

Humanitarian support to Refugee, IDPs and host communities in Paktika Province, Afghanistan:

“Negotiating procedures for Latrines operations in Urgan and Barmal Districts, Paktika, Afghanistan.”

1. Description

This is a succinct description of the activities to do. The technical specification required will be described below. The designs are in Appendix.

International Medical Corps proposes to improve sanitation conditions of refugees. International Medical Corps will construct 150 ventilated improved pit (VIP) latrines (30 latrines in Urgan and 120 latrines in Barmal district). The VIP latrine is a pit latrine with a back pipe (vent pipe) fitted to the pit and a screen (fly screen) at the top outlet of the pipe. VIP latrines are an improvement to overcome the disadvantages of simple pit latrines, i.e. fly and mosquito nuisance and unpleasant odors. The smell is carried upwards by the chimney effect and flies are prevented from leaving the pit and spreading disease. The locations for the latrines will be finalized in consultation with the refugees and local communities and IMC Staff.

- a. Stone masonry of vault (height 1.8m, length 2.2 m, width 0.5) with foundation and pointing.
- b. Stone masonry of stair (height 1.4m, length 2.3m, width 1m) and pointing.
- c. Mark of concrete/mortar for stone masonry M-120
- d. Installation of metallic trap door (45cm X 45cm) in the vault for empty excreta from latrine.
- e. Installation wooding beam, wooding timber and thatch floor.
- f. Installation 4” PVC normal type black color pipe for ventilation
- g. PCC for covering the floor for seating place (thickness 10cm).
- h. Mark of PCC concrete is (M-150).
- i. Installation urine 2” GL pipe
- j. Fitted urine pipe in Gras trap/sock pit and covered by plastic sheet.
- k. Booth mud prick masonry according drawing and mud plastering
- l. Covering roof by weeding beam, timber, thatch and mud plastering.
- m. Wooding/Metallic door (180 x 90)cm
- n. Installation of wooding window frame(25 x 25)cm with mesh

A – MATERIAL

Concrete

Cement

- Cement to be used for the mortar and concrete will be preferably artificial Portland cement CPJ CEM II / A 32.5 OR CPJ CEM II / B 32.5 R
- Recoveries of cement dust is prohibited.
- Cement use on the site should not be stored over long periods (more than two months), the Engineer on site will check the quality on regular basis.

Sand

- Sand calibration : 1 to 3mm (sieve down)
- The sand used to prepare the mortar must be washed and cleaned.

Gravel

The gravel used for every concrete part must be crushed, cleaned and have 10 to 25 mm diameter.

Water:

- The water used for every concrete part needs to be clear (turbidity less than 5 NTU) and the cement ratio should not be more than 50%.
- Stone Masonry- (50ft³)= the maximum water used would be 25 liters
- Type 2 (Concrete 1:2:4) = the maximum water used would be 25 liters
- Pointing (1:2)- = the maximum water used would be 18 liters

Concrete

The concrete Mix should have a strength of 150kg/cm². The mixing will be carried out on a well prepared surface (no trash, dust, branch or grass), where the procedure is to dry-mix the cement, sand and gravel, turning over the heap regularly. Once the dry materials are properly mixed, a crater will prepare, into which a suitable quantity of water would be added. Moreover, The concrete will be smooth to avoid any kind of deterioration which can be caused by water or something else.

Appropriate precautions to take are:

- Do not add to much water to avoid excessive shrinkage and separation of the concrete.
- Work at temperature higher than 5°C or use the relevant materials if the temperature is not higher the 5°C (anti freezing additives, calcium chlorite).

Gravel for sock pit

The gravel to use for sock pit must have size is (15 ÷ 30) cm.

2. WORK FOLLOW-UP

In order to allow an effective follow-up of work, the Contractor will hold a book of building site on which all information related to the work will be reported. This book will allow the IMC controller, as of his arrival on the building site, to know exactly the progress report of construction work. The remarks and reserves of the Contractor and/or the person in charge for the programmed will be notified in the book of building site. A copy of this field notebook will have to be given to IMC in the end of the project and might be used as intermediate or final report to the donor. On the book of building site, all information will be written down concerning:

- Name of the building site (description of the location);
- logical description of the samples;
- Measurement of the works.
- Generally, all technical details, incidental, clean breakdowns, difficulties with the course of work, with indication of the hours when they occurred.

