



**Kenya Marine Fisheries Socioeconomic
Development Project (KEMFSED)
P.O. Box 58187-00200
NAIROBI**



**MINISTRY OF MINING, BLUE ECONOMY AND MARITIME
AFFAIRS**

Request for Bids

**CONSTRUCTION OF FISHERIES HEADQUARTERS IN
KILIFI COUNTY**

Employer: State Department for Blue Economy & Fisheries
Project: Kenya Marine Fisheries Socio-Economic
Development Project (KEMFSED)
Contract Title: **CONSTRUCTION OF FISHERIES OFFICE
KILIFI**
Country: Republic of Kenya
Loan No./Credit No./Grant No.: 6540-KE
RFBNo.: KE-MOMBE&MA-KLF-2024-014-CW
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VOLUME 2 OF 4

BILLS OF QUANTITIES

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A. PREAMBLE

1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Particular Conditions, Technical Specifications, and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
3. The rates and prices bid in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the Contract, include all Constructional Plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.
4. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of Items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
5. The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bill of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
6. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.
7. Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clauses 13.4 and 13.5 of the General Conditions except with respect to DAAB Fees and Expenses for which no instruction will be required from the Engineer.
8. The method of measurement of completed work for payment shall be Admeasurement in accordance with ICE Conditions of Contract measurement clauses.¹

¹ The method of measurement should be spelled out precisely in the Preamble to the Bill of Quantities, describing for example the allowances (if any) for timbering in excavation, etc. Many national standard reference guides have been prepared on the subject, and one such guide is the Standard Method of Measurement of the U.K. Institution of Civil Engineers.

B. WORK ITEMS

1. The Bill of Quantities contains the following part Bills, which have been grouped according to the nature or timing of the work:
 1. **BILL NO. 1: PARTICULAR PRELIMINARIES**
 2. **BILL NO. 2 : GENERAL PRELIMINARIES**
 3. **BILL NO. 3: ENVIRONMENTAL SOCIAL MANAGEMENT PLAN**
 4. **BILL NO. 4 : OFFICE BUILDING**
 5. **BILL NO. 5 : FOUL WATER DRAINAGE**
 6. **BILL NO. 6: DRIVEWAY AND PARKING**
 7. **BILL NO. 7: LANDSCAPING**
 8. **BILL NO. 8: MECHANICAL WORKS**
 9. **BILL NO. 9: ELECTRICAL WORKS**
 10. **BILL NO. 10: DAYWORKS**
 11. **BILL NO. 11: PROVISIONAL SUMS**
2. Bidders shall price the Bill of Quantities in local currency only and shall indicate in the Appendix to Bid the percentage expected for payment in foreign currency or currencies.

DAYWORK SCHEDULE

General

1. Reference should be made to Sub-Clause 13.5 of the General Conditions. Work shall not be executed on a daywork basis except by written order of the Engineer. Bidders shall enter basic rates for daywork items in the Schedules, which rates shall apply to any quantity of daywork ordered by the Engineer. Nominal quantities have been indicated against each item of daywork, and the extended total for Daywork shall be carried forward as a Provisional Sum to the Summary Total Bid Amount. Unless otherwise adjusted, payments for daywork shall be subject to price adjustment in accordance with the provisions in the Conditions of Contract.

Daywork Labour

2. In calculating payments due to the Contractor for the execution of daywork, the hours for labour will be reckoned from the time of arrival of the labour at the job site to execute the particular item of daywork to the time of return to the original place of departure, but excluding meal breaks and rest periods. Only the time of classes of labour directly doing work ordered by the Engineer and for which they are competent to perform will be measured. The time of gangers (charge hands) actually doing work with the gangs will also be measured but not the time of foremen or other supervisory personnel.
3. The Contractor shall be entitled to payment in respect of the total time that labour is employed on daywork, calculated at the basic rates entered by the Contractor in the Schedule of Daywork Rates:
 1. Labour, together with an additional percentage payment on basic rates representing the Contractor's profit, overheads, etc., as described below:
 - a) The basic rates for labour shall cover all direct costs to the Contractor, including (but not limited to) the amount of wages paid to such labour, transportation time, overtime, subsistence allowances, and any sums paid to or on behalf of such labour for social benefits in accordance with [country of Borrower]Kenya law. The basic rates will be payable in local currency only.
 - b) The additional percentage payment to be quoted by the bidder and applied to costs incurred under (a) above shall be deemed to cover the Contractor's profit, overheads, superintendence, liabilities, and insurances and allowances to labour, timekeeping, and clerical and office work, the use of consumable stores, water, lighting, and power; the use and repair of stagings, scaffolding, workshops, and stores, portable power tools, manual plant, and tools; supervision by the Contractor's staff, foremen, and other supervisory personnel; and charges incidental to the foregoing. Payments under this item shall be made in local currency.

Daywork Materials

4. The Contractor shall be entitled to payment in respect of materials used for daywork (except for materials for which the cost is included in the percentage addition to labour costs as detailed heretofore), at the basic rates entered by the Contractor in the Schedule of Daywork Rates: 2. Materials, together with an additional percentage payment on the basic rates to cover overhead charges and profit, as follows:
 - a) the basic rates for materials shall be calculated on the basis of the invoiced price, freight, insurance, handling expenses, damage, losses, etc., and shall provide for delivery to store for stockpiling at the Site. The basic rates shall be stated in local currency, but payment will be made in the currency or currencies expended upon presentation of supporting documentation.
 - b) the additional percentage payment shall be quoted by the bidder and applied to the equivalent local currency payments made under (a) above. Payments under this item will be made in local currency.
 - c) the cost of hauling materials for use on work ordered to be carried out as daywork from the store or stockpile on the Site to the place where it is to be used will be paid in accordance with the terms for Labour and Construction in this schedule.

Daywork Contractor's Equipment

5. The Contractor shall be entitled to payments in respect of Contractor's Equipment already on Site and employed on daywork at the basic rental rates entered by the Contractor in the Schedule of Daywork Rates: **3. Contractor's Equipment.** Said rates shall be deemed to include due and complete allowance for depreciation, interest, indemnity, and insurance, repairs, maintenance, supplies, fuel, lubricants, and other consumables, the cost of drivers, operators, and assistants and all overhead, profit, and administrative costs related to the use of such equipment.
6. In calculating the payment due to the Contractor for Contractor's Equipment employed on daywork, only the actual number of working hours will be eligible for payment, except that where applicable and agreed with the Engineer, the travelling time from the part of the Site where the Contractor's Equipment was located when ordered by the Engineer to be employed on daywork and the time for return journey thereto shall be included for payment.
7. The basic rental rates for Contractor's Equipment employed on daywork shall be stated in local currency, but payments to the Contractor will be made in local currency.

VOLUME 2: BILLS OF QUANTITIES

PARTICULAR PRELIMINARIES

BILL NO. 1

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
	<u>PARTICULAR PRELIMINARIES</u>	
1.1.1	PRICING ITEMS OF PRELIMINARIES Prices SHALL BE INSERTED against items of “preliminaries” in the tenderer’s priced Bills of Quantities. The contractor is advised to read and understand all preliminary items.	
1.1.2	DESCRIPTION OF THE WORKS The works to be carried out under this contract involves; The works to be carried out under this contract involves; Construction of an office block i.e substructure,superstructure,roof structure, external and internal finishes,associated mechanical and electrical services and external works	
1.1.3	FLOOR AREAS The total gross floor areas are approximately 3400 square metres. The total gross floor area is given without warranty but for guidance only.	
1.1.4	MEASUREMENTS In the event of any discrepancies arising between the Bills of Quantities and the actual works, the site measurements shall generally take precedence. However, such discrepancies between any contract documents shall immediately be referred to the PROJECT MANAGER in accordance with Clause 22 of the Conditions of Contract. The discrepancies shall then be treated as a variation and be dealt with in accordance with Clause 22 of the said Conditions.	
1.1.5	LOCATION OF SITE The site of the proposed works is located in Kilifi County The Contractor is advised to visit the site, to familiarize with the nature and position of the site. No claims arising from the Contractor’s failure to do so will be entertained.	
1.1.6	SIGNING OF THE TENDER DOCUMENTS The bidder shall append his / her signature and / or company ‘s rubberstamp on each and every page of tender document.	
	<i>Carried to collection</i>	0.00

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
1.2.1	<p>DEMOLITIONS AND ALTERATIONS</p> <p>The Contractor is to allow for all temporary protection required during the works including ordinary and special dust screens, hoardings, barriers, warning signs, etc as directed by the Project Manager and</p> <p>as necessary for the adequate propping and protection of existing property, finishes, workmen employed on the site, employer's agents and the public. Any damage or loss incurred due to the insufficiency of such protection must be made good by the Contractor. All protective devices are to be removed on completion of the works and any necessary making good consequent upon this is to be executed to the satisfaction of the Project Manager</p> <p>The works shall be propped, strutted and supported as necessary before any alteration or demolition work commences. Prices shall include for all cleaning and preparatory work to structure and finishes and for making good to all finishes on completion whether or not specifically described.</p> <p>Unless described as set aside for re-use all arising debris and surplus materials shall be carefully removed from building and carted away from site.</p> <p>The Contractor shall be entirely responsible for any breakage or damage which may occur to materials required for re-use during their removal unless it is certified by the Project Manager that such damage or breakage was inevitable as a result of the condition of the item concerned</p>	
1.2.2	<p>CLEARING AWAY</p> <p>The Contractor shall remove all temporary works, rubbish, debris and surplus materials from the site as they accumulate and upon completion of the works, remove and clear away all plant, equipment, rubbish, unused materials and stains and leave in a clean and tidy state to the reasonable satisfaction of the Project Manager.</p> <p>The whole of the works shall be delivered up clean, complete and in perfect condition in every respect to the satisfaction of the Project Manager.</p>	
1.2.3	<p>CLAIMS</p> <p>It shall be a condition of this contract that upon it becoming reasonably apparent to the Contractor that he has incurred losses and / or expenses due to any of the contract conditions, or by any other reason whatsoever, he shall present such a claim or intent to claim notice to the PROJECT MANAGER within the contract period. No claim shall be entertained upon the expiry of the said contract period.</p>	
	<i>Carried to collection</i>	0.00

