check
12	B.9.5 C.15.4 a)	Validity of Bid Security	<b>120 days from the last day of Bid submission</b> Bid Security of unsuccessful Bidders shall be returned.
13		Advanced Payment upon signing of contract	A maximum 10% advance payment will be authorized to facilitate early mobilization, start up and/or minimum design related costs. As per UNDP policies, in principle, advance payments shall be backed up by a corresponding bank guarantee or certified cheque.
14		Liquidated Damages	Will be imposed under the following conditions: Price per day of delay: USD 500 Max. deduction of contract price :10 per cent Next course of action : contract termination
15	F.37	Performance Security	Required Amount :10% Form: Bank Guarantee (See Section 9 for template) or Any Bank-issued Check / Cashier's Check / Certified Check
			Within 7 days of receipt of the letter of Intent, and before contract signature, the successful Bidder shall furnish a Performance Security to UNDP in the amount of 10% of the contract Value; The Performance Security shall be valid until end of
			defects liability period (i.e. 12 months after the intended completion date); The proceeds of the Performance Security shall be payable to the UNDP as a compensation for any loss resulting from the Contractors' failure to complete its obligations under the contract;
			The Performance Security shall be denominated in the currency of the contract; Within seven (7) days from the date of Issuance of a Certificate of Substantial Completion of works, the UNDP will return to the Supplier the Performance Security and after the Contractor, at his own cost and expense furnishes to the UNDP a Maintenance
			Guarantee in an amount equal to (5%) of the Contract Price to be valid until the end of the Warranty / Defects Liability Period; If, within 12 months after the goods/system have been

DS No	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
			put into service, any defects are discovered or arise in the normal course of usage, the Supplier shall remedy the defect either by replacement or by repair; If the Supplier fails to replace/repair the defect during the above specified period, then UNDP does these repairs at the expense of the Supplier, which shall be deducted from due sums against the Maintenance Guarantee.
16	C.17 C.17.2	Preferred Currency of Bid and Method for Currency conversion	United States Dollars (USD) Any resulting contract will be in the USD currency based on the official UN rate of exchange.
17	B.10.1	Deadline for submitting requests for clarifications/ questions	5 working days prior to deadline for submission of bids.
18	B.10.1	Contact Details for submitting clarifications/ques tions	Focal Person in UNDP: Mr.Alfonso Buxens, Ms. Pranisha Bajracharya, Mr. Dick Kampamba and Mr.Guy Rino Meyers. E-mail address dedicated for this purpose: alfonso.buxens@undp.org, pranisha.bajracharya@undp.org, guy.rino.meyers@undp.org dick.kampamba@undp.org and (IMPORTANT: please direct clarifications/questions to all indicated email addresses)
19	B.11.1	Manner of Disseminating Supplemental Information to the ITB and responses/clarific ations to queries	Direct communication to prospective Proposers by email, and posting on the website: http://procurement-notices.undp.org/
20	D.23.3	No. of copies of Bid that must be submitted	In case hard copy offers are submitted Original: one (1) Copies: two (2), in addition to <b>two (2) soft copies on</b> <b>CD/DVD (when submitted in hard copy)</b> Submissions must be identical and include all required documents. In the event of any discrepancies the "original proposal" submitted in hard copy shall govern.
21	D.23.1 b) D.23.2 D.24	Bid submission address	United Nations Development Programme UNDP, 4th floor Att. Procurement Support Office Bid / Tender Unit Marmorvej 51, 2100 Copenhagen Ø, Denmark
21	C.21.1 D.24	Deadline of Bid Submission	Date and Time : Thursday 9th February 2017 12.00 Hours Copenhagen local time

DS No	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
22	D.23.2	Manner of Submitting Bid	<ul> <li>Courier/Hand Delivery</li> <li>Electronic submission of Bid (preferred manner)</li> </ul>
23	D.23.2 D.26	Conditions and Procedures for electronic submission and opening, if allowed	<ul> <li>☑Official Address for e-submission:</li> <li>pso.bidtender@undp.org</li> <li>☑ Format : PDF files</li> <li>☑ Max. File Size per transmission: 4.5 Mb</li> <li>Note that there is no restriction to number of files to be transmitted. Offers can be divided in several files provided they are each smaller than 4.5 Mb and that they are all received in the above stated email address before the stipulated deadline.</li> <li>☑ No. of copies to be transmitted : 1</li> <li>☑Mandatory subject of email: UNDP Mandatory subject of email: ITB UNDP HIST 030-16 Design and Construction of a new medical warehouse in Chipata, Zambia</li> </ul>
24	D.23.1 c)	Date, time and venue for opening of Bid	Date and Time: Friday 10th February 2017 14.00 Hours Copenhagen local time. United Nations Development Programme UNDP, 4th floor Att. Procurement Support Office Bid / Tender Unit Marmorvej 51, 2100 Copenhagen Ø, Denmark. Any bidder that intends to participate in the public bid opening shall notify Arvis Vilcins (arvis.vilcins@undp.org) at least 24 hours in advance. Bids will be opened in the presence of bidders' representatives, who choose to attend and carry a letter authorizing the holder to attend the bids opening session on behalf of the bidder.
25		Evaluation method to be used in selecting the most responsive Bid	<ul> <li>Non-Discretionary "Pass/Fail" Criteria on the Technical Requirements; and</li> <li>Lowest price offer of technically qualified/responsive Bid</li> </ul>
26	C.15.1	Required Documents that must be Submitted to Establish Qualification of Bidders (In "Certified True Copy" form only)	<ul> <li>Company Profile, which should not exceed fifteen (15) pages, including printed brochures and product catalogues relevant to the works being procured (refer to section 5, point 7.)</li> <li>Quality Certificate (e.g., ISO, etc.) and/or other similar certificates, accreditations, awards and citations received by the Bidder, if any (refer to section 5, point 8)</li> <li>Environmental Compliance Certificates, Accreditations, Markings/Labels, and other evidences of the Bidder's practices which contributes to the ecological sustainability and reduction of adverse environmental impact (e.g., use of non-toxic substances, recycled raw materials, energy-efficient equipment, reduced carbon emission, etc.), either in its business practices or in the goods it manufactures (refer to</li> </ul>

DS No	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
			section 5, point 9)
			• Statement of compliance / deviations in regards to each of the items included in the Bill of Quantities, Part C to the ITB.
			• Bid submission form: Fully completed and duly authorized (see Section 4).
			• Bid Security. Bidders that opt to submitting their offers electronically shall include a copy of the bid security with their electronic bid. The original bid security shall be received at the address stated under BDS Section 21 latest a week after the deadline for submission of bids in response to this ITB.
			• Bidder information form: Fully completed and duly authorized (see Section 5) together with corresponding required supporting documents.
			• Technical bid form: Fully completed and duly authorized (see Section 6) together with corresponding required supporting documents
			• Price and Delivery Schedule form: Fully completed and duly authorized (see Section 7).
			• Project safety, health and environment plan, in order to ensure adherence of all works carried out to accepted minimum health and safety standards, such as SA Occupational Health and Safety Act 85 of 1993 and/or similar, ILO guidelines on safety & health in a construction site, etc.
			• Written power of attorney, authorizing the signatory of the bid to commit the Bidder.
27		Other documents that must be Submitted to Establish Technical responsiveness of	<ol> <li>Proposed team composition and structure, per the minimum stated in BDS with recent CVs and the corresponding time-effort to be allocated for each stage/milestone, expressed in number of working days;</li> </ol>
		the offers in response to the ITB.	2) Detailed implementation work plan and time schedule. Bidders are required to submit a proposed implementation work programme from contract signature to project completion and handover. The work plan shall cover design, steel fabrication and installation, civil works, etc. and all delivery milestones as outlined in the Terms of Reference. The work plan must show detailed list of tasks, duration, and allocated resources per task -The work plan shall show the works schedule and at

DS No	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
			the same time show bidder's ability to finish the works within 11 calendar months from the contract start date. -The work plan will form part of the contractual documents.
			(3) Preliminary design report and drawings for all project components, including pre-engineered steel buildings, civil and foundation works, external works, etc. The design report shall provide adequate description and detailed specifications_ full technical data_ of all the required works and components to meet the minimum requirements specified in the Terms of Reference (Section 3a). If the preliminary design report and drawings does not include adequate description of the steel building components or does not meet the minimum requirements specified in the Terms of Reference and drawings included in the tender dossier, the bid will be rejected as non-responsive. Bidders shall make use of the drawings included as attachments to this tender dossier in order to develop their preliminary design report and drawings.
			-Subcontracting;
			A) The maximum percentage of the contract value which may be subcontracted is fixed at 30% of contract value, except for the pre-engineered steel buildings works, where the whole item (regardless of the percentage) can be subcontracted.
			<ul> <li>B) Where the contractor is proposing to subcontract more than 10% of the total value of the contract, the following details should be submitted by the contractor in the bid submission: <ul> <li>BOQ item number to be subcontracted</li> <li>Value of item to be subcontracted</li> <li>Name of subcontractor(s)</li> <li>Full qualifications and resources details for the proposed subcontractor(s) for evaluation</li> </ul> </li> </ul>
			purposes. C) Additional information may be requested by UNDP to verify the technical and administrative capacity of the subcontractor(s) to undertake the works. UNDP reserves the right to accept or reject proposed subcontractor(s) based on their qualifications.
28	C.15	Structure of the Technical Bid and List of Documents to be Submitted	See point 26 and 27. Bidders are required to take note of the requirements stipulated under SECTION 3: SCHEDULE OF REQUIREMENTS & TECHNICAL SPECIFICATIONS, Section A, Part A2, General, Section B, Scope of Required works.

DS No	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
			IMPORTANT: Bidders are required to pay special attention to the detailed description of the minimum technical requirements, characteristics and specifications required for the different components / elements of the required works, as outlined in Section 3, Part B, Scope of required works. BIDDERS are requested to outline any deviation
			between the technical requirements, characteristics and specifications offered for the different components / elements of the required works and those required in Section 3, Part B of the ITB. Bidders are requested to indicate any such deviations by including the corresponding remark/s in the Column titled "Bidder's confirmation of compliance / comments on deviations" in the table included in Section 3, Part C Bill of quantities.
29	C.15.2	Latest Expected date for commencement of Contract	March 2017
30	C.15.2	Maximum Expected duration of contract	The expected time frame for completion of the works is envisaged to be a maximum of 11 months.
31		UNDP will award the contract to:	One Bidder only
32	F.34	Criteria for the Award and Evaluation of Bid	<ul> <li>Award Criteria</li> <li>Compliance with the minimum set of eligibility and qualification requirements stated in Section Instructions to Bidders, Bid Data Sheet in this ITB.</li> <li>Non-discretionary "Pass" or "Fail" rating on the detailed contents of the Schedule of Requirements and Technical Specifications</li> <li>Confirmation that Maximum percentage of supply/work that will be sub-contracted: 30% of contract value.</li> <li>Acceptability of the Delivery Schedule;</li> <li>Appropriateness of the Implementation work plan and Timetable to Project Schedule;</li> <li>Full compliance of qualification of the team assigned to the contract.</li> <li>Appropriateness of Plant and Equipment schedule</li> <li>Lowest offered cost</li> </ul>
33	E.29	Post qualification Actions	<ul> <li>Verification of accuracy, correctness and authenticity of the information provided by the bidder on the legal, technical and financial documents submitted;</li> <li>Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team;</li> <li>Inquiry and reference checking with other previous clients on the quality of performance on ongoing or</li> </ul>

DS No	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
			<ul> <li>previous contracts completed;</li> <li>Inquiry through visit / inspection of bidder's and/or associates premises, facilities, equipment and/or resources.</li> <li>Inquiry through credit rating and reporting agencies; the Successful Bidder shall fully cooperate with a given credit rating and reporting agency, for purpose of obtaining reports on the company's production facilities, financial and management status; and,</li> <li>Testing and sampling of completed goods similar to the requirements of UNDP, where available.</li> </ul>
34	E.31 B	Conditions for Determining Contract Effectivity	<ul> <li>Compliance to Instructions to Bidders</li> <li>UNDP's receipt of Performance Bond; and, Contractor's signature of the civil works contract.</li> <li>Approved Works programme</li> <li>Resource Histograms</li> </ul>
35	F.35	Right to vary Requirements at the Time of Award	
36		Other Information	Alternative & Partial bids are not acceptable

# **SECTION 3: SCHEDULE OF REQUIREMENTS & TECHNICAL SPECIFICATIONS**

#### Scope Of Work

#### SECTION A - PROJECT INFORMATION

# PART A1 - BACKGROUND

Procurement and supply management are key elements of the grants of the Global Fund to fight AIDS, Tuberculosis and Malaria managed by UNDP and other partners in Zambia. MSL/Medical Stores Limited is the central actor of the Ministry of Health for the storage and distribution of health commodities in Zambia. The supplies for the three diseases may cater for up to 40% of the total volume of supplies handled in the public sector.

The last years have been marked by a dramatic increase of total volumes of health commodities handled by MSL. At the same time there have been plans to improve the handling capacity of this supply chain with enlargement of the Lusaka stores and construction of a second store as well as regional hubs (Chipata being one of them).

The lack of sufficient space at central and "regional" stores/HUBs for storage and handling of supplies is affecting capacity and quality of operations and hampering the efforts of MSL to provide quality logistics services.

In order to improve the last mile distribution, it is important to have these HUB's close to the health facilities. They will ensure local storage and distribution and as so will need to be pharmaceutical grade stores to cater for medicines, vaccines and other health commodities.

UNDP financed the Master Plan for MSL which describes requirements, layout and overall structure for the development of Lusaka central stores, as well as that of the regional hubs.

Later UNDP prepared the design and documentation for the different MSL stores with GF funding.

UNDP-GF provides an active support to this process financing the first phase of this development, which included a new building at MSL central medical stores location in Lusaka for dispatch operations, with truck-bay and cold room, a new office floor and a new gate for outgoing trucks and picking and packing area, which is currently under construction. This will be followed by the other phases of the central store in Lusaka; phase 2 funded by the GF and phase 3 in parallel by the EU.

The construction of 3 HUBs with GF funding of which the Chipata stores is the last.

There is also the construction of the stores in Luanshya, Choma and Mongo which are planned to be done in collaboration with USAID/Chemonix. Those are planned from 2017 to complement the first HUB's and may be followed by additional HUBs like the one planned for Kapombo.

# PART A2 – GENERAL (I)

Further to the Schedule of Requirements in Section B below, Bidders are requested to take note of the following additional requirements, conditions, and related services and to include the corresponding documents required in their offers submitted in response to this ITB and/or present these prior to award of contract.

Delivery Term [INCOTERMS 2010]	All prices for materials and equipment included in this ITB shall be
	understood as DAP Chipata, Zambia, location of new MSL medical warehouse, off-loaded.
Exact Address of Delivery/Installation Location	Chipata, Zambia
Customs, if needed, clearing shall be done by:	UNDP will be responsible for tax, customs and duties exemption only.
Commissioning	Contractor will be responsible for commissioning of all equipment
Commissioning	included in this ITB. Corresponding prices / costs shall be factored accordingly in the bidder's offer.
Warranty/Guarantee	The successful Contractor must provide a warranty period of 365 days following issuance of the Certificate of Substantial completion of works, which will run concurrently with the Defects Liability period.
	The warranty will exclude malicious damage or end user damage to works by third parties.
Liability Insurance	The liability insurance referred to in Clause 23 of the General Conditions shall be taken out by the Contractor for an amount of 300% of the price of the Contract per occurrence, with number of occurrences unlimited. The liability insurance shall be submitted by the Contractor within seven (7) days of receipt of the letter of Intent, and before contract signature and start of works, and shall be valid until end of defects liability period (i.e. twelve months after the intended completion date).
	Insurance policies (All risks insurance, public liability insurance - third parties & Workers' compensation insurance) should be issued by the successful bidder subject to the general conditions, terms and conditions of the contract, and as per/ in compliance with the applicable Zambia Labour Law and international standards in this regard.
Defects Liability	Any damage resulted from defect in execution by the Contractor on the executed works during the defects liability period should be repaired by the contractor and at his own expense and during a week after receiving a notice in writing from UNDP (or it's appointed representative); and if the contractor does not repair these damages during the above specified period, then UNDP does these repairs at the expense of the contractor, which shall be deducted from due sums against the Maintenance Guarantee.
Taxes	This contract is exempted from VAT and all other taxes; as such taxes will not be paid under this contract. Bidders are requested to submit their offers excluding any such taxes.
Payment Terms	UNDP shall issue payments to the contractor according to an agreed payment modality based on progress of the works specified in Section III of the Terms of Reference (Section 3). See further Section 11 of this ITB
	<ul> <li>In the case of requesting an advance payment by the Contractor; the UNDP shall pay the Contractor an advance payment up to 10% of the contract value upon signature of the contract between UNDP and the Contractor and submission of the following documents by the Contractor:         <ul> <li>An irrevocable bank guarantee for the same value of the advance payment valid for the period of 30 days</li> </ul> </li> </ul>

	after the intended completion date of the project works.
	WOINS.
	<ul> <li>The required Performance Security as stipulated in this contract.</li> </ul>
	<ul> <li>The amount of the advance payment if paid to the contractor shall be subject to a deduction of a 10% (Ten percent) of the amount accepted for payment until the cumulative amount of the deductions so effected shall equal the amount of the advance payment when 80% of the works are completed.</li> </ul>
	Should the cumulative amount of the deductions so made be lower than the amount of the advance payment after the date of completion of 80% the Works, UNDP may deduct the amount equal to the difference between the advance payment and the cumulative deductions from the payments
	due after completion or may recover such amount from the bank guarantee
	<ul> <li>On each payment, UNDP shall withhold a per centum of the invoice amount, up to a maximum of 10% of the total price of the Contract for due performance of execution. Half of this amount (5%) shall be returned to the Contractor within Forty (40) days upon the substantial completion and taking-over of the Michael Michael (5%).</li> </ul>
	the Works, and the remaining (5%) will be retained until the contractor furnishes the Maintenance Bank Guarantee which to be issued in the amount of 5% (five-percent) of contract value, and to be valid until the end of the one year defects liability period. The said remaining (5%) of the contract value
	<ul> <li>shall be returned to the contractor within Forty (40) days as of the date of receipt of the Maintenance Bank Guarantee.</li> <li>Deliverables and payment schedule will be discussed during the contract preparation.</li> </ul>
Safety, Health & Welfare Plan	Upon contract award, the contractor should provide, as part of his contractual commitments, a detailed Safety, Health & Welfare plan, being part of the overall program of works, subject to the Engineer approval. Contractor to bear all the costs associated with implementation of the said Safety, Health & Welfare plan.
	The said Safety, Health & Welfare plan shall be based on the following Safety manual, "Safety, health and welfare on construction sites/A Training Manual - International Labour Office Geneva (1999 version)" – Section 14 of the ITB
	The above mentioned Safety manual shall be an integral part of the tender and contract documents and the contractor is obligated to fully comply with the guidelines and instructions contained in the said manual, all to the satisfaction of the UNDP appointed Engineer.
	Important: The contractor shall also implement fully the applicable Safety measures contained in the approved Safety plan during mobilization stage before actual work starts.
Special Requirements	1. Miscellaneous a) Time Schedule: The contractor is required to submit a time schedule (or the all
	The contractor is required to submit a time schedule for the all activities and deliverables of the project as outlined in the BDS and the sequence of work activities using MS-Project (or equivalent) software. This time schedule should be reviewed and approved by the engineer before the initiation of work activities. The contractor has to update it and do all modifications deemed necessary to work
	activities as per the instructions of the engineer.

The contractor shall carry out quantity verification to be executed before the start-up of work activities. Written approval on the scope of works shall be obtained prior to implementation process.

#### b) Schedule of material supply

No delays are accepted due to delay in or insufficient material supply for works in the local market. Hence a schedule for material supply is required before starting up activities.

The time schedule of works should include the dates and quantities of material supply as well as the equipment supply to assure proper planning of work activities.

## c) Work plan

The contractor shall submit a written work plan that illustrates the methodology to be followed in implementation of the work activities.

## d) Samples and catalogues:

The contractor shall submit all samples and /or catalogues for all materials to be used on the project to verify their compliance with the technical specifications as follows:

\*The samples will be handed along with the request of material approval as per the schedule of material supply such that one week is allowed to obtain approval before order of material supply is placed.

\*The samples and catalogues should show the data of technical specification. In case there is no possibility to obtain a sample, the catalogue might be accepted after the engineer approval.

# e) Cash – Flow:

The contractor shall submit a cumulative cash flow chart (S- curve) expected during implementation. Updates should be carried out on regular basis to adapt the actual expenditure on the project.

# f) Monthly reports and photographs:

The contractor shall submit monthly reports in three copies reflecting the actual progress of works in percentage, executed work activities, obstacles and difficulties faced and photos showing such progress.

# g) Contract documents:

All tender documents stipulated in the ITB should be preferably submitted, signed and stamped. It is deemed that all mentioned in the technical specification (General and Specific), drawings, bill of quantities, pre-bid meeting notes and/or any addendum thereof are included in the unit prices of the items and no extra charges will be paid in that respect.

# 2) WORKMANSHIP:

The contractor shall engage competent workers to achieve the workmanship stated in the tender documents. It is expected that best local practices be utilized in case no specific workmanship is identified. It is responsibility of the contractor

#### 3) DRAWINGS:

a) The contractor shall abide to any additional detail or general drawings issued by the engineer and will be considered as part of the contract.

<ul> <li>b) The contractor will develop shop drawings for all work activities and submit for approval. No activity can be started unless engineer approves relevant shop drawing.</li> </ul>	
c) The contractor should submit three copies of the shop drawings a week ahead of required approval. In case of changes required, the contractor will resubmit the drawings with changes and obtain approval before execution of works.	
4) As-Built Drawings:	
The Contractor is responsible to submit as-built drawings before the preliminary handing over in two hard copies A3 size and three CD's. They should show all details (civils, structural, mechanical, and electrical along with services routes, trenches, manholes, and levels etc). The drawings will be submitted to UNDP and/or the appointed Engineer who will review accordingly.	
<ul> <li>5) Discrepancies and mistakes in tender documents:</li> <li>a) In case there is discrepancy in the tender documents, the Engineer will verify the correct specification of any item in</li> </ul>	
<ul> <li>the tendering stage.</li> <li>b) In case there is missing information in the contract documents or discrepancy or review and approval of the engineer, improper description of details of the items, it doesn't relieve the contractor from carrying out the item in the most correct manner as if identified and properly described in the original tender documents.</li> <li>c) The contractor has to inform the engineer in case of</li> </ul>	
omissions, discrepancies or mistakes in the tender documents in the tendering stage and price according to the engineer's answer.	
<b>INSPECTION OF SITE:</b> The contractor is deemed to have visited and investigated the site and identified all site conditions in terms of ground nature, accessibility to site, availability of services like water & electricity and all factors affecting execution of work activities before submitting his offer. All such factors are deemed to be taken into consideration while pricing.	
<b>SUB-CONTRACTORS:</b> Sub- contractors are dealt with according to General Conditions of Contract. The main contractor should submit to the Engineer the certified agreement between him and the subcontractor prior to commencement of the work. See also BD, section 27.	
<b>EQUIVALENCE AND ENGINEER'S INSTRUCTION:</b> Wherever equivalence and Engineers' instruction are mentioned within the contract documents, they are interpreted to be dealt with and /or executed according to the consent of the engineer.	
6) SITE MEETINGS: Periodical site meetings will be carried out and the contractor or duly authorized delegate should attend the meetings.	
7) TESTING: The contractor at his own expenses shall provide any test as requested by the Engineer for any materials supplied, installed, or stored in the site according to the stipulated tests in the general specifications. The contractor has to secure devices and equipment that are necessary to test any works as requested by the Engineer.	

#### 8) SPECIFICATIONS:

Specifications are the approved international and/or Zambian Specifications or as indicated in the ITB.

In case there is no clear or missing specification for items, it is deemed that the contractor has based his prices on high quality materials and best practice in implementation.

## 9) TAKE OFF QUANTITIES AND PRICING:

a) Description of items

The tender documents are complementary and self- explanatory and what is deemed necessary in one is deemed necessary in all.

Accordingly, the item specification is not limited to item description in the bill of quantity but rather to the tender documents as a whole.

b) Deliverables and pricing

c) Bidders are expected to submit a total lump sum all inclusive offer for each of the required deliverables included in Section 3 of this ITB. Costing for each deliverable shall be based on the design proposed by the bidder and the information provided in this ITB and such costing shall be reflected in the corresponding financial proposal included in Section 7 of this ITB.

- (i) The costing should not include VAT. All payments will be processed according to Zero VAT invoices all according to applicable rules and regulations in that respect. The contractor has to include all expenses that might occur in his overhead expenses and no claims will be accepted regarding this issue.
- Price shall include fees of testing according to specification and engineer's instruction. UNDP has the right to change the testing laboratory from time to time.

#### **10) PROJECT SIGN BOARDS:**

The contractor has to supply and install two project sign boards before the start-up of work activities. All information and logos that have to be included on the board will be provided by the engineer during the mobilization period.

#### 11) Temporary installations during implementation

All temporary installations needed to facilitate the implementation and completion of the project works will be carried out by the contractor at his own expense. Such temporary installations shall be removed by the contractor after completion of the project works. In case of any delays by the contractor in establishing the temporary installations or any part thereof and in the removal of these installations or any part thereof, the Engineer shall have a right to establish these temporary installations and to remove them at the end of the project at the expense of the contractor. Such expenses, if happened, will be reduced from the amounts payable to the contractor without any objection to the action or the cost.

