

GOALPRIME ORGANIZATION NIGERIA

Annex B - Technical Specification

LOT 1

BoQ - Construction of a Block of Sanitation Facility (4+2)				
<i>Refer all discrepancies to the Architect/Engineer and IOM Wash San in charge.</i>				
<i>All material not in conformity with design specification and description WILL NOT be</i>				
S/N	ITEM	DESCRIPTION	UNIT	QUANTITY
A Preliminaries				
1a	Mobilization/Demobilization	Initial Mobilization and final demobilization of equipment, labour and materials to and from site	sum	1
Total of Section A				
B Excavation and Earth Work				
1b	Site clearance	Clear site of shrubs, grasses undergrowth and other unwanted materials from the surrounding	sum	1
2b	Excavation	Excavate pit for the latrine to a maximum depth of 2.5m (plus 0.25m sideways to allow working space) Excavate pit for shower blockwork to a maximum depth of 0.6m (plus 0.25m sideways to allow working space) Excavate pit for lining foundation block for accessibility platform and ramps to a maximum depth of 0.6m (plus 0.25m sideways to allow working space) Excavate pit for shower soak pit to a maximum depth of 1.5m (plus 0.25m sideways to allow working space)	m ³	55
3b	Levelling bottom of excavation	Level and compact bottom of excavation to receive concrete	m ²	45
4b	Backfilling	Filling to excavation with selected materials from excavation; Compact to edges of facility block and dispose surplus off site after blockwork	m ³	45
Total of Section B				
C Concrete Structure				
1c	Blinding	Cast 50mm blinding under blockwork with weak concrete of ratio 1:3:6	m ³	0.6
2c	High tensile bar (BS4449) for footings and column	Y12 - High yield reinforcement bar to be cut, bend and fix for footings (at 200c/c) and column starters as shown in drawing Y10 - High yield reinforcement bar to be cut, bend and fix for stirrups (at 200c/c) as shown in drawing	Kg	115
3c	Concrete for floor of septic tanks	Cast plain M15 grade concrete (1:2:4); developing minimum 15N/mm ² working strength after 28 days of curing for floor of septic tank with thickness 100mm	m ³	0.7
4c	Concrete for footings and column	Cast plain M15 grade concrete (1:2:4); developing minimum 15N/mm ² working strength after 28 days of curing for both footings and columns with dimensions as shown in the drawing	m ³	1.5
5c	Blockwork	Laying of concrete blockwork (230x450mm) ; laid stretcher bond on cement and sand mortar (1:3) flush pointed for septic tanks and shower foundation- as illustrated in the drawing	m ²	46
6c	Rendering	Internal rendering of septic tanks using 1:4 mortar and gauge of 12mm	m ²	55
7c	Formwork for Beam	Sawn formwork to cover sides of beam, the beam is placed at the top of last coach of block to receive slab, superstructure and user load as shown in the drawing	m ²	5
8c	Formwork for Slab	Sawn formwork to cover soffit of slab supported with vertical poles at appropriate intervals	m ²	6.5
9c	High tensile bar (BS4449) for beams	Y12 - High yield reinforcement bar to be cut, bend and fix for resisting compression and tension in beams as shown in drawing Y10 - High yield reinforcement bar to be cut, bend and fix for stirrups (at 200c/c) as shown in drawing	Kg	63