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
1.3.1	PAYMENTS The tenderer's attention is drawn to the fact that the GOVERNMENT DOES NOT MAKE ADVANCE PAYMENTS but pays for work done and materials delivered to sit: all in accordance with Clause 23 of the Conditions of Contract Agreement. In order to facilitate this, a list of the general component elements for the works is given at the summary page of these specifications and the tenderer is requested to break down his tender sum commensurate to the said elements	
1.3.2	PREVENTION OF ACCIDENT, DAMAGE OR LOSS The Contractor is notified that these works are to be carried out on a restricted site where the client is going on with other normal activities. The Contractor is thus instructed to take reasonable care in the execution of the works as to prevent accidents, damage or loss and disruption of activities being carried out by the Client. The Contractor shall allow in his rates any expense he deemed necessary by taking such care within the site.	
1.3.3	WORKING CONDITIONS The Contractor shall allow in his rates for any interference that he may encounter in the course of the works for the Client may in some cases ask the Contractor not to proceed with the works until some activities within the site are completed, as the facility will be operating as usual during the course of the contract.	
1.3.4	SIGNBOARD Allow for providing, erecting, maintaining throughout the course of the Contract and afterwards clearing away a signboard as designed, specified and approved by the Project Manager.	
1.3.5	LABOUR CAMPS The Contractor shall not be allowed to house labour on site. Allow for transporting workers to and from the site during the tenure of the contract.	
1.3.6	MATERIALS FROM DEMOLITIONS Any materials arising from demolitions and not re-used shall become the property of the Employer. The Contractor shall allow in his rates the cost of transporting the demolished materials as directed.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
1.4.1	PRICING RATES The tenderer shall include for all costs in executing the whole of the works, including transport, replacing damaged items, fixing, all to comply with the said Conditions of Contract.	
1.4.2	SECURITY The Contractor shall allow for providing adequate security for the works and the workers in the course of execution of this contract. No claim will be entertained from the Contractor for not maintaining adequate security for both the works and workers.	
1.4.3	URGENCY OF THE WORKS The Contractor is notified that these “ works are urgent” and should be completed within the period stated in these Particular Preliminaries. The Contractor shall allow in his rates for any costs he/ she deems that he/she may incur by having to complete these works within the stipulated contract period.	
1.4.4	PAYMENT FOR MATERIALS ON SITE All materials for incorporation in the works must be stored on site before payment is effected, unless specifically exempted by the Project Manager. This is to include materials of the Contractor, nominated sub-Contractors and nominated suppliers.	
1.4.5	EXISTING SERVICES Prior to the commencement of any work, the Contractor is to ascertain from the relevant authority the exact position, depth and level of all existing services in the area and he/she shall make whatever provisions may be required by the authorities concerned for the support, maintenance and protection of such services.	
1.4.6	CONTRACT COMPLETION PERIOD The contract completion period in accordance with condition 31 of the Conditions of contract must be adhered to. The ‘PROJECT MANAGER’ shall strictly monitor the Contractors progress in relation to the progress chart and should it be found necessary the ‘PROJECT MANAGER’ shall inform the Contractor in writing that his actual performance on site is not satisfactory .In all such cases the Contractor shall accelerate his rate of performance production and progress by all means such as additional labour,plant, e.t.c and working overtime all at his cost.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
1.5.1	<p>PERFORMANCE BOND</p> <p>A bond of 10% of the contract sum will be required in accordance with clause 6.00 (as amended) on award of contract of the Instructions to Tenderer's. No payment on account for the works executed will be made to the contractor until he has submitted the Performance Bond to the Project Manager duly signed, sealed and stamped from an approved Bank.</p>	
1.5.1	<p>TENDER DOCUMENTS</p> <p>Tender documents are as listed in Clause 2.1 of the Instruction to Tenderer's Page STD/8</p>	
1.5.1	<p>DELIVERY OF TENDER</p> <p>Tenders and all documents in connection therewith, as specified above must be delivered in the addressed envelope which should be properly sealed and deposited at the offices as specified in the letter accompanying these documents or as indicated in the advertisement.</p> <p>Tenders will be opened at the time specified in the letter accompanying these Tender Documents or as indicated in the advertisement. Tenders delivered/received later than the above time will not be opened.</p>	
1.5.1	<p>VALUE ADDED TAX</p> <p>The Contractor's attention is drawn to the Legal Notice in the Finance Act part 3 Section 21(b) operative from 1st September, 1993 which requires payment of VAT on all contracts. The Contractor should therefore include allowance in his rates and prices for prices for VAT and any other Government taxes currently in force.</p> <p>NB: VAT shall be included in the rates</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
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ITEM	DESCRIPTION	AMOUNT
1.6.1	<p><u>PARTICULARS OF INSERTIONS TO BE MADE IN APPENDIX TO CONTRACT AGREEMENT</u></p> <p>The following are the insertions to be made in the appendix to the Contract Agreement: -</p> <p>Period of Final Measurement 3 Months From Practical completion</p> <p>Defects Liability Period 6 Months from Practical completion</p> <p>Date for Possession To be agreed with the Project Manager</p> <p>Date for Completion ...52.. Weeks from date of Possession</p> <p>Liquidated and Ascertained 0.04 % of the Accepted Contract Amount, less provisional sum</p> <p>Period of Interim Certificates Monthly</p> <p>Period of Honouring Certificates 56 days</p> <p>Percentage of Certified Value Retained 10%</p> <p>Limit of Retention Fund 5%</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
	<p><u>COLLECTION</u></p> <p>Brought forward from page PP/1</p> <p>Brought forward from page PP/2</p> <p>Brought forward from page PP/3</p> <p>Brought forward from page PP/4</p> <p>Brought forward from page PP/5</p> <p>Brought forward from page PP/6</p>	
	TOTAL FOR PARTICULAR PRELIMINARIES CARRIED TO GRAND SUMMARY	