The contractor to safeguard the site, the works, materials and plant from damage and theft. Take all reasonable precautions to prevent

	unauthorised access to the Works.
Various Additional & Important Special Conditions:	<ul> <li>12) Warehouses         The contractor shall establish stores and warehouses to store all the building materials, especially cement and ensure the conditions necessary for the protection of stored materials from damage caused by exposure to external conditions.     </li> <li>A detailed Safety, Health &amp; Welfare plan, including any support systems plan (including safety requirements for scaffolding) shall</li> </ul>
	be prepared and presented by the contractor to the UNDP Engineer for his review and approval before start of the works. The said safely plans and related measures shall be in full compliance with the ILO safety manual, the safety and other related regulations issued by the related authorities, and the relevant parts of the project specifications and tender documents. Please refer to the relevant parts in the subject tender documents for the instructions and conditions related to the safety & security plans and the applicable safety manual and guidelines.
	2. Any related official governmental/municipal/local fees and work permits (yet not mentioned in this tender), as applicable under the local laws in terms of the works, are and remain the sole responsibility of the contractor. Contractor should therefore inquire on, and take into account in his bid, such possible applicable fees given the context of this project.
	3. Detailed shop drawings as directed and requested by the UNDP Engineer and as required in the projects specifications shall be prepared and handed over to the UNDP Engineer for his review and approval before and during implementation of the works.
	<ol> <li>Setting up and furnishing of the site-offices is the sole responsibility of the awarded contractor.</li> </ol>

# PART A2 – GENERAL (II)

# 2.1 Phasing

The project will be implemented in one only phase.

# 2.2 Local authority approval

The Contractor shall prepare a complete detailed design package, including structural and descriptive memorandums, for Municipal approvals and required construction licenses issuing.

# 2.3 As-built in drawings

As works progress, the Contractor is required to produce and submit to UNDP complete sets of updated as-built drawings, as well as final as-built drawings at project completion.

# 2.4 Commissioning and Hand Over

The Contractor is responsible for verifying that all works and systems, equipment, and other project elements have been installed, tested, fit the purpose, and are in good operating condition. If defects are found, the Contractor is responsible for correcting these defects. Additionally, the Contractor is required to handover all buildings and systems to UNDP after the completion of the works and after the MSL issued the letter of acceptance.

# 2.5 Construction Oversight

UNDP will issue another independent contract, for construction oversight services for the warehouse of this solicitation.

# 2.6 Temperature Control

The warehouse building should be thermally efficient and designed to maintain an internal temperature in the main open storage area below 25° C. The design should avoid hot spots and air pockets through a combination of insulation, natural, and (if necessary) forced ventilation. The ventilation system shall maintain positive pressure and resist entry of dust and vermin.

### PART B – SCOPE OF REQUIRED WORKS

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#### 28 Exclusions

#### 29 Programme for the works

#### 1. EARTHWORKS

- Tenderers to visit sites to familiarise themselves with the site conditions to clear and grub the site.
- Building platform to be compacted to MSL's Engineers approval.
- Compaction tests will be taken by a soils laboratory and properly recorded.
- General founding to be in natural ground and/or compacted fill and to the tender specification and satisfaction and MSL representatives satisfaction.
- Platform earthworks for the future extension is to be completed.
- On completion of the works the site will be cleared of all rubble.
- Layer works designs are to be detailed by contractors consultant and confirmed by MSL Civil Engineer.

#### 2. CONCRETE, FORMWORK AND REINFORCEMENT

All concreting work is to be carried out in accordance with the design of a competent Structural Engineer with placing of reinforcement in accordance with details supplied. Strengths of concrete are specified for the various applications and all work is to be carried out under the supervision of the MSL's appointed Engineer. Surface beds are to be cast in panels or to have expansion/shrinkage saw cuts.

When premises are located on suspended slabs, then the use of post tensioned floors is not permitted.

All concreting work shall be carried out in accordance with the relevant Codes of Practice for the particular type of work.

#### Various Concrete Strengths:

- Blinding: 10 MPA
- Foundation Footings: 25 MPA
- Concrete Bases to Stub Columns: 25 MPA
- Concrete Columns to Slabs: 30 MPA
- Concrete Mezzanine Slabs: 25 MPA
- Concrete Staircases: 30 MPA
- Concrete Surface Beds: 30 MPA

#### 3 WAREHOUSE FLOOR

The warehouse floor level should be selected to suit a number of factors: -

- Balancing or optimising of bulk earthwork operations.
- Avoiding the risk of flooding in major storms.
- Vehicle access from municipal roads and entrance gates.
- The warehouse floor finish to be a mechanical powerfloat finish.

As a generalisation, the warehouse floor thickness should be designed to accommodate for pallet and racking loads over a 25-year design life.

#### 3.1 Floor Hardness & Concrete Sealers

Hardened surface finished smooth and even. The specification is to be designed by a tenderer specialist with experience in warehouse flooring.

Concrete sealer:

- Type 1 (SL-1):
  - L & M Chemical or equal approved Seal Hard of equal approved penetrating silane, sealer/hardener.
- Type 2 (SL-2):
  - L & M Construction Chemicals, Fluohard or equal approve fluo-silicates sealer dust-proofer.

#### 3.2 Floor Joints

The floor should consist of un-reinforced panels with joints at a pitch suitable for the racking layout, (subject to final confirmation of racking layout design).

Joints should include construction joints; saw cut (contraction) joints and expansion joints to accommodate the various requirements that arise during the construction as well as the long term serviceability of the floor.

Joints shall be properly treated and filled with a suitable joint filling compound, capable of carrying the traffic of lift trucks with polyurethane wheels.

- Movement Joint Sealant:
  - Single-component, polyurethane sealant, meeting Fed. Spec TT-S-00230C, Type II Class A, or BS equivalent with minimum plus-and-minus 25 percent movement capabilities
  - Colour: Custom colours to be determined.

#### 3.3 Floor Strength

The floor must be power floated and a specialist floor hardener must be applied to provide a dust free surface for increased durability. The floor surface hardener/sealer is to prevent discolouration of the floor from the spillage of petrochemical products.

#### 3.4 Floor Flatness

The internal warehouse floor is to be constructed to a FM2 floor.

'Allowable values of the properties of flatness for free movement areas' Concrete Society Technical Report № 34 fourth edition.

#### 3.5 Corners

All exposed structural concrete corners are to be protected by suitably sized steel angles.

#### 3.6 Damp Proofing

All floors and walls are to be damp proofed and as required for good building practice in the particular local area.

Place surface bed directly in damp proof heavy duty polythene sheeting over compacted sub grade laterite fill.

#### 3.7 Ant Poisoning & Termite Proofing

To be allowed for.

#### 4 WAREHOUSE STRUCTURE

#### 4.1 Internal columns

An optimal structural grid will be determined in conjunction with the structural and logistics engineers in order to optimise the benefits a cost effective yet functional warehouse layout.

Where required in open storage areas, internal columns should be painted 2m high (chevron style black and yellow) to improve their visibility to truck and forklift operations. Protective barriers need to be placed around columns to protect the structure from damage incurred by impact. Columns requiring protection will be specified by MSL and the appointed industrial consultants.

#### 5 <u>AIR CONDITIONING</u>

#### 5.1 General Air-Conditioning Specifications

- Air-Conditioning to be done as per the following attached Annexures:
- Annexure 1 Air-conditioning DurkeeSox 1AE1611047A
- Annexure 2 Air-conditioning wiring diagram
- Annexure 3 PHE66-Model

#### 6 WALK IN CHILLER

#### 6.1 General Design Requirements

- Finish: White Chromadeck finish on outside and inside. Thickness of 0.5mm.
- Thermal Insulation chiller : Rockwool panelling 80mm.
- Box Roof: Depending on height and span of the box, the roof must be suspended from the warehouse structure with steel cable and tin buckle.
- Pedestrian Door:
  - Width of 1500mm x Height of 2000mm sliding door
  - Material same as per fridge.
  - o Must be installed with a quality sliding mechanism.
  - o Must be able to open from the inside even if locked form the outside.
  - $\circ$   $\;$  Opening mechanism on the inside must be luminescent.
- Drains: Floor drain with a p-trap for evaporator condensate must be allowed for inside the box. Drain to be connected to this sewer system.
- Lights:
  - o 400 LUX rating. (Cool light)
  - Fluorescent tubes with vapour proof light fittings.
  - Switchgear for lights must be designed for cold start conditions.
  - Light switch must be on the outside of the box next to the main service door.
  - Must have indication light on the switch to indicate status of the lights.
- Strip Curtains: To be installed at all external doors clear type, industrial Grade

#### 6.2 **Refrigeration Requirements**

- The Cold Room Airlock storage to be maintained between 2° and 8° Celsius
- Temperature probes for the control of the evaporator units to be placed at the return-air side.
- Defrost probes must be installed in the coil of the evaporator units.
- Compressor units to be installed in such way to suit the environmental and weather conditions of the facility.
- Product load has been allowed for when designing refrigeration equipment.
- Evaporator coils for redundancy reasons must be positioned for optimum air flow/temperature (e.g. staggering of coils).
- Stacking limit line to be fixed inside fridge 1 000mm lower than evaporator oils (to allow for air flow).
- Pipes, electrical wiring etc., must be installed in such a manner not to interfere with the movement of humans, computer equipment or product.
- Holes for pipes etc., must be properly sealed and made good.
- The Compressor unit to be installed in a separate temperature controlled environment to prevent over/under condensing This area must be lockable.

#### 6.3 Electrical

- Main power supply to chiller panel must be a dedicated supply from the generator panel.
- Complete air conditioned warehouse power supply to be supplied with an isolator rated according to tenderers Electrical Engineers specification.
- Individual compressor unit's circuit to be supplied with individual circuit breakers according to specification.

- Compressor to be fitted with an overload of correct value to indicate compressor trip. Compressor trip indicator light to be installed in same position as the Carel controller.
- Power for the chiller lights to be supplied form warehouse light circuit.
- Compressor unit must supply power to its own controlling Carel controller.

#### 6.4 <u>Controls</u>

- Compressor unit must be controlled with a Carel controller model IRDRC (din mounted and contacts can be changed to normally open/closed to allow one to configure your own alarm system inputs/outputs).
- Controller to be mounted in control room (position to be specified by MSL).
- Controller to be mounted in a suitable DIN rail enclosure.

#### 7. WAREHOUSE HEIGHT

An optimal height has been selected to suit warehouse operations based on the storage of optimum modules of pallets.

#### A 9850mm clearance to the underside of trusses (eave height)

It is recommended that a global maximum working height be used allowing forklift reach limitation, eliminating facility/forklift damage.

#### 8. <u>ROOF STRUCTURE</u>

As a generalisation, it is envisaged that the warehouse structure will consist of hot rolled structural steel rafters or trusses depending on the final design optimisation. The design should minimize the presence of dust collection surfaces. The roof should be designed for self-weight, maintenance loads with insulation, lighting and the installation of solar panels by the client that requires a design weight of 20kg/m2.

As this is a pharmaceutical warehouse there should be no product exposure to UV light.

All structural steelwork will be designed in accordance with local and international standards.

#### 9. <u>ROOF SHEETING</u>

The warehouse needs to be a thoroughly weather-tight facility. The design must ensure that extreme weather is taken into account; details of sheeting, flashing, counter flashing etc., need to be clearly defined during the construction phase of the project. The profiled steel sheeting needs to be suitably thick and purlins at close enough centres to support construction personnel and maintenance personnel without damage to the sheeting. Roof slopes need to be selected to suit the selected roof sheeting water carrying capacity. Roof sheets are to be in single lengths. A 10 Year back-to-back materials and workmanship guarantee is to be provided.

All cavities etc., which might induce the nesting of birds or ingress of vermin must be closed. Antibird perch material should be fixed to all exposed trusses.

The roof system to consist of GRS Zip Tek 440 patented roofing solution, which should be erected by a GRS approved installed. The system consists of 0.58mm Chromadek, colour Fish Eagle White profiled sheeting, all installed with concealed fixing brackets, complete with all flashings and fixtures.

All roof sheeting to be coated with Radiant Barrier Paint as described below.

Radiant Barrier Paint to be applied as per the specifications below:

1				
2 Item 1: Radiant Barrier Paint				
3 <b>Non-toxic</b> : Free from harmful chemicals such as Alkyl phenol ethoxylates (APEO), heavy				
metals and with low Volatile Organic Compound (VOC)				
Fire resistant				
Water resistant				
4 Coverage for optimal Radiant Barrier result: Approximately 2-3 m <sup>2</sup> per litre per coat				
(Maximum 2 coats) applied by roller.				
Material to be painted: Adequate for metal, timber and masonry surfaces.				
Outside conditions: Adequate for outdoor surfaces of structures situated in tropical regions.				
Maintenance: Able to withstand washing with soapy water				
Colour: White*				
5 Drying time (touch dry): at 25 C dry conditions: Less than 3 hours				
6 Application Methods: By brush, roller, spray				
7 Storage temperature: Able to maintain its properties when stored up to 30 C°				
8 Shelf life: Minimum 2 years				
9 Compliance with International standards and or certifications. Please state which here and				
provide copies as annexes.				
<b>10</b> Warranty: at least 8 years performance warranty.				
11 Minimum stock available during the duration of contract: sufficient paint to meet the				
needs of an average warehouse of 4,000 m2.				
12         Maximum delivery time to FCA point: 2 Weeks				
Item 2 Insulating Painting Additive				
13 <b>Non-toxic</b> : Free from harmful chemicals such as Alkyl phenol ethoxylates (APEO), heavy				
metals and with low Volatile Organic Compound (VOC).				
Fire resistant				
Suitable for mixing with all kind of paints				
Colour: White*				
14 <b>Storage temperature</b> : Able to maintain its properties when stored up to 30 C <sup>o</sup>				
15 Shelf life: Minimum 2 years				
16 Compliance with International standards and or certifications (please state which) and				
provide copies as annexes.				
17 Warranty: at least 8 years performance warranty				
18         Maximum delivery time to FCA point: 2 Weeks				
Item 3 alternative Radiant Barrier Coating solution				
19 Solutions other than items 1 and 2 may be considered in the future and not necessarily				
within the scope of this ITB, in the case that such alternative solutions result more beneficial in				
terms of value for money or any other added value.				

#### 10. THERMAL INSULATION (SISALATION) TO ROOFS AND SIDE WALLS

The tenderer is to make provision for all necessary thermal insulation to roofs and in accordance with the attached bill of quantities. All insulation materials to be fire rated.

#### 11. RAINWATER DISPOSAL

- Roof gutters piped to rain water storage tanks.
- Over-flow drains.

#### 12. BRICKWORK

No load-bearing brickwork is permitted within the premises without the written consent of MSL. Where consent for load-bearing brickwork is given the tenderer is to provide a sign clearly indicating the location and extent of load-bearing brickwork.

Mortars and design mixes for mortars are to be in accordance with the relevant Codes of Practice and shall be approved by the supervising Consultant.

Internal and external walls in the warehouse to be smooth plastered and painted with a high quality washable paint.

Generally, the external envelope is to consist of concrete masonry to a typical height as per the drawings and be suitably braced and stiffened

Concrete Masonry Units (CMU):

- 200mm and 150mm thick hollow concrete blocks 3.5KN/mm minimum crushing strength, normal weight, plant cured concrete blocks, uniform in colour and texture and free of chips, cracks and imperfections. Mortar: Portland structural cement (Proportion Specification cement and sand 1:4).
- Use jamb-blocks at door and borrowed-light openings.
- Use prefabricated lintels and bond-beam blocks.
- Use solid-top block as the last (topmost) course.
- Reinforce assembly with mesh and ties where necessary at every third course.
- Waterproof membrane to be installed under walls on floor level.

#### 13. VERTICAL CLADDING

Vertical cladding should be I.B.R. sheeting to same material specification as the roof sheeting fixed vertically to steel girt rails with all trims, sills and closure pieces.

#### 14. OPERATIONAL WAREHOUSE DOOR SCHEDULE

#### 14.1 Walk In Chiller

- a) Type: Manually operated sliding with viewing panel.
- b) Size: 1500mm Wide x 2000mm High
- c) Quantity: 1-off (External Doors)

#### 14.2 Docking Area Sectional Doors with viewing panels

- a) Type: Sectional up and over door with viewing panels
- b) Size: 2200mm Wide x 3000mm 2 off High & Size: 3000mm Wide x 3000mm High 2 off
- c) Quantity: 2-off 2200mm W x 3000mm H & 2-off 2200mm W x 3000mm H

#### 14.3 <u>Battery Charging Room Roller Shutter Doors</u>

- a) Type: Sectional up and over roller shutter door with viewing panel
- b) Size: 3000mm Wide x 3500mm High
- c) Quantity: 2-off

#### 15. <u>BALUSTRADES</u>

- Balustrades to office staircase will be stainless steel balustrades. Profiles and size limitations to meet minimum BS or SABS specifications.
- All external staircases and ramps to receive wecro-lock, ball and stanchion type balustrades. Profiles and size limitations to meet minimum BS of SABS specifications.

#### 16. FUTURE EXPANSION

Based on the requirements there is the possibility that the design of the warehouse might have to allow for future extension of the warehouse. Provision should be made in the design and fabrication of the steelwork to accommodate these future steelwork connections. Civil work should be constructed to accommodate for future warehouse extensions. Paving levels should be considered in the design in order to accommodate for warehouse extensions without the need to re-lay large amounts of flooring & paving.

#### 17. PROTECTION

#### 17.1 Bollards

All doors and access ways are to be protected with steel bollards standing 1000 mm above ground. For additional strength, outside bollards are to be sunk into the ground and keyed into position.

#### 17.2 Building Column Protection

All exposed external/internal canopy columns are to be protected with a concrete or galvanised steel surround as advised by the Structural Engineer.

#### 18. <u>ELECTRICAL SPECIFICATIONS</u>

It should be noted that the specification shall be in accordance with Local and International Standards as noted within the local by laws pertaining to Electrical Installations of premises.

#### 18.1 Main Service Provisions

Telecommunications: -

An allowance should be made for the main incoming telecommunication provider's provisions. Local council shall confirm that the site shall have telephone infrastructure provisions available to the site, within the project duration.

Mains Power: -

A sub-station to be provided for the provision of a suitable power to the site. The sub-station to be located no more than 100m from the warehouse infrastructure.

MSL require a main consumption KWH/KVA meter positioned with ease of reading for the checking of the supply authority metering values.

The installation of a transformer shall be protected by a Circuit Breaker having the following protection: -

- Earth fault.
- Over Load.
- Bucholz protection.
- Over temperature protection.

The protection is to be installed and witnessed by MSL.

#### 18.2 Main Building Earth and Clean Earth: -

Normal and clean electrical supply earthing certificates are to be issued for both of these, the appropriate cable will be specified by the electrical engineers. (Computer earth to link to Telecommunication Provider earth)

#### 18.3 Lightning Protection: -

The Developer is to provide sufficient lightning protection in accordance with the recommendations of Local and International Standards.

#### 18.4 Main LT Distribution Board: -

The main distribution board shall be installed within the general warehouse area to suit the areas of largest electrical consumption to be determined by the tenderers electrical engineer and the logistics consultant. It is of paramount importance that the board be rated and certified to the correct fault level as required by the transformer power supply.

The construction of all distribution boards is to be of sound structure, with the following: -

- Hinged Panels.
- Metal square key catches.
- Engraved Labels
- Legend cards to be fitted onto panels /doors as required.
- All feeds over 200 amps to be coppered.
- No welding cables to be used under any conditions.
- No reverse circuit breaker feed will be accepted.
- The main distribution board is to have a KWH meter or similar to confirm configuration, this is the same as noted above as the check meter.

All distribution boards are to be white, with colour panels being: -

- a) Normal Orange
- b) Emergency Red
- c) UPS- Blue.

The main board is to be supplied with power factor correction. This is to be included in the submission as the ventilation and battery bay loadings forms significant part of the connected Load.

A standby generator is not included in the bill of quantities and the tenderer to allow for the following: -

- Cables from and to the generator.
- All room requirements.
- Fire approval for the diesel tank.
- Handling, Off Loading, Positioning and Commissioning of the Unit, should this be required.

It should be noted that besides lighting, the standby plant will feed the office and the battery bay.

Main Feeders: -

It should be noted that besides the standard power provisions to the warehouse and offices the following would be required to be allowed for as the base submission: -

- Ventilation/Cooling Warehouse Main Plant
- Air conditioning fan units Office
- Battery Bay Distribution Board and Reticulation

Other power requirements are to be provided for inclusive of the distribution boards and the associated requirements.

#### 18.5 Warehouse

Power and Services: (to be assessed on final design)

- All external doors are to be fitted with a door contact provision.
- Every second external door to be fitted with 1 x normal SSO, 2 x dedicated SSO and 2 x data outlets.
- All ablutions to have 1 x 220v hand drier provisions terminated to isolator.
- Allow for 20 desks either in offices or open plan within the warehouse each having 1 x normal SSO, 1 x dedicated SSO, 1 x data and 1 x telephone outlet provisions, plus 4 printers (4 x dedicated SSO & data).

- Power reticulation and service reticulation is to be made above the doors linking this are to offices and each elevation.
- All wall mounted plug points in the warehouse to be 1.5m from floor to avoid damage from pallet handling.

#### Note: All dedicated SSO to be on emergency power

Battery Charger Area: -

- 1 x 400 volt SSO (32 amp units) at 2100 affl
- (Provision in DB / cabling for 10 % expansion)

Note: Lighting and the general installation to this area to be vapour proof unless rationalized alternatively.

All units to be of type welding plug, male and female components to be provided.

Power for air conditioning and ventilation system is to be provided for as per the nominated air-conditioning contractor.

Kitchen: -

The kitchen is to be provided with: -

- 3 off 230 volt SSO 15 amp
- Geyser connections to be provided.
- 1 x Hydro boil provision to be provided

Lighting: -

All gear to be electronic.

Important: Light fittings/globes should be of very low or preferably zero UV radiation type.

General: -

Warehouse office lighting / canteen and associated service areas refer to bill of quantities

LOCATION	AREA OF ACTIVITY	MIN. LX LEVEL
	Bulk loading / unloading areas where manual operations are performed	50
Outdoor Areas	Storage areas (e.g. waste skip yard)	50
	Marshalling yards	20
	Main entrance & exit	200
	Shelf & flow rack packing area	400
Warehouses &	Manifesting counters	500
Marshalling Areas	Receiving & despatch	400
	Bulk racking area	200
Ablutions	Wash rooms, toilets & change rooms	200
Offices	Entrance hall / reception	400
	General offices	500
	Computer / business machine	450

	operation	
Store & Filing Rooms	Store & filing rooms	200

#### Table 1

The light fittings are to be so positioned that they provide for the racking and bulk storage area layout, ensuring that the light level design is consistent within the racking area and the open storage area.

Switching is to be provided for in a 30 / 30 / 40 percentage split throughout the warehouse to allow for the control of light levels. The first 30 percentage must be on emergency power. (Lighting to be controlled from security control room)

#### 18.6 External Lighting: -

External lighting should comprise of suitable floodlights and wall pack bulkheads mounted on poles and on the building façade respectively to suit the final layout, distribution warehouse and site facilities. External lighting to be controlled by photocell switches with manual override.

External light system needs to be designed to cater for a 24-hour operation to achieve the stated lux levels in the outdoor areas. Minimum lux levels measured at boundary fence to be 20 lux.

#### 18.7 Emergency Lighting

Emergency/escape lighting system shall conform to the requirements of the Local Authority's Fire Officer.

The emergency lighting systems shall comprise a 1-hour self-contained non-maintained system converting designated general purpose luminaries within office areas or utilising devoted fittings.

Emergency lighting shall be provided as a minimum to each external exit door, each internal emergency exit door, changes in direction or level along emergency access routes and as appropriate to open plan and other areas.

Emergency lighting is to be provided to all essential rooms and areas on a 50 % basis.

Emergency lighting is to be provided at all electrical panels.

#### Offices: -

Power to offices as follows: -

# 1 Off Normal SSO, 2 Off dedicated SSO, 1 Off Data Outlet and 1 Off Telephone outlet per 12 sq meters on power skirting along the perimeter of the office area. Jupiter type power skirting to be allowed.

Cluster desks are to be fitted with corporate connections below the desks being fed from power pole provision. (4 desk groups, 4 Off Normal SSO, 4 Off dedicated SSO 4 Off Data Outlet and 4 Off Telephone outlet per cluster.). Allow 1 cluster per 50 sq metres of office space area.

Air conditioning to be one 25 amp DP isolator per 12 sq metres, and one 30 amp TP isolator per 36 sq meters (This may be replaced with mechanical engineer's design).

Ablution, hand driers, geysers and associated power connections to be allowed for to all areas.

#### Office Lighting: -

Office lighting as per notes and light level. All board rooms are to be separately switched and to have 4 off low voltages down lights dimmed per 10 sq metres of room. Store rooms, server room etc., to have separate switches.

A master switch shall be installed for each separate section or floor level, the position to be confirmed by MSL

100 % of office lighting is to be on standby power.

#### **External Special Requirements: -**

Connections to the following gate house provisions required: -

#### Gate house: -

Lighting as required.

Power, 1 Off Normal SSO and 1 Off Telephone outlet on power skirting at 1200 affl.

Special Notes: -

No surface wiring will be allowed, all wiring to be either cast in, in ceiling voids or in galvanized conduit. All distribution boards are to be manufactured by an approved manufacturer; MSL must approve size of the distribution boards, general arrangement drawings prior to manufacture. (All boards should be fault level cascaded)

All plant rooms and areas must be provided with small power and lighting as per the industry norm should it not be detailed specifically above.

