

**Islamic Relief Kenya** 

# TENDER DOCUMENT FOR

# TENDER DOCUMENT FOR THE CONSTRUCTION OF WATER WORKS IN GOTANI BOREHOLE KILIFI COUNTY

REF NO: IRK/KLF/WORKS/003/03/2025

ISSUED ON: THURSDAY, 13<sup>TH</sup> MARCH 2025

CLOSING DATE: WEDNESDAY, 26<sup>TH</sup> MARCH 2025 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 Peacebuilding.

The LDP project is under implementation in Kilfi 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 unemployed urban, and peri urban youths.
- 4. Strengthened community managed disaster risk reduction capacity.

Islamic Relief is planning to undertake Construction Water Works in Gotani Borehole in Kilifi County.

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: <a href="https://islamic-relief.or.ke">https://islamic-relief.or.ke</a>
CONSTRUCTION WATER WORKS IN GOTANI BOREHOLE IN KILIFI COUNTY.

Complete one tender document in pdf format (max 25mb) with subject as tender name and reference number TENDER: IRK/KLF/WORKS/003/03/2025 to be submitted via email tenders@islamic-relief.or.ke no later than **Wednesday 26**th **March 2025** 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

Eligible bidders can download a complete set of tender documents with evaluation criteria from the Islamic Relief Kenya website: <a href="https://islamic-relief.or.ke">https://islamic-relief.or.ke</a> Complete one tender document in pdf format (max 25mb) with subject as tender name and reference number to be submitted via email <a href="tenders@islamic-relief.or.ke">tenders@islamic-relief.or.ke</a> no later than <a href="mailto:March 26">March 26</a>, <a href="mailto:2025">2025</a> at 11:00 am

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: <a href="https://islamic-relief.or.ke">https://islamic-relief.or.ke</a>

Interested bidders are advised to read the submission instructions carefully to ensure compliance **Submission Email**: To be submitted via email: <a href="mailto:tenders@islamic-relief.or.ke">tenders@islamic-relief.or.ke</a>

**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.

**Tender Tittle:** Construction Water Works in Gotani Borehole in Kilifi County.

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

**Specific Instructions to intredsted bidders:** 

- 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:

# 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 authority.

## 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 the 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 <a href="mailto:Procurement.Irk@islamic-relief.or.ke">Procurement.Irk@islamic-relief.or.ke</a> 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 Email us at: <a href="mailto:complaints@irworldwide.org">complaints@irworldwide.org</a>

# 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 water and building 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 April 2024 28<sup>th</sup> February 2025)
- 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.

NB: - Partial delivery of the documents will lead to disqualification. Preference shall be given to qualified local supplier with valid licenses.

- It is advisable that the bidder at own cost and convenience to undertake a physical visit and assessment of the particular site for the proposed works prior to the compilation of the bid.

## 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 the 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

Complete one tender document in pdf format (max 25 mb) with subject as tender name and reference number to be submitted via email tenders@islamic-relief.or.ke

## 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 <u>MUST</u> 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		Mandatory Evaluation (YES/NO)
1	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.	
5.	Valid Registration with (NCA7 and above).  ( water works)	
7	Active KRA PIN – With VAT Obligation	
8	Valid Tax Compliance	
9	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 ANALYSIS

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		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 ANALYSIS

No.	Description		Maximum
1	Certified Bank statement for the past six months (Aug 2024 – Feb 2025)	Certified bank statement for 6 months.	25
		Uncertified bank statement -0	
2	Evidence of a Certified letter of credit from the reputable from reputable bank.	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	<b>Tentative Tender Schedule</b>
Advertising of tender	13th March 2025
Closing of tender	Wednesday, 26th March 2025 11:00 am
Opening of tender	Wednesday, 26th March 2025 11:00 am
Evaluation	27 <sup>th</sup> – 31st March 2024
Award	1 <sup>st</sup> April 2025

# MANDATORY QUESTIONNAIRE A: Organization and Contact Details Full Name of Organization Date of Registration Registration Certificate Number Street Road Address Code Town Email Telephone No. PIN No.

Name of Parent Company	
Type of Organization	A Public Limited Company A Limited Company  A Limited Liability Partnership Other Partnership Sole Trader Other (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"	
with the legal. This wer with a Tes of Tio	

# **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>I</u> s 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	

Account Name	
Account Number	
Swift Code	

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

Name of Bidder:	-
Authorized signature:	 
Name of Authorized signatory:	

unctional Title:			
elephone Number:			
Email Address:			
Date://2025		Official Stamp:	
	ANNEX I BOQ's		