GENERAL PRELIMINARIES

BILL NO. 2

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
	GENERAL PRELIMINARIES	
2.1.1	PRICING ITEMS OF PRELIMINARIES AND PREAMBLES	
	Prices will be inserted against items of Preliminaries in the Contractor's priced Bills of Quantities and Specification.	
	The Contractor shall be deemed to have included in his prices or rates for the various items in the Bills of Quantities or Specification for all costs involved in complying with all the requirements for the proper execution of the whole of the works in the Contract.	
2.1.2	ABBREVIATIONS	
	Throughout these Bills, units of measurement and terms are abbreviated and shall be all the requirements for the proper execution of the whole of the works in the Contract.	
	<i>C.M.</i> Shall mean cubic metre	
	<i>S.M.</i> Shall mean square metre	
	<i>L.M.</i> Shall mean linear metre	
	<i>MM</i> Shall mean Millimetre	
	<i>Kg.</i> Shall mean Kilogramme	
	<i>No.</i> Shall mean Number	
	<i>Prs.</i> Shall mean Pairs	
	<i>B.S.</i> - Shall mean the British Standard Specification Published by the British Standards Institution, 2 Park Street, London W.1., England.	
	<i>Ditto</i> - Shall mean the whole of the preceding description except as qualified in the description in which it occurs.	
	<i>m.s.</i> Shall mean measured separately.	
	<i>a.b.d</i> Shall mean as before described.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
2.2.1	<p>EXCEPTION TO THE STANDARD METHOD OF MEASUREMENT</p> <p><i>Attendance</i> ; Clause B19(a) of the Standard Method of Measurement is deleted and the following clause is substituted:-</p> <p>Attendance on nominated Sub-Contractors shall be given as an item in each case shall be deemed to include: allowing use of standing scaffolding, mess rooms, sanitary accommodation and welfare facilities; provision of special scaffolding where necessary; providing space for office accommodation and for storage of plant and materials; providing light and water for their work: clearing away rubbish; unloading checking and hoisting: providing electric power and removing and replacing duct covers, pipe casings and the like necessary for the execution and testing of Sub- Contractors' work and being responsible for the accuracy of the same.</p> <p><i>Fix Only</i>:-</p> <p>"Fix Only" shall mean take delivery at nearest railway station (Unless otherwise stated),pay all demurrage charges, load and transport to site where necessary, unload, store,unpack, assemble as necessary, distribute to position, hoist and fix only.</p>	
2.2.2	<p>EMPLOYER</p> <p>The "Employer" is Ministry of Mining, Blue Economy and Maritime Affairs P.O Box 30009-00100 Nairobi, Kenya</p> <p>The term "Employer" and "Ministry of Mining, Blue Economy and Maritime Affairs" wherever used in the contract document shall be synonymous.</p>	
2.2.3	<p>PROJECT MANAGER</p> <p>The term "P.M." wherever used in these Bills of Quantities shall be deemed to imply the Project Manager as defined in Condition 1 of the Conditions of Contract or such person or persons as may be duly authorised to represent him on behalf of the Government.</p>	
2.2.4	<p>ARCHITECT</p> <p>The term "Architect" shall be deemed to mean "The P.M " as defined above whose address unless otherwise notified is Project Engineer</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
2.3.1	QUANTITY SURVEYOR The term "Quantity Surveyor" shall be deemed to mean "The P.M " as defined above whose address unless otherwise notified is Project Engineer	
2.3.2	ELECTRICAL ENGINEER The term "Electrical Engineer" shall be deemed to mean "The P.M " as defined above whose address unless otherwise notified is Project Engineer	
2.3.3	MECHANICAL ENGINEER The term "Mechanical Engineer" shall be deemed to mean "The P.M " as defined above whose address unless otherwise notified is Project Engineer	
2.3.4	STRUCTURAL ENGINEER The term "Structural Engineer" shall be deemed to mean "The P.M " as defined above whose address unless otherwise notified is Project Engineer	
2.3.5	PROJECT ENGINEER (PE) (Member of NPCU, State Department of Fisheries) The term "Project Engineer" shall be deemed to mean "The ENGINEER " as defined above whose address unless otherwise notified is National Project Coordination Unit (NPCU), State Department of Fisheries. P.O. Box 58187-00200 NAIROBI	
2.3.6	FORM OF CONTRACT The Form of Contract shall be as stipulated in the World Bank's Standard Procurement Document for Small Works(March 2021 Edition) included herein The Conditions of Contract are also included herein Particulars of insertions to be made in the Appendix to the Contract Agreement will be found in the Particular Preliminaries part of these Bills of Quantities	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
2.4.1	<p>BOND.</p> <p>The Contractor shall find and submit on the Form of Tender an approved bank who will be willing to be bound to the Government in an amount equal to ten per cent (10) of the Contract amount for the due performances of the Contract up to the date of completion as certified by the PROJECT MANAGER and who will, when and if called upon, sign a Bond to that effect on the relevant standard form included herein. (without the addition of any limitations) on the same day as the Contract Agreement is signed, by the Government, the Contractor shall furnish within seven days another Surety to the approval of the Government.</p>	
2.4.2	<p>PLANT, TOOLS AND VEHICLES</p> <p>Allow for providing all scaffolding, plant, tools and vehicles required for the works except in so far as may be stated otherwise herein and except for such items specifically and only required for the use of nominated Sub-Contractors as described herein. No timber used for scaffolding, formwork or temporary works of any kind shall be used</p>	
2.4.3	<p>TRANSPORT.</p> <p>Allow for transport of workmen, materials, etc., to and from the site at such hours and by such routes as may be permitted by the competent authorities.</p>	
2.4.4	<p>MATERIALS AND WORKMANSHIP.</p> <p>All materials and workmanship used in the execution of the work shall be of the best quality and description unless otherwise stated. The Contractor shall order all materials to be obtained from overseas immediately after the Contract is signed and shall also ensure they are onsite when required for use in the works. The Bills of Quantities shall not be used for the purpose of ordering materials.</p>	
2.4.5	<p>SIGN FOR MATERIALS SUPPLIED.</p> <p>The Contractor will be required to sign a receipt for all articles and materials supplied by the PROJECT MANAGER at the time of taking deliver thereof, as having received them in good order and condition, and will thereafter be responsible for any loss or damage and for replacements of any such loss or damage with articles and/or materials which will be supplied by the PROJECT MANAGER at the current market prices including Customs Duty and V.A.T., all at the Contractor's own cost and expense, to the satisfaction of the PROJECT</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
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ITEM	DESCRIPTION	AMOUNT
2.5.1	<p>STORAGE OF MATERIALS</p> <p>The Contractor shall provide at his own risk and cost where directed on the site weather proof lock-up sheds and make good damaged or disturbed surfaces upon completion to the satisfaction of the PROJECT MANAGER Nominated Sub-Contractors are to be made liable for the cost of any storage accommodation provided especially for their use.</p>	
2.5.2	<p>SAMPLES</p> <p>The Contractor shall furnish at his own cost any samples of materials or workmanship including concrete test cubes required for the works that may be called for by the PROJECT MANAGER for his approval until such samples are approved by the PROJECT MANAGER and the PROJECT MANAGER, may reject any materials or workmanship not in his opinion to be up to approved samples. The PROJECT MANAGER shall arrange for the testing of such materials as he may at his discretion deem desirable, but the testing shall be made at the expense of the Contractor and not at the expense of the PROJECT MANAGER. The Contractor shall pay for the testing in accordance with the current scale of testing charges laid down by the Ministry of Roads, Housing and Public Works.</p> <p>The procedure for submitting samples of materials for testing and the method of marking for identification shall be as laid down by the PROJECT MANAGER The Contractor shall allow in his tender for such samples and tests except those in connection with nominated sub-contractors' work.</p>	
2.5.3	<p>GOVERNMENT ACTS REGARDING WORKPEOPLE ETC.</p> <p>Allow for complying with all Government Acts, Orders and Regulations in connection with the employment of Labour and other matters related to the execution of the works. In particular the Contractor's attention is drawn to the provisions of the Factory Act 1950 and his tender must include for all costs arising or resulting from compliance with any Act, Order or Regulation relating to Insurances, pensions and holidays for workpeople or so the safety, health and welfare of the workpeople.</p> <p>The Contractor must make himself fully acquainted with current Acts and Regulations, including Police Regulations regarding the movement, housing, security and control of labour, labour camps , passes for transport, etc. It is most important that the Contractor, before tendering, shall obtain from the relevant Authority the fullest information regarding all such regulations and/or restrictions which may affect the organisation of the works, supply and control of labour, etc., and allow accordingly in his tender. No claim in respect of want of knowledge in this connection will be entertained.</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
2.6.1	SECURITY OF WORKS ETC. The Contractor shall be entirely responsible for the security of all the works stores, materials, plant, personnel, etc., both his own and sub-contractors' and must provide all necessary watching, lighting and other precautions as necessary to ensure security against theft, loss or damage and the protection of the public.	
2.6.2	PUBLIC AND PRIVATE ROADS. Maintain as required throughout the execution of the works and make good any damage to public or private roads arising from or consequent upon the execution of the works to the satisfaction of the local and other competent authority and the PROJECT MANAGER	
2.6.3	EXISTING PROPERTY. The Contractor shall take every precaution to avoid damage to all existing property including roads, cables, drains and other services and he will be held responsible for and shall make good all such damage arising from the execution of this contract at his own expense to the satisfaction of the PROJECT MANAGER	
2.6.4	VISIT SITE AND EXAMINE DRAWINGS. The Contractor is recommended to examine the drawings and visit the site the location of which is described in the Particular Preliminaries hereof. He shall be deemed to have acquainted himself therewith as to its nature, position, means of access or any other matter which, may affect his tender. No claim arising from his failure to comply with this recommendation will be considered.	
2.6.5	ACCESS TO SITE AND TEMPORARY ROADS. Means of access to the Site shall be agreed with the PROJECT MANAGER prior to commencement of the work and Contractor must allow for building any necessary temporary access roads for the transport of the materials, plant and workmen as may be required for the complete execution of the works including the provision of temporary culverts, crossings, bridges, or any other means of gaining access to the Site. Upon completion of the works, the Contractor shall remove such temporary access roads; temporary culverts, bridges, etc., and make good and reinstate all works and surfaces disturbed to the satisfaction of the PROJECT MANAGER The Contractor should also allow for relocating existing fence (approx. 30 metres long).	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
2.7.1	AREA TO BE OCCUPIED BY THE CONTRACTOR The area of the site which may be occupied by the Contractor for use of storage and for the purpose of erecting workshops, etc., shall be defined on site by the PROJECT MANAGER	
2.7.2	OFFICE ETC. FOR THE PROJECT MANAGER The Contractor shall provide, erect and maintain where directed on site and afterwards dismantle the site office of the standard type, complete with furniture. He shall also provide a strong metal trunk complete with strong hasp and staple fastening and two keys. He shall provide, erect and maintain a lock-up type water or bucket closet for the sole use of the PROJECT MANAGER including making temporary connections to the drain where applicable to the satisfaction of Government and Medical Officer of Health and shall provide services of cleaner and pay all conservancy charges and keep both office and closet in a clean and sanitary condition from commencement to the completion of the works and dismantle and make good disturbed surfaces. The office and closet shall be completed before the Contractor is permitted to commence the works. The Contractor shall make available on the Site as and when required by the "PROJECT MANAGER" a modern and accurate level together with levelling staff, ranging rods and 50 metre metallic or linen tape.	
2.7.3	WATER AND ELECTRICITY SUPPLY FOR THE WORKS The Contractor shall provide at his own risk and cost all necessary water, electric light and power required for use in the works. The Contractor must make his own arrangements for connection to the nearest suitable water main and for metering the water used. He must also provide temporary tanks and meters as required at his own cost and clear away when no longer required and make good on completion to the entire satisfaction of the PROJECT MANAGER . The Contractor shall pay all charges in connection herewith. No guarantee is given or implied that sufficient water will be available from mains and the Contractor must make his own arrangements for augmenting this supply at his own cost. Nominated Sub--contractors are to be made liable for the cost of any water or electric current used and for any installation provided especially for their own use.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
2.8.1	SUPERVISION AND WORKING HOURS The works shall be executed under the direction and to the entire satisfaction in all respects of the PROJECT MANAGER who shall at all times during normal working hours have access to the works and to the yards and workshops of the Contractor and sub-Contractors or other places where work is being prepared for the contract.	
2.8.2	PROVISIONAL SUMS. The term "Provisional Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7(i) of the Standard Method of Measurement. Such sums are net and no addition shall be made to them for profit.	
2.8.3	PRIME COST (OR P.C.) SUMS. The term "Prime Cost Sum" or "P.C. Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7 (ii) of the Standard Method of Measurement. Persons or firms nominated by the PROJECT MANAGER to execute work or to provide and fix materials or goods are described herein as Nominated Sub-Contractors. Persons or firms so nominated to supply goods or materials are described herein as Nominated Suppliers.	
2.8.4	PROGRESS CHART. The Contractor shall provide within two weeks of Possession of Site and in agreement with the PROJECT MANAGER a Progress Chart for the whole of the works including the works of Nominated Sub-Contractors ; one copy to be handed to the PROJECT MANAGER and a further copy to be retained on Site. Progress to be recorded and chart to be amended as necessary as the work proceeds.	
2.8.5	ADJUSTMENT OF P.C. SUMS. In the final account all P.C. Sums shall be deducted and the amount properly expended upon the PROJECT MANAGER'S order in respect of each of them added to the Contract sum. The Contractor shall produce to the PROJECT MANAGER such quotations, invoices or bills, properly receipted, as may be necessary to show the actual details of the sums paid by the Contractor. Items of profit upon P.C. Sums shall be adjusted in the final account pro-rata to the amount paid. Items of "attendance"	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
2.9.1	ADJUSTMENT OF P.C. SUMS. Ctd..... Should the Contractor be permitted to tender and his tender be accepted of any work for which a P.C. Sum is included in these Bill of Quantities profit and attendance will be allowed at the same rate as it would be if the work were executed by a Nominated Sub-Contractor.	
2.9.2	ADJUSTMENT OF PROVISIONAL SUMS. In the final account all Provisional Sums shall be deducted and the value of the work properly executed in respect of them upon the PROJECT MANAGER's order added to the Contract Sum. Such work shall be valued as described for Variations, but should any part of the work be executed by a Nominated Sub-Contractor, the value of such work or articles for the work to be supplied by a Nominated Supplier, the value of such work or articles shall be treated as a P.C. Sum and profit and attendance comparable to that contained in the priced Bills of Quantities for similar items added.	
2.9.3	NOMINATED SUB-CONTRACTORS When any work is ordered by the PROJECT MANAGER to be executed by nominated sub-contractors, the Contractor shall enter into sub-contracts and shall thereafter be responsible for such sub-contractors in every respect. Unless otherwise described the Contractor is to provide for such Sub-Contractors any or all of the facilities described in these Preliminaries. The Contractor should price for these with the nominated Sub-contract Contractor's work concerned in the P.C. Sums under the description "add for Attendance".	
2.9.4	DIRECT CONTRACTS Notwithstanding the foregoing conditions, the Government reserves the right to place a "Direct Contract" for any goods or services required in the works which are covered by a P.C. Sum in the Bills of Quantities and to pay for the same direct. In any such instances, profit relative to the P.C. Sum the priced Bills of Quantities will be adjusted as described for P.C. Sums and allowed.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
2.10.1	ATTENDANCE UPON OTHER TRADESMEN, ETC. The Contractor shall allow for the attendance of trade upon trade and shall afford any tradesmen or other persons employed for the execution of any work not included in this Contract every facility for carrying out their work and also for use of his ordinary scaffolding. The Contractor, however, shall not be required to erect any special scaffolding for them. The Contractor shall perform such cutting away for and making good after the work of such tradesmen or persons as may be ordered by the PROJECT MANAGER and the work will be measured and paid for to the extent executed at rates provided in these Bills.	
2.10.2	INSURANCE The Contractor shall insure as required in Clause 30 of the Conditions of Contract. No payment on account of the work executed will be made to the Contractor until he has satisfied the PROJECT MANAGER either by production of an Insurance Policy or and Insurance Certificate that the provision of the foregoing Insurance Clauses have been complied with in all respects. Thereafter the PROJECT MANAGER shall from time to time ascertain that premiums are duly paid up by the Contractor who shall if called upon to do so, produce the receipted premium renewals for the PROJECT MANAGER's inspection.	
2.10.3	PROVISIONAL WORK All work described as "Provisional" in these Bills of Quantities is subject to remeasurement in order to ascertain the actual quantity executed for which payment will be made. All "Provisional" and other work liable to adjustment under this Contract shall left uncovered for a reasonable time to allow all measurements needed for such adjustment to be taken by the PROJECT MANAGER Immediately the work is ready for measuring, the Contractor shall give notice to the PROJECT MANAGER. If the Contractor makes default in these respects he shall if the PROJECT MANAGER so directs uncover the work to enable all measurements to be taken and afterwards reinstate at his own expense.	
2.10.4	ALTERATIONS TO BILLS, PRICING, ETC. Any unauthorised alteration or qualification made to the text of the Bills of Quantities may cause the Tender to be disqualified and will in any case be ignored. The Contractor shall be deemed to have made allowance in his prices generally to cover any items against which no price has been inserted in the priced Bills of Quantities. All items of measured work shall be priced in detail and the Tenders containing Lump Sums to cover trades or groups of work must be broken down to show the price of each item before they will be accepted.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
2.11.1	BLASTING OPERATIONS Blasting will only be allowed with the express permission of the PROJECT MANAGER in writing. All blasting operations shall be carried out at the Contractor's sole risk and cost in accordance with any Government regulations in force for the time being, and any special regulations laid down by the PROJECT MANAGER governing the use and storage of explosives.	
2.11.2	MATERIALS ARISING FROM EXCAVATIONS Materials of any kind obtained from the excavations shall be the property of the Government. Unless the PROJECT MANAGER directs otherwise such materials shall be dealt with as provided in the Contract. Such materials shall only be used in the works, in substitution of materials which the Contractor would otherwise have had to supply with the written permission of the PROJECT MANAGER Should such permission be given, the Contractor shall make due allowance for the value of the materials so used at a price to be agreed.	
2.11.3	PROTECTION OF THE WORKS. Provide protection of the whole of the works contained in the Bills of Quantities, including casing , casing up, covering or such other means as may be necessary to avoid damage to the satisfaction of the PROJECT MANAGER and remove such protection when no longer required and make good any damage which may nevertheless have been done at completion free of cost to the Government.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
2.12.1	<p>GENERAL SPECIFICATION.</p> <p>For the full description of materials and workmanship, method of execution of the work and notes for pricing, the Contractor is referred to the Ministry of Roads, Public Works and Housing General Specification dated 1976 or any subsequent revision thereof which is issued as a separate document, and which shall be allowed in all respects unless it conflicts with the General Preliminaries, Trade Preambles or other items in these Bills of Quantities.</p>	
2.12.1	<p>TRAINING LEVY</p> <p>The Contractor's attention is drawn to legal notice No. 237 of October, 1971, which requires payment by the Contractor of a Training Levy at the rate of 1/4 % of the Contract sum on all contracts of more than Kshs. 50,000.00 in value.</p>	
2.12.2	<p>MATERIALS ON SITE</p> <p>All materials for incorporation in the works must be stored on or adjacent to the site before payment is effected unless specifically exempted by the PROJECT MANAGER. This includes the materials of the Main Contractor, Nominated Sub-Contractors and Nominated Suppliers.</p>	
2.12.3	<p>HOARDING</p> <p>The Contractor shall enclose all the site under construction with a hoarding 2400 mm high consisting of iron sheets gauge 30 on 100 x 50 mm 2nd grade treated sawn cypress timber posts firmly secured at 1800 mm centres with two 75 x 50 mm 2nd grade treated sawn cypress timber rails . The Contractor is in addition required to take all precautions necessary for the safe custody of the works, materials, plant, public and Employer's property on the site.</p>	
2.12.4	<p>CONTRACTOR'S SUPERINTENDENCE/SITE AGENT</p> <p>The Contractor shall constantly keep on the works a literate English speaking Agent or Representative, competent and experienced in the kind of work involved who shall give his whole experience in the kind of work involved and shall give his whole time to the superintendence of the works. Such Agent or Representative shall receive on behalf of the Contractor all directions and instructions from the Project Manager and such directions shall be deemed to have been given to the Contractor in accordance with the Conditions of Contract.</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
	<u>COLLECTION</u>	
	Brought Forward From Page GP/ 1	
	Brought Forward From Page GP/ 2	
	Brought Forward From Page GP/ 3	
	Brought Forward From Page GP/ 4	
	Brought Forward From Page GP/ 5	
	Brought Forward From Page GP/ 6	
	Brought Forward From Page GP/ 7	
	Brought Forward From Page GP/ 8	
	Brought Forward From Page GP/ 9	
	Brought Forward From Page GP/ 10	
	Brought Forward From Page GP/ 11	
	Brought Forward From Page GP/ 12	
	TOTAL FOR GENERAL PRELIMINARIES CARRIED TO GRAND SUMMARY	

