

## Request for Proposals (RFP)

### SUPPLY, DELIVERY AND INSTALLATION OF STORAGE SYSTEMS, CONVEYOR SYSTEMS, FENCING AND GATES, PICK TROLLEYS, DOCK LEVELLERS, HVAC SYSTEMS AND FIRE PROTECTION SYSTEMS FOR THE MEDICAL STORES WAREHOUSE IN LUANSHYA DISTRICT IN ZAMBIA

**RFP Number:** RFP-ZMB-LUANSHYA-2018

**Description:** Medical Stores Ltd (MSL) is currently constructing a new warehouse in Luanshya District in Zambia. The warehouse will cater for the distribution of pharmaceutical products, for which there are requirements for Narrow Aisle Storage Structures, Conveyor Picking system, small parts binning, and Ancillary Products described herein.

This RFP is for Supply, Delivery and Installation of stacked pallet racking and shelving system, Tote conveyor systems, internal zoning fencing and gates, dock levelers, pick trolleys and design, manufacture, supply and installation of HVAC and Fire fighting systems

**For:** GHSC-PSM/Zambia  
**Contracting Entity:** Chemonics International, Inc.

**Funded by:**RND United States Agency for International Development (USAID), Contract No. AID- OAA-I-15-00004; Task Order 01 Contract No. AID-OAA-TO-15-00007; Task Order 02 Contract No. AID-OAA-TO-15-00009; and Task Order 03 Contract No. AID-OAA-TO-15-00010.

**Place of Performance:** Luanshya District, Zambia

**Release Date:** May 31, 2018

**RFP Issue:** No. 1

**Questions Due:** June 12, 2018

**Mandatory Site Visit and Offerors Conference:** June 14, 2018

**Proposals Due:** June 28, 2018

Chemonics International Inc, (Chemonics) implementing the **GHSC-PSM/Zambia**, is soliciting proposals for the supply of services described herein. **GHSC-PSM/Zambia** is an official project of the United States Agency for International Development (**USAID**) under Contract No. AID-OAA-I-15-00004; Task Order 01 Contract No. AID-OAA-TO-15-00007; Task Order 02 Contract F. AID-OAA-TO-15-00009; and Task Order 03 Contract No. AID-OAA-TO-15-00010.

Please submit your proposal for the services described herein in accordance with the instructions to Offerors and terms and conditions of this RFP. This RFP includes the following sections and attachments:

1. INSTRUCTIONS TO OFFERORS
2. SCOPE OF WORK

ATTACHMENT A	LETTER OF TRANSMITTAL
ATTACHMENT B	REQUIRED CERTIFICATIONS
ATTACHMENT C	EXAMPLE BANK GUARANTEE FOR PERFORMANCE SECURITY
ATTACHMENT D	SCHEDULE OF VALUES
ATTACHMENT E	WAREHOUSE PLAN, SECTIONS FOR RACKING, CONVEYOR AND FENCING – LUANSHYA WAREHOUSE COMPLEX
ATTACHMENT F	FUNCTIONAL AND TECHNICAL REQUIREMENTS FOR STORAGE SYSTEMS
ATTACHMENT G	FUNCTIONAL AND TECHNICAL REQUIREMENTS – TOTE CONVEYOR SYSTEMS
ATTACHMENT H	FUNCTIONAL AND TECHNICAL SPECIFICATIONS – FENCING AND GATES
ATTACHMENT I	FUNCTIONAL AND TECHNICAL SPECIFICATIONS – DOCK LEVELLERS
ATTACHMENT J	FUNCTIONAL AND TECHNICAL SPECIFICATIONS – HVAC SYSTEMS
ATTACHMENT K	FUNCTIONAL AND TECHNICAL SPECIFICATIONS – FIRE FIGHTING SYSTEMS
ATTACHMENT L	ENVIRONMENTAL MITIGATION & MONITORING PLAN (EMMP)
ATTACHMENT M	DETAILED DESIGN DRAWINGS APPROVED FOR CONSTRUCTION

**ACRONYMS**

AIDAR	Agency for International Development Regulations
BOQ	Bill of Quantities
CFR	Code of Federal Regulations
CO	USAID Contracting Officer
COP	Chief of Party
COR	USAID Contracting Officer Representative
FAR	Federal Acquisition Regulations
MSL	Medical Stores Limited
RFP	Request for Proposals
SOW	Statement of Work
USAID	United States Agency for International Development

**SECTION 1: INSTRUCTIONS TO OFFERORS**

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**1.1 Introduction**

Chemonics International as Prime Contractor for GHSC-PSM/Zambia requests proposals for the supply and installation of pallet racking and shelving systems, supply and installation of Tote conveyor systems and all other items described in this RFP for a Medical Stores Limited (MSL) warehouse currently under construction in Luanshya District, Copperbelt Province of Zambia.

**1.2. Offer Deadline**

Offers must be received in hard and soft copy no later than **17:00 Central Africa Time (CAT) on June 28, 2018** at the following address:

**Hard Copies:**

**Chemonics International Inc.**  
Plot 2473, 1st Floor Metropolitan House  
Off Kelvin Siwale Road  
Mass Media  
Lusaka, Zambia  
Attention: Luckson Sichamba

**Soft Copies:**

[PSMZambiaProcurement@gmail.com](mailto:PSMZambiaProcurement@gmail.com)

The RFP number must be included on the front of the envelope for the hard copy submission and in the subject line of your email for the electronic submission. Late offers will be considered at the discretion of the Chemonics evaluation committee.

**1.3 Protocol for Submission of Offers and Required Documents**

Offerors are responsible for ensuring that their offers are received in accordance with the instructions stated herein.

All offers must be prepared in English. Any resultant subcontract will be issued in English and the English language will govern. All proposals must be submitted in two volumes, consisting of:

- Volume 1: Technical Volume (See Section 1.6)
- Volume 2: Cost Volume (see Section 1.7)

These volumes must be submitted in separate, sealed envelopes. Three (3) hard copies—one original and two copies—of each volume must be included in each envelope. Offerors are also required to submit one (1) electronic version of each volume on a CD-ROM. Each envelope must be clearly marked with the RFP number #RFP-ZMB-LUANSHYA-2018, the complete legal name and contact information of the offeror's organization, and the delivery address found below.

Upon delivery, applicants will be issued a stamped receipt confirming timely submission.

Each offeror may submit only one proposal, either individually or as a partner in a joint venture. An offeror who submits or participates in more than one proposal shall cause all the proposals with that offeror's participation to be disqualified.

#### **1.4 Questions and Clarifications**

All questions and/or clarifications regarding this RFP must be submitted via email to [PSMZambiaProcurement@gmail.com](mailto:PSMZambiaProcurement@gmail.com) no later than no later than **17:00 CAT on June 12, 2018**. All correspondence and/or inquiries regarding this solicitation must reference the RFP number in the subject line. No phone calls or in-person inquiries will be entertained; all questions and inquiries must be in writing.

Questions and requests for clarification—and the responses thereto—that Chemonics believes may be of interest to other Offerors will be circulated to all RFP recipients who have indicated an interest in bidding.

Only the written answers will be considered official and carry weight in the RFP process and subsequent evaluation. Any verbal information received from a Chemonics or **GHSC-PSM/Zambia** employee or other entity shall not be considered as an official response to any questions regarding this RFP.

#### **1.5 Mandatory Site Visit and Bidder's Conference**

In order to provide offerors an opportunity to raise questions and to learn more about the site and the scope of work described herein. A mandatory site visit to familiarize bidders with the place of performance will be held at the MSL Luanshya Warehouse, Off Ndola-Kitwe Highway on **June 14, 2018 at 10:00 CAT**.

The site visit is mandatory, and Chemonics will accept proposals in response to this RFP only from those offerors who attend the site visit.

Please confirm attendance via email to Barry Chovitz, [PSMZambiaProcurement@gmail.com](mailto:PSMZambiaProcurement@gmail.com), no later than **17:00 CAT on June 13, 2018**. The RFP number must be included in the subject line of your email. This confirmation should include the full name and contact information of all participants.

Participation in the site visits and the bidder's conference are the responsibility of the offerors. Chemonics will not reimburse offerors for any costs associated with the site visit.

A pre-bid conference shall be held at the Medical Stores Ltd offices in Ndola on June 14, 2018 at 14:00 CAT. The pre-bid conference will provide prospective Offerors an opportunity to familiarize themselves with the needs of the stores. Attendance at the Offerors' Conference is not mandatory but Offerors are encouraged to participate.

The pre-bid conference minutes, and any further enquiries received on or before the deadline stated in the RFP, will be documented and posted on the designated Chemonics website. No

inquiries will be accepted after 5 working days prior to the deadline for submission of bids stated in the RFP.

## **1.6 Technical Volume**

The Technical Volume should describe in detail how the offeror intends to carry out the requirements specified for the works and other services as described in this RFP. The technical volume should demonstrate a clear understanding of the work to be undertaken and the responsibilities of all parties involved. The technical volume should be organized by the evaluation criteria listed in Section 1.13. The offeror should include details on personnel, equipment, and who will be used to carry out the required activities. The following documents must be included in the Technical Volume (failure to submit all of the following documents may result in disqualification from award):

- Completed Letter of Transmittal (see Attachment A)
- Completed Required Certifications (see Attachment B)
- Project Methodology (see below)
- Environmental Compliance plan (see below)
- Design documents and technical specifications
- Draft Work Plan (see below)
- CVs of Key Personnel (see below)
- Information on Past Performance (see below)
- Copy of official license of legal registration in Zambia

*Project Methodology and Technical Solution:* Using the information contained in this RFP, the offeror should describe its approach for executing racking and shelving supply and installation of Tote conveyor systems (design review, procurement & temporary storage, fabrication, and installation) and technical and performance information for the supply of other miscellaneous items as described in this RFP, in as much detail as necessary, for a successful outcome. The methodology and technical solution proposed by the offeror shall meet recognized international industry standards, all relevant Zambian Standards and be cost efficient while taking into consideration the project's location and availability of materials and equipment. The methodology section should also include an outline of the offeror's approach to Quality Control and Quality Assurance (with description of testing and inspections), Safety Plan as well as compliance with the USAID/Zambia Environmental Regulations. The methodology section shall include a detailed schedule demonstrating that all works described in this RFP shall be complete and accepted by Chemonics within a time frame of 4 months from the date of subcontract execution.

*Design Documents and Technical Specifications:* The offeror is directed to Section 2 Scope of Work of this RFP and the relevant Attachments for design documents and specifications.

*Environmental Compliance:* The offeror must provide an environmental implementation plan that complies with the provisions of the USAID-approved Environmental Mitigation & Monitoring Plan (EMMP) for the GHSC-PSM global project which is shown in Attachment K. (This attachment is available as a link on the Chemonics website). The Offeror's environmental implementation plan shall include the following information:

- Introduction
  - Project background
  - Description of product
- Implementation strategy
  - Installation specification
    - Narrative including the following:
      - Delivery of product
      - Product installation procedures
      - Product commissioning and handover
    - Solid waste
      - Narrative including the following:
        - Packaging and storage
        - Transport
        - Disposal method
    - Waste –water mitigation
      - Narrative including the following:
        - Packaging and storage
        - Transport
        - Disposal method
  - Implementation mitigation and monitoring plan
    - A table that includes: activity, potential impact, mitigation measure, responsible, monitoring indicators, frequency of monitoring, monitoring method
- Health, safety and accident prevention plan
  - A table that includes: activity/issue, potential/accident impact, preventive/specific measure, responsible, timing, monitoring method
- Personnel training
  - Narrative including the following:
    - Accident prevention
    - Tools and machinery safety
    - Fire safety
    - Emergency preparedness
    - Personal protective equipment
- Annex:
  - Country operating licenses
    - Transport
    - Electric
    - Water and sewage / plumbing
    - Waste disposal
    - Insurance
  - Product specifications/engineering schematics
  - Copy of all monitoring tools/materials

*Key Personnel:* The offeror should demonstrate that professional staff with extensive experience is available to oversee and carry out the scope of work. The professional staff deemed as Key Personnel shall be fully available throughout the duration of the subcontract and shall not be replaced without prior written consent of Chemonics. The Technical Volume should include CVs for the following required key personnel:

- Project Manager
- Certified Professional installer of conveyor systems
- Certified Professional Installer-Racking and Shelving
- Certified Professional Engineers – HVAC and Electrical
- Certified Professional Engineers – Mechanical (specialized in fire fighting systems)
- Quality Assurance Specialist.

The Technical Volume should also include an organizational chart with the roles and availability of each proposed staff for this project. It is expected the awardee would work with local Zambian professionals and certified engineers to ensure consistency with applicable local regulations.

*Past Performance:* The Technical Volume should include information on past performance, briefly describing at least **one recent contract of similar scope and duration done in the last five years**. It is not the intent of this RFP to solicit an overly long response but it is important that the offeror's experience/expertise be adequately described. The information supplied must include the legal name and address of the organization for which services were performed, a description of the work performed, the duration of the work and size (in USD) of the contract, a description of problems encountered in the performance of the work and actions taken to resolve them, and the contact information (current telephone number and email address) of a responsible representative of the contracting organization. Chemonics may use this information to contact representatives on prior contracts to obtain feedback on performance. Failure to submit complete and accurate information regarding previous similar or related contracts or subcontracts is grounds for disqualification from award. Any offer not including this information will be accepted at the discretion of the evaluation committee.

There is a 20 page limit to the Technical Volume. This page limit does not include the following documents:

- Completed Letter of Transmittal (see Attachment A)
- Completed Required Certifications (see Attachment B)
- Environmental Compliance Plan
- CVs of key personnel
- Draft work plan
- Sketches, catalogue cut sheets and/or drawings

### 1.7 **Cost Volume**

The Cost Volume is used to establish the best value among proposals and serves as a basis of negotiation for the signing of the subcontract. The Cost Volume must include a detailed budget as well as a budget narrative which explains the basis for the estimate of each budget element. Supporting information should be provided in sufficient detail to allow a complete analysis of each cost element. The Cost Volume shall also include the costs for any materials, survey, and geotechnical testing and analysis required to complete the development of the design documents. Taxes or fees are not to be added later. Offers must show level of effort, materials, quantities, and total price. All items, services, etc. must be clearly labeled and included in the total price. Quotations must be a firm fixed-price, expressed in USD. All Offerorsshall use the attached Schedule of Values (Attachment D) with itemized cost detail supporting schedules as the basis for the preparation of the detailed budget. The completed Schedule of Values and supporting schedules shall be submitted with the Cost Volume.



**The anticipated contract type for this procurement will be a firm fixed-priced subcontract.** Please note that the inclusion of separate line items for any indirect costs or fees will not be permitted. As such, it is expected that each offeror will provide comprehensive total values for each component inclusive of any/all indirects and fees.

**1.8 Performance Guarantee**

Within 7 (seven) calendar days after execution of this subcontract, the successful offeror shall deliver to Chemonics a performance guarantee in the amount of **10%** of the subcontract amount in the form of an official bank guarantee or a check. The bank guarantee or check shall be issued by a reputable bank licensed to do business in Zambia. The format of the bank guarantee shall be as indicated in Attachment C. This Guarantee shall be valid until a date 28 days from the date of issue of the Certificate of Substantial Completion.

**1.9 Authorized USAID Geographic Code**

All goods and services offered under this order must meet **USAID Geographic Code 935** (Special Free World) requirements detailed in the Code of Federal Regulations (CFR), 22 CFR §228 and the Automated Directives System (ADS), ADS Chapter 260.

No items, items with components from, or related services may be offered from the following countries: Cuba, Iran, North Korea, and Syria. Related services include incidental services pertaining to any/all aspects of this subcontract (including transportation, fuel, lodging, meals, and communications expenses).

**1.10 Eligibility of Offerors**

This RFP is open to all qualified Offerors who submit a proposal that meets the requirements in accordance to this RFP.

