

# **Islamic Relief Kenya**

### TENDER DOCUMENT FOR

### REHABILIATION WORKS OF BOREHOLE AT DILMANYALEY BOREHOLE IN WAJIR SOUTH SUB-COUNTY, WAJIR COUNTY

### REF NO: IRK/WAJ/BR/WORKS/006/11/2024

# **ISSUED ON: SATURDAY, NOVEMBER 9, 2024**

# CLOSING DATE: MONDAY, NOVEMBER 25, 2024, 11.00 AM

NAME AND CONTACT OF PROCURING ENTITY:

Islamic Relief Kenya Kirichwa Road, off Ngong Road P.O.BOX 417 – 00202 KNH, Nairobi Email: procurement.Irk@islamic-relief.or.ke

#### **INSTRUCTION TO BIDDERS**

Established in 1984 in the UK, Islamic Relief is an international NGO seeking to promote sustainable economic and social development by working with local communities through relief and development activities regardless of race, color and religion, and without expecting anything in return.

IR started operations in Kenya in 1993 on orphan's sponsorship programme through a local CBO in Mandera District, Northern Kenya. It opened its fully fledged office in March in 2006 at the height of drought in the Horn of Africa. Since then, IR has been providing humanitarian and developmentassistance to vulnerable communities. Over these years it has implemented various developmentand relief activities in Mandera. This has remarkably changed the lives of the vulnerable and disadvantaged communities. In January 2010, IRK extended its operation to Wajir County and in January 2012 expanded to Garissa and Dadaab, and in October 2017 opened a programme office in Kilifi County.

Islamic Relief Kenya focuses on resilience projects namely: Food Security and Livelihoods, Water Sanitation and Hygiene, Cash Transfer Programming, Orphans Support and Sponsorship, women Empowerment, Education and Peace-building.

The Bracc project is under implementation in Wajir County Kenya. It aims to implement inclusive climate adaptation and resilience actions and strategies at grass root levels to increase the adaptive capacity and level of climate resilience of the target communities, the project outcomes are,

1. Increased access to potable and sufficient water for human and livestock consumption and for small-scale irrigation.

2. Improved agricultural and livestock productivity through supporting extension services and climate smart agricultural practices, for optimal food production.

3. Increased income and asset growth for the unemployed urban, and peri urban youths.

4. Strengthened community managed disaster risk reduction capacity.

In order to achieve this, IRK is raising this tender document for borehole equipping, rehabilitation, piping and construction works at Dilmanyaley borehole in Wajir south sub-County, Wajir county to enable increased access to water for the targeted local communities.

A complete set of tender documents may be obtained Free of Charge by interested candidates by downloading from the link provided: Islamic Relief Kenya website: <u>https://islamic-relief.or.ke</u>

#### **Bid Submission Requirements**

Interested bidders are advised to read the submission instructions carefully to ensure compliance

Submission Email: To be submitted via email: tenders@islamic-relief.or.ke

**Single PDF Document**: Each bid must be submitted as a single, consolidated PDF document (Max 25mb). Multiple or fragmented submissions will not be accepted.

**Bidder Email**: Interested bidders may submit their bids **ONLY** from the official email address of the bidder or company.

**Direct PDF Attachment Only**: Bid documents must be attached directly as PDF files in the submission email. Links to external file-sharing platforms, such as Google Drive or Dropbox, are not permitted and will not be reviewed.

**Subject Line Specification**: Bidders must include the **tender name** and **reference number** in the email subject line to ensure proper filtering and identification of submissions.

**Disqualification Notice**: Failure to adhere to these submission requirements will result in the disqualification of the bid.

**Tender Name**: Borehole Equipping, Rehabilitation, Piping and Construction Works at Dilmanyaley Borehole in Wajir South Sub-County, Wajir County

Tender Ref No: IRK/WAJ/BR/WORKS/001/11/2024

Submission Deadline: Monday, 25<sup>th</sup> November 2024 at 11:00 am

Tenders will be opened immediately thereafter in the presence of bidders or their representatives who choose to attend in the Islamic Relief Boardroom. Any tender documents received later than the deadline will not be accepted.

At the tender opening, IRK will announce the tender's names, total tender price, and such other details as the Employer, at his discretion, may consider appropriate. No tender shall be rejected at the tender opening except for late tenders. Tenders not opened and read out at the tender opening shall not be considered further for evaluation, irrespective of the circumstances.

Prices quoted should be inclusive of all taxes, must be in Kenya shillings and shall remain valid for (60) days from the closing date of tender.

#### **INSTRUCTION TO BIDDERS PROCURING ENTITY:** ISLAMIC RELIEF KENYA. P.O BOX 417-00202 KNH. Nairobi

BOREHOLE EQUIPPING, REHABILITATION, PIPING AND CONSTRUCTION WORKS AT DILMANYALEY BOREHOLE IN WAJIR SOUTH SUB-COUNTY, WAJIR COUNTY

- **1.** All Tenders above must be accompanied by a Bid Bond at least 10% of the quoted amount valid for 180 days.
- 2. Only tenders submitted electronically will be accepted. Late tenders will be rejected

# 3. Work Scope and Sites Details

The tender is for undertaking the following components as per Annex I – BoQ and Annex II – Drawings: borehole equipping, rehabilitation, piping and construction works at Dilmanyaley borehole in Wajir south subcounty, Wajir county.