Lighting is to be provided under any loading canopy as indicated on the MSL drawings.

Lighting circuits are to be provided for the cold room lighting, lighting to these areas by others.

#### 19. WAREHOUSE VENTILATION

Warehouse is to be suitably ventilated to prevent degradation of stock stored at high levels. As per Mechanical Engineer Instructions and Zambian Local Authorities.

#### 20. <u>SMOKE AND WAREHOUSE VENTILATION</u>

Fire protection codes and the classification of the building will set smoke ventilation requirements. All efforts should be made to incorporate appropriate roof vents into the conventional ventilation system. The fire alarm system should dictate the operation of any smoke control system both for venting the space as well as preventing the ingress of combustion air. As per tenderers Rational Fire Design Consultant.

#### 21. FIRE PROTECTION

As a generalization it is anticipated that hose reels and portable fire extinguishers will be required as a norm. External hydrants would also be a requirement. An 800mm border should be left as fire access around the internal perimeter of the warehouse; 800mm access gaps should be left between bins to access fire exits and firefighting equipment.

#### 21.1 Fire Extinguishers

It is envisaged that hand held fire extinguishers will be required within the warehouse. The size, type and final locations should be determined based on the appropriate fire code and internal warehouse layout. (Halon extinguishers are not to be used.)

Fire Extinguisher Cabinet (FE-1): Steel unit constructed with rolled edges for semi-recessed installation. Steel tub shall have inside dimensions of 267mm wide x 601mm high x 152mm deep with welded joints grind smooth.

- Use rated tub construction where applicable
- Trim type: Radiused
- Door: Solid door with break glass insert and key lock.

• Acceptable Product: J.L. Industries: Ambassador Model 1015B20

Fire Extinguisher Bracket (FE-2): Wall mounted bracket sized for each extinguisher. Manufacturer's standard bracket with strap to secure fire extinguisher.

- Provide bracket at each mechanical and electrical room
- Acceptable product: J.L. Industries: Model MB846, for ABC Dry Chemical Fire Extinguishers: Provide hand held fire extinguishers as per approved fire plan/design.

#### 21.2 Fire Hose Reels

It is envisaged that a hose reel system will be required within the building; reels need to be located in such a way as to ensure coverage of entire space. It is anticipated that the water serving this system will be taken from the rising fire mains serving the sprinkler zone valves. Hose reels need to be positioned at a suitable height (1.5m recommended) to prevent damage by forklift trucks. Forklift barriers should be strategically placed to reduce damage.

#### 21.3 Smoke Detection

Sufficient Smoke detection connected to the alarm throughout buildings required.

#### 21.4 Fire Water Supply and Pressure

Appropriate tanks, pumps and standby pumps for the total fire system (hydrants and fire hose reels) must be installed with pump house and all peripherals.

#### 21.5 Fire Detection and Fire Alarm System

A conventional fire alarm system needs to be provided with a central control panel. The position of the panel needs to be discussed further; a good position would be close to the main entrance. The system should comprise smoke detectors or beams mounted at high level within the warehouse and coordinated with the lighting positions to assist access for maintenance. A layout needs to be provided showing general warehouse coverage. A finer detection grid should be provided for in the office area, which has a higher fire risk. The alarm system can comprise of conventional bells, large area coverage type in the warehouse with weather proof units outside to alert the rest of the site. Smaller bells should be placed in the office environment to maintain maximum noise levels to acceptable levels. Flashing xenon beacons should be provided in areas with high ambient noise levels.

Break glass units should be provided on the final escape doors from the office to the warehouse and at the control positions in the warehouse. The fire system should also send a signal to the smoke ventilation system to ensure that the smoke extract ventilation is activated and that any undesirable ventilation (supply fans) is disabled. Wiring should be in red flexible fire resistant cable, which should be installed on cable trays within trunking.

#### 21.6 General Zoning

All emergency exits & fire passages need to be clearly marked, an 800mm gap "fire passage" along the perimeter of the warehouse need to be provided for during detailed design.

#### 21.7 General

An emergency assembly area needs to be allocated and demarcated with signage. It must be away from product and buildings.

#### 22. MHE BATTERY CHARGING AREA

#### 22.1 A Distribution board

Required with sufficient capacity circuit breakers must be located in the battery charging room.

#### 22.2 Ventilation

The battery charging room should be sufficiently well ventilated to prevent the accumulation of hydrogen and oxygen given off during recharging.

#### 22.3 Surface Finish of Floor

An acid-resistant floor is recommended in the case of a major accidental spillage. The floor must be slightly sloped towards a capture drain so that the wash down of the battery and accidental spillage can be performed.

#### 22.4 Washing Facilities

Floors should be cast to falls and the drainage system should incorporate a slit trap and an oil separator. The design of the slit trap should ensure easy maintenance and operation. A high pressure pump and reticulation system should be provided with suitable means of distributing and storing the hoses.

#### 23. LOADING BAYS

#### 23.1 Dock Level Bay Loading

2 off Loading Dock Areas approximately 1.3m in height to be provided.2 off Standard Type Airbag Dock Levellers and associated Pits to be provided.Allow for 2 off the following Dock Levellers to be supplied and installed:

#### **Technical Specifications:**

Model	APL 610 SX
Type	Air Powered Swing Lip Dock Leveller
Capacity	10 000kg
Deck Length	2 845mm
Deck Width	1 830mm
Depth	500mm Rear & 500mm Front
Lip	16mm Link plate
Lip Length	400mm
Working Range 350mm	Above
	300mm Below
Bumpers	1 Set Laminated Bumpers
Operation	Dual Airbag Activation
Includes	Safety legs
	Safety Toe Guards
	Maintenance Strut
Electrics	220V with 25A breaker supplied by contractors
Warranty	10 Years Structural
	5 Years on Lifting Mechanism
	1 Year Remaining Parts

#### **Dock Head Seals:**

Rite Hite, Frommelt, Rain Guard furnish with steel channel framing, brackets and fasteners for erection on block work cavity wall.

#### Head Seal:

Weighted roller seal behind a fabric curtain that provides a positive weather-seal against the roof of the trailer and the tops of the jambs.

- Width: The full width of the trailer plus the jamb seals
- Projection: 406 mm to 457 mm

#### Fabric colour:

Black

#### Dock Bumper:

Fabric-reinforced, laminated rubber pads constructed of multiple rubber plies secured together with 19 mm diameter steel rod and minimum, 6.4 mm thick binder angles with predrilled holes at each end.

Sizes: as indicated

Metal finish: Hot dip galvanized

Acceptable manufacturers:

- Blue Giant Equipment Corporation
- Durable Mat Company
- Kelley Company, Inc.
- Or Similar Approved

#### 24. OFFICES

It is envisaged that a set of main offices will be provided with a mezzanine next to receiving/despatch area (to facilitate prompt communication and effective ground level management).

#### 24.1 Reception Area

Provision should be made for reception area.

#### 24.2 General Office Area Detail

- The layout has been designed by a competent person
- Areas require double exits to allow for fire escape
- Boreholes are provided on all sites for the supply of water
- Sewer services and waste water to drain into a septic tank
- Potable water will be required for drinking and tea / coffee making in the kitchen as well as hot water for washing purposes and boiling purposes.
- Geyser points are required
- Power points at a rate of 1No. x 15A plug point per 15m2 of office area.
- Lighting in the dispatch offices and toilets area should be via 400 LUX fluorescent lights either recessed or surface mounted to suit ceiling type.
- Lighting to the offices to be 500 Lux of fluorescent recessed ceiling mounted light fittings within lay-in ceilings and recessed down lighters to flush plastered areas.
- Emergency lighting should comprise of tungsten floodlights mounted on dedicated battery packs to achieve 10 lux throughout the office area and along the emergency escape route for one hour to permit safe egress from the facility.
- Containment for provision of telecomm cabling (both telephone and data network) shall be made in the dispatch offices by means of skirting trunking or similar arrangement – 3 Compartment power skirting to all external walls of offices is required.
- It is envisaged that the offices will be protected by hand held fire extinguishers and hose reels. The size, type and location of these appliances will be determined based on fire regulations.
- It is envisaged that a despatch office, receiving office, mangers office and warehouse staff green area is provided within the new warehouse facility will be in the form of self contained units within the actual storage space within close proximity of the despatch area. (*To be supplied during detailed design*)

#### 24.3 Boardrooms

Allowance for a Boardroom has been made

#### 24.4 Air Conditioning

The facility should provide fresh air at a rate of *8l/s per person*\* into these spaces to achieve comfortable conditions. The fresh air should be connected via individual space terminal air conditioning units, thus providing necessary pre-conditioning to the incoming air. Exhaust will be by natural ex-filtration into the warehouse space or via forced exhaust to toilet accommodation if as anticipated, it is adjacent to the office spaces. Make-up air should be provided by the office air conditioning system via transfer where available.

It is envisaged that offices will either be in the form of split-packaged units, possibly multisplits with suitable room side units in the office spaces and the condensing units at a suitable external position. Each unit should then be sized to cater for internal and external loads of the space served with allowance to treat incoming fresh air. The climate specifications within the dispatch offices are  $23^{\circ}C \pm 2 \ ^{\circ}C^{*}$ . Alternatively, an open plan office structure would require the same specifications.

- Ducting system to open plan office area to be considered. Correct BTU to be specified for each area volume.
- 380 Volt 3 phase 4 wire electrical supply to the switchboard on each of the air conditioning units.
- Water supply adjacent to the air conditioning units.
- Permanent drain points adjacent to each air conditioning unit.
- Provision for framed openings through the building fabric to accommodate the air conditioning equipment.
- Provision of concrete bases for the equipment.

The toilet accommodation should be provided with a forced exhaust system to insure a minimum of *10 air changes per hour*<sup>\*</sup>, and to comply with the National Building Regulations.

#### 24.5 External Office Facade

Blockwork plastered and painted with a suitable finish to be maintenance free for the first 5 years and features to create a pleasing architectural aesthetic.

#### 24.6 Internal Divisions

Offices to be generally open plan with a number of cellular offices subdivided with drywall partitioning with aluminium skirtings both sides. Partitioning to meeting rooms and boardrooms to be suitably sound proofed. An allowance of 10m per 100m2 of office area should be provided and office doors at a rate of 1 door per 10m of partitioning.

Walls around tea kitchens, computer rooms, ablutions, stair wells, document storage, etc., to be of brickwork.

#### 24.7 Floor Finishes

- Floor tiles laid on concrete floor to ablutions, tea kitchens, canteens, receptions and main stair
- All office floor areas to receive tiles
- Allowance for Floor Tiles: \$15.00

#### 24.8 Wall Finish

- Plaster:
  - One coat plaster Portland cement plaster built-up to total thickness of 15mm with a fine-sand, wood float-texture over concrete masonry units. Plaster mix

materials, and accessories shall be according to Standard Specifications for Materials of the Republic of Zambia, Interim Metric Edition (All exposed blockwork to be plastered).

#### Exterior Painting:

- To the extent practicable, materials with an exterior exposure will be prefinished by the manufacture.
- Paint System Dulux or Plascon: Semi-gloss, finish for hollow metal service doors and frames. Colour as selected by the Project Manager from the manufacturers full range of available colour.
- Paint System Dulux or Plascon: High-performance, opaque urethane finish for structural steel with exterior exposure.

#### Materials Mix:

- Cement:
  - Portland cement
  - Aggregate: Well grade natural sand, clean, sharp and suitable of plastering.
  - Water: potable and free of substances that could damage plaster, lath of accessories.

#### • Interior Painting:

- Painting System for CMU walls and partitions:
  - Paint System Dulux or Plascon: Semi-gloss, 100 percent acrylic-resin latex finish.
  - Base 1 coat block filler applied to achieve a smooth surface
  - Primer 1 coat concrete primer
  - Finish 2 coats, minimum, PPG, 6-50 Series, Speed hide Interior Latex Enamel finish

#### • Steel Interior Exposure:

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- Paint System Dulux or Plascon: Semi-gloss, alkyd finish:
  - Surface preparation
  - Primer Where finished factory primed, touch-up shop coat at bare metal: 1 coat, interior metal primer.
  - Finish: 2 coats, minimum Dulux/Plascon, Speed hide interior enamel, semi-gloss.
- Ablutions and toilets 2.1m high with eggshell enamel paint finish above
- Tea kitchens and restrooms 600mm High tiled splash back behind fitting/sink units
- All internal window sills to be tiled
- Allowance for Wall Tiles: \$15.00

#### 24.9 Ceilings

- Suspended vinyl clad ceiling panels size 1200 x 600 to offices and circulation areas
- Flush plastered ceilings in reception areas and boardroom
- Recessed shadow line cornices throughout

#### 24.10 Doors and Ironmongery

- Internal doors to be semi-solid size 813 x 2032mm high in suitable frames
- External doors to be 'wrot meranti flbb' flush back external doors in suitable frames with galvanised steel sheet cladding on the external face
- All doors to be painted with eggshell enamel
- "Solid" door furniture with glass window or similar for visual check prior to opening door
- Rubber door stops
- Ablution door signage is required
- Door closers must be allowed for to ablutions
- Master keying is excluded
- External door locks to be 4 lever and internal locks to be 3 lever

#### Acceptable Ironmongey:

- Hinges: Dorma or Cisa 114mm x 114 unless noted otherwise.
- o Lock-and latch-sets: Dorma or Cisa heavy duty commercial mortise sets.
- o Exit Devices: Dorma or Cisa approved.
- Cylinders: Dorma or Cisa 7-pin, removable core.
- Emergency strike: Dorma or Cisa approved.
- o Astragal: Dorma or Cisa approved.
- o Closers Manual: Dorma or Cisa series, universal closers with full covers.
- o Coordinator: Dorma or Cisa approved width or door opening.
- Automatic flush bolts: Dorma or Cisa approved.
- Push/Pull set: Domra or Cisa approved.
- o Stops/Holders:
  - Wall Stops: Dorma or Cisa approved.
  - Magnetic HO: Dorma or Cisa approved.
- Protective Plates: Dorma or Cisa approved.
- Smoke Gasket: Dorma or Cisa approved.
- Vision Seals: Dorma or Cisa approved.
- Base metal: Galvanised steel sheet
- Base metal: Galvanised steel sheet, (ASTM A653, A60) pre-treated for paint finish.
- Flush top channel.
- Fill seams with filler and grind smooth before finishing.

#### 24.11 Doorframes

- Steel/Aluminium Doorframes furnish in configuration for single doors with or without transom panels or sidelights as schedules.
  - Steel doorframes:
    - Unitary frames: One-piece with casing faces welded and ground smooth. Stops shall have hairline-tight butt joints.
    - **Fully welded frames:** one-piece with casing faces, rebates and stops welded from behind and ground smooth.
    - Fabrication:
      - Base metal: Cold-rolled, steel sheet, 16-gauge, minimum.
      - Sizes: As schedule by manufacturer with AAAMSA compliance.
      - Finish: Prime painted for scheduled paint finish.
      - Locations: Use unitary frames throughout the work unless fully welded frames are expressly indicated.
      - Use fully welded frames.
    - Aluminium doorframes:
      - Doorframes to be compatible to partition system specified.

#### 24.12 Shop Fittings

Toilets: -

• Granite vanity tops with under slung basins to office toilets

Tea Kitchen: -

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• Formica counter tops with stainless steel drop-in sink and with cupboard and drawer units below and wall hung units to the full extent of the wall space

#### 24.13 Aluminium & Glazing

Windows are to be epoxy powder coated aluminium framed with clear/frosted glass to NBR requirements and sealed with suitable sealant. Window sills externally are to be fibre cement sills, painted with a roadmaking/or similar paint finish.

Main entrance door to be double leaf epoxy powder coated aluminium framed with safety glazing and suitable handles, door closers and electronic door lock.

#### Aluminium windows:

• AAAMSA Architectural Grade Standards.

- Clear glass as per safety standards.
- Openable: Single hung
- Fixed pane
- Exposed Aluminium Finish Architectural Class 1 clear anodized finish (minimum thickness 18 microns).
- Concealed Metals:
  - Aluminium: chemically treated with alodine process.
  - Steel ASTM A123, G90, hot dip galvanised or AAASMA equivalent.

Mirror glass:

- (GL-91): ASTM C1036, Type I, Class 1 Quality q2, 17mm thick glass mirror or SABS equivalent with polished bevelled edges, furnish with brushed stainless steel mirror clips with concealed fasteners (above all wash hand basins).
- Size of mirrors: 900mm H x 600mm W

Obscure glass for all ablutions.

#### 24.14 Plumbing

Plumbing codes and standards:

- International Building Code
- British Standard BS 6700
- Leadership in Effective Energy Design (LEED) principles
- Relevant Local Regulations

Building service piping:

- Domestic water
  - o The system comprises of domestic water storage tanks (2 x 1000L), pressure pump and bladder vessel for cold water supply, and equivalent equipment necessary for acceptable operation and maintenance of the plumbing fixtures which includes taps, cocks, valves etc. Water would be sourced from the existing water supply piping and borehole into the newly adequately sized tanks for use in the offices and ablution block. Domestic water tanks are to be strategically positioned on the site for ease of distribution into the building. All domestic taps to be supplied from rain water storage tanks via two pipe system. Rainwater storage system also to be supplied with pressure pump, bladder vessel, solids filter and ancillary equipment to render it operational. Rainwater tanks to be supplied with a backup municipal water connection & float valve to replenish water supply when no rain water is available.

Rain water usage

- Supply and install 4 no x 10000 litres storage water tanks including electric pump and pressure vessel on concrete plinth. Rain water tanks to be linked with bore hole domestic line, with ball valve installed (Once water levels in the tanks drops below 20% capacity, borehole water to to-up to 30%).
- An emergency backup water supply line to be installed from domestic supply to be linked to grey water supply lines in case of dysfunctional rain water supply system.
- All external taps for watering garden and washing of vehicles to be connected to rain water supplies and each tap outlet clearly marked "NOT FOR HUMAN CONSUMPTION"
- Weather sensitive equipment to be housed in a basic pump room structure with room, which is lockable (pump room as specified elsewhere).

#### • Plumbing Fixtures

- All plumbing fixtures would be of standard quality with features of:
  - Durability
  - Water saving in line with LEED, for instance, water closet with 6 litres to 6.5 litres flush cisterns, aerators for minimal usage of water on taps, press demand taps, electronically operated taps, electronic flushing urinals, emergency shower and wash hand basin outside the battery changing room.

#### Sanitary Waste and Vent System

A complete sanitary drainage and vent system to be provided in accordance with SABS 1200 and SABS 0400. Sanitary drainage and vent system would consist of a network of piping connected to fixtures, drains, and equipment that drains by gravity to the septic tank. The sanitary drainage and vent system would be sized using the drainage fixture unit method. Sanitary waste pipes would have minimum slopes of 1:60 and 1:100 in 40mm diameter and 100mm diameter waste pipes, respectively. Vent pipes and vent valves shall be considered for every zone of waste pipes. Floor drains would be provided in all rest rooms and emergency shower. Inspection bend in waste pipes and inspection chambers in the sewer system shall be included in the installations for ease of maintenance.

#### Hot Water

• Under counter 10 litre geysers to be installed in kitchens and office bathrooms

#### Storm Water System

 A storm water system would be provided and designed to accommodate a rainfall rate as required by Code of Geographic Area. The Building storm water drainage system would consist of gutters. The gutters could be drained by exterior rain down pipes

The number, size and type of sinks, basins and other sanitary fittings are all to be in accordance with the requirements of the Local Health and Licensing Authorities.

Hot and cold water is to be supplied to all wash hand basins and sinks and suitably sized geysers positioned locally to avoid long pipe lengths.

- Under slung basins to vanities
- · Wall hung vitreous china wash hand basins to ablutions
- Vitreous china wall hung WC pans with flush masters and heavy duty double flap seats
- Vitreous china bowl urinals with flush masters
- Office block to have paraplegic toilet
- Building and toilet accessories:
  - Will be commercial quality units fabricated from Type 304 stainless steel with brushed (satin) finish
  - Acceptable manufacturers of Regional equivalent:
    - Franke
    - Kimberley-Clarke Professional
    - Bidvest Steiner
    - TCS Hygiene Products and Services
    - Cobra Standard fixtures
    - Cobra Electronic Faucets (Fixtures)
    - Toilet Paper Holders: Franke no CHRX 672
  - Combination paper towel dispenser/waste receptacle: Franke no RODX 602
  - Liquid soap dispenser: Franke no RODX 619
  - Touch-free electric hand dryer: Franke no RODX 310
  - Grab bars (paraplegic toilet): Franke no CNTX 300, CNTX 700A, CNTX 70B
  - o Mirrors without shelves
  - Coat hook: Franke no. STRX 692

#### 25. EXTERNAL FACILITIES AND SITE SERVICES

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#### 25.1 New Guardhouse and Gate Access Control

- In Lane and out lane with electronic booms
- One automatically operated 7 500mm wide x 2 100mm high sliding gate to entrance. Gate to match fence profile.
- Small kiosk for security with toilet facility

- Counter tops as required
- Air-conditioning is required
- Internal finishes similar to those in the general office and ablution areas

The Guardhouse is to be designed to house 2 security guards who perform search and access control functions.

The Guardhouse design is to suit general aesthetic of the office building with adequate visibility to monitor all movements at the entrance.

#### 25.2 Guardhouse

A guardhouse constructed from 150mm block work with plaster and paint finish on internal and external walling over a 450mm concrete foundations strip, 150mm thick solid block wall foundation, 75mm thick reinforced slab complete with mild steel door and aluminium window frames with glazed sliding window and solid timber door leafs, roofed with white IBR Chromadek roof sheeting on steel frames including 4mm Alucusion insulation, electrical fittings and plumbing fittings as shown on Architects & Engineers drawings. All to comply with the Standard Specification for Materials and Workmanship for Building Works for the Government of the Republic of Zambia, Interim Metric Edition.

#### 25.3 Refuse Area

The area is to be surrounded by a 2,1m high wall finished with plaster and washable exterior paint both sides and provided with a water point and drain connected to sewerage. To include a steel gate with screening size 2,4 x 2,1m high. Overall size of refuse area approximately 6 x 3m on plan.

#### 25.4 <u>Electrical Room, Plant Room, Battery Charging Room, Battery Store Room, Pump</u> <u>Room, Office & Warehouse Ablutions</u>

A warehouse staff ablution and changing facility constructed from 150mm block work with plaster and paint finish on external walling over a 450mm concrete foundation strip, 150mm thick solid block wall foundation, 75mm thick reinforced slab complete with mild steel door an aluminium window frames with glazed sliding window and solid timber door leafs, roofed with white IBR Chromadek roof sheeting on steel frames including electrical fittings and plumbing fittings as shown on drawings. Walls to ablutions to be tiled (internal) with ceramic tiles up to 2m height. Walls to all other external buildings to be plastered and painted. A suspended ceiling (as per offices) to be installed. All to comply with the Standard Specifications for Materials and Workmanship for Building Works for the Government of the Republic of Zambia, Interim Metric Edition.

All facilities by way of Electrical Room, Plant Room and Battery Charging Stores, all as required by the Electricity Department, the Electrical Consultant and the Telephone Authorities are to be provided by the Professional Team in accordance with the relevant Supply Authority's requirements. Everything necessary to conform with the proper Codes of Practice in this regard is to be provided.

Electrical boards need to be lockable

#### 25.5 Covered Area for Lunch and Recreation

A Covered Area consisting of a 100mm thick concrete surface bed, 100dia mild steel poles with laminated timber beams, timber roof trusses and IBR Chromadek roof sheeting Colour: Fish Eagle White to be supplied as per drawings.

#### 25.6 Hazardous Store

A Low flash warehouse needs to be specified in accordance with the provisions of the OSH act the local authority and local fire department regulations. (*Quantification To be provided during detailed design.*)

#### 25.7 Roads, Staging and Hardstand Areas

Pending a detailed logistics report, the Professional Team should assume the need of new paved roads serving the medical storage hub facility.

This allowance will need to include feeder roads from municipal roads, loading and unloading areas & truck turning areas and staging area. Roads and hard standings will generally consist of 80mm thick interlock paving blocks. Pavement thickness should be selected to suit anticipated axle loads and design life (*25 years*<sup>\*</sup>) as well as subsoil conditions. The paving blocks and sub-base is to be properly engineered and designed.

Paving must be designed to take cognisance of all vehicle turning movements and incorporate flexibility with respect to vehicle sizes, etc.

Road markings and safety signage should be provided for. Side walks should be landscaped. Road positioning should be inline with the relevant legislation regarding distances from building, rail lines and site boundaries.

#### 25.8 Parking Areas

#### 25.8.1 Construction

The construction of the Parking Areas shall be carried out in accordance with the design specification.

#### 25.8.2 Parking Areas Generally

The drawings are to show all parking areas and driveways, properly demarcated, and showing kerbs, drive-ins, parking bays and general circulation. Minimum size of internal parking bays to be  $2,5 \times 5m$ . Minimum width of internal roadways to be 6500 and main roadways to be 9000.

All road markings, traffic signs, pole signs, speed hump etc., shall be provided including inter alia, the following: -

- a) Disabled parking bays for persons with wheel chairs must be provided per the requirements of the local authority.
- b) Provision of bollards to prevent vehicles from driving onto pavements.
- c) Proper illumination of Parking Areas.
- d) Landscaping and planting including automatic sprinklers, plus areas within the Site with suitable trees, shrubs, ground cover, lawn, etc.,
- e) Clay paved pathways are to be provided for pedestrian traffic where necessary
- f) A paraplegic ramp is to be provided in accordance to Local requirements
- g) 6 No. cantilevered shade ports are required per site (to be determined in detailed design phase)

#### 25.9 Walls and Gates

Clearvu Fence will be installed on the perimeter of the site area together with associated gateways as per the logistics study recommendation.

