



TENDER REFERENCE: RACIDA/DKH K-AFM-2022-0375/021

INVITATION TO TENDER

Tender Title: Building Resilience of Agro-Pastoralist Communities (BRAP) project in Liban zone. Ethiopia

Tender Reference Number: RACIDA/DKH K-AFM-2022-0375/021

Procurement Procedure: Open call for tender Rural Agency for Community Development and Assistant (RACIDA) ,Implementing project under **BRAP Project** funding Project, is inviting Rehabilitation of underground water tank in the following areas Garab 1 in Dollow Ado and Jay Gadud.,Kulan and Qurah Gubana of Filtu woredas of Liban Zone ofSomalia Regional

1.	PROPOSED REHABILITATION OF GARBAAB COMMUNITY UNDERGROUND TANK AND ASSOCIATED WORKS OFINSTALLATION OF SOLAR POWERED SURFACE BOOSTER PUMP				
ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL (ETB)
A	Supply and install Brushless surface solar pump, 750W/1HP, 3" dia suction With a minimum flow rate 20cubic/hr and max head 15M. WHC Solar or approved equivalent	Pcs	1		
B	Control box	Pcs	1		
C	Supply and install suction pipe with grating and equal size foot valve. Cost to include adjoining fittings	M	5		
D	400W 24VDC crystalline solar modules	Pcs	6		
E	Solar PV disconnect switch 1000/16A	Pcs	1		
F	Fabrication, supply and installation of a 4M High steel solar support structure	LS	1		
G	4MM*2 Core U/G cable	M	15		
I	Lightening arrestor	Pcs	1		
J	Earthrod C/W clamp 5/8*4FT	Pcs	1		
K	Copper earth cable 10mm	M	10		
L	Twin flat 4MM Cable with earth	M	15		
M	Installation labor, transport, testing and commissioning	LS	1		
TOTAL FOR INSTALLATION OF SOLAR POWERED SURFACE BOOSTER PUMP					

PROPOSED REHABILITATION OF GARBAAB COMMUNITY UNDERGROUND TANK AND ASSOCIATED WORKS

WATER TANK PLATFORM, TANK INSTALLATION & WATER POINT

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL (ETB)
	<u>SUBSTRUCTURES WORKS</u>				
	<u>Digging and leveling work - All provisional</u>				
A	Clear the site off all vegetative growth with and including top 300mm deep vegetative soil, level ground and compact to approval	m2	22.00		
B	Extra over excavation for excavation in rock (All classes)	m3	2.20		
C	Selected imported murram well watered and compacted in layers not exceeding 150mm thick to Engineer's approval	m3	3.30		
D	Allow for keeping all excavations free from spring, subterranean or flood water	Item	1.00		
E	Allow for all necessary planking and strutting sides of all types of excavation	Item	1.00		
	<u>Hardcore backfill</u>				
F	Supply, transport, deliver and handpack gravel 1000mm thick below foundation slab, this includes watering and compressing gravel according to standards for this activity	m2	12.00		
G	50mm thick quarry dust blinding to hardcore (measured separately)	m2	12.00		
	<u>Damp proof Membrane</u>				
H	Two layers 1000 gauge polythene sheeting with minimum 300mm side and end laps	m2	12.00		
	Carried to collection				
	<u>SUBSTRUCTURES WORKS - CONTINUED</u>				
	<u>Concrete class 1:3:6 (40mm aggregate)</u>				
A	50mm thick blinding to foundation in trenches	m ²	9.36		
	<u>Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-</u>				
B	Strip footing	m ³	1.87		
C	150mm thick ground floor slab	m2	12.00		
D	Mass Concrete at the Water dispensing area Including Overhang slab	m2	1.75		
	<u>Supply and construct formwork to the sides of the concrete surfaces. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u>				
E	Formwork to sides of strip foundation	m ²	7.00		

F	Edge formwork to sides of ground floor slab	m	20.90		
	<u>Supply, transport, deliver, cutting, bending and installing of steel rods</u>				
	<u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u>				
G	Assorted reinforcement bars 8 - 12mm diameter	Kgs	224.64		
	<u>Supply, transport and install mesh fabric reinforcement</u>				
H	Fabric mesh reinforcement BRC type A142 weighing 2.22Kg/M2 with minimum 300mm side and end laps	m2	12.00		
	<u>Construction of natural stonework walling; roughly squared; bedded and jointed in 1:4 cement and sand mortar and reinforced with 20-gauge hoop iron wall ties every alternate course. The stone crushing strength to be minimum 7N/mm²</u>				
I	200mm thick	m ²	37.62		

	Finishes				
	<u>Whitewash of the External Massonry Walling</u>				
J	- 200mm thick	m ²	37.62		
	Plumbing and Drainage Works				
K	Provisional for Drainage and Plumbing Works including supply and installation of 10,000 L Plastic Water tanks with all the necessary pipeworks	Sum	1.00		
	Allow for pipeline connection from the booster pump to the tank platform approximately 30m with 3" HDPE pipes. Cost to include trenching and necessary adjoining fittings	Sum	1.00		
	Carried to collection				
	FOR EXTERNALS WORKS				
	<u>Digging and leveling work - All provisional</u>				
A	Excavate for making level on black cotton, red soil or sandy soil, load, transport and spread on site as directed by the Engineer, for the embankments of the strip footing.	m ³	6.00		
B	Return fill and ram selected soil materials. Where the selected materials are not suitable, the contractor will use imported and approved imported materials	m ³	4.00		
C	Cart away surplus materials arising from excavations as directed on site	m ³	2.00		
D	Extra over excavation for excavation in rock (All classes)	m ³	0.20		
	<u>Hardcore filling</u>				
E	Supply and handpack selected gravel 300mm thick, water and compact in layers not exceeding 150mm thick as directed by the Engineer	m ²	6.00		
F	50mm thick quarry dust blinding to hardcore (measured separately)	m ²	6.00		
G	Level the surface of the hardcore to be horizontal with a gentle slope of 1% or as directed by the engineer	m ²	14.00		

H	<u>Construction of natural stonework walling; roughly squared; bedded and jointed in 1:4 cement and sand mortar and reinforced with 20 gauge hoop iron wall ties every alternate course. The stone crushing strength to be minimum 7N/mm²</u> 200mm thick	m ²	2.61		
I	<u>Supply, transport and lay precast concrete paving slabs 50mm thick on and including prepared sand bed of 50mm thickness. The paving slabs will be neatly joined at regular pattern and where cutting will be required, the cut face shall be cut neatly and straight</u> 600 x 600mm wide precast concrete paving slabs with and including jointing with cement and sand (1:3) mortar	m ²	3.00		
J	<u>Approved Rocks Pebbles</u> Supply, deliver and spread approved 300x200mm drain filled with rock pebbles aggregates on rammed murram (measured separately) with average thickness of 50mm	m ²	1.50		
	Carried to collection				
ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL (ETB)
	<u>COLLECTION</u> Brought forward from page 1				
	Brought down from above				
	Brought down from above				
	TOTAL FOR WATER TANK INSTALLATION & WATER POINT				

FENCE

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL (ETB)
	<u>SUBSTRUCTURES WORKS</u>				
	<u>Digging and leveling work - All provisional</u>				
A	Excavate for precast concrete poles, load, transport and spread on site as directed/instructed by the Engineer	m ³	8.29		
B	Ditto for column bases to support access gates	m ³	8.64		
C	Extra over excavation for excavation in rock (All classes)	m ³	1.69		
D	Return fill and ram selected soil materials. Where the selected materials are not suitable, the contractor will use imported and approved imported materials	m ³	11.06		
	Allow for all necessary planking and strutting sides of all types of excavation	Item	1.00		
G	<u>Concrete class 1:3:6 (40mm aggregate)</u> 50mm thick blinding to column bases	m ²	5.76		

H	Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-				
	Column bases	m ³	1.73		
I	Columns in foundations	m ³	0.54		
	Supply and put in place vibrated mass concrete class 25 (20mm aggregate) in:-				
J	Mass concrete for the precast concrete poles (measured separately)	m ³	5.78		
	Carried to collection				
ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL (ETB)
	<u>SUBSTRUCTURES WORKS - CONTINUED</u>				
A	<u>Supply and construct formwork to the sides of the strip foundation. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u>				
B	Formwork to sides of column bases	m ²	6.72		
	Formwork to sides of column in foundations	m ²	9.60		
	<u>Supply, transport, deliver, cutting, bending and installing of steel rods.</u>				
	<u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u>				
	Assorted reinforcement bars 8 - 12mm diameter				
	Carried to collection				
	<u>COLLECTION</u>				
	Brought forward from page 1	Kgs	226.80		
	Brought down from above				
	TOTAL FOR SUBSTRUCTURES CARRIED TO COLLECTION PAGE				
ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL (ETB)
A	<u>FENCING AND GATES</u>				
	<u>CONCRETE WORKS</u>	m ³	1.08		

	<p><u>Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-</u></p> <p>Columns for the gates</p> <p><u>Ground levels</u></p>				
B	200 x 200mm mass concrete, 80 m long at the base of the boundary fencing	m ³	7.20		
C	<p><u>Supply, transport, deliver and install concrete posts. The concrete posts shall be vertical and shall be installed in the concrete in holes (measured separately)</u></p> <p>Precast concrete poles size 150x 150mm x 2400mm long reinforced with 4 No. D10 reinforcing rods with D8 @ 250c/c as stirrups and including 4 No. straining wire holes on the straight part (1825mm long) and 3 No. holes on the bent part (275mm long but with a bent of 400mm) and 400mm deep into the ground</p>	No.	40.00		
D	Precast concrete poles supports size 150 x 150 x 1500mm long reinforced with and including 4 No. D10 reinforcing rods with D8 stirrups and with a required number of holes to attach the corner post and every 30.0m on the straight span	No.	10.00		
E	<u>Supply and construct formwork to the sides of the strip foundation. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u>				
F	<p>Formwork to vertical sides of columns</p> <p><u>Supply, transport, deliver, cutting, bending and installing of steel rods.</u></p> <p><u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u></p> <p>Assorted reinforcement bars 8 - 12mm diameter</p>	<p>m²</p> <p>Kgs</p>	<p>19.20</p> <p>108.00</p>		
	Carried to collection				
ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL (ETB)
A	<u>Supply and install approved wiremesh fence complete with straining and tying binding wire to pre-cast concrete poles (measured separately)</u>				
	G12.5 wiremesh with 80 x 80mm squares, 7 feet high, 2.5mm thickness	m ²	254.40		
B	G11 galvanized straining wire 3.0mm thick strained onto a 4 lines at the straight parts of the poles for straining the chainlink meshwire, above	m	480.00		