ESMP

BILL NO. 3

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<p>ELEMENT NO.1</p> <p><u>PRELIMINARIES FOR HEALTH AND SAFETY, AIR AND NOISE MONITORING & CONTROL, WASTE MANAGEMENT</u></p> <p><u>The Tenderer's attention is drawn to the fact that the Employer reserves the right to hold back the amount priced against below items either in full or in part due to any non-performance on the Contractor's part of his obligations.</u></p> <p><u>The Contractor will be required to monitor, keep records and report on the following environmental and social issues for the project in manner acceptable to the World Bank and Government of Kenya:</u></p> <p><u>SAFETY, HEALTH AND WELFARE OF WORKERS</u></p> <p>The Contractor shall allow for providing for the safety, health and welfare of work people and for complying with any relevant Ordinances, Regulations or Union Agreement</p> <p>In addition to complying with the requirements of the Occupational Safety & Health Act 2007 and the Factories Act, the Contractor and Sub-Contractors shall be required to comply in all respects with the Factories (Building Operations and Work of Engineering Construction) rules together with the Construction Safety Plan in compliance with International Labour Organizations (ILO) Regulations.</p>				
3.1.1					
	Total Carried to Collection			Ksh	-

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<p>The Contractor will further be required to identify a Site Environment Health and Safety Officer in accordance with the above Rules who will be responsible for the health and safety of workers on the site. This includes awareness and sensitization on environmental protection, occupational and community health and safety, code of conduct for contractors personnel, risk of spread of communicable diseases including sexually transmitted diseases such as HIV/AIDS, Gender Equity, Sexual Harassment and abuse amongst workers in the workplace,Spread of COVID-19 amongst community members during the consultation processes and Grievance redress mechanism.</p> <p>The Contractor will also be required to provide approved personal protective equipment such as good quality hard hats, gumboots, safety boots and other necessary protective gear for all workers on site including Sub-Contractors' workers and also for the exclusive use by the Clerk of Works and representatives of the Employer and Consultants.</p> <p>The tenderer's attention is further drawn to the fact that he is required to submit with his tender a detailed write-up on how he intends to implement the above Construction Safety Plan. It should be noted that this write-up will form a heavily weighted criteria in the evaluation of the tenders.</p>	Item	1	1,000,000	1,000,000
	Total Carried to Collection			Ksh	1,000,000

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3.2.1	<p>The contractor will be required to provide adequate temporary Notices and Signs shall be posted to indicate e.g. that “construction is in progress” and “entry is at ones own risk” or “trespassers are liable to be prosecuted” or such other Notices and Signs as the Architect may consider necessary from time to time. The design and location of such signs will be to the approval of the Architect.</p> <p>The Contractor is expected to also come up with an Emergency Response plan</p> <p><u>SANITATION OF THE WORKS</u></p> <p>The sanitation of the works shall be provided, maintained and removed on completion of works by the Contractor to the satisfaction of the Architects, health department and local Authorities.</p> <p>The sanitation facilities should be gender sensitive (separate for male and female)shall be for the use by Contractors and sub- Contractors workmen etc without charge.</p> <p>The Latrine/toilet shall be enclosed plastered and painted masonry wall, corrugated sheets roofs ,with concrete tiled floors to facilitate washing. Their location shall be agreed with the Architects and the works shall not be commenced before the sanitary accommodation has been approved by the above mentioned authorities.</p>	Item	1	300,000	300,000
	Total Carried to Collection			Ksh	300,000

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3.3.1	<p>The Contractor will be required to pay all conservancy charges and shall ensure clean daily maintenance and disinfecting of the latrines/toilet, and not less than once per week, the whole area shall be sprayed with disinfectant and insecticides and any temporary drains shall be removed and all works and surfaces disturbed made good and then the whole area disinfected and left clean and free from pollution to the satisfaction of the Architect and local authorities.</p> <p><u>PREVENTION OF DISTURBANCE AND NUISANCE</u></p> <p>Tenderers should note that normal activities shall be continuing in the surrounding buildings during the construction period.</p> <p>Minimum disturbance by noise, dust, water or movement of vehicles, materials, labour or plant must be caused to the function of the existing adjacent buildings in the vicinity and the occupants and staff therein. The Contractor shall comply with all instructions issued by the Employer or Architect with regard to minimizing such disturbances.</p> <p>The Contractor shall not directly or indirectly or otherwise by himself or through his agents cause nuisance. Should he do so he shall be directly responsible for such acts.</p>				
		Item	1	200,000	200,000
	Total Carried to Collection			Ksh	200,000

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<p>The works and such sections of the site necessary shall be under the entire care and control of the contractor during the whole period of the contract and shall take all possible precautions to prevent any nuisance, inconvenience or injury to the holder or occupiers of the existing or surrounding properties and to the public generally, and shall at all times keep all paths and roads affected by the works in a safe and clear state, and shall use proper precautions to ensure the safety of all wheeled traffic and pedestrians.</p> <p><u>GRIEVANCE REDRESS MECHANISM (GRM) WORKER</u></p> <p>The Contractor shall employ, maintain and equip throughout the project duration staff assigned the functions for GRM and the implementation of social safeguard issues.</p> <p><u>CLEANING, REMOVAL OF PLANT AND RUBBISH ETC</u></p> <p>The Contractor shall upon completion of the works remove and clear away all temporary buildings, scaffolding, plant, rubbish and unused materials,surplus excavated materials and shall leave the whole of the site of the works in a clean and tidy state to the satisfaction of the Architect, including clearing away and making good all traces of dirt.</p> <p>The contractor will come up with a Solid and liquid Waste Management and handling Plan to guide and manage the collection and disposal of solid/liquid waste at the site.</p>				
3.3.2		Item	1	1,020,000	1,020,000
3.4.1					
	Total Carried to Collection			Ksh	1,020,000

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<p>Particular care shall be taken in leaving windows, floors and fittings clean and the removal of all paint and cement stains therefrom.</p> <p>He shall also remove all rubbish and dirt from the site as it accumulates or as directed by the Architect. The Contractor is to find his own dump and shall pay all charges in connection therewith.</p> <p><u>AMBIENT AIR QUALITY AND NOISE MONITORING</u></p> <p>The Contractor to carry out continuous monitoring of the ambient air quality and Noise measurements as well as vibration monitoring on quarterly basis during the construction phase and this should be done at different weather and seasons to ensure that all the weather patterns are taken into consideration during the monitoring process.</p>	Item	1	200,000	200,000
3.4.2	<p><u>TRAFFIC CONTROL AND MANAGEMENT</u></p> <p>It will be necessary for the Contractor to provide safety road signage on busy roads around the construction site, temporarily during the construction period. The contractor should arrange diversions for providing alternative route for transport.</p>	Item	1	200,000	200,000
3.4.3	<p>After breaking up, closing or otherwise interfering with any street or footpath to which the public has access, the Contractor shall make such arrangements as may be reasonably necessary so as to cause as little interference with the traffic in that entrance road or footpath during</p> <p>The Contractor will also come up with a Traffic Management Plan to ensure safety of local communities from construction traffic</p>	Item	1	200,000	200,000
	Total Carried to Collection			Ksh	600,000

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3.5.1	<p><u>MOVEMENT OF TRUCKS OR MACHINERY</u></p> <p>The Contractor moving solid or liquid construction materials and waste shall take strict measures to minimize littering of roads by ensuring that vehicles are licensed and loaded in such a manner as to prevent falling off or spilling of construction materials and by sheeting the sides and tops of all vehicles carrying mud, sand, other materials and debris. Construction materials should be brought from registered/approved sources in the city or from the city and debris should be transferred to assigned places in the landfill with documented confirmation.</p>	Item	1	200,000	200,000
3.5.2	<p><u>PROTECTION OF EXISTING INSTALLATION</u></p> <p>The Contractor shall take all necessary measures required for the support and protect structures, pipes, cables, sewers and other apparatus during the construction period, and to repair any damage occurs in coordination with local resident association, Government and any concerned authorities.</p>	Item	1	100,000	100,000
3.5.3	<p><u>PHYSICAL CULTURAL RESOURCES</u></p> <p>The contractor will train construction crews and supervisors to spot potential archaeological finds. In the event of a potential find, the contractor will inform the implementing partner who will in turn liaise with the archaeological department at the Ministry of Culture, and Social Services or a local university for quick assessment and action. Clear record keeping and expert verification procedures, criteria for temporary work stoppages that may be required to allow for rapid resolution of issues in the field and the chain of custody must be clear from the onset.</p>	Item	1	100,000	100,000
	Total Carried to Collection			Ksh	400,000

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	The Contractor will come up with a Water Resource Protection Plan to prevent contamination of drinking water				
	Total Carried to Collection below			Ksh	-
	<u>SECTION SUMMARY- ESMP</u>				
	Total Brought Forward from Page ESMP/1				-
	Total Brought Forward from Page ESMP/2				1,000,000
	Total Brought Forward from Page ESMP/3				300,000
	Total Brought Forward from Page ESMP/4				200,000
	Total Brought Forward from Page ESMP/5				1,020,000
	Total Brought Forward from Page ESMP/6				600,000
	Total Brought Forward from Page ESMP/7				400,000
	Total Brought Forward from Page 8 above				-
	TOTAL FOR DAY WORKS CARRIED TO GRAND SUMMARY				3,520,000