Gates should consist of sliding steelwork gates, suitably painted. – **Height: 2.1m.** Provision is to be made for automation and access control.

#### 25.10 CCTV Surveillances

Closed circuit TV needs to be considered as an option. The feasibility of installing cable ducts and draw chambers within the medical storage hub site for future installation of CCTV in operational sensitive areas needs to be evaluated. Suitable sleeves and conduits are to be provided and chased into brickwork.

A provisional sum of: \$7200.00 has been allowed.

#### 25.11 Access Control

Provide for the marking of pedestrian areas and "zebra crossings" etc. (To be provided during detailed design.)

Access control is divided into personnel access and vehicle access.

All personnel access should be controlled using turnstiles (dual turnstiles at the gate, warehouse entrance as well as office area entrance. Only one access control point into the warehouse and office is required, however consideration needs to be taken of any emergency exit requirements

Access into the various areas will be controlled as per authorisation level of the individual affected. Furthermore, all turnstile access points need to incorporate a manual, lockable, pedestrian gate for access by disabled personnel and for managing exceptional situations.

The installation of an internal warehouse alarm system should be considered only once the internal equipping design has been finalised. The alarm installation will be under direct advice from Protection services upon the completion of the warehouse design.

Access control technology will be based on a access card throughout the warehouse.

- Security access
- Warehouse staff
- Office staff
- Visitors

(To be provided during detailed design.)

#### 25.12 Pedestrian Barriers

Specify fall barriers at danger points e.g.; ramps, steps, loading bays etc., chains at loading bays. (*To be provided during detailed design.*)

#### 25.13 Generator

Standby generator (supplied by UNDP) for power failures is required. (Allowance for a 200 kVA standby generator should be made))

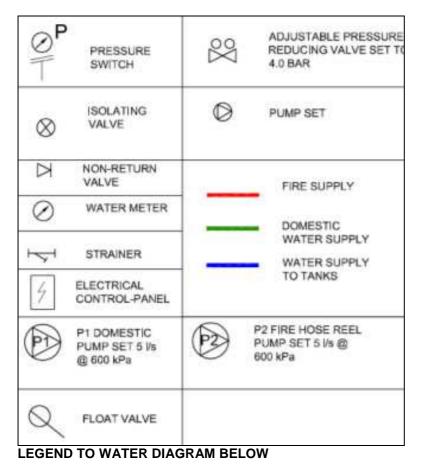
#### 25.14 **Pump Room**

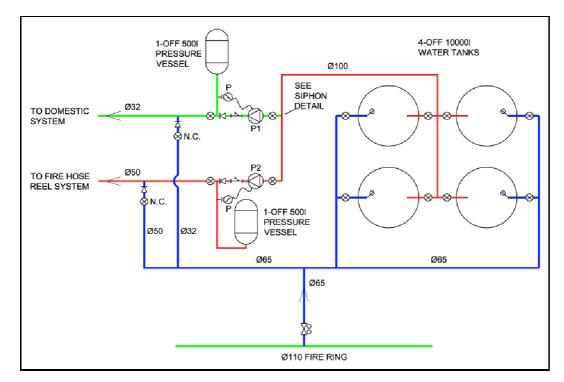
Conventional pump room with a pitched roof. Pump room too have surface mounted low brightness fluorescent luminary with 2 x 58 W cool white lamps and control gear. Pump room to measure 5.46 m x 4.46 m and 3.13 m high with one transformer type door and two windows measuring 1264 mm x 1245 mm each, erected on a concrete slab, with strip foundation. Provision for an apron will be made, depending on the paving configuration and its position on site.

#### 25.14.1 Water Reticulation

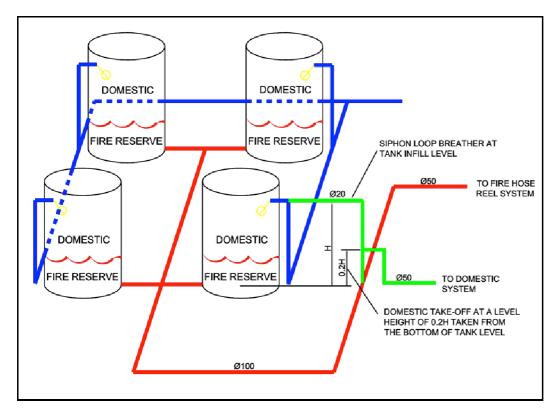
The domestic water use as well as the emergency firefighting is connected to 40 000l bulk water storage. This bulk storage is fed from the municipal water connection. If no municipal (borehole) connection is available it can be connected to a borehole, the cost of borehole for Clients account. The system is designed to

always have a fire reserve, in other words the water for domestic use will automatically cut off when water level drops below a certain point.





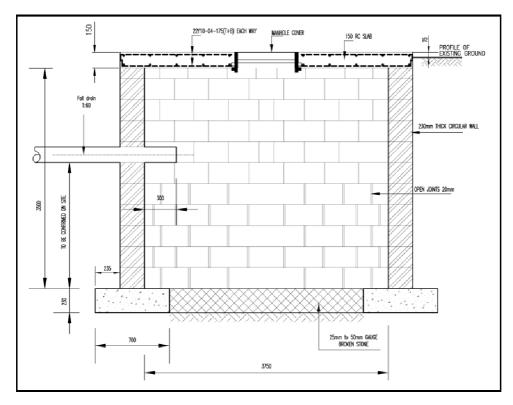
TYPICAL DOMESTIC WATER AND FIRE RESERVE



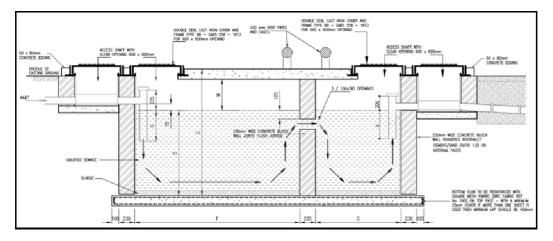
#### SCHEMATIC LAYOUT OF WATER RETICULATION

#### 25.15 <u>Waste Water Disposal</u>

Provide for waste water reticulation by means of aseptic tank. The majority of sites do not have a municipal connection, therefore a typical design of septic tank and soak away pit are shown below.



TYPICAL SECTION THROUGH SOAK AWAY PIT



**TYPICAL SECTION THROUGH SEPTIC TANK** 

#### 26. <u>TESTING</u>

- Preconstruction Testing: Submit certified copies of test reports. If testing is more than 6-months
  old submit certification that products delivered will be identical in performance to tested products:
  - Mortar Tests: Test mortars for conformance to BS requirements for the indicated mortar types.
  - Concrete Masonry Units: Test each type of concrete masonry unit indicated, for strength, absorption and moisture content using ASTM C140
  - Windows:
    - For structural performance use ASTM E 330 or AAAMSA equivalent.
    - For water resistance test use ASTM E 31 or AAAMSA equivalent.
    - For air infiltration testing use ASTM E 29 or AAAMSA equivalent.
    - For condensation resistance factor use AAMA 1503.1 or AAAMSA equivalent.

- Field Testing: Submit certified copies of test reports.
  - Masonry Test: Test prisms made with delivered materials using ASTM E447, method or BS equivalent.
  - Windows: Conduct at least two ASTM E 29 air leakage tests of installed windows including perimeter caulking. The Project Manager to select test sites. Conduct and additional test for each failed test at site selected by the Project Manager.

#### 27. CONSULTANTS DETAILED DESIGN

Tenderers to allow for the following consultants fees:

- design
- drawings
- details issue

compliance certificate issue

- Disciplines to be included:
  - Civil Engineer
  - Structural Engineer
  - Mechanical & Electrical Engineer

#### 28. EXCLUSIONS

Although specifically excluded from the above Project Specification, some of the following items could be undertaken as extensions to the construction contract once the necessary information becomes available, these items eventually attended to by Professional Team at the Lessee's request, these shall be at an extra cost to be agreed upon. Notwithstanding this, all necessary builder's work pertaining to this specialist work is to be carried by the Professional Team.

- 1. Generator
- 2. Telephone, PABX, intercom and Public Address System.
- 3. Loose furniture, fittings and lockers.
- 4. Office equipment and computers.
- 5. Canteen furniture and benches.
- 6. Any work directly related to the installation and functioning of any plant or production equipment or electrical reticulation for same or for liquid, solid or gas installation.
- 7. Any special provisions related to dealing with spillage or chemical containment, other than specified.
- 8. Security systems (burglar alarms / burglar proofing).
- 9. UPS
- 10. Racking.
- 11. Reach trucks & forklifts
- 12. Internal fencing
- 13. Battery charging equipment
- 14. Compressors, chillers & airlines
- 15. Computer and data cabling
- 16. Safes, Strong and record room doors, and shelving
- 17. Relocation costs

- 18. Consumer deposits
- 19. Diesel tanks and bowers
- 20. Stoves, fridges, microwaves and all other operational equipment
- 21. Client signage

#### 29 PROGRAMME FOR THE WORKS

The time period the tenderer must allow from Site Handover to Practical Completion of the Projects will be:

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- Chipata:
- Tender period
- Adjudicator period
- Earthworks
- Infrastructure development (including offices)
- Beneficial occupancy
- Handover

- Week 1 to week 4
- Week 4 to week 6
- Week 6 to week 20
- Week 20 to week 46
- Week 42
  - Week 47

## Part C. Bill of Quantities

The following items and quantities are deemed as required to conduct the scope of civil works included in this ITB.

IMPORTANT: Bidders are required to pay special attention to the detailed description of the minimum technical requirements, characteristics and specifications required for the different components / elements of the required works, as outlined in Section 3, Part B, Scope of required works.

BIDDERS are requested to outline any deviation between the technical requirements, characteristics and specifications offered for the different components / elements of the required works and those required in Section 3, Part B of the ITB. Bidders are requested to indicate any such deviations by including the corresponding remark/s in the Column titled "Bidder's confirmation of compliance / comments on deviations" in the table included in Section 3, Part C Bill of quantities and summarizing such deviations in the following table;

Schedule Nr/Description	Item Nr/Descripition	Summary of deviations between Scope of Required
		works as described in Section 3B above (pages 38 to 64) and offered items

Bidders are required to price these items in Section 7 of the ITB. Bidders are requested to make use of the Excel file included as an annex to the ITB to facilitate completion and submission of Section 7, Price Schedule Form (Financial proposal).

Assumptions and designs provided in drawings, sketches available in Section 12 are for illustrative and guidance purposes only. Offers are responsible for proposing and developing their own designs in line with the specifications and site lay out, provided in this document.

	DESCRIPTION	QUANTITY	UNIT	Bidder's confirmation of compliance / comments on DEVIATIONS
<u>1</u>	BULK EARTHWORKS			
1	Clear site of all bush and small trees (girth less than 1m measured 1m above			
2	ground) including grubbing up stumps and root system and disposal Remove topsoil up to 150mm thick including all grass and roots and	6 099,00	m²	
-	stockpile			
3	for future use, as instructed Test existing soil on site and provide confirmation to Engineer (assume we	914,85	m <sup>3</sup>	
	can			
4	use existing soil on site for backfilling) Cut and fill to building platforms and compact to 93% Mod AASHTO as	1,00	Item	
-		4 707 00		
5	Enigneers specification Cut and fill to roadworks platforms and compact to 93% Mod AASHTO as per	1 737,00	m <sup>3</sup>	
	Engineers specifications	1 580,00	m <sup>3</sup>	
6	Cut and spoil offsite to approved dumping yard	350,00	m <sup>3</sup>	
7	Rip and compact platform up to 150mm thick layers to 93% Mod AASHTO	330,00		
	area to receive fill	2 316,00	m²	
8	Rip and compact roadworks up to 150mm thick layers to 93% Mod AASHTO	2 310,00		
	area to receive fill	3 160,00	m²	
9	Import G7 material or similar to building platform & compact in layers of 150mm			
	at 95% Mod AASHTO to create height of 1350mm above paving level as per			
	Engineers specifications	2 084,40	m³	
10	Import G45 or similar material to building platform and compact in layers of			
	150mm at 98% Mod AASHTO as per Engineers specification	347,40	m³	
11	Import G45 or similar material to roadworks platform and compact in layers of			
	150m at 98% Mod AASHTO as per Engineers specification Import crusher run to roadworks platform and copact in layers of 150mm	948,00	m <sup>3</sup>	
12	at 98%			
10	Mod AASHTO as per Enigneers specifications	474,00	m <sup>3</sup>	
13	Extra Over for trimming and forming of ramps	185,00	m²	
14	Allow for lab testing and quality control	1,00	Item	
15	Extra Over for hard excavation (provisional)	50,00	m <sup>3</sup>	
16	Extra Over for rock (provisional)	50,00	m <sup>3</sup>	
<u>2</u>	FOUNDATION EXCAVATIONS			
1	Excavations for footings	569,48	m³	
2	Excavations for Bases	256,20	m³	
3	Excavations for dockleveller	6,00	m <sup>3</sup>	
<u>3</u>	BACKFILLING			
1	Backfilling available from footings	284,74	m³	
2	Backfilling available from bases	128,10	m³	
4	Carting away	412,84	m³	
<u>4</u>	SOIL POISONING			
1	Soil Poisoning under Surfacebed	2 170,00	m²	
<u>5</u>	CONCRETE			
	Foundations			
1	15 Mpa Concrete Blinding to Bases	20,34	m³	
2	25 Mpa Concrete to Footings	122,03	m³	
3	25 Mpa Concrete to Bases	69,40	m³	

5       25 Mpa Stub Columns       8,15       m³         6       30 Mpa Cavity Wall Concrete Filling       42,26       m³         7       30 Mpa Concrete to Dockleveler       1,50       m³         -       Surfacebeds       -       -         30 Mpa Concrete to Surfacebed - 85mm Thick to offices & security & hazardous store       25,84       m³         30 Mpa Concrete to Surfacebed - 180mm Thick on waterproofing to warehouse       -       -         ramps & pump rooms       329,94       m³         10       30 Mpa Concrete to Surfacebed - 200mm Thick to walk-n chiller       6,40       m³         112       Placing       2 169,00       m²         12       Placing       2 169,00       m²         13       Cube Tests of sets of 6       5,00       No         Jet Cure RB90 resin based curing compound & surface sealer - to       -       1 823,00       m²         14       warehouse       1 823,00       m²       -       -         15       Approved dust sealer - to warehouse       1 084,50       m       -         17       Ream Joints       1 084,50       m       -       -         18       Joint Sealing 0.5m/1m2       1 084,50       m       -       -	
7       30 Mpa Concrete to Dockleveler       1,50       m³         Surfacebeds       30 Mpa Concrete to Surfacebed - 85mm Thick to offices & security & hazardous store       25,84       m³         30 Mpa Concrete to Surfacebed - 180mm Thick on waterproofing to warehouse       25,84       m³         10       30 Mpa Concrete to Surfacebed - 200mm Thick to waterproofing to warehouse       329,94       m³         10       30 Mpa Concrete to Surfacebed - 200mm Thick to walk-n chiller       6,40       m³         12       Placing       2 169,00       m²         13       Cube Tests of sets of 6       5,00       No         14       warehouse       1 823,00       m²         15       Approved dust sealer - to warehouse       1 823,00       m²         16       Sawcut Surfacebed       1 084,50       m         17       Ream Joints       1 084,50       m         18       Joint Sealing 0.5m/1m2       1 084,50       m²         19       surfacebed       2 170,00       m	
SurfacebedsImage: construction & starting & source	
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17     Ream Joints     1 084,50     m       18     Joint Sealing 0.5m/1m2     1 084,50     m²       Construction & Isolation Joints between vertical faces of walls & surfacebed     2 170,00     m	
18       Joint Sealing 0.5m/1m2       1 084,50       m <sup>2</sup> Construction & Isolation Joints between vertical faces of walls &       2 170,00       m	
Construction & Isolation Joints between vertical faces of walls &         2 170,00         m	
19 surfacebed 2 170,00 m	
20         Prepare Earthworks (Surfacebed Size)         2 170,00         m <sup>2</sup>	
_ <u>Structural</u>	
21         30 Mpa Concrete to Square Columns         21,00         m <sup>3</sup>	
22         30 Mp Concrete to Beams         6,92         m <sup>3</sup>	
23     30 Mpa Concrete to Stairs & Landings     5,66     m <sup>3</sup>	
24         25 Mpa Concrete First Floor Slab         94,35         m <sup>3</sup>	
25 Placing 370,00 m <sup>2</sup>	
26     Cube Tests of sets of 6     5,00     No	
27         Pump Rate         101,27         m <sup>3</sup>	
28   Pump Establishment   1,00   No	
<u>6</u> <u>REINFORCEMENT</u>	
<u>Foundations</u>	
1     to Foundations     7,32     tonne       2     to Column Bases     9.72     tonne	
3     to Cavity Wall     2,96     tonne       4     Mesh Reinforcing to Surfacebed Ref 193     2 170 00     m <sup>2</sup>	
Superstructure         1,47         tonne	
b     To Square Columns     5,00     tonne       7     Up stand and Downstand beams     1,25     tonne	
8To Stairs & Landings1,25torne	+
9         To Slabs         11,32         tonne	+
10     To Dock Leveller     0,27     tonne	
	+
Z <u>FORMWORK</u>	
1         To Stub Columns - Rough         72,45         m <sup>2</sup>	
2 To Columns Square - Rough 182,00 m <sup>2</sup>	
3         Upstand & Downstand beams - Rough         73,75         m <sup>2</sup>	
4         To Stairs & Landings Soffits - Rough         14,02         m <sup>2</sup>	
5 To Stairs & Landings - Edges Not exceeding 300mm high - Rough 27,00 m	
6 Sides of Staircase - Rough 13,34 m	
7         To Slab - Soffit - Rough         370,00         m²	
8 To Slab - Edges Not exceeding 300mm high - Rough 121,00 m	
9 To plinth - Smooth 16,00 m	
10         Formwork to dockleveller side walls         8,80         m <sup>2</sup>	
<u>8</u> <u>MASONRY</u>	

_	Foundation			
1	200mm thick block wall	69,30	m²	
2	200mm thick block wall to staircases & ramps	105,00	m²	
3	370mm thick cavity block wall	603,75	m²	
4	Extra Over Facebrick	0,00	m²	
_	Superstructure			
5	150mm thick block wall	309,00	m²	
6	200mm thick block wall	1 339,37	m²	
7	200mm thick block wall to parapet	16,00	m²	
8	Precast Concrete Coping	0,00	m	
9	Fibre Cement External Sills	40,00	m	
_	Sundries			
10	150mm Wide DPC	59,00	m	
11	200mm Wide DPC	317,00	m	
12	150mm Wide Brick Force	14 972,70	m	
13	200mm Wide Brick Force	5 363,18	m	
14	Wall Ties	3 018,75	No	
15	Hoop Irons	498,00	No	
16	Pre-Cast Concrete Lintels - Windows	98,40	m	
17	Pre-Cast Concrete Lintels - Doors	48,00	m	
<u>9</u>	WATERPROOFING			
1	250 micron Consol Plastic Gunplas USB Green waterproof sheeting			
<u>⊢                                     </u>	sealed at laps with Gunplas Pressure Sensitive Tape under surface beds &	2 226,25	m²	
	aprons			
2	DPC under window sills	40,00	m	
		- ,		
<u>10</u>	ROOFING			
_	Steel Trusses			
1	Supply & erect structual steel to roof incl paint @ 28kg per sqm as per			
	Engineer's specifications	41,93	tonne	
2	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as	41,93	tonne	
2	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per			
	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications	1,43	tonne	
3	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building	1,43 117,00	tonne m	
34	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies	1,43 117,00 21,00	tonne m m	
3	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block	1,43 117,00	tonne m	
3 4 5 -	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u>	1,43 117,00 21,00 32,00	tonne m m m	
3 4 5 - 6	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material	1,43 117,00 21,00 32,00 304,70	tonne m m m m m m	
3 4 5 - 6 7	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material Labour	1,43 117,00 21,00 32,00 304,70 304,70	tonne m m m m m m <sup>2</sup> m <sup>2</sup>	
3 4 5 - 6	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material Labour Sheeting on timber trusses	1,43 117,00 21,00 32,00 304,70	tonne m m m m m m	
3 4 5 - 6 7 8 -	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material Labour Sheeting on timber trusses <u>Covering</u>	1,43 117,00 21,00 32,00 304,70 304,70 304,70	tonne m m m m m m m <sup>2</sup> m <sup>2</sup> m <sup>2</sup>	
3 4 5 - 6 7 8 8 - 9	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material Labour Sheeting on timber trusses <u>Covering</u> Roof sheeting vertical	1,43 117,00 21,00 32,00 304,70 304,70 304,70 1 069,30	tonne m m m m m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup>	
3 4 5 - 6 7 8 - 9 10	Engineer's specifications         Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per         Engineer's specifications         150 x300mm Gutters to main building         125 x 200mm Gutters to canopies         125 x 200mm Gutters to office block         Timber Trusses         Material         Labour         Sheeting on timber trusses         Covering         Roof sheeting vertical         Extra Over Polycarb	1,43 117,00 21,00 32,00 304,70 304,70 304,70 304,70 1 069,30 160,40	tonne m m m m m m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup>	
3 4 5 - 6 7 8 - 9 10 11	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material Labour Sheeting on timber trusses <u>Covering</u> Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal	1,43 117,00 21,00 32,00 304,70 304,70 304,70 304,70 1 069,30 160,40 907,69	tonne m m m m m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m	
3 4 5 - 6 7 8 - 9 10 11 12	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material Labour Sheeting on timber trusses <u>Covering</u> Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal Downpipes to main building	1,43 117,00 21,00 32,00 304,70 304,70 304,70 1069,30 160,40 907,69 140,00	tonne m m m m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup>	
3 4 5 6 7 8 9 10 11 12 13	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material Labour Sheeting on timber trusses <u>Covering</u> Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal Downpipes to main building Downpipes to canopies	1,43 117,00 21,00 32,00 304,70 304,70 304,70 1069,30 160,40 907,69 140,00 11,00	tonne m m m m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup>	
3 4 5 - 6 7 8 - 9 10 11 12 13 14	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material Labour Sheeting on timber trusses <u>Covering</u> Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal Downpipes to main building Downpipes to canopies Downpipes to office block	1,43 117,00 21,00 32,00 304,70 304,70 304,70 1069,30 160,40 907,69 140,00 11,00 21,00	tonne m m m m m m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup>	
3 4 5 - 6 7 8 - 9 10 11 12 13 14 15	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material Labour Sheeting on timber trusses <u>Covering</u> Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal Downpipes to main building Downpipes to canopies Downpipes to office block Canopies	1,43 117,00 21,00 32,00 304,70 304,70 304,70 1069,30 160,40 907,69 140,00 11,00 21,00 62,00	tonne m m m m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup>	
3 4 5 - 6 7 8 - 9 10 11 12 13 14 15 16	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material Labour Sheeting on timber trusses <u>Covering</u> Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal Downpipes to main building Downpipes to canopies Downpipes to office block Canopies Ventillation Louvres	1,43           117,00           21,00           32,00           304,70           304,70           304,70           1069,30           160,40           907,69           140,00           11,00           21,00           62,00           86,40	tonne           m           m           m           m           m2           m3           m4	
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material Labour Sheeting on timber trusses <u>Covering</u> Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal Downpipes to main building Downpipes to canopies Downpipes to office block Canopies Ventillation Louvres Horizontal smoke extraction	1,43           117,00           21,00           32,00           304,70           304,70           304,70           1069,30           160,40           907,69           140,00           11,00           21,00           62,00           86,40           8,00	tonne           m           m           m           m           m2           m3           m4           m2           m3           m4           m4	
3 4 5 6 7 8 <u>-</u> 9 10 11 12 13 14 15 16 17 18	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block Timber Trusses Material Labour Sheeting on timber trusses <u>Covering</u> Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal Downpipes to main building Downpipes to canopies Downpipes to office block Canopies Ventillation Louvres Horizontal smoke extraction Allowance to radiant barrier paint to sheeting as per specification	1,43           117,00           21,00           32,00           304,70           304,70           304,70           1069,30           160,40           907,69           140,00           11,00           21,00           62,00           86,40           8,00           1976,99	tonne           m           m           m           m2           m3           m4           m4	
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material Labour Sheeting on timber trusses <u>Covering</u> Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal Downpipes to main building Downpipes to canopies Downpipes to office block Canopies Ventillation Louvres Horizontal smoke extraction	1,43           117,00           21,00           32,00           304,70           304,70           304,70           1069,30           160,40           907,69           140,00           11,00           21,00           62,00           86,40           8,00	tonne           m           m           m           m           m2           m3           m4           m2           m3           m4           m4	
3 4 5 - 6 7 8 - 9 10 11 12 13 14 15 16 17 18 19	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block <u>Timber Trusses</u> Material Labour Sheeting on timber trusses <u>Covering</u> Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal Downpipes to main building Downpipes to canopies Downpipes to office block Canopies Ventillation Louvres Horizontal smoke extraction Allowance to radiant barrier paint to sheeting as per specification	1,43           117,00           21,00           32,00           304,70           304,70           304,70           1069,30           160,40           907,69           140,00           11,00           21,00           62,00           86,40           8,00           1976,99	tonne           m           m           m           m2           m3           m4           m4	
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 19 <b>11</b>	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block Timber Trusses Material Labour Sheeting on timber trusses Covering Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal Downpipes to main building Downpipes to canopies Downpipes to office block Canopies Ventillation Louvres Horizontal smoke extraction Allowance to radiant barrier paint to sheeting as per specification Sisalation Insulation under roof sheeting as per specification	1,43 117,00 21,00 32,00 304,70 304,70 304,70 1 069,30 1 60,40 907,69 1 40,00 11,00 21,00 62,00 86,40 8,00 1 976,99 1 976,99 1 976,99	tonne           m           m           m           m2           m3           m4           m2           m2           m2           m3           m4           m4	
3       4       5       6       7       8       9       10       11       12       13       14       15       16       17       18       19       1       1	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block Timber Trusses Material Labour Sheeting on timber trusses Covering Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal Downpipes to main building Downpipes to canopies Downpipes to office block Canopies Ventillation Louvres Horizontal smoke extraction Allowance to radiant barrier paint to sheeting as per specification Sisalation Insulation under roof sheeting as per specification Sisalation Insulation under roof sheeting as per specification	1,43           117,00           21,00           32,00           304,70           304,70           304,70           1069,30           160,40           907,69           140,00           11,00           21,00           62,00           86,40           8,00           1976,99	tonne           m           m           m           m2           m3           m4           m4	
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 19 <b>11</b>	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block Timber Trusses Material Labour Sheeting on timber trusses Covering Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal Downpipes to main building Downpipes to canopies Downpipes to office block Canopies Ventillation Louvres Horizontal smoke extraction Allowance to radiant barrier paint to sheeting as per specification Sisalation Insulation under roof sheeting as per specification	1,43 117,00 21,00 32,00 304,70 304,70 304,70 1 069,30 1 60,40 907,69 1 40,00 11,00 21,00 62,00 86,40 8,00 1 976,99 1 976,99 1 976,99	tonne           m           m           m           m2           m3           m4           m2           m2           m2           m3           m4           m4	
3       4       5       6       7       8       -       9       10       11       12       13       14       15       16       17       18       19       1       1	Engineer's specifications Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per Engineer's specifications 150 x300mm Gutters to main building 125 x 200mm Gutters to canopies 125 x 200mm Gutters to office block Timber Trusses Material Labour Sheeting on timber trusses Covering Roof sheeting vertical Extra Over Polycarb Roof sheeting horizontal Downpipes to main building Downpipes to canopies Downpipes to office block Canopies Ventillation Louvres Horizontal smoke extraction Allowance to radiant barrier paint to sheeting as per specification Sisalation Insulation under roof sheeting as per specification Sisalation Insulation under roof sheeting as per specification Sisalation Insulation under roof sheeting as per specification	1,43 117,00 21,00 32,00 304,70 304,70 304,70 1 069,30 1 60,40 907,69 1 40,00 11,00 21,00 62,00 86,40 8,00 1 976,99 1 976,99 1 976,99	tonne           m           m           m           m2           m3           m4           m2           m2           m2           m3           m4           m4	