	OF QUANTITIES FOR CONSTRUCTION CLATED WORKS AT KIBAO KICHE SCH	,			ANK AND
ITEM	DESCRIPTION	UNIT	1	RATE	AMOUNT
1	BILL No. 1: PRELIMINARIES AND GE	NERAL	S		
1.1	Mobilization	ITEM	1		
1.1	Allow an amount of KSh. 200,000 for	TILIVI	•		
	mobilization and demobilization of				
	equipment including personnel to the site.				
	Amount to include setting up of camp.				
1.2	Provide, fabricate and install MS Signboard	ITEM	1		
	(4ftx8ft) raised 1.0m above ground				
	complete with appropriate paintwork,				
	Islamic Relief Logo and Project details on				
	either side.				
1.3	Allow for the construction of raised	ITEM	1		
	masonry platform 1200mmx1500mm above				
	ground level plastered on both sides as				
	permanent visibility to be constructed inside the site. Fix 1SM foundation stone				
	on the Platform. Cost to include the				
	delivery, fixation of appropriate				
	commemmoration plaque. The relevant				
	artworks details on the plate to be provided				
	IRK.				
	TOTAL CARRIED TO SUMMARY	•		•	
3	BILL No.3: CONSTRUCTION OF 50M3	MASON	RY TA	NK	
3	EARTH WORKS (ALL PROVISIONAL)				
3.01	Strip top soil 200mm from ground level	M2	20		
	over the area of tank and remove all the				
	soil to a temporary soil heap				
3.02	Trim, spread and level the ground around	M2	20		
	the tank to form suitable drainage of				
2.02	surface water	142	20		
3.03	Excavate from the stripped level to a depth not exceeding 1.5m deep and dispose of the	M3	30		
	materials 50m away from the foundation,				
	allowing the use of selected excavated				
	materials for fill or back fill as required.				
3.04	Extra over excavation for excavating in	M3	5		
	rock item 6.03 (provisional)				
	Hardcore filling as specifications				
3.05	Provide, place and compact hardcore using,	M3	10		
	500mm thick to make up levels.				
3.06	Blind the surface of the hardcore using,	M3	3		
2.30	50mm layer of 1:4:8 concrete mix to make		_		
	up levels under floor slab				
3.07	Provide and place 500gauge polythene	M2	26		
	sheet to the surface of the blinded hardcore				
3.08	Ditto to roof cover slab	M2	26		
2.00		1,12			
	Sub-total carried to summary				

	Concrete works.				
	Provide materials, handle, mix and place.				
3.09	Vibrated 1:2:4 concrete mix asdescribed to 150mm thick floor slab.	M3	6		
3.1	Ditto to 150mm thick roof slab	M3	5		
3.11	Ditto to outlet /inlet pipes anchorage chambers and column. including inlet and outlet valve	M3	1		
	Sub-total carried to summary				
	Reinforcement Bars				
	Provide, handle,cut,bend and fix in position the following reinforcement bars as per the bending schedule.				
3.12	12mmΦ high yield reinforcement bars to the roof slab and column	KG	372		
3.13	Ditto to the floor slab	KG	320		
3.14	$8mm\Phi$ mild steel circumferential bars bent to average radius of 2875mm.	KG	342		
3.15	10mmΦ mild steel reinforcement bars to valve chamber cover slabs.	KG	45		
3.16	Allow for binding wire	KG	50		
	Shuttering/formwork				
3.17	Provide sawn timber form work to soffit of roof slab including the inlet /outlet valve chambers and columns	M2	36		
3.18	Provide cut and fix ply wood to the edges of 150mm tick floor slab	M2	3		
3.19	Ditto to edges of roof slab	M2	4		
3.2	Sawn timber formwork 150mm wide to the edges of manhole opening including the outlet and inlet valve chambers.	LM	10		
3.21	Provide and place good quality timber struts/pole support to roof slab average size 100mmΦ and 3000mm long	No.	75		
	Sub-Total Carried to Summary.				
	WALLING				
	Concrete block walling Provide all				
	materials, handle, mix mortar as per				
2.22	specification and construct the following.	140	(0)		
3.22	225mm thick concrete block walling in 1:1:3 cement: water proof cement: sand mortar ration between the joints.	M2	60		
3.23	Provide and install bondex seal in the joints as per the instruction	LS	1		

3.24	Install double layer of bitumen coat between surface of masonry wall and floor/roof slab	LS	1		
3.25	Construct and complete valve chamber in concrete masonry block measuring 600mm x600mm x 600mm deep complete with steel plate cover including locking device.	Item	2		
	Sub-Total Carried to Summary.				
	FINISHES				
3.26	Provide all materials, handle, mix and apply 20mm thick 1:3 cement: sand mortar screed Including water proof cement to floor slab	M2	20		
3.27	Ditto rendering to the interior surface of the concrete block walls including waterproof cement.	M2	48		
3.28	Ditto to the exterior surface of block walls including water proof cement.	M2	54		
3.29	20mm thick 1:3 cement: sand mortar screed to the exterior surface of the roof slab.	M2	24		
	Metal work and miscellaneous items				
3.3	Supply and install internal and external tank ladder fabricated on stainless steel tubing and include provision and fixing of 25mm G.S Pipes extension of ladder top as directed by the Engineer.	NO.	2		
3.31	Supply and install tank manhole cover size 600mmx 450mm fabricated on 3mm thick steel plate including locking device and good quality padlock.	No.	1		
3.32	Supply and install 100mmΦ GI bend to air vent as per the drawing	No.	2		
3.34	100mmΦ G.S pipe threaded on one side and side lugged and fixed to the top concrete cover slab.	М	3		
	PAINTING				
3.35	Apply undercoat to external walling Ditto cream paint	M2	50		
3.36	Ditto Bermuda blue paint 600mm from bottom of tank and 600mm from top of tank	M2	50		
3.37	Provide and tie mosquito gauze to the G.S bend opening to air vents above the tank roof cover slap.	No	3		
3.38	Provide for appropriate paintwork, Islamic Relief Logo and Project details on either side of the tank.	Item	1		
Sub-to	otal carried out to summary				
	Tank-Associated pipe work				

	Provide, handle cut and fix the following pipe fittings				
	Intake				
3.39	50mmΦ G.I pipe	No	2		
3.4	50mmΦ G.I bend	No	3		
3.41	50mmΦ G.I Socket	No	1		
3.42	50mmΦ G.I nipple	No	1		
3.43	50mmΦ G.I elbow	No	1		
	Offtake				
3.44	50mmΦ G.I pipe	No.	2		
3.45	50mm ΦG.I tee	No	2		
3.46	50mmΦ bend	No	2		
3.47	50mmΦ plain screwd flanges	No.	2		
3.48	3mm thick rubber gasket	M2	1		
3.49	50mm x 40mmΦ G.I reducing bush	No	3		
3.5	50mmΦ Pegler(UK) gate valve	No	1		
	Overflow pipe				
3.51	50mmΦ G.I pipe	M	1		
3.52	50mmΦ G.I socket	No	1		
3.53	50mmΦ G.I Plain flange	No	1		
3.54	50mmΦ G.I bend	No	1		
	Scour pipe				
3.55	50mmΦ G.I pipe	No.	1		
3.56	50mmΦ plain G.I flange	No	1		
3.57	50mm ΦG.I nipple	No	2		
3.58	50mmΦG.I bend	No	1		
3.59	50mmΦ G.I socket	No	2		
3.6	50mmΦG.I union	No	1		
3.61	50mmΦpeglar(UK) gate valve	No	3		
3.62	Supply and lay 2" G.I pipes class C	NO.	8		
	Supply and fix the following fittings:				
3.64	2" GI Equal Tee	No	2		
3.65	2" x 63mm HDPE adaptor	No	6		
3.66	2" G.I Elbow	No	4		
3.67	2"x 1" GI red Tee	No	2		
3.68	1" Valve sockets	No	2		
3.69	1"x 3/4" reducing brush G.I	No	2		
3.7	2" Pegler gate valve	No	2		
3.71	Excavate trench size 0.2x0.6m and backfill the same after pipe laying for the above line	LM	24		

	Sub-total carried to summary			
	ROOF WATER HARVESTING FROM 5 CLASSROOMS			
3.72	Provide an amount for roof water harvesting from 5NO.standard classroms by provision of upv gutters this should include the related appurtanences and fittings connected to the masonry tank.	LM	400	
3.73	Provide an amount for construction of handwashing point with 5 taps	no	4	
	Total for Water Connection			
	SUMMARY			
	EARTH WORKS			
	CONCRETE WORKS.			
	REINFORCEMENT BARS			
	WALLING			
	FINISHES			
	TANK-ASSOCIATED PIPE WORK			
	ROOF WATER HARVESTING			
	TOTAL FOR MASONRY TANK			
SUMM	ARY OF PROJECT COMPONENTS			I
ITEM	DESCRIPTION			AMOUNT
1	PRELIMINARIES AND GENERALS			
3	MASONRY TANK			
	SUB-TOTAL 1			
	Add 5% contigency			
	SUB-TOTAL 2			
	Add VAT 16%			

# BOQ WATER SUPPLYLINE KWA EMMANUEL, KILIFI COUNTY.

BOQ FOR WATER SUPPLY LINE TO KWA EMMANUEL, KILIFI COUNTY					
-	KWA EMMANUEL WORKS	-	-	_	-
ITE M	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ELEMENT 1				
1.0	Distribution Mains from the elevated tank to the school				
1.1	Provide, fabricate and install MS Signboard (1.5mx1.5m) raised 1.5m above ground complete with appropriate paintwork, Islamic Relief Logo and Project details on either side.	Item	1		

			T	
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.	Lm	2,000	
1	HDPE Pipe pipes 2" PN12 100 m long	Lm	2,000	
2	HDPE Coupling 2"	pcs	15	
3	HDPE Adapter male 2"	pc	6	
4	HDPE TEE 2"	Pcs	3	
4	Water meter 2" Lirlee	pc	1	
5	None return valve 2" lirlee	pc	2	
0	GI Pipe 2", Class D (Blue Mark)	pc	4	
1	GI Socket 2"	pc	4	
2	GI Union 2"	pc	2	
3	Tangit glue 1kg tin	Tins	1	
4	Thread tape	pc	40	
D	Construct 1200 x 1200 x900 Valve Chambers with Lockable Steel cover at kiosks connection complete with control valves and adjoining fittings	No.	3	
Е	Allow for a lump sum amount to cater for contingencies, disinfection, testing and commissioning of the system	Item	1	
	TOTAL CARRIED TO MAIN SUMMARY			
ITE M	DESCRIPTION	UNIT	QTY	
	ELEMENT 2			
2.0	Rehabilitation of the existing water tower			
#RE F!	Supply delivery and mounting of 10,000 liters KENTANK or Approved plastic tank2.91 m high by 2.2 m, <b>With IRK BRANDING LOGO</b> at kanjongoni pre school	Pcs	1	
	Painting			
7	2 coats Bituprime & Aluminium paint externally for the hand rail, column and the board to prevent rusting	pc	1	
	Plumbing Works			
8	63mm Gate Valve	No.	3	
8	63mm GI Union	No.	3	
8	63mm Barrel nipple	No.	3	
8	63mm GI elbow	No.	3	
8	63mm GI pipe 6000mm long	No.	3	
8	GI reducing Tee (50/25)		3	

8	50mm end plug	No.	2		
8	PVC Valve Socket 50mm	No.	1		
8	50mm GI pipe - 6000mm long	No.	2		
8	50mm GI elbow	No.	1		
8		No.	1		
	DN 50 pegler gate Valve PVC 63mm Tank Connector				
8	TOTAL CARRIED TO MAIN SUMMARY	No.	2		
	ELEMENT 4	1			
	· · · · · · · · · · · · · · · · · · ·	ON AT	IZANION	ICONI DI	DE CCHOOL
	CONSTRUCTION OF HANDWASHING STATE WITH 5 NO.POINTS	ION AT	KANJUI	NGUNI PI	RE SCHOOL
T.			TT 1/		
Item	Description	Qty	Unit	Rate	Total
	ELEMENT 3				
	Hand Washing Stations At kanjongoni Pre school				
1.0	Source supply materials to site and Construct STD masonry wall tapstand appr 4m long and 1m high complete with drainage and 1.5 Cubic meter Soak pit	No.	5		
A.2	Excavate trenches to receive pipe commencing from ground levels not exceeding 0.6m deep, 0.6m wide, and backfill	m <sup>3</sup>	22		
A.3	25mm diameter PPR from tank outlet to hand washing station complete with fittings	m	120		
A.4	Supply and instal uk made 25mm gate valve (pegla)	No.	3		
A.5	Construct standard Vavle chamber with locable cover (0.6 X 0.6 X 0.6m)	No.	3		
A.6	Provide an amount for a hdpe water pipeline 100m from the main to kanjongoni pre school	lm	100		
	Total for Hand washing Stations at Kanjongoni				
	pre-school	-			
	SUMMARY ELEMENT 1	1			
	ELEMENT 1 ELEMENT 2				
	ELEMENT 3				
	SUB TOTAL				
	Add 5% for contigencies				
	ADD 16% VAT				
	GRAND TOTAL for KWA EMMANUEL WORKS				

# BOQ FOR THE CONSTRUCTION OF A WATER KIOSK AT KWA EMMANUEL

BOQ FOR THE CONSTRUCTION OF A WATER KIOSK			
AT KWA EMMANUEL			

	WATER KIOSK AT KWA EMMANUEL	UN	Q	RATE	AMOUNT	1
IT E M	DESCRIPTION	IT	Y	KSHS	KSHS	C T S
	BILL NO: CONSTRUCTION OF WATER KIOSK WITH REINFORCED PLATFORM FOR TANK					
	A. <u>SUBSTRUCTURES</u>					
	ELEMENT NO. 01-SUBSTRUCTURE					
	(ALL PROVISIONAL)					
A	Excavate oversite to remove vegetable soil average 150mm deep; wheel and deposit on site n.e. 100M away in permanent spoils heaps	SM	12			
В	Ditto but to a depth of 300mm	C M	1.8			
С	Excavate for pad foundation and strip footing not exceeding 1000 mm deep.	C M	25			
	Disposal					
D	Cart away excess excavated material to spoil	C M	10			
	<u>Hardcore</u>					
Е	250mm thick filling: deposit, spread, level and compact: to receive blinding	C M	3			
F	50mm murram blinding to surface of hardcore.	SM	6			
	Anti-Termite Treatment					
G	Chemical anti-termite treatment executed by Rentokil Laboratoties Limited or equal and approved pest control firm under a ten year gurantee, applied to surface of excavation and floor	SM	12			
	<u>Damp-Proof Membrane</u>					
Н	500mm Gauge polythene damp-proof membrane laid on blinded hardcore with 100mm folded side and end laps	SM	12			
	(measured net-allow for laps)					
	Plain Concrete 1:4:8 mix in:					
G	50 mm blinding bed under strip footing	C M	6			
	Reinforced Concrete 1:2:4- 20mm gauge mix in					
Н	150 mm floor slab	SM	12			
I	300 mm thick Strip Footing	C M	2.1			
J	600 x150mm thick pavement round the perimeter walling	SM	1.0			
	Reinforcement					
	High Tensile Steel Reinforcement to B.S. 4483					
K	Y12	NO	6			
L	Y10	NO	4			
M	Y8	NO	4			
141	Mesh Fabric Reinforcement to B.S.4483	110	<del>                                     </del>			
N	Mesh reinforcement to B.S.4485  Mesh reinforcement reference A 142 weighing 2.22kg per square metre laid in bed with 300mm side and end laps (Measured net allow for laps)	SM	12			

	MASONRY				
О	Medium quarry dressed stone walling in cement and sand				
	(1:3)mortar:20 gauge x 25mm wide hoop iron				
	reinforcement and column-wall ties in every alternate				
	course: to				
P	200mm walling in Foundation	SM	15		
	Hessian Based Bituminous Felt Damp-Proof course to				
	B.S.743 type 4A and setting in cement and sand mortar				
Q	under 200mm walls	L.	10		
	TOTAL DI PARNET AL	M			
	TOTAL ELEMENT 01				
IDD	DESCRIPTION	UN	Q	_	1
ITE M		IT	T Y		
IVI			1		C T
					S
	ELEMENT NO-02				
	CONCRETE WORK AND WALLING				
	Reinforced Concrete 1:2:4- 20mm gauge mix in	1			
A	Rings Beams;450x200	С	0.9		
	1 tings 2 tinns, 10 tin2 t	M	0.5		
В	150mm roof slab and fetching bay	С	1.8		
		M			
	Sawn formwork to				
C	sides and soffits of beams	SM	9.7		
D	Ditto but to sides and of columns	SM	19.		
		CM	2		
E	Ditto but including props beneath the roof slab and	SM	12		
	fetching bay  Reinforcement				
	High Tensile Steel for columns, ring beam and top slab				
	Reinforcement to B.S. 4483				
F	Y16mm Bars	NO	12		
G	Y10mm Bars	NO	16		
H	Y12mm Bars	NO	15		
11	Walling	110	13		
	Medium quarry dressed stone walling in cement and sand (1:3)mortar:20 gauge x 25mm wide hoop iron				
	reinforcement and column-wall ties in every alternate				
	course: to				
I	200mm welling	SM	25		
1	200mm walling	SIVI	23		
	TOTAL ELEMENT 02	TI TIN T			
TE	DESCRIPTION	UN IT	Q T		 1
IT E	DESCRIPTION	11	Y		
E M			•		C
141					S
	ELEMENT NO-03	+			

	DISPOSAL				
A	Plastic downpipes;75mm diameter	L.	6		
В	10,000 litres plastic Kentank tank or equivalent and approved by IRK ENGINEER AND FITTED WITH IRK LOGO	No	1		
	TOTAL ELEMENT 03				
IT E M	DESCRIPTION	UN IT	Q T Y		C T
	ELEMENT NO. 04				S
	<u>FINISHINGS</u>				
	Cement and Sand (1:4) Screed and Paving				
	FLOOR FINISHES				
	Cement and sand (1:4) paving: steel trowelled: on concrete				
A	.40mm thick floors to receive tiles	SM	10		
В	Tiling on the floor including water fetching area upto the bay deck as approved by RE	SM	20		
	12mm Two Coats Lime Plaster with stel Trowel				
	Finished to:				
С	Internal walls and slab soffit	SM	25		
D	Extenal walls including keying	SM	10		
	TOTAL ELEMENT 04				-
		UN	Q		_
IT E M	DESCRIPTION	IT	Y		C T S
	ELEMENT NO. 5				
	DOORS				
	Steel Door				
A	Standard single leaf steel door to the satisfaction of the RE	NO	1		
	TOTAL ELEMENT 05				
		UN	Q		
IT E M	DESCRIPTION	IT	T Y		C T S
	ELEMENT NO.6		-		
	WINDOWS				

A	2000x1200mm double leaf steel window as directed by RE	NO	1	
	TOTAL ELEMENT 06			
		UN	Q	
IT	DESCRIPTION	IT	T	
E	DESCRIPTION		Y	C
M				
				S
	ELEMENT NO.07			
	_			
	PAINTING AND DECORATING			
	Prepare and apply three coats plastic emulsion paint to:			
	<u>Internally</u>			
A.	Plastered walls	SM	45	
В	Ditto but to the doors and window surfaces as Directed by	SM	10	
	RE			
	TOTAL ELEMENT 07			
ITE	DESCRIPTION	UN	Q	l l
M		IT	T	
	ELEMENT NO.08		Y	
	PLUMBING WORKS			
				C
				T
A	32mm thick floors screed	SM	11.	S
71	32mm ther hoofs select	DIVI	6	
	Plumbing (Supply and fix the following)			
В	<sup>3</sup> / <sub>4</sub> " GI pipe	No.	1	
С	<sup>3</sup> / <sub>4</sub> " Gate Valve (Peggler)	No.	1	
D	<sup>3</sup> / <sub>4</sub> " Bend	No.	3	
Е	<sup>3</sup> ⁄ <sub>4</sub> " Elbow	No.	4	
F	<sup>3</sup> / <sub>4</sub> Tee equal	No.	3	
G	<sup>3</sup> / <sub>4</sub> " Union	No.	1	
Н	<sup>3</sup> / <sub>4</sub> " Stop Cork (Peggler)	No.	3	
I	<sup>3</sup> / <sub>4</sub> " Hexagonal nipple	No.	10	
J	<sup>3</sup> / <sub>4</sub> " Sockets	No.	2	
K	PVC end-caps 2"	No.	2	
L	PVC end-caps 1½"	No.	2	
M	PVC Tee equal 2"	No.	2	
N	Ditto ½"	No.	2	
O	Reducing socket 2" x ¾" PVC	No.	2	
P	Ditto 1 ½" x ¾"	No.	2	
Q	PVC Adapter <sup>3</sup> / <sub>4</sub> "	No.	2	
	TOTAL ELEMENT 08			