OFFICE BUILDING

BILL NO. 4

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT
FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 1</u>				
	<u>SUBSTRUCTURES (All provisional)</u>				
	<u>Site Preparation</u>				
4.1.1.	Oversite excavation to remove top soil, cut shrubs, grab up roots and dispose away from site as directed by the Project Manager	1,100	SM		
	<u>Trees</u>				
4.1.2.	Cut trees, grub up roots and cart away as directed by the Project Manager. Girth 1200 mm girth	6	NO		
	<u>Excavation (Note that all excavations are measured nett and no allowance for working space provided)</u>				
4.1.3.	Excavate to reduce levels not exceeding 1500 mm deep approximately 500 mm deep	550	CM		
4.1.4.	Ditto for foundation trenches from reduced level : not exceeding 1.50 metres deep	474	CM		
4.1.5.	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	411	CM		
4.1.6.	Ditto for column bases from reduced level not exceeding 1.50 metres deep	355	CM		
4.1.7.	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	319	CM		
4.1.8.	Extra over all descriptions of excavations and removal from site for breaking up rocks: irrespective of class	200	CM		
	<u>Disposal of excavated material</u>				
4.1.9.	Fillings around sub- walls: backfill and compact in 150 mm layers: selected excavated materials	1,688	CM		
4.1.10.	Remove surplus spoil from site and deposit in spoil heaps and later spreadon site as directed	421	CM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT
FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Planking and strutting</u>				
4.2.1.	Planking and strutting to sides of all excavations: keep excavations free from all fallen materials	1	ITEM		
	<u>Disposal of Water</u>				
4.2.2.	Keep excavations free from all water including spring or running water.	1	ITEM		
	<u>Hardcore Filling</u>				
4.2.3.	Imported filling to make-up levels; To atleast 100% MDD (AASHTO T99) compaction, including all necessary scarification and water in layers of at most 150mm.	550	CM		
4.2.4.	300mm thick (minimum) approved hardcore handpacked in layers not exceeding 150mm	857	SM		
	<u>Murram</u>				
4.2.5.	50mm Thick Quarry dust blinding to the surface of hardcore rolled smooth to receive polythene sheeting	857	SM		
	<u>Insecticide treatment</u>				
	<u>Treat hardcore surface with approved antitermite applied in accordance with the manufacturer's instructions and subject to a TEN YEAR guarantee</u>				
4.2.6.	To hardcore surface	857	SM		
	<u>CONCRETE WORK</u>				
	<u>Insitu concrete class 15/20: in</u>				
4.2.7.	50 mm Blinding to strips	316	SM		
4.2.8.	50 mm Blinding to column bases	237	SM		
	<u>Insitu concrete class 25/20: vibrated: reinforced</u>				
4.2.9.	Column bases	106	CM		
4.2.10.	Columns	13	CM		
4.2.11.	Strip foundation	64	CM		
4.2.12.	Steps	2	CM		
	Carried to collection				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.3.1.	Thicknessing under concrete bed including hand packing hardcore to sloping sides average 600x300mm deep	10	LM		
4.3.2.	150mm Thick ground floor slab	896	SM		
4.3.3.	150mm Thick ramp slab	66	SM		
	<u>High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :-</u>				
	<u>Ribbed bars to KS ISO 6935-2:2007</u>				
4.3.4.	8mm diameter	500	KG		
4.3.5.	10mm diameter	2,600	KG		
4.3.6.	12mm diameter	3,400	KG		
4.3.7.	16mm diameter	2,000	KG		
4.3.8.	BRC Fabric mesh reinforcement Ref. A142; weighing 2.22kg per square metre(measured net no allowances made for laps) including bends tying wire and spacer blocks.	962	SM		
	<u>Sawn timber formwork or MS plate formwork: to</u>				
4.3.9.	Vertical: sides of foundations in trenches	211	SM		
4.3.10.	Vertical: sides of column bases	202	SM		
4.3.11.	Vertical: sides of columns; including curved	174	SM		
4.3.12.	Edges: slab and ramp over 75 but not exceeding 150 mm wide	286	LM		
4.3.13.	Edges of steps 75m -150 mm high	69	LM		
	<u>WALLING</u>				
	<u>Approved natural stone or coral stone ; load bearing 7.0 N/mm²: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar</u>				
4.3.14.	200mm thick walling	1,053	SM		
	Carried to collection				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>DAMP PROOFING</u>				
	<u>1000 Gauge polythene; 150mm laps; no allowances made for laps</u>				
4.4.1.	Horizontal; over 300mm wide	962	SM		
	<u>Drainage</u>				
4.4.2.	200 mm diameter high density UPVC pipe laid under slab	20	LM		
	<u>Plain in situ concrete : class 15/20 : as per Engineer's detail</u>				
4.4.3.	200mm bed and surround to 200mm diameter pipe : including all necessary formwork	20	LM		
	<u>FINISHES</u>				
4.4.4.	15mm Thick cement sand (1:3) rendering to plinth; wood float finish	200	SM		
4.4.5.	Prepare and apply three coats of premium quality marine grade bituminous paint to rendered walls; externally	200	SM		
	<u>Paving slabs at plinth of building</u>				
4.4.6.	Excavate oversite average 200mm deep and cart away as directed	132	SM		
4.4.7.	300mm thick (minimum) approved hardcore handpacked in layers not exceeding 150mm	132	SM		
4.4.8.	Treat hardcore surface and tops of walls with approved insecticide as before described	132	SM		
4.4.9.	600x600x50mm pre-cast concrete class 20/20 paving slabs pointed in cement sand (1:3) mortar and laid on and including 50mm approved bed of sand.	132	SM		
	Carried to collection				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>COLLECTION</u> <u>SUBSTRUCTURE</u> Brought forward from page OB/1 Brought forward from page OB/2 Brought forward from page OB/3 Brought forward from page OB/4				
	TOTAL FOR SUBSTRUCTURE CARRIED TO SUMMARY				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 2</u>				
	<u>RC SUPERSTRUCTURE</u>				
	<u>Insitu concrete class 25 (20mm Maximum aggregate size): vibrated: reinforced</u>				
4.6.1.	Beams	120	CM		
4.6.2.	Gutter beams	59	CM		
4.6.2.	Columns	34	CM		
4.6.3.	Staircase	13	CM		
4.6.4.	175mm thick suspended first floor slab	704	SM		
4.6.5.	175mm thick suspended roof slab	1,108	SM		
4.6.6.	175mm thick suspended staircase landings	30	SM		
4.6.7.	175mm thick ramp slab	101	SM		
	<u>High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :-</u>				
	<u>Ribbed bars to KS ISO 6935-2:2007</u>				
4.6.9.	Assorted sizes	74,730	KG		
4.6.10.	<u>Precast concrete class 25/20 units Lintels</u> 200 x 200mm thick lintel reinforced with 10mm and 8mm diameter steel bars and including all necessary moulding, hoisting and placing all to approval.	86	LM		
	<u>Sawn timber formwork or MS plate formwork: to</u>				
4.6.11.	Sides of Columns; including curved	431	SM		
4.6.12.	Sides and soffits of beams	1,251	SM		
4.6.13.	Soffites of suspended floor slab	704	SM		
4.6.14.	Soffites of suspended roof slab	1,108	SM		
4.6.15.	Soffites of ramp	101	SM		
4.6.16.	Soffites of staircase landings	30	SM		
4.6.17.	Sloping soffites of staircase	54	SM		
	Carried to collection				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.7.1.	Extreme edges of staircase average 300mm wide with profile to treads and risers	27	LM		
4.7.2.	Edges of suspended floor slab 150-225mm	562	LM		
4.7.3.	Ditto edges of suspended staircase landing	48	LM		
4.7.4.	Ditto edges of ramp	93	LM		
4.7.5.	Risers 150mm high	144	LM		
	Structural steel deck				
	Structural mild steel to BS 4360 grade 43C in roof structure: allow for 6FW continuous welding : 3mm blanked open ends : on coat zinc chromate primer : including drilling holes in steel: all connections,6mm thick connection plates, cleats,M16 bolts, nuts, washers etc; to Engineer's detail				
4.7.6.	150 x 150 x 5mm thick SHS	1,923	KG		
4.7.7.	50 x 50 x 4mm thick SHS	428	KG		
4.7.8.	4mm thick chequered plate	70	SM		
	Prepare surface by Sand blasting; apply one coat of 2 pack epoxy zinc phosphate primer; apply three coats of marine grade gloss paint				
4.7.9.	To steel surfaces	113	SM		
4.7.10.	To steel surfaces 100-200mm girth	74	LM		
	Carried to collection				
	<u>COLLECTION</u>				
	<u>RC SUPERSTRUCTURE</u>				
	Brought forward from page OB/6				
	Brought down from page OB/7 above				
	TOTAL FOR RC SUPERSTRUCTURE CARRIED TO SUMMARY				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 3</u>				
	<u>EXTERNAL WALLS</u>				
	<u>NATURAL STONE WALLING</u>				
	<u>Machine cut natural stone or machine cut coral stone or hollow concrete block walling ; load bearing 7.0 N/mm2: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar</u>				
4.8.1.	200mm. Thick walling externally	699	SM		
4.8.2.	200mm thick at parapet walling; including allowing for crenellation to architect's detail	311	SM		
	<u>Bituminous or other equal approved damp-proof course; 3 ply membrane</u>				
4.8.3.	Horizontal; 200mm wide under walls	146	LM		
	<u>Pre-cast concrete Grade 20 precast ventilation blocks</u>				
4.8.4.	1000x1000x200mm thick vents block with floral motifs; bedded and jointed in cement and sand (1:3) mortar and reinforced every alternate course with hoop iron.;To architect's details	134	SM		
	<u>Pre-cast concrete class 20/20 concrete coping</u>				
4.8.5.	250 x 50 mm high precast concrete coping weathered and throated on both sides and jointed to wall in cement sand mortar 1:3 all to approval	259	LM		
	TOTAL EXTERNAL WALLING CARRIED TO SUMMARY				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p><u>ELEMENT NO. 4</u></p> <p><u>INTERNAL WALLS</u></p> <p><u>NATURAL STONE WALLING</u></p> <p><u>Machine cut natural stone or machine cut coral stone or hollow concrete block walling ; load bearing 7.0 N/mm²: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar</u></p>				
4.9.1.	200mm. Thick walling internally	996	SM		
4.9.2.	Ditto but 150 mm thick	68	SM		
	<p><u>Bituminous or other equal approved damp-proof course; 3 ply membrane</u></p>				
4.9.3.	Horizontal; 200mm wide under walls	204	LM		
4.9.4.	Horizontal; 150mm wide under walls	21	LM		
	TOTAL INTERNAL WALLING CARRIED TO SUMMARY				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 5</u>				
	<u>FLAT ROOF AND RAINWATER DISPOSAL</u>				
	<u>Flat roof finishes</u>				
4.10.1.	50mm thick (average) water proof screed consisting of cement and sand (1:3)	1,460	SM		
4.10.2.	Ditto to sides of wall	110	SM		
4.10.3.	50 x 50mm internal angle fillet	366	LM		
	<u>Supply and apply 4mm thick bituminous felt membrane heat welded in 200mm overlaps and all necessary surface preparations; applied strictly in accordance with printed manufacturer's instructions; provide a 10 year guarantee</u>				
4.10.4.	To roof slabs; including water tank area	1,001	SM		
4.10.5.	To gutters	459	SM		
4.10.6.	To sides of walls	110	SM		
4.10.7.	300 x 50 mm high precast concrete coping weathered and throated on both sides and jointed to wall in cement sand mortar 1:3 all to approval	366	LM		
4.10.8.	Ditto but 500 x 500 mm pier coping	49	NO		
	<u>Unplasticized PVC downpipes and fittings: solvent welded joints</u>				
	<u>Rainwater Goods</u>				
4.10.9.	Extra over for forming 160mm diameter hole for down pipe	18	NO		
4.10.10.	160mm dia downpipes in concrete columns to approval	132	LM		
4.10.11.	Extra over downpipe for bends	18	NO		
4.10.12.	Extra over downpipe for 160mm diameter anti splash shoe	18	NO		
4.10.13.	Extra over 150mm flubora outlets including galvanised expanded metal mesh	18	NO		
	Carried to collection				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>COLLECTION</u> <u>ROOF AND RAINWATER DISPOSAL</u> Brought forward from page OB/10				