		1	1	Í
<u>12</u>	PARTITIONING			
1	Walls - removable divider	0,00	m²	
<u>13</u>	PLASTER			
1	To walls	2 659,00	m²	
2	Rhinolite to walls	247,80	m²	
3	To Internal Window Narrow Widths	30,00	m²	
4	To Concrete Columns	118,30	m²	
5	To Concrete Slab Soffit	197,00	m²	
6	Screeds to Stairs and Landings	61,28	m²	
7	Bagging	45,00	m²	
8	Slush to Concrete	315,30	m²	
<u>14</u>	TILING			
1	To Internal Walls - PC Amount \$15.00 per m2 - 2100mm high	130,20	m²	
2	To Internal Window Narrow Widths	10,00	m²	
3	Kitchen Splashback	3,60	m²	
4	To Floors - PC Amount \$15.00 per m2	473,00	m²	
5	To Stairs and Landings	46,62	m²	
6	Tile Skirting	375,00	m	
7	Metal Strips to Staircase Edges	24,00	m	
8	Metal Strips to Tile Skirtings	375,00	m	
9	Metal Strips to Wall Tiles	10,00	m	
45				
<u>15</u>	PAINTING			
To Plas		0.505.00		
1	To all walls	2 525,20	m <sup>2</sup>	
2	Slab Soffits	197,00 118,30	m²	
	Columns 100mm Wide Road Marking Paint at Dispatch & Receiving Area as per		m²	
4	drawing	0,00	m	
Wood				
5	Door	35,00	m²	
6	Skirting	0,00	m	
<u>Steel</u>				
7	Door Frames	42,00	m²	
8	Waste Management Gates	0,00	m²	
9	Angle Irons	47,00	m	
10	Wecro rails	24,00	m²	
	Armco Barriers	80,00	m²	
	s & Partitioning			
11	Partitioning	0,00	m²	
12	Flush plastered ceilings	94,00	m²	
40				
<u>16</u>	FLOOR COVERINGS		-	
1	Extra Over Vinyl	0,00	m²	
2	Server Room Floor	0,00	m²	
3	Carpets	0,00	m²	
<u>17</u>				
1	ALUMINIUM	2.70		
2	Extra Over Doors - Office entrance to reception	3,78	m <sup>2</sup>	
3	Extra Over Doors - Staff entrance to ablutions	3,78	m <sup>2</sup>	
4	Extra Over Doors - Internal security	1,89	m <sup>2</sup>	
4 5	Extra Over Doors - External gate security	1,89	m <sup>2</sup>	
6	Door Frames - Single Doors to Manager's & Dispatch / Receiving Offices	3,00	No	
0	Door Frames - One and Half Doors to Boardroom & Accounts Office	2,00	No	<u> </u>

7	Windows	52,60	m²	
8	E.O view panels to partitions	2,50	m²	
		*		
<u>18</u>	METALWORK			
1	Door - Double Rebated - Single Opening to 762 x 2032mm doors - WC's	5,00	No	
2	Door - Double Rebated - Single Opening to 813 x 2032mm doors - WC	- ,	-	
	entrance	4,00	No	
3	Door - Double Rebated - Single Opening to 813 x 2032mm doors - kitchen	1,00	No	
4	Door - Double Rebated - Single Opening to 813 x 2032mm doors - waiting room	1,00	No	
F	Door - Double Rebated - Single Opening to 813 x 2032mm doors -	1,00	110	
5	ablution to			
	waiting rooms	1,00	No	
6	Door - Double Rebated - Single Opening to 762 x 2032mm doors - duct	1,00	No	
7	Door - Double Rebated - Single Opening to 813 x 2032mm doors - internal			
	security	1,00	No	
8	Roller Shutter Doors - SECTIONAL - 3000 x 3500mm High - to battery charging, chain operated			
		1.00	No	
	and galvanised Roller Shutter Doors SECTIONAL - 2500 x 3500mm High - dispatch &	1,00	INU	
9	receiving sectional			
	up and over with 2 viewing panels	2,00	No	
10	Roller Shutter Doors-SECTIONAL - 3000 x 3500mm High - dispatch			
	marshalling sectional	0.00	Nia	
11	up & over type door with 2 viewing panels	2,00	No	
11 12	Angle Iron to RSD - Floor	15,00	m	
	Angle Iron to Sectional Doors - Walls	24,00	m	
13	Angle Irons to Ramps	47,00	m	
14	80 x 80 x 6mm Angle around dock levellers	22,00	m	
15	Strong Room Doors/ Safe Doors	0,00	No	
16	Anti-Bandit Door	0,00	No	
17	Transformer Room Door MV 1525 X 2135mm incl louvre set	3,00	No	
18	Brickwork Support T-Sections	11,00	m	
19	Stainless Steel Balustrades to Staircases	8,00	m	
20	Armco Balustrades to Ramps	40,00	m	
20	Weckrolock Balustrades - Internal at Mezzanine	12,37	m	
21	Supply & fit air powered swing lip docklevelers with capacity 10 000kg - APL			
	610 SX	2,00	No	
22	Shelving	*	m	
23	Metal Blinds/Louvers		m²	
24	Lockers		m	
25	Recycling Bins		No	
26	240 Litre Bins		No	
27	Turnstyles with pedestrian gate	1,00	No	
28	Steel Staircase - large	1,00	No	
29	All external doors to be cladded with galvanised sheeting - one side only	7,00	No	
30	Allow bollards standing 1m above ground, incl excavate and concrete			
30	base	6,00	No	
31	Supply & install two project sign boards of 2m x 3m incl galvanized steel pipes			
	3" in diameter to hold the sign and fixed in place by concrete footings			
	500mm			
	x 500mm x 600mm deep. All information to be included on the boards to be			
	provided by the Engineer during the mobilization period	1,00	No	
32	Pallet Gate to Mezzanine Slab	1,00	No	
33	Louvre to hazardous store	1,00	No	
	Diamond mesh fence 3000mm H - with galvinised posts fixed to surface	1,00		
34	bes	18,00	m	
	Single gate to fence	1,00	no	
	Sliding gate to fence	1,00	no	
36	Coner angles to concrete colums galvinised - 75x75mm - 2100 high	42,00	m	

19	CARPENTRY & JOINERY			
1	Doors - Single - Semi-Solid 762 x 2032mm - to WC's	5,00	No	
2	Doors - Single - Semi-Solid - 813 x 2032mm - entrance to WC's	4,00	No	
3	Doors - Single - Semi-Solid - 813 x 2032mm - to kitchen	1,00	No	
4	Doors - Single - Semi-Solid - 813 x 2032mm - passage to waiting area	1,00	No	
5	Doors - Single - Semi-Solid - 813 x 2032mm - ablution to waiting area	1,00	No	
6	Doors - Vinyl Consertina Doors - 900 x 2032mm to search booth incl	1,00		
0	frame	1,00	No	
7	Doors - Single - External Frame Braced Ledged & Battened 762 x 2032mm to duct	1,00	No	
8	Doors - Single - Semi-Solid - 813 x 2032mm - to internal security	1,00	No	
9	Doors - Single - Semi-Solid - 813 x 2400mm - officers & managers,	.,		
3	dispatch/receiving Doors - Single - Semi-Solid - 1200 x 2400mm - boardroom & accounts	3,00	No	
10	office	2,00	No	
11	Class B Fire Doors Single	3,00	No	
12	Class B Fire Doors Double	2,00	No	
13	Skirting - all skirting priced as meranti	0,00	m	
14	Vanity Tops - Bathroom	2,00	m	
15	Kitchen Cupboards & Counters	4,00	m	
16	FHR Cupboard and Frame	0,00	No	
17	Worktops	1,50	m	
18	Reception Desks		m	
19	Timber benches		m	
20	Other Cupboards		m	
21	Other Counters		m	
<u>20</u>	GLAZING			
1	Shower Curtain & Rail	0,00	No	
2	Mirrors - 900 x 600mm Wide	6,00	No	
<u>21</u>	IRONMONGERY	10.00		
1	3 Lever Locks	19,00	No	
1 2	3 Lever Locks Labour to fit	19,00	No	
1 2 3	3 Lever Locks Labour to fit 4 Lever Locks	19,00 2,00	No No	
1 2 3 4	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit	19,00 2,00 2,00	No No No	
1 2 3 4 5	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD	19,00 2,00 2,00 4,00	No No No No	
1 2 3 4 5 6	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit	19,00           2,00           2,00           4,00           4,00	No No No No No	
1 2 3 4 5 6 7	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door	19,00           2,00           2,00           4,00           4,00           5,00	No No No No No No	
1 2 3 4 5 6 7 8	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit	19,00           2,00           2,00           4,00           5,00           5,00	NoNoNoNoNoNoNoNo	
1 2 3 4 5 6 7 8 9	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures	19,00           2,00           2,00           4,00           5,00           5,00           9,00	NoNoNoNoNoNoNoNoNo	
1 2 3 4 5 6 7 8 9 10	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit	19,00           2,00           2,00           4,00           5,00           5,00           9,00	NoNoNoNoNoNoNoNoNoNoNo	
1 2 3 4 5 6 7 8 9 10 11	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders	19,00           2,00           2,00           4,00           5,00           5,00           9,00           9,00           6,00	No	
$     \begin{array}{r}                                $	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders Labour to fit	19,00           2,00           2,00           4,00           5,00           5,00           9,00           9,00           6,00	No	
$     \begin{array}{r}             1 \\             2 \\           $	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders Labour to fit Towel Rings	19,00           2,00           2,00           4,00           5,00           5,00           9,00           9,00           6,00	No	
$     \begin{array}{r}                                $	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders Labour to fit Towel Rings Labour to fit	19,00           2,00           2,00           4,00           5,00           5,00           9,00           6,00           6,00           5,00	No	
$     \begin{array}{r}                                $	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders Labour to fit Towel Rings Labour to fit Towel Rings	19,00           2,00           2,00           4,00           5,00           5,00           9,00           9,00           6,00           5,00           5,00	No	
$     \begin{array}{r}                                $	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders Labour to fit Towel Rings Labour to fit	19,00           2,00           2,00           4,00           5,00           5,00           9,00           9,00           6,00           5,00           5,00           9,00           9,00           6,00           5,00           5,00           0,00	No	
$     \begin{array}{r}                                $	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders Labour to fit Towel Rings Labour to fit Towel Rails - 1000mm long Labour to fit	19,00           2,00           2,00           4,00           5,00           5,00           9,00           9,00           6,00           5,00           5,00           0,00           0,00	No	
$     \begin{array}{r}                                $	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders Labour to fit Towel Rings Labour to fit Towel Rails - 1000mm long Labour to fit Soap Dispencer	19,00           2,00           2,00           4,00           5,00           5,00           9,00           6,00           5,00           5,00           9,00           0,00           0,00           0,00	No	
$     \begin{array}{r}                                $	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders Labour to fit Towel Rings Labour to fit Towel Rails - 1000mm long Labour to fit Soap Dispencer Labour to fit	19,00           2,00           2,00           4,00           5,00           5,00           9,00           6,00           6,00           5,00           0,00           0,00           0,00           0,00           0,00	No	
$     \begin{array}{r}                                $	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders Labour to fit Towel Rings Labour to fit Towel Rings Labour to fit Towel Rails - 1000mm long Labour to fit Soap Dispencer Labour to fit Rubber Door Stop	19,00           2,00           2,00           4,00           5,00           5,00           9,00           9,00           6,00           5,00           5,00           9,00           9,00           0,00           0,00           0,00           0,00           0,00           2,00	No	
$     \begin{array}{r}                                $	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders Labour to fit Towel Rings Labour to fit Towel Rails - 1000mm long Labour to fit Soap Dispencer Labour to fit Rubber Door Stop Labour to fit	19,00           2,00           2,00           4,00           5,00           5,00           9,00           9,00           6,00           5,00           0,00           0,00           0,00           0,00           0,00           0,00           28,00	No	
$     \begin{array}{r}                                $	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders Labour to fit Towel Rings Labour to fit Towel Rails - 1000mm long Labour to fit Soap Dispencer Labour to fit Rubber Door Stop Labour to fit Rubber Door Stop Labour to fit Door Signs	19,00           2,00           2,00           4,00           4,00           5,00           9,00           6,00           6,00           5,00           0,00           0,00           0,00           0,00           0,00           0,00           28,00           4,00	No	
$     \begin{array}{r}                                $	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders Labour to fit Towel Rings Labour to fit Towel Rails - 1000mm long Labour to fit Soap Dispencer Labour to fit Rubber Door Stop Labour to fit Door Signs Labour to fit	19,00           2,00           2,00           4,00           5,00           5,00           9,00           6,00           6,00           5,00           9,00           0,00           0,00           0,00           0,00           0,00           28,00           4,00           4,00	No	
$     \begin{array}{r}                                $	3 Lever Locks         Labour to fit         4 Lever Locks         Labour to fit         Locks to RSD         Labour to fit         Ironmongery to Fire Door         Labour to fit         Door Closures         Labour to fit         Toilet Roll Holders         Labour to fit         Towel Rings         Labour to fit         Towel Rails - 1000mm long         Labour to fit         Soap Dispencer         Labour to fit         Rubber Door Stop         Labour to fit         Door Signs         Labour to fit	19,00           2,00           2,00           4,00           5,00           5,00           9,00           9,00           6,00           5,00           5,00           9,00           9,00           0,00           0,00           0,00           0,00           0,00           28,00           4,00           1,00	No           No	
$     \begin{array}{r}         \\             1 \\             $	3 Lever Locks         Labour to fit         4 Lever Locks         Labour to fit         Locks to RSD         Labour to fit         Ironmongery to Fire Door         Labour to fit         Door Closures         Labour to fit         Toilet Roll Holders         Labour to fit         Towel Rings         Labour to fit         Towel Rails - 1000mm long         Labour to fit         Soap Dispencer         Labour to fit         Rubber Door Stop         Labour to fit         Door Signs         Labour to fit         Door Signs         Labour to fit         Disabled Handrail         Labour to fit	19,00           2,00           2,00           4,00           5,00           5,00           9,00           9,00           6,00           5,00           5,00           9,00           9,00           0,00           0,00           0,00           0,00           0,00           28,00           4,00           1,00	No           No	
$     \begin{array}{r}                                $	3 Lever Locks Labour to fit 4 Lever Locks Labour to fit Locks to RSD Labour to fit Ironmongery to Fire Door Labour to fit Door Closures Labour to fit Toilet Roll Holders Labour to fit Towel Rings Labour to fit Towel Rails - 1000mm long Labour to fit Soap Dispencer Labour to fit Rubber Door Stop Labour to fit Door Signs Labour to fit Disabled Handrail Labour to fit Building Signs	19,00           2,00           2,00           4,00           4,00           5,00           9,00           6,00           6,00           5,00           9,00           0,00           0,00           0,00           0,00           0,00           28,00           4,00           1,00	No           No	

I			1	
22	PLUMBING			
1	Points	17,00	No	
2	WC incl all Fittings	6,00	No	
3	Labour to fit WC	6,00	No	
4	Urinal incl all Fittings	3,00	No	
5	Labour to fit urinal	3,00	No	
6	WHB incl all Fittings	6,00	No	
7	Labour to fit WHB	6,00	No	
8	Single Bowl Sink incl all Fittings	1,00	No	
9	Labour to fit double bowl sink	1,00	No	
10	Shower incl all fittings	0,00	No	
11	Labour to fit shower	0,00	No	
12	Solar Geyser	1,00	No	
13	Sewer Pipes - 110mm	,	m	
13	Sewer Pipes - 160mm		m	
14	Supply Pipes		m	
15	Extra Over Heat Pump	0,00	Item	
16	Full Bore Outlets	0,00	No	
17	Subsoil drain	0,00	m	
18	Allow for pipework, 500l pressure vessels, valves etc as per attached	_,	1	
10	Engineers		-	
	sketch item 3.83	0,00	No	
19	Allow water domestic tanks - 10 000litres incl concrete plinth 180mm thick	3.00	No	
20	Allowance to install & commission borehole (provisional Sum item)	0,00	No	
21	Allowance to supply and fit Emergency shower to Battery Room	1,00	No	
		1,00		
<u>23</u>	ELECTRICAL			
1	Warehouse	1823,00	m²	
2	Office Ground Floor	182,00	m²	
3	Office First Floor	330,00	m²	
4	Security	10,00	m²	
6	Pump Rooms	42,00	m²	
7	Hazardous Store	109,00	m²	
8	Outside Lighting	1,00	Item	
9	Lightning Protection & Earthing	1,00	Item	
10	Allow CCTV installation	1,00	Item	
11	Allow security installation	1,00	Item	
12	Allow for telecomunication services	1,00	Item	
13	Allow for generator	1,00	Item	
14	Allow for solar panel installation (20kg/m2 on structural steel roof design)	1,00	Item	
15	Allow for access control	1,00	Item	
		.,		
	Office Allowance = 100 Watt/m2		1	
	Warehouse Allowance = 50 Watt/m2			
	1 KVA = 1.58 AMPS			
	Supply to Offices = 0.5 KVA/m2		1	
	Supply to Offices = 0.15 KVA/m2		1	
			1	
<u>24</u>	MECHANICAL			
1	Allowance for air conditioning to warehouse - <b>PROVISIONAL</b>			
	SUM TO BE USED	1,00	Item	
2	Allowance for inverter air conditioning to office - PROVISIONAL SUM TO BE USED	1,00	Item	
3	Gas Installation	- , = #	No	
4	Access Control	1,00	No	
5	UPS	1,00	No	
6	Allow to supply & fit complete walk-in chiller 6m x 5m with double entrance			
			1	

	door	I	1	I
	4m high as per specification	1.00	No	
		1,00	110	
<u>25</u>	FIRE PROTECTION			
1	9 Kg DCP Fire Extinguisher & Cabinet	10,00	No	
2	30m Fire Hose Reel	5,00	No	
3	Fire Hydrant	1,00	No	
4	Booster pump	1,00	No	
5	Allow for smoke detection system including fire alarm	1,00	Item	
6	Sprinklers			
7	Ordinary Hazard = 1 sprinkler per 12 m2		m²	
8	High Hazard (storage) = 1 sprinkler per 9 m2		Item	
<u>26</u>	EXTERNAL			
1	Landscaping	1,00	Item	
2	Garden Tap	2,00	No	
3	Paving - 80mm	3 160,00	m²	
4	Kerbs - Fig 7	411,00	m	
5	Kerbs - Fig 12		m	
6	200 x 400mm concrete Edge Beam	30,00	m	
7	Sewer manholes incl heavy duty covers and frame as per Engineer's Detail	4.00	No	
8		4,00	No	
	Sewer inspection eyes Allow stormwater channel, 200mm concrete surface bed with 200mm	4,00	NU	
9	concrete			
	walls, 150kg/m3 reinforcing & heavy duty cast-in rectogrid mentis cover & frame,			
	galvanised	45,00	m	
10	Road markings (Arrow/Stop and lines)	130,00	m	
11	Clear Vu Fence	320,00	m	
12	Clear Vu Automatic Single Sliding Gate 7,5m Wide x 2,1m high incl Centurion D5 or			
	similar motor	1.00	No	
13	Shadeports	10.00	no	
14	Brick and lintel staircase - large	2,00	No	
15	Brick and lintel staircase - small	3,00	No	
16	Electronic Booms	1,00	No	
17	Allowance for covered area for lunch and recreation	49,00	m2	
18	Allow 60mm paving plinth around building	0,00	m2	
	Anow comm paring printrateand banding	0,00		
19	Septic Tank			
19.1	Excavate for tank	112,00	m³	
19.2	Excavate for access shafts	1,00	m³	
19.3	Surface beds to septic tank	8,00	m³	
19.4	Surface beds to access shafts	0,14	m³	
19.5	200mm block work	98,00	m²	
19.6	Plaster to blockwork (internal only)	98,00	m²	
19.7	Extra Over additive to plaster for waterproofing	98,00	m²	
19.8	Concrete to roof slab septic tank	8,00	m³	
19.9	Concrete to Roof Slabs to Access Panels	0,50	m³	
19.10	Formwork to Roof Slabs - septic tank slab soffit	32,00	m²	
19.11	Formwork to Roof Slabs - access panels slab soffit	2,00	m²	
19.12	Formwork to edges of roof slabs	32,00	m	
19.13	Reinforcing to septic tank surface bed	0,96	tonne	
19.14	Reinforcing to access panels surface beds - 395 mesh	2,50	m²	
19.15	Reinforcing to roof slab - septic tank	1,44	tonne	
19.16	Reinforicng to rood slab - access panels	0,09	tonne	
19.17	110mm pipework to septic tank	10,00	m	
19.18	110mm bends	3,00	No	
19.19	110mm t-sections	3,00	No	

19.20	110mm vent pipe and cages through slabs	2,00	No	
19.21	Double seal cast iron cover & frame type 8B - SABS 558-1973 for 600 x	4.00	No	
	600mm opening	4,00	No	
20	Potuco Vord			
20.1	Refuse Yard Excavate for footings	8,64	m <sup>3</sup>	
20.2			m <sup>3</sup>	
20.2	Excavate for bases	2,00		
20.3	Backfilling available for footings	4,32	m <sup>3</sup>	
20.4	Backfilling available for bases Carting away of excavated materials	1,00	m <sup>3</sup>	
20.5		5,32	m <sup>3</sup>	
20.0	25 Mpa Concrete to footings	3,24	m <sup>3</sup>	
20.7	25 Mpa Concrete to bases	0,60	m <sup>3</sup>	
	25 Mpa Concrete to infill columns	0,26	m <sup>3</sup>	
20.9 20.10	30 Mpa Concrete to Surfacebed to falls - 150mm thick	2,70	m <sup>3</sup>	
	Placing	18,00	m²	
20.11	Preparation for earthworks for surface beds	18,00	m²	
20.12	Reinforcing to bases	0,08	tonne	
20.13	Reinforcing to infill columns	0,03	tonne	
20.14	200mm thick block walls to foundations	10,80	m²	
20.15	Brick piers to foundations - 400mm x 400mm	0,19	m <sup>3</sup>	
20.16	200mm thick block walls to superstructure	37,80	m²	
20.17	Brick piers to superstructure - 400mm x 400mm	0,67	m <sup>3</sup>	
20.18	Plaster to walls	75,60	m²	
20.19	Plaster to narrow widths	10,00	m²	
20.20	Paint to walls	75,60	m²	
20.21	Alowance for floor drains	1,00	No	
20.22	Allowance for 110mm uPVC pipe	45,00	m	
20.23	Allowance for water supply pipe to garden tap	45,00	m	
20.24	Allowance for garden tap	1,00	No	
20.25	Allowance for double swing steel gate - 1800mm x 2100mm high	1,00	No	
20.26	Paint to gate	7,56	m²	
20.27	1200mm Paving apron around building on 2 layers compacted earthworks	154,00	m2	
<u>27</u>	PRELIMINAIRIES & GENERAL			
1	Supervision - Contracts Manager	9,00	Mth	
2	Supervision - Foreman	9,00	Mth	
3	Quantity Surveyor	9,00	Mth	
4	Safety	9,00	Mth	
5	Company Overheads	9,00	Mth	
6	Insurance	9,00	Mth	
7	Plant	9,00	Mth	
	Transport	9,00	mth	
8	Scaffolding	9,00	Mth	
9	Fuel/ Diesel Usage	9,00	Mth	
10	Site Storage & Office	9,00	Mth	
11	Professional Board	1,00	No	
12	Water Usage	9,00	Mth	
13	Electricity Usage	9,00	Mth	
14	Telephone Usage	9,00	Mth	
15	Site Clean up After Works Completion	20,00	Loads	
16	Building Clean Up After works Completion	1,00	No	

# **SECTION 4: BID SUBMISSION FORM3**

(This should be written in the Letterhead of the Bidder. Except for indicated fields, no changes may be made in this template.)

