

ANNEX C- TECHNICAL SPECIFICATIONS AND SCOPE OF WORKS

Construction of Accessible Household Latrines

C1. Introduction

The Contractor shall construct accessible household latrines in accordance with the approved drawings, Bill of Quantities (BoQ), and these technical specifications. The works shall include site preparation, excavation, construction of the pit and superstructure, roofing, ventilation, accessibility features, handwashing facilities, and all associated works necessary to deliver a complete, safe, and functional sanitation facility. All materials shall be new, of good quality, and suitable for the intended purpose. The Contractor shall provide all labor, equipment, tools, transportation, supervision, and incidentals required for the successful execution of the works.

C2. Scope of Works

The Contractor shall carry out all activities required for the complete construction and commissioning of the emergency household latrine facilities. This shall include setting out the works, excavation of pits and foundation trenches, construction of pit lining and concrete works, erection of the superstructure, installation of roofing materials, fitting of doors, installation of ventilation systems, construction of access ramps, installation of handwashing facilities, site restoration, and final handover.

All works shall be executed in accordance with the approved drawings and shall comply with accepted engineering, public health, safety, and environmental standards.

C3. Site Preparation and Excavation

The Contractor shall clear and prepare the construction site and accurately set out the works before commencing excavation activities. Excavation shall be carried out to the dimensions and depths specified in the drawings or as directed by the supervising engineer. Excavated materials suitable for backfilling shall be stockpiled and reused where appropriate, while unsuitable materials shall be disposed of at approved locations.

The Contractor shall take all necessary measures to prevent collapse of excavations and ensure the safety of workers and surrounding communities throughout the construction period.

C4. Pit and Foundation Construction

The pit shall be excavated and constructed in accordance with the approved design. Where required, pit walls shall be lined with quarry stone masonry laid in cement mortar to prevent collapse and enhance structural stability. Foundation works shall be constructed on firm and properly compacted ground.

The Contractor shall ensure that all structural elements are capable of safely supporting the loads imposed by the superstructure and intended use of the facility. Pit dimensions and depths shall conform to the approved drawings.

C5. Concrete Works

Concrete works shall include foundations, floor slabs, access ramps, pit covers, and all other concrete elements indicated in the drawings. Concrete shall be mixed, placed, compacted, and cured in accordance with recognized construction standards.

The reinforced concrete pit cover slab shall incorporate a removable desludging access cover to facilitate future maintenance. All concrete surfaces shall be smooth, free from cracks and defects, and finished to a high standard.

C6. Superstructure Construction

The latrine superstructure shall be constructed using treated timber framing and corrugated galvanized iron sheet wall cladding. All timber used shall be treated against termites, fungal attack, and decay. Timber members shall be structurally sound, free from major defects, and securely fixed to ensure stability.

The completed structure shall be weather-resistant, durable, and capable of withstanding local environmental conditions. The overall dimensions shall be in accordance with the approved drawings.

C7. Roofing Works

The roof shall consist of corrugated galvanized iron sheets fixed to timber purlins and rafters. The roof shall be constructed with sufficient slope to facilitate rainwater runoff and prevent water ponding. Ridge caps and all necessary accessories shall be installed to ensure a watertight and durable roofing system. Adequate ventilation openings shall be maintained as indicated in the approved drawings.

C8. Floor and Internal Features

The floor shall be constructed from reinforced concrete and finished with a smooth, durable, and non-slip surface. A squat hole measuring approximately 200 mm × 150 mm shall be provided together with raised footrests. The floor shall be constructed with an appropriate slope toward the squat hole to facilitate cleaning and proper drainage.

C9. Doors and Fittings

The Contractor shall supply and install a lockable corrugated iron sheet door complete with frame, hinges, handles, and locking mechanism. The door shall be securely fixed and capable of opening and closing smoothly without obstruction. All fittings shall be corrosion resistant and suitable for long-term use in outdoor conditions.

C10. Ventilation System

A ventilation system shall be installed to improve air circulation and reduce odors and insect breeding. The system shall include a PVC vent pipe extending above roof level and fitted with a mosquito-proof screen at its upper end. The vent pipe shall be securely fixed and positioned to ensure effective operation throughout the lifespan of the facility.

C11. Accessibility Requirements

The facility shall be accessible to persons with disabilities and individuals with reduced mobility. A reinforced concrete access ramp shall be constructed to provide safe and convenient entry to the latrine. The ramp shall have a non-slip finish and be constructed in accordance with the approved design. The Contractor shall ensure that accessibility features are fully integrated into the completed facility and are functional at the time of handover.

C12. Handwashing Facilities

A handwashing facility shall be installed adjacent to the latrine to promote hygiene and sanitation practices. The facility shall include a water storage container with a minimum capacity of 20 litres or an approved equivalent. All components shall be securely installed and fully operational upon completion of the works.

C13. Quality Assurance and Defects Liability

The Contractor shall be responsible for maintaining quality control throughout the construction period and shall ensure that all materials and workmanship comply with these specifications. Any defects identified during construction, inspection, or the defects liability period shall be corrected at the Contractor's own expense.

Before handover, the Contractor shall clean the site, remove all waste materials, and ensure that the completed facility is safe, functional, and ready for use.

C14. Contractor's Responsibilities

The Contractor shall:

- Provide all labor, materials, equipment, transportation, supervision, and tools required for the works.
- Comply with all applicable health, safety, environmental, and safeguarding requirements.
- Protect completed works from damage until final handover.
- Maintain a clean and safe working environment throughout the construction period.
- Rectify any defects identified during the defect's liability period.

C15. Deliverables

Upon completion, the Contractor shall deliver:

- Fully completed and functional accessible household latrine.
- Operational handwashing facility.
- Completed access ramp and accessibility features.
- Clean and restored construction site.
- Works approved by the supervising engineer and the Client's representative.