# **Eligible Bidders**

The invitation for the bids is open to all interested eligible Companies/individuals who are duly registered with the national government, respective County governments and National construction authorities.

### 4. Services

All services to be done under the contract shall have their measurement and shall not be subcontracted.

# 5. Cost of Bidding

The bidders shall bear all costs associated with preparation and submission of its bid & IRK will in no case be responsible for those costs, regardless of the conduct or outcome of the bidding process.

# 6. Clarification of Bidding Documents

Interested eligible candidates who may want to obtain further information or seek for clarification can do so by sending an email to <u>Procurement.Irk@islamic-relief.or.ke</u> OR +254 727531220 / 2543861216. IRK will respond in writing to any request prior to the deadline.

If you have any concerns – relating to this tender or otherwise – or want to make a complaint please:Call us on +254 700 200 849 or Email us at: <u>complaints@irworldwide.org</u>

# 7. Amendment of Bidding documents

At any time prior to the deadline for submission of bids, IRK May for any reason, at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents & will be binding on them. The amendment will be notified in writing to all prospective bidders, who have received the bidding documents & will be binding on them. In order to allow prospective bidders responsive time in which to take the amendment into account in preparing their bids, IRK may, at its discretion, extend the deadline for bid submission.

# 8. Language of the Bid

The bid prepared by the bidder, as well as all correspondence & documents relating to the bid, supporting documents and printed literature furnished by the bidder shall be written in English language.

#### 9. Bid Document Comprises.

The bid document prepared by the bidder shall comprise of the following:

- a) Each page of the tender document is serialized.
- b) Form of tender signed and stamped by the authorized person.
- c) Tender submitted with tender security as required (bid bond 10% of the quoted amount)
- d) Completed and signed confidential business questionnaire form.
- e) Certified Copy of Certificate of Incorporation/Registration.
- f) Disclosure of business ownership (Directors/ Partners /Sole Proprietor). Attach a copy of CR12 Form
- g) Certified Copy of Current Tax Compliance certificate from Kenya Revenue Authority must verifiable online –itax
- h) KRA PIN with VAT obligation
- i) Certified Copy of Valid and current Business Permit
- j) Certified copy of Valid registration for National Construction Authority NCA 7 and above Building and water works
- k) Bidder to provide self-declaration that the person/tenderer will not engage in any corrupt or fraudulent practice.
- 1) Only certified Statement of comprehensive income for the last three years (Max. 3 pages) signed by auditors.
- m) Company Profile with brief business description, physical location, address and company structure (Max. 5 pages).
- n) Evidence of Past Experience in Similar work done for the last 5 years e.g. at least 5 signed contracts supported by LPO and Certificate of Completion
- o) Copy of ID/Passport for Company Owner/Director
- p) Bid bond (10% of the quoted amounts)
- q) Key Technical staff and their CVs (Key people but not more than four CVs)
- r) List of Key Equipment (only relevant equipment).
- s) Detailed workplan and methodology statement: Work plan demonstrating flow of work from inception to site hand over) (Max 3 pages)
- t) Bank Statement for 6 months (1st May 2024 31<sup>st</sup> October 2024)
- u) Duly filled Tender B.o.Q and forms in the format provided
- v) All copies of certified/mandatory documents must be Certified by a Commissioner of Notary/ Oath.

# **10. Bid Currencies**

The bids prices shall be quoted in Kenya Shillings (KES).

# 11. Bids Prices

- The potential contractor shall submit his/her bid in the BOQ format provided in Annex I
- The bidders shall indicate the unit price where possible and the total bid price as indicated in the BOQ.
- Prices quoted by the bidder shall be fixed during the performance of the contract.

# 12. Withholding Tax

IRK shall retain 3% of contract value as withholding tax and remit to the government. A receipt shall be issued for this.

# 13. Retainer

IRK shall retain 10% of the contract value for a period of 6 months being defect liability.

#### 14. IRK's right to vary quantities at the time of the award

IRK reserve the right at the time of award of contract to increase or decrease by up to 10% the quantity of work specified in the technical specification without change of unit price or other terms of condition.

### 15. IRK's right to accept any bid and/or reject any or all bids

IRK reserves the right to accept any bid and to annul the bidding processes and reject all bids at any time prior to award of contract, without, thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders on the grounds of its action.

#### **16. Submission of Bids**

The bidders shall submit their bids in one envelope marked with Tender Name and Reference.

### 17. Evaluation

18.1 IRK will examine the prequalification documents to determine completeness, general orderliness, sufficiency in responsiveness, price and product brand.