Insert: Location

To:[insert: Name and Address of UNDP focal point]

Dear Sir:

We, the undersigned, hereby offer to supply the goods and related services required for ITB UNDP HIST 030-16 Design and Construction of a new medical warehouse in Chipata, Zambia in accordance with your Invitation to Bid dated ...... We are hereby submitting our Bid, which includes the Technical Bid and Price Schedule.

We hereby declare that :

- a) All the information and statements made in this Bid are true and we accept that any misrepresentation contained in it may lead to our disqualification;
- b) We are currently not on the removed or suspended vendor list of the UN or other such lists of other UN agencies, nor are we associated with, any company or individual appearing on the 1267/1989 list of the UN Security Council;
- c) We have no outstanding bankruptcy or pending litigation or any legal action that could impair our operation as a going concern; and
- d) We do not employ, nor anticipate employing, any person who is or was recently employed by the UN or UNDP.

We confirm that we have read, understood and hereby fully accept the Schedule of Requirements and Technical Specifications describing the duties and responsibilities required of us in this ITB, and the General Terms and Conditions of UNDP's Standard Contract for this ITB.

We agree to abide by this Bid for 120 days.

We undertake, if our Bid is accepted, to initiate the supply of goods and provision of related services not later than the date indicated in the Data Sheet.

We fully understand and recognize that UNDP is not bound to accept this Bid, that we shall bear all costs associated with its preparation and submission, and that UNDP will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the evaluation.

We remain, Yours sincerely,

Authorized Signature [In full and initials]: Name and Title of Signatory: Name of Firm: Contact Details:

[please mark this letter with your corporate seal, if available]

<sup>3</sup> No deletion or modification may be made in this form. Any such deletion or modification may lead to the rejection of the Bid.

# Section 5: Documents Establishing the Eligibility and Qualifications of the Applicant

## Form 2. Applicant's Information Form<sup>4</sup>

Date: [insert date (as day, month and year] of Proposal Submission]

Page of pages

1. Applicant's Legal Name [insert Proposer	's legal name]	
2. In case of Joint Venture (JV), legal name	of each party: [insert legal name	of each party in JV]
3. Actual or intended Country/ies of Registra	ation/Operation: [insert actual or	intended Country of Registration]
4. Year of Registration: [insert Proposer's ye	ear of registration]	
5. Countries of Operation 6. No	of staff in each Country	7.Years of Operation in each Country
8. Legal Address/es in Country/ies of Roregistration]	egistration/Operation: [insert Pr	oposer's legal address in country of
9. Value and Description of Top three (3) Bi	ggest Contract for the past five (	5) years
10. Latest Credit Rating (if any)		
11. Brief description of litigation history (dis if already resolved.	putes, arbitration, claims, etc.), i	ndicating current status and outcomes,
12. Proposer's Authorized Representative Ir	nformation	
Name: [insert Authorized Representative's r Address: [insert Authorized Representative' Telephone/Fax numbers: [insert Authorized Email Address: [insert Authorized Represen	s name] Representative's name]	
13. Are you in the UNPD List 1267.1989 or	UN Ineligibility List?  VES or	
14. Applicants shall confirm non-existence c	of conflict of interest	
15. Applicants shall confirm that Non-perford deadline for application submission, based of		

<sup>&</sup>lt;sup>4</sup> The Applicant shall fill in this Form in accordance with the instructions. Apart from providing additional information, no alterations to its format shall be permitted and no substitutions shall be accepted.

16. Attached are copies of original documents of:

Certificate of registration of the business

I Tax registration / payment certificate

Certificate of registration of the business

☑ If Joint Venture/Consortium – copy of the Memorandum of Understanding/Agreement or Letter of Intent to form a JV/Consortium, or Registration of JV/Consortium, if registered

If case of Government corporation or Government-owned/controlled entity, documents establishing legal and financial autonomy and compliance with commercial law.

## FORM 3. JOINT VENTURE DECLARATION

We have entered into a private association/consortium/ joint venture in order to submit joint application for this Pre-qualification notice by United Nations Development Programme (UNDP) If we are awarded the contract, the joint venture agreement shall be notarized and submitted to the Contracting Entity before the contract is concluded. Lead (pilot) partner of our joint venture shall be .....*[indicate name of the lead partner]*...... until the completion of work.

If we are awarded the contract as a result of the joint tender that we intend to submit, we hereby declare, accept and guarantee that the contract shall be signed by all partners and our partner indicated as the lead partner shall have the full power to act for and on behalf of our joint venture in respect of all issues concerning the contract.

No	Name of the Partner in the JV	Percentage Share*
1		
2		
3		

	Lead Partner	Partner	Partner
Name			
Date			
Signature			
Stamp			

Lead partner's share cannot be less than 50% Share of the remaining partner(s) shall not be less than 20%

## Form - 4: Litigation history

1. Has the Applicant ever failed to complete any awarded work within the last 3 years? (If Yes, attach explanation)

2. Company's history of litigation or arbitration from contracts executed in the last three years or currently under execution. Please indicate for each case year, name of employer, cause of litigation, matter in dispute, disputed amount and whether the award was for or against company. (If applicable, attach explanation)

3. Has the Applicant filed any lawsuits or claims with regard to construction contracts within the last three years?

(If Yes, attach explanation)

# Form – 5: General Construction Experience: Projects Completed / Ongoing

No	Name of the Employer / Client (Address and contact details)	Name and location of project	Project start and completion Dates	Project type: Building, Sewage, Water, Roads, etc	Project Amount or Contract Price (US\$)	Attached Certificate/ Contract/POs
1						
2						
3						
4						
5						
6						
7						
8						

Applicants are requested to complement the information inserted in table above with a copy of the respective contract / purchase order/s.

Further Applicants are required to include in their applications, statement of Satisfactory Performance from 3 relevant Clients. Such statements shall be dated five month or later, before the deadline for submission of bids in response to this ITB.

# Form – 6: Applicants Turnover

Year	Turnover Volume in U\$
2013	
2014	
2015	

	Description of project and of the works of similar nature included in it	Year and degree of project completion	Value of works of similar nature included in project
Project 1	(indicate project description, location and outline what are the works of similar nature conducted i.e site preparation, plumbing, electricity, vertical construction works, etc) plas well as the Applicants role in executing the referred works (management contractor, major contractor, subcontractor, etc.)		
Project 2			

## Form -8 : Key Personnel Form

Guidance note: The key personnel form should be printed on company letterhead, signed by the authorized representative(s) of the Applicant, dated and stamped. The form should be supplemented by the SIGNED CVs of the proposed key personnel, copies of their diplomas, and other supporting documents (certifications, membership to professional bodies etc.) as applicable.

#### To: UNDP

#### **KEY PERSONNEL FORM**

We, the undersigned, confirm that the following key personnel whose names and qualifications have been summarized below will be available for engagement in connection with any possible contract awarded on the base of this pre-qualification notice. Attached are the signed CVs of the proposed key personnel, along with copies of their diplomas and other supporting documents as applicable.

#	Key Personnel	Name and Last Name	Designation / Role / Expertise	Education (Degree)	Years of Professional Experience	Years of Similar Work Experience

#### **CV** Template

Guidance note: The following CV template should be used by the applicants for all of the proposed key personnel. Note that the CV should be signed and dated by the proposed key personnel. At the minimum the copies of the diplomas of the proposed key personnel should be attached.

Position*:		
Personnel Information	Name	Date of Birth:
	University Degree*:	
	Professional Qualifications:	
Present Employment	Name of the Employer	
	Address of the Employer	
	Telephone	Contact Person:
	Fax	Email:
	Job Title	Years with present Employer:

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project. Add/delete rows as applicable.

From *	То*	Company, Project, Position, and Technical and Management Experience*

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describes me, my qualifications and my experience. I confirm my intention to serve within the proposed capacity and my availability to perform the duties as per the requirements.

Signature and Date: [signature of the proposed personnel and the date of signature] .

Attachments: Copy of diploma(s), etc.

## Form 9: Equipment Form

Guidance Note: The key equipment form should be printed on company letterhead, signed by the authorized representative(s) of the applicant, dated and stamped. The Applicant must demonstrate that it will have access, at the minimum, to the same list of equipment that has been used by the Applicant over the last two years and which is required to be listed hereafter. Applicants are required to confirm either ownership of each of the pieces of equipment included in the list below and/or access to it through agreed rental/leasing agreements.

#### EQUIPMENT FORM

(applicants to complete information on the equipment used over the last two years)

Equipment description and capacity	Quantity	Year of Manufacture	Current Location	Status/Condition of the equipment	Indicate form of access to the equipment (i.e. ownership, lease, rental, etc.)
(i.e. Concrete Mixer Xm3, dump truck Ym3, tipper Zm3, Water tanker, Crane lifting capacity X Tons at Y M, backhoe loaders, excavators, etc) -					
(i.e. Concrete Mixer Xm3, dump truck Ym3, tipper Zm3, Water tanker, Crane lifting capacity X Tons at Y M, backhoe loaders, excavators, etc)					

Note: please add all equipment that is with the firm/company

Best regards,

[Signature of the Authorized Representative(s) of the Proposer]

Name: [Insert name(s) of the Authorized Representative(s) of the Proposer] Address [insert street number/town or city/country address] Dated on [insert the date: DD/MM/YYYY]

## Form – 10: Local Representative in Zambia<sup>1</sup>

We confirm that we have appointed Mr/Ms [Applicants to enter name, full location & address of main office, telephone and contact number], as our local representative for this project.

[Signature of the Authorized Representative(s) of the Proposer]

Name: [Insert name(s) of the Authorized Representative(s) of the Proposer] Address [insert street number/town or city/country address] Dated on [insert the date: DD/MM/YYYY]

<sup>&</sup>lt;sup>1</sup> To be provided ONLY by bidders that are not a legal entity constituted in Zambia

## Form - 11: Financial Situation

(to be printed on company letterhead, signed, dated and stamped)

Applicant's Legal Name \_\_\_\_\_ Date \_\_\_\_\_

Financial information in US\$ <sup>2</sup>							
Information from Balance Sheet							
	2013	2014	2015	Average			
Total Assets (TA)							
Total Liabilities (TL)							
TA/TL Ratio							
Net Worth (NW)							
Current Assets (CA)							
Current Liabilities (CL)							
CA/CL Ratio							
Information from Income Statement		1	1	1			
Total Revenue (TR)							
Profits Before Taxes (PBT)							

Attached are copies of financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following conditions:

- \* Must reflect the financial situation of the Applicant
- \* Historical financial statements must be audited by a certified accountant
- Historical financial statements must be complete, including all notes to the financial statements
- Historical financial statements must correspond to accounting periods already completed and audited

Note: Companies/Firms applying through Joint Venture are requested to please provide the Audited Account of Lead Partner.

Name:

Company Name:

<sup>&</sup>lt;sup>2</sup> For conversion purposes please use average annual conversion rates

## Form 12: Financial Resources

(to be printed on company letterhead, signed, dated and stamped)

Cash and Credit pos	sition as of submissio	on date in U\$ <sup>3</sup>		
Bank	Available Cash	Unu	sed	
		Cash Credit	Credit Letter	
Fotal				
	A	В	С	

<sup>&</sup>lt;sup>3</sup> For conversion purposes please use average annual conversion rates

# Form 13: Detail of existing Applicant's workload

Project Reference and name of client	Applicant's role in the project and detailed description of works	Value of work to be executed by Applicant	Estimated time of full completion

# ITB UNDP HIST 030-16 Design and Construction of a new medical warehouse in Chipata, Zambia

Name of Bidding Organization / Firm:	
Country of Registration:	
Name of Contact Person for this Bid:	
Address:	
Phone / Fax:	
Email:	

#### SCOPE OF SUPPLY, TECHNICAL SPECIFICATIONS, AND RELATED SERVICES

- Technical description of items: Confirmation that all items requested in Data Sheet sections 4, 26 and 27, Section 3, Schedule of requirements and technical specifications and a detailed BOQ, Section 7, have been included and priced in the bidder's offer.
- Bidder's Statement Regarding Deviations/Non-Compliance : Any departure from the provisions of the specification shall be disclosed in the table provided as BoQ
- 3. Descriptive literature: Bidders shall provide full technical details of all items offered in technical sheets or catalogues with pictures showing detail and general views of the equipment and components. Specific details/models of items offered should be clearly stated as standard technical sheets or catalogues may offer different options.
- Further to the Schedule of Requirements, Bidders are requested to take note and submit additional documentation required in Section 3, Part A2: related services.

<sup>&</sup>lt;sup>5</sup> Technical Bids not submitted in this format may be rejected.

## Section 7: Price Schedule Form

ITB UNDP HIST 030-16 Design and Construction of a new medical warehouse in Chipata, Zambia

#### Tender Price Breakdown

Bidders are required to complete columns titled "rate" and "amount" in table below (both marked in grey in the table below)

IMPORTANT: Bidders are requested to make use of the Excel file titled "Chipata warehouse design and construction, Price Schedule Excel format" when completing Section 7, Price Schedule form in response to this ITB.

Assumptions and designs provided in drawings, sketches available in Sections 12 and following in this tender dossier are for illustrative and guidance purposes only. Offerors are responsible for proposing and developing their own designs in line with the specifications and site lay out, provided in this document.

#### **SECTION 7, PRICE SCHEDULE FORM**

Bidders are required to complete the columns titled Rate & TOTAL for each item. The Excel sheet included as annex to this ITB includes the corresponding formulas to automatically calculated totals. Bidders are required to complete also the summary table

	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
<u>1</u>	BULK EARTHWORKS				
1	Clear site of all bush and small trees (girth less than 1m measured 1m above				
	ground) including grubbing up stumps and root system and disposal	6 099.00	m²		\$-
2	Remove topsoil up to 150mm thick including all grass and roots and stockpile				Ť
	for future use, as instructed	914,85	m³		\$-
3	Test existing soil on site and provide confirmation to Engineer (assume we can				
	use existing soil on site for backfilling)	1,00	Item		\$-
4	Cut and fill to building platforms and compact to 93% Mod AASHTO as per				
	Enigneers specification	1 737,00	m³		\$-
5	Cut and fill to roadworks platforms and compact to 93% Mod AASHTO as per				
	Engineers specifications	1 580,00	m³		\$-
6	Cut and spoil offsite to approved dumping yard	350,00	m³		\$-
7	Rip and compact platform up to 150mm thick layers to 93% Mod AASHTO				
	area to receive fill	2 316,00	m²		\$-
8	Rip and compact roadworks up to 150mm thick layers to 93% Mod AASHTO				
	area to receive fill	3 160,00	m²		\$-
9	Import G7 material or similar to building platform & compact in layers of 150mm				
	at 95% Mod AASHTO to create height of 1350mm above paving level as per			Ī	
	Engineers specifications	2 084,40	m³		\$-
10	Import G45 or similar material to building platform and compact in layers of				
	150mm at 98% Mod AASHTO as per Engineers specification	347,40	m³		\$-
11	Import G45 or similar material to roadworks platform and compact in layers of				
	150m at 98% Mod AASHTO as per Engineers specification	948,00	m³		\$-
12	Import crusher run to roadworks platform and copact in layers of 150mm at 98%				
	Mod AASHTO as per Enigneers specifications	474,00	m³		\$-
13	Extra Over for trimming and forming of ramps	185,00	m²		\$-
14	Allow for lab testing and quality control	1,00	Item		\$-
15	Extra Over for hard excavation (provisional)	50,00	m³		\$-
16	Extra Over for rock (provisional)	50,00	m³		\$-
	N /				
2	FOUNDATION EXCAVATIONS				
1	Excavations for footings	569,48	m³		\$-
2	Excavations for Bases	256,20	m³		\$-
3	Excavations for dockleveller	6,00	m³		\$-
<u>3</u>	BACKFILLING				
1	Backfilling available from footings	284,74	m³		\$-
2	Backfilling available from bases	128,10	m³		\$-
4	Carting away	412,84	m³		\$-
		, , , , , , , , , , , , , , , , , , ,			
<u>4</u>	SOIL POISONING				
1	Soil Poisoning under Surfacebed	2 170,00	m²		\$-
<u>5</u>	CONCRETE				
	Foundations				
1	15 Mpa Concrete Blinding to Bases	20,34	m <sup>3</sup>		\$-
2	25 Mpa Concrete to Footings	122,03	m³		\$-
3	25 Mpa Concrete to Bases	69,40	m³		\$-
5	25 Mpa Stub Columns	8,15	m <sup>3</sup>		\$-
6	30 Mpa Cavity Wall Concrete Filling	42,26	m <sup>3</sup>		\$-
	30 Mpa Concrete to Dockleveler	1,50	m <sup>3</sup>		\$-
7		.,			Ŧ
7					
7	Surfacebeds				

	store		1	
9	30 Mpa Concrete to Surfacebed - 180mm Thick on waterproofing to warehouse			
	ramps & pump rooms	329,94	m³	\$-
10	30 Mpa Concrete to Surfacebed - 200mm Thick to walk-n chiller	6,40	m³	\$-
12	Placing	2 169,00	m²	\$-
13	Cube Tests of sets of 6	5,00	No	\$-
14	Jet Cure RB90 resin based curing compound & surface sealer - to warehouse	1 823,00	m²	\$-
15	Approved dust sealer - to warehouse	1 823,00	m²	\$-
16	Sawcut Surfacebed	1 084,50	m	\$-
17	Ream Joints	1 084,50	m	\$-
18	Joint Sealing 0.5m/1m2	1 084,50	m²	\$-
19	Construction & Isolation Joints between vertical faces of walls & surfacebed	2 170,00	m	\$-
20	Prepare Earthworks (Surfacebed Size)	2 170,00	m²	\$-
		_		
	Structural			
21	30 Mpa Concrete to Square Columns	21,00	m³	\$-
22	30 Mp Concrete to Beams	6,92	m <sup>3</sup>	\$-
23	30 Mpa Concrete to Stairs & Landings	5,66	m <sup>3</sup>	\$-
24 25	25 Mpa Concrete First Floor Slab	94,35	m <sup>3</sup>	\$- ¢
25 26	Placing	370,00	m²	\$-
26	Cube Tests of sets of 6	5,00	No m3	\$- ¢
28	Pump Rate	101,27	m <sup>3</sup>	\$-
20	Pump Establishment	1,00	No	\$-
<u>6</u>	REINFORCEMENT			
-	Foundations			
1	to Foundations	7,32	tonne	\$-
2	to Column Bases	9,72	tonne	\$-
3	to Cavity Wall	2,96	tonne	\$-
4	Mesh Reinforcing to Surfacebed Ref 193	2 170,00	m²	\$-
_	Superstructure			
5	To Stub Columns	1,47	tonne	\$-
6	To Square Columns	5,00	tonne	\$-
7	Up stand and Downstand beams	1,25	tonne	\$-
8	To Stairs & Landings	1,02	tonne	\$-
9	To Slabs	11,32	tonne	\$-
10	To Dock Leveller	0,27	tonne	\$-
<u>7</u>	FORMWORK			
1	To Stub Columns - Rough	72,45	m²	\$-
2	To Columns Square - Rough	182,00	m²	\$-
3	Upstand & Downstand beams - Rough	73,75	m²	\$-
4	To Stairs & Landings Soffits - Rough	14,02	m²	\$-
5	To Stairs & Landings - Edges Not exceeding 300mm high - Rough	27,00	m	\$-
6	Sides of Staircase - Rough	13,34 370,00	m m²	\$-
7	To Slab - Soffit - Rough	3700 00	m²	\$-
7		· · ·		¢
8	To Slab - Edges Not exceeding 300mm high - Rough	121,00	m	\$- ¢
8 9	To Slab - Edges Not exceeding 300mm high - Rough To plinth - Smooth	121,00 16,00	m m	\$-
8	To Slab - Edges Not exceeding 300mm high - Rough	121,00	m	
8 9 10	To Slab - Edges Not exceeding 300mm high - Rough To plinth - Smooth Formwork to dockleveller side walls	121,00 16,00	m m	\$-
8 9	To Slab - Edges Not exceeding 300mm high - Rough To plinth - Smooth Formwork to dockleveller side walls <u>MASONRY</u>	121,00 16,00	m m	\$-
8 9 10 <u>8</u>	To Slab - Edges Not exceeding 300mm high - Rough To plinth - Smooth Formwork to dockleveller side walls  MASONRY Foundation	121,00 16,00 8,80	m m m <sup>2</sup>	\$- \$-
8 9 10 <u>8</u> - 1	To Slab - Edges Not exceeding 300mm high - Rough To plinth - Smooth Formwork to dockleveller side walls  MASONRY Foundation 200mm thick block wall	121,00 16,00 8,80 69,30	m m m <sup>2</sup>	\$- \$- 
8 9 10 <u>8</u>	To Slab - Edges Not exceeding 300mm high - Rough To plinth - Smooth Formwork to dockleveller side walls  MASONRY Foundation	121,00 16,00 8,80	m m m <sup>2</sup>	\$- \$-

	Superstructure			
- 5	150mm thick block wall	309,00	m²	\$-
6	200mm thick block wall	1 339,37	m²	\$-
7	200mm thick block wall to parapet	16,00	m²	\$-
8	Precast Concrete Coping	0.00	m	\$- \$-
9	Fibre Cement External Sills			\$-
J	Sundries	40,00	m	φ-
- 10	150mm Wide DPC	59,00	m	\$-
10	200mm Wide DPC	317,00		\$-
12	150mm Wide Brick Force		m	\$-
13	200mm Wide Brick Force	14 972,70	m	\$- \$-
14		5 363,18	m	· ·
15	Wall Ties	3 018,75	No	\$-
16	Hoop Irons	498,00	No	\$- ¢
17	Pre-Cast Concrete Lintels - Windows	98,40	m	\$-
17	Pre-Cast Concrete Lintels - Doors	48,00	m	\$-
<u>9</u>	WATERPROOFING			
1	250 micron Consol Plastic Gunplas USB Green waterproof sheeting sealed	2 226,25	m²	\$-
	at laps with Gunplas Pressure Sensitive Tape under surface beds & aprons	2 220,23	111-	φ-
2	DPC under window sills	40,00	m	\$-
-		40,00		φ-
10	ROOFING			
	Steel Trusses			
- 1	Supply & erect structual steel to roof incl paint @ 28kg per sqm as per			
	Engineer's specifications	41,93	tonne	\$-
2	Supply & erect Structural steel to canopies incl paint @ 23kg per sqm as per	,00		÷
	Engineer's specifications	1,43	tonne	\$-
3	150 x300mm Gutters to main building	117,00	m	\$-
4	125 x 200mm Gutters to canopies	21,00	m	\$-
5	125 x 200mm Gutters to office block	32,00	m	\$-
	Timber Trusses	,		, T
- 6	Material	304,70	m²	\$-
7	Labour	304,70	m²	\$-
8	Sheeting on timber trusses	304,70	m²	\$-
	Covering			
- 9	Roof sheeting vertical	1 069,30	m²	\$-
10	Extra Over Polycarb	160,40	m²	\$-
11	Roof sheeting horizontal	907,69	m²	\$-
12	Downpipes to main building	140,00	m	\$-
13	Downpipes to canopies	11,00	m	\$-
14	Downpipes to office block	21,00	m	\$-
15	Canopies	62,00	m²	\$-
16	Ventillation Louvres	86,40	m²	\$-
17	Horizontal smoke extraction	8,00	No	\$-
18	Allowance to radiant barrier paint to sheeting as per specification	1 976,99	m²	\$-
19	Sisalation Insulation under roof sheeting as per specification	1 976,99	m²	\$-
<u>11</u>	CEILINGS			
1	1200mm x 600mm Don Suspended Ceilings	589,00	m²	\$-
2	Extra over for flush plastered ceilings to boardroom & reception to Architect's			
	details	94,00	m²	\$-
<u>12</u>	PARTITIONING			
1	Walls - removable divider	0,00	m²	\$-
40				
<u>13</u>	PLASTER			