C	G12.5 Barbedwire Hippo strained onto a three holes at the bends section	m	360.00		
C	Supply and Install a Barbed razorwire diameter color coated green, 450mm dia, to be installed at the top ends of the precast pples bends section	No.	12.00		
D	<u>GATES</u> <u>Steel vehicular double gate size 43000 x 2400mm high and pedestrian gate, 1200 x 2400mm adjacent with and including two No. 300 x 300 x 2500mm high concrete support columns embedded with necessary steel supports on eaiter side of the gate with and including necessary conduits for lighting at the top and with 3mm thick steel panel, all bracing members and all iron mongery. The contractor shall include in his rate the cost of 12mm dia. 300mm long slide bolt assembly with 4mm thick steel hasp and staple, 3 No.150mm wide painted purpose made pin hinges and all other associated iron mongery to make the gate operational</u> Double gate size 4300 x 2400mm high as a Vehicular gate	No.	1.00		
E	itto single gate size 1200 x 2400mm high as a pedestrian gate <u>Supply, transport, deliver prepare and apply gloss paint. The paint shall be Manufactured by Crown Paint Ltd or other approved manufacturer. Whenever required by the Engineer, the paint will be tested and if the paint does not pass the test, the contractor shall re-paint the whole area at his own cost</u>	No.	1.00		
F	Gloss paint to gate surfaces	m ²	13.20		
	Carried to collection				
	<u>COLLECTION</u> Brought forward from page 3 Brought down from above				
	TOTAL FOR FENCING AND GATES CARRIED TO COLLECTION PAGE				
ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL (ETB)
	<u>SUMMARY PAGE</u>				
A	SUBSTRUCTURES				

B	FENCING AND GATES				
	TOTAL CARRIED TO GRAND TENDER SUMMARY PAGE				

UNDERGROUND TANK REHABILITATION AND ROOFING

ITEM	DESCRIPTION	UNIT	QTY	RATE in ETB	Total cost in ETB
	Element No.1: Underground Tank Demolition				
A	Carefully hack existing screed including reducing levels where necessary and prepare surface to receive new screed finish and cart away debris (tank internally, externally & floor)	m ²	373.5		
	Plaster: 9 mm first coat of cement/waterproof cement/sand (1:1:2): 3 mm second coat of cement/waterproof cement/sand (1:1:2): nil finish: on masonry or concrete: to				
B	Walls: internally	m ²	189.5		
C	Bottom of the tank	m ²	141		
D	Top of the wall and external sections	m ²	43		
	Carried to Collection				
	Element No.2: Inlet, silt trap and outlet Demolition				
A	Carefully hack existing screed including reducing levels where necessary and prepare surface to receive new screed finish and cart away debris (tank internally, externally & floor)	m ²	60		
	Plaster: 9 mm first coat of cement/sand (1:2): 3 mm second coat of cement/sand (1:2) on masonry or concrete: to				
B	Walls: internally, externally, floor	m ²	60		
	Carried to Collection				
	Element No.3: Roofing				
	<i>Metallic roofing constructed as described properly coated with 2 coats red-oxide/grey primer or any approved anti rust paint</i>				
A	Top chord (75x50x3mm)	M	66		
B	Bottom chord (50X50X3mm)	M	56		
C	Angles (50X50X3mm)	M	146		

D	Struts (50X30X3mm	M	63		
E	300X300X6mm base plates fixed to concrete/masonry walls	Pcs	8		
F	12mm dia anchor bolts	Pcs	32		
G	Grade 1 metallic paint - 2 coats	LS	1		
H	Pre-painted IT4, Gauge 28 roofing sheets fixed to metallic purlins with appropriate screws. Area measured net	m ²	208		
I	Matching ridge caps, Gauge 28. Allow for over laps	M	70		
J	Labor for fabrication and erection of the roof support structure and fixing of roof cover	LS	1		
K	Allow for fabrication, and installation of lockable roof access cover	LS	1		
L	Allow for fabrication and installation of trash rack with the following specifications; R16 mild steel rods welded at a spacing of 20mm properly fixed at the tank inlet	LS	1		
	Carried to Collection				
	SUMMARY				
	Element No.1: Underground Tank				
	Element No.2: Inlet, silt trap and outlet				
	Element No.3: Roofing				
	TOTAL CARRIED TO GRAND SUMMARY				

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
A	Supply and install Brushless surface solar pump, 750W/1HP, 3" dia suction With a minimum flow rate 20cubic/hr and max head 15M. WHC Solar or approved equivalent	Pcs	1		
B	Control box	Pcs	1		
C	Supply and install suction pipe with grating and equal size foot valve. Cost to include adjoining fittings	M	5		
D	400W 24VDC crystalline solar modules	Pcs	6		
E	Solar PV disconnect switch 1000/16A	Pcs	1		
F	Fabrication, supply and installation of a 4M High steel solar support structure	LS	1		
G	4MM*2 Core U/G cable	M	15		
I	Lightening arrestor	Pcs	1		
J	Earthrod C/W clamp 5/8*4FT	Pcs	1		
K	Copper earth cable 10mm	M	10		
L	Twin flat 4MM Cable with earth	M	15		
M	Installation labor, transport, testing and commissioning	LS	1		
TOTAL FOR INSTALLATION OF SOLAR POWERED SURFACE BOOSTER PUMP					

UNDERGROUND TANK REHABILITATION AND ROOFING

2. PROPOSED REHABILITATION OF JAY GADUD COMMUNITY UNDERGROUND TANK AND ASSOCIATED WORK INSTALLATION OF SOLAR POWERED SURFACE BOOSTER PUMP					
ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
	Element No.1: Underground Tank				
	Demolition				
A	Carefully hack existing screed including reducing levels where necessary and prepare surface to receive new screed finish and cart away debris (tank internally, externally & floor)	m ²	375.5		
	Plaster: 9 mm first coat of cement/waterproof cement/sand (1:1:2): 3 mm second coat of cement/waterproof cement/sand (1:1:2): nil finish: on masonry or concrete: to				
B	Walls: internally	m ²	130		
C	Bottom of the tank	m ²	205		
D	Top of the wall and external sections	m ²	40.5		
	Carried to Collection				
	Element No.2: Inlet, silt trap and outlet				
	Demolition				
A	Carefully hack existing screed including reducing levels where necessary and prepare surface to receive new screed finish and cart away debris (tank internally, externally & floor)	m ²	62.5		
	Plaster: 9 mm first coat of cement/sand (1:2): 3 mm second coat of cement/sand (1:2) on masonry or concrete: to				
B	Walls: internally, externally, floor	m ²	62.5		
	Carried to Collection				
	Element No.3: Roofing				
	<i>Metallic roofing constructed as described properly coated with 2 coats red-oxide/grey primer or any approved anti rust paint</i>				
A	Top chord (75x50x3mm)	M	70		
B	Bottom chord (50X50X3mm)	M	70		

C	Angles (50X50X3mm)	M	108		
D	Struts (50X30X3mm)	M	60		
G	Grade 1 metallic paint - 2 coats	LS	1		
H	Pre-painted IT4, Gauge 28 roofing sheets fixed to metallic purlins with appropriate screws. Area measured net	m ²	150		
I	Wire Mesh - Heavy gauge with galvanized gauze wire welded to cover any open spaces	m ²	40		
J	Labor for fabrication and erection of the roof support structure and fixing of roof cover	LS	1		
K	Allow for fabrication, and installation of lockable roof access cover	LS	1		
L	Allow for fabrication and installation of trash rack with the following specifications; R16 mild steel rods welded at a spacing of 20mm properly fixed at the tank inlet	LS	1		
	Carried to Collection				
	SUMMARY				
	Element No.1: Underground Tank				
	Element No.2: Inlet, silt trap and outlet				
	Element No.3: Roofing				
	TOTAL CARRIED TO GRAND SUMMARY				

WATER TANK PLATFORM, TANK INSTALLATION & WATER POINT

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
	<u>SUBSTRUCTURES WORKS</u>				
	<u>Digging and leveling work - All provisional</u>				
A	Clear the site off all vegetative growth with and including top 300mm deep vegetative soil, level ground and compact to approval	m2	22.00		
B	Extra over excavation for excavation in rock (All classes)	m3	2.20		

C	Selected imported murrum well watered and compacted in layers not exceeding 150mm thick to Engineer's approval	m3	3.30		
D	Allow for keeping all excavations free from spring, subterranean or flood water	Item	1.00		
E	Allow for all necessary planking and strutting sides of all types of excavation	Item	1.00		
F	<u>Hardcore backfill</u> Supply, transport, deliver and handpack gravel 1000mm thick below foundation slab, this includes watering and compressing gravel according to standards for this activity	m2	12.00		
G	50mm thick quarry dust blinding to hardcore (measured separately)	m2	12.00		
H	<u>Damp proof Membrane</u> Two layers 1000 gauge polythene sheeting with minimum 300mm side and end laps	m2	12.00		
	Carried to collection				

	<u>SUBSTRUCTURES WORKS - CONTINUED</u>				
	<u>Concrete class 1:3:6 (40mm aggregate)</u>				
A	50mm thick blinding to foundation in trenches	m ²	9.36		
B	<u>Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-</u> Strip footing	m ³	1.87		
C	150mm thick ground floor slab	m2	12.00		
D	Mass Concrete at the Water dispensing area Including Overhang slab	m2	1.75		
E	<u>Supply and construct formwork to the sides of the concrete surfaces. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u> Formwork to sides of strip foundation	m ²	7.00		