18.2 The potential contractor shall not contact IRK on matters relating to their bid from the time of opening to completion and official communication sent to them. Any effort by the potential contractor to influence IRK in the evaluation shall result in disqualification.

18.3 Prequalification will be based on meeting the minimum criteria regarding the applicant's legal status, general and experience, personnel and financial position as demonstrated by their responses as set in clause

18.4 The applicants  $\underline{MUST}$  have registered offices and IRK reserves the discretion of visiting physical premises from which the applicant conducts business if so desired to confirm existence and capability to execute the contract.

18.5 Due diligence shall be undertaken, and any bidder found to be in breach by providing false information shall be disqualified.

# **19. Employment of Minors**

The Contractor shall not employ children in executing the contract. The Contractor shall observe international conventions relating to child labor namely the UN Convention No.182 on worst forms of child labor and convention No. 138 on the minimum age for admission to employment.

# 20. Criminal Act

The Contractor undertakes to comply with all applicable laws and to ensure that it does not engage in any kind of criminal activity including but not limited to bribery, fraud, corruption, terrorism and to maintain ethical business practices as well as not to commit any Prohibited Acts defined as: -

i) To offer, promise or give any person a financial or other advantage.

ii) To request, agree to receive or accept any financial or other advantage not expressly provided for as an inducement or a reward for the performance of any function or activity in connection with this Agreement.

#### BID EVALUATION RATING SCALE MANDATORY REQUIREMENTS

No	Description	Mandatory Evaluation (YES/NO)
l	Company Registration Certificate – Mandatory	
2	CR12- issued within the last 3 months	
3	Duly filled forms (Organization details, Grounds for Mandatory Rejection Grounds for Discretionary rejection form, Bid Value, Financial and declaration)	·
4.	Valid Registration with the county government/valid and genuine business permit.	3
5.	Valid Registration with (NCA7 and above). (Building and water work).	
7	Active KRA PIN – With VAT Obligation	
8	Valid Tax Compliance	
<u>9</u>	Copy of ID/ Passport of the directors	
10	Serialization of the Bid – Bidders shall sequentially serialize all pages of the	

**Note:** Bids that do not include any of the documents listed as mandatory will not be considered for either the technical or financial evaluation.

#### **TECHNICAL EVALUATION**

No.	Desc	ription	Score
1	Brief Company Profile with verifiable physic	cal location/address	10
2	List of Key Equipment	Owned (Max 15 marks)	20
		50% Owned – 50% leased (Max - 7)	
		100% leased (Max. 5 Marks)	
3	List of Key Personnel	(Degrees- 10, HNDs – 6, Diplomas – 4)	20
4	Number of Years in Operation at least 5 years	1yr - 2 marks	10
		2yrs- 4 marks	
		3yrs- 6 marks	
		4yrs- 8 marks	
		5yrs & above – 10 marks	
	Evidence of past similar works – Contract,	-5 or More = (Max. 30 marks	
5	LPO & Completion certificates.	4 LPOs, contracts & completion cert.	30
		(Max 24 marks)	
		3 LPOs, contracts & completion cert.	
		(Max 18 marks)	
		2 LPOs, contracts & completion cert.	
		(Max 12)	
		1 LPO/contracts/completion cert (Max 4	
		Marks)	
		Note: the contract/LPOs/completion certificate	
		must be readable, signed and stamped by the	
		issuing authority for authentication.	

6	Detailed statement	work	plan	and	Detailed workplan and methodology statement: Work plan demonstrating flow of work from inception to site hand over) (Max 3 pages)	10
	TOTAL				100	

Note: Bids that do not score 80% or above in the technical analysis will be automatically disqualified and will not be considered for financial evaluation.

# FINANCIAL EVALUATION

No.	Description		Maximum
1	Certified Bank statement for the past six months. (1st May 2024 – 31 <sup>st</sup> October 2024)	Certified bank statement for 6 months.	25
2	Evidence of a Certified letter of credit from the	Uncertified bank statement -0 Certified letter (signed & stamped) of credit.	25
	TOTAL		50

Note: Bids that do not score 75% or above in the financial analysis shall not be considered for due diligence.

# **Tender Schedule**

Task	Tentative Tender Schedule
Advertising of tender	Saturday, November 9, 2024
Closing of tender	Monday, November 25, 2024, 11:00 am
Opening of tender	Monday, November 25, 2024, 11:00 am
Evaluation	26th – 29th October 2024
Award	2 <sup>nd</sup> -4 <sup>th</sup> November 2024

# MANDATORY QUESTIONNAIRE

# A: Organization and Contact Details

Full Name of Organizati Date of Registration Registration Certificate N	
Street	Road
Address	Code
Town	
Email	Telephone No.
PIN No.	
Name of Parent Compan	y
Type of Organization	APublicLimitedCompanyALimited CompanyALimitedLiabilityPartnershipOther PartnershipSole TraderOther (Please Specify)

# Name of Owners

Name	ID/Passport No.	Nationality

DETAILS FOR CONTACT PERSON						
	Contact details for enquiries about this PQQ/Business Issues					
Name of Staff						
Address						
Post Code						
Town						
Phone						
Mobile						
Email						

# **B** - Grounds for Mandatory Rejection

# **Important Notice:**

In some circumstances IRK is required by law to exclude you from participating further in a procurement. If you cannot answer 'no' to every question in this section it is very unlikely that your application will be accepted, and you should contact us for advice before completing this form.