1	To walls	2 659,00	m²	\$-
2	Rhinolite to walls	2 033,00	m²	\$-
3	To Internal Window Narrow Widths	30,00	m²	\$-
4	To Concrete Columns	118,30	m²	\$-
5	To Concrete Slab Soffit	197,00	m²	\$-
6	Screeds to Stairs and Landings	61,28	m²	\$-
7	Bagging	45,00	m²	\$-
8	Slush to Concrete	315,30	m²	\$-
		,		· · ·
<u>14</u>	TILING			
1	To Internal Walls - PC Amount \$15.00 per m2 - 2100mm high	130,20	m²	\$-
2	To Internal Window Narrow Widths	10,00	m²	\$-
3	Kitchen Splashback	3,60	m²	\$-
4	To Floors - PC Amount \$15.00 per m2	473,00	m²	\$-
5	To Stairs and Landings	46,62	m²	\$-
6	Tile Skirting	375,00	m	\$-
7	Metal Strips to Staircase Edges	24,00	m	\$-
8	Metal Strips to Tile Skirtings	375,00	m	\$-
9	Metal Strips to Wall Tiles	10,00	m	\$-
<u>15</u>	PAINTING			
To Plas				
1	To all walls	2 525,20	m²	\$-
2	Slab Soffits	197,00	m²	\$-
3	Columns	118,30	m²	\$-
4	100mm Wide Road Marking Paint at Dispatch & Receiving Area as per drawing	0,00	m	\$-
Wood				
5	Door	35,00	m²	\$-
6	Skirting	0,00	m	\$-
<u>Steel</u> 7				
8	Door Frames	42,00	m²	\$-
0 9	Waste Management Gates	0,00	m²	\$-
10	Angle Irons Wecro rails	47,00	m m²	\$- \$-
10	Armco Barriers	24,00	m² m²	\$- \$-
		80,00	111-	φ-
Ceiling	s & Partitioning			
<u>0011119</u>	Partitioning	0,00	m²	\$-
12	Flush plastered ceilings	94,00	m²	\$-
		01,00		÷
<u>16</u>	FLOOR COVERINGS			
1	Extra Over Vinyl	0,00	m²	\$-
2	Server Room Floor	0,00	m²	\$-
3	Carpets	0,00	m²	\$-
<u>17</u>	ALUMINIUM			
1	Extra Over Doors - Office entrance to reception	3,78	m²	\$-
2	Extra Over Doors - Staff entrance to ablutions	3,78	m²	\$-
3	Extra Over Doors - Internal security	1,89	m²	\$-
4	Extra Over Doors - External gate security	1,89	m²	\$-
5	Door Frames - Single Doors to Manager's & Dispatch / Receiving Offices	3,00	No	\$-
6	Door Frames - One and Half Doors to Boardroom & Accounts Office	2,00	No	\$-
7	Windows	52,60	m²	\$-
8	E.O view panels to partitions	2,50	m²	\$-
<u>18</u>	METALWORK			

1	Door - Double Rebated - Single Opening to 762 x 2032mm doors - WC's	5,00	No	\$-
	Door - Double Rebated - Single Opening to 813 x 2032mm doors - WC entrance	4,00	No	\$-
	Door - Double Rebated - Single Opening to 813 x 2032mm doors - kitchen	1,00	No	\$-
	Door - Double Rebated - Single Opening to 813 x 2032mm doors - waiting room	1,00	No	\$-
_	Door - Double Rebated - Single Opening to 813 x 2032mm doors - ablution to	.,		Ť
	waiting rooms	1,00	No	\$-
-	Door - Double Rebated - Single Opening to 762 x 2032mm doors - duct	1,00	No	\$-
	Door - Double Rebated - Single Opening to 813 x 2032mm doors - internal	.,		Ť
	security	1,00	No	\$-
8	Roller Shutter Doors - SECTIONAL - 3000 x 3500mm High - to battery charging, chain operated	,		
	and galvanised	1,00	No	\$-
	Roller Shutter Doors SECTIONAL - 2500 x 3500mm High - dispatch & receiving sectional			
	up and over with 2 viewing panels	2,00	No	\$-
	Roller Shutter Doors-SECTIONAL - 3000 x 3500mm High - dispatch marshalling sectional			
	up & over type door with 2 viewing panels	2,00	No	\$-
11	Angle Iron to RSD - Floor	15,00	m	\$-
12	Angle Iron to Sectional Doors - Walls	24,00	m	\$-
13	Angle Irons to Ramps	47,00	m	\$-
14	80 x 80 x 6mm Angle around dock levellers	22,00	m	\$-
15	Strong Room Doors/ Safe Doors	0,00	No	\$-
16	Anti-Bandit Door	0,00	No	\$-
17 <sup>·</sup>	Transformer Room Door MV 1525 X 2135mm incl louvre set	3,00	No	\$-
18	Brickwork Support T-Sections	11,00	m	\$-
19	Stainless Steel Balustrades to Staircases	8,00	m	\$-
20	Armco Balustrades to Ramps	40,00	m	\$-
20	Weckrolock Balustrades - Internal at Mezzanine	12,37	m	\$-
21	Supply & fit air powered swing lip docklevelers with capacity 10 000kg -APL			
	610 SX	2,00	No	\$-
22	Shelving		m	by client
23	Metal Blinds/Louvers		m²	by client
24	Lockers		m	by client
25	Recycling Bins		No	by client
26	240 Litre Bins		No	by client
27 <sup>·</sup>	Turnstyles with pedestrian gate	1,00	No	\$-
28	Steel Staircase - large	1,00	No	\$-
29	All external doors to be cladded with galvanised sheeting - one side only	7,00	No	\$-
30	Allow bollards standing 1m above ground, incl excavate and concrete base	6,00	No	\$-
31	Supply & install two project sign boards of 2m x 3m incl galvanized steel pipes			
:	3" in diameter to hold the sign and fixed in place by concrete footings 500mm			
1	x 500mm x 600mm deep. All information to be included on the boards to be			
	provided by the Engineer during the mobilization period	1,00	No	\$-
32	Pallet Gate to Mezzanine Slab	1,00	No	\$-
33	Louvre to hazardous store	1,00	No	\$-
	Diamond mesh fence 3000mm H - with galvinised posts fixed to surface bes	18,00	m	\$-
	Single gate to fence	1,00	no	\$-
;	Sliding gate to fence	1,00	no	\$-
36	Coner angles to concrete colums galvinised - 75x75mm - 2100 high	42,00	m	\$-
<u>19</u>	CARPENTRY & JOINERY			
1	Doors - Single - Semi-Solid 762 x 2032mm - to WC's	5,00	No	\$-
2	Doors - Single - Semi-Solid - 813 x 2032mm - entrance to WC's	4,00	No	\$-
-	Doors - Single - Semi-Solid - 813 x 2032mm - to kitchen	1,00	No	\$-
4	Doors - Single - Semi-Solid - 813 x 2032mm - passage to waiting area	1,00	No	\$-
-	Doors - Single - Semi-Solid - 813 x 2032mm - ablution to waiting area	1,00	No	\$-

6 1	Doors - Vinyl Consertina Doors - 900 x 2032mm to search booth incl frame	1,00	No	\$-
	Doors - Single - External Frame Braced Ledged & Battened 762 x 2032mm to duct	1,00	No	\$-
	Doors - Single - Semi-Solid - 813 x 2032mm - to internal security	1,00	No	\$-
0 [	Doors - Single - Semi-Solid - 813 x 2400mm - officers & managers,	.,		
(	dispatch/receiving	3,00	No	\$-
	Doors - Single - Semi-Solid - 1200 x 2400mm - boardroom & accounts office	2,00	No	\$-
	Class B Fire Doors Single	3,00	No	\$-
	Class B Fire Doors Double	2,00	No	\$-
	Skirting - all skirting priced as meranti	0,00	m	\$-
	Vanity Tops - Bathroom	2,00	m	\$-
	Kitchen Cupboards & Counters	4,00	m	\$-
	FHR Cupboard and Frame	0,00	No	\$-
	Worktops	1,50	m	\$-
	Reception Desks		m	by client
	Timber benches		m	by client
	Other Cupboards		m	by client
21 (	Other Counters		m	by client
	GLAZING			
	Shower Curtain & Rail	0,00	No	\$-
2 r	Mirrors - 900 x 600mm Wide	6,00	No	\$-
	RONMONGERY			
1 3	3 Lever Locks	19,00	No	\$-
2 l	Labour to fit	19,00	No	\$-
3 4	4 Lever Locks	2,00	No	\$-
4 l	Labour to fit	2,00	No	\$-
5 l	Locks to RSD	4,00	No	\$-
6 l	Labour to fit	4,00	No	\$-
7 I	Ironmongery to Fire Door	5,00	No	\$-
	Labour to fit	5,00	No	\$-
9 [	Door Closures	9,00	No	\$-
	Labour to fit	9,00	No	\$-
11 ]	Toilet Roll Holders	6,00	No	\$-
	Labour to fit	6,00	No	\$-
	Towel Rings	5,00	No	\$-
	Labour to fit	5,00	No	\$-
	Towel Rails - 1000mm long	0,00	No	\$-
	Labour to fit	0,00	No	\$-
	Soap Dispencer	0,00	No	\$-
	Labour to fit	0,00	No	\$-
	Rubber Door Stop	28,00	No	\$-
	Labour to fit	28,00	No	\$-
	Door Signs	4,00	No	\$-
	Labour to fit	4,00	No	\$-
	Disabled Handrail	1,00	No	\$-
	Labour to fit	1,00	No	\$-
	Building Signs		No	By Client
	Fire Signs	1,00	No	\$-
	Electronic door lock to main aluminium entrance double door	1,00	No	\$-
28 l	Labour to fit	1,00	No	\$-
	PLUMBING			
	Points	17,00	No	\$-
	WC incl all Fittings	6,00	No	\$-
3 1	Labour to fit WC	6,00	No	\$-

4	Urinal incl all Fittings	3.00	No	\$-
5	Labour to fit urinal	3.00	No	\$-
6	WHB incl all Fittings	6,00	No	\$-
7	Labour to fit WHB	6,00	No	\$-
8	Single Bowl Sink incl all Fittings	1,00	No	\$-
9	Labour to fit double bowl sink	1,00	No	\$-
10	Shower incl all fittings	0.00	No	\$-
11	Labour to fit shower	0.00	No	\$-
12	Solar Geyser	1,00	No	\$-
13	Sewer Pipes - 110mm	· · ·	m	
13	Sewer Pipes - 160mm		m	
14	Supply Pipes		m	
15	Extra Over Heat Pump	0.00	Item	\$-
16	Full Bore Outlets	0.00	No	\$-
17	Subsoil drain	0.00	m	\$-
18	Allow for pipework, 500l pressure vessels, valves etc as per attached Engineers			
	sketch item 3.83	0,00	No	\$-
19	Allow water domestic tanks - 10 000litres incl concrete plinth 180mm thick	3,00	No	\$-
20	Allowance to install & commission borehole (provisional Sum item)	0,00	No	\$-
21	Allowance to supply and fit Emergency shower to Battery Room	1,00	No	\$-
<u>23</u>	ELECTRICAL			
1	Warehouse	1823,00	m²	\$-
2	Office Ground Floor	182,00	m²	\$-
3	Office First Floor	330,00	m²	\$-
4	Security	10,00	m²	\$-
6	Pump Rooms	42,00	m²	\$-
7	Hazardous Store	109,00	m²	\$-
8	Outside Lighting	1,00	Item	\$-
9	Lightning Protection & Earthing	1,00	Item	\$-
10	Allow CCTV installation	1,00	Item	\$-
11	Allow security installation	1,00	Item	\$-
12	Allow for telecomunication services	1,00	Item	\$-
13	Allow for generator	1,00	Item	\$-
14	Allow for solar panel installation (20kg/m2 on structural steel roof design)	1,00	Item	\$-
15	Allow for access control	1,00	Item	\$-
	Office Allowance = 100 Watt/m2			
	Warehouse Allowance = 50 Watt/m2			
	1 KVA = 1.58 AMPS			
	Supply to Offices = 0.5 KVA/m2			
	Supply to Offices = 0.15 KVA/m2			
24				
<u>24</u>	MECHANICAL Allowance for air conditioning to warehouse - PROVISIONAL SUM TO			
1	BE USED	1,00	Item	\$-
2	Allowance for inverter air conditioning to office - <b>PROVISIONAL SUM TO</b>			
	BE USED	1,00	Item	\$-
3	Gas Installation		No	
4	Access Control	1,00	No	\$-
5	UPS		No	
6	Allow to supply & fit complete walk-in chiller 6m x 5m with double entrance door	4.00		<b>^</b>
	4m high as per specification	1,00	No	\$-
25				
<u>25</u>	FIRE PROTECTION	40.00	<b>N</b>	
1	9 Kg DCP Fire Extinguisher & Cabinet	10,00	No	\$-
2	30m Fire Hose Reel	5,00	No	\$-

3	Fire Hydrant	1.00	No	\$-
4	Booster pump	1,00	No	\$-
5	Allow for smoke detection system including fire alarm	1,00	Item	\$-
6	Sprinklers	,		
7	Ordinary Hazard = 1 sprinkler per 12 m2		m²	
8	High Hazard (storage) = 1 sprinkler per 9 m2		Item	
<u>26</u>	EXTERNAL			
1	Landscaping	1,00	Item	\$-
2	Garden Tap	2,00	No	\$-
3	Paving - 80mm	3 160,00	m²	\$-
4	Kerbs - Fig 7	411,00	m	\$-
5	Kerbs - Fig 12	,	m	
6	200 x 400mm concrete Edge Beam	30,00	m	\$-
7	Sewer manholes incl heavy duty covers and frame as per Engineer's Detail	4,00	No	\$-
8	Sewer inspection eyes	4,00	No	\$-
9	Allow stormwater channel, 200mm concrete surface bed with 200mm concrete	.,		Ţ
	walls, 150kg/m3 reinforcing & heavy duty cast-in rectogrid mentis cover & frame,			
	galvanised	45,00	m	\$-
10	Road markings (Arrow/Stop and lines)	130,00	m	\$-
11	Clear Vu Fence	320,00	m	\$-
12	Clear Vu Automatic Single Sliding Gate 7,5m Wide x 2,1m high incl Centurion D5 or	520,00		
	similar motor	1,00	No	\$-
13	Shadeports	10,00	no	\$-
14	Brick and lintel staircase - large	2,00	No	\$-
15	Brick and lintel staircase - small	3,00	No	\$-
16	Electronic Booms	1,00	No	\$-
17	Allowance for covered area for lunch and recreation	49,00	m2	\$-
18	Allow 60mm paving plinth around building	0.00	m2	\$-
		0,00	1112	Ψ
19	Septic Tank			
19.1	Excavate for tank	112,00	m <sup>3</sup>	\$-
19.2	Excavate for access shafts	1.00	m³	\$-
19.3	Surface beds to septic tank	8,00	m <sup>3</sup>	\$-
19.4	Surface beds to access shafts	0,14	m <sup>3</sup>	\$-
19.5	200mm block work	98,00	m²	\$-
19.6	Plaster to blockwork (internal only)	98,00	m²	\$-
19.7	Extra Over additive to plaster for waterproofing	98,00	m²	\$-
19.8	Concrete to roof slab septic tank	8,00	m <sup>3</sup>	\$-
19.9	Concrete to Roof Slabs to Access Panels	0,50	m <sup>3</sup>	\$-
19.10	Formwork to Roof Slabs - septic tank slab soffit	32,00	m²	\$-
19.11	Formwork to Roof Slabs - access panels slab soffit	2,00	m²	\$-
19.12	Formwork to edges of roof slabs	32,00	m	\$-
19.13	Reinforcing to septic tank surface bed	0,96	tonne	\$-
19.14	Reinforcing to access panels surface beds - 395 mesh	2,50	m <sup>2</sup>	\$-
19.15	Reinforcing to access pares surface beds - 355 mesh	1,44	tonne	\$-
19.16	Reinforcing to rood slab - access panels	0,09	tonne	\$-
19.17	110mm pipework to septic tank	10,00	m	\$-
19.18	110mm bends	3,00	No	\$-
19.19	110mm t-sections	3,00	No	\$-
19.20	110mm vent pipe and cages through slabs	2,00	No	\$-
	Double seal cast iron cover & frame type 8B - SABS 558-1973 for 600 x 600mm	2,00		φ-
19.21	opening	4,00	No	\$-
				<u> </u>
20	Refuse Yard			
20.1	Excavate for footings	8,64	m³	\$-

20.2	Excavate for bases	2,00	m³	\$-
20.3	Backfilling available for footings	4,32	m³	\$-
20.4	Backfilling available for bases	1,00	m³	\$-
20.5	Carting away of excavated materials	5,32	m³	\$-
20.6	25 Mpa Concrete to footings	3,24	m³	\$-
20.7	25 Mpa Concrete to bases	0,60	m³	\$-
20.8	25 Mpa Concrete to infill columns	0,26	m³	\$-
20.9	30 Mpa Concrete to Surfacebed to falls - 150mm thick	2,70	m³	\$-
20.10	Placing	18,00	m²	\$-
20.11	Preparation for earthworks for surface beds	18,00	m²	\$-
20.12	Reinforcing to bases	0,08	tonne	\$-
20.13	Reinforcing to infill columns	0,03	tonne	\$-
20.14	200mm thick block walls to foundations	10,80	m²	\$-
20.15	Brick piers to foundations - 400mm x 400mm	0,19	m³	\$-
20.16	200mm thick block walls to superstructure	37,80	m²	\$-
20.17	Brick piers to superstructure - 400mm x 400mm	0,67	m³	\$-
20.18	Plaster to walls	75,60	m²	\$-
20.19	Plaster to narrow widths	10,00	m²	\$-
20.20	Paint to walls	75,60	m²	\$-
20.21	Alowance for floor drains	1,00	No	\$-
20.22	Allowance for 110mm uPVC pipe	45,00	m	\$-
20.23	Allowance for water supply pipe to garden tap	45,00	m	\$-
20.24	Allowance for garden tap	1,00	No	\$-
20.25	Allowance for double swing steel gate - 1800mm x 2100mm high	1,00	No	\$-
20.26	Paint to gate	7,56	m²	\$-
20.27	1200mm Paving apron around building on 2 layers compacted earthworks	154,00	m2	\$-
<u>27</u>	PRELIMINAIRIES & GENERAL			
1	Supervision - Contracts Manager	9,00	Mth	\$-
2	Supervision - Foreman	9,00	Mth	\$-
3	Quantity Surveyor	9,00	Mth	\$-
4	Safety	9,00	Mth	\$-
5	Company Overheads	9,00	Mth	\$-
6	Insurance	9,00	Mth	\$-
7	Plant	9,00	Mth	\$-
	Transport	9,00	mth	\$-
8	Scaffolding	9,00	Mth	\$-
9	Fuel/ Diesel Usage	9,00	Mth	\$-
10	Site Storage & Office	9,00	Mth	\$-
11	Professional Board	1,00	No	\$-
12	Water Usage	9,00	Mth	\$-
13	Electricity Usage	9,00	Mth	\$-
14	Telephone Usage	9,00	Mth	\$-
15	Site Clean up After Works Completion	20,00	Loads	\$-
16	Building Clean Up After works Completion	1,00	No	\$-

ltem	O		Amount (USD) Offered by bidder	
1	TOTAL QUOTED SCHEDULE 1, BULK EARTHWORKS	\$	-	
2	TOTAL QUOTED SCHEDULE 2, FOUNDATION EXCAVATIONS	\$	-	
3	TOTAL QUOTED SCHEDULE 3, BACKFILLING	\$	-	
4	TOTAL QUOTED SCHEDULE 4, SOIL POISONING	\$	-	
5	TOTAL QUOTED SCHEDULE 5, CONCRETE	\$	-	
6	TOTAL QUOTED SCHEDULE 6, REINFORCEMENT	\$	-	
7	TOTAL QUOTED SCHEDULE 7, FORMWORK	\$	-	
8	TOTAL QUOTED SCHEDULE 8, MASONRY	\$	-	
9	TOTAL QUOTED SCHEDULE 9, WATERPROFFING	\$	-	
10	TOTAL QUOTED SCHEDULE 10, ROOFING	\$	-	
11	TOTAL QUOTED SCHEDULE 11, CEILINGS	\$	-	
12	TOTAL QUOTED SCHEDULE 12, PARTITIONING	\$	-	
13	TOTAL QUOTED SCHEDULE 13, PLASTER	\$	-	
14	TOTAL QUOTED SCHEDULE 14, TILING	\$	-	
15	TOTAL QUOTED SCHEDULE 15, PAINTING	\$	-	
16	TOTAL QUOTED SCHEDULE 16, FLOOR COVERINGS	\$	-	
17	TOTAL QUOTED SCHEDULE 17, ALUMINIUM	\$	-	
18	TOTAL QUOTED SCHEDULE 18, METALWORK	\$	-	
19	TOTAL QUOTED SCHEDULE 19, CARPENTRY AND JOINERY	\$	-	
20	TOTAL QUOTED SCHEDULE 20, GLAZING	\$	-	
21	TOTAL QUOTED SCHEDULE 21, IRONMONGERY	\$	-	
22	TOTAL QUOTED SCHEDULE 22, PLUMBING	\$	-	
23	TOTAL QUOTED SCHEDULE 23, ELECTRICAL	\$	-	
24	TOTAL QUOTED SCHEDULE 24, MECHANICAL	\$	-	
25	TOTAL QUOTED SCHEDULE 25, FIRE PROTECTION	\$	-	
26	TOTAL QUOTED SCHEDULE 26, EXTERNAL WORKS	\$	-	
27	TOTAL QUOTED SCHEDULE 27, PRELIMINARIES AND GENERAL	\$	-	
	TOTAL QUOTED FOR BUILDING WORKS EXCLUDING CONSULTANTS	\$	-	
_	Contractors to allow design and supervision fees for:			
	Civil & structural Engineer			
	Mechanical & Electrical Engineer	<u> </u>		
	Fire Consultant			
	Wet Trades Consultant			
	TOTAL QUOTED IN RESPONSE TO BID INCLUDING CONSULTANTS:	\$		
L		φ		

## SECTION 7. PRICE SCHEDULE FORM (CONTINUES). SUMMARY TABLE

# **SECTION 8: FORM FOR BID SECURITY**

(This must be finalized using the official letterhead of the Issuing Bank. Except for indicated fields, no changes may be made in this template.)

#### To:UNDP

[Insert contact information as provided in Data Sheet]

WHEREAS [name and address of Contractor] (hereinafter called "the Bidder") has submitted a Bid to UNDP dated, to deliver goods and execute related services for [indicate ITB title] (hereinafter called "the Bid"):

AND WHEREAS it has been stipulated by you that the Bidder shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security in the event that the Bidder:

- a) Fails to sign the Contract after UNDP has awarded it;
- b) Withdraws its Bid after the date of the opening of the Bid;
- c) Fails to comply with UNDP's variation of requirement, as per ITB Section F.3; or
- d) Fails to furnish Performance Security, insurances, or other documents that UNDP may require as a condition to rendering the contract effective.

AND WHEREAS we have agreed to give the Bidder such this Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Bidder, up to a total of [amount of guarantee] [in words and numbers], such sum being payable in the types and proportions of currencies in which the Price Bid is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of [amount of guarantee as aforesaid] without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

This guarantee shall be valid until a date 30 days from the date of issue by UNDP of a certificate of full acceptance of all goods and satisfactory performance / completion of all related services by the Bidder.

#### SIGNATURE AND SEAL OF THE GUARANTOR BANK

Date .....

Name of Bank .....

Address .....

# SECTION 9: FORM FOR PERFORMANCE SECURITY<sup>6</sup>

(This must be finalized using the official letterhead of the Issuing Bank. Except for indicated fields, no changes may be made in this template.)

#### To:UNDP

[Insert contact information as provided in Data Sheet]

WHEREAS [name and address of Contractor] (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. Click to enter dated, to deliver the goods and execute related services Click here to enter text. (hereinafter called "the Contract"):

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract:

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of [amount of guarantee] [in words and numbers], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of [amount of guarantee as aforesaid] without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

This guarantee shall be valid until a date 30 days from the date of issue by UNDP of a certificate of satisfactory performance and full completion of services by the Contractor.

#### SIGNATURE AND SEAL OF THE GUARANTOR BANK

Date .....

Name of Bank .....

Address .....

<sup>6</sup> If the RFP requires the submission of a Performance Security, which shall be made a condition to the signing and effectivity of the contract, the Performance Security that the Bidder's Bank will issue shall use the contents of this template

## SECTION 10: FORM FOR ADVANCED PAYMENT GUARANTEE<sup>7</sup>

(This must be finalized using the official letterhead of the Issuing Bank. Except for indicated fields, no changes may be made in this template.)

Beneficiary: \_\_\_\_\_ Date: [Bank's Name, and Address of Issuing Branch or Office] [Name and Address of UNDP]

#### ADVANCE PAYMENT GUARANTEE No.:

We have been informed that [name of Company] (hereinafter called "the Contractor") has entered into Contract No. [reference number of the contract] dated [insert: date] with you, for the provision of [brief description of ITB requirements] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum of [amount in words] ([amount in figures]) is to be made against an advance payment guarantee.

At the request of the Contractor, we [name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[amount in words] ([amount in figures])*<sup>8</sup> upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor has used the advance payment for purposes other than toward providing the goods and related services under the Contract.

It is a condition for any claim and payment under this guarantee to be made that the advance payment referred to above must have been received by the Contractor on its account number and at [name

address of Bank].

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of certified monthly statements which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of the monthly payment certificate indicating that the Consultants have made full repayment of the amount of the advance payment, or on the \_\_\_\_\_\_day of \_\_\_\_\_\_, 2016 whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

#### [signature(s)]

Note: All italicized text is for indicative purposes only to assist in preparing this form and shall be deleted from the final product.

<sup>&</sup>lt;sup>7</sup> This Guarantee shall be required if the Contractor will require advanced payment of more than 20% of the contract amount, or if the absolute amount of the advanced payment required will exceed the amount of USD 30,000, or its equivalent if the price offer is not in USD, using the exchange rate stated in the Data Sheet. The Contractor's Bank must issue the Guarantee using the contents of this template.

<sup>&</sup>lt;sup>8</sup> The Guarantor Bank shall insert an amount representing the amount of the advanced payment and denominated either in the currency/ies of the advanced payment as specified in the Contract.

# SECTION 11: CONTRACT

# CONTRACT (DRAFT)



Date

Dear Sir/Madam,

Ref.: ITB UNDP HIST 030-16 Design and Construction of a new medical warehouse in Chipata, Zambia.

The United Nations Development Programme (hereinafter referred to as "UNDP"), wishes to engage [ENTER CONTRACTOR NAME] in order to perform Design and Construction of Design and construction of a new medical warehouse in Chipata, Zambia, in accordance with the following Contract:

#### 1. Contract Documents

- 1.1 This Contract is subject to the UNDP General Conditions for Civil Works, REV. Oct, 2000], attached hereto as Annex I(A). The provisions of such Annex shall control the interpretation of this Contract and in no way shall be deemed to have been derogated by the contents of this letter and any other Annexes, unless otherwise expressly stated under section 4 of this letter, entitled "Special Conditions".
- 1.2 The Contractor and UNDP also agree to be bound by the provisions contained in the following documents, which shall take precedence over one another in case of conflict in the following order:

a) this letter;

b) the Technical Specifications, Site Geotechnical Survey Report, Site Topographical Survey drawing and Preliminary Concept Drawings dated [Enter date] attached hereto as Annex II;

c) the Contractor's Tender dated [enter date] including the Priced Bill of Quantities, as clarified by the [MINUTES OF MEETING DATED] not attached hereto but known to and in the possession of both parties.

1.3 All the above shall form the Contract between the Contractor and UNDP, superseding the contents of any other negotiations and/or agreements, whether oral or in writing, pertaining to the subject of this Contract. The Contractors' address and contact details being:

[ENTER DETAILS OF CONTRACTOR'S ADDRESS]

2. <u>Obligations of the Contractor</u>

- 2.1 The Contractor shall commence work within 45 (fortyfive) days from the date on which he shall have been given access to the Site and received the notice to commence from the Project Manager, and shall perform and substantially complete the Works by[STATE AGREED COMPLETION DATE], in accordance with the Contract. The Contractor shall provide all materials, supplies, labour and other services necessary to that end.
- 2.2 The Contractor shall submit to the Project Manager the Programme of Work referred to in Clause 13 of the General Conditions by [STATED DATE].
- 2.3 The Contractor represents and warrants the accuracy of any information or data provided to UNDP for the purpose of entering into this Contract, as well as the quality of the Works foreseen under this Contract in accordance with the highest industrial and professional standards.

### 3. <u>Price and Payment</u>

- 3.1 In full consideration of the complete and satisfactory performance of the Works under this Contract, UNDP shall pay the Contractor a fixed contract price of [ENTER SUM in figures] United States Dollars [ENTER SUM IN LETTERS]
- 3.2 The price of this contract is fixed lump sum and not subject to any adjustments or revision because of price or currency fluctuation or the actual cost incurred by the contractor. The contractor shall have total responsibility on the performance of the Design and Build contract without exceeding the contract lump sum amount of USD [ENTER SUM in figures followed by SUM in letters]
- 3.3 Invoices shall be submitted by the Contractor to the Project Manager upon achievement of the corresponding milestones and for the following amounts: PROPOSED PAYMENT SCHEDULE

#### Table 1: Payment schedule

#### Draft figures (to be finalized and completed at time of award of contract)

		AMOUNT	EXPECTED
NI-	MILESTONE ACTIVITY		
No.		(USD)	PAYMENT DATE
	Advance Payment	10% max	
1		against bank	TBD
		guarantee	
2	Site establishment	5%	TBD
3	Acceptance of Construction	5%	TBD
3	Working Drawings	5%	ТБО
4	First agreed construction milestone	20%	TBD
5	Second agreed construction	20%	TBD
	milestone	20%	ТВО
6	Third agreed construction	20%	трр
	milestone	20%	TBD
7	Fourth agreed construction	10%	TBD

	milestone		
8	Practical completion (First Retention Release)	5%	TBD
9	Final completion (Release of last Retention)	5%	TBD
	Total Contract Amount	TBD	TBD

- 3.4 UNDP shall effect payment of the invoices after receipt of the certificate of payment issued by the Project Manager, approving the amount contained in the invoice. The Project Manager may make corrections to that amount, in which case UNDP may effect payment for the amount so corrected. The Project Manager may also withhold invoices if the work is not performed at any time in accordance with the terms of the Contract or if the necessary insurance policies or performance security are not valid and/or in order. The Project Manager shall process the invoices submitted by the Contractor within 15 days of their receipt.
- 3.5 Payments effected by UNDP to the Contractor shall be deemed neither to relieve the Contractor of its obligations under this Contract nor as acceptance by UNDP of the Contractor's performance of the Works.
- 3.6 Payment of the final invoice shall be effected by UNDP after issuance of the Certificate of Final Completion by the Project Manager.
- 4. <u>Special conditions</u>
- 4.1 The advance payment to be made upon signature of the contract by both parties is contingent upon receipt and acceptance by UNDP of a bank guarantee for the full amount of the advance payment issued by a Bank and in a form acceptable to UNDP.
- a) The amounts of the payments referred to under section 3.3 Table 1 Nr. 2 7 and 12 above shall be subject to a deduction of 10% (Ten percent) of the amount accepted for payment until the cumulative amount of the deductions so effected shall equal the amount of the advance payment, as stated on page 32, under ITB section 3, part A2 General: Payment Terms, item (b).

b) At the completion and acceptance of the works 50 (fifty) % of the retention deduction or 5 (five) % of the total contractual amount will be released. The remaining 5 (five) % will be released at the end of the defect liability period (one year after the practical completion of the works), as stated on page 32, under ITB section 3, part A2 – General: Payment Terms, item (c).

- 4.3 The Performance guarantee referred to in Clause 10 of the General Conditions shall be submitted by the Contractor for an amount of 10% (Ten percent) of the Contract Amount.
- 4.4 The Contractor may submit invoices for materials and plant stored at the Site, provided they are necessary and adequate for the performance of the Works and

they are protected from weather conditions and duly insured as per the instructions of the Project Manager.

- 4.5 The liability insurance referred to in Clause 23 of the General Conditions shall be taken out by the Contractor for an amount equivalent to 300% (hundred percent) of the contract sum.
- 4.6 According to Clause 45 of the General Conditions, the liquidated damages for delay shall be USD500.00 (Five Hundred Dollars) /day of delay, up to a maximum of 10% of the final price of the Contract.
- 4.7 The General Conditions of Contract for Civil Works are supplemented with the Special Conditions of Contract, attached hereto as Annex 1(B) (the "Special Conditions"). For the avoidance of doubt, and unless expressly stated otherwise, the Special Conditions shall prevail in case of any inconsistency over the General Conditions.

#### 5. <u>Submission of invoices</u>

- 5.1 One original and one copy of every invoice shall be submitted by mail by the Contractor for each payment under the Contract to the Project Manager's address specified in clause 8.2.
- 5.2 Invoices submitted by fax shall not be accepted by UNDP.
- 6. <u>Time and manner of payment</u>
- 6.1 Invoices shall be paid within fourteen (14) days of the date of their receipt and acceptance by UNDP.
- 6.2 All payments shall be made by UNDP to the following Bank account of the Contractor:

[ENTER BANK NAME, ADDRESS AND BANK ACCOUNT]

- 7. <u>Modifications</u>
- 7.1 Any modification to this Contract shall require an amendment in writing between both parties duly signed by the authorized representatives of the Contractor and UNDP.
- 8. <u>Notifications</u>
- 8.1 For the purpose of notifications under the Contract, the addresses of UNDP and the Contractor are as follows:

For the UNDP: The UNDP Country Director, United Nations Development Programme UN House, 9350, Alick Nkhata Road, P.O. Box 31966, Lusaka, Zambia. Ref. GF HIST 27-2016 Tel: (260-211) 386200 E-mail: registry.zm.undp.org

For the Contractor: [ENTER CONTRACTOR NAME AND CONTACT DETAILS]

8.2 For the purposes of communications with the Project Manager, the address of the Project Manager shall be as follows:

[ENTER DETAILS OF PROJECT MANAGER]

If the above terms and conditions meet with your agreement as typed in this letter and in the Contract Documents, please initial every page of this letter and its attachments and return to this office one original of this Contract, duly signed and dated.

Yours sincerely,

#### Martim Faria e Maya, Country Director

For United Nations Development Programme

Agreed and Accepted:

Signature \_\_\_\_\_

Name Martim Faria e Maya Title UNDP Country Director Date

Witnessed by:

Signature \_\_\_\_\_

Name Kazuhisa Yokomizo Title UNDP GF Acting Project Manager Date

# For [ENTER CONTRACTOR NAME]

# Agreed and Accepted:

Signature \_\_\_\_\_

Name Title Date

Witnessed by:

Signature \_\_\_\_\_

Name Title Date

## ANNEX I (A)

## UNDP GENERAL CONDITIONS OF CONTRACT FOR CIVIL WORKS

Please note that a full set of UNDP General Conditions of contract for civil works is available from the following internet Link

http://procurement-notices.undp.org/view\_file.cfm?doc\_id=17648.

### ANNEX 1(B)

## Special Conditions of Contract

A. Amendments to the General Conditions of Contract for Civil Works, attached as Annex 1(A) hereto

Clause 1 (setting forth definitions) on page 3 is hereby amended to read as follows:

(b) "Design and Build Contractor" or "Contractor" means the entity whose tender has been accepted and with whom the Contract has been entered into.

(c) "Project Manager" means the person whose services have been engaged by UNDP to administer the contract as provided therein, as will be notified by writing to the Contractor.

(e) "The Works" means the design, actual construction and supervision to be executed and completed under the contract.

Clause 1 (setting forth definitions) on page 3 is hereby supplemented with the following terms:

(i)Architect, Engineer and Quantity Surveyor: A duly licensed individual or entity designated by design and Build Contractor to perform or furnish specified Design Professional Services in connection with the Work.

(ii) Contract Documents: The documents as are listed under Agreement Declarations, Section 1 of the Agreement.

(iii) Contract Time: The time stated in the Agreement to achieve Substantial completion, and to finally complete the Works so that it is ready for final payment in accordance with article 46.0f these General Conditions.

(iv) Design Criteria Package: The drawings and specifications and/or other graphic or written materials, criteria and information concerning the Employer's requirements for the Project, such as design objective and constraints, space, capacity and performance requirements, flexibility and expandability, which show or describe the character and scope of, or relate to, the Work to be performed or furnished and which have been prepared by or for the Employer.

(v) Laws and Regulations: Any and all applicable laws rules, regulations, ordinances, codes and orders or any and all governmental bodies, agencies, authorities and courts having jurisdiction.

(vi) Drawings: Those portions or the Contract Documents prepared by or for the Design and Builder Contractor and approved by Employer consisting of drawings, diagrams, illustrations, schedules and other data which show the scope, extent, and character of the work.

(vii) Specifications: Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the construction and certain administrative details applicable thereto.

(viii) Submittal: A written or graphic document prepared by or for Design and Build Contractor which is required by the Contract Documents to be submitted to the Employer by the Design and Build Contractor. Submittal may include, but are not necessarily limited to Drawings, Specifications, Bill of Quantities, Progress Schedules, Shop Drawings, Samples, Cash Flow Projections, and Schedules of Values. Submittals other than Drawings and Specifications are not Contract Documents.

(ix) Substantial Completion: The time at which the construction has progressed and the Work has been completed to the point where it sufficiently complete, in accordance with the Contract Documents, so that the Construction can be effectively and efficiently utilized for the purpose of which it is intended without any material impairment of function. The terms substantially Completion may be used in the Contract Document in reference to a particular portion of the construction in which case the term will be applied as defined above only to that portion of the Construction; otherwise it shall be deemed to refer to the total Construction.

(x) Special Conditions: Annex 1(B) of the Contract Documents which amends or supplements the General Conditions of Contract.

Clause 8.1 (regarding custody of drawings) on page 8 is hereby amended to read as follows:

Two (2) sets of hardcopy and a soft copy of approved drawings shall be submitted by the contractor to the Employer and remain in the sole custody of the Employer but two(2) hard copies thereof shall be retained by the contractor. The Contractor shall provide and make at his own expense any further copies require by him. At completion of the works, the Contractor shall return all drawings generated under the contract.

Clause 8.2 (regarding copies of drawings) on page 8 is hereby amended to read as follows:

One copy of the approved Drawings submitted by the Contractor as aforesaid shall be kept by the Contractor on site and the same shall at all reasonable times be available for inspection and use by the Project Manager and any other person authorized in writing by the Project Manager.

Clause 56 (tax exemption) on page 29 is hereby replaced with the following text:

Section 7 of the Convention on the Privileges and Immunities of the United Nations provides, inter alia, that the United Nations, including its subsidiary organs, is exempt from all direct taxes, except charges for public utility services, and is exempt from customs duties and charges of a similar nature in respect of articles imported or exported for its official use. In the event any governmental authority refuses to recognize the United Nations exemption from such taxes, duties or charges, the Contractor shall immediately consult with the UNDP to determine a mutually acceptable procedure.

Accordingly, the Contractor authorizes UNDP to deduct from the Contractor's invoice any amount representing such taxes, duties or charges, unless the Contractor has consulted with the UNDP before the payment thereof and the UNDP has, in each instance, specifically authorized the Contractor to pay such taxes, duties or charges under protest. In that event, the Contractor shall provide the UNDP with written evidence that payment of such taxes, duties or charges has been made and appropriately authorized.

Provisions Supplementing the General Conditions of Contract for Civil Works, attached as Annex 1(A) hereto

Design by the Contractor. General Design

Based upon the Employer's Project requirements, as set forth in the Design Criteria Package prepared by the Employer, the Design and Build Contractor shall prepare Design Development documents to finalize the character of the Project as to structural, mechanical and electrical systems, materials, and other appropriate essential items of the Project. From approved Design Development Documents, the Design and Build Contractor will prepare work Drawings and Specifications setting forth in detail the requirements for the construction of the Project, and based upon codes, laws, or regulations which have been enacted at the time of their preparation.

These Development Documents shall be the basis for the design and construction of the Project.

The Contractor shall carry out, and be responsible for the design of the Works. The Design shall be prepared by qualified designers within the Contractor Team, who are consultants registered with the relevant Statutory Bodies in Zambia.

Each Design Member of Contractor shall assign a sufficient number of its experts, to the Project so that the provisions of this Contract are complied with and the Design Services are carried out in accordance with the subcontract Services Agreement, which shall be submitted to the Project Manager for approval.

The Contractor warrants that its designers and design Subcontractors have the experience and capability necessary for the design. The Contractor undertakes that the designers shall be available to attend discussions with the Employer at all reasonable times, until the expiry date of the relevant Defects Notifications Period.

The Employer shall scrutinize the Contractor's design criteria and procedures and the items of reference within the period of fourteen (14) days before the Commencement Date, the Employer shall give notice of any error, fault or other defect found in the Contractor's design criteria and procedures on the reference items.

A detailed Bill of Quantities shall be prepared and priced by the contractor, whose final price shall be as indicated in the price schedule. Any errors and/ or omissions in the Bill of Quantities shall not absorb the contractor from their overall design and works execution liability and responsibility and shall not be regarded as variations to the Employer's Account.

h) The contractor unless otherwise provided in the contract, shall:

In respect of any defects or insufficiencies in the design of the works, be liable to rectify such defects or insufficiencies at their own cost and also be liable to compensate costs or losses incurred by the employer arising from a defective design on the works.

In all circumstances, obliged to ensure that the final approved design is fit for the purpose intended in the contract and warrants design defect liability on the works after practical project completion.

#### 2. Documentation Necessary to Execute the Works

The Contractor's Documents shall comprise the technical documents required to satisfy all regulatory approvals, including the Bill of Quantities. The Contractor's Documents shall be written in the language for communications defined in the General Conditions of Contract (Clause 64).

The Contractor shall prepare all the Documents, necessary to execute the Works and pay all related statutory fees as applicable under the local Laws. The Employer's Project

Manager shall have the right to inspect the preparation of all these documents, wherever, they are being prepared. When complete the documents shall be submitted to the Employer for their approval.

For each part of the Works, and except to the extent that the prior approval or consent of the Employer shall have been obtained.

In the case of the Contractor's Document which has been submitted for Employer's approval within five days, the Employer shall give notice to the Contractor that the Contractor's Document is approved, with or without comments, or that it fails (to the extent stated) to comply with the Contract.

Execution of such part of the Works shall not commence until the Employer has approved the Contractor's Document.

If the Employer instructs that further Documents from the Contractor are required for approval, the Contractor shall prepare them promptly. Any such approval or consent, or any review shall not relieve the Contractor from any obligations or responsibility.

The Contractor undertakes that the design, the execution and the completed Works will be in accordance with:

The Laws in the Country of Zambia, and

The Contract Documents, as may be amended by the Parties in writing.

If errors, omissions, ambiguities, inconsistencies, inadequacies or other defects are found in the Contractor's Documents, the Documents and the Works shall be corrected at the Contractor's cost, notwithstanding any consent or approval under this Clause.

#### Execution of the Works

Pre-construction Meeting. Prior to the commencement of Work, the Design and Build Contractor shall attend a preconstruction conference with the Employer to discuss the progress Schedule, procedures for finalizing and handling working drawings and other submittals, and for processing Applications for Payment, and to establish a working understanding among the parties as to the contract deliverables.

Execution of actual building works shall not commence until after all preliminary site establishment requirements, a detailed Safety ,Health and Welfare plan, including scaffolding/ support systems plans are approved, and performance and insurance Bonds are obtained and submitted in line with the execution model of the bidding document.

The Contractor shall submit the Quality Assurance plan within fourteen (14) days of the Start Date, for approval by the Employer's Representative, and operations on site shall not commence until the scheme is approved.

#### 4. Contractor's Supervision of the Works

The Contractor shall with due care and diligence design, execute and complete the Works and remedy any defects therein in accordance with the provisions of the Contract.

The Contractor shall establish and implement a scheme of Quality Assurance, including all supervision and testing procedures, records and all other things required to ensure that the Works are in accordance with provisions of the contract.

#### 5. Design Copyright, Patents and Other Proprietary Rights

Except as it otherwise expressly provided in writing in the Contract, UNDP shall be entitled to all intellectual property and other proprietary rights including, but not limited to, patents, copyrights, and trademarks, with regard to products, process, inventions, ideas, know-how, or documents and other materials which the Contractor has developed or the UNDP under the Contract and which bear a direct relation to or are produced or prepared or collected in consequence of, or during the course of, the performance of the Contract, and the Contractor acknowledges and agrees that such products, documents and other materials constitute works made for hire for the UNDP. The intellectual property entitlement does not include repetition of the design other than on the site or sites to which this agreement relates, unless agreed and consented to in writing by UNDP and the Contractor.

To the extent that any such intellectual property or other proprietary rights consist of any intellectual property or other proprietary rights of the Contractor: (i) that pre-existed the performance by the Contractor of its obligations under the Contract, or (ii) that the Contractor may develop or acquire, or may have developed or acquired, independently of the performance of its obligations under the contract, UNDP does not and shall not claim any ownership interest thereto, and the Contractor grants to the UNDP a perpetual license to use intellectual property or other proprietary rights solely for the purpose of and in accordance with the requirements of the contract.

At the request of the UNDP, the Contractor shall take all necessary steps, execute all necessary documents and generally assist in securing such proprietary rights and transferring or licensing them to the UNDP incompliance with the requirements of the applicable law and of the Contract.

Subject to the foregoing provisions, all maps, drawings, photographs, mosaics, plans, reports, Bills of Quantities, recommendations, documents, and all other details complied by or received by the Contractor under the Contract shall be the property of the UNDP, shall be made available for use or inspection by the UNDP at reasonable times and in reasonable places, shall be treated as confidential, and shall be delivered only to UNDP authorized officials on completion of work under the Contract.

### 6. Professional Liability / Malpractice/ Errors or Omissions

In addition to the insurance and liability provisions in the General Conditions of Contract for Civil Works, the Design and Build Contractor shall purchase and maintain Professional Liability or malpractice or errors or omissions insurance coverage with a minimum limit equal to 12.50% of the estimated construction contract price for the project. Said coverage shall be continuously maintained and in effect for a period of not less than two (2) years from the effective date of this Agreement. The policy limit of liability shall not include legal fees and other defence costs.

If at any time during the aforementioned policy period there should be a cancellation, non-renewal, or lapse in coverage, professional liability coverage shall be extended for the remainder of the two year period with a supplemental extended reporting period (SERP) endorsement to take effect upon expiration of the policy period referenced above. The limits of liability applicable to the SERP coverage shall be equal to the limits of liability applicable to the policy reference above and to which the endorsement attaches.

#### 7. Time Extensions

Should Design and Build Contractor be obstructed or delayed in the prosecution of or completion of the Work as a result of unforeseeable causes beyond the control of Design and Build Firm, and not due to its fault or neglect, including but not restricted to acts of

God or of the public enemy, acts of government, fires, floods, epidemics, quarantine regulations, strikes or lockouts, Design and Build Contractor shall notify the Employer in writing within forty-eight (48) hours after the commencement of such delay, stating the cause of causes thereof, or be deemed to have waived any right which Design and Build Contractor may have had to request a time extension.

No interruption, interference, inefficiency, suspension or delay in the commencement or progress of the Work from any cause whatever in whole or in part, shall relieve Design and Build Contractor of its duty to perform or give rise to any right to damage or additional compensation from Employer. The Design and Build Contractor expressly acknowledges and agrees that it shall receive no compensation for delay. The Design and Build Contractor's sole remedy, if any, against the Employer will be the right to seek an extension to the Contract Time; provided, however, the granting of any such time extension shall not be a condition precedent to the aforementioned.

#### 8. Subcontractor Insurance Requirements and Renewals

The Design and Build Contractor shall require each of its subcontractors to procure and maintain until the completion of the subcontractor's work, insurance of the types and to the limits specified in Clause 23 unless such insurance requirements for the subcontractor is expressly waived in writing by the Employer. All liability insurance policies, other than professional liability, worker's compensation and employer's liability policies, obtained by the Design and Build Contractor to meet the requirements of the Contract Documents shall name Employer as an additional insured and shall contain severability of interest provisions. The Employer shall also be designated as certificate holder with the address P.O. Box 31966, Lusaka. If any insurance provided pursuant to the Contract Document expires prior to the completion of the Work, renewal Certificate of insurance and, if requested by Employer, certified, true copies of the renewal policies, shall be furnished by the Design and Build contractor within thirty (30) days prior to the date of expiration. Upon expiration of an insurance policy term during the course of work under the contract, succeeding insurance policies shall be consecutive to the expiring policy.

#### 9. Authority to Modify

Pursuant to the Financial Regulations and Rules of UNDP, only the UNDP Authorized Official possesses the authority to agree on behalf of UNDP to any modification of or change in this Agreement, to a waiver of any of its provisions or to any additional contractual relationship of any kind with the Contractor. Accordingly, no modification or change in this Contract shall be valid and enforceable against UNDP unless provided by an amendment to this Agreement signed by the Contractor and jointly by the UNDP Authorized Official.

# ANNEX II

 a) Technical Specifications (ITB), b) Modified Technical Specifications (Pre-contract Negotiations) (If/when required), c) Site Geotechnical Survey Report, d) Site Topographical Survey drawing and e) Preliminary Concept Drawings.

Annex II a)

The original ITB specifications are attached as a separate document for easy reference.

Annex II b) Agreement for Technical specification modifications proposed by the bidder against those stated in the ITB.

Recommendation:

A: Noted that A means that the proposed alteration is equivalent or better than the specifications in the ITB and as so accepted.

B: Contractor to comply with original specifications in the ITB.

Annex II c) Geographical Survey site location Chipata medical warehouse

The original Geographical Survey site location Chipata medical warehouse is attached as a separate document for easy reference.

Annex II d) Topographical Survey site location Chipata medical warehouse

The original Topographical Survey Map for the Chipata warehouse is attached as a separate document.

• MSL Chipata Hub Land Site Plan

### SECTION 12: PRELIMINARY CONCEPT DRAWINGS

The following drawings, design / sketches are available as separate attachments to this ITB and constitute an integral part of it;

Details of air-conditioning package unit

- CHI 001 Rev D -Site Plan
- CHI 002 Rev D Building -•
- Section CHI 003 Rev A -•
- -CHI 004 Rev A •
- **Dock Leveller** CHI 005 Rev A -Rack Loading ٠
- -**Building Elevation** CHI 006 Rev A •
- CHI 2016 01 Rev D Auto Cad File -•
- 01

•

- -1AE1611047A
  - -Air-conditioning design
- Wiring diagram •

# SECTION 13: SITE GEOTECHNICAL REPORT

# SECTION 14: Other relevant attachments

# SECTION 15: SAFETY, HEALTH AND WELFARE ON CONSTRUCTION SITES – MANUAL

(Refer to the "Safety Manual" which can be accessed from at: http://www.ilo.org/safework/info/instr/WCMS\_110237/lang--en/index.htm

Contractor should not submit a copy of the Safety Manual along with his/her bid

Only Successful bidder, however, shall print & provide UNDP with a hardcopy of the **Safety Manual** duly acknowledged (signed/stamped) upon contract signature