CLIMATADY			
SUMMARY			
ELEMENT NO.			
			C
			T
			S
1. SUBSTRUCTURE			
2. CONCRETE WORK AND WALLING			
3. ROOFING AND RAINWATER DISPOSAL			
4. FINISHING			
5. DOORS			
6. WIDOWS			
7. PAINTING AND DECORATION			
8. PLUMBING WORKS			
SUB TOTAL		 	
TOTAL CARRIED TO SUMMARY			

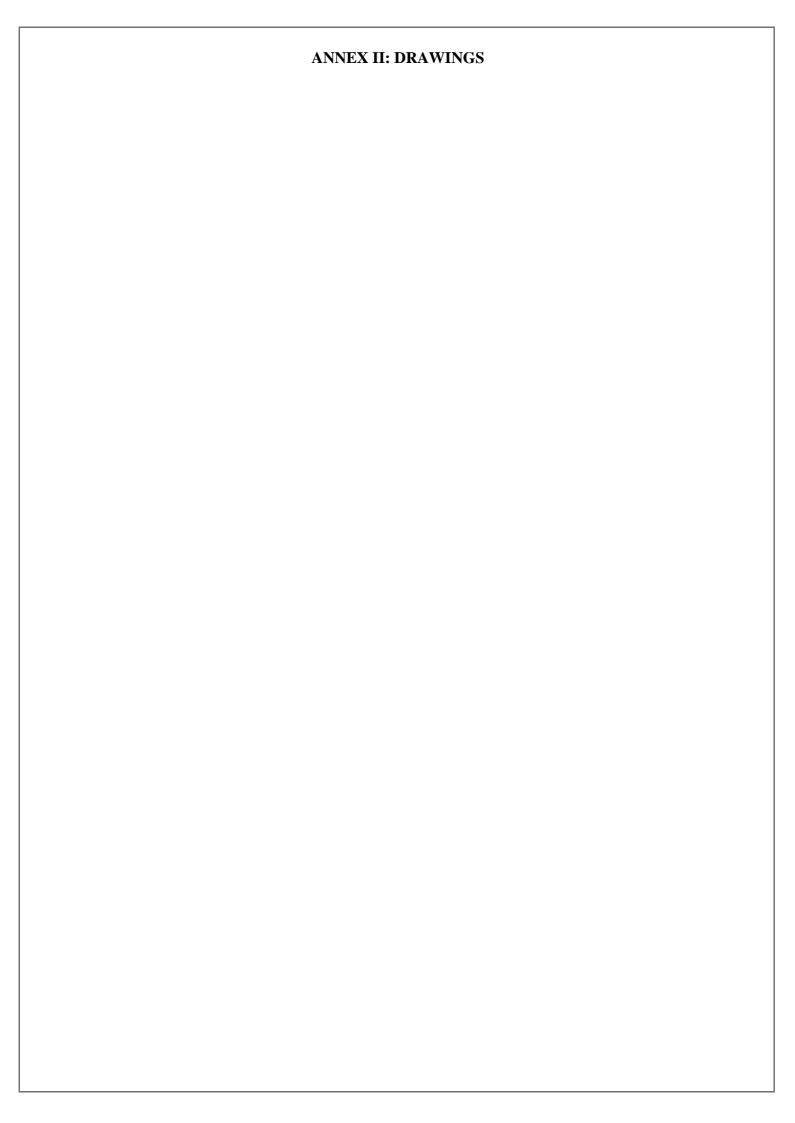
Item	NTY Description	Qty	Unit	Rate	Total
No.	Description	Qty		Nau	Total
	SUBSTRUCTURE (Provisional)				
	Excavation				
	Excavation including maintaining and				
	supporting sides and keeping free				
	from water, mud and fallen materials				
	by bailing, pumping or otherwise				
A	Prepare site by stripping top 200 mm	M2	40.0		
	of soil to remove all debris including				
	sand (if any) from site and carting				
	away spoil				
В	Excavate for foundation strip	M3	72.0		
	commencing at stripped levels depth				
	not exceeding 1.50m deep				
C	Pit excavation commencing at	M3	36.0		
	stripped levels depth not exceeding				
	1.50m deep				
D	Ditto 1.50 - 3.00 metres deep	M3	14.0		
E	Ditto 3.00 - 4.50 metres deep	M3	14.0		
	(Optional)				
F	Ditto 4.50 - 6.00 metres deep	M3	14.0		
	(Optional)				
G	Extra-over for excavation in rock	M3	5.0		
Н	Remove surplus excavated material	M3	66.0		
	from site				
I	Backfill around foundation	M3	64.0		
	Filing				

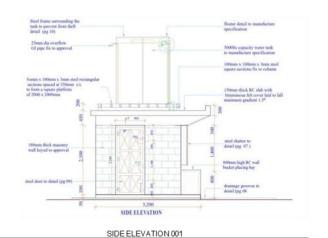
J	300 mm thick approved hardcore	M3	11.0		
	filling spread, well rammed and				
	compacted in 150mm layers to				
	receive concrete surface bed				
	Insitu concrete: class 15: mix 1:3:6				
K	50mm blinding layer under	M2	51.0		
	foundations	1/2			
L	50mm blinding layer on hardcore	M2	42.0		
	surfaces				
	Total from Substructures Collection 1				
	Concrete work				
	Reinforced Concrete class 15				
A	Strip foundation	M3	4.3		
	Reinforced Concrete class 25				
В	100mm thick floor slab with surface	M2	52.0		
	steel trowelled smooth				
С	Allow for pit/squat hole in 100mm	No	2.0		
	thick floor slab				
	Reinforcement				
D	Reinforcement bars (asorted steel) as	Kg	400.0		
	shown on drawings				
Е	Mesh fabric reinforcement ref. No.	m2	84.0		
	A142 laid in floor slab with minimum				
	150 mm side allowance				
	Sawn formwork				
F	Formwork to edges of floor slab girth	M	44.0		
-	over 75mm but not exceeding 150mm				
G	Formwork to edges of strip footing	M	66.0		
	girth over 75mm but not exceeding				
	150mm				
Н	Formwork to edges of strip footing	M	62.0		
	girth over 150mm but not exceeding				
	2250mm				
	Walling				
I	400mm Thick coral stone retaining	M2	25.0		
	wall in cement and sand mortar (1:3)				
J	300mm Thick coral stone foundation	M2	33.0		
	walling in cement and sand mortar				
	(1:3)				
K	150mm thick masonry wall	M2	4.0		
L	One layer 1000gauge polythene sheet	M2	40.0		
	damp proof membrane under beds:				
	300mm laps				
M	200mm wide Bituminous felt damp-	M	40.0		
	proof course				
	<b>Total from Substructures Collection</b>				
	2				
	Steps				
	Concrete work				
	Reinforced Concrete class 25				
A	Treads, 300 mm wide	M	10.0		
		M		+	1

			1		1
С	Open string	M2	0.9		
D	Waist	M2	0.6		
	Sawn formwork				
Е	Risers: girth over 75mm but not	M	8.0		
	exceeding 150mm	M2			
F	Open string		0.8		
G	Waist	M2	0.6		
	Cement and sand mortar (1:4)				
T.T.	trowelled beds: on concrete: to	2.6	4.0		
H	Treads, 300 mm wide	M	4.0		
I	Risers, 150 mm high	M M2	4.0		
J	Open string	M2	0.6		
K	Waist	IVIZ	0.4		
	Reinforcement				
P	High tensile reinforcement bars in assorted sizes	KG	180.0		
	Total page 3 to Substructures Collection				
	Concetion				
	<u>Plinths</u>				
A	15mm thick cement sand rendering (1:3) to plinths	M2	10.0		
В	Prepare and apply three coats black	M2	15.0		
	bituminous paint to rendered plinths		12.0		
	externally				
	Total from Substructures Collection 3				
	SUBSTRUCTURES				
	COLLECTION				
	Total from Collection 1				
	Total from Collection 2				
	Total from Collection 3				
	SUBSTRUCTURES SUB TOTAL				
	TO SUMMARY				
	SUPERSTRUCTURES				
	Walling				
A	150mm Thick load bearing solid	M2	90.0		
A	concrete block walling		90.0		
	200mm deep x 400mm wide vent	No	4.0		
	block				
	Wall Coping				
В	Precast concrete 600 x 300 x 50 mm	M	18.0		
_	Thick twice weathered and throated	1,1	10.0		
	coping jointed and pointed in cement				
	and sand mortar				
	Concrete Work				
	Vibrated reinforced concrete class 25				
	(1:1.5:3) with 20mm maximum				
	aggregate as described in:				
С	Lintels	M3	0.4		
	Reinforcement				
		77	20.0	1	
D	8mm Diameter high tensile	Kg	20.0		

	D' 1 10	77	22.0		
Е	Ditto but 10mm	Kg	22.0		
_	Sawn Formwork to:	M2			
F	Sides and soffits of lintels	IVIZ	2.2		
	Roofing				
	Roof Structure				
	Sawn celcured cypress timber as				
	described in:				
G	200mm x 15mm Fascia Board	M	29.0		
Н	100x50mmRafters	M	22.0		
Ι	100mm x 50mm wall plate	M	24.0		
J	50 x 50 Purlins	M	40.0		
	Roof Covering				
K	0.5mm color coated Fiberglass	M2	24.0		
	corrugated roofing sheets screwed to				
	purlins - Blue in color				
	<b>Total from Superstructures</b>				
	Collection 4				
	Painting and Decorating				
L	Knot prime stop and apply two	M	26.0		
L	undercoats and one gloss finishing	141	20.0		
	coat oil paint to fascia board 200- 300				
	mm wide				
	Doors				
Α	45mm thick Match boarded timber	No	3.5		
71	single door, overall size 900x	110	3.3		
	2100mm high				
	Wrot cypress 1st grade				
В	150x50mm frame two labours	M	20.0		
	plugged screwed and pellated	141	20.0		
С	50x25mm architrave two labours	M	20.0		
D	25x15mm quadrant one labour	M	20.0		
D	Supply and fix the following	1V1	0.0		
	ironmongery to timber with matching		0.0		
	screws				
Е	Stainless steel hinges	Pairs	6.0		
F	Tower bolt lock	No	7.0		
G	Rubber door stop	No	4.0		
Н	Prepare and apply two undercoats and	M2	18.0		
11	one finishing coat oil paint to timber		10.0		
	door - Blue in Color				
	Total from Superstructures				
	Collection 5				
	Finishes				
	Floor Finishes	<del> </del>		1	
	Cement and sand mortar				+
	(1:4)trowelled beds: on concrete: to				
Α	32mm floors Trowelled finished	M2	25.0		
В	100mm diameter Heavy duty uPVC	No	23.0		+
ע	soil and vent pipe 3000mm high	110	2		
	fastened to wall with plastic clips at				
	400c/c with wire grating tied to top of				
	pipe				
	Wall Finishes		0.0	1	+
	riwit I tittoites	<u> </u>	1 0.0	1	

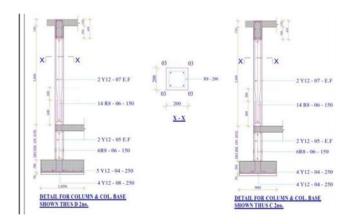
	15mm cement and sand (1:4)		0.0	
	backing; steel trowelled finish		0.0	
D	Walls internally	M2	96.0	
D	<u> </u>		90.0	
	12mm lime plaster: steel trowelled			
	finish: on concrete, block work or			
	stonework: to	M2	40.0	
F	Walls externally	IVIZ	40.0	
	Prepare and apply three coats plastic			
	emulsion paint to:			
G	Walls externally	M2	40.0	
Н	Extra over keying	M2	12.0	
J	Provide branding and metallic	ITEM	1	
	artwork with Islamic Relief Logo and			
	Project details			
	<b>Total from Superstructures</b>			
	Collection 6			
	SUPERSTRUCTURE			
	COLLECTION			
	Total from page 4			
	Total from page 5			
	Total from page 6			
	SUPERSTRUCTURE SUB TOTAL			
	TO SUMMARY			
	SUMMARY			
	(1) SUBSTRUCTURE			
	(2) SUPERSTUCTURE			
	Total			
	ADD VAT 16%			
	GRAND TOTAL			
	CIUM D TOME	1	1	



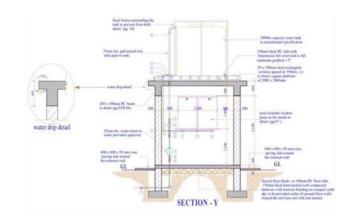


1:1

1:1



COLUMN DETAILS



SECTION Y-Y

1:1 BEAM DETAIL

# 2Y 12 - 09 15 R8 - 10 - 150 2Y 12-10 200 200 BEAM A 2No. 2Y 12 - 12 15 Ro - 10 - 150 2Y 12 - 12 200 200 BEAM B 2No.

NOTES:

#### GENERAL.

- All disconcions specified
- Dimensions to be read, not scaled Only
- Contractor to check and verify all

#### of one works CONSTRUCTION

- 1. All slabs at around level to be poured over 1000 gauge polythene sheeting on 50 mm thick murram bliding layer which on 300 hardcore fill.
- 2. All soil under slabs and all around external

#### foundations to be treated against termites. STRUCTURAL.

- All block contour coil to be removed from
- helow all building and naved surfaces
- 2 All soil under slabs and all anound external
- foundations to be treated against termites.
- Building to be clear of black cotton soil within 3m outside the perimeter wall.
   For all R.C. works, refer to structural
- Depth of foundation to be determined on the
- site to structural Engineers Approval.

# MECHANICAL.

- All plumbing and drainage to comply with local authority regulations.

   All service ducts to be accessible from all
- 3. SVP denotes soil vent pipe to be provided
- at the head of the drainage.
- 4.P.V permanent ventilation to be provided on
- all doors and windows except bathroom and water close t doors.
- 5. All underground foul and waste drain pipes
- shall be upve to comply with Bs 5255. All inspection chamber covers and framing
- hall be cast iron to comply with Bs 497 table

#### 2 grade A.

- The storm drain nine to comply with Ba
- 556 minimum slope in the drain pipes in 1%. t All testing of pipes must be done before

plastering.		
prefix	description	date
$\Box$		
П		
$\vdash$		
$\vdash$		
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# ISLAMIC RELIEF

PROPOSED TYPICAL WATER KIOSK AT 5 WATER TAPS -DELIVER

WORKING DRAWINGS