Please state 'Yes' or 'No' to each question.

Has your organization or any directors or partner or any other person who has powers of representation, decision or control been convicted of any of the following offences?	Answer
(a) A crime	
(b) Corruption	
(c) The offence of bribery;	
(d) Fraud within the meaning of:	
i) Money laundering	
ii) Any other offence	

Has your organization fulfilled obligations related to the payment of social security contributions or the payment of taxes in accordance with the legal? Answer with a "**Yes**" or "**No**"

# **C** - Grounds for Discretionary Rejection

#### **Important Notice:**

**IRK** is entitled to exclude you from consideration if any of the following apply but may decide to allow you to proceed further. If you cannot answer 'no' to every question it is possible that your application might not be accepted. In the event that any of the following do apply, please set out (in a separate Annex) full details of the relevant incident and any remedial action taken subsequently. The information provided will be taken into account by IRK in considering whether or not you will be able to proceed any further in respect of this procurement exercise. Please state 'Yes' or 'No' to each question.

Is any of the following true of your organization?	
(a) <u>Is bankrupt</u> or under receivership or bankruptcy restrictions order made against the organization	
(b) <u>Is insolvent</u> ,	
(c) <u>Is</u> the subject of an order by the court winding up otherwise than for the purpose of bona fide reconstruction or amalgamation, or had a receiver, manager or administrator on behalf of a creditor appointed in respect of the company's business or any part thereof or is the subject of similar procedures under the law of any other state?	
Has your organization	
(a) been convicted of a criminal offence relating to the conduct of your business or profession;	
(b) committed an act of grave misconduct in the course of your business or profession:	
(c) failed to fulfil obligations relating to the payment of social security contributions	
(d) failed to fulfil obligations relating to the payment of taxes under the	
(e) been guilty of serious misrepresentation in providing any information required	

# **D** – Bid Value & Duration of Supply

Bid Value for the Work	Kshs
Payment Terms	
Duration of Delivery	
Remarks	

# E - Financial

1	BANK INFORMATION	
1.1	Bank	
	Branch	
	Account Name	
	Account Number	
	Swift Code	
	Letter From Bank Confirming Account & Credit Facility	

F		Declaration	Declaration
2.	are correct. assess my requirement Contracting relevant qu	at to the best of my knowledge the answers submitted in th I understand that the information will be used in organization's suitability to be invited to tender for and I am signing on behalf of my organization. I und Authority may reject this bid if there is a failure testions fully or if I provide false/misleading informat ument, I certify that all of the above statements are accur <b>FORM COMPLETED BY</b>	the process to Islamic Relief's erstand that the to answer all ion. By signing
2.1	Name:		
2.2	Position:		
2.3	Signature:		
2.4	Date:		

Name of Bidder:Authorized signatory:	Authorized signature:   Name of Authorized signatory:   Functional Title:   Telephone Number:   Email Address:	2.5	Stamp:			
Authorized signature:	Authorized signature:   Name of Authorized signatory:   Functional Title:   Telephone Number:   Email Address:					
Authorized signature:	Authorized signature:   Name of Authorized signatory:   Functional Title:   Telephone Number:   Email Address:					
Authorized signature:	Authorized signature:   Name of Authorized signatory:   Functional Title:   Telephone Number:   Email Address:					
Name of Authorized signatory: Functional Title: Telephone Number: Email Address:	Name of Authorized signatory: Functional Title: Telephone Number: Email Address:	Name o	f Bidder:			
Functional Title: Telephone Number: Email Address:	Functional Title: Telephone Number: Email Address:	Authori	zed signature	:		
Telephone Number:	Telephone Number:	Name o	f Authorized	signatory:		
Email Address:	Email Address:	Functio	nal Title:			-
		Felepho	one Number:			
Date://2024 Official Stamp:	Date://2024 Official Stamp:	Email A	Address:			-
		Date:	//2024		Official	Stamp:

# ANNEX I: B.O.Q

Islamic Relief Kenya Kirichwa Road P.O Box 417-00200, KNH Nairobi, Kenya 3



Tel: 0727531220/0734740074 Email: info@islamic-relief.or.ke Ref: Date......