F	Edge formwork to sides of ground floor slab	m	20.90		
	<u>Supply, transport, deliver, cutting, bending and installing of steel rods</u> <u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u>				
G	Assorted reinforcement bars 8 - 12mm diameter	Kgs	224.64		
	<u>Supply, transport and install mesh fabric reinforcement</u>				
H	Fabric mesh reinforcement BRC type A142 weighing 2.22Kg/M2 with minimum 300mm side and end laps	m2	12.00		
	<u>Construction of natural stonework walling; roughly squared; bedded and jointed in 1:4 cement and sand mortar and reinforced with 20 gauge hoop iron wall ties every alternate course. The stone crushing strength to be minimum 7N/mm²</u>				
I	- 200mm thick	m ²	37.62		

	Finishes <u>White Wash of the External Massonry Walling</u> - 200mm thick	m ²	37.62		
	Plumbing and Drainage Works Provisional for Drainage and Plumbing Works including supply and installation of 10,000 L Plastic Water tanks with all the necessary pipeworks Allow for pipeline connection from the booster pump to the tank platform approximately 30m with 3" HDPE pipes. Cost to include trenching and necessary adjoining fittings Carried to collection	Sum Sum	1.00 1.00		
	FOR EXTERNALS WORKS <u>Digging and leveling work - All provisional</u>				
A	Excavate for making level on black cotton, red soil or sandy soil, load, transport and spread on site as directed by the Engineer, for the embarkments of the strip footing.	m ³	6.00		
B	Return fill and ram selected soil materials. Where the selected materials are not suitable, the contractor will use imported and approved imported materials	m ³	4.00		

C	Cart away surplus materials arising from excavations as directed on site	m ³	2.00		
D	Extra over excavation for excavation in rock (All classes)	m ³	0.20		
E	<u>Hardcore filling</u> Supply and handpack selected gravel 300mm thick, water and compact in layers not exceeding 150mm thick as directed by the Engineer	m ²	6.00		
F	50mm thick quarry dust blinding to hardcore (measured separately)	m ²	6.00		
G	Level the surface of the hardcore to be horizontal with a gentle slope of 1% or as directed by the engineer	m ²	14.00		
H	<u>Construction of natural stonework walling; roughly squared; bedded and jointed in 1:4 cement and sand mortar and reinforced with 20 gauge hoop iron wall ties every alternate course. The stone crushing strength to be minimum 7N/mm²</u> 200mm thick	m ²	2.61		
I	<u>Supply, transport and lay precast concrete paving slabs 50mm thick on and including prepared sand bed of 50mm thickness. The paving slabs will be neatly joined at regular pattern and where cutting will be required, the cut face shall be cut neatly and straight</u> 600 x 600mm wide precast concrete paving slabs with and including jointing with cement and sand (1:3) mortar	m ²	3.00		
J	<u>Approved Rocks Pebbles</u> Supply, deliver and spread approved 300x200mm drain filled with rock pebbles aggregates on rammed murrum (measured separately) with average thickness of 50mm	m ²	1.50		
	Carried to collection				
ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
	<u>COLLECTION</u>				
	Brought forward from page 1				

	Brought down from above				
	Brought down from above				
	TOTAL FOR WATER TANK INSTALLATION & WATER POINT				

FENCING

ITEM	DESCRIPTION	UNIT	QTY	RATE IN ETB	Total cost in ETB
	<u>SUBSTRUCTURES WORKS</u>				
	<u>Digging and leveling work - All provisional</u>				
A	Excavate for precast concrete poles, load, transport and spread on site as directed/instructed by the Engineer	m ³	8.29		
B	Ditto for column bases to support access gates	m ³	8.64		
C	Extra over excavation for excavation in rock (All classes)	m ³	1.69		
D	Return fill and ram selected soil materials. Where the selected materials are not suitable, the contractor will use imported and approved imported materials	m ³	11.06		
	Allow for all necessary planking and strutting sides of all types of excavation	Item	1.00		
	<u>Concrete class 1:3:6 (40mm aggregate)</u>				
G	50mm thick blinding to column bases	m ²	5.76		
	<u>Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-</u>				
H	Column bases	m ³	1.73		
I	Columns in foundations	m ³	0.54		
J	<u>Supply and put in place vibrated mass concrete class 25 (20mm aggregate) in:-</u>	m ³	5.78		

	Mass concrete for the precast concrete poles (measured separately)				
	Carried to collection				
ITEM	DESCRIPTION	UNIT	QTY		
	<u>SUBSTRUCTURES WORKS - CONTINUED</u>				
	<u>Supply and construct formwork to the sides of the strip foundation. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u>				
A	Formwork to sides of column bases	m ²	6.72		
B	Formwork to sides of column in foundations	m ²	9.60		
	<u>Supply, transport, deliver, cutting, bending and installing of steel rods.</u>				
	<u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u>				
	Assorted reinforcement bars 8 - 12mm diameter				
	Carried to collection				
	<u>COLLECTION</u>				
C	Brought forward from page 1	Kgs	226.80		
	Brought down from above				
	TOTAL FOR SUBSTRUCTURES CARRIED TO COLLECTION PAGE				
ITEM	DESCRIPTION	UNIT	QTY		
	<u>FENCING AND GATES</u>				
	<u>CONCRETE WORKS</u>				
	<u>Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-</u>				
A	Columns for the gates	m ³	1.08		

	<u>Ground levels</u>				
B	200 x 200mm mass concrete, 80 m long at the base of the boundary fencing	m ³	7.20		
C	<u>Supply, transport, deliver and install concrete posts. The concrete posts shall be vertical and shall be installed in the concrete in holes (measured separately)</u>	No.	40.00		
	Precast concrete poles size 150x 150mm x 2400mm long reinforced with 4 No. D10 reinforcing rods with D8 @ 250c/c as stirrups and including 4 No. straining wire holes on the straight part (1825mm long) and 3 No. holes on the bent part (275mm long but with a bent of 400mm) and 400mm deep into the ground				
D	Precast concrete poles supports size 150 x 150 x 1500mm long reinforced with and including 4 No. D10 reinforcing rods with D8 stirrups and with a required number of holes to attach the corner post and every 30.0m on the straight span	No.	10.00		
E	<u>Supply and construct formwork to the sides of the strip foundation. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u>	m ²	19.20		
	Formwork to vertical sides of columns				
F	<u>Supply, transport, deliver, cutting, bending and installing of steel rods.</u>	Kgs	108.00		
	<u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u>				
	Assorted reinforcement bars 8 - 12mm diameter				
	Carried to collection				
ITEM	DESCRIPTION	UNIT	QTY		
A	<u>Supply and install approved wiremesh fence complete with straining and tying binding wire to pre-cast concrete poles (measured separately)</u>	m ²	254.40		
	G12.5 wiremesh with 80 x 80mm squares, 7 feet high, 2.5mm thickness				
B	G11 galvanized straining wire 3.0mm thick strained onto a 4 lines at the straight parts of the poles for straining the chainlink meshwire, above	m	480.00		
C	G12.5 Barbedwire Hippo strained onto a three holes at the bends section	m	360.00		
C	Supply and Install a Barbed razorwire diameter color coated green, 450mm dia, to be installed at the top ends of the precast poles bends section	No.	12.00		

	<u>GATES</u>				
	<u>Steel vehicular double gate size 43000 x 2400mm high and pedestrian gate, 1200 x 2400mm adjacent with and including two No. 300 x 300 x 2500mm high concrete support columns embedded with necessary steel supports on either side of the gate with and including necessary conduits for lighting at the top and with 3mm thick steel panel, all bracing members and all iron mongery. The contractor shall include in his rate the cost of 12mm dia. 300mm long slide bolt assembly with 4mm thick steel hasp and staple, 3 No.150mm wide painted purpose made pin hinges and all other associated iron mongery to make the gate operational</u>				
D	Double gate size 4300 x 2400mm high as a Vehicular gate	No.	1.00		
E	Ditto single gate size 1200 x 2400mm high as a pedestrian gate	No.	1.00		
	<u>Supply, transport, deliver prepare and apply gloss paint. The paint shall be Manufactured by Crown Paint Ltd or other approved manufacturer. Whenever required by the Engineer, the paint will be tested and if the paint does not pass the test, the contractor shall re-paint the whole area at his own cost</u>				
F	Gloss paint to gate surfaces	m ²	13.20		
	Carried to collection				
	COLLECTION				
	Brought forward from page 3				
	Brought down from above				
	TOTAL FOR FENCING AND GATES CARRIED TO COLLECTION PAGE				
ITEM	DESCRIPTION	UNIT	QTY		
	<u>SUMMARY PAGE</u>				
A	SUBSTRUCTURES				
B	FENCING AND GATES				
	TOTAL CARRIED TO GRAND TENDER SUMMARY PAGE				

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3. PROPOSED REHABILITATION OF KULAN COMMUNITY UNDERGROUND TANK AND ASSOCIATED WORKS

UNDERGROUND TANK REHABILITATION AND ROOFING

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
	Element No.1: Underground Tank				
	Demolition				
A	Carefully hack existing screed including reducing levels where necessary and prepare surface to receive new screed finish and cart away debris (tank internally, externally & floor)	m ²	447.4		
	Plaster: 9 mm first coat of cement/waterproof cement/sand (1:1:2): 3 mm second coat of cement/waterproof cement/sand (1:1:2): nil finish: on masonry or concrete: to				
B	Walls: internally	m ²	234.9		
C	Bottom of the tank	m ²	165.24		
D	Top of the wall and external sections	m ²	47		
	Carried to Collection				
	Element No.2: Inlet, silt trap and outlet				
	Demolition				
A	Carefully hack existing screed including reducing levels where necessary and prepare surface to receive new screed finish and cart away debris (tank internally, externally & floor)	m ²	82.4		
	Plaster: 9 mm first coat of cement/sand (1:2): 3 mm second coat of cement/sand (1:2) on masonry or concrete: to				
B	Walls: internally, externally, floor	m ²	82.4		
	Carried to Collection				
	Element No.3: Roofing				
	<i>Metallic roofing constructed as described properly coated with 2 coats red-oxide/grey primer or any approved anti rust paint</i>				
A	Top chord (75x50x3mm)	M	80		
B	Bottom chord (50X50X3mm)	M	75		
C	Angles (50X50X3mm)	M	168		
D	Struts (50X30X3mm)	M	63		
G	Grade 1 metallic paint - 2 coats	LS	1		

