

Bill of Quantity – ITB-04-10/2016, Renovation of Benghazi Kidney Center Building

Renovation of Benghazi Kidney Center Building					
	Bill of Quantity				
ITEM NO	JOB DESCRIPTION	UNIT	Quantity	Unit Price USD	Amount in USD
1	General				
	Clearing the building and working area and dumping the debris out of the city.	Item	1		
2	Sanitary Sewage and Water Supply Work				
	Fittings such as taps, waste water outlet, internal overflows etc. and supporting brackets, incidental materials for fixing, unless otherwise measured separately.	Note			
	Assembling, jointing together fixing components parts, and jointing to pipes including necessary coupling and for leaving perfectly clean and in perfect working order on completion.	Note			
	Jointing and connecting of pipes to sanitary fittings.	Note			
	Testing and commissioning of the installation.	Note			
	Making good of the work disturbed.	Note			
	Submitting samples for the approval of the Engineer.	Note			
	Protecting the works.	Note			
	Rate shall include for supplying and installation of sanitary fittings with all accessories	Note			
2,1	Supply and fix space saver close coupled toilet dual flush 6/4Ltr Cistern Capacity Product Depth 650 mm Product Height 770 mm similar to Roca, Ideal, Screwfix brand or an equivalent brand, approved by the Engineer. The rate includes soft close toilet seat stainless steel hinges ; and wc outlet connector and flexible hose pipe as Cobra complete with angle valve as Cobra	Item	8		
2,2	Supply and fix Eastern water closed wc suite for toilets similar to Roca or any equivalent product approved by the Engineer. The work include all accessories and finishing off the work according to specifications	Item	3		
2,3	Supply and fix shower tray white gloss with 760*760*35mm with shower trap chrome effect	Item	3		
2,4	Supply and fix hand wash sink wall-hung cloakroom basin 1top holes of 450mm (W x D x H: 450 x 385 x 170mm)	Item	12		
2,5	Supply and fix Swirl bathroom basin mixer tap made from chrome with average flow rate of 5.12 Ltr/min	Item	12		
2,6	Supply and fix Swirl contract deck-mounted metal head bath shower mixer tap	Item	3		
	Plumbing				
2,7	Installation PPR pipes 3/4 inches all pipes shall be jointed and fixed and connected to sinks and toilets (Hidden into the walls or not hidden depends on the system status) * The rate includes all fittings which are not mentioned in the below items and accessories as well as water pressure test must be performed to achieve zero leakage.*the rate includes the necessity of replacing the main pipes from the main water supply if some pipes of 1.5m worn out.	Note			
	All fittings and pipe specials used in the plumbing installation shall be suitable and compatible with all respects to the pipe line to which fittings and specials are fixed.	Note			
	All sanitary fittings & fixtures shall be American Standards or approved equivalent.	Note			
	Rates for plumbing work shall include for:-				

	Complying with the relevant British or any other standard as given under the specifications and with the regulations of the Local Authority and or any other relevant authorities.	Note			
	Cutting and waste of pipes etc., and joining pipes.	Note			
	All specials such as elbows, bends, tees, junctions, plugs, reducers and similar pipe fittings except for valves which will be measured separately.	Note			
	Connecting pipes to sanitary fixtures and appliances.	Note			
	Casing to brick walls etc. and making good all works disturbed.	Note			
	Necessary screws, nails sockets, connection back nuts standard pipe fixing or supporting clips, saddles, brackets, holder bats, straps etc.	Note			
	Connecting of different types of pipes.	Note			
	Testing and disinfection after completion.	Note			
	Excavation, backfilling, disposal of surplus soil for items which were specifically mentioned.	Note			
	Rates for sanitary fittings shall include for:-				
	Fittings such as taps, waste water outlet, internal overflows etc. and supporting brackets, incidental materials for fixing, unless otherwise measured separately.	Note			
	Assembling, jointing together fixing components parts, and jointing to pipes including necessary coupling and for leaving perfectly clean and in perfect working order on completion.	Note			
	Jointing and connecting of pipes to sanitary fittings.	Note			
	Testing and commissioning of the installation.	Note			
	Making good of the work disturbed.	Note			
	Submitting samples for the approval of the Engineer.	Note			
	Protecting the works.	Note			
2.7.1	3/4 pipes of PPR (Red Sea brand is preferable or any equivalent brand) attached and not limited to the followings :	M	96		
2.7.2	Stop valve 20mm size	Item	5		
2.7.3	Socket end cap 20mm size	Item	7		
2.7.4	Female threaded brass adaptor coupling with nut of 32mm*3/4inch	Item	4		
2.7.5	Reducing tee 25*20mm	Item	8		
2.7.6	Reducing Elbow 25*20mm	Item	5		
2.7.7	Coupling 20mm	Item	20		
2,8	Replacing the damaged sewage system and installing new pipes of UPVC with (3-4inches) (clean up all manholes and removing the sludge to dumping area) *Note: The entire sewage system shall be checked. The followings items shall be included and not limited	M	25		
2.8.1	Elbow 45 3inch diameter size	Item	5		
2.8.2	Sweep 45 Elbow 3inch size	Item	3		
2.8.3	Trap Elbow	Item	2		
2.8.4	Tee with door 3 inches size	Item	4		
2.8.5	Multi floor drain trap 110*1125	Item	1		
2,9	Installation of water boiler (Ariston or Thermax an equivalent brand) 80 litre capacity (The rate includes the electric cable and plug in with socket and thermal switchers)	Item	3		
2.10.	Installation of two centrifugal pump water pump (SAER brand preferable) with 7.5hp ,and 2900L/min and 10 m head(The rate includes the replacing the existing pumps and installation of new electrical switchers into control panel)	Item	2		