# **BILLS OF QUANTITIES FOR WORKS OF BOREHOLE EQUIPPING, REHABILITATION, PIPING AND CONSTRUCTION WORKS AT DILMANYALEY BOREHOLE**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	BILL No.1: PLASTIC POLES FENCING WORKS (30mx30m compound)				
1.1	Site Clearance and setting out	SM	900		
1.2	Excavate post holes of size 300mm diameter and 450mm deep to receive plastic poles.	No.	44		
1.3	Supply and fix posts of size 150x 150mm and 2.4m long placed at 3 metres apart c/c with 6 through holes for wire or bolt. The insitu mass concrete surround to be compacted.	No.	44		
1.4	Excavate post holes of size 300mm diameter and 450mm deep to receive concrete poles.	No.	20		
1.5	Supply and fix posts of size 150x 150mm and 2.4m long placed corners and after every 5 poles (15m) and ditto	No.	20		
1.6	Provide, place, compact and vibrate 1:2:4 concrete to the post holes.	СМ	3		
1.7	Supply and fix razor wire Gauge 14 placed all round the fence including the gate area	LM	120		
1.7	Provide and fix heavy gauge 14 chain link fences, (18m long roll) 2.1m/7ft high to be fitted with appropriate strainers on the posts.	SM	252		
1.8	Provide and fix 6 rounds heavy gauge 16 barbed wire (610m long roll)	М	720		
1.9	Provide, place, compact and vibrate insitu 1:3:6 mass concrete to the base of the Chain-link within 100mm above the existing ground level.	СМ	4		
1.10	Construct 300mmx300mmx2500mm long reinforced concrete gate columns. Concrete surfaces to be fully plastered and painted with two coats gloss paint (perch blue) to Engineer's approval.	No.	2		

1.11	Provide materials, fabricate and install purpose made steel grilled double leaf security gate overall size 5000x2000mm high in two equal opening leaves each size 2500x2000mm high with external frame of 50x50x3mm SHS spaced l000mm c/c vertically and l250mm c/c horizontally both internally and externally. Internal vertically bracings of 25x25x3mm spaced @150mm c/c horizontally all fixed to external frame by wielding including all hinged joints. A pedestrian door 900mmx l900mm high to be assembled, wielded to shape and fixed to position on the right eave of the gate. Provide 250mm wide MS strip across the entire gate horizontally. Complete Gate finished with heavy gauge wire mesh wielded on the surface and locking devices to be supported by RC Columns specified above. All to be painted with two coats of approved primer and finished with final coat first grade gloss paint (perch blue). All to design drawing specifications.	No.	1	
1.12	Allow for contingencies.	LS	1	
	TOTAL FOR FENCING WORKS TO BE CARRIED OVER TO GRAND SUMMARY			
2	BILL No.2 DEMOLITION AND REMOVAL OF ELEVATED STEEL TANK AND OLD CONTROL HOUSE			
2.1	Removal of existing elevated steel tank			
А	Remove existing 9m high 50m <sup>3</sup> (5m*5m*2m) elevated steel tank	ITEM	1	
В	Dispose off tank debris as per engineer's instruction	ITEM	1	
2.2	Removal of solar panel holding structures complete with solar panels.			
А	Remove existing solar panel holding structure complete with solar panels 62No. 260 watts solar panels	LS	1	
В	Cart away and dispose debris as per engineers instructions	LS	1	
2.3	Demolition and removal of old control house			
А	Demolish existing control house dimensions 4m*5m*3m L*W*H(wall half masonry half wire mesh)	LS	1	
В	Cart away and dispose debris as per engineer's instructions	LS	1	
	Total for demolition and removal			
3	BILL No. 3 BOREHOLE WATER STEEL WATER TANK 15- CUBIC ON 9M TOWER FOR BOREHOLE WATER STORAGE			
	Supply, deliver to site, fabricate and install to position the following components of the Elevated Steel Tank			
			1	

	Fabricate, supply and erect on an elevated steel tower a pressed Hot-dip Galvanized steel section tank, effective capacity 15m <sup>3</sup> of 6mm thick panels elevated at 9m height tower complete with steel roof cover 3mm sheets, internal bracing, brackets, access cover and internal and external ladder, calibrated level indicator, fasteners, threaded nozzles, sealants and lockable manhole. Tank to be painted with two coats of non-toxic black bituminous paint internally and one coat of grey primer and two coats of silver aluminum externally. The tank & tower to strictly follow the drawing and have allowance for future expansion to increase capacity. Member Specifications as	СМ	15	
	per drawings			
3.2	9M High Tower			
	Provide shop drawings, fabricate ,deliver and erect a 9m high steel tower to BS 449 above foundation level steelwork complete with primer and aluminium paint to carry 15m <sup>3</sup> steel tank. The tower to comprise of UC columns, angle bracings, chequered plate platform and beams, access cat ladder and railing on the platform and fixtures necessary for erection.	ITEM	1	
3.3	Steel Tank Branding			
	4 plates to be branded with the provided organizational logo and wordings	ITEM	1	
3.4	GI pipework			
	Supply, deliver and install 2" dia G.I class B pipe for the inlet work, outlet, washout and overflow for the 15m <sup>3</sup> steel water tank on 9m steel tower. Rate to include connection to the tank by pass pipe, inlet gate valves and all necessary fittings including fasteners and anchor blocks.	ITEM	1	
3.5	Concrete Foundation			
A	Excavate for tank tower foundation, spread and level the excavated materials and stack surplus as directed for re-use: Depth to be determined on site	СМ	25	
В	Provide C15 blinding concrete to foundation and ground beam	SM	15	
С	Supply and place reinforced concrete class 20/25 with D12 placed at 150c/c both way at bottom and sides to foundation for tank tower, for underground tie beam and 8Y16 for stub column bases: Cost to include reinforcement bars as specified measured net	СМ	25	
D	Allow for contingencies, commissioning and testing to full operationalization of the system for use by the community.	LS	1	
	TOTAL FOR ELEVATED BOREHOLE STEEL TANK TO BE CARRIED TO GRAND SUMMARY			
4	BILL No.4 SOLARIZED PUMPING SYSTEM			

