

Bill of Quantity for Extra work at RTC Kandahar

Currency: USD

Project No: UNDP/AFG/CW/XXXX

Project Title: RTC Project (Water Supply Connection to RTC Kandahar)

Location: Kandahar



S/N	Description of Work/Items	Unit	Quantity	Unit Cost	Total Price	Remarks
1. Miscellaneous						
a	Supply and installaion of printed Project Sign Board on golden color stainless steel sheet (40x60cm). This is stainless steel sheet with minimum 1mm thickness screwed to 16mm MDF board which will be fixed to the wall. Printed or liser text and logos should be as per the details given and instruction of Engineer.	No.	1.00		-	
b	Capping to the top edges of parapet wall of 22 Gauge Galvanized Iron Sheet with total width of 45cm fixed to the parapet wall with screw-type fasteners with hex head and neoprene washers after each 40cm distance. This includes any needed work for complete installation of Engineer.	LM	200.00		-	
c	Supply and Install Stainless steel hand railing for the stairs: This is include heavy duty stainless steel pipes and fittings of SS 304 grade including supply of all materials, cutting, bending, welding (fabrication) and cutting holes in concrete and masonry, fixing to floor / walls with necessary dash hold fasteners of required size (erection), rubbing and polishing and labor fees. The design of this hand rail should gain the approval of the engineer before starting the work.	LM	20		-	
d	Insect Screen: Supply and Installation of Fly Screen for windows openings (75cm x 133cm) complying below requirements: -PVC Strips & Corners (25mm x 20mm) -High quality Fiberglass Mesh resistant to weathering, salt water and rain. -Two PVC Hinges opening to outside -PVC Clips for opening Including all required accessories and work to complete the job as per UNDP engineer instruction.	SQ.m	120.00		-	
e	Provide fixed steel access ladder to roof (H = 4.9m) Siderail and Landing Guide rail of hollow steel pipes. Diameter = 32mm, thickness = 2mm with 10mm steel bent plate and 20mm diameter steel rungs and Safety steel rings of 30x4mm steel plate, starting from h= 1.8 up to the top with internal distances 25cm. This also include gussets, fasteners, welding, one coat anti-rust followed by 2 other coats of oil painting and all needed accessories and work for the complete installation. as per the details given and instruction of Engineer.	LS	3.00		-	
f	Supply and installation of Stainless Heavy duty and highly functional wall mounted coat rack/rail complyig below specifications: Plate material: stainless steel Hook material: Chrome Hook quantity: 15 Back plate: width 16.2inch, height 1.2inch, Hook height 5.11inch,as per the details given and instruction of Engineer.	No	60.00		-	
g	Construction of Water Manhole 120x120cm from RCC M-250 at least 100 to 130cm depth, Supply and installation of heavy duty, flat, cast iron manhole covers, with Ø 800 mm opening and bearing capacity of 8 ton.with excavation and backfilling in strict accordance with the original design drawings, and technical specifications.also as per the details given and instruction of Engineer.	No	4.00		-	
h	Provision and Installation of PPRC Pipe D=32mm with all required Fittings (Elbow, Double socket, socket, Tee, Reducer, Union socket and so on) in strict accordance with the original design drawings, technical specifications, the manufacturer's recommended installation procedures and instruction of Engineer.	LM	50.00		-	

i	Provision and Installation of PPRC Pipe D=40mm with all required Fittings (Elbow, Double socket, socket, Tee, Reducer, Union socket and so on) in strict accordance with the original design drawings, technical specifications, the manufacturer's recommended installation procedures and instruction of Engineer.	LM	150.00			-	
j	Provision and Installation of PPRC Pipe D=50mm with all required Fittings (Elbow, Double socket, socket, Tee, Reducer, Union socket and so on) in strict accordance with the original design drawings, technical specifications, the manufacturer's recommended installation procedures and instruction of Engineer.	LM	100.00			-	
k	Supply and installation of Water supply bronze Valve D=25mm, including fittings and installation.as per the details given and instruction of Engineer.	No	3.00			-	
l	Water supply bronze Valve D=40mm and D=50mm , including fittings and installation.as per the details given and instruction of Engineer.	No	6.00			-	
m	Supply and installation of PVC Clean out 4 inch, including supply and installation.as per the details given and instruction of Engineer.	No	2.00			-	
n	Water Reservoir and tower: This includes supply and installation of Steel Water reservoir. 6000 liters water tank with all needed water connection accessories between well and tower Reservoir and between tower and main distribution manhole and buildings. There will be an over flow system on tank. The cost includes excavations, base compaction to 98%, 10cm PCC under foundation, RCC foundation (3x3x0.5m) M=250, steel structure for tower, GI gauge 18 water storage tank, sandwich panel (insulated with 100mm glass wool) for walls and roof, water pipes and connections, valves, oil painting (3 coats :primer ,anti-rust and oil based paint for all non-galvanized steel surfaces, and any other accessories, materials and works to complete a functional strictly as per drawings SC01,2,3and4. This also includes testing and commissioning of the newly constructed elevated water tank,as per the details given and instruction of Engineer.	LS	1.00			-	
o	Installation of Italian 'Sumoto' brand or equivalent submersible pump With automatic water level switch, D=2", with 90 Liter/minute discharge capacity capable of 1700m total head, power capacity<3000 watt, single-phase motor. This item includes complete and functioning pump installation that includes itself submersible water pump unit, pump-hanging steel cable, electrical cable from pump to its main switchboard at pump-house, all fittings & connections required, all water-proofing covers needed for electric cable, provision and installation of pump panel board and connection of the pump panel board with the main electrical board using proper cables/methods as per requirement of the pump guideline and the Engineer's instruction.	No	1.00			-	
p	Insulation of exposed water pipes network: This include insulation of exposed pipes using Rubber Pipe Insulation with internal diameter of 2inch and skin thickness of not less than 15mm,as per the details given and instruction of Engineer.	No	3.00			-	
q	Insulation of Water supply pipes on the roof: This include insulation of the pipes with a 10cm thick high-quality glass wool and then protected by gauge 24 Galvanized Iron sheet,as per the details given and instruction of Engineer.	LM	50.00			-	
r	Excavation and Backfilling of soil Trench(400x800)mm for water and Sewer pipes. This item includes all excavations, sand bedding under pipes, laying caution tapes, backfilling with compaction of levels/dimensions, disposal and temporary support or shoring if needed for details. The volume given here is the net volume of excavated space based on dimensions shown on the BoQ and as per the details given and instruction of Engineer.	LM	250.00			-	

2- Septic Tank						
a	Structural excavation for septic tank (4500mm x 8000mm x 4000mm) in all kind of soil and ramming the bottom. Complete as per Drawings, Specifications and as directed by the engineers.	Cum	170.00		-	
b	Providing & laying stone soling 150mm thick with round approved sea stones & filling the voids with stone metals 18mm to 38mm size & fine sand, well rammed, watered, consolidated & compacted with mechanical means for rooms' flooring. complete as per drawing and as directed by engineers.	Cum	5.60		-	
c	Providing, laying, compacting, levelling & curing , etc. 100mm lean mix plain cement concrete (1:4:6) for base of septic tank having 10 N/mm2 strength , using ordinary Portland cement, including form work where required complete as per Drawings, Specifications and as directed by the engineers.	Cum	3.50		-	
d	Providing and laying of Stone work for septic tank's walls 600mm wide using approved random size stones to be laid In 1:5 (1- cement, 5-fine sand) mortar, including levelling, curing etc. complete in all respect as per drawings, Specifications and as directed by the engineers.	Cum	55.13		-	
e	Providing and laying, straight or curved cast-in place designed mix reinforced structural cement concrete((1:1.5:3) by weight with water cement ratio of 0.6 having 3,000 psi cylindrical strength (20.68 N/mm2)) including high tensile steel (Grade-60) (deformed reinforcement bars ASTM A615 having minimum yield strength 60,000 psi (414 N/mm2) including cost of spacer blocks, steel chairs, pins, wastage, binding wire and those over-laps which are not shown on drawings) for beams on stone work and slab, using ordinary Portland cement including vibrating through electro- mechanical vibrator, erecting / removing form work, levelling, compacting, curing etc. Complete as per Drawings, Specifications and as directed by the engineers.	Cum	16.17		-	
f	Providing and laying gunni+bitumen insulation (Two layers gunni+Three layers bitumen) for walls and floor insulation complete in all respect as per drawings, Specifications and as directed by the engineers.	SQ.m	88.00		-	
g	Providing and laying 12 mm thick plaster (1:4) to walls, floor and concrete Ceiling, complete with levelling, finishing, curing, scaffolding etc. at any height complete as per Drawings, Specifications, Room Finishes Schedule and as directed by the engineers.	SQ.m	138.15	-	-	
Grand Total					-	