	TOTAL FLAT ROOF FINISHES AND RAIN WATER DISPOSAL CARRIED TO SUMMARY				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 6</u>				
	<u>WINDOWS</u>				
	<u>Heavy Duty powder coated Aluminium windows to B.S. 4813 to be executed by an approved sub contractor</u>				
	<u>The following in Heavy Duty Powder coated Aluminium windows from approved manufacturer(s) complete with 75x50x3 mm frames mullions trasomes railing and necessary intermediate reinforcement elements including all weather strips, rubber glazing strips, couplings, ironmongery including hinges, fasteners and stays, sliding rails(where necessary) bars; all ironmongery to be of stainless steel grade 316 marine grade; panes left open for glazing to Architects detail</u>				
4.12.1.	Window Size 3000x2000mm high as W001	28	NO		
4.12.2.	Window Size 3700x800mm high as W002	4	NO		
4.12.3.	Window Size 1200x1800mm high as W003	2	NO		
4.12.4.	Window Size 1200x800mm high as W004	9	NO		
	<u>Window cills</u>				
4.12.5.	200x50mm pre-cast concrete window sill bedded and pointed in cement sand(1:3) mortar, weathred and throated all to Architects detail and approval	121	LM		
	<u>Glazing</u>				
	<u>One way laminated sheet glass and glazing with aluminium beadings.</u>				
4.12.6.	6mm thick glass in panes (0.50-1.00m ²)	193	SM		
	<u>Window blinds</u>				
4.12.7.	Supply and fix venetian blinds complete with tracks to the project manager's approval and as described (window size 3000x2000mm high)	28	NO		
4.12.8.	Window Size 3700x800mm high	4	NO		
4.12.9.	Window Size 1200x1800mm high	2	NO		
	Carried to collection				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Prepare and apply three coats high quality gloss paint to:</u>				
4.13.1.	Surfaces of window cill 200mm but not exceeding 300mm girth	121	LM		
	<u>Mvule: selected and kept clean</u>				
4.13.2.	250 x 20 mm Window board; plugged	121	LM		
4.13.3.	35 x 35 mm decorated beading	121	LM		
	<u>Burglar proofing grilles-provisional</u>				
4.13.4.	Mild steel grille framed with 50 x 25 x 3mm thick RHS sections, 25x3mm MS bars welded to frame at 150 mm centres both sides; including assembly and fixing to opening cutting and pinning lugs to concrete and bedding frame in cement and sand mortar (1:3)	193	SM		
	<u>Prepare surface by sand blasting, apply one coat of 2 pack epoxy zinc phosphate primer; apply three coats of marine grade gloss paint</u>				
4.13.5.	To burglar-proofing grilles; internally/externally	386	SM		
	<u>Prepare and apply three coats of premium quality marine grade clear varnish; Matt quality to:-</u>				
4.13.6.	General surfaces of wood exceeding 200mm but not exceeding 300mm girth	121	LM		
4.13.7.	Ditto; girth not exceeding 100mm	121	LM		
	Carried to collection				
	<u>COLLECTION</u>				
	<u>WINDOWS</u>				
	Brought forward from page OB/12				
	Brought down from page OB/13 above				
	TOTAL WINDOWS CARRIED TO SUMMARY				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 7</u> <u>DOORS</u> <u>Aluminium Framed Door</u> <u>Supply and fix aluminium framed doors with approved heavy duty powder coated aluminium in framing in sections of size 75mm x 50 x 3mm thick fixed to wall/beam/column around openings, including glazing with 6mm thick laminated glass; secured to the framing using approved glazing strips and glazing beading including waterproofing all joints using approved silicon sealing compounds with all the necessary ironmongery and fittings;all ironmongery to be of stainless steel grade 316 marine grade; all to Architect's door schedules' details and approval</u>				
4.14.1.	Sliding door overall size 3000mm x 2400mm overall height as D001 <u>Panel Doors</u> <u>50mm thick mvule panelled door: comprised of 200 x 50mm thick stiles, top and middle rail: 200 x 50mm thick bottom rail : complete with moulded grooves to door leaf on both sides and 300mm high fanlight glazed with 6mm thick clear glass;solid blocking to iron mongery (m/s) to door</u>	2	NO		
4.14.2.	Single leaf door hardwood panel door overall size 900 x 2400mm high complete with 900 x 300mm high glazed fanlight as D002 <u>Louvred Doors</u> <u>50mm thick mvule louvred door comprising of 50x3mm louvres set at 45 degrees at 50mm centres;solid blocking for iron mongery (m/s) to door : all in accordance with Architect's details</u>	36	NO		
4.14.3.	Single leaf door overall size 1100 x 2400; complete with timber louvred fanlight size 1100x300mm high as D003	12	NO		
	Carried to collection				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.15.1.	Single leaf door overall size 900 x 2400mm high; complete with timber louvred fanlight size 900x300mm high as D004	12	NO		
4.15.2.	Single leaf door overall size 800 x 2100mm high as D005	8	NO		
4.15.3.	Doube leaf door overall size 900 x 2100mm high as D006	6	NO		
	<u>The following in wrot mvule</u>				
4.15.4.	150 x 50mm frame with two labours	415	LM		
4.15.5.	150 x 50 mm Transome	57	LM		
4.15.6.	150 x 50 mm Mullion	10	LM		
4.15.7.	50 x 25mm. Splayed architrave.	415	LM		
4.15.8.	25 x 25mm. Quadrant.	415	LM		
4.15.9.	25 x 12m Glazing Bead	87	LM		
	<u>Glazing</u>				
4.15.10.	6mm thick clear glass and glazing to timber with beads (m.s) in panes 0.10-0.50 S.M	8	SM		
	<u>Ironmongery</u>				
	<u>Supply and fix the following ironmongery from an approved manufacturer including all necessary matching screws;all ironmongery to be stainless steel grade 3.1.6 marine grade</u>				
4.15.11.	3 - Lever mortice lock; complete with lockcase and handle	66	NO		
4.15.12.	2 - Lever mortice lock; ditto with indicator	8	NO		
4.15.13.	100mm. Pressed butt hinges	102	PRS		
4.15.14.	150mm heavy duty double action spring hinges	18	PRS		
4.15.15.	38mm. Diameter door stop on floor / wall to approval	80	NO		
4.15.16.	Heavy duty Door closer to an approved sample	56	NO		
4.15.17.	Ditto double action door closer	12	NO		
	Carried to collection				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.16.1.	150 x 150mm sex indicator plate	6	NO		
4.16.2.	800 x 200mm high stainless steel kick plate onto both sides to approval	24	NO		
4.16.3.	Coat and hat hook	18	NO		
	<u>Metal fixing cramps</u>				
4.16.4.	30 x 3mm. Approved door cramps 250mm. Long once bent one end drilled and screwed to wood	304	NO		
	<u>Painting and Decoration</u>				
	<u>Prepare and apply three coats of premium quality marine grade clear varnish; Matt quality to:-</u>				
4.16.5.	General surfaces of wood exceeding 200mm but not exceeding 300mm girth	482	LM		
4.16.6.	Ditto; girth not exceeding 100mm	917	LM		
4.16.7.	Doors both internally and externally	299	SM		
	<u>Prepare and apply one coat aluminium primer before fixing: to backing of wood</u>				
4.16.8.	Surfaces over 200 but not exceeding 300mm	482	LM		
4.16.9.	Surfaces not exceeding 100mm	917	LM		
	Carried to collection				
	<u>COLLECTION</u>				
	<u>DOORS</u>				
	Brought forward from page OB/14				
	Brought forward from page OB/15				
	Brought down from page OB/16 above				
	TOTAL FOR DOORS CARRIED TO SUMMARY				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 8</u>				
	<u>BALUSTRADES & RAILINGS (All Provisional)</u>				
	<u>BALUSTRADES (PROVISIONAL)</u>				
	<u>Handrail -Stainless Steel</u>				
4.17.1.	Supply, assemble and fix 1000mm high purpose made stainless steel (grade 3.1.6) comprising of 50mm diameter x 3mm thick stainless steel tube handrail welded to 50mm diameter x 3mm thick stainless steel balusters at fixed to concrete floor at 1000mm centres; balusters fixed to and including 200mm x 150mm x 15mm thick stainless steel base plate fixed to concrete; complete with 4no. 25mm diameter x 3mm thick horizontal middle rails ; including all necessary cleats, brackets,lugs stiffeners and the like; all to Architect's instructions and approval at staircase	27	LM		
4.17.2.	Ditto at internal ramp	45	LM		
4.17.3.	Ditto at external steps and entrance	23	LM		
4.17.4.	Ditto at external ramp	75	LM		
4.17.5.	Ditto at first floor corridor	61	LM		
4.17.6.	Horizontal handrail comprising of 50mm diameter x 3mm thick stainless steel CHS(grade 3.1.6); with and including timber infill, fixed onto 80mm long lugs at 1000mm centres; one end fish tailed and built into concrete / block work at ramp walls	50	LM		
	TOTAL FOR BALUSTRADES & RAILING CARRIED TO SUMMARY				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 9</u>				
	<u>FIXTURES AND FITTINGS:-(PROVISIONAL)</u>				
	<u>Worktop</u>				
4.18.1.	100mm thick plain concrete class 15/20 in plinth	16	SM		
4.18.2.	Reinforced concrete class 25/20 in 100mm worktops	16	SM		
	<u>Formwork to:-</u>				
4.18.3.	Soffites of worktops	16	SM		
4.18.4.	Soffites of sitting benches	16	SM		
4.18.5.	Edges of worktops and plinths 75-150mm high	76	LM		
4.18.6.	10mm diameter high yield reinforcement bars	200	KG		
4.18.7.	100mm thick coral block walling in cement/sand 1:3 mortar as before described	26	SM		
4.18.8.	15mm thick cement sand (1:3) plaster of worktop and plinth	32	SM		
4.18.9.	Ditto walls	52	SM		
	<u>Granito tiles at worktop</u>				
4.18.10	Supply and fix 10 mm thick non-slip granito tiles on prepared backing including matching grouting, waterproof adhesive, spacers and edge protectors where required; overall size 600mm x 600mm.	68	SM		
4.18.11.	12mm girth aluminium edgings	40	LM		
	Carried to collection				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Vanity cabinets: comprising of 20mm thick PVC celuka foam board in internal shelvings, doors, sides and partitions; including 20 x 50mm mvule timber runners ; including matching lipping to edges; secret nailing/screwing on prime timber substructures; All exposed surfaces in PVC celuka foam board as before described; complete with drawers in 20mm thick PVC celuka foam board as before described ; complete with doors in 20mm thick PVC celuka foam board as before described; including stainless steel malpa hinges, stainless steel D handle, magnetic ball catches and all other necessary ironmongery;all ironmongery to be of stainless steel grade 316 marine grade. Including making hole for sinks all as per Architect's details</u>				
4.19.1.	Vanity cabinets overall size :average length 2400mm x 600mm wide x 900mm high	4	NO		
4.19.2.	Vanity overall size :average length 1600mm x 600mm wide x 900mm high;including at lactation	2	NO		
4.19.3.	Cleaners vanity overall size :average length 1800mm x 600mm wide x 900mm high	2	NO		
	<u>Kitchenette Cabinets</u> <u>Low level cabinets: comprising of 20mm thick PVC celuka foam board in internal shelvings, doors, sides and partitions; including 20 x 50mm mvule timber runners ; including matching lipping to edges; secret nailing/screwing on prime timber substructures; All exposed surfaces in 20mm thick PVC celuka foam board as before described; complete with drawers in 20mm thick PVC celuka foam board as before described ; complete with doors in 20mm thick PVC celuka foam board as before described; including malpa hinges, stainless steel D handle, magnetic ball catches and all other necessary ironmongery;all ironmongery to be of stainless steel grade 316 marine grade. Including making hole for kitchen sink all as per Architect's details</u>				
4.19.4.	Low level cabinet overall size :overall length 5000mm x 600mm wide x 900mm high at kitchenette	2	No		
	Carried to collection				