3. WORK PLAN

The work must be finished within 4 months after the beginning of the construction site.

N ^o	Description	April-17	May-17	June-17	July-2017	August 2017
1	Completed 30 Latrines					
2	Completed 30 Latrines					

3	Completed 30 Latrines					
4	Compered 30 Latrines					
5	Compered 30 Latrines					

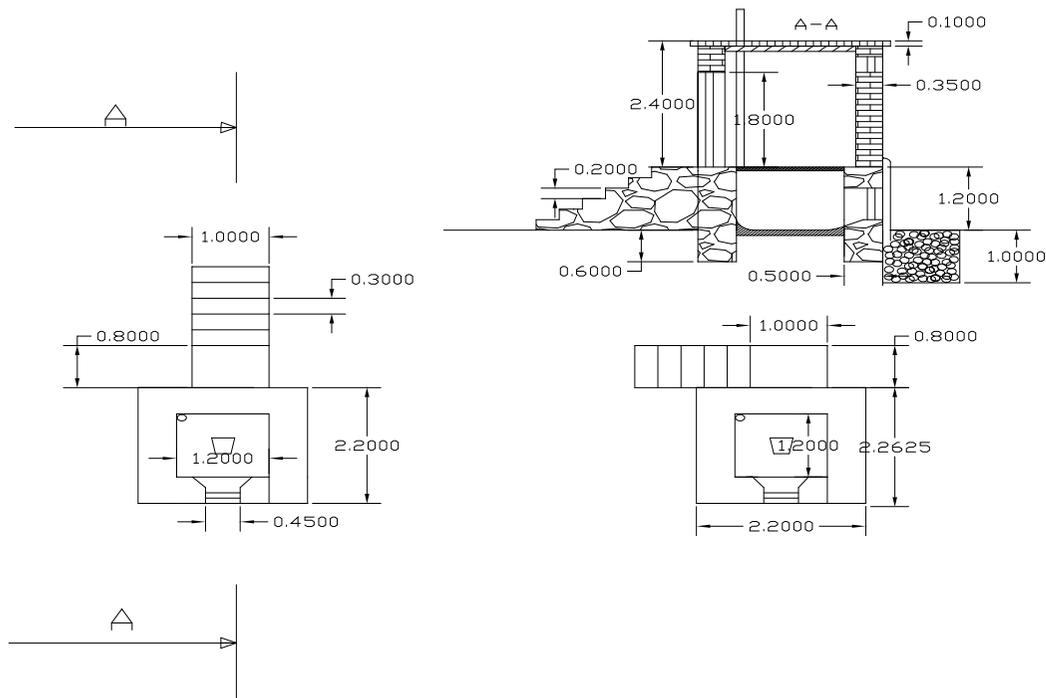
4. Appendix-1

BoQ for construction of 150 latrines

N ^o	Construction of latrines Item	Quantity for one latrine	Unit	Estimated Cost in Afg	Total Estimated Cost in Afg	N ^o latrines	Total cost in Afg
1	Stone masonry	8	m ³			150	
2	Foundation excavation	2.5	m ³			150	
3	Sand	3	m ³			150	
4	Portland cement(M-400) (50kg)	14	bag			150	
5	Trap door (45 x 45)cm	1	pc			150	
6	Wooding beam (L=2m , D=15cm)	8	pc			150	
7	Wooding Timber (L=2m, T=2cm, b=20cm)	3	m ²			150	
8	G.I pipe with elbow	1.8	m			150	
9	PVC 4" pipe Black colure	3	m			150	
10	Mesh with clump to installed on the top of ventilation PVC 4"	0.1	m ²			150	
11	Mud brick masonry with plastering	3000	pc			150	
12	cooked brick	200	pc			150	
13	Straw nail	1.5	m ²			150	
14	Nail(2")	0.5	kg			150	
15	Straw for plastering	35	kg			150	
16	Gutter	1	pc			150	
17	Wooding/Metallic door (180 x 90)cm	1	pc			150	
18	wooding window frame(25 x 25)cm with mesh	1	pc			150	
19	Gravel (10-15)cm	0.8	m ³			150	
20	Plastic sheet	1	m ²			150	
21	Mason and lobar	6	day/per			150	
Sub Total					0		0

5. Appendix-2

L A T R I N E



IMC Afghanistan February 2017

Detail

Mainhole

Door trap