10c	High tensile bar (BS4449) for slab	Y12 - High yield reinforcement bar to be cut, bend and fix for both main and distribution bars at an interval of 150mm as shown in drawing	Kg	130
11c	Concrete for Beams	Cast plain M15 grade concrete (1:2:4); developing minimum 15N/mm ² working strength after 28 days of curing - dimensions as shown in drawing	m ³	0.6
12c	Concrete for Slab	Cast plain M15 grade concrete (1:2:4); developing minimum 15N/mm ² working strength after 28 days of curing, with thickness of 100mm	m ³	1.6
13c	External hand rails to aid PWSN when using the ramp	Cut, bend, weld and fix in position as shown in the drawing using 50mm (2") hollow GI pipe	sum	2
14c	Blockwork for shower collection chamber	Laying of sancrete blockwork (150x450x230mm) and rendering/dressing ; laid stretcher bond on cement and sand mortar (1:3) flush pointed for shower collection chamber, two PVC pipes will be connected into the chamber and one out to the soak pit as illustrated in the drawing	m ²	1.5
15c	Blockwork for steps and ramps	Laying of sancrete blockwork (230x450mm) ; laid stretcher bond on cement and sand mortar (1:3) flush pointed for steps and ramps, this include cost for rendering and finishing the edges- as illustrated in the drawing	m ²	7
16c	Backfill and compact shower stances	Backfill and compact shower stances with 300mm thickness hardcore materials	m ³	0.9
17c	Shower floor over-site concrete	Cast 75mm over-site concrete; Cast plain M15 grade concrete (1:2:4); developing minimum 15N/mm ² working strength after 28 days of curing	m ³	0.15
18c	Backfill and compact for steps and ramps	Backfill and compact for steps and ramps with 300mm thickness hardcore materials	m ³	7.5
19c	Blockwork for shower soak pit	Laying of sancrete blockwork (230x450mm) - 2x2x1.5m out-to-out ; laid stretcher bond on cement and sand mortar (1:3) flush pointed for shower soak pit, entire second and fourth coaches of blockwork will be inverted to allow for more soaking by adjacent soil- as illustrated in the drawing	m ²	10.5
20c	Rendering	Internal rendering of soak pit using 1:4 mortar and gauge of 12mm	m ²	9
21c	Concrete Slab for Soak Pit	Precast Slab - Cast plain M15 grade concrete (1:2:4); developing minimum 15N/mm ² working strength after 28 days of curing, with thickness of 100mm and divided into 2 for easy placement	sum	1
Total of Section C				
D Superstructure				
1d	Networking of liquid waste pipe	laying and connecting 4" PVC pipes with connections and necessary fittings from floor drains to inspection chamber and to soak pit - This include excavation and patching where needed	m	2
2d	100mm (4") PVC floor drains	Installation of 100mm PVC floor drains (with all accessories) to collect waste water from shower cubicle to inspection chamber	pcs	2
3d	100mm (4") PVC Ventillation Pipe	Installation of 100mm PVC ventillation pipe with fly preventing cap, this include fastening with metal strip (langalanga) to the superstructure	pcs	4
4d	75mm (3") GI Pipe	Installation of 75mm GI vertical poles to carry superstructure as shown	pcs	6
5d	2x4" hard wood (obeche) for super structure	Supply, cut and nail full gauge 2x4" wood as horizontal and vertical poles as shown	m	160
6d	2x3" hard wood (obeche) for super structure	Supply, cut and nail full gauge 2x3" wood as horizontal and vertical poles as shown	m	70
7d	CGI Sheet	Supply and install 30gauge (0.4mm thickness) CGI sheet for walling and roofing of the super structure, it should be fasten using 2.5" roofing nail (cap nail) at grove interval	m ²	80

8d	Doors with accessories	Fabrication and installation of wooden framed doors, wrapped with CGI sheet and braced at intervals with hinges, internal locks and door handle of approved samples	pcs	6
9d	Wire mesh/net	Cut and fix flies-preventing wire mesh as shown	m ²	5
10d	Fascia board	Supply and install 1x12" fascia board, painted blue with gloss paint (IOM blue)	m	7.5
Total of Section D				
Finishes				
E				
1e	Internal floor screeding	Screed internal floor with concrete of gauge 25mm (1") providing surface that will flow towards pit/floor drain	m ³	0.25
2e	Rendering & Dressing	Rendering and dressing of concrete structure above normal ground level	sum	1
3e	Visibility	Placement of 2metallic visibility: IOM and donor visibility, and; Visibility seggregating gender use for the facility. This should be printed on A3 sized metal sheet - Sample to be approved before placement	pcs	2
4e	Contingency	Allow a provisional sum as contingency amount	sum	1

LOT 2

Bill of Quantity (BOQ) for latrine Rehabilitation				
S/N	ITEM	DESCRIPTION	UNIT	QUANTITY
A Concrete Structure				
A.1	Pit Linning	Damage Latrine pit linning should be properly mend and rehabilitate	Pcs	1
A.2	Concrete for Slab	Damage concrete floor should be mend and highly damage once should be Cast plain with M15 grade concrete (1:2:4); developing minimum 15N/mm ² working with thickness 800mm and with 8mm rod with spacing distance of 75mm in each direction	Pcs	1
A.3	Blockwork for steps Ramp	Laying of sancrete blockwork (230x450x230mm) ; laid stretcher bond on cement and sand mortar (1:3) flush pointed for steps and ramps, in highly damage once and mending if need be with atleast three step and ramp should not smooth to avoid slipry	Pcs	1
Total of Section A				
B Superstructure				
B.1	100mm (4") PVC Ventillation Pipe and fly trap	Installation of 100mm PVC ventillation pipe with fly preventing cap, this include fastening with metal strip (langalanga) to the superstructure - fixed with fly screen and cap	Pcs	5
B.2	Corrogeted sheeting Supper Structure	All damaged sheeting should be replaced with new ones where damage is high it should be completely replaced with a minimum of 9 sheet	Pcs	25
B.3	Doors with accessories	Fabrication and installation of wooden framed doors, wrapped with long span corrogeted sheet and braced at intervals with hinges, internal locks and door handle of approved samples		5
C Roof				
C.1	Corrogeted sheeting roofing to be used	All damage sheeting roof should be replace with new once using roofing nails	Pcs	10
D Finishing				
D.1	Visibility	Placement of A3 size visibility on metallic sheet in front and at the rear of the facility	Pcs	1
TERMS AND CONDITIONS				
1	All the materials supplied by the contractor must be according to Nigeria			
2	The contractor must provide samples, catalogues and specification of materials			
3	The price of works includes all job requirements as per Nigerian standard			
4	Contractor should provide PPE for all labors and personnel on the site			

5	Follow the description of equipment, materials and / or services above
6	All the materials supplied by the contractor must be approved by the site engineer
7	Total Cost cover for suply, transportation fabtiction, construction and installtion