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FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>High level cabinets: comprising of 20mm thick PVC celuka foam board in sides,doors, divisions and shelves; 20mm thick PVC celuka foam board as before described top on 20 x50mm mvule timber framing; including matching lipping to edges; secret nailing/screwing on prime timber substructures; complete with doors on malpa hinges; with stainless steel D handle and magnetic ball catches and all other necessary iron mongery;all ironmongery to be of stainless steel grade 316 marine grade</u>				
4.20.1.	High level kitchen cabinet : overall size: length 2500mm x 300mm wide x 800mm high <u>Supply and fix the following in high stainless steel plate grade 3.1.6 marine grade; treated with sealer and chemical etching ; graphics and lettering finished in 3M vinyl cut outs as per architect's details</u>	2	No		
4.20.2.	500 x 100 mm door signage	54	NO		
4.20.3.	600 x 400 mm floor markings	6	NO		
	Carried to collection				
	<u>COLLECTION</u> <u>FIXTURES AND FITTINGS</u> Brought forward from page OB/18 Brought forward from page OB/19 Brought forward from page OB/20				
	TOTAL OF FIXTURES AND FITTINGS, CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT
FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.10</u>				
	<u>INTERNAL FINISHES</u>				
	<u>Floor finishes</u>				
	<u>Screed; cement and sand 1:3 with approved integral dust proofing additive wood floated.</u>				
4.21.1.	32 mm Thick to receive ceramic floor tiles(m.s)	797	SM		
4.21.2.	32 mm Thick to receive terrazzo(m.s)	697	SM		
4.21.3.	Ditto to staircase landing	30	SM		
4.21.4.	Ditto at treads; 300mm wide	144	LM		
4.21.4.	Ditto to risers; 150mm high	144	LM		
	<u>CERAMIC TILES</u>				
4.21.5.	300x300x10mm Thick non-slip Ceramic tiles to architects approval fixed with waterproof tile adhesive to approval;complete matching with grout, spacers etc	797	SM		
	<u>Skirting</u>				
4.21.6.	100x10mm thick ceramic tile skirting with colour to match floor finish	705	LM		
	<u>Polished Terrazzo paving</u>				
4.21.7.	25mm thick insitu polished terrazzo laid on concrete in approved coloured aggregate finished smooth including sanding and polishing	697	SM		
4.21.8.	Ditto to staircase landing	30	SM		
4.21.9.	Ditto to treads; 300mm wide	144	LM		
4.21.10.	Ditto to 150mm high risers	144	LM		
4.21.11.	20 x 100mm ditto skirting	556	LM		
4.21.12.	25 mm wide Slip-resistant Carborandum inserts on Terrazzo treads bonded with an approved adhesive	200	LM		
	<u>Plastic dividing strips</u>				
4.21.13.	32 x 3mm thick plastic dividing strips	1,091	LM		
	<u>Carried to collection</u>				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT
FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Wall finishes</u> <u>12mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to:-</u>				
4.22.1.	Walls and columns	1,367	SM		
4.22.2.	Beams	1,050	SM		
4.22.3.	100 mm-200mm wide Window reveals	594	LM		
	<u>Backing; cement and sand 1:3 with approved integral dust proofing additive wood floated.</u>				
4.22.4.	15 mm thick to receive ceramic tiles	585	SM		
	<u>Glazed wall tiles, local approved colour; glazed; to regular pattern bedding and jointing in cement mortar (1:3). Grouting joints with matching colour cement</u>				
4.22.5.	300 x 300 x 6 mm glazed ceramic tiles to wall surfaces	585	SM		
4.22.6.	12mm girth PVC Edgings	252	LM		
	<u>Painting and decoaration</u> <u>Prepare surface, apply undercoat and apply three coats PVA based premium quality marine grade silk vinyl emulsion paint or other equal and approved to:-</u>				
4.22.7.	Plastered surfaces of walls and columns	1,367	SM		
4.22.8.	Ditto beams	1,050	SM		
4.22.9.	100 mm-200mm wide Window reveals	594	LM		
	<u>Ceiling finishes</u> <u>12mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to:-</u>				
4.22.10.	Soffits of concrete slab	1,494	SM		
4.22.11.	Soffits of Landing	30	SM		
4.22.12.	Sloping Soffits of staircase	54	SM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT
FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.23.1.	Soffits of ramp <u>Prepare surface,apply indercoat and apply three coats of premium quality marine grade emulsion paint to:-</u>	101	SM		
4.23.2.	Plastered concrete soffits	1,494	SM		
4.23.3.	Soffits of Landing	30	SM		
4.23.4.	Sloping soffits of stairs	54	SM		
4.23.5.	Plastered soffits of ramp	101	SM		
	Carried to collection				
	<u>INTERNAL FINISHES</u> <u>COLLECTION</u> Brought forward form page OB/21 Brought forward form page OB/22 Brought forward form page OB/23				
	TOTAL FOR INTERNAL FINISHES CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT
FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.11</u>				
	<u>EXTERNAL FINISHES</u>				
	<u>Floor finishes</u>				
	<u>Screed; cement and sand 1:3 with approved integral dust proofing additive wood floated.</u>				
4.24.1.	32 mm thick to receive terrazzo (m.s)	121	SM		
4.24.2.	Ditto at treads; 300mm wide	22	LM		
4.24.3.	Ditto at treads; 500mm wide	43	LM		
4.24.4.	Ditto to risers; 150mm high	69	LM		
4.24.5.	32 mm Thick to receive clay interlocking tiles(m.s)	923	SM		
	<u>Polished Terrazzo paving</u>				
4.24.6.	25mm thick insitu polished terrazzo laid on concrete in approved coloured aggregate finished smooth including sanding and polishing	121	SM		
4.24.7.	Ditto to treads; 300mm wide	22	LM		
4.24.8.	Ditto at treads; 500mm wide	43	LM		
4.24.9.	Ditto to 150mm high risers	69	LM		
4.24.10.	20 x 100mm ditto skirting	29	LM		
4.24.11.	25 mm wide Slip-resistant Carborandum inserts on Terrazzo treads bonded with an approved adhesive	65	LM		
	<u>Plastic dividing strips</u>				
4.24.12.	32 x 3mm thick plastic dividing strips	140	LM		
	<u>INTERLOCKING TILES</u>				
4.24.13.	200 x 200 x 12mm Thick precast interlocking concrete tiles laid on waterproofed cement and sand screed (m.s) as described on	923	SM		
	<u>Skirting</u>				
4.24.14.	100x12mm thick skirting	293	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT
FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Wall Finishes				
4.25.1.	15mm Thick cement sand (1:3) rendering to walls and columns;	1,325	SM		
4.25.2.	Ditto to beams	336	SM		
4.25.3.	Ditto to gutter beams	262	SM		
4.25.4.	100 mm-200mm wide Window reveals	594	LM		
	<u>Prepare and apply one undercoat and two finishing coats marine grade weatherguard(silicone based) exterior paint as approved to:</u>				
4.25.5.	Rendered surfaces of walls and columns	1,325	SM		
4.25.6.	Ditto: Beams	336	SM		
4.25.7.	Ditto to gutter beams	262	SM		
4.25.8.	100 mm-200mm wide Window reveals	594	LM		
	<u>Ceiling finishes</u>				
	<u>15 mm Thick Internal cement sand (1:3) gauged plaster as described to:</u>				
4.25.9.	Soffits of concrete slab	420	SM		
	<u>Prepare surface,apply indercoat and apply three coats of premium quality marine grade emulsion paint to:-</u>				
4.25.10.	Plastered concrete soffits	420	SM		
	Carried to collection				
	<u>EXTERNAL FINISHES</u>				
	<u>COLLECTION</u>				
	Brought forward form page OB/24				
	Brought forward form page OB/25 above				
	TOTAL FOR EXTERNAL FINISHES CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT
FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.12 BUILDERS WORK IN CONNECTION WITH SERVICES(BWICS) Builder's Work incidental to sanitary fittings, ventilation, plumbing, drainage, reticulation, fire fighting, solar, electrical and data installations, concealed fixings				
4.26.1.	Allow for making holes, chasing walls, floors, inclusion of sleeves and other items necessary for the proper carrying out of the installations including all builder's work of making good all surfaces	1	SUM		
	TOTAL FOR BWICS CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT
FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY</u>				
	<u>SUMMARY</u>				
1	SUBSTRUCTURES				
2	R.C SUPERSTRUCTURE				
3	EXTERNAL WALLS				
4	INTERNAL WALLS				
5	ROOF AND RAINWATER DISPOSAL				
6	WINDOWS				
7	DOORS				
8	BALUSTRADES & RAILINGS				
9	FIXTURES AND FITTINGS				
10	INTERNAL FINISHES				
11	EXTERNAL FINISHES				
12.	BWICS				
	TOTAL FOR OFFICE BLOCK CARRIED TO GRAND SUMMARY				