H	Pre-painted IT4, Gauge 28 roofing sheets fixed to metallic purlins with appropriate screws. Area measured net	m ²	170		
I	Wire Mesh - Heavy gauge with galvanized gauze wire welded to cover any open spaces	m ²	25		
J	Labor for fabrication and erection of the roof support structure and fixing of roof cover	LS	1		
K	Allow for fabrication, and installation of lockable roof access cover	LS	1		
L	Allow for fabrication and installation of trash rack with the following specifications; R16 mild steel rods welded at a spacing of 20mm properly fixed at the tank inlet	LS	1		
Carried to Collection					
SUMMARY					
Element No.1: Underground Tank					
Element No.2: Inlet, silt trap and outlet					
Element No.3: Roofing					
TOTAL CARRIED TO GRAND SUMMARY					

PROPOSED REHABILITATION OF KULAN COMMUNITY UNDERGROUND TANK AND ASSOCIATED WORKS

INSTALLATION OF SOLAR POWERED SURFACE BOOSTER PUMP

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
A	Supply and install Brushless surface solar pump, 750W/1HP, 3" dia suction With a minimum flow rate 20cubic/hr and max head 15M. WHC Solar or approved equivalent	Pcs	1		
B	Control box	Pcs	1		
C	Supply and install suction pipe with grating and equal size foot valve. Cost to include adjoining fittings	M	5		
D	400W 24VDC crystalline solar modules	Pcs	6		
E	Solar PV disconnect switch 1000/16A	Pcs	1		
F	Fabrication, supply and installation of a 4M High steel solar support structure	LS	1		

G	4MM*2 Core U/G cable	M	15		
I	Lightening arrestor	Pcs	1		
J	Earthrod C/W clamp 5/8*4FT	Pcs	1		
K	Copper earth cable 10mm	M	10		
L	Twin flat 4MM Cable with earth	M	15		
M	Installation labor, transport, testing and commissioning	LS	1		
TOTAL FOR INSTALLATION OF SOLAR POWERED SURFACE BOOSTER PUMP					

PROPOSED REHABILITATION OF KULAN COMMUNITY UNDERGROUND TANK AND ASSOCIATED WORKS

WATER TANK PLATFORM, TANK INSTALLATION & WATER POINT

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
	<u>SUBSTRUCTURES WORKS</u>				
	<u>Digging and leveling work - All provisional</u>				
A	Clear the site off all vegetative growth with and including top 300mm deep vegetative soil, level ground and compact to approval	m2	22.00		
B	Extra over excavation for excavation in rock (All classes)	m3	2.20		
C	Selected imported murram well watered and compacted in layers not exceeding 150mm thick to Engineer's approval	m3	3.30		
D	Allow for keeping all excavations free from spring, subterranean or flood water	Item	1.00		
E	Allow for all necessary planking and strutting sides of all types of excavation	Item	1.00		
	<u>Hardcore backfill</u>				

F	Supply, transport, deliver and handpack gravel 1000mm thick below foundation slab, this includes watering and compressing gravel according to standards for this activity	m2	12.00		
G	50mm thick quarry dust blinding to hardcore (measured separately)	m2	12.00		
H	<u>Damp proof Membrane</u> Two layers 1000 gauge polythene sheeting with minimum 300mm side and end laps	m2	12.00		
	Carried to collection				

	<u>SUBSTRUCTURES WORKS - CONTINUED</u>				
	<u>Concrete class 1:3:6 (40mm aggregate)</u>				
A	50mm thick blinding to foundation in trenches	m ²	9.36		
B	<u>Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-</u> Strip footing	m ³	1.87		
C	150mm thick ground floor slab	m2	12.00		
D	Mass Concrete at the Water dispensing area Including Overhang slab	m2	1.75		
E	<u>Supply and construct formwork to the sides of the concrete surfaces. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u> Formwork to sides of strip foundation	m ²	7.00		
F	Edge formwork to sides of ground floor slab	m	20.90		
	<u>Supply, transport, deliver, cutting, bending and installing of steel rods</u> <u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u>				

G	Assorted reinforcement bars 8 - 12mm diameter	Kgs	224.64		
H	<u>Supply, transport and install mesh fabric reinforcement</u> Fabric mesh reinforcement BRC type A142 weighing 2.22Kg/M2 with minimum 300mm side and end laps	m2	12.00		
I	<u>Construction of natural stonework walling; roughly squared; bedded and jointed in 1:4 cement and sand mortar and reinforced with 20 gauge hoop iron wall ties every alternate course. The stone crushing strength to be minimum 7N/mm²</u> - 200mm thick	m ²	37.62		

J	Finishes <u>White Wash of the External Massonry Walling</u> - 200mm thick	m ²	37.62		
K	Plumbing and Drainage Works Provisional for Drainage and Plumbing Works including supply and installation of 10,000 L Plastic Water tanks with all the necessary pipeworks Allow for pipeline connection from the booster pump to the tank platform approximately 30m with 3" HDPE pipes. Cost to include trenching and necessary adjoining fittings Carried to collection	Sum Sum	1.00 1.00		
A	FOR EXTERNALS WORKS <u>Digging and leveling work - All provisional</u> Excavate for making level on black cotton, red soil or sandy soil, load, transport and spread on site as directed by the Engineer, for the embankments of the strip footing.	m ³	6.00		
B	Return fill and ram selected soil materials. Where the selected materials are not suitable, the contractor will use imported and approved imported materials	m ³	4.00		
C	Cart away surplus materials arising from excavations as directed on site	m ³	2.00		
D	Extra over excavation for excavation in rock (All classes)	m ³	0.20		
E	<u>Hardcore filling</u> Supply and handpack selected gravel 300mm thick, water and compact in layers not exceeding 150mm thick as directed by the Engineer	m ²	6.00		

F	50mm thick quarry dust blinding to hardcore (measured separately)	m ²	6.00		
G	Level the surface of the hardcore to be horizontal with a gentle slope of 1% or as directed by the engineer	m ²	14.00		
	<u>Construction of natural stonework walling; roughly squared; bedded and jointed in 1:4 cement and sand mortar and reinforced with 20 gauge hoop iron wall ties every alternate course. The stone crushing strength to be minimum 7N/mm²</u>				
H	200mm thick	m ²	2.61		
I	<u>Supply, transport and lay precast concrete paving slabs 50mm thick on and including prepared sand bed of 50mm thickness. The paving slabs will be neatly joined at regular pattern and where cutting will be required, the cut face shall be cut neatly and straight</u> 600 x 600mm wide precast concrete paving slabs with and including jointing with cement and sand (1:3) mortar	m ²	3.00		
J	<u>Approved Rocks Pebbles</u> Supply, deliver and spread approved 300x200mm drain filled with rock pebbles aggregates on rammed murrum (measured separately) with average thickness of 50mm	m ²	1.50		
	Carried to collection				

ITEM	DESCRIPTION	UNIT	QTY		
	<u>COLLECTION</u>				
	Brought forward from page 1				

	Brought down from above				
	Brought down from above				
	TOTAL FOR WATER TANK INSTALLATION & WATER POINT				

PROPOSED REHABILITATION OF KULAN COMMUNITY UNDERGROUND TANK AND ASSOCIATED WORKS
FENCING

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
	<u>SUBSTRUCTURES WORKS</u>				
	<u>Digging and leveling work - All provisional</u>				
A	Excavate for precast concrete poles, load, transport and spread on site as directed/instructed by the Engineer	m ³	8.29		
B	Ditto for column bases to support access gates	m ³	8.64		
C	Extra over excavation for excavation in rock (All classes)	m ³	1.69		
D	Return fill and ram selected soil materials. Where the selected materials are not suitable, the contractor will use imported and approved imported materials	m ³	11.06		
	Allow for all necessary planking and strutting sides of all types of excavation	Item	1.00		

	<u>Concrete class 1:3:6 (40mm aggregate)</u>				
G	50mm thick blinding to column bases	m ²	5.76		
	<u>Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-</u>				
H	Column bases	m ³	1.73		
I	Columns in foundations	m ³	0.54		
	<u>Supply and put in place vibrated mass concrete class 25 (20mm aggregate) in:-</u>				
J	Mass concrete for the precast concrete poles (measured separately)	m ³	5.78		
	Carried to collection				
ITEM	DESCRIPTION	UNIT	QTY		
	<u>SUBSTRUCTURES WORKS - CONTINUED</u>				
	<u>Supply and construct formwork to the sides of the strip foundation. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u>				
A	Formwork to sides of column bases	m ²	6.72		
B	Formwork to sides of column in foundations	m ²	9.60		
	<u>Supply, transport, deliver, cutting, bending and installing of steel rods.</u>				
	<u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u>				
C	Assorted reinforcement bars 8 - 12mm diameter	Kgs	226.80		
	Carried to collection				
	<u>COLLECTION</u>				
	Brought forward from page 1				
	Brought down from above				

**TOTAL FOR SUBSTRUCTURES CARRIED TO
COLLECTION PAGE**

ITEM	DESCRIPTION	UNIT	QTY		
	<u>FENCING AND GATES</u>				
	<u>CONCRETE WORKS</u>				
	<u>Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-</u>	m ³			
A	Columns for the gates		1.08		
	<u>Ground levels</u>				
B	200 x 200mm mass concrete, 80 m long at the base of the boundary fencing	m ³	7.20		
	<u>Supply, transport, deliver and install concrete posts. The concrete posts shall be vertical and shall be installed in the concrete in holes (measured separately)</u>				
C	Precast concrete poles size 150x 150mm x 2400mm long reinforced with 4 No. D10 reinforcing rods with D8 @ 250c/c as stirrups and including 4 No. straining wire holes on the straight part (1825mm long) and 3 No. holes on the bent part (275mm long but with a bent of 400mm) and 400mm deep into the ground	No.	40.00		
D	Precast concrete poles supports size 150 x 150 x 1500mm long reinforced with and including 4 No. D10 reinforcing rods with D8 stirrups and with a required number of holes to attach the corner post and every 30.0m on the straight span	No.	10.00		
	<u>Supply and construct formwork to the sides of the strip foundation. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u>				
E	Formwork to vertical sides of columns	m ²	19.20		
	<u>Supply, transport, deliver, cutting, bending and installing of steel rods.</u>				
	<u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u>				
F	Assorted reinforcement bars 8 - 12mm diameter	Kgs	108.00		
	Carried to collection				

