

MEMO ON LUANSHYA FIREFIGHTING SYSTEM.

Observation	Response	Comments
<p>BOQ for the sprinkler system TM 14SEP: BOQ docs not provided for review.</p> <p>Even though there is a general comment that the specs govern the BOQ, there are numerous references to buried mild steel pipe throughout and just one mention of cast iron in the spec. Recommend that the BOQ be more closely aligned with the spec. DH response: "The BOQ clearly states that the above ground and below ground pipe are Schedule 40 seamless carbon steel pipes. The drawing is aligned with the BOQ." TM response: The DH 6/9/22 report calls for "The existing PVC pipe from the Pump House to the building be replaced with a 200 mm diameter galvanized iron pipe wrapped in corrosion resistant tape". Explain the change from the recommendation. TM 14SEP: Unresolved. Also, there are inconsistent provisions between the RFP (steel) and SUBK (galvanized iron).</p>	<p>DHEC response: The BOQ supersedes the report in terms of equipment and works descriptions. The report was written prior to the BOQ being drafted and as such there will be differences between the two. The BOQ form and drawings form the specifications of the project, and the report will not be issued as part of the tender process. Thus, the inconsistencies noted are only between the report and BOQ/Drawings not between the BOQ and Drawings</p>	<p>DH Engineering BOQ and Drawing will be used as the main point of reference for the Luanshya firefighting system because:</p> <ul style="list-style-type: none"> • They were developed after the report was shared. • They were developed using the AISB firefighting regulations. • The very tight budgetary constraints on this particular project demand frugality while trying to meet AISB standards at the same time.
<p>The findings report started that no pressure gauges were fitted on the existing Hose reels, but they are not included in the BOQ or the SOW. DH response: "Pressure gauges are not a mandatory requirement on every fire hose reel. This statement was made just to clarify that the pressure of the existing system could not be ascertained as there were no pressure gauges. The 2 new fire hose reels have gauges included in the BOQ and these will suffice. There is no need for additional gauges." TM response: The DH report dated 6/9/22 states, "Pressure gauges be installed for all fire hose reels installed to enable a quick check on the system operation." Explain. TM 14SEP: Unresolved.</p>	<p>DHEC response: The BOQ supersedes the report in terms of equipment and works descriptions. The report was written prior to the BOQ being drafted and as such there will be differences between the two. The BOQ form and drawings form the specifications of the project, and the report will not be issued as part of the tender process. Thus, the inconsistencies noted are only between the report and BOQ/Drawings not between the BOQ and Drawings</p>	

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<p>Total number of existing Hose reels is 5. If the recommended design illustrates that the warehouse should have 8 hose reels then the stated quantity in the BOQ/SOW should be 3 and not 2. DH response: "Our drawing shows only 2 new Fire Hose Reels are required and thus the BOQ is correct." TM response: I defer to DS to confirm this statement. TM 14SEP: Defer to DS to sign off on this item.</p>	<p>Dingase response: Warehouse to have a total of 7 hose reels (of which 5- existing and 2- to be installed) and thus will meet AISB standards</p>	
<p>Recommended foam canon (in SOW) for the Hazardous Goods store not included in the BOQ. DH response: "This has now been added" TM response: Noted addition in the BOQ. My comment of 7/29 stated that the foam canon was not in the BOQ or technical specifications. Recommend that DH provide a spec for inclusion in the RFP Attachment A. TM 14SEP: No spec found in RFP. An alternative to a spec is to have DH provide a manufacturer of an acceptable product. We can insert "or equal" after the manufacturer's name. Unresolved.</p>	<p>Jack Calnan response: Spec provided is sufficient. DHEC response: The specification for this mobile canon is given in the BOQ</p>	<p>Extract from BOQ: MOBILE FOAM CANON Supply to site mobile foam canon complete with 90 kg tank, hose, and nozzle on wheeled frame. (This definition will be adequate for a firefighting systems installer to understand what is required).</p>
<p>Number of Optical Smoke Detectors should be 53 (49 in main warehouse and 4 in Hazardous Goods store). DH response: "The smoke detectors from the Admin Building are being re-used in the Hazardous Store which is why they have not bene counted as new." TM response: a) Are we leaving the admin area without smoke detectors? b) Reconcile the proposed removal of smoke detectors from the admin area with the recommendation from the DH report "The faulty Break Glass should be replaced in the Administration Section and the detectors connected to the new Control Panel". TM 14SEP: Unresolved.</p>	<p>DHEC response: All detectors and break glasses in the Admin Block are measured as new in the BOQ and as such there is no need to repair any existing faulty equipment</p>	

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<p>On the ZAMMSA firefighting layout design The stated number of Hose reels is incorrect on the quantities list. The drawing has 8 but the quantities list shows 6. DH response: "This has been corrected." TM response: I can find only 2 hose reels in Bill #2. TM 14SEP: Unresolved. Defer to DS to sign off on this item.</p>	<p>Dingase response: Layout was corrected.</p>	
<p>Number of fire hydrants to be installed is not stated on the quantities list. DH response: "The quantities list does not indicate the number of hydrants, but the ICV, of which there is only 1. Number of Fire Hydrants has been added." TM response: Noted addition of 2 hydrants to BOQ. I defer to DS to confirm this aligns with what is shown on plans. TM 14SEP: Defer to DS to sign off on this item.</p>	<p>Dingase response: Resolved</p>	
<p>What happened to the recommendation that the sprinkler heads above the solar batteries/inverters be blanked off? TM 14SEP: Noted new provision that the sprinklers in the area of the solar batteries be blanked off. DH needs to tell us how far horizontally from the edges of the batteries removal must be done.</p>	<p>Sprinklers will be blanked off to approximately 3m. Decision to be made during site visit.</p>	
<p>Re item #14 in list appearing in Scope of Work Section II.2. Not clear. The DH recommendations of 6/29 call for the replacement of the fire panel. This bullet appears to call for the removal of the existing panel and reinstallation in the HAZ area. Needs clarification. TM 14SEP: Unresolved.</p>	<p>DHEC response: The existing panel is not an addressable panel and as such it will not show what zone the fire is in once detected. This is why we recommended its replacement with an addressable panel for the warehouse and admin block. As the Hazardous Store is one zone the existing panel can be re-use there as it is a separate building and once a fire is detected and the alarm sounds one will immediately know where the fire is.</p>	
<p>Solar power back up to be protected by blanking off the</p>	<p>Jack response: ZAMMSA will be officially informed.</p>	

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<p>sprinkler head on top and installation of the roof covering on top with expended mesh wire around it. TM 14SEP: Unresolved. What happened to the DH recommendation about covering the batteries? If we are not going to do this work, but it remains a DH recommendation, Chemonics has to formally notify ZAMMSA of the recommendation.</p> <p>All internet router points around the warehouse to be installed with a false roof covering. TM 14SEP: Unresolved. Same recommendation as previous item.</p> <p>Drainpipes to be used during maintenance to be installed. TM 14SEP: Unresolved. Same recommendation as previous item.</p>	<p>As for the installation of drainpipes- the installed tank has a drainpipe that will be used to empty the tank. Emptying of water from the sprinkler pipe system will make use of the ICV that will be installed when connecting the pumps to the sprinkler pipe network.</p>	

Date: 22/09/2022.