GATE HOUSE

BILL NO. 5

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>(All rates are V.A.T Inclusive)</u> <u>BUILDING WORKS</u> <u>ELEMENT NO 1.</u>				
	<u>SUBSTRUCTURE WORKS (All Provisional)</u> <u>EXCAVATION AND EARTHWORKS</u>				
5.1.1	Clear site of all bushes, tufts and any small or large trees, including grubbing out roots and burn on site where directed	15	SM		
5.1.2	Excavate oversite average 250mm deep and cart away	15	SM		
5.1.3	Excavate trench for strip foundation: not exceeding 1.5m deep	14	CM		
5.1.4	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	7	CM		
5.1.5	Excavate for column pits: not exceeding 1.5m deep	9	CM		
5.1.6	Ditto but exceeding 1.50 m deep but not exceeding 3.0 m deep	8	CM		
5.1.7	Extra over excavation from rock of any class in any position	23	CM		
	<u>Disposal of excavated material</u>				
5.1.8	Return fill in and ram in excavations	10	CM		
5.1.9	Load and cart away surplus material	13	CM		
	<u>Disposal of Water</u>				
5.1.10	Allow for keeping the whole of the excavation free from mud, water and fallen materials	1	Item		
	<u>Planking and strutting</u>				
5.1.11	Allow for planking and strutting sides of excavation	1	Item		
	<u>Filling</u>				
5.1.12	300mm thick (minimum) approved hardcore handpacked in layers not exceeding 150mm	11	SM		
	Carried to collection				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
5.2.1	50mm Thick Quarry dust blinding to the surface of hardcore rolled smooth to receive polythene sheeting	11	SM		
	<u>Insecticide Treatment</u>				
5.2.2	Treat hardcore surface with approved antitermite applied in accordance with the manufacturer's instructions and subject to a TEN YEAR guarantee	11	SM		
	<u>WATERPROOFING</u>				
5.2.3	1000 gauge polythene sheet damp proof membrane including 300mm laps	14	SM		
	<u>CONCRETE WORKS</u>				
	<u>In situ concrete class 15/20: in</u>				
5.2.4	50mm thick concrete blinding to surfaces of strip footing	9	SM		
5.2.5	Ditto column bases	9	SM		
	<u>Vibrated reinforced concrete class 25/20</u>				
5.2.6	Strip footing	2	CM		
5.2.7	Columns Bases	3	CM		
5.2.8	Columns	1	CM		
5.2.9	150mm thick floor slab	14	SM		
	<u>High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :-</u>				
	<u>Ribbed bars to KS ISO 6935-2:2007</u>				
5.2.11	8mm dia reinforcement bars	22	KG		
5.2.12	10mm dia reinforcement bars	75	KG		
5.2.13	12mm dia reinforcement bars	90	KG		
5.2.14	16mm dia reinforcement bars	75	KG		
5.2.15	BRC Fabric mesh reinforcement Ref. A142; weighing 2.22kg per square metre(measured net no allowances made for laps) including bends tying wire and spacer blocks.	14	SM		
	Carried to collection				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Marineply formwork as Described. Allow for setting to special steel proping, strutting, fillets, nails, etc to:</u>				
5.3.1	Edges of strip footing	6	SM		
5.3.2	Ditto but to column bases	8	SM		
5.3.3	Ditto but to sides of columns	8	SM		
5.3.4	Ditto but to edges of floor slabs 75-150mm girth	15	LM		
	<u>FOUNDATION WALLING</u>				
5.3.5	200mm solid coral block foundation wall in cement:sand (1:3) reinforced with hoop iron at every to alternative course	30	SM		
	<u>PLINTH FINISHES</u>				
5.3.6	15mm cement and sand (1:4) render trowelled smooth and comprising 12mm thick backing and 3mm finishing coat.	15	SM		
	<u>Painting and Decoration</u>				
5.3.7	Prepare and apply 3 coats of first quality bituminous paint or equal and approved to rendered surfaces	15	SM		
	Carried to collection				
	<u>ELEMENT NO. 1 (SUBSTRUCTURE WORKS) COLLECTION</u>				
	Brought forward from page GH/1				
	Brought forward from page GH/2				
	Brought down from page GH/3 above				
	TOTAL ELEMENT NO. 1 (SUBSTRUCTURE WORKS), CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO 2.</u>				
	<u>SUPERSTRUCTURE REINFORCED CONCRETE WORKS</u>				
	<u>Vibrated reinforced concrete class 25/20</u>				
5.4.1	Beams	1	CM		
5.4.2	Gutters	1	CM		
5.4.3	Columns	1	CM		
5.4.4	150mm thick roof slab	26	SM		
	<u>High Tensile Reinforcement Bars to B. S. 4449including cutting, bending and all necessary spacer blocks : (Provisional) :- Ribbed bars to KS ISO 6935-2:2007</u>				
5.4.6	Assorted Bars	790	KG		
	<u>Sawn Treated cypress formwork to: -</u>				
5.4.7	Sides of Ring Beams	12	SM		
5.4.8	Sides and soffits of gutter beams	11	SM		
5.4.9	Soffits of columns	8	SM		
5.4.10	To soffits of roof slab and canopy	26	SM		
5.4.11	To Edges of roof slab and canopy 75-150mm	20	LM		
	TOTAL FOR ELEMENT NO. 2 (SUPERSTRUCTURE REINFORCED CONCRETE WORKS), CARRIED FORWARD TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 3</u>				
	<u>WALLING</u>				
	<u>External walling</u>				
	<u>Machine cut natural stone or machine cut coral stone or hollow concrete block walling ; load bearing 7.0 N/mm2: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar</u>				
5.5.1	200mm mm thick	30	SM		
5.5.2	200mm thick at parapet walling; including allowing for crenellation to architect's detail	9	SM		
	<u>Internal walling</u>				
	<u>Machine cut natural stone or machine cut coral stone or hollow concrete block walling ; load bearing 7.0 N/mm2: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar</u>				
5.5.3	150mm mm thick	12	SM		
	<u>WATERPROOFING</u>				
5.5.4	Hessian based bituminous felt damp proof course 200mm wide	15	LM		
5.5.5	Ditto 150mm	5	LM		
	<u>Pre-cast concrete class 20/20 concrete coping</u>				
5.5.6	250 x 50 mm high precast concrete coping weathered and throated on both sides and jointed to wall in cement sand mortar 1:3 all to approval	15	LM		
	TOTAL FOR ELEMENT NO. 3 (WALLING), CARRIED FORWARD TO SUMMARY				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 4</u>				
	<u>ROOFING</u>				
	<u>FLAT ROOF FINISHES</u>				
5.6.1	50 mm cement sand 1:3 water proof screed to flat roof slab,gutters and sides of parapet walls; laid to fall and crossfalls	36	SM		
5.6.2	Apply one coat bituminous primer to surface of screed.	36	SM		
	Supply and apply 4mm thick bituminous felt membrane heat welded in 200mm overlaps and all necessary surface preparations; applied strictly in accordance with printed manufacturer's instructions; provide a 10 year guarantee				
5.6.3	To roof slabs	26	SM		
5.6.4	To gutters	7	SM		
5.6.5	Ditto sides of wall 200mm high	15	LM		
5.6.6	50 x 50mm internal angle fillet	15	LM		
	<u>Floor Finishes</u>				
	<u>Cement and sand (1:4) screeding smooth trowelled</u>				
5.6.7	32mm Thick floor screed to receive concrete tiles	26	SM		
5.6.8	200 x 200 x 25mm thick concrete interlocking tiles at roof slab; bedding and jointing in cement mortar mix 1:4(m/s)	26	SM		
5.6.9	100mm high matching skirting	15	LM		
	<u>Rainwater goods</u>				
5.6.10	Extra over for running outlet	2	NO		
5.6.11	100mm x 75 x 0.6mm PVC down pipes fixed to wall with holding clips at 1200mm centres	6	LM		
5.6.12	Extra over for swan neck 1000mm long	2	NO		
5.6.13	Extra over for shoe 1000mm long	2	NO		
	TOTAL FOR ELEMENT NO. 4 (ROOFING) CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 5</u> <u>WINDOWS</u> <u>The following in Heavy Duty Powder Coated Aluminium windows from approved manufacturer(s) complete with 75x50x3 mm frames mullions trasomes railing and necessary intermediate reinforcement elements including all weather strips, rubber glazing strips, couplings, ironmongery including hinges, fasteners and stays, sliding rails(where necessary) bars; all ironmongery to be of stainless steel grade 316 marine grade; panes left open for glazing to Architects detail</u>				
5.7.1	Overall size 1500 x 750mm high as W03	3	NO.		
5.7.2	Overall size 600 x 900mm high as W04	2	NO.		
	<u>Window cills</u> 200x50mm pre-cast concrete window sill bedded and pointed in cement sand(1:3) mortar, weathred and throated all to Architects detail and approval				
5.7.3		5	LM		
	<u>Glazing</u> <u>laminated oneway glass fixed with and including beadings.</u>				
5.7.4	6mm thick glass in panes (0.50-1.00m ²)	5	SM		
	Carried to collection				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Burglar proofing grilles-provisional</u>				
	Mild steel grille framed with 50 x 25 x 3mm thick RHS sections, 25x3mm MS bars welded to frame at 150 mm centres both sides; including assembly and fixing to opening cutting and pinning lugs to concrete and bedding frame in cement and sand mortar (1:3)				
5.8.1	Overall size 1500 x 750mm high	3	NO.		
5.8.2	Overall size 600 x 900mm high	2	NO.		
	<u>Prepare surface by sand blasting, apply one coat of 2 pack epoxy zinc phosphate primer; apply three coats of marine grade gloss paint</u>				
5.8.3	To burglar-proofing grilles; internally/externally	9	SM		
	Carried to collection				
	<u>ELEMENT NO. 5 (WINDOWS) COLLECTION</u>				
	Brought forward from page GH/7				
	Brought down from page GH/8 above				
	TOTAL FOR ELEMENT NO. 5 (WINDOWS), CARRIED FORWARD TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 6</u>				
	<u>DOORS</u>				
	<u>Louvred Doors</u>				
	<u>50mm thick mvule louvred door comprising of 50x3mm louvres set at 45 degrees at 50mm centres;solid blocking for iron mongery (m/s) to door : all in accordance with Architect's details</u>				
5.9.1	Single leaf door overall size 900 x 2400mm high;complete with timber louvred fanlight size 900x300mm high as D06	2	NO		
	<u>Panel Doors</u>				
	<u>50mm thick mvule panelled door: comprised of 200 x 50mm thick stiles, top and middle rail: 200 x 50mm thick bottom rail ; complete with moulded grooves to door leaf on both sides ;solid blocking to iron mongery (m/s) to door</u>				
5.9.2	Single leaf door overall size 900 x 2400mm high; complete with timber louvred fanlight size 900x300mm high	1	NO		
	<u>FRAMES (Wrot Mvule)</u>				
5.9.3	150x50mm.rebated frame plugged	17	LM		
5.9.4	Ditto transome	3	LM		
5.9.5	50 x 25mm. Splayed architrave.	17	LM		
5.9.6	25mm quadrant moulds	17	LM		
	Carried to collection				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Ironmongery				
	Supply and fix the following ironmongery from an approved manufacturer including all necessary matching screws;all ironmongery to be stainless steel grade 3.1.6 marine grade				
5.10.1	3 - Lever mortice lock; complete with lockcase and handle	1	NO		
5.10.2	2 - Lever mortice lock; ditto with indicator	2	NO		
5.10.3	100mm. Pressed butt hinges	5	PRS		
5.10.4	38mm. Diameter door stop on floor / wall to approval	3	NO		
5.10.5	Heavy duty Door closer to an approved sample	3	NO		
5.10.6	800 x 200mm high stainless steel kick plate onto both sides to approval	2	NO		
5.10.7	150 x 150mm sex indicator plate	2	NO		
5.10.8	Coat and hat hook	2	NO		
	Painting and Decoration				
	Prepare and apply three coats of premium quality marine grade clear varnish; Matt quality to:-				
5.10.9	General surfaces of wood exceeding 200mm but not exceeding 300mm girth	37	LM		
5.10.10	Ditto; girth not exceeding 100mm	17	LM		
5.10.11	Doors both internally and externally	13	SM		
	Carried to collection				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Prepare and apply one coat aluminium primer before fixing: to backing of wood				
5.11.1	Surfaces over 200 but not exceeding 300mm	34	LM		
5.11.2	Surfaces not exceeding 100mm	17	LM		
	Carried to collection				
	<u>ELEMENT NO. 6 (DOORS) COLLECTION</u> Brought forward from page GH/9 Brought forward from page GH/10 Brought down from page GH/11 above				
	TOTAL FOR ELEMENT NO. 6 (DOORS), CARRIED FORWARD TO SUMMARY				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 7</u>				
	<u>FINISHES</u>				
	<u>EXTERNAL FINISHES</u>				
	<u>Walls</u>				
	<u>25mm thick cement and sand (1:3) render to:-</u>				
5.12.1	25mm thick cement and sand rendering to walls, finished with a wood float.	11	SM		
5.12.2	Ditto to receive natural stone cladding	44	SM		
	<u>Prepare and apply one undercoat and two finishing coats marine grade weatheguard(silicone based) exterior paint as approved to:</u>				
5.12.3	Plastered surfaces of walls	11	SM		
	<u>Stone Cladding</u>				
	25mm thick polished mazeras stone cladding or other equal and approved to columns in cement and sand (1:3) mortar (m/s) with and including galvanised wire reinforcement;pattern to architect's approval	44	SM		
	<u>Ceiling Finishes</u>				
	<u>Concrete Finishes</u>				
5.12.5	15mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to concrete surfaces	12	SM		
5.12.6	Prepare surface, apply undercoat and apply three coats PVA based premium quality marine grade emulsion paint or other equal and approved to plastered surfaces	12	SM		
	Carried to collection				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>INTERNAL FINISHES</u>				
	<u>Wall and Concrete Finishes</u>				
5.13.1	15mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to walls and concrete surfaces	40	SM		
5.13.2	Prepare surface, apply undercoat and apply three coats PVA based premium quality marine grade silk vinyl emulsion paint or other equal and approved to plastered surfaces	40	SM		
5.13.3	12mm cement and sand (1:3) plaster to walls and concrete surfaces trowelled smooth; to receive wall tiles (m/s)	24	SM		
	<u>Wall Tiles</u>				
5.13.4	300 x 300 x 6mm Thick glazed ceramic wall tiles bedding and jointing in cement and sand (1:3) mortar and flush pointed with white cement;including matching grouting, waterproof adhesive,spacers and edge protectors where required	24	SM		
5.13.5	12mm PVC Edgings	21	LM		
	<u>Floor Finishes</u>				
	<u>Cement and sand (1:4) screeding smooth trowelled</u>				
5.13.6	32mm Thick floor screed to receive non slip ceramic tiles	10	SM		
	<u>Ceramic floor tiles</u>				
5.13.7	Supply and fix 10 mm thick non-slip ceramic floor tiles on prepared backing including matching grouting, waterproof adhesive and edge protectors where required; overall size 300mm x 300mm.	10	SM		
5.13.8	Ditto 100mm high skirting	21	LM		
	Carried to collection				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Ceiling finishes</u>				
	<u>Concrete Finishes</u>				
5.14.1	15mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to concrete surfaces	10	SM		
5.14.2	Prepare surface, apply undercoat and apply three coats PVA based premium quality marine grade silk vinyl emulsion paint or other equal and approved to plastered surfaces	10	SM		
	Carried to collection				
	<u>ELEMENT NO. 7 (FINISHES) COLLECTION</u> Brought forward from page GH/12 Brought forward from page GH/13 Brought down from page GH/14 above				
	TOTAL FOR ELEMENT NO. 7 (FINISHES) CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 8</u>				
	<u>FIXTURES AND FITTINGS</u>				
	BENCH				
5.15.1	100mm thick plain concrete class 15/20 in plinth	2	SM		
5.15.2	Reinforced concrete class 25/20 in 100mm worktops	2	SM		
	Formwork to:-				
5.15.3	Soffites of worktops	2	SM		
5.15.4	Edges of worktops and plinths 75-150mm high	6	LM		
5.15.5	10mm diameter high yield reinforcement bars as described before	20	KG		
5.15.6	100mm thick coral block walling in cement/sand 1:3 mortar; abd	2	SM		
5.15.7	15mm thick cement sand (1:3) plaster of worktop	2	SM		
5.15.8	Ditto walls	4	SM		
	Polished Terrazzo paving				
5.15.9	25mm thick insitu polished terrazzo laid on concrete in approved coloured aggregate finished smooth including sanding and polishing	6	SM		
	Plastic dividing strips				
5.15.10	32 x 3mm thick plastic dividing strips	9	LM		
	TOTAL FOR ELEMENT NO. 8 (FIXTURES AND FITTINGS) CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
5.16.1	<u>ELEMENT NO.9</u>				
	BUILDERS WORