Works Project Quality Control Plan

Works Projects have specific requirements for Quality Control.

<u>Contractors Quality Control Plan</u> - The first step is to require the Contractor to develop a Quality Control Plan (QCP) for MC approval to be updated continuously by the Contractor. The Contractor's QCP shall include at a minimum the following elements:

- A. Contractor Organizational Structure describe internal responsibility for: planning the work, procuring materials, supervising labor forces, list of subcontractors and description of work, documenting activities, contract authorization authority, and stop work authority.
 - The contractor cannot leave this project to any subcontractor. It is better to select the contractor from Kadugli if possible. They should be local contractors.
 - MCE engineers must check the construction materials, especially the number of cement bags, and rebars to reinforce concrete.
 - Civil engineer or his/her assistant must be in the field on a daily basis, to supervise the activities step by step.
- B. Material Control list type of work to be performed, estimated quantities, list of suppliers/vendors with address and contact information, and submittal list.
 - Providing construction materials is the responsibility of contractor, but MCE engineer should check the quality of materials
- C. Quality Compliance list equipment, laboratories, and testing frequency (per design/QMP standards) that will be utilized to ensure the incorporated work will be in compliance with the Project documents. Name individual responsible for coordinating schedule, materials, and testing with the Inspector.

This is not applicable and is not required by the donor.

<u>Mercy Corps Construction Monitoring</u>. In addition to verifying the Contractors activities mentioned above, the Mercy Corps construction monitoring team shall provide a range of QC functions as described in the 2014 Mercy Corps Field Infrastructure Manual including:

- A. <u>Submittal</u> reviews Contractors shall be required to submit for MC engineer approval submittals for critical equipment and equipment which identify the required quality, capacity and features as specified. Contractors shall allow a minimum of 7 calendar days for each submittal review. List the required submittals below:
 - a. Concrete mix design, This is a light weight structure and the best concrete mix design is 1:2:4 or 1:3:6. MCE engineers can check this with the relevant Ministry.
 - b. Piping: There is no piping for this construction
 - c. Pumps and motors: No water pump needed for this project
 - d. Other critical materials and equipment: All the necessary equipment is the responsibility of the contractor. For example, he/she must provide a quality welding machine.

- B. Field Observation Mercy Corps field staff will conduct and document regular field observations to ensure Contractor is complying with the Contractors QCP.
 - Site engineers must visit the sites on a daily basis, specially for foundation and concrete jobs. prepare the percentage of work on a weekly basis.
- C. Field Testing and Testing verification The Contractor is responsible for ongoing testing during construction and sharing testing results in a timely manner. In some circumstances, the Mercy Corps field staff will conduct testing or contract for third party testing of critical project elements such as concrete mix design or disinfection.
 - Testing is not required but Mercy Corps will check that water utilized for mixing of concrete is clean water (not muddy).
- D. System Start-up Up and Commissioning Prior to acceptance of the work, the Mercy Corps field staff will ensure that all performance criteria of the specified system are met. This will include specified flow rate, pressure, bearing capacity, dimensions, clearances and required parts.

This is not a design with bearing capacity. The dimension of the walls, tie beam and ring beam should be controlled by MCE site engineers.

The roof design with a good slope for rain water, also site slope around the structure to protect the foundation from rain water.