ITEM	DESCRIPTION	UNIT	QTY		
	<u>Supply and install approved wiremesh fence complete with straining and tying binding wire to pre-cast concrete poles (measured separately)</u>				
A	G12.5 wiremesh with 80 x 80mm squares, 7 feet high, 2.5mm thickness	m ²	254.40		
B	G11 galvanized straining wire 3.0mm thick strained onto a 4 lines at the straight parts of the poles for straining the chainlink meshwire, above	m	480.00		
C	G12.5 Barbedwire Hippo strained onto a three holes at the bends section	m	360.00		
C	Supply and Install a Barbed razorwire diameter color coated green, 450mm dia, to be installed at the top ends of the precast pples bends section	No.	12.00		
	<u>GATES</u>				
	<u>Steel vehicular double gate size 43000 x 2400mm high and pedestrian gate, 1200 x 2400mm adjacent with and including two No. 300 x 300 x 2500mm high concrete support columns embedded with necessary steel supports on eaither side of the gate with and including necessary conduits for lighting at the top and with 3mm thick steel panel, all bracing members and all iron mongery. The contractor shall include in his rate the cost of 12 mm dia. 300mm long slide bolt assembly with 4mm thick steel hasp and staple, 3 No.150mm wide painted purpose made pin hinges and all other associated iron mongery to make the gate operational</u>				
D	Double gate size 4300 x 2400mm high as a Vehicular gate	No.	1.00		
E	Ditto single gate size 1200 x 2400mm high as a pedestrian gate <u>Supply, transport, deliver prepare and apply gloss paint. The paint shall be Manufactured by Crown Paint Ltd or other approved manufacturer. Whenever required by the Engineer, the paint will be tested and if the paint does not pass the test, the contractor shall re-paint the whole area at his own cost</u>	No.	1.00		
F	Gloss paint to gate surfaces	m ²	13.20		
	Carried to collection				
	<u>COLLECTION</u>				
	Brought forward from page 3				
	Brought down from above				
	TOTAL FOR FENCING AND GATES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	UNIT	QTY		
	<u>SUMMARY PAGE</u>				
A	SUBSTRUCTURES				
B	FENCING AND GATES				
	TOTAL CARRIED TO GRAND TENDER SUMMARY PAGE				

4. PROPOSED REHABILITATION OF OURAH GUBANA COMMUNITY UNDERGROUND TANK AND ASSOCIATED WORKS

UNDERGROUND TANK REHABILITATION AND ROOFING

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL
	Element No.1: Underground Tank				
A	Demolition Carefully hack existing screed including reducing levels where necessary and prepare surface to receive new screed finish and cart away debris (tank internally, externally & floor)	m ²	230.97		
	Plaster: 9 mm first coat of cement/waterproof cement/sand (1:1:2): 3 mm second coat of cement/waterproof cement/sand (1:1:2): nil finish: on masonry or concrete: to				
B	Walls: internally	m ²	127.25		
C	Bottom of the tank	m ²	75.44		
D	Top of the wall and external sections	m ²	28.28		
	Carried to Collection				
	Element No.2: Inlet, silt trap and outlet				
	Demolition				

A	Carefully hack existing screed including reducing levels where necessary and prepare surface to receive new screed finish and cart away debris (tank internally, externally & floor)	m ²	70		
B	Plaster: 9 mm first coat of cement/sand (1:2): 3 mm second coat of cement/sand (1:2) on masonry or concrete: to Walls: internally, externally, floor Carried to Collection	m ²	70		
	Element No.3: Roofing <i>Metallic roofing constructed as described properly coated with 2 coats red-oxide/grey primer or any approved anti rust paint</i>				
A	Top chord (75x50x3mm)	M	48		
B	Bottom chord (50X50X3mm)	M	42		
C	Angles (50X50X3mm)	M	84		
D	Struts (50X30X3mm)	M	62		
E	Grade 1 metallic paint - 2 coats	LS	1		
F	Pre-painted IT4, Gauge 28 roofing sheets fixed to metallic purlins with appropriate screws. Area measured net	m ²	110		
G	300X300X6mm base plates fixed to concrete/masonry walls	Pcs	8		
H	12mm dia anchor bolts	Pcs	32		
I	Labor for fabrication and erection of the roof support structure and fixing of roof cover	LS	1		
J	Allow for fabrication, and installation of lockable roof access cover	LS	1		
K	Allow for fabrication and installation of trash rack with the following specifications; R16 mild steel rods welded at a spacing of 20mm properly fixed at the tank inlet	LS	1		
	Carried to Collection				
	SUMMARY				
	Element No.1: Underground Tank				
	Element No.2: Inlet, silt trap and outlet				
	Element No.3: Roofing				
	TOTAL CARRIED TO GRAND SUMMARY				

INSTALLATION OF SOLAR POWERED SURFACE BOOSTER PUMP

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
A	Supply and install Brushless surface solar pump, 750W/1HP, 3" dia suction With a minimum flow rate 20cubic/hr and max head 15M. WHC Solar or approved equivalent	Pcs	1		
B	Control box	Pcs	1		
C	Supply and install suction pipe with grating and equal size foot valve. Cost to include adjoining fittings	M	5		
D	400W 24VDC crystalline solar modules	Pcs	6		
E	Solar PV disconnect switch 1000/16A	Pcs	1		
F	Fabrication, supply and installation of a 4M High steel solar support structure	LS	1		
G	4MM*2 Core U/G cable	M	15		
I	Lightening arrestor	Pcs	1		
J	Earthrod C/W clamp 5/8*4FT	Pcs	1		
K	Copper earth cable 10mm	M	10		
L	Twin flat 4MM Cable with earth	M	15		
M	Installation labor, transport, testing and commissioning	LS	1		
TOTAL FOR INSTALLATION OF SOLAR POWERED SURFACE BOOSTER PUMP					

PROPOSED REHABILITATION OF OURAH GUBANA COMMUNITY UNDERGROUND TANK AND ASSOCIATED WORKS**WATER TANK PLATFORM, TANK INSTALLATION & WATER POINT**

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ERB
	<u>SUBSTRUCTURES WORKS</u>				
	<u>Digging and leveling work - All provisional</u>				

A	Clear the site off all vegetative growth with and including top 300mm deep vegetative soil, level ground and compact to approval	m2	22.00		
B	Extra over excavation for excavation in rock (All classes)	m3	2.20		
C	Selected imported murram well watered and compacted in layers not exceeding 150mm thick to Engineer's approval	m3	3.30		
D	Allow for keeping all excavations free from spring, subterranean or flood water	Item	1.00		
E	Allow for all necessary planking and strutting sides of all types of excavation	Item	1.00		
	<u>Hardcore backfill</u>				
F	Supply, transport, deliver and handpack gravel 1000mm thick below foundation slab, this includes watering and compressing gravel according to standards for this activity	m2	12.00		
G	50mm thick quarry dust blinding to hardcore (measured separately)	m2	12.00		
	<u>Damp proof Membrane</u>				
H	Two layers 1000-gauge polythene sheeting with minimum 300mm side and end laps	m2	12.00		
	Carried to collection				

	<u>SUBSTRUCTURES WORKS - CONTINUED</u>				
	<u>Concrete class 1:3:6 (40mm aggregate)</u>				
A	50mm thick blinding to foundation in trenches	m ²	9.36		
	<u>Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-</u>				
B	Strip footing	m ³	1.87		

C	150mm thick ground floor slab	m2	12.00		
D	Mass Concrete at the Water dispensing area Including Overhang slab	m2	1.75		
E	<p><u>Supply and construct formwork to the sides of the concrete surfaces. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u></p> <p>Formwork to sides of strip foundation</p>	m ²	7.00		
F	Edge formwork to sides of ground floor slab	m	20.90		
G	<p><u>Supply, transport, deliver, cutting, bending and installing of steel rods</u></p> <p><u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u></p> <p>Assorted reinforcement bars 8 - 12mm diameter</p>	Kgs	224.64		
H	<p><u>Supply, transport and install mesh fabric reinforcement</u></p> <p>Fabric mesh reinforcement BRC type A142 weighing 2.22Kg/M2 with minimum 300mm side and end laps</p>	m2	12.00		
I	<p><u>Construction of natural stonework walling; roughly squared; bedded and jointed in 1:4 cement and sand mortar and reinforced with 20-gauge hoop iron wall ties every alternate course. The stone crushing strength to be minimum 7N/mm²</u></p> <p>- 200mm thick</p>	m ²	37.62		

J	<p>Finishes</p> <p><u>White Wash of the External Massonry Walling</u></p> <p>- 200mm thick</p>	m ²	37.62		
K	<p>Plumbing and Drainage Works</p> <p>Provisional for Drainage and Plumbing Works including supply and installation of 10,000 L Plastic Water tanks with all the necessary pipeworks</p> <p>Allow for pipeline connection from the booster pump to the tank platform approximately 30m with 3" HDPE pipes. Cost to include trenching and necessary adjoining fittings</p> <p>Carried to collection</p>	Sum	1.00		
		Sum	1.00		

	FOR EXTERNALS WORKS				
	<u>Digging and leveling work - All provisional</u>				
A	Excavate for making level on black cotton, red soil or sandy soil, load, transport and spread on site as directed by the Engineer, for the embankments of the strip footing.	m ³	6.00		
B	Return fill and ram selected soil materials. Where the selected materials are not suitable, the contractor will use imported and approved imported materials	m ³	4.00		
C	Cart away surplus materials arising from excavations as directed on site	m ³	2.00		
D	Extra over excavation for excavation in rock (All classes)	m ³	0.20		
	<u>Hardcore filling</u>				
E	Supply and handpack selected gravel 300mm thick, water and compact in layers not exceeding 150mm thick as directed by the Engineer	m ²	6.00		
F	50mm thick quarry dust blinding to hardcore (measured separately)	m ²	6.00		
G	Level the surface of the hardcore to be horizontal with a gentle slope of 1% or as directed by the engineer	m ²	14.00		
	<u>Construction of natural stonework walling; roughly squared; bedded and jointed in 1:4 cement and sand mortar and reinforced with 20 gauge hoop iron wall ties every alternate course. The stone crushing strength to be minimum 7N/mm²</u>				
H	200mm thick	m ²	2.61		
	<u>Supply, transport and lay precast concrete paving slabs 50mm thick on and including prepared sand bed of 50mm thickness. The paving slabs will be neatly joined at regular pattern and where cutting will be required, the cut face shall be cut neatly and straight</u>				
I	600 x 600mm wide precast concrete paving slabs with and including jointing with cement and sand (1:3) mortar	m ²	3.00		
	<u>Approved Rocks Pebbles</u>				
J	Supply, deliver and spread approved 300x200mm drain filled with rock pebbles aggregates on rammed murrum (measured separately) with average thickness of 50mm	m ²	1.50		

	Carried to collection				
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ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL
	<u>COLLECTION</u>				
	Brought forward from page 1				
	Brought down from above				
	Brought down from above				
	TOTAL FOR WATER TANK INSTALLATION & WATER POINT				

PROPOSED REHABILITATION OF OURAH GUBANA COMMUNITY UNDERGROUND TANK AND ASSOCIATED WORKS

FENCING

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
A	<u>SUBSTRUCTURES WORKS</u>	m ³	8.29		

	<u>Digging and leveling work - All provisional</u>		
	Excavate for precast concrete poles, load, transport and spread on site as directed/instructed by the Engineer		
B	Ditto for column bases to support access gates	m ³	8.64
C	Extra over excavation for excavation in rock (All classes)	m ³	1.69
	Return fill and ram selected soil materials. Where the selected materials are not suitable, the contractor will use imported and approved imported materials		
D		m ³	11.06
	Allow for all necessary planking and strutting sides of all types of excavation	Item	1.00
	<u>Concrete class 1:3:6 (40mm aggregate)</u>		
G	50mm thick blinding to column bases	m ²	5.76
	<u>Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-</u>		
H	Column bases	m ³	1.73
I	Columns in foundations	m ³	0.54
	<u>Supply and put in place vibrated mass concrete class 25 (20mm aggregate) in:-</u>		
J	Mass concrete for the precast concrete poles (measured separately)	m ³	5.78
	Carried to collection		
ITEM	DESCRIPTION	UNIT	QTY
	<u>SUBSTRUCTURES WORKS - CONTINUED</u>		
	<u>Supply and construct formwork to the sides of the strip foundation. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u>		
A	Formwork to sides of column bases	m ²	6.72
B	Formwork to sides of column in foundations	m ²	9.60
	<u>Supply, transport, deliver, cutting, bending and installing of steel rods.</u>		
	<u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u>		
C	Assorted reinforcement bars 8 - 12mm diameter	Kgs	226.80

Carried to collection

COLLECTION

Brought forward from page 1

Brought down from above

**TOTAL FOR SUBSTRUCTURES CARRIED TO
COLLECTION PAGE**

ITEM	DESCRIPTION	UNIT	QTY
	<u>FENCING AND GATES</u>		
	<u>CONCRETE WORKS</u>		
	<u>Supply and put in place vibrated reinforced concrete class 2 5 (20mm aggregate) in:-</u>		
A	Columns for the gates	m ³	1.08
	<u>Ground levels</u>		
B	200 x 200mm mass concrete, 120 m long at the base of the boundary fencing	m ³	7.20
	<u>Supply, transport, deliver and install concrete posts. The co ncrete posts shall be vertical and shall be installed in the co ncrete in holes (measured separately)</u>		
C	Precast concrete poles size 150x 150mm x 2400mm long reinforced with 4 No. D10 reinforcing rods with D8 @ 250c/c as stirrups and including 4 No. straining wire holes on the straight part (1825mm long) and 3 No. holes on the bent part (275mm long but with a bent of 400mm) and 400mm deep into the ground	No.	40.00
	Precast concrete poles supports size 150 x 150 x 1500mm long reinforced with and including 4 No. D10 reinforcing rods with D8 stirrups and with a required number of holes to attach the		
D	corner post and every 30.0m on the straight span	No.	10.00

	<u>Supply and construct formwork to the sides of the strip foundation. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u>			
E	Formwork to vertical sides of columns	m ²	19.20	
	<u>Supply, transport, deliver, cutting, bending and installing of steel rods.</u>			
	<u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u>			
F	Assorted reinforcement bars 8 - 12mm diameter	Kgs	85.00	
	Carried to collection			
ITEM	DESCRIPTION	UNIT	QTY	
	<u>Supply and install approved wiremesh fence complete with straining and tying binding wire to pre-cast concrete poles (measured separately)</u>			
A	G12.5 wiremesh with 80 x 80mm squares, 7 feet high, 2.5mm thickness	m ²	254.40	
	G11 galvanized straining wire 3.0mm thick strained onto a 4 lines at the straight parts of the poles for straining the chainlink meshwire, above			
B	G12.5 Barbedwire Hippo strained onto a three holes at the bends section	m	480.00	
C		m	360.00	
C	Supply and Install a Barbed razorwire diameter color coated green, 450mm dia, to be installed at the top ends of the precast pples bends section	No.	12.00	
	<u>GATES</u>			
	<u>Steel vehicular double gate size 43000 x 2400mm high and pedestrian gate, 1200 x 2400mm adjacent with and including two No. 300 x 300 x 2500mm high concrete support columns embedded with necessary steel supports on either side of the gate with and including necessary conduits for lighting at the top and with 3mm thick steel panel, all bracing members and all iron mongery. The contractor shall include in his rate the cost of 12mm dia. 300mm long slide bolt assembly with 4mm thick steel hasp and staple, 3 No.150mm wide painted purpose made pin hinges and all other associated iron mongery to make the gate operational</u>			
D	Double gate size 4300 x 2400mm high as a Vehicular gate	No.	1.00	
E	Ditto single gate size 1200 x 2400mm high as a pedestrian gate	No.	1.00	

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL
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Element No.1: Underground Tank			
Demolition			
A	Carefully hack existing screed including reducing levels where necessary and prepare surface to receive new screed finish and cart away debris (tank internally, externally & floor)	m ²	230.97
Plaster: 9 mm first coat of cement/waterproof cement/sand (1:1:2): 3 mm second coat of cement/waterproof cement/sand (1:1:2): nil finish: on masonry or concrete: to			
B	Walls: internally	m ²	127.25
C	Bottom of the tank	m ²	75.44
D	Top of the wall and external sections	m ²	28.28
Carried to Collection			
Element No.2: Inlet, silt trap and outlet			
Demolition			
A	Carefully hack existing screed including reducing levels where necessary and prepare surface to receive new screed finish and cart away debris (tank internally, externally & floor)	m ²	70
Plaster: 9 mm first coat of cement/sand (1:2): 3 mm second coat of cement/sand (1:2) on masonry or concrete: to			
B	Walls: internally, externally, floor	m ²	70
Carried to Collection			
Element No.3: Roofing			
<i>Metallic roofing constructed as described properly coated with 2 coats red-oxide/grey primer or any approved anti rust paint</i>			
A	Top chord (75x50x3mm)	M	48
B	Bottom chord (50X50X3mm)	M	42
C	Angles (50X50X3mm)	M	84
D	Struts (50X30X3mm)	M	62
E	Grade 1 metallic paint - 2 coats	LS	1
F	Pre-painted IT4, Gauge 28 roofing sheets fixed to metallic purlins with appropriate screws. Area measured net	m ²	110
G	300X300X6mm base plates fixed to concrete/masonry walls	Pcs	8
H	12mm dia anchor bolts	Pcs	32
I	Labor for fabrication and erection of the roof support structure and fixing of roof cover	LS	1
J	Allow for fabrication, and installation of lockable roof access cover	LS	1

K	<p>Allow for fabrication and installation of trash rack with the following specifications; R16 mild steel rods welded at a spacing of 20mm properly fixed at the tank inlet</p> <p>Carried to Collection</p> <p>SUMMARY</p> <p>Element No.1: Underground Tank</p> <p>Element No.2: Inlet, silt trap and outlet</p> <p>Element No.3: Roofing</p>	LS	1		
	TOTAL CARRIED TO GRAND SUMMARY				

PROPOSED REHABILITATION OF OURAH GUBANA COMMUNITY UNDERGROUND TANK AND ASSOCIATED WORKS

INSTALLATION OF SOLAR POWERED SURFACE BOOSTER PUMP

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
A	Supply and install Brushless surface solar pump, 750W/1HP, 3" dia suction With a minimum flow rate 20cubic/hr and max head 15M. WHC Solar or approved equivalent	Pcs	1		
B	Control box	Pcs	1		
C	Supply and install suction pipe with grating and equal size foot valve. Cost to include adjoining fittings	M	5		
D	400W 24VDC crystalline solar modules	Pcs	6		
E	Solar PV disconnect switch 1000/16A	Pcs	1		
F	Fabrication, supply and installation of a 4M High steel solar support structure	LS	1		
G	4MM*2 Core U/G cable	M	15		
I	Lightening arrestor	Pcs	1		
J	Earthrod C/W clamp 5/8*4FT	Pcs	1		

K	Copper earth cable 10mm	M	10		
L	Twin flat 4MM Cable with earth	M	15		
M	Installation labor, transport, testing and commissioning	LS	1		
TOTAL FOR INSTALLATION OF SOLAR POWERED SURFACE BOOSTER PUMP					

PROPOSED REHABILITATION OF OURAH GUBANA COMMUNITY UNDERGROUND TANK AND ASSOCIATED WORKS

WATER TANK PLATFORM, TANK INSTALLATION & WATER POINT

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
	<u>SUBSTRUCTURES WORKS</u>				
	<u>Digging and leveling work - All provisional</u>				
A	Clear the site off all vegetative growth with and including top 300mm deep vegetative soil, level ground and compact to approval	m2	22.00		
B	Extra over excavation for excavation in rock (All classes)	m3	2.20		
C	Selected imported murram well watered and compacted in layers not exceeding 150mm thick to Engineer's approval	m3	3.30		
D	Allow for keeping all excavations free from spring, subterranean or flood water	Item	1.00		
E	Allow for all necessary planking and strutting sides of all types of excavation	Item	1.00		
	<u>Hardcore backfill</u>				