	1	1	1	1	1 1
	BOREHOLE CONDITIONS a. Borehole Depth:- 150m b. Minimum Borehole Diameter:- 6" c. Static Water Level:- 40m d. Pumping Water Level:- 80m e. Test Pump Output:- 14m3/hr f. Client's Desired Output:- 9.8m3/hr g. Delivery Point Elevation:- 9m h. Running distance to tank:- 30m, i. Tank Size:-15m <sup>3</sup> j. Power point:- Solar,20m away. k. Dynamic pressure:- 160m l. Pump setting:- 145m				
	Borehole area: Dilmanyaley				
4.1	Provide, fabricate and install MS Signboard (1.5mx1.5m) raised 1.5m above ground complete with appropriate paintwork/artwork, Islamic Relief Logo and Project details on either side. Artwork to be done via stencil pasting and not freehand as shall be directed by the Engineer.	Item	1		
4.2	Dayliff DS08-44 7.5kW pump end c/w motor or equivalent that can do a flow rate of 9.8m3/hr at a head of 160m	Pcs	1		
4.3	350W 24VDC crystalline solar module (connected to reach the pump's required wattage plus safety factor and current)	Pcs	36		
4.4	Dayliff SV3 7.5KW 3PH Sunverter or equivalent	Pcs	1		
4.5	6.0MM <sup>2</sup> X4 STD pvc submersible drop cable	М	150		
4.6	6.0MM <sup>2</sup> X4 core U/G cable	М	20		
4.7	2" adaptor set or equivalent	Pcs	1		
4.8	Dayliff 2" Standard 3m pipe or equivalent	Pcs	48		
4.9	Borehole cover 2*8 c/w b/valve	Pcs	1		
4.10	2" water meter	Pcs	1		
4.11	Earthrod c/w clamp 5/8*4ft	Pcs	1		
4.12	Copper earth cable 6mm	М	5		
4.13	Lighting arrestor	Pcs	1		
4.14	1000/40A 2ST PV disconnect switch	Pcs	1		
4.15	6mm <sup>2</sup> X2 core Solar pv cable	Μ	40		
4.16	Supply and install solar panel holding structure c/w control panel box with beams and SHS supports to hold the solar panels and withstand windloads	Ls	1		
417	Installation sundries	Ls	1		
<ul><li>4.18</li><li>4.19</li></ul>	Equipment delivery and installation Lift and hand over to community existing 7.5kw pump c/w controls set at 138m complete	Ls Ls	1 1		
	with 38No. Pipes				
4.20	Allow for contigencies	Ls	1	1	

	TOTAL CARRIED TO GRAND SUMMAI	RV	1	1	1
5	BILL NO. 5 CONSTRUCTION OF 1 WATER KIOSK				
5.1	Excavation and Earthworks				
А	Excavation and Earthworks -General excavation to remove top soil to an average depth of 250mm	SM	7		
В	Excavation for wall footing depth not exceeding 1200mm deep	СМ	8		
С	Ditto to column bases	CM	2		
D	Excavation for front to back area depth not exceeding 250mm	СМ	3		
E	Backfill and ram	CM	3		
F	Cart away surplus excavated material and deposit at recommended area.	СМ	3		
G	300mm thick approved hardcore, well compacted in layers not exceeding 150mm and blinded using 50mm murram/ quarry dust	SM	10		
Η	Gauge 1000 polythene Damp proof and 50mm murram blinding	SM	15		
5.2	Masonry Work				
A	200mm thick natural stone walling to substructures in 1:3 sand/cement mortar. Rate to include hoop iron reinforcement at every course.	SM	10		
В	200mm thick natural stone walling to superstructures in 1:3 sand/cement mortar. Rate to include hoop iron reinforcement at every course.	SM	22		
С	200mm wide ventilation	PC	2		
D	150mm wide DPM to walls	SM	3		
5.3	Concrete Work	2111			
A	Concrete grade 20/20 - 300 mm thick Plinth	СМ	0.2		
B	Concrete grade 20/20 - 100mm thick slanting front area	CM	0.2		
С	Reinforced concrete grade 20/25 - 100mm thick floor slab	СМ	0.6		
D	Reinforced concrete grade 20/20 - 150mm thick roof	СМ	1		
Е	Reinforced concrete grade 20/20 to strip footing	CM	1.2		
F	Reinforced concrete grade 20/25 to column base	СМ	3		
G	Reinforced concrete grade 20/25 to columns	СМ	0.5		
Н	Reinforced concrete grade 20/25 to beam	СМ	1.0		
5.4	Concrete Ancillaries				
А	Sawn formwork to Sides of strip footing	SM	5		1
В	Sawn formwork to Edges ground slab 100mm wide	LM	19		
С	Sawn formwork to sides and Soffits of 300mm deep plinth and slanting front area	SM	2		
D	Sawn formwork to edges of roof slab	LM	12		
E	Sawn formwork to Underneath roof slab, including props	SM	8		
F	Sawn formwork sides and soffits of beam 300mm deep	SM	6		
G	A142 mild steel reinforcement	SM	15		
Η	8mm reinforcement bars	KG	82		
Ι	10mm reinforcement bars	KG	54		
J	12mm reinforcement bars	KG	93		

5.5	Doors and Windows			
А	1000x2000mm steel door including locks and hinges to details	No.	1	
В	950x1000mm steel swing window including locks and hinges to details	No.	1	
С	Built in table with two lockable drawers	No.	1	
D	Meter Box 220x220x300mm Lockable	No.	1	
5.6	Pipe and Fittings			
	All pipes to be galvanised iron with threads			
A	32mm outlet pipe	m	12	
C	32mmdia. Elbows	No.	8	
B	32 mm dia. Valve sockets	No.	2	
С	32mm dia. Gate Valve as Peglar	No.	1	
D	32x32mm Tee	No.	3	
E	32x20mm reducing bush	No.	2	
F	32mm end Plug	No.	2	
G	32mm union	No.	2	
Н	32mm short nipple	No.	2	 
Ι	20mm union	No.	4	
J	20mm barrel nipple	No.	4	
Κ	20mm ball valve	No.	4	
L	20mm elbow	No.	12	
М	20mm taps	No.	4	
Ν	Supply and install 32mm water meter c/w fittings	No.	1	
0	Sundries and Installation labour for the above fittings	No.	1	
5.7	Finishes			
А	Plastering to all masonry and concrete surfaces (internally and externally)	SM	32	
В	Provide three coats of gloss piant to all plastered surfaces	SM	32	
5.8	Drainage and Water Supply			
A	Catch pit			
1	Excavate for 400mm squarex700mm catch pit to detail	СМ	0.2	
2	100mm thick block lining to the sides of the catch pit	SM	2	
3	100mm thick mass concrete for catch pit base slab	СМ	0.1	
4	20mm thick plaster mixed with Sika or equivalent water proofing admixture to walls surfaces internally.	SM	2	
5	Catch pit grating made from wielded sections to form 25mm square mesh on 50mm steel frame.	ITEM	1	
B	Soak pit			
1	Prepare site by stripping top 150mm of soil to remove all debris including sand (if any) from site and carting away spoil	SM	1	
2	Pit excavation commencing at reduced levels depth not exceeding 1.50m deep.	СМ	1.5	
3	Ditto 1.50 - 3.00 metres deep	СМ	1.5	
4	Remove surplus excavated material from site	СМ	3	
5	Graded approved free draining hard-core/ rubble stone filling the soak pit	СМ	1	

7	10mm reinforcement bars	KG	13	
8	Sawn formwork to sides and soffits of slab	SM	1.4	
9	Provide and install 200mm Drainage PVC pipe for inlet and outlet connections including adjoining fittings	LM	10	
С	Plastic tank			
1	Provide and install 5000L approved plastic tank on top of the kiosk roof complete with all fitting (its nipples, back nuts and float/ball valve) and associated piping.	No.	1	
2	Provide for branding with IRK Logo and wording as directed by the Engineer on plastic tank and water Kiosk.	ITEM	1	
	TOTAL FOR WATER KIOSK CARRIED TO GRAND SUMMARY			
6	BILL NO.6: CONSTRUCTION OF 12M			
	LONG CATTLE TROUGH			
6.1	Earthworks			
6.1.1	Prepare site by stripping top 150 mm of soil to remove all debris including sand (if any) from site and carting away spoil	SM	81	
6.1.2	Excavate for foundation strip commencing at stripped levels depth not exceeding 1.50m deep	СМ	25	
6.1.3	Remove surplus excavated material from site	CM	25	
6.1.4	Backfill around foundation	CM	10	
6.2	Filling			
6.2.1	200 mm thick approved hardcore filling spread, well rammed and compacted in 150mm layers to receive concrete surface bed	СМ	8	
6.3	Concrete work			
	Mass Concrete class 15 (1:3:6) with 20mm thick maximum aggregate size in			
6.3.1	50mm blinding layer on hardcore surfaces	SM	38	
	Vibrated reinforced concrete class 25 (1:1.5:3) with 20mm			
(2)	maximum aggregate as described in:		2	
6.3.2	Strip foundation	CM	2	
6.3.3 6.3.4	75mm thick concrete benching laid to falls and with surface steel trowelled rough (Optional) 100 mm thick floor slab	CM CM	4.5	
<b>6.4</b>	Reinforcement		<i>L</i>	
<b>0.4</b> 6.4.1	Mesh fabric reinforcement ref. No. A142 laid in		20	
0.4.1	floor slab with minimum 150 mm side allowance	SM	20	
6.5	Finishes	I		
-	Cement and sand mortar (1:3) in:			
6.5.1	12 mm Thick paving to floor with water proof cement (Optional)	SM	10	
6.5.2	15mm thick plaster to internal side of wall with water proof cement	SM	14	
6.6	Blockwork and Masonry	I		
	To include supply and lay dressed building stones for masonry walls			

6.6.1	225mm thick ashlar masonry, vertical straight walls; thickness 150-250	SM	27	
	Galvanized mild steel pipes class "B" medium			
6.7	thickness with and including jointing fittings a fixed as described	nd		
6.7.1	32mm diameter inlet pipe chased through masonry wall 300 mm long with and including stop cork (Float Valve)	NO	1	
6.7.2	Provide and install 32mm diameter inlet pipe c/w gate valve, 2No. hex nipple, 2No.elbow and 2No.unions.	М	6	
6.7.3	Construct Lockable steel cover and attach to valve chamber at water trough complete with control gate valves and adjoining fittings.	No.	1	
	TOTAL FOR 1 WATER TROUGH			
7	BILL No. 7: PIPING TO AND FRO TANKS, CATTLE TROUGH AND KIOSKS			
7.1	Connection from borehole to elevated steel tank			
A	Excavate and backfill pipeline trench (after laying of pipe) 450mm wide and between 0.6m and 1.5m deep for delivery of water to elevated steel tank from pump.	М	20	
В	Provide and lay GI 2" pipe delivery line from borehole pump to elevated steel tank c/w assorted fittings, non return valve and other accessories.	М	20	
7.2	Connection between elevated steel tank and valve chamber			
A	Excavate and backfill pipeline trench (after laying of pipe) 450mm wide and between 0.6m and 1.5m deep.	М	12	
В	Provide and lay HDPE pipe PN 6 DN 63 delivery line from elevated borehole water steel tank to valve chamber (for water kiosk and cattle trough) c/w assorted fittings and other accessories	М	12	
7.3	Connection between valve chamber to water kiosk			
A	Excavate and backfill pipeline trench (after laying of pipe) 450mm wide and between 0.6m and 1.5m deep. Cost to include excavations in rocky formations.	М	80	
В	Provide and lay HDPE pipe PN 6 DN 63 delivery line from valve chamber to water kiosk c/w assorted fittings, non return valve and other accessories	М	80	
7.4	Connection between valve chamber and cattle trough			
A	Excavate and backfill pipeline trench (after laying of pipe) 450mm wide and between 0.6m and 1.5m deep. Cost to include excavations in rocky formations.	М	80	
В	Provide and lay HDPE pipe PN 6 DN 63 delivery line from valve chamber to cattle trough c/w assorted fittings, non return valve and other accessories	М	80	
С	Construct 1000 x 1000 x700 Valve Chambers with Lockable steel cover 2m away from fence	No.	1	

	complete with control gate valves and adjoining fittings to isolate the water kiosk and trough lines.			
D	Allow for contingencies, commissioning and testing to full operationalization of the system for use by the community and permits	LS	1	
	TOTAL FOR PIPING FROM TANKS TO BE CARRIED FORWARD TO GRAND SUMMARY	Ksh		
	GRAND SUMMARY OF PROJECT COMPONENTS			
BILL NO.	DESCRIPTION			
1	PLASTIC POLES FENCING WORKS			
2	REMOVAL OF EXISTING ELEVATED TANK, SOLAR PANEL C/W HOLDING STRUCTURE AND DEMOLITION OF EXISTING POWER CONTROL HOUSE.			
3	SUPPLY AND INSTALLATION OF 15 CUBIC ELEVATED STEEL TANK			
4	SUPPLY AND INSTALLATION OF SOLARISED PUMPING SYSTEM			
5	CONSTRUCTION OF 1 WATER KIOSK			
6	CONSTRUCTION OF 12M LONG CATTLE TROUGH			
7	PIPING TO WATER KIOSK AND TROUGH FROM BOREHOLE COMPOUND			
	Sub-Total			
	Add VAT 16% TOTAL FOR REHABILITATION OF DILMANYALEY WATER SUPPLY PROJECT IN WAJIR SOUTH SUB COUNTY, WAJIR COUNTY			

# **ANNEX II: DRAWINGS**