2,11	Installation of one water centrifugal pump (SAER or DAB brand preferable) with 1hp ,0.6 -3 M3/h and 10 m head(The rate includes the replacing the existing pumps and installation of new automatic electrical switchers)	Item	1		
3	Aluminium work				
3,1	Repairing the existing windows including the replacement of accessories for dialysis rooms (replacing the damaged hinges,handles and replacing them with similar product)*Note: every room has one aluminium door and two windows Note: Door has 3 hinges one handle, window has 2hinges one handle	Item	96		
3,2	Repairing the existing doors including the replacement of accessories for dialysis rooms (replacing the damaged hinges,handles and replacing them with similar product)*Note: every room has one aluminium door and two windows Note: Door has 3 hinges one handle, window has 2hinges one handle	Item	48		
3,3	Repairing the existing windows including the replacement of accessories of nurses room (replacing the damaged hinges and handles and replacing with similar product)*Note: the rate includes the installation of new glasses the windows size are 800*700mm	M2	2		
3,4	Repairing the doors bathrooms including the replacement of accessories (replacing the damaged hinges and handles and replacing with similar product)*Note: the rate includes the replacing the existing doors	M2	18		
3,5	Installation of glasses for the hall ways and the nurses rooms(The glass made up from glass and wires known as reinforced glasses)	M2	5,5		
4	False Ceiling (Suspended Ceiling)				
4,1	Supply and fix gypsum plaster board KNAUF or equally approved acoustic false heat proof ceiling panels on steel/aluminum brackerings as per site engineers approval. Rate shall include for all the necessary fittings* Note: This item to cover the defects on ceiling	M2	80		
5	Electrical Work				
	Unless otherwise stated, Rates in Bill of Quantities shall include all necessary materials Cables, conduits, PVC sunk box, bulbs, switches etc.) and labour required to complete the electrical installation to good working order.	Note			
	Except where specifically stated, all costs associated with provision of all holes, openings, chases, ducts and other builders' work required for installation and make them good, shall be included in the rates.	Note			
	Testing and commissioning of the electrical installation is to be carried out by the contractor and Cost of such testing and reports to be included in the rates unless otherwise mention separately.	Note			
	All types of fittings, materials, painting and finishes shall be approved by the Engineer prior to installation.	Note			
	All types of fittings, materials, painting and finishes shall be approved by the Engineer before installations by the Engineer prior to installation.	Note			

5,1	Supply and installation of fluorescent lamp with all the fittings complete with 3*TL-D36 W (Philips or equivalent) and connect it and make it to working condition. Lamp must be suitable for indoor use including all other necessary accessories like terminal block etc. The accessories and fittings must be similar or equal quality of thorn / Philips. Note: Carrier size 1200*600mm the carrier holds 3 lamps	Item	96		
5,2	Supply and installation of fluorescent lamp fittings complete with 3*TL-D25 W (Philips or equivalent) and the Lamp must be suitable for indoor use including all other necessary accessories like terminal block etc. The accessories and fittings must be similar or equal quality of thorn / Philips. Note: Carrier size 600*600mm the carrier holds 3 lamps	Item	30		
6	Painting Work				
	Rate of painting is including the preparation of surface cleaning down, smoothing, knotting, stepping etc. protection of floors and fitting, covering all wooden frames and skirting with tapes to prevent them from paints , the rate includes scrapping off the cracked and damaged paints	Note			
	Paint shall be from approved colour with approved manufacturer by UNDP Engineer.	Note			
6,1	Internal wall paint for the damaged wall and the repaired precast panels with putty past, one coat of primer and two coat of emulsion paint approved by UNDP engineer similar to JOTUN, DELUX, Maxmeyer, Superlatex or any equivalent product. (The painting area includes the hallways, in patient rooms, main rooms for patients , staircase, 3 toilets and shower rooms)	M2	1 400,00		
Total				\$	-

Renovation of Civil Defiance Department Office Building

Summary

	Deataillss	Unit Cost	Total Cost in USD
1	Renovation of Civil Defiance Department Office Building		-
	Total		-

1.8 All items in the Bill of Quantities shall be deemed to have a monetary value, whether priced or unpriced. In the absence of a unit rate or price against any item, the cost shall be deemed to have been included elsewhere within the Contract Price and the work described to that item shall be executed by the Contractor without any additional payment.

1.9 The descriptions in the Bill of Quantities may be incomplete and the Tenderer is referred to the Drawings, Photographs and

2.0 Format of Descriptions

2.1 In addition to common abbreviations the following have been adopted; POM (I), Principal of Measurement (International) for Works of construction dated June 1979 as published by the royal Institution of Chartered Surveyors, London

mm- Millimeter	Pr-Pair
M-Linear Meter	No-Number
m ² - Square Meter	Kg-Kilograms
m ³ - Cubic Meter	

3.0 Rates

3.1 Rates and Prices shall be all inclusive, comprehensive and include the following:

- a) All obligations imposed by the Contract.
- b) Complying in every respect with the requirements and the considerations of the Specifications and Drawings.
- c) All considerations arising from the definitions incorporated in each Preamble section.
- d) Labour for fixing and all associated costs.
- e) Materials and goods and all associated costs
- f) Fitting and /or fixing materials and goods in any position, hoisting to any height.
- g) Use of Scaffolding, plant, equipment and tools.
- h) Any additional labours usually associated with measured items.
- i) All necessary protection of the Works, removing all casings and temporary covering and making good and clearing away upon completion.
- j) All applicable taxes, duties, charges, government levies, landing charges and transport.
- k) Overheads & profit.

4.0 Measurements

4.1 All measurements are net and the rates shall include for all laps, waste, working space and trade or traditional allowances.

4.2 The pricing of materials shall take account of the following:

- a) Pricing Preambles, Drawings and specifications shall apply reciprocally between the various sections of the Works, unless
- b) Materials shall be of the specified quality unless otherwise described.
- c) All materials shall be transported, handled, stored and fixed in accordance with the printed instruction or recommendations
- d) Protection of completed work, all casings and temporary coverings and making good and clearing away upon completion.

5.0 Discrepancies

5.1 Any discrepancy arising in terms of these Preambles and the items contained within the Bill of Quantities must be brought to the attention of the Engineer for his clarification prior to the submission of tender.

EARTH WORKS

§ All quantities for excavation have been measured net with no allowance for increase in bulk or working space.

§ The Tenderer shall allow in this excavation rates for excavating in any material, including running sand and rock, commencing excavation at any depth, excavating below the normal water table, excavating around existing services and mains, supporting the vertical sides of excavations, working space and filling soft spots.

§ Rates and Prices to include,

- a) Excavating by whatever means are necessary including hand excavation in any kind of ground, except rock and boulder rock.
- b) Trimming or grading ground to produce level surfaces or surfaces to falls or slopes.
- c) Ramming and compacting sides and bottoms of excavations and supports to sides.

Renovation of Benghazi Kidney Center Building

Preamble- Statement of Work

Background

The Stabilization Facility for Libya aims to bridge the critical period of transition from initial period of humanitarian relief towards mid- and long-term structural and sector-specific support. It includes time bound quick interventions at the municipality level providing concrete improvements and peace dividends at the community level through rehabilitation of critical infrastructure, building the capacity of local authorities and enhancing local mediation and conflict resolution capacities and processes.

Under this project, UNDP will repair light infrastructure within the conflict affected areas to reverse the physical disruption caused by the conflict and enable the reopening of key services at the municipal level. It will also support quick recovery of businesses that are critical to the survival of whole communities through rehabilitation and provision of equipment. Through these activities it will also aim to boost the capacity of municipalities.

Description of Work

As according to the agreed plan, Municipality of Benghazi has requested to repair the Benghazi Kidney Center and the SFL board has approved the rehabilitation work. The building is damaged due to conflict and long period improper maintenance. UNDP engineer has done the estimate based on his assessment. Since it is rehabilitation work, there is a possibility for variation in the assessment. Since this is a rehabilitation/repair/refixing work, all the works must be similar to the existing building work. So, the bidders are instructed to physically visit to the site, review and quote their price to fix the items mentioned in the BOQ similar to the existing building structure and accessories.

Since the center is functioning, The contractor has to plan in advance before he quotes the price about the working methodology to do the rehabilitation work without disturbing the normal work of the department. The contractor must have minimum BSc qualified Civil engineer with three years experience in building construction throughout the implementation.

1.0 General

1.1 The Bill of Quantities shall be read in conjunction with the Conditions of Contract, Specifications, Drawings and Employer's requirements and the Tenderer shall provide against the bill rates or in the prices for the full scope of the work covered by the Contract, no claim or variations shall be considered on account of the Tender's failure to comply with this provision.

1.2 The various documents collectively referred to herein as the Bill of Quantities shall jointly constitute the Bill of Quantities referred to in the Conditions of Contract and these preambles are to be read in conjunction with item descriptions in the Bill of Quantities.

1.3 Lump Sum values shall not be inserted where unit rates are applicable and the Tenderer shall ensure that identical items occurring in separate bills are not priced at different rates, unless this is the deliberate intention.

1.4 The Tenderer shall check against the summaries that each copy of the Bill of Quantities is complete in the number of pages and in the reproduction of each page. The Tenderer's unit rates, prices and extensions shall be entered clearly by hand in black ink.

1.5 Unit rates, prices and extensions shall be given in the United state Dollar with cents taken to two decimal places or any other valid currency value taken to two decimal places.

1.6 The Bill of Quantities has generally been measured in accordance with the Principals of Measurement (International) for Works of Construction (June 1979), as published by the Royal Institution of Chartered Surveyors with amendments made to suit local practice and conditions. The Quantities inserted against items in the Bill of Quantities are estimated quantities for the Works for the purpose of Tender evaluation, and the Tenderer shall be deemed to have checked and verified such quantities in the compilation of his Tender Price prior to the submission of his Tender. Upon the award of the Contract, the priced Bill of Quantities shall be used solely for evaluating interim payments due to the Contractor, and as a schedule of rates for establishing the value of variations.

1.7 The Contractor shall not use the Bill of Quantities for the purpose of ordering materials or arranging Subcontractors. References to these activities shall be the Specifications and Drawings and instructions issued by the Engineer.

- d) Keeping free from water including any dewatering as necessary.
- e) Any hand excavation required around existing services or the like.

CONCRETE WORK

§ The rates for all concrete work shall include for the following:

- a) Concrete test cubes and testing costs wherever required.
- b) Mixing, hoisting and placing and compacting on the surfaces of any material or on formwork.
- b) The forming any construction joints, including any required preparation for adjacent pours, together with expansion joints
- d) Curing and protecting concrete surfaces from harmful weather conditions
- e) All necessary keys to concrete surfaces to receive in-situ finishes.

REINFORCEMENT

§ The rates for bar reinforcement shall include for the following;

- a) Positioning and protecting starter bars, Straightening (If required) cutting to length and bending reinforcement to required
- b) Cleaning and wire brushing.
- c) Provision of supports (excluding links and stirrups) steel binding wire and approved/proprietary distance pieces.

SHUTTERING

§ The rates for Shuttering or molds as appropriate shall include for the followings;

- a) All cutting and waste including raking curved or circular cutting and notching around pipes, ducting and fittings.
- b) Setting up, strutting and supporting at any height above the structure subject to any limitations imposed by the engineer
- c) Carefully coating with shutter oil ensuring that no shutter oil is applied to surfaces of reinforcement.
- d) Rubbing down, filling and making good the surface of concrete after removal of shuttering.

MASONRY

§ The rates for brick walls shall include the following:

- a) Straight raking curved and circular rough or fair cutting, plumbing at angles, cutting and bonding at angles, openings and
- b) All necessary keys for in-situ finishing.
- c) All necessary wall ties, dowels, straps, sleeves. Channels and other like fixings built-in at junctions between brick work and insitu concrete including casting in, drilling, bolting and the like.
- d) All necessary brick work reinforcement at junctions between brick work and walls construction joints or the like and openings.

WOODWORK

§ The rates for wood work shall include for the following;

- a) All joints in the running length including structural joints.
- b) Cutting and fitting to steelwork, trimming around opening, notching, boring and sinking.
- b) Wood work shall be fixed with non-corroding nails and screws and unless otherwise described all plugging and pelling

FINISHES

§ The rates for all work-in this section shall include for the followings :

- a) Straight, racking, curved and circular cuttings or the like and all consequent wastages.
- b) All setting out temporary rules, screeds, templates and supports.
- c) Curing and cleaning off/down upon completion.
- d) All labours and making good around pipes, ducting and fittings and the like