F	Supply, transport, deliver and handpack gravel 1000mm thick below foundation slab, this includes watering and compressing gravel according to standards for this activity	m2	12.00		
G	50mm thick quarry dust blinding to hardcore (measured separately)	m2	12.00		
H	<u>Damp proof Membrane</u> Two layers 1000-gauge polythene sheeting with minimum 300mm side and end laps	m2	12.00		
	Carried to collection				

	<u>SUBSTRUCTURES WORKS - CONTINUED</u>				
	<u>Concrete class 1:3:6 (40mm aggregate)</u>				
A	50mm thick blinding to foundation in trenches	m ²	9.36		
B	<u>Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-</u> Strip footing	m ³	1.87		
C	150mm thick ground floor slab	m2	12.00		
D	Mass Concrete at the Water dispensing area Including Overhang slab	m2	1.75		
E	<u>Supply and construct formwork to the sides of the concrete surfaces. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u> Formwork to sides of strip foundation	m ²	7.00		
F	Edge formwork to sides of ground floor slab	m	20.90		
	<u>Supply, transport, deliver, cutting, bending and installing of steel rods</u> <u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u>				

G	Assorted reinforcement bars 8 - 12mm diameter	Kgs	224.64		
H	<u>Supply, transport and install mesh fabric reinforcement</u> Fabric mesh reinforcement BRC type A142 weighing 2.22Kg/M2 with minimum 300mm side and end laps	m2	12.00		
I	<u>Construction of natural stonework walling; roughly squared; bedded and jointed in 1:4 cement and sand mortar and reinforced with 20 gauge hoop iron wall ties every alternate course. The stone crushing strength to be minimum 7N/mm²</u> - 200mm thick	m ²	37.62		

J	Finishes <u>White Wash of the External Massonry Walling</u> - 200mm thick	m ²	37.62		
K	Plumbing and Drainage Works Provisional for Drainage and Plumbing Works including supply and installation of 10,000 L Plastic Water tanks with all the necessary pipeworks Allow for pipeline connection from the booster pump to the tank platform approximately 30m with 3" HDPE pipes. Cost to include trenching and necessary adjoining fittings Carried to collection	Sum Sum	1.00 1.00		
A	FOR EXTERNALS WORKS <u>Digging and leveling work - All provisional</u> Excavate for making level on black cotton, red soil or sandy soil, load, transport and spread on site as directed by the Engineer, for the embankments of the strip footing.	m ³	6.00		
B	Return fill and ram selected soil materials. Where the selected materials are not suitable, the contractor will use imported and approved imported materials	m ³	4.00		
C	Cart away surplus materials arising from excavations as directed on site	m ³	2.00		
D	Extra over excavation for excavation in rock (All classes)	m ³	0.20		
E	<u>Hardcore filling</u> Supply and handpack selected gravel 300mm thick, water and compact in layers not exceeding 150mm thick as directed by the Engineer	m ²	6.00		

F	50mm thick quarry dust blinding to hardcore (measured separately)	m ²	6.00		
G	Level the surface of the hardcore to be horizontal with a gentle slope of 1% or as directed by the engineer	m ²	14.00		
	<u>Construction of natural stonework walling; roughly squared; bedded and jointed in 1:4 cement and sand mortar and reinforced with 20 gauge hoop iron wall ties every alternate course. The stone crushing strength to be minimum 7N/mm²</u>				
H	200mm thick	m ²	2.61		
I	<u>Supply, transport and lay precast concrete paving slabs 50mm thick on and including prepared sand bed of 50mm thickness. The paving slabs will be neatly joined at regular pattern and where cutting will be required, the cut face shall be cut neatly and straight</u> 600 x 600mm wide precast concrete paving slabs with and including jointing with cement and sand (1:3) mortar	m ²	3.00		
J	<u>Approved Rocks Pebbles</u> Supply, deliver and spread approved 300x200mm drain filled with rock pebbles aggregates on rammed murrum (measured separately) with average thickness of 50mm	m ²	1.50		
	Carried to collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
	<u>COLLECTION</u> Brought forward from page 1				

	Brought down from above				
	Brought down from above				
	TOTAL FOR WATER TANK INSTALLATION & WATER POINT				

PROPOSED REHABILITATION OF OURAH GUBANA COMMUNITY UNDERGROUND TANK AND ASSOCIATED WORKS

FENCING

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL ETB
	<u>SUBSTRUCTURES WORKS</u>				
	<u>Digging and leveling work - All provisional</u>				
A	Excavate for precast concrete poles, load, transport and spread on site as directed/instructed by the Engineer	m ³	8.29		
B	Ditto for column bases to support access gates	m ³	8.64		
C	Extra over excavation for excavation in rock (All classes)	m ³	1.69		
D	Return fill and ram selected soil materials. Where the selected materials are not suitable, the contractor will use imported and approved imported materials	m ³	11.06		
	Allow for all necessary planking and strutting sides of all types of excavation	Item	1.00		
	<u>Concrete class 1:3:6 (40mm aggregate)</u>				
G	50mm thick blinding to column bases	m ²	5.76		

	<u>Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-</u>				
H	Column bases	m ³	1.73		
I	Columns in foundations	m ³	0.54		
	<u>Supply and put in place vibrated mass concrete class 25 (20mm aggregate) in:-</u>				
J	Mass concrete for the precast concrete poles (measured separately)	m ³	5.78		
	Carried to collection				
ITEM	DESCRIPTION	UNIT	QTY		
	<u>SUBSTRUCTURES WORKS - CONTINUED</u>				
	<u>Supply and construct formwork to the sides of the strip foundation. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u>				
A	Formwork to sides of column bases	m ²	6.72		
B	Formwork to sides of column in foundations	m ²	9.60		
	<u>Supply, transport, deliver, cutting, bending and installing of steel rods.</u>				
	<u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u>				
C	Assorted reinforcement bars 8 - 12mm diameter	Kgs	226.80		
	Carried to collection				
	<u>COLLECTION</u>				
	Brought forward from page 1				
	Brought down from above				
	TOTAL FOR SUBSTRUCTURES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	UNIT	QTY
	<u>FENCING AND GATES</u>		
	<u>CONCRETE WORKS</u>		
	<u>Supply and put in place vibrated reinforced concrete class 25 (20mm aggregate) in:-</u>		
A	Columns for the gates	m ³	1.08
	<u>Ground levels</u>		
B	200 x 200mm mass concrete, 120 m long at the base of the boundary fencing	m ³	7.20
	<u>Supply, transport, deliver and install concrete posts. The concrete posts shall be vertical and shall be installed in the concrete in holes (measured separately)</u>		
C	Precast concrete poles size 150x 150mm x 2400mm long reinforced with 4 No. D10 reinforcing rods with D8 @ 250c/c as stirrups and including 4 No. straining wire holes on the straight part (1825mm long) and 3 No. holes on the bent part (275mm long but with a bent of 400mm) and 400mm deep into the ground	No.	40.00
D	Precast concrete poles supports size 150 x 150 x 1500mm long reinforced with and including 4 No. D10 reinforcing rods with D8 stirrups and with a required number of holes to attach the corner post and every 30.0m on the straight span	No.	10.00
	<u>Supply and construct formwork to the sides of the strip foundation. The formwork shall comprise acceptable timber or steel shutters with and including mould oil, putting in place and striking off. Where the surface of concrete is disturbed by the striking off, it shall be repaired at the Contractor's cost</u>		
E	Formwork to vertical sides of columns	m ²	19.20
	<u>Supply, transport, deliver, cutting, bending and installing of steel rods.</u>		
	<u>Hot rolled deformed reinforcement bars with and including bends, hooks, tying wire, distance blocks, and spacers</u>		
F	Assorted reinforcement bars 8 - 12mm diameter	Kgs	85.00
	Carried to collection		
ITEM	DESCRIPTION	UNIT	QTY
	<u>Supply and install approved wiremesh fence complete with straining and tying binding wire to pre-cast concrete poles (measured separately)</u>		
A		m ²	254.40

	G12.5 wiremesh with 80 x 80mm squares, 7 feet high, 2.5mm thickness			
	G11 galvanized straining wire 3.0mm thick strained onto a 4 lines at the straight parts of the poles for straining the chainlink meshwire, above			
B	G12.5 Barbedwire Hippo strained onto a three holes at the bends section	m	480.00	
C		m	360.00	
C	Supply and Install a Barbed razorwire diameter color coated green, 450mm dia, to be installed at the top ends of the precast pples bends section	No.	12.00	
	<u>GATES</u>			
	<u>Steel vehicular double gate size 43000 x 2400mm high and pedestrian gate, 1200 x 2400mm adjacent with and including two No. 300 x 300 x 2500mm high concrete support columns embedded with necessary steel supports on either side of the gate with and including necessary conduits for lighting at the top and with 3mm thick steel panel, all bracing members and all iron mongery. The contractor shall include in his rate the cost of 12mm dia. 300mm long slide bolt assembly with 4mm thick steel hasp and staple, 3 No.150mm wide painted purpose made pin hinges and all other associated iron mongery to make the gate operational</u>			
D	Double gate size 4300 x 2400mm high as a Vehicular gate	No.	1.00	
E	Ditto single gate size 1200 x 2400mm high as a pedestrian gate <u>Supply, transport, deliver prepare and apply gloss paint. The paint shall be Manufactured by Crown Paint Ltd or other approved manufacturer. Whenever required by the Engineer, the paint will be tested and if the paint does not pass the test, the contractor shall re-paint the whole area at his own cost</u>	No.	1.00	
F	Gloss paint to gate surfaces	m ²	13.20	
	Carried to collection			
	<u>COLLECTION</u>			
	Brought forward from page 3			
	Brought down from above			
	TOTAL FOR FENCING AND GATES CARRIED TO COLLECTION PAGE			
ITEM	DESCRIPTION	UNIT	QTY	

	SUMMARY PAGE				
A	SUBSTRUCTURES				
B	FENCING AND GATES				
	TOTAL CARRIED TO GRAND TENDER SUMMARY PAGE				

Tenders, who want to provide all, or part of the merchandise, will find general submission conditions and detailed description of commodities below:

RURAL AGENCY FOR COMMUNITY DEVELOPMENT AND ASSISTANCE (RACIDA) – INVITATION TO TENDER

By participating in this tender you are indicating your acceptance of the guidelines set out in this document. The commodities must correspond to the specifications of RACIDA conditions of contract and respect, RACIDA's requirements as stipulated on the present call for tender. RACIDA reserves the right to disqualify and reject tenders from suppliers who do not comply with guidelines set out in this document.

All questions or inquiries are to be submitted in writing to RACIDA's procurement department: procurement@racida.org or ethiopiaprocurement@racida.org

General Bid Requirements

1. **Contact Information:** Full name, address, telephone numbers of your company and contact persons.
 2. **Mandatory requirement i.e. Tax compliance**
 3. **Previous experience preferably from Non-governmental organizations.**
 4. 100% Price evaluations.
 5. General understanding of the local context and geographical area is an added advantage
 6. The supplier or the vendor should tax clearance Government revenue office.
 7. Supplier's acceptance of **RACIDA's Prohibition on Assistance to Drug Traffickers, and Certification Regarding Terrorist Financing Declaration** (enclosed, Appendix I). RACIDA cannot issue a Purchase Order in the absence of a Supplier's acceptance of these declarations.
 8. **Prices:** The rates and prices inserted in the bill of quantities/ price schedule are to be full inclusive costs of the work, described under the items, complete in place in accordance with the specifications, including costs, expenses and profit which may be required in and for the construction of the works described, together with any temporary works and installations which may be necessary and all general risks, liabilities and obligations set forth or implied in the documents.
 9. **Delivery time:** The preferred delivery date/time for this work is 90 days from the start of contract. Suppliers are therefore requested to quote their best delivery time in calendar days/weeks
 10. **Validity:** Bids must remain valid with firm and fixed prices for 90 days after Tender Closing Date.
-

The submission of applications

Completed tender documents are to be submitted **through email with the subject name:** Tender for Rehabilitation of existing WASH infrastructures and extension of the water pipeline system in the Liban zone (Quran Gubana, Jaygadud, Garbab, & Kulan -Helaboon) in Liban Zone of Somali Region and Tender Number RACIDA/DKH K-AFM-2022-0375/021 in accordance with the Instructions to Tenders in the tender documents.

Bids must be emailed to: procurement@racida.org or ethiopiaprocurement@racida.org
Or submitted to our office in Dollo Ado

Tender Name: Tender for Rehabilitation of existing WASH infrastructures and extension of the water pipeline system in the Liban zone (Quran Gubana, Jaygadud, Garbab, & Kulan -Helaboon) in Liban Zone of Somali Region

Tender Reference Number: RACIDA/DKH K-AFM-2022-0375/021

Closing date of reception of Submission of applications: at the latest the 15th of August 2023 at 4:30pm.

Special conditions

Delivery deadline

Suppliers must indicate their delivery time. Once purchase orders and contracts are signed with the supplier, he/she must strictly respect delivery schedules agreed. Delays or quantity difference in delivery without valid explanation will incur a penalty of 10% of the total price

RURAL AGENCY FOR COMMUNITY DEVELOPMENT AND ASSISTANCE (RACIDA) –
INVITATION TO TENDER

without valid explanation will incur a penalty of 10% of the total price.

Acceptance of submissions of tender

Acceptance of submissions of tender is the sole responsibility of RACIDA. Any late submissions of tenders will not be accepted and will be excluded from analysis.

Method of payment

The chosen supplier will be paid according to the terms of contract: 100% of the total sum of each purchase contract will be paid upon successful completion of works to each project location.

All the prices bidden must be inclusive of all relevant taxes

Payment schedule:

- Supplier will be paid 100% of the total contractual upon completion of the delivery and after signing of the delivery note by RACIDA, with a limited delay of 10 days, if the items are accepted and the delivery is completed.

Suppliers will only be paid through bank transfer after submitting their bank details. No other means of payment will be considered.

Validity of submissions of tender

Quotations of submissions of tender must remain stable and valid for 90 days after the closing date for the submissions of tenders.

Working language.

Communication, work documents and contracts will be drafted in English.

Damaged items

The bidders must carefully note: potential damaged items will not be paid for by RACIDA and will be returned to the supplier if asked to at his/her own costs.

Delivery Locations

The winning supplier is to deliver to each project locations listed below in this tender document.

Kulan Helaboon

Qurac Gubane

Garbab 1

Jaygadud

RURAL AGENCY FOR COMMUNITY DEVELOPMENT AND ASSISTANCE (RACIDA) –
INVITATION TO TENDER

Control and Inspection

RACIDA's representative can monitor the quality of commodities, its packaging, parcelling and storage at any time before the definitive acceptance of offer. Quality control and inspection will be conducted by RACIDA upon loading at the supplier warehouse and upon receipt at destination in Dollo Ad. The payments will be facilitated after confirmation of goods at the target locations.

Detailed items to be mentioned in the submissions of tender

1. Unit price and total price in ETB of each commodity, including delivery DDP to RACIDA's project sites in Garba 1, Jay Gadud, Kulan Helaboon and Qurac Gubane of Liben Zone of Somali Region. **Applicants without this will not be considered.**
2. Previous experience: The supplier must provide us References of at least 3 important customers for same or similar orders
3. Bank statements
4. The company registration and the national tax payer registration number

Detailed items to be mentioned in the submissions of tender

- Tender's complete name and address, phone, fax and e-mail address.
- Tender's transporter name and address.
- Official Certificate of registration of firm

Order voucher and Contract.

If your submission of tender is chosen, a purchase contract will be signed.

The quantity mentioned in this document as well as the delivery timetable are indicative and stand for a purchase intention. The orders will become effective with the signature of the purchase contract that will confirm quantity and delivery time.

RACIDA will purchase the goods according to the need of its program to your company. Each RACIDA purchase has to be confirmed by the sending of a Purchase Order and a Purchase Contract. You must sign our contract confirming that you accept our conditions.

Goods for Tender

**Signature with Stamp of
Company Name of
Signature.....**

***Designation***

***Place:***

***Date*.....**

**RURAL AGENCY FOR COMMUNITY DEVELOPMENT AND ASSISTANCE (RACIDA) –
INVITATION TO TENDER**

Cancellation clauses

Other cancellation clause

If any conditions, in the invitation to tender or the supplier's application, change within the stated period, an additional Letter of Agreement must be agreed and signed by both parties.

Cancellation may occur where:

1. The tender procedure has been unsuccessful, namely where no qualitatively or financially worthwhile tender has been received or there has been no response at all;
2. The economic or technical parameters of the project have been fundamentally altered;
3. Exceptional circumstances or *force majeure* render normal performance of the project impossible;
4. All technically compliant tenders exceed the financial resources available;
5. There have been irregularities in the procedure, in particular where these have prevented fair competition.

In no circumstances will RACIDA be liable for damages, whatever their nature (in particular damages for loss of profits) or relationship to the cancellation of a tender, even if RACIDA has been advised of the possibility of damages.

The publication of a procurement notice does not commit RACIDA to implement the program or project announced.

Conditions of attribution

Selection Criteria

The attribution will be decided on the basis of our selection criteria. Be precise on your quotation concerning each one of these criteria's and if there are some you are not able to fulfill explain why in order for us to possibly review our position.

Type of Criteria	Basis on which criteria is used
1. Price	• Competitive price and corresponding to our budget,
2. Delivery	• Delay for deliveries
3. Previous experience	• References provided by the supplier (3),
4. Bank guarantee	• Bank statement

5. Signed declaration form	• Signed declaration form in Appendix I of tender document
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APPENDIX I

DECLARATIONS

1. Prohibition on Assistance to Drug Traffickers

RACIDA reserves the right to terminate this contract or take other appropriate measures if the supplier is found to have been convicted of an narcotics offense or to have been engaged in drug trafficking as defined in United Nations Convention Against Illicit Traffic in Narcotics Drugs and Psychotropic Substances, 1988.

1a. Key Individual Certification Narcotics Offenses and Drug Trafficking: I hereby certify that within the last ten years: 1. I have not been convicted of a violation of, or a conspiracy to violate, any law or regulation of Kenya, Somalia or any other country concerning narcotic or psychotropic drugs or other controlled substances. 2. I am not and have not been an illicit trafficker in any such drug or controlled substance. 3. I am not and have not been a knowing assister, abettor, conspirator, or colluder with others in the illicit trafficking in any such drug or substance. 4. I understand that RACIDA may terminate my contract if it is determined that I engaged in the above conduct during the last ten years or during the period of engagement with RACIDA.

Signature: _____

Name: _____

Company: _____

Date: _____

Address: _____

2. Certification Regarding Terrorist Financing

By signing and submitting this contract, the prospective supplier provides the declarations set out below:

2a. The Supplier, to the best of their current knowledge, did not provide, within the previous ten years, and will take all reasonable steps to ensure that they do not and will not knowingly provide, material support or resources to any individual or entity that commits, attempts to commit, advocates, facilitates, or participates in terrorist acts, or has committed, attempted to commit, facilitated, or participated in terrorist acts, consistent with numerous United Nations Security Council resolutions, including S/RES/1269(1999), S/RES 1368(2001) and S/RES1373(2001) and the European Union. RACIDA is firmly committed to the international fight against terrorism and in particular against the financing of terrorism. It is the policy of RACIDA to seek to ensure that none of its and its donor funds are used, directly or indirectly, to provide support to individuals or entities associated with terrorism or money laundering. I understand that RACIDA may terminate my contract if it is determined that I engaged in the above conduct during the last ten years or during the period of engagement with RACIDA.

2b. For purposes of this Certification - a. "Material support and resources" means currency or monetary instruments or financial securities, financial services, lodging, training, expert advice or assistance, safe houses, false documentation or identification, communications equipment, facilities, weapons, lethal substances, explosives, personnel, transportation, and other physical assets, except medicine or religious materials." (i) "Training" means instruction or teaching designed to impart a specific skill, as opposed to general knowledge. (ii) "Expert advice or

assistance" means advice or assistance derived from scientific, technical, or other specialized knowledge.

Signature: _____

Name: _____

Company: _____

Date: _____

Address: _____