In accordance with Federal Acquisition Regulation Clause 52.209-6, "Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment," (SEP 2006), all Offerors must certify that they are not debarred, suspended, or proposed for debarment. Chemonics will not award a subcontract to any firm or firms' principals who are debarred, suspended, or proposed for debarment, or who proposes to do business with firms or firms' principals who are debarred, suspended, or proposed for debarment, in the performance of the requirement of this activity.

**1.11 Validity Period**

Offers must remain valid for at least ninety (90) calendar days after the offer deadline.

**1.12 Negotiations**

Best offer quotations are requested. It is anticipated that awards will be made solely on the basis of these original quotations. However, Chemonics reserves the right to conduct negotiations and/or request clarifications prior to awarding a subcontract. Chemonics reserves the right to make multiple awards if it is in the best interests of the **GHSC-PSM/Zambia** program.

**1.13 Basis for Award**

Chemonics intends to award a subcontract resulting from this solicitation to the responsible offeror whose proposal represents the best value to the **GHSC-PSM/Zambia** program after evaluation of the following criteria, with the weights applied accordingly:

- **Proposed Methodology and Technical Solution** **35 Points**  
The offeror shall be evaluated on the overall understanding of the scope of work. Specifically, the offeror shall be evaluated on how realistic the proposed technical solution is in completing projects on schedule and meeting delivery guidelines. This technical solution shall integrate design methodology, procurement process, assembly methods, techniques, project scheduling, and project management to deliver the required scope of work with the highest construction quality. Special consideration shall be given to the offeror's ingenuity, creativity, and use of sound engineering principles in its proposed solutions. The offeror's proposal shall include a draft work plan providing a step by step process for executing every phase of the work in the most efficient manner.
- **Key Personnel** **25 Points**  
The offeror's key personnel shall be evaluated on the experience of the team members with similar projects. In particular, special consideration will be given to a well experienced Project Manager and the following:
 
  - Certified Professional installer of conveyor systems
  - Certified Professional Installer-Racking and Shelving
  - Quality Assurance Specialist
- **Past Performance and Experience** **25 Points**  
The offeror shall be evaluated on the experience the firm has with related projects of similar scope and size. In particular, special consideration shall be given to firms having executed such projects in Zambia or nearby countries. The references listed by the offeror shall be contacted to complete a survey.
- **Proposed Schedule of Implementation** **15 Points**  
Due to the nature of this project, time is of the essence. All works described in this RFP must be complete and accepted by within 3-4 months from start date.. Special consideration shall be given to the Offerors with an aggressive but realistic timeline for completing each phase of the scope of work as well as the overall implementation plan that meets the desired goals stated herein. A detailed draft work plan shall be included in the offeror's technical volume.

Once the evaluation of offers is completed based on the above criteria, the Cost Volume will be used in conducting the best value analysis. The combined technical factors above are more important than cost or price. However, Chemonics will not select an offer for award on the basis of a superior technical proposal without considering cost. Cost will be evaluated based on cost reasonableness, allowability, and realism. A technical/cost trade-off analysis will be performed by Chemonics in order to determine the best value to the project.

**1.1 Terms and Conditions of Subcontract**

Issuance of this solicitation does not in any way obligate Chemonics to award a subcontract, nor does it commit Chemonics to pay for costs incurred in the preparation and submission of a proposal.

This solicitation is subject to the Fixed-Price Subcontract Terms and Conditions detailed in Section 3. Any resultant award will be governed by these terms and conditions. Chemonics reserves the right to make minor revisions to the content, order, and numbering of the provisions in the actual subcontract document to be executed by Chemonics and the selected awardee.

**1.15 Protests**

Please note that in submitting a response to this solicitation, the Offeror understands that USAID is not a party to this solicitation and the offeror agrees that any protest hereunder must be presented—in writing with full explanations—to Chemonics International for consideration, as USAID will not consider protests made to it under USAID-financed subcontracts. Chemonics, at its sole discretion, will make a final decision on the protest for this procurement.

**SECTION 2: SCOPE OF WORK**

**A. OBJECTIVE**

The intent of this document is to provide interested Offerors with sufficient information to enable them to prepare and submit a proposal.

Offerors are alerted to the fact that the MSL warehouse in Luanshya District is currently being constructed under a separate project managed by MSL and the Department of Defence. Attachment E contains schematic design drawings and sections that were part of the tender documents for the DOD contract. The warehouse and associated civil works are being constructed on a design-build basis. Final detailed design drawings and specifications approved for construction are shown in Attachment M. Concrete testing results and floor levelness data obtained from the Luanshya warehouse owner are provided in Attachment M.

The work to be performed under this subcontract shall consist of the following: providing all tools, equipment, materials, supplies, and manufactured articles; furnishing all labor, transportation, engineering, surveying, design and services, including testing, shipping, fuel, power, water, and essential communications; and performing all work or other operations required for the fulfillment of the subcontract. The work shall be complete, and all work, materials, and services not expressly indicated or called for in the Scope of Work which may be necessary for the completion of the work in good faith shall be provided by the Offeror. The Offeror shall be responsible for ensuring the procurement, shipping, customs clearance, assembly, and all associated works with the stacked pallet racking and shelving, Tote conveyor systems, fencing and gates and all other works and services described in this RFP in Luanshya District, Zambia.

**KITTING AND OTHER REQUIREMENTS LIST FOR LUANSHYA WAREHOUSE**

<b><u>KITTING AND OTHER REQUIREMENTS LUANSHYA WAREHOUSE -</u></b>			
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>QUANTITY</b>	<b>U OF M</b>
<b>1.1</b>	<b><u>STORAGE SYSTEMS</u></b>		
<b>1.1.1</b>	<b>Adjustable Pallet Racking</b>	<b>1,716</b>	<b>pallets</b>
<b>1.1.2</b>	<b>Long Span Shelving Hazardous Store</b>	<b>40</b>	<b>units</b>
<b>1.1.3</b>	<b>New Carton Flow Rack Trays (includes support racking)</b>	<b>40</b>	<b>trays</b>
<b>1.1.4</b>	<b>New Steel Binning - 914 x 457 with solid back and sides</b>	<b>64</b>	<b>units</b>
<b>1.1.5</b>	<b>Manifesting Stations Complete with conveyor</b>	<b>2</b>	<b>units</b>
<b>1.1.6</b>	<b>Shelving for Packaging Material</b>	<b>2</b>	<b>bays</b>
<b>1.1.7</b>	<b>Labels for Bulk and Fine Pick Locations (Print and Applied)</b>	<b>3,436</b>	<b>sum</b>

1.1.8	Narcotics Store - mobile shelving system	1	units
1.1.9	Narcotics Store - work station	1	units
1.1.10	Upright Label Holders	120	uprights
1.1.11	Plastic Upright Protectors	120	uprights
1.1.12	Row End Barriers	14	units
1.1.13	Plastic Totes	500	ea

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1.2	<b><u>CONVEYOR SYSTEM</u></b>		
1.2.1	Conveyor System inclusive of Belt Conveyor, Driven Roller Bends, Lift up Gate, Zero Pressure Accumulation Conveyor, Idler Conveyor, Driver, Electrical Installation, Mechanical Installation, Controls	1	units

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1.4	<b><u>MISCELLANEOUS</u></b>		
1.4.2	Pick Trolleys	4	ea
1.4.3	Fencing	219	sqm
1.4.4	Gates in Fencing	18	sqm

1.5	<b><u>HANDLING EQUIPMENT</u></b>		
1.5.1	Dock Levellers	4	ea

1.6	<b><u>HVAC SYSTEMS</u></b>		
1.6.1	Cooling System for the warehouse	2040	m2

1.6.2	Cooling System for offices and boardroom and hazardous store( split and celing type)	11	units
1.7	<b><u>FIRE FIGHTING SYSTEMS</u></b>		
1.7.1	Sprinkler Sytem in warehouse	2040	m2
1.7.2	Fire fighting equipment ( fire hose reels, fire extinguishers)	as per design	
1.7.3	Smoke and fire detection systems and alarms	as per design	

**A.1 SCOPE OF WORK**

The works to be performed include the following:

**Implementation Plan**

The Offeror shall be responsible for the development of a detailed Implementation Plan for provision of all of all the items as listed in Section 2.A, Kitting and Other Requirements List. At a minimum, the Implementation Plan shall include criteria for review of the documents, a stakeholder coordination plan, a listing of the available records reviewed, the finalized progress and work schedule, a description of the means and methods to be employed for a successful delivery, identification of the required local and central level government permits, schedule of any tests to be performed during assembly and name of the company(ies) that will perform the testing, a listing of all proposed activities with their anticipated duration and the names of responsible personnel, site staging plan, site safety plan, site security plan, quality control and assurance plan, as well as the proposed suppliers to be retained by the Offeror.

**Kick-Off Meeting**

The Offeror shall participate in kick-off meeting and site visit with GHSC-PSM and MSL following the acceptance of the Implementation Plan The purpose of the kick-off meeting is to introduce the Offeror to other partners, the beneficiaries, identify existing constraints, review the Implementation Plan and final configuration of contract works.

The Offeror shall summarize the comments generated during the meeting in a memorandum.

**Site and Prefabricated Assembly**

MSL is the owner of the site and has jurisdiction over the overall security of the site. MSL does not have security personnel or equipment in place at the site at this time and does

not plan to do so until works under this RFP are complete and handed over. The Offeror shall assume full responsibility for all costs, including personnel, equipment and fencing, related to the security of the Offeror's works and equipment at the warehouse site during the subcontract period. The Offeror shall describe its Security Plan in the Proposal and said Security Plan shall be subject to the review and approval by MSL. The Offeror shall secure and isolate their portion of the worksite for the protection of its workforce and the general public. The Offeror shall work closely with MSL security department to ensure maximum safety and protection of personnel, materials and equipment..

The Offeror shall install the proposed kitting components as per the implementation plan and the requirements in this RFP.

The Offeror shall be responsible for the development of sketches and or additional drawings for each work item not sufficiently detailed in the final design documents. The sketches and/or drawings shall include details and technical specifications necessary to facilitate the implementation of the proposed improvements. The Offeror shall submit the sketches and/or drawings to GHSC-PSM/Zambia for review prior to installing said work item.

The Offeror shall be responsible for the disposal of all waste material generated by the Offeror's activities during the assembly period.. The Offeror shall also be responsible for all cleaning and site maintenance activities, during the installation phase and for final cleanup. The Offeror shall be responsible for cleaning up the worksite following each workday.

The Offeror shall be responsible for the provision of potable water supply for drinking and non-potable water for construction related uses such as testing. The Offeror shall be responsible for cost of electric power required during the assembly period. The Luanshya warehouse will be connected to the electric grid but the date of connection is not known at this time. It will be communicated to the offeror once it's finalized.

During the implementation of the project, the Offeror shall maintain a photographic record of work on site to document daily progress along with a field journal kept by the GHSC-PSM/Zambia Resident Engineer / Construction Manager. The photographic record and field journal shall be available to GHSC-PSM/Zambia for review during site visits.

### **Supply, Installation Commissioning and Training Components**

The Offeror shall be responsible for procuring and/or fabricating all required components for the stacked pallet racking and shelving system, conveyor systems and fencing and gates, dock levelers, HVAC and Fire fighting systems as well as all necessary appurtenances for a complete assembly. The Offeror shall be responsible for all permit fees, procurement, shipping, and storage, as required. Delays in procurement, fabrication, and/or shipping shall be the responsibility of the Offeror. Refer to Attachment F,G, H,I, J,and K for functional and technical requirements.

During the implementation of the project, the Offeror shall maintain a photographic record of work on site to document daily progress along with a field journal kept by the GHSC-PSM/Zambia Resident Engineer / Construction Manager. The photographic record and field journal shall be available to GHSC-PSM/Zambia for review during site visits.

**Environmental Compliance**

The Offeror shall follow the guidelines for environmental compliance set in Section 1.6 of the RFP, in particular the provisions contained in the USAID-approved Environmental Mitigation & Monitoring Plan for the GHSC-PSM global project which is shown in Attachment I. The purpose is to monitor environmental impact of the potential activities and define mitigation actions to be implemented. Using the prescriptions included in the guidance, the Offeror shall dutifully follow and implement all preventive and mitigation measures during all phases of the project. The Offeror shall also maintain on file and provide to Chemonics at the end of the subcontract, the monitoring and evaluation logs associated with the various activities of the project.

**A.2 ILLUSTRATIVE DELIVERABLES**

The following are illustrative deliverables. Exact deliverables, timelines and payments will be included in the fixed price subcontract to be executed upon award.

**Deliverable 1: Mobilization and Implementation Plan**

The Offeror shall develop and deliver a detailed Implementation Plan for review and approval by GHSC-PSM/Zambia prior to the start of work. The Implementation Plan shall include all the element identified in Section A.1 of the Scope of Work.

The Offeror shall submit the Implementation Plan in electronic (USB) and hard (3 sets – paper) format to GHSC-PSM/Zambia for review and approval. In the event that GHSC-PSM/Zambia finds deficiency with the Implementation Plan, the Offeror shall revise and resubmit until approval is obtained.

**Deliverable 2: Kick-off Meeting**

The Offeror shall participate in kick-off meeting and site visit as described in Section A.1 of the Scope of Work. The Offeror shall summarize the comments generated during the meeting in a memorandum and incorporate them to the extent possible in the implementation for the project. The Offeror shall submit the memorandum in electronic (Microsoft Word) (USB) and hard (3 sets – paper) format to GHSC-PSM/Zambia for review and approval.

**Deliverable 3: Supply, Installation, Commsioning of Stacked Pallet Racking, Tote Conveyor Systems, Fencing and Gates and Dock Levellers**

Completion of the provision, installation, testing and commissioning of all stacked pallet racking and conveyor systems, fencing and gates, and all associated works in accordance with the requirements of Section A.1 Scope of Works and Attachments to this RFP.

**Deliverable 4: Supply, Installation, Commsioning of HVAC and Fire fighting Systems**

Completion of the provision, installation, testing and commissioning of all HVAC and Fire fighting systems and all associated works in accordance with the requirements of Section A.1 Scope of Works and Attachments to this RFP

**Deliverable 5: Final Acceptance**

The Offeror shall submit a Final Report summarizing the work associated with the



procurement and assembly of the kitting items. The Final Report shall include a copy of the final accepted documents, record drawings, all weekly progress reports, weekly site meetings minutes, and weekly environmental monitoring checklists, environmental compliance, quality control measures employed to ensure quality materials and workmanship, operation and maintenance manual (O&M Manual) for all the installed systems. The Final Report shall also include a certification from the Offeror that the project was implemented as per the contract documents and that the items are safe for the intended use. The Final Report shall be submitted upon the completion of installation of all stacked pallet racking and conveyor system,, fencing and gates and docking levellers shall be in English and in Microsoft Word format. The submission of an acceptable Final Report and formal handover of completed works to MSL shall be conditions of Final Acceptance.

During the implementation of the project, the Offeror shall maintain a set of the Final Documents upon which all field changes shall be noted. At the conclusion of the work, the Offeror shall develop record drawings to accurately reflect 'as-built' conditions of the work associated with this project. The record drawings shall be prepared and submitted on electronic (compact disks) and hard (3 sets – 11"x17" paper) formats. The record drawings must be delivered to GHSC-PSM/Zambia and found to be acceptable prior to final issuance of payment.

**Deliverable 6: Environmental Compliance, Weekly Progress Reporting and Final Report (not a separate pay item)**

The Offeror shall be responsible for implementing and monitoring of the environmental compliance requirements noted in section A1.6 of the RFP in order to comply with USAID requirements for the GHSC-PSM/Zambia program. The work shall include the monitoring and preparation of the evaluation reports during all phases of the project. On a weekly basis, the Offeror shall submit the Progress Report, Site Meeting Minutes, Environmental Monitoring Checklist (Section A.1) and all associated test and inspection requests/results. The submission of weekly reports described above shall be considered compliance with the requirement for monthly progress reports as mandated by Article 7, below. The submission of the above described weekly reports shall be a condition of every progress payment; submission of all weekly reports and final report shall be a condition of final acceptance.

**ATTACHMENT A: LETTER OF TRANSMITTAL**

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*The following letter must be completed and submitted with any offer:*

Date: \_\_\_\_\_ *(insert date)*

To:

Chemonics International Inc.  
USAID/GHSC-PSM Zambia Office

Plot 2473, 1st Floor Metropolitan House  
Off Kelvin Siwale Road  
Mass Media  
Lusaka, Zambia

Attention: Luckson Sichamba

RE: Letter of Transmittal, RFP No. RFP-ZMB-LUANSHYA-2018

*(insert name of company)* hereby proposes the attached offer to perform all work required for the for the supply and installation of pallet racking and shelving systems, supply and installation of Tote conveyor systems and all other items described in this RFP for a Medical Stores Limited (MSL) warehouse currently under construction in Luanshya District, Copperbelt Province of Zambia. Please find attached our detailed Technical Volume (including past performance information and required certifications) and Cost Volume, as called for in the RFP.

We hereby acknowledge and agree to all of the terms and conditions, special provisions, and instructions included in the above referenced RFP. We confirm receipt of Addenda No (list Addenda). We further certify that *(insert name of company)*, as a firm—as well as the firm’s principal officers and all commodities and services offered in response to this RFP—are eligible to participate in this procurement under the terms and conditions of this solicitation and under USAID regulations.

We hereby certify that the enclosed representations, certifications, and other statements are accurate, current, and complete.

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Name and title of authorized representative

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**ATTACHMENT B: REQUIRED CERTIFICATIONS**

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The following certifications must be completed and submitted in the Technical Volume of any proposal.

**ATTACHMENT B-1: CERTIFICATE OF INDEPENDENT PRICE DETERMINATION, PER FAR 52.203-2 (APR 1985)**

\_\_\_\_\_ (*insert name of company*) (hereinafter called the "offeror")

(a) The offeror certifies that—

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to—

- (i) Those prices;
- (ii) The intention to submit an offer; or
- (iii) The methods or factors used to calculate the prices offered.

(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(b) Each signature on the offer is considered to be a certification by the signatory that the signatory—

(1) Is the person in the offeror's organization responsible for determining the prices being offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this provision; or

(2)  
(i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this provision \_\_\_\_\_ [insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization];

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) of this provision have not participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this provision; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this provision.

(c) If the offeror deletes or modifies paragraph (a)(2) of this provision, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

\_\_\_\_\_ (*insert name of company*) (Offeror)

BY (Signature) \_\_\_\_\_ TITLE \_\_\_\_\_

TYPED NAME \_\_\_\_\_ DATE \_\_\_\_\_

**ATTACHMENT B-2: CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS, PER FAR 52.203-11 (SEP 2005)**

\_\_\_\_\_ (*insert name of company*) (hereinafter called the "offeror")

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989—

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of this subcontract;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Chemonics Chief of Party; and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this subcontract imposed by section 1352, Title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

\_\_\_\_\_ (*insert name of company*)  
(Offeror)

BY (Signature) \_\_\_\_\_ TITLE \_\_\_\_\_

TYPED NAME \_\_\_\_\_ DATE \_\_\_\_\_

**ATTACHMENT B-3: TAXPAYER IDENTIFICATION, PER FAR 52.204-3 (OCT 1998)**

\_\_\_\_\_ (*insert name of company*) (hereinafter called the "offeror")

(a) Definitions.

*Common parent*, as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

*Taxpayer Identification Number (TIN)*, as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All Offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting subcontract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the subcontract.

(c) The TIN may be used by the government to collect and report on any delinquent amounts arising out of the offeror's relationship with the government (31 U.S.C. 7701(c)(3)). If the resulting subcontract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer Identification Number (TIN).

- TIN: \_\_\_\_\_
- TIN has been applied for.
- TIN is not required because:
  - Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;
  - Offeror is an agency or instrumentality of a foreign Government;
  - Offeror is an agency or instrumentality of the Federal Government.

(e) Type of organization.

- Sole proprietorship;
- Partnership;
- Corporate entity (not tax-exempt);
- Corporate entity (tax-exempt);
- Government entity (Federal, State, or local);
- Foreign Government;
- International organization per 26 CFR 1.6049-4;
- Other \_\_\_\_\_

(f) Common parent.

- Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.
- Name and TIN of common parent:

Name \_\_\_\_\_  
TIN \_\_\_\_\_

\_\_\_\_\_ (*insert name of company*)  
(Offeror)

BY (Signature) \_\_\_\_\_ TITLE \_\_\_\_\_

TYPED NAME \_\_\_\_\_ DATE \_\_\_\_\_

**ATTACHMENT B-4: CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS, PER FAR 52.209-5 (DEC 2001)**

\_\_\_\_\_ (*insert name of company*) (hereinafter called the "offeror")

(a) (1) The Offeror certifies, to the best of its knowledge and belief, that -

(i) The Offeror and/or any of its Principals -

(A) Are  are not  presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have  have not , within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) subcontract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion or receiving stolen property; and

(C) Are  are not  presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision (a)(1)(i)(B) of this provision.

(ii) The Offeror has  has not , within a 3-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

(b) The Offeror shall provide immediate written notice to the Chemonics Chief of Party if, at any time prior to subcontract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Chemonics Chief of Party may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Chemonics Chief of Party or Senior Vice President of Contracts may terminate the subcontract resulting from this solicitation for default.

\_\_\_\_\_ (*insert name of company*)  
(Offeror)

BY (Signature) \_\_\_\_\_ TITLE \_\_\_\_\_

TYPED NAME \_\_\_\_\_ DATE \_\_\_\_\_

**ATTACHMENT B-5: CERTIFICATION REGARDING KNOWLEDGE OF CHILD LABOR FOR LISTED END PRODUCTS, PER FAR 52.222-18 (FEB 2001)**

Pursuant to FAR 52.222-18 (Feb 2001), federal contractors who supply products on the Current List of Products and Countries on Executive Order (EO) 13126, published by the Department of Labor must certify that they have made a good faith effort to determine whether forced or indentured child labor was used to produce the items listed. The Current List of Products and Countries on EO 13126 is included on the next page as Attachment B-5a.

\_\_\_\_\_ (*insert name of company*) (hereinafter called the "offeror")

(a) Definition.

Forced or indentured child labor means all work or service--

- (1) Exacted from any person under the age of 18 under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily; or
- (2) Performed by any person under the age of 18 pursuant to a subcontract the enforcement of which can be accomplished by process or penalties.

(b) Listed end products. The following end product(s) being acquired under this solicitation is (are) included in the List of Products Requiring Offeror Certification as to Forced or Indentured Child Labor, identified by their country of origin. There is a reasonable basis to believe that listed end products from the listed countries of origin may have been mined, produced, or manufactured by forced or indentured child labor.

Listed End Product:

Listed Countries of Origin:

(c) Certification. Chemonics will not make award to an offeror unless the offeror, by checking the appropriate block, certifies to either paragraph (c)(1) or paragraph (c)(2) of this provision.

- (1) The offeror will not supply any end product listed in paragraph (b) of this provision that was mined, produced, or manufactured in a corresponding country as listed for that end product.
- (2) The offeror may supply an end product listed in paragraph (b) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product. The offeror certifies that it has made a good faith effort to determine whether forced or indentured child labor was used to mine, produce, or manufacture such end product. On the basis of those efforts, the offeror certifies that it is not aware of any such use of child labor.

\_\_\_\_\_ (*insert name of company*)  
(Offeror)

BY (Signature) \_\_\_\_\_ TITLE \_\_\_\_\_

TYPED NAME \_\_\_\_\_ DATE \_\_\_\_\_



**ATTACHMENT B-5A: Current List of Products and Countries on EO 13126 List**

The current list of products was published in the April 3, 2013 Federal Register and includes the following:

<b>Product</b>	<b>Countries</b>
Bamboo	Burma
Beans (green, soy, yellow)	Burma
Brazil Nuts/Chestnuts	Bolivia
Bricks	Afghanistan, Burma, China, India, Nepal, Pakistan
Carpets	Nepal, Pakistan
Cassiterite	Democratic Republic of Congo
Coal	Pakistan
Coca (stimulant plant)	Colombia
Cocoa	Cote d'Ivoire, Nigeria
Coffee	Cote d'Ivoire
Coltan	Democratic Republic of Congo
Cotton	Benin, Burkina Faso, China, Tajikistan, Uzbekistan
Cottonseed (hybrid)	India
Diamonds	Sierra Leone
Electronics	China
Embroidered Textiles (zari)	India, Nepal
Garments	Argentina, India, Thailand
Gold	Burkina Faso
Granite	Nigeria
Gravel (crushed stones)	Nigeria
Pornography	Russia
Rice	Burma, India, Mali
Rubber	Burma
Shrimp	Thailand
Stones	India, Nepal
Sugarcane	Bolivia, Burma
Teak	Burma
Textiles (hand-woven)	Ethiopia
Tilapia (fish)	Ghana
Tobacco	Malawi
Toys	China

**ATTACHMENT B-6: CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING, PER FAR 52.223-13 (AUG 2003)**

\_\_\_\_\_ (*insert name of company*) (hereinafter called the "offeror")

(a) Executive Order 13148, of April 21, 2000, Greening the Government through Leadership in Environmental Management, requires submission of this certification as a prerequisite for subcontract award.

(b) By signing this offer, the offeror certifies that—

(1) As the owner or operator of facilities that will be used in the performance of this subcontract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this subcontract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: [*Check each block that is applicable.*]

(i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed in 40 CFR 372.65;

(ii) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(iv) The facility does not fall within the following Standard Industrial Classification (SIC) codes or their corresponding North American Industry Classification System sectors:

- (A) Major group code 10 (except 1011, 1081, and 1094.
- (B) Major group code 12 (except 1241).
- (C) Major group codes 20 through 39.
- (D) Industry code 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).
- (E) Industry code 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C (42 U.S.C. 6921, et seq.), or 5169, or 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis); or

(v) The facility is not located in the United States or its outlying areas.

\_\_\_\_\_ (*insert name of company*)  
(Offeror)

BY (Signature) \_\_\_\_\_ TITLE \_\_\_\_\_

TYPED NAME \_\_\_\_\_ DATE \_\_\_\_\_

**ATTACHMENT B-7: EVIDENCE OF RESPONSIBILITY STATEMENT**

\_\_\_\_\_ (*insert name of company*) (hereinafter called the "offeror")

The offeror hereby certifies the following:

**1. Authorized Negotiators**

The Company Name proposal in response to RFP No. RFP-ZMB-LUANSHYA-2018 may be discussed with any of the following individuals. These individuals are authorized to represent Company Name in negotiation of this offer in response to RFP No. RFP-ZMB-LUANSHYA-2018.

List Names of Authorized signatories

These individuals can be reached at Company Name office:

Address  
Telephone/Fax  
Email address

**2. Adequate Financial Resources**

Company Name has adequate financial resources to manage any subcontract resulting from this offer.

**3. Ability to Comply**

Company Name is able to comply with the proposed delivery of performance schedule having taken into consideration all existing business commitments, commercial as well as governmental.

**4. Record of Performance, Integrity, and Business Ethics**

Company Name's record of integrity is outstanding. Company Name has no allegations of lack of integrity or of questionable business ethics. Our integrity can be confirmed by our references in our Past Performance References, contained in the Technical Volume.

**5. Organization, Experience, Accounting and Operational Controls, and Technical Skills**

(Offeror should explain which department will be managing the contract, type of accounting and control procedure they have to accommodate the subcontract type.)

**6. Equipment and Facilities**

(Offeror should state they have necessary facilities and equipment to carry out the subcontract.)

**7. Eligibility to Receive Award**

(Offeror should state that they are qualified and eligible to receive an award under applicable laws and regulation and if they have performed work of similar nature under similar mechanisms for USAID. They should provide their DUNS number here as well, if applicable.)

**8. Commodity Procurement**

Not applicable to this RFP.

**9. Cognizant Government Audit Agency**

(Offeror should provide name, address, phone of their auditors, and whether it is DCAA or independent CPA, if applicable)

**10. Acceptability of Subcontract Terms and Conditions**

The offeror has reviewed the solicitation document and attachments and agrees to the terms and conditions set forth therein.

**11. Organization of Firm**

(Offeror should explain how their firm is organized – for example regionally or by technical practice)

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Name and title of authorized representative

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**ATTACHMENT B-8: 52.222-50 OFFEROR CERTIFICATION REGARDING TRAFFICKING IN PERSONS COMPLIANCE PLAN (MARCH 2, 2015)**

The Offeror/Offeror Certifies that:

- (1) It has implemented a compliance plan to prevent any prohibited activities identified in paragraph (b) of the clause at 52.222–50, Combating Trafficking in Persons, and to monitor, detect, and terminate the contract with a Offeror engaging in prohibited activities identified at paragraph (b) of the clause at 52.222–50, Combating Trafficking in Persons;
- (2) The compliance plan applicable to the qualifying subcontract meets the minimum requirements set forth in subsection (h)(3) of clause 52.222-50, including the following:
  - a. An awareness program to inform Offeror employees about the Government’s policy prohibiting trafficking-related activities, the activities prohibited, and the actions that will be taken against the employee for violations.
  - b. A process for employees to report, without fear of retaliation, activity inconsistent with the policy prohibiting trafficking in persons, including a means to make available to all employees the hotline phone number of the Global Human Trafficking Hotline at 1-844-888-FREE and its email address at [help@befree.org](mailto:help@befree.org).
  - c. A recruitment and wage plan that only permits the use of recruitment companies with trained employees, prohibits charging recruitment fees to the employee, and ensures that wages meet applicable host-country legal requirements or explains any variance.
  - d. A housing plan, if the Offeror intends to provide or arrange housing that ensures that the housing meets host-country housing and safety standards.
  - e. Procedures to prevent agents and Offerors at any tier and at any dollar value from engaging in trafficking in persons (including activities in paragraph (b) of this clause) and to monitor, detect, and terminate any agents, subcontracts, or Offeror employees that have engaged in such activities.
- (3) The Offeror/Offeror will post the relevant contents of the compliance plan, no later than the initiation of contract performance, at the workplace (unless the work is to be performed in the field or not in a fixed location) and on the Offeror’s/Offeror’s Web site (if one is maintained). If posting at the workplace or on the Web site is impracticable, the Offeror/Offeror shall provide the relevant contents of the compliance plan to each worker in writing. The Offeror/Offeror agrees to inform Chemonics immediately of any credible information it receives from any source (including host country law enforcement) that alleges a contractor employee, Offeror, Offeror employee, or their agent has engaged in conduct that violates the policy.
- (4) After having conducted due diligence, either—
  - (i) To the best of the Offeror’s/Offeror’s knowledge and belief, neither it nor any of its proposed agents, Offerors, or their agents is engaged in any such activities; or,
  - (ii) If abuses relating to any of the prohibited activities identified in 52.222– 50(b) have been found, the Offeror or proposed Offeror has taken the appropriate remedial and referral actions.

PLEASE SIGN AND RETURN THIS CERTIFICATION TO CHEMONICS

Company Name \_\_\_\_\_

Signature \_\_\_\_\_ Printed Name \_\_\_\_\_

Title \_\_\_\_\_ Date \_\_\_\_\_

**NOTE: The Offeror is required to recertify annually by signing this document one year from the date signed above and resending it to the Contractor.**

**ATTACHMENT C: EXAMPLE BANK GUARANTEE FOR PERFORMANCE SECURITY**

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To:

Chemonics International Inc.  
USAID/GHSC-PSM Zambia Office

Plot 2473, 1st Floor Metropolitan House  
Off Kelvin Siwale Road  
Mass Media  
Lusaka, Zambia

REF: Subcontract No. [subcontract number]

Whereas [name of Offeror], [address of Offeror] (hereinafter called "the Offeror") has undertaken, in pursuance of Subcontract No. [subcontract number] dated [date of subcontract] to execute [subcontract number], for the supply, delivery and installation of storage systems, conveyor systems, fencing and gates, pick trolleys, dock levellers, hvac systems and fire protection systems for the medical stores warehouse in luanshya district in Zambia (hereinafter called "the Subcontract");

And whereas it has been stipulated by you in the said Subcontract that the Offeror 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 Subcontract;

And whereas we have agreed to give the Offeror such a Bank Guarantee;

Now therefore we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Offeror, up to a total of [amount of Guarantee] [amount in words], such sum being payable in the types and proportions of currencies in which the Subcontract 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.

We hereby waive the necessity of your demanding the said debt from the Offeror before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Subcontract or of the Works to be performed there under or of any of the Subcontract documents which may be made between you and the Offeror shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any such change, addition, or modification.

This Guarantee shall be valid until a date 28 days from the date of issue of the Certificate of Substantial Completion.

Signature and seal of the Guarantor \_\_\_\_\_

Name of Bank \_\_\_\_\_

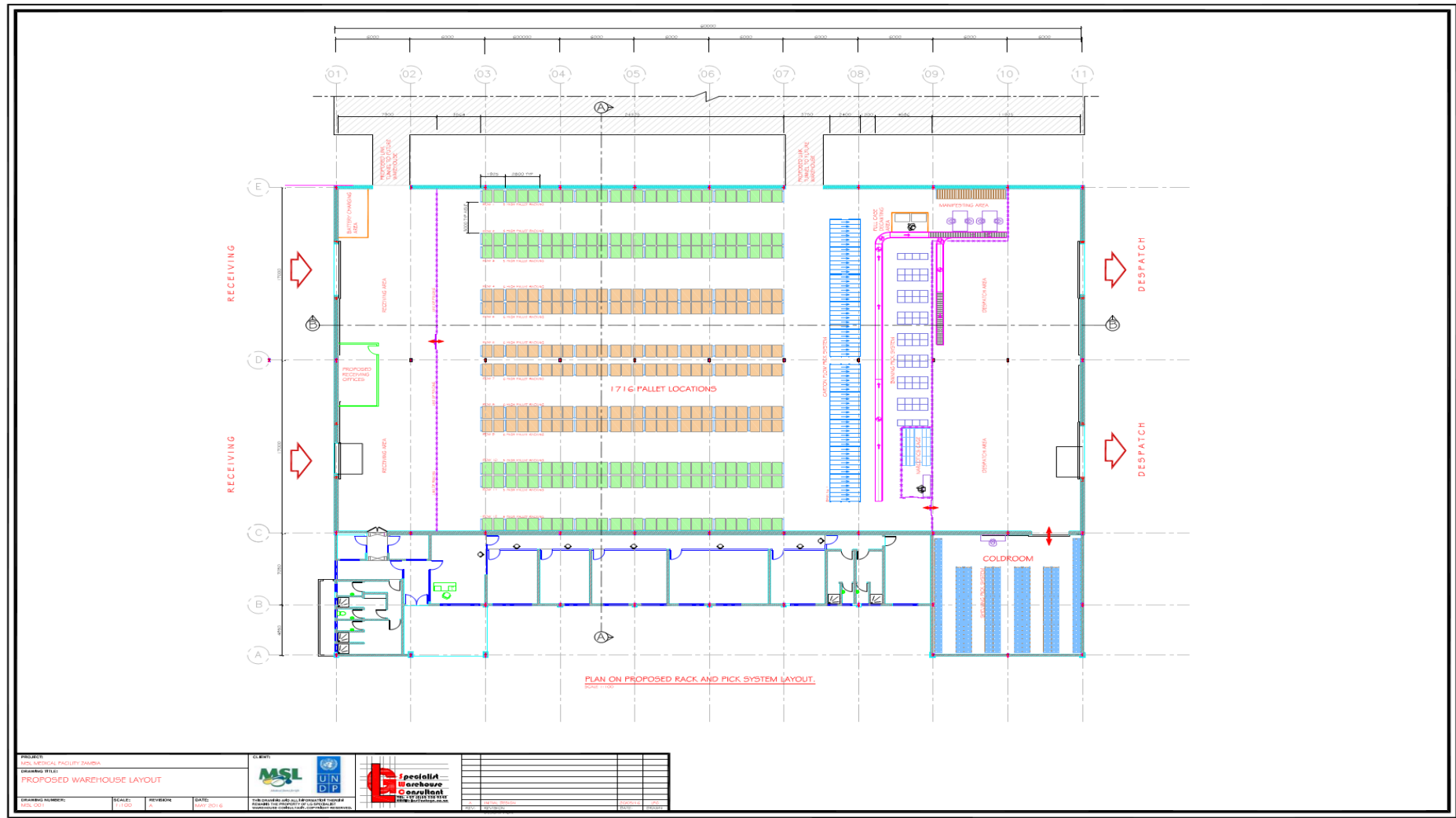


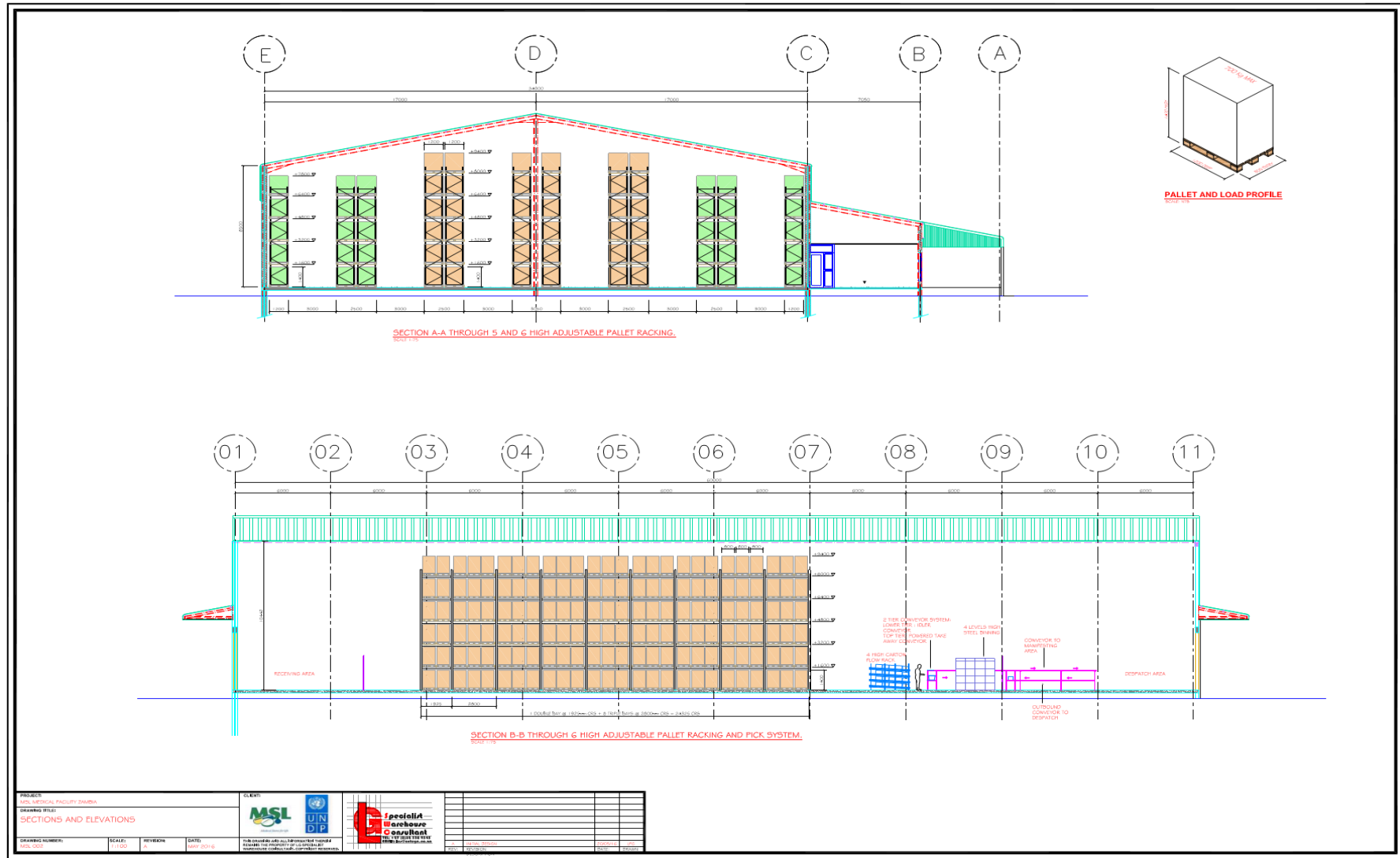
**ATTACHMENT D: SCHEDULE OF VALUES**

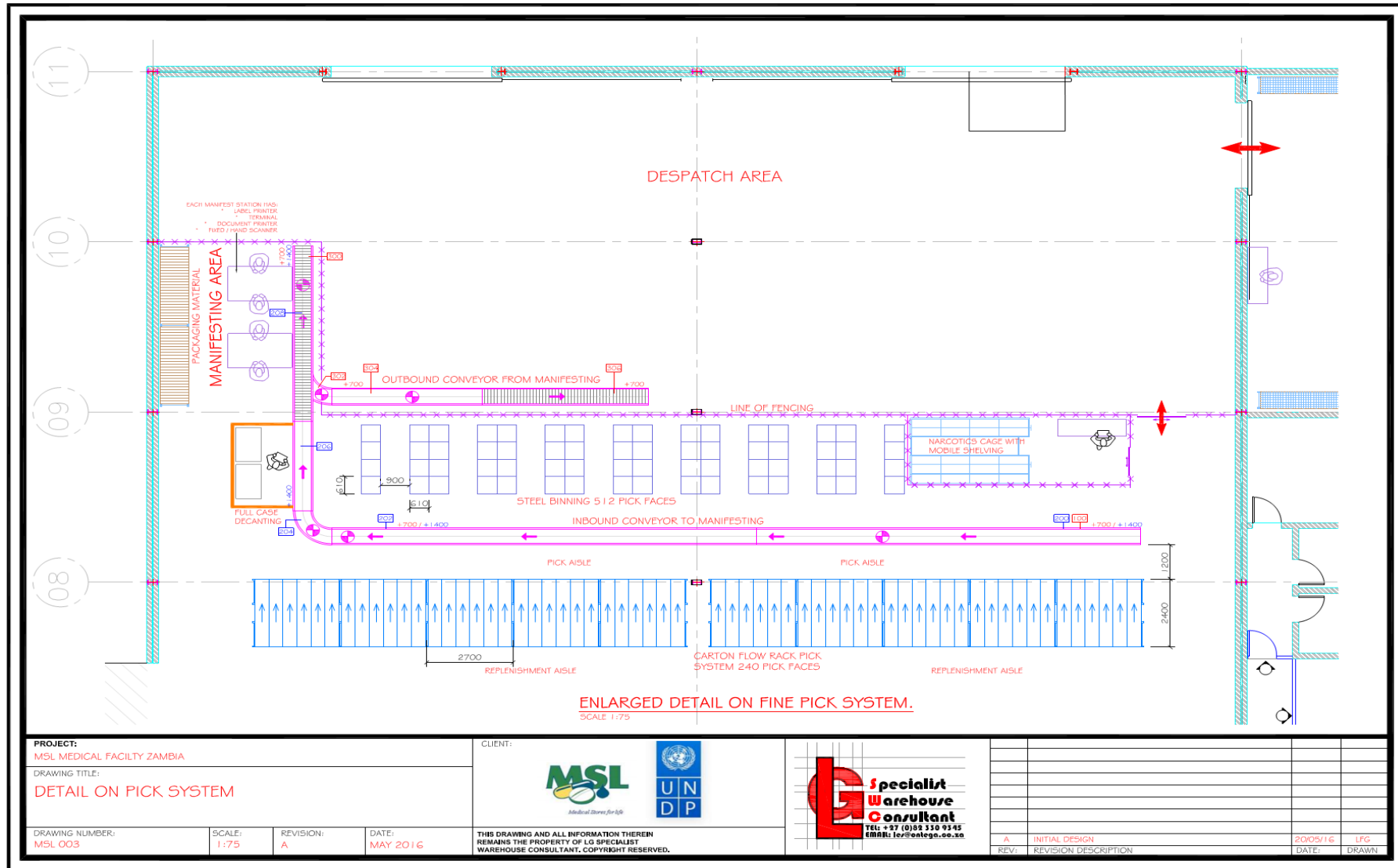
Item No.	Description	Unit	Quantity	Unit Cost in USD	Total
*Include categories					
1	Mobilization & Implementation Plan				
2	Kick-off MTGS				
3	Kitting List (ref Section 2.A)				
3a	Storage Systems				
3b	Conveyor Systems				
3c	Miscellaneous				
3d	Dock Levellers				
3e	HVAC Systems				
3f	Fire fighting Systems				
4	Final Acceptance				

**NOTE 1: ITEMS 3A-F SHALL BE TOTAL COSTS BASED ON ITEMIZED COST WORKSHEETS FOR EACH LOCATION WITH THE INFORMATION IN THE KITTING LIST**

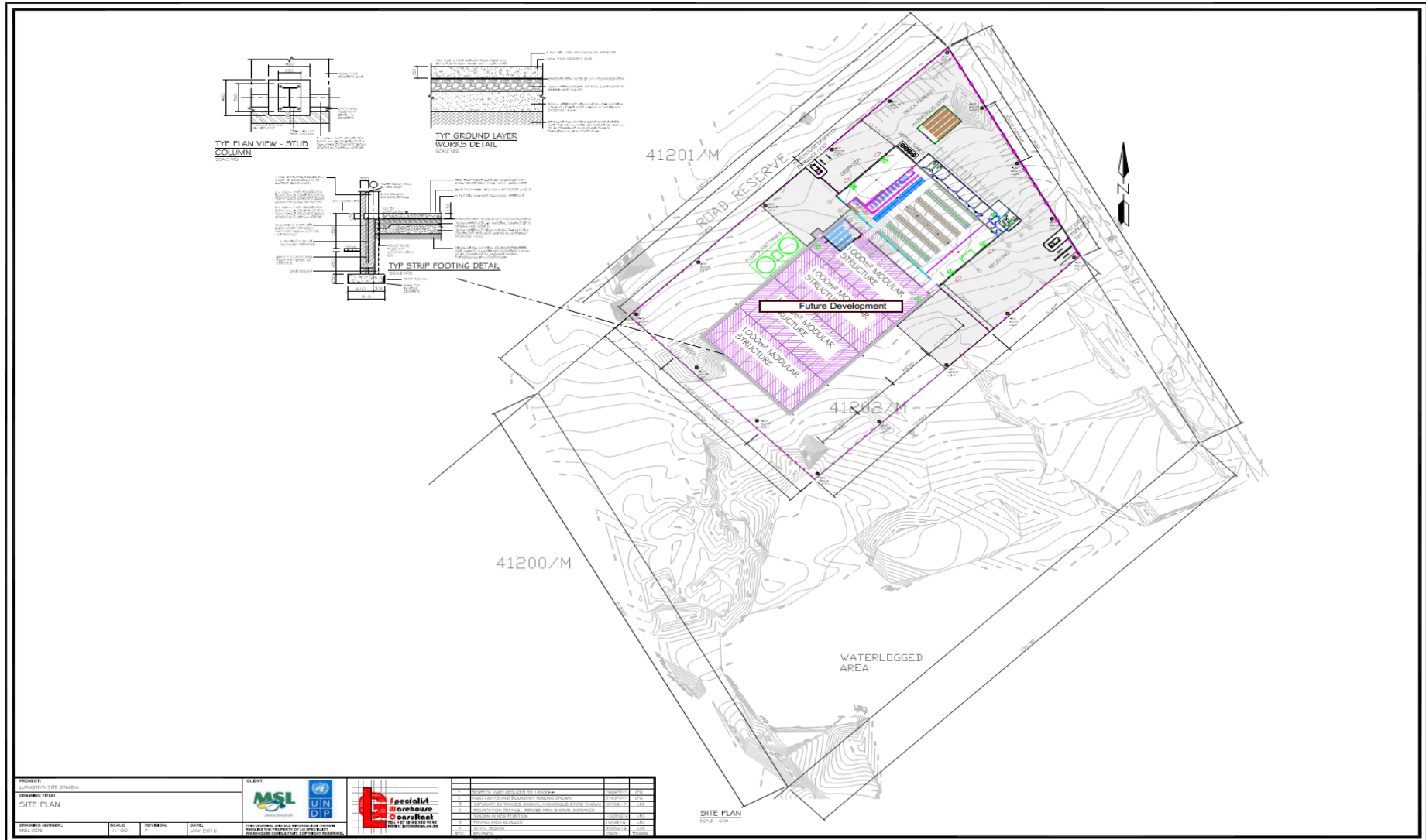
**ATTACHMENT E – LUANSHYA WAREHOUSE PLAN, SECTIONS AND FLOOR LOADS**











## **ATTACHMENT F: FUNCTIONAL AND TECHNICAL SPECIFICATIONS – STORAGE SYSTEMS AND BINNING**

### **F.1 FUNCTIONAL SPECIFICATIONS**

#### **F.1.1 Overview**

This Document calls for the design, manufacture, supply, installation and commissioning and performance criteria of a storage system inclusive of the following:

- Adjustable Pallet Racking (APR).
- Bolted Steel Binning
- Long Span Shelving
- Manifesting Tables
- Lock-up Steel Cabinets
- Pick Trolleys

#### **F.1.2 Reference Drawings**

This RFP to be read in conjunction with the following reference drawings in Attachment E:

- MSL 001 rev A: Warehouse Detail
- MSL 002 rev A: Sections and Elevations
- MSL 003 rev A: Detail on Pick System
- MSL 005 rev C: Site Plan
- MSL 006 rev A: Detail on Hazardous Store

**Note: The Cold room shown on drawing “MSL 001 rev A: Warehouse Detail” has now been changed to Conference room (See drawing AL/15-533/R14 Floor plan in Attachment M for changes made to floor plan).**

#### **F.1.3 Load Units**

- PALLET AND LOAD : 800mm ENTRY x 1200mm DEEP x 1400mm HIGH x 700Kg EURO PALLET.
- STORAGE TOTE: 300mm WIDE x 400mm DEEP x 300mm HIGH

### **F.1.4 STORAGE SYSTEMS**

#### **G.1.4.1 Adjustable Pallet Racking: Bulk Store (Gridline reference C-E and 03–07)**

**Row 1:** comprises of 1-off single row of APR storage consisting of 1-off bay of double pallet storage at ground plus 4-off beam levels in the height, 8-off bays of triple pallet storage at ground plus 4-off beam levels in the height

REQUIRED	OFFERED	QTY
Rack Bay centres of Double Pallet Bay = 1925mm centers		1-off
Rack Bay centres of Triple Pallet Bay = 2800mm centers		8-off
Height of top beam = 6400mm		
Frame depth =1100mm		
Load capacity = 3-off pallets @ 700Kg/ Pallet (Triple Bay)		
Load capacity = 2-off pallets @ 700Kg/ Pallet (Double Bay)		
Location quantity = 130 Pallet locations.		

**Rows 2 and 3:** comprises 1-off back to back row of apr storage consisting of 1-off bay of double pallet storage at ground plus 4-off beam levels in the height, 8-off bays of triple pallet storage at ground plus 4-off beam levels in the height.

REQUIRED	OFFERED	QTY
Rack Bay centres of Double Pallet Bay = 1925mm centers		1-off
Rack Bay centres of Triple Pallet Bay = 2800mm centers		8-off
Height of top beam = 6400mm		
Frame depth =1100mm		
Load capacity = 3-off pallets @ 700Kg/ Pallet		
Location quantity = 260 Pallet locations.		

**Rows 4 and 5:** comprises of 1-off back to back row of APR storage consisting of 1-off bay of double pallet storage at ground plus 5-off beam levels in the height, 8-off bays of triple pallet storage at ground plus 5-off beam levels in the height.



REQUIRED	OFFERED	QTY
Rack Bay centres of Double Pallet Bay = 1925mm centers		1-off
Rack Bay centres of Triple Pallet Bay = 2800mm centers		8-off
Height of top beam = 8000mm		
Frame depth = 1100mm		
Load capacity = 3-off pallets @ 700Kg/ Pallet (Triple Bay)		
Load capacity = 2-off pallets @ 700Kg/ Pallet (Double Bay)		
Location quantity = 312 Pallet locations		

**Rows 6 and 7:** comprises of 1-off back to back row of APR storage consisting of 1-off bay of double pallet storage at ground plus 5-off beam levels in the height, 8-off bays of triple pallet storage at ground plus 5-off beam levels in the height.

REQUIRED	OFFERED	QTY
Rack Bay centres of Double Pallet Bay = 1925mm centers		1-off
Rack Bay centres of Triple Pallet Bay = 2800mm centers		8-off
Height of top beam = 8000mm		
Frame depth = 1100mm		
Load capacity = 3-off pallets @ 700Kg/ Pallet (Triple Bay)		
Load capacity = 2-off pallets @ 700Kg/ Pallet (Double Bay)		
Location quantity = 312 Pallet locations		

**Rows 8 and 9:** comprises of 1-off back to back row of APR storage consisting of 1-off bay of double pallet storage at ground plus 5-off beam levels in the height, 8-off bays of triple pallet storage at ground plus 5-off beam levels in the height.

REQUIRED	OFFERED	QTY
Rack Bay centres of Double Pallet Bay = 1925mm centers		1-off
Rack Bay centres of Triple Pallet Bay = 2800mm centers		8-off
Height of top beam = 8000mm		
Frame depth =1100mm		
Load capacity = 3-off pallets @ 700Kg/ Pallet (Triple Bay)		
Load capacity = 2-off pallets @ 700Kg/ Pallet (Double Bay)		
Location quantity = 312 Pallet locations		

**Rows 10 and 11:** comprises of 1-off back to back row of APR storage consisting of 1-off bay of double pallet storage at ground plus 4-off beam levels in the height, 8-off bays of triple pallet storage at ground plus 4-off beam levels in the height.

REQUIRED	OFFERED	QTY
Rack Bay centres of Double Pallet Bay = 1925mm centers		1-off
Rack Bay centres of Triple Pallet Bay = 2800mm centers		8-off
Height of top beam = 6400mm		
Frame depth =1100mm		
Load capacity = 3-off pallets @ 700Kg/ Pallet (Triple Bay)		
Load capacity = 2-off pallets @ 700Kg/ Pallet (Double Bay)		
Location quantity = 260 Pallet locations		

**Row 12:** comprises of 1-off single row of APR storage consisting of 1-off bay of double pallet storage at ground plus 4-off beam levels in the height, 8-off bays of triple pallet storage at ground plus 4-off beam levels in the height.

REQUIRED	OFFERED	QTY
Rack Bay centres of Double Pallet Bay = 1925mm centers		1-off
Rack Bay centres of Triple Pallet Bay = 2800mm centers		8-off
Height of top beam = 6400mm		
Frame depth = 1100mm		
Load capacity = 3-off pallets @ 700Kg/ Pallet (Triple Bay)		
Load capacity = 2-off pallets @ 700Kg/ Pallet (Double Bay)		
Location quantity = 130 Pallet locations.		

**F.1.4.2 Long Span Shelving: Hazardous Store**

The Long Span Shelving comprises of 2-off single rows of 5 bays long and 3-off back to back rows of 5 bays long each.

REQUIRED	OFFERED	QTY
Bay Quantity 40-off bays on plan		40-off
No. Of Rows = 2-off Single and 3-off Back to Back		
Bay Width = 750mm		
Bay Centers = 2500mm		
Vertical Levels = Ground + 3 levels @ 500mm clear / level		
Decking = Open slatted Timber Decked, KD Certified and Heat treated		
Loading per level = 500Kg UDL \ level		

**F.1.4.3 Carton Flow Rack: Pick System (Gridline reference C-E and 08)**

**Bank №1:** comprises of 1-off single row consisting of 5-off bays of Carton Flow beds at 5-off levels in the height.

REQUIRED	OFFERED	QTY
Rack Bay centres = 2700mm centers Flow Bed Depth = 2400mm № Flow lanes / Bed = 6 lanes wide @ 3 tracks per lane On Loading Shelf = not required Presentation Shelf = 1-off per bed. Guides = Full Length		5-off

**Bank №2:** comprises of 1-off single row consisting of 4-off bays of Carton Flow beds at 4-off levels in the height.

REQUIRED	OFFERED	QTY
Rack Bay centres = 2700mm centers Flow Bed Depth = 2400mm № Flow lanes / Bed = 6 lanes wide @ 3 tracks per lane On Loading Shelf = not required Presentation Shelf = 1-off per bed. Guides = Full Length		5-off

**F.1.4.4 Steel Binning: Pick System (Gridline reference C-E and 08–09)**

The Steel Binning comprises of 2-off single rows and 7-off back to back rows.

**1st Single Row:**

REQUIRED	OFFERED	QTY
Bay Quantity 56-off bays on plan Bay Width = 610mm Bay Depth = 610mm per bay Vertical Levels = 5-off Total Bay Height = 2210mm Side and Back Panels = Yes Central Divider = Yes		56-off

**7-off Back to Back Rows:**

**Last Single Row:**

REQUIRED	OFFERED	QTY
Bay Quantity 4-off bays on plan Bay Width = 610mm Bay Depth = 610mm per bay Vertical Levels = 5-off Total Bay Height = 2210mm Side and Back Panels = Yes Central Divider = Not required		4-off

**F.1.4.5 Mobile Shelving: Pick System (gridline reference c and 9)**

The mobile shelving comprises of 1-off fixed single row of 4 bays wide, 2-off double rows of mobile banks of 4 bays wide.

REQUIRED	OFFERED	QTY
Bay Quantity 20-off bays on plan Bay Width = 914mm Bay Depth = 305mm per bay Vertical Levels = 5-off Total Bay Height = 2210mm Side and Back Panels = Yes		20-off

**F.1.4.6 Long Span Shelving: Manifesting (gridline reference e and 09-10)**

The long span shelving comprises of:

REQUIRED	OFFERED	QTY
Bay Quantity 2-off bays on plan №. Of Rows = 1-off Bay Width = 900mm Bay Centers = 2800mm Vertical Levels = Ground + 3 levels @ 500mm clear / level Decking = Open slatted Timber Decked, KD Certified and Heat treated Loading per level = 500Kg UDL \ level		2-off

**F.1.4.7 Manifesting Workstation Complete with Conveyor: Manifesting (gridline reference e and 09-10)**

The manifesting workstation comprises of:

REQUIRED	OFFERED	QTY
Quantity 2-off sets  1st Table Width = 3000mm  2nd Table Width = 2000mm  Table Depth = 1150mm  Length over System = 5500mm  Table Top Finish = Stainless Steel @ 900mm  F.F.L  Conveyor Width = 600mm  Conveyor Length = 5300mm  Guide Rail = Full Length 1 side only  Rollers = Steel with "Sealed for life" Bearings		2 OFF

**F.1.4.8 Pick Trolley in Fine Pick Area**

Fine pick trolley: comprises of a human manoeuvrable steel trolley that caters for 6 picking totes and 6 back up totes per trolley:

REQUIRED	OFFERED	QTY
Trolley Length = 1290mm  Trolley Width = 600mm  Trolley Height = 1400mm  Fixed Castors = 2-off  Swivel Castors = 2-off		4-off

**F.1.4.9 Workstation: Narcotics store**

REQUIRED	OFFERED	QTY
Aluminium framed  Stainless steel top  Length: 1200mm  Depth: 600mm  Height: 800mm  Drawers: 2-off 450mm x 140mm		1 OFF



**F.1.4.10 Warehouse Barcode Labels**

Warehouse barcode labels to be provided for every location plus at the rack uprights for higher locations where scanners cannot reach. bidders to provide for the fitment only and not the supply.

Type 1 barcode label for all pallet locations and shelf locations inside pallet racks: 210mm x 70mm self-adhesive dairyfilm label

Type 2 barcode label for all fine pick locations: 125mm x 25mm selfadhesive dairyfilm label

Type 3 barcode label for all rack upright labels: 70mm x 44mm selfadhesive dairyfilm label

REQUIRED	OFFERED	QTY
Type 1 Barcode Label		+ - 1716-off
Type 2 Barcode Label		+ - 2200 – off
Type 3 Barcode Label		+ - 1500-off

**F.1.4.11 Plastic Totes**

These are plastic boxes that are to be used to do the fine picking; Description: STORAGE TOTE: 300mm WIDE x 400mm DEEP x 300mm HIGH with cover, color blue



## **F.2 TECHNICAL SPECIFICATION**

### **F.2.1 Racking Requirements**

- a) The calculations for designing the racking solution must take account of racking self-weight, pallet/product live loads, transient miscellaneous forces during retrieval or put-away and any other loads that can reasonably be expected during normal operations.
- b) Generally racking shall be installed to be rigid and without any discernible sway. this especially applies to single bay racking and the supplier must include for all additional supports, braces and arms etc. to ensure that this requirement is met.
- c) Where single frames are present and where the base-to-height ratio of these single frames exceeds 10:1, then these single frames shall be supported to the nearest double rack by means of cross-aisle ties in accordance with the sema code of practice.
- d) The installation will be according to the sema guideline no. 2 (guide to erection tolerances for static racking), grade 1 – low tolerance.

### **F.2.2 Frames**

- a) For 2 pallet high apr installation, frames shall be designed to allow a bottom floor supported pallet position and to support extension to two levels of maximum weight pallets above. in essence the system is expandable to store 3 high with the two levels above ground floor as short heavy pallets.
- b) Frames shall be of bolted or welded construction.

### **F.2.3 Beams**

- a) Beams shall be closed section and locked to end frames using an approved locking system. the height of each beam above floor level shall be easily adjustable without the use of tools and independent of any adjacent beam.
- b) Beam pairs are to be adequately designed to support the pallet loads described earlier in this tender.
- c) Offerors must take cognisance of the beam levels required in the lgsdc design. If any differences in beam levels due to rack /slot pitch and hook connector configuration are found, the Offeror will be required to alter the beam and connector design by means of down-welding in order to achieve the required beam levels. the structural integrity and safety aspects of the beams must not be affected and where such alterations are required, these are to be brought to the attention of the project manager prior to commencement of manufacturing.  
Typical back-to-back connectors shall be installed between frames approx. 250mm spacing.

### **F.2.4 Back to Back Connectors**

- a) Where building columns occur, the back-to-back are to be constructed

accordingly to ensure that the operational aisles remain integral to functioning of the system and may not be changed without prior consultation to the project manager.

b) Offerors must refer to the relevant drawings to determine the back-to-back connector lengths and quantities to suit the SEMA requirements. the position of the back-to-back connector must be installed according to the SEMA Code of Practice.

### **F.2.5 Baseplates and Point Loads**

a) A recommended base-plate size required: 140mm x 110mm x 6mm.

b) Base plates may consist of bolted base spigot or can be welded to the frame uprights. The base plates shall have four fixing holes but, in the first instance, be fixed to the floor slab using only one bolt per base plate as according to the SEMA Code of Practice. these floor fixings shall be sized to ensure that the base plates are not turned by impact from pallets, products or MHE equipment. Using only one the four available holes allows maximum opportunity to avoid bolt position coinciding with floor joint.

c) Offerors are to provide details and their dimensions for the proposed base plate and confirm the maximum rack leg point loads (kn.) the final size of the base-plate will be subject to acceptance by the projects structural engineer.

d) Offerors are to include for all shims to ensure correct levelling of all frames to ensure that racking elevations and alignments comply with the requirements of the sema codes of practice. the shim plate must be the full size of the base-plates area.

e) Where racks are joined by a back-to-back connector, only those uprights which are adjacent to aisles and gangways require floor fixing in accordance with SEMA Codes of Practice. should a pair of uprights fall on or over a building sawcut floor joint, the floor fixing may be omitted on that particular upright only in order to permit floor expansion and shrinkage. The successful bidder is to identify such conflicts and present the same to the project manager before commencement of the installation.

### **F.2.6 Load notices**

a) Supply and fix load notices (not less than 200mm x150mm) to the racking installation stating maximum beam and bay loadings, first beam level and beam pitch.

b) These notices shall be placed in a prominent location (typically at rack ends) and shall be sized and coloured in accordance with the requirements of SEMA Code of Practice.

### **F.2.7 Row Identification Signage**

a) The bidder is to provide plaques measuring not less than 200mm (High) x 300mm (Wide) on which the row number will be indicated.

b) Chemonics will inform the supplier with the details of the row numbers during manufacturing.

### **F.2.8 Rack Labelling**

The Offeror is to cost for the installation of the rack labels only and not for the

supply of barcode labels. each location and pick face is to be labelled according to instruction issued before commencement of installation.

- a) Offerors are to provide protection to all 'aisle facing' (apr) racking uprights. The adjustable pallet racking is to be supplied with an upright protector with a height of not less than 400 mm and must be positioned on every rack upright, providing protection to the three 'accessible' sides of the upright (excluding vna racking)
- b) The upright protector must be designed for energy absorption of at least 400 Nm in any direction at any height between 0.10 m and 0.40 m, alternatively, reference may be made to FEM user's guide 10.2.03.
- c) Two options for upright protection are to be considered by the Offeror
  - i. the upright protector could be made of alternative / composite / plastic material that is of suitable strength and is designed as per above.
  - ii. steel upright protection that is mounted separately to the fixing of the rack column and does not use the same anchor fixing. These protection barriers shall be bolted to the floor independently of the frame base plate and positioned to afford maximum protection to the uprights from contact by MHE and other equipment.
  - iii. in the instance of a pre-existing (brown built) project, the location of floor joints may exclude the anchoring of steel protectors.
- d) provide clear details of the proposed racking upright protection.

**Note: both types of upright protectors are to be indicated separately and as optional for the client's decision.**

#### **F.2.9 Row End Protection**

- a) Row End Protection barriers shall be manufactured and installed at both ends of each racking structure. These shall be fixed to the floor independently of the racking frame assembly and shall protect the end frames from damage by MHE, trolleys and other equipment.
- b) A suitable barrier shall be proposed by the offeror with drawings. For the purposes of the RFP, Offerors are to provide costs based on the drawing supplied by them.
- c) The rack end barriers shall be primed, undercoated and finished with two full coats of gloss paint. The colour will be yellow from the manufacturer's standard range.

#### **F.2.10 Standard Specification for Mobile Shelving**

Each mobile base is equipped with a mechanical servo assisted mechanism for easy movement along 2-off bright mild steel rails which are fixed to a timber platform. The system is considered to be security storage and must be made lockable.

#### **F.2.11 Standard Specification for Steel Binning**

- a) All components shall be free from sharp edges and protrusions and shall be galvanised or epoxy coated.
- b) Indicate the finish of all components in the RFP submission.
- c) The Offeror must furnish load capabilities and limitations of their equipment.
- d) The bottom of all uprights shall be provided with base-plates. Shelving shall be anchored to the floor by fixings capable of resisting the horizontal shear forces caused by horizontal and vertical loads on the binning.

- e) Where binning is subjected only to gravity loads plus incidental horizontal forces from loading and off-loading of shelves, each upright on the perimeter of a run shall be fixed to the floor through its base plate by a bolt, stud or other such fixing capable of safely resisting a horizontal shear load of not less than 3kN and a tensile force of not less than 2kN.
- f) The factor against overturning of the entire binning run shall not be less than 1.4. Stabilising forces provided by the floor fixings shall not be considered in checking overturning, unless these are especially designed and installed to resist the uplift forces.
- g) The binning shall be installed with a maximum deviation from the vertical of 1 in 500 of height.

#### **F.2.12 Standard Specification for Carton Flow Rack**

- a) Minimum of three adjustable roller tracks required per lane.
- b) Capacity required per tray level = 600kg
- c) Lane side guides are to be included as an option and therefore must be costed separately.
- d) The following must be specified in your tender offer:
  - Conveying track profile size
  - Conveying wheel diameter and width
  - Conveying wheel pitch
  - Offload presentation tray width and angle
  - End stop assembly
  - Tray support bracket assembly
- e) The carton flow tracks must be fully adjustable within the tray.

### **F.3 GENERAL SYSTEM REQUIREMENTS**

#### **F.3.1 Finishes**

- a) All components shall be free from sharp edges and protrusions and shall be galvanised or epoxy coated.
- b) Indicate the finish of all components in the tender submission.
- c) All Offerors must supply a list of available colour finishes.
- d) The finishing process shall ensure that all edges are properly covered and sealed. any components not completely finished in this manner will be rejected and a replacement installed.
- e) All Offerors must specify the proposed preparation and finish techniques to be employed.
- f) All minimum dry film paint thickness must be specified in the instance of epoxy finish.
- g) All paint finish may be subject to inspection of paint adhesion and surface preparation test by client and an independent paint inspector.

#### **F.3.2 Requirements on the Materials**

- a) Steel structure type: hot or cold – rolled profiles.
- b) Steel grade: to be specified by Offerors.
- c) Bolts and nuts: steel grade 8.8 electro galvanized
- d) Anchors for floor fixing shall be chemical anchor type.
- e) The Offerors must be able to prove the quality and origin of the materials by certification; this will be subject to an approval by client

#### **F.3.3 Requirements on Manufacturing**

- a) All welding shall be performed by certified welders.

- b) On the request of the client, the copies of welder certifications must be made available.
- c) The ends of all tubular components must be sealed.
- d) Length of all bolts should generally be chosen to avoid excess protrusion beyond the fixing nut, typically by 2 to 3 threads.

#### **F.3.4 Requirements on Installation**

- a) Packaging & shipping, storage and installation of the storage system shall be with due care to minimize any damage.
- b) Damaged parts are to be repaired and paint touch-ups effected as required.
- c) Welding on site is not allowed without prior authorization and required occupational health and safety regulations followed. A suitable screened area shall be set up by the installer.
- d) During installation, the Offeror takes care of bracing the storage structure where necessary.
- e) The successful Offeror carries full responsibility for familiarising themselves with the site in respect of the way storage structures can be brought in, located and installed.

#### **F.3.5 Standardisation**

- a) To minimise the number of spare parts that need to be stored and to simplify the racking installation as much as possible, the use of standard components is encouraged i.e. a common slot profile and hook connector.
- b) Offerors are to confirm to what extent, and how, this has been achieved.

### **ATTACHMENT G: FUNCTIONAL AND TECHNICAL REQUIREMENTS – TOTE CONVEYOR SYSTEMS**

#### **G.1 Overview**

This section calls for the design, manufacture, supply, installation and commissioning and performance criteria of a Tote Conveyor system from the Fine Picking Operations to the Manifesting area to the Despatch Area

##### **G.1.1 Reference Drawings**

This tender to be read in conjunction with the following reference Drawings in Attachment E:

- MSL 001 rev A: PROPOSED WAREHOUSE LAYOUT
- MSL 002 rev A: SECTIONS AND ELEVATIONS
- MSL 003 rev A: DETAIL ON PICK SYSTEM
- MSL 005 rev C: SITE PLAN

##### **G.1.2 Load Units and System Throughput**

- **Tote conveyor:**
  - o 500mm long x 400mm wide x 300mm high x 20kg.
  - o Estimated throughput : 2000 totes / hr
- **Case Conveyor:**
  - o Min carton 150mm long x 100mm wide x 100mm high x 0.5kg
  - o Max carton: 600mm long x 500mm wide x 400mm high x 25kg
  - o Estimated throughput : 2000 cases / HR

##### **G.1.3 Conveyor System**

**G.1.3.1 Tote conveyor: idler Conveyor Series 100.**

Conveyor # 100: Horizontal Idler Conveyor:

Operation Description: Idler Conveyor is placed at 700mm above F.F.L to assist the operator in the Order Picking Process as he moves to the various Carton Flow Rack Pick Faces when presented with a Pick Order.

REQUIRED	OFFERED	QTY
Conveyor Type = Idler Roller Height to Top of Roller = 700mm Horizontal Length = 25 000mm Roller Width = 500mm Support Type = Floor Support in a H-Frame support Side Guarding = None		1-off

**G.1.3.2 Tote Conveyor: Powered Conveyor Series 200.**

**Conveyor # 200: Powered Horizontal Belt Conveyor:**

Operation Description: Completed orders are placed on the top tier Take – away conveyor that leads to Manifesting. Conveyor #200 is connected to Conveyor #202.

REQUIRED	OFFERED	QTY
Conveyor Type = Powered Belt Height to Top of Belt = 1400mm Horizontal Length = 12 000mm Belt Width = 500mm Support Type = Floor Support in a H-Frame support Side Guarding = Double Adjustable Channel. Left Side		1-off

**G.1.3.3 Conveyor # 202: Powered Horizontal Belt Conveyor:**

Operation Description: Completed orders are placed on the top tier Take – away conveyor that leads to Manifesting. Conveyor #202 is connected to Conveyor #200.

REQUIRED	OFFERED	QTY
Conveyor Type = Powered Belt Height to Top of Belt = 1400mm Horizontal Length = 12 000mm Belt Width = 500mm Support Type = Floor Support in a H-Frame support Side Guarding = Double Adjustable Channel. Left Side		1-off

**G.1.3.4 Conveyor # 204: Right Hand 90 deg Taper Roller Bend:**

Operation Description: Totes are moving from the Powered belt conveyor and transitions into the 90 degree Right Hand Turn Tapered Roller Bend.  
 Conveyor №.204 is connected to Conveyor №.202

REQUIRED	OFFERED	QTY
Conveyor Type = Right Hand 90 deg Tapered Roller Bend Height to Top of Roller = 1400mm Roller Width = 500mm Support Type = Floor Supported. Side Guarding = Double Adjustable Channel. Both Sides		1-off

**G.1.3.5 Conveyor # 206: Powered Horizontal Belt Conveyor:**

Operation Description: Totes are moving from the 90 degree Tapered Roller Bend and transitions onto a Powered Belt Conveyor.  
 Conveyor №.206 is connected to Conveyor №.204.

REQUIRED	OFFERED	QTY
Conveyor Type = Powered Belt Height to Top of Belt = 1400mm Horizontal Length = 3000mm Belt Width = 500mm Support Type = Floor Supported Side Guarding = Double Adjustable Channel. Both Sides		1-off



**G.1.3.6 Conveyor # 208: Zero Pressure Accumulation Conveyor:**

Operation Description: Totes are moving from the Horizontal Belt Conveyor and transitions onto Zero Pressure Accumulation Conveyor.  
Conveyor №.208 is connected to Conveyor №.206

REQUIRED	OFFERED	QTY
Conveyor Type = Zero Pressure Accumulation Height to Top of Roller= 1400mm Horizontal Length = 6000mm Roller Width = 500mm Zone Length = 10 zones @ 600mm / zone. Support Type = Floor Supported. Side Guarding = Double Adjustable Channel. Right Side		1-off

**G.1.3.7 Case Conveyor: Powered Conveyor Series 300.**

**Conveyor # 300: Powered Horizontal Belt Conveyor:**

operation description: manifested orders (cases) are placed on the lower tier take –away conveyor that leads to the despatch area. conveyor #300 is connected to conveyor #302

REQUIRED	OFFERED	QTY
Conveyor Type = Powered Belt Height to Top of Belt = 700mm Horizontal Length = 5000mm Belt Width = 500mm Support Type = Floor Support in an H-Frame support. Side Guarding = Double Adjustable Channel. Left Side		1-off

**G.1.3.8 Conveyor # 302: Left Hand 90 deg Taper Roller Bend:**

operation description: cases are moving from the powered belt conveyor and transitions into the 90 degree left hand turn tapered roller bend.  
conveyor №.302 is connected to conveyor №.300

REQUIRED	OFFERED	QTY
Conveyor Type = Left Hand 90 deg Tapered Roller Bend Height to Top of Roller = 700mm Roller Width = 500mm Support Type = Floor Supported. Side Guarding = Double Adjustable Channel. Both Sides		1-off

**G.1.3.9 Conveyor # 304: Powered Horizontal Belt Conveyor:**

Operation Description: Cases are moving from the 90 deg tapered roller bend onto powered horizontal belt conveyor. Conveyor #304 is connected to Conveyor #302.

REQUIRED	OFFERED	QTY
Conveyor Type = Powered Belt Height to Top of Belt = 700mm Horizontal Length = 5000mm Belt Width = 500mm Support Type = Floor Supported. Side Guarding = Double Adjustable Channel. Both Sides		1-off

**G.1.3.10 Conveyor # 306 Gravity Decline Conveyor**

Operation Description: Cases are moving from the Powered Horizontal Belt conveyor and transitions onto idler decline conveyor  
Conveyor №.306 is connected to Conveyor №.304

REQUIRED	OFFERED	QTY
Conveyor Type = Idler Decline Horizontal Length = 5000mm Roller Width = 500mm Decline Angle = 2 Degrees Support Type = Floor Supported. Side Guarding = Double Adjustable Channel. Right Side End Stop = Yes		1-off

**G.2 STANDARD SPECIFICATIONS FOR THE CONVEYOR**

All conveyor equipment must be specified in the tender document inclusive of:

- dimensions of proposed equipment.
- supporting roller diameter and wall thickness.
- pitch of rollers.
- decline/incline angles and induction controls.
- controls and plc logic.
- field devices.
- conveyor speeds.
- power system conditions and requirements
- requirements of ups support on plc logic to be confirmed and supplied by the Offeror where necessary.
- position and load of conveyor supports.
- all electromechanical controls including emergency stop equipment and functions, total power requirements, positions and sizes of motor control cabinets including isolating switches.
- all equipment is to be finished with a high gloss epoxy coating. the colour will be based on a ral standard selected by the client.
- should the conveyor system require compressed air, the bidder is to include for reticulation, termination points and compressor.

### **G.2.1 Electrical Requirements**

It would also be advantageous for Offerors to elaborate on energy reduction / reclamation technologies that they are in a position to supply and support.

**ATTACHMENT H: FUNCTIONAL AND TECHNICAL SPECIFICATIONS –  
FENCING AND GATES**

**H.1 FUNCTIONAL AND TECHNICAL SPECIFICATIONS**

**H.1.1. Overview**

This section calls for the supply, delivery and installation, of:

- Fencing with double sliding gates between grid line 02-03 C-E and C-E 9-10
- Fencing and gate with roof for Narcotics cage

**H.1.2 Reference Drawings:-**

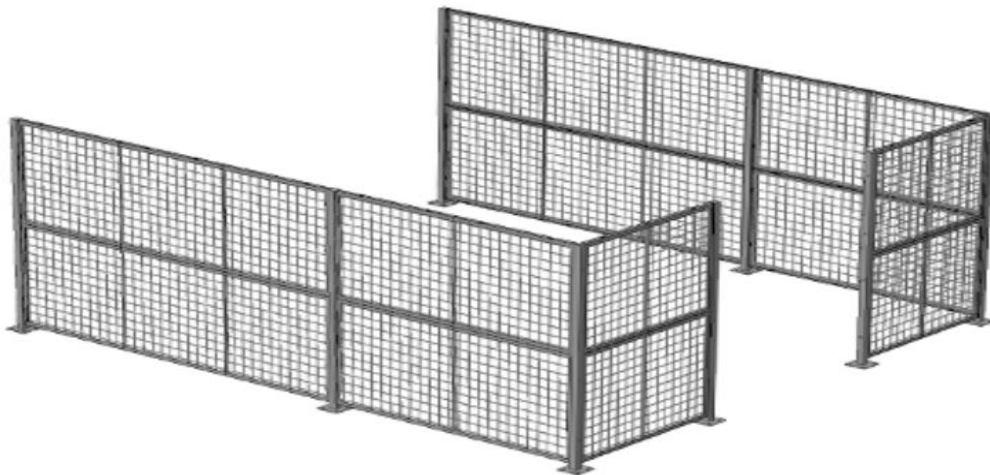
- MSL 001 rev A: Warehouse Detail
- MSL 002 rev A: Sections an Elevations

**H.1.3 Fencing With Double Sliding Gate – Grid lines 02-03 C-E and C-E 9-10**

**H.1.3.1 Fencing**

The area indicated between the grid line 02-03 C-E and C-E 9-10 in the warehouse (refer to plan) is to be partitioned off using wire mesh supported on free standing steel tubular posts centred at equal spacings along its length and breadth with a double sliding steel tubular gates as shown in the plan. The Offeror is required to design the fencing partition and determine the spacing of posts required to ensure both strength and stability of the partition.

An illustrative picture of the type of fencing required is given below



### **H.1.3.2 Specifications for Partition Fence**

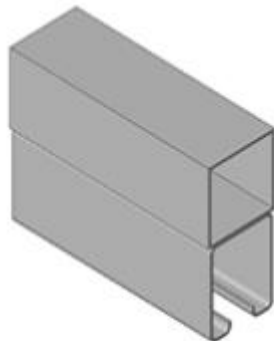
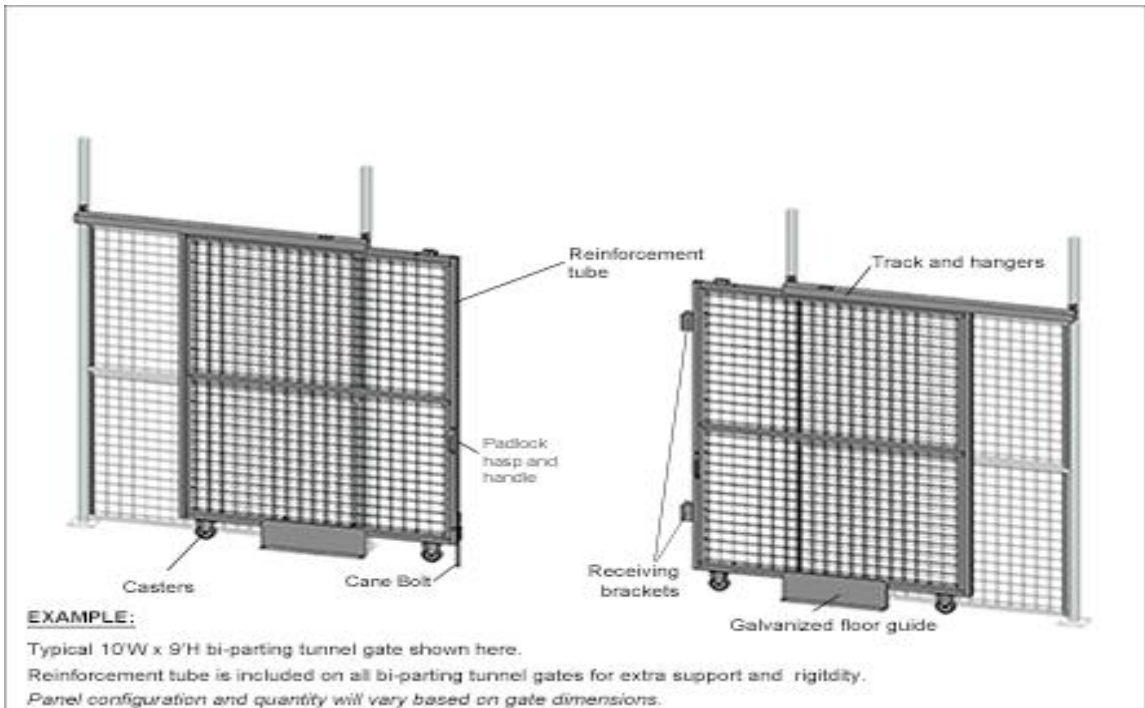
- Mesh Material – Steel wire
- Mesh Size – 50mm x 50mm x 2,5mm dia Weld Mesh hung in the vertical & attached to the structure and 2 No x 3,15mm dia straining wires secured with 2mm dia binding wire.
- Frame Material – Structural angle steel
- Stiffening profile- 12mm diameter reinforcement rod
- Post Height – 3000mm (10feet)
- Post Material – Hollow Structural Tubing
- Size of tubing – Minimum 50x50mm (2"x2")
- Base plate sizes for posts – 150 x 150 x 6mm (6"x6"x 1/4")
- Finish coat – Powder coated
- Color for Posts – Grey
- Color for wire mesh- Factory finish (galvanized)

### **H.1.3.3 Sliding Gates**

Between grids B-E and 2-3 and along grid 9, B-E as indicated in the layout plan for the warehouse, there is a requirement to fabricate, supply and install a Bi - Parting sliding gate with specifications as those indicate for the fencing above. Additional information for the sliding gates are as follows;

- Height – 3000mm (10 feet)
- Width – 2400mm (8 feet)
- Upper tracks – Galvanised tracks and hangers ( see example below)
- Lower tracks- Castor roller wheels with floor guides
- Door stop- to be attached to the right door
- Locking Mechanism – Latch and key ( see example below)

An illustrative picture of the type of gate required is given below



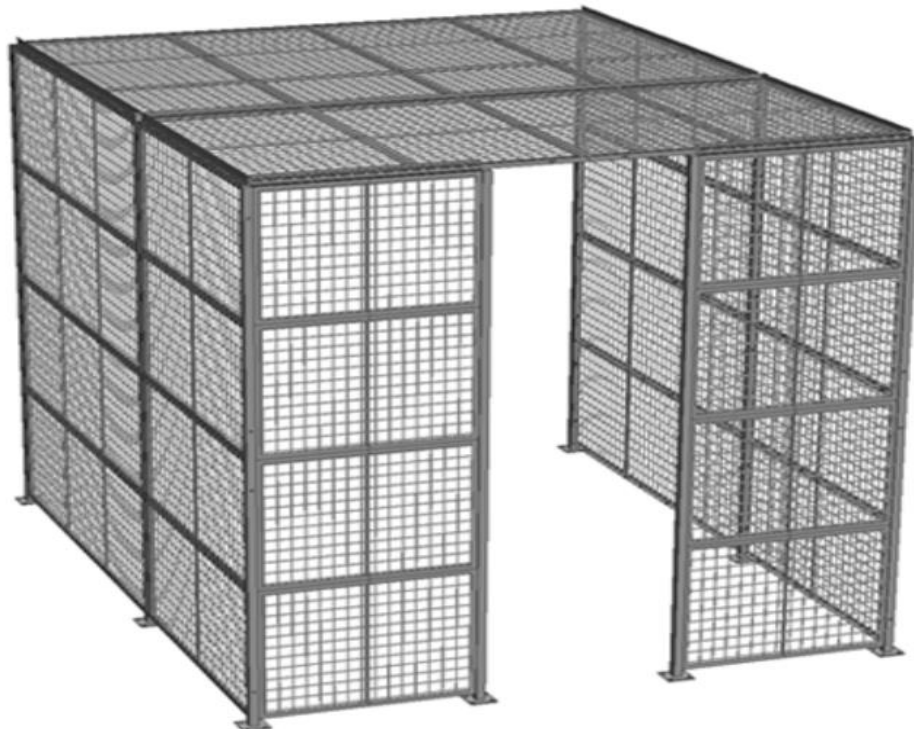
**Track #2:**  
 Galvanized track  
 welded to 2" x 2"  
 reinforcement tube.



## **H.1.4 FENCING AND GATE WITH ROOF FOR NARCOTICS CAGE**

### **H.1.4.1 Fencing**

The area indicated as Narcotics Cage (refer to plan) is to be partitioned off using wire mesh supported on free standing steel tubular posts centred at equal spacings along its length, breadth and roof with a steel tubular single swing gate at the entrance to this area. The bidder is required to design the fencing partition and determine the spacing of posts required to ensure both strength and stability of the cage partition. An illustrative picture of the type of cage required is given below



### **H.1.4.2 Specifications for Partition Cage**

- Mesh Material – Steel wire
- Mesh Size – 25mm x 25mm x 2mm welded mesh
- Frame Material – Structural angle steel
- Stiffening profile- 12mm diameter reinforcement rod
- Post Height – 3000mm (10feet)
- Post Material – Hollow Structural Tubing
- Size of tubing – Minimum 50x50mm (2"x2")
- Base plate sizes for posts – 150 x 150 x 6mm (6"x6"x 1/4")
- Finish coat – Powder coated
- Color for Posts – Grey
- Color for wire mesh- Factory finish (galvanized)

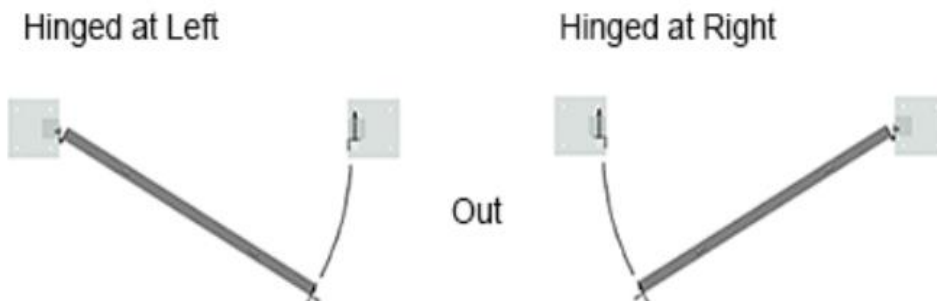
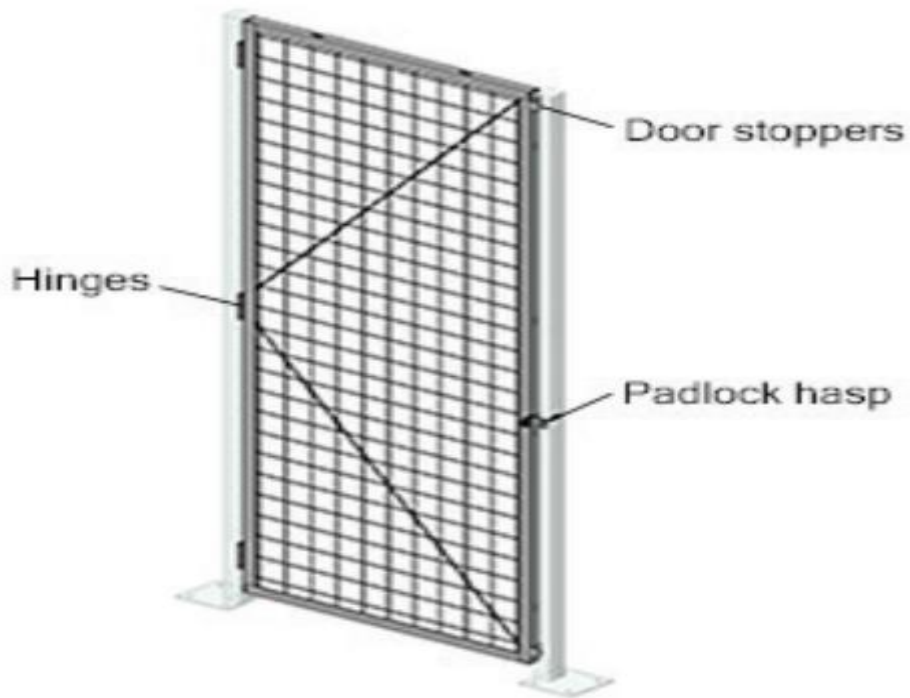
### **H.1.4.3 Single Swing Gate**

At the entrance to the Narcotics Cage as indicated in the layout plan for the warehouse, there is a requirement to fabricate, supply and install a single swing gate

with specifications as those indicate for the fencing above. Additional information for the swing gate are as follows;

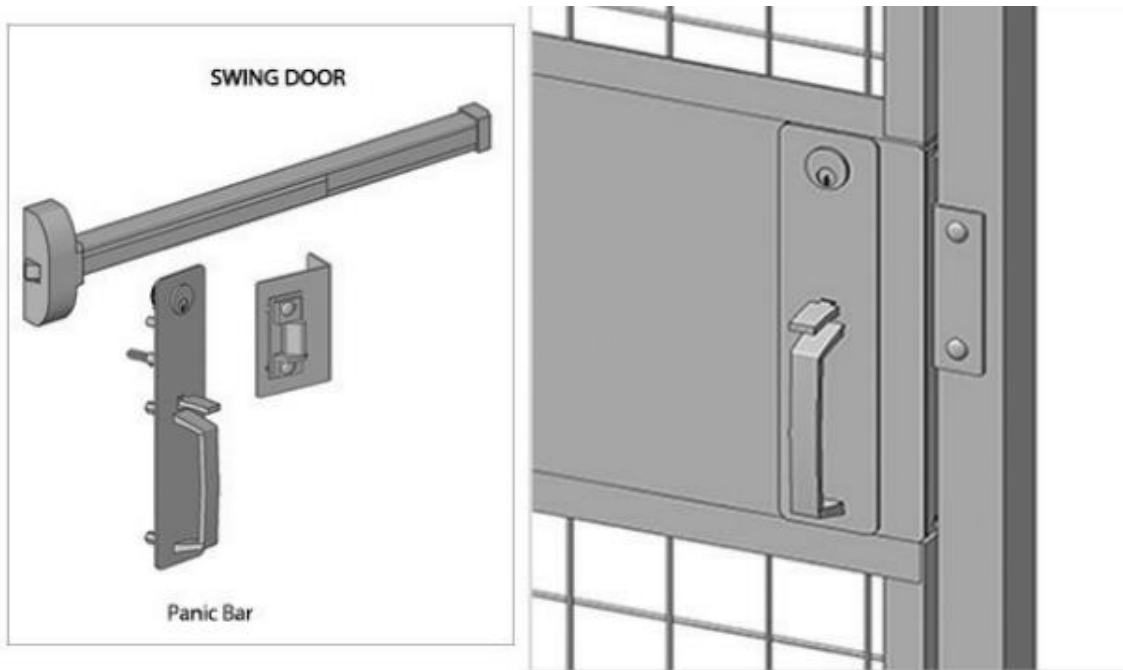
- Height – 3000mm (10feet)
- Width – 1200mm (4feet)
- Locking Mechanism – Panic bar ( see example below)

An illustrative picture of the type of gate required is given below



The swing gate should be hinged at the left, opening out





Locking mechanism

**ATTACHMENT I : FUNCTIONAL AND TECHNICAL SPECIFICATIONS – DOCK LEVELLERS**

**I.1 FUNCTIONAL AND TECHNICAL SPECIFICATIONS**

**I.1.1. Overview**

This section calls for the supply, delivery and installation, of:

04 Number Dock Levellers

**I.1.2. Reference Drawings:-**

This section needs to be read in conjunction with the following drawings in Attachment M:

1. **AL/15-553/R14 – Floor Plan**
2. **AL/15-553/R15 – Floor Plan ( Sections)**
3. **AL/15-553/W02 – Section S**

**I.1.3 Equipment: Dock levelers**

**a) Technical Specifications for air powered Dock Levellers**

Model	APL 610 SX
Type	Air Powered Swing Lip Dock Leveller
Capacity	15 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	Laminated included “D” type rubber
Operation	Dual Airbag Activation
Includes	Safety legs Safety Toe Guards Maintenance Strut
Electrics	220V with 30 amp breaker supplied by contractor to push location in an isolator (1 400 mm H from finished floor level) recommended
Warranty	10 Years Structural 5 Years on Lifting Mechanism 1 Year Remaining Parts

**b) Local Foamside Truck Shelter (Dock Head Seals):**

Door opening	: 3 000 mm x 4 000 mm maximum
Material	: 1100mg / sqm vinyl
Colour	: Black – yellow guide stripes
Overall width	: 3 500 mm
Overall height	: 3 350 mm

Side curtains : 609 mm W x 3 350 mm L with fibreglass stiffeners  
Head curtain : 950 mm drop x 3 500 mm W  
Opening between curtains : 2 280 mm W  
Projection from dock face : 450 mm  
Foam filled side members : 200 mm W x 450 mm D x 3 350 mm L (high density foam)  
Bottom draft pads : 2 included with "NO STEP" on  
Wind straps : Included for the curtains consistent shape and for uniform impact by vehicles  
Head frame : Stiff galvanised steel with translucent fibreglass cover for natural light infiltration into the dock cubicle  
Fixing consumables : All in galvanised steel

**c) 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.

- (i) Sizes: as indicated
- (ii) Metal finish: Hot dip galvanized
- (iii) Acceptable manufacturers:
  - Blue Giant Equipment Corporation
  - Durable Mat Company
  - Kelley Company, Inc.

**d) Truck wheel Guides:**

2 No. Tubular steel truck guide frames per dock

***MUST BE FITTED TO CONCRETE FLOOR***

Tube dimension : 150 mm Ø x 6 mm – wall thickness  
Length : 2 500 mm  
Overall height : 250 mm above floor  
Floor plate : 300 mm x 300 mm x 4 anchor holes  
Finish : Spray painted to manufacturers paint specification

**e) Vertical Lift (Dock Door)**

Opening : 3000mm W x 4000mm H  
Quantity : 4 off  
Type of lift : Vertical lift with the entire door perpendicular to the floor in the opened position  
Head room required : Door opening height plus 500mm  
Operation : Chain hoist (optional motor drive)  
Sections : fabricated from pre-painted white, hot dipped galvanised steel with rigid polyurethane insulation core for added strength and protection  
Finish : White stucco embossed  
Panel Thickness : 38 mm  
Weather seals : bottom, header and side seals contributing to a cleaner



Running current        A        41.5 (+/- 10 %)

Refrigerant control    TXV

Refrigerant             R410A

With motorized dampers and actuator for automatic switching between free cooling and compressor cooling.

AC controller on free cooling and compressor cooling.

Free cooling at 20 C to be able for automatic for switch on

Air flow minimum m<sup>3</sup> /h        14000

Evaporator side

ESP (Pa)                            500

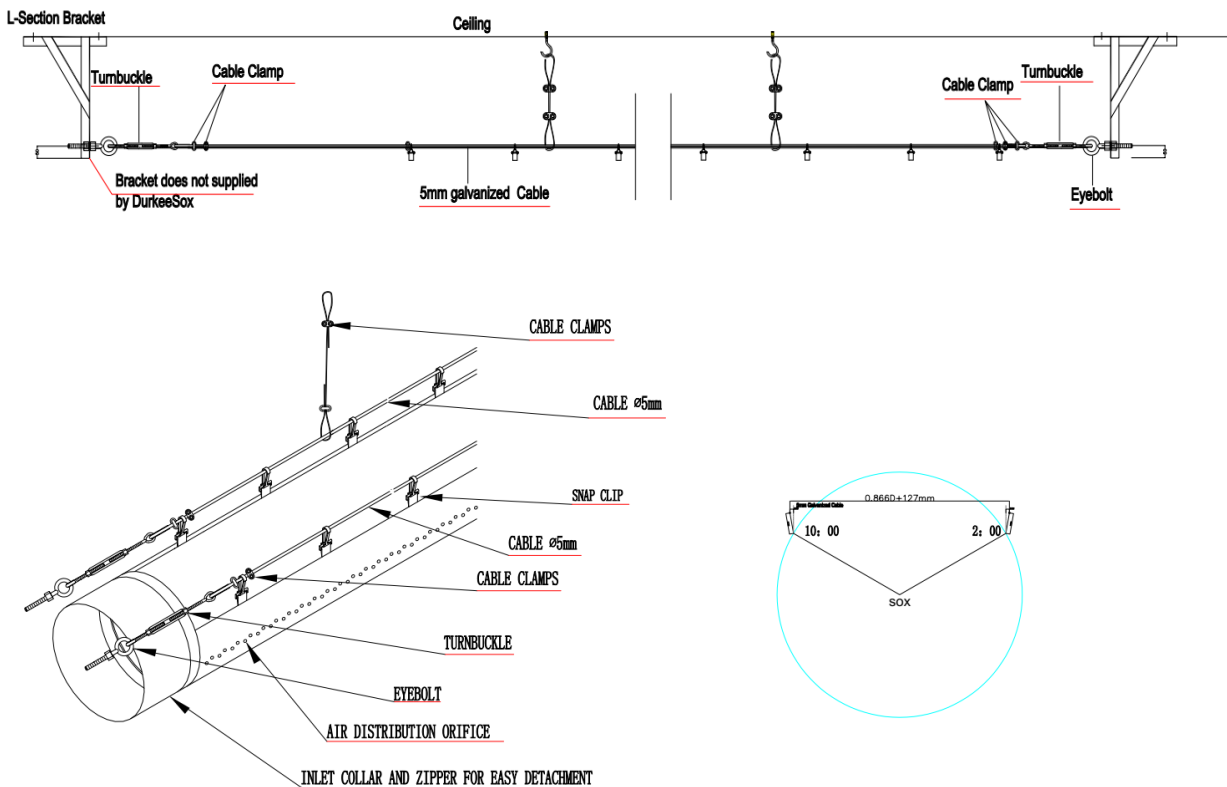
Filter Aluminium(G3)

Noise dB(A) maximum        76

Refrigerant charge (kg)        2x10.5

Duct system is using non-inflammable, round, soft fabric, fire proof ducts

Colour of the ducts: blue



**Recommended Sox suspension sytem**

**J.1.4 Offices, Boardroom and Hazardous Store**

It is envisaged that offices will be in the form of split-packaged units, possibly multi-splits 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  $23^{\circ}\text{C} \pm 2^{\circ}\text{C}^*$ .

- 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.
- All units should come complete with auto restart, insulated refrigerant and drain piping, wireless remote controllers

#### **J.1.5 Toilet Accomodation**

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

Extract fan specification

- Capacity- 250m<sup>3</sup>/hr or 69 l/m
- Electrics- 1PHSE /240V/ 50HZ40W
- Supply complete with fan on/off control switch and all other necessary ancillaries and fixings

## **ATTACHMENT K: FUNCTIONAL AND TECHNICAL SPECIFICATIONS – FIRE FIGHTING SYSTEMS**

### **K.1.0 SPRINKLER SYSTEM**

#### **K.1.1 FUNCTIONAL SPECIFICATIONS**

##### **K.1.1.1 Overview**

This Document calls for the design, manufacture, supply, installation and commissioning and performance criteria of a sprinkler system inclusive of the following:

##### **K.1.1.2 Existing Conditions:**

Survey the interior of the building and provide a scaled drawing showing all existing spaces, ceiling construction, location of walls and partitions, and the occupancy of each room. Identify the location of all equipment located above the ceilings to determine the appropriate routing of the new sprinkler mains, branches, and head locations. Provide a design to relocate any existing equipment necessary to install the new sprinkler system such as conduit, piping, lighting fixtures, ductwork, suspended ceiling system components, panels, light fixtures, mechanical equipment, etc

##### **K.1.1.3 Design Documents:**

A complete scaled layout of the new sprinkler system shall be shown on the interior floor plan of the building including the coordination required with the roof, lighting, HVAC ductwork and diffusers, wiring conduit, and other

obstructions. Identify the location of all walls, partitions, concealed spaces, closets, and bathroom areas. The design shall be in accordance with current Zambian Building Fire Codes. Provide fire protection for all material storage areas of the building and identify the storage commodity description and classification, storage area height, and storage arrangement. Design documents shall include the pipe material description, size and wall thickness, and center to center dimension of the sprinkler heads. The location of all control valves, check valves, backflow preventers, line flushing valves, drain pipes, air compressors, jockey pumps, fire pumps, and test connections shall be shown. Details of the hanger type and location, sleeves, braces, and methods of securing the sprinkler system shall be provided. The specification shall indicate the type of system and the name of the desired manufacturer of the fire suppression system components proposed including, but not limited to: valves, hangers, sprinkler heads, alarms, meters, fire pump and jockey pump, etc.

#### **L.1.1.4 Reference Drawings**

This RFP to be read in conjunction with the following reference Drawings in Attachment E:

- MSL 001 rev A: Warehouse Detail
- MSL 002 rev A: Sections and Elevations
- MSL 003 rev A: Detail on Pick System
- MSL 005 rev C: Site Plan
- MSL 006 rev A: Detail on Hazardous Store
- As built drawings provided for in attachment M

#### **K.1.1.5 Pipe Penetrations:**

All new piping installed in the buildings shall be sealed where it passes through the floors and walls of the structure and the material must afford the required fire rating of that floor and wall. Details of the pipe penetrations shall be included on the design drawings indicating how they are to be sealed and the type of material to be used.

#### **K.1.1.6 Valves:**

Provide all system wet and dry valves, compressors, and Siamese connections per the requirements of the codes. All hydrants, control valves, check valves, backflow preventers, line flushing valves, drain pipes, air compressors, jockey pumps, fire pumps, and test connections shall be shown. Each system shall have a single control valve arranged to shut off both the domestic and sprinkler systems and a separate valve for the domestic system only. The sprinkler system main valve supervision, flow and tamper switches must be integrated with the fire detection system of the building and must comply with the current code. Design all test valves and drains as needed. Provide durable locks and chains for each interior valve controlling water to a sprinkler or standpipe system and each

#### **K.1.1.7 Sprinkler Riser Diagram:**

A sprinkler piping riser diagram shall be provided identifying the routing and interface of the new system piping to the existing water supply line and related components. The drawings shall provide a full height cross section of the area where the sprinkler system is being installed including the ceiling construction and location of any

structural obstructions. Drawings shall include all standard fire safety symbols and occupancy of each area.

**K.1.1.8 Riser Main Drain Connection:**

Each fire suppression pipe riser shall have its own 2” main drain connection. This connection will be run “full open” for two minutes to measure flow and pressure of the system during the annual test. Gauge connections shall also be provided

**K.1.1.9 Sprinkler System Controls:** Sprinkler system controls shall be vertically mounted and accessible without the need for a ladder. Service side and system side pressure gauges shall be provided for all installations.

**K.1.1.10 Building Interior Finishes:**

The proposal shall address and cost in the restoration of all building interior finishes that are impacted by the installation of the fire sprinkler system component items such as the sprinkler pipe, attachment devices, heads, soffits, ceiling tiles, etc. Finishes shall include, but not be limited to patching, painting, and the relocation of lighting, signage, alarms, ventilators, louvers, curtain tracts, wood trim, ceiling systems, etc. necessary to install the sprinkler pipe, attachment devices, heads and all other components of the system.

**K.1.1.11 Sanitation:**

Sanitation requirements such as flushing of the lines, chemical treatments, and pipe cleaning details shall be included in the design documents for all piping components. Readily removable fittings shall be provided at the end of all cross mains to facilitate the flushing process

**K.1.1.12 Equipment Tests:**

Upon completion of the project, and prior to issuance of the Certificate of Approval, the Offeror shall test the complete sprinkler and detection system making adjustments as required to obtain all necessary approvals. The Offeror’s designer shall identify the testing requirements in the specification including the hydrostatic test pressures, the test duration under pressure, and the amount of allowable leakage per hour. All equipment testing shall be conducted in the presence of the Chemonics engineer and designated representatives of the Local Fire Department and MSL. The Offeror shall be responsible for the coordination and scheduling of all tests. All test results shall be collected and bound in a manual for reference. Locate test/drain connections so that their discharge will not cause damage to the building or site. Provide splash blocks where test and drain connections are discharged to grade. All test stations shall be located in areas where testing does not affect occupants or programs, and water discharge does not pool.

**Note: The Offeror should cost in all the required tests in their Cost Proposal**

**K.2.0 FIRE HOSE REELS AND FIRE EXTINGUISHERS**

**K.2.1.0 FUNCTIONAL SPECIFICATIONS**

**K.2.1.2 Overview**

This section calls for the design, manufacture, supply, installation and commissioning and performance criteria of a fire hose reel and fire extinguisher requirements for the warehouse and office annex area and external installations



#### **K.2.1.3 Reference Drawings**

This tender to be read in conjunction with the following reference Drawings:

- MSL 001 rev A: PROPOSED WAREHOUSE LAYOUT
- MSL 002 rev A SECTIONS AND ELEVATIONS
- MSL 005 rev C: SITE PLAN
- As built drawings provided for in attachment M

#### **K.2.1.4 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.

#### **K.2.1.5 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.

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

Fire Extinguishers: Provide hand held fire extinguishers as per approved fire plan/design

### **K.3 SMOKE AND FIRE DETECTION AND FIRE ALARM SYSTEM**

#### **K.3.1 FUNCTIONAL AND TECHNICAL SPECIFICATIONS**

##### **K.3.1.1. Overview**

This section calls for the design, supply, delivery and installation of smoke, fire detection and fire alarm systems

##### **K.3.1.2 Reference Drawings:**

- MSL 001 rev A: Warehouse Detail
- MSL 002 rev A: Sections and Elevations
- As built drawings provided for in attachment M

##### **K.3.1.3 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 trays.

#### **K3.1.4 General Zoning**

All emergency exits & fire passages need to be clearly marked. Offerors should include this both in their designs and make provision for all signages including those for the emergency assembly area in their proposal.

### **ATTACHMENT L – ENVIRONMENTAL MITIGATION & MONITORING PLAN**

Per section 1.6 of this RFP, the environmental mitigation & monitoring plan (EMMP) for GHSC-PSM can be found on the following link on the Chemonics website: [https://www.dropbox.com/home?preview=GHSC\\_PSM\\_EMMP.pdf](https://www.dropbox.com/home?preview=GHSC_PSM_EMMP.pdf)  
Based on the requirement of the EMMP (linked above), all offerors will be required to complete an Environmental Risk and Occupational Health and Safety Compliance Plan (EHSCP) in the provided template. The template for this plan can be found at the following link:

[https://www.dropbox.com/s/8f7laqmdrabknv0/GHSC%20EHSCP.Template.Mission.GHSC.PSM\\_Luanshya.docx?dl=0](https://www.dropbox.com/s/8f7laqmdrabknv0/GHSC%20EHSCP.Template.Mission.GHSC.PSM_Luanshya.docx?dl=0)

### **ATTACHMENT M – DETAILED DESIGN DRAWINGS APPROVED FOR CONSTRUCTION**

Architectural, Structural, Electrical and Mechanical drawings approved for construction for this warehouse can be found on the following link:

<https://www.dropbox.com/sh/qwemdh3m758c3t/AABNkFhq-l1O-rTfPN2LMbana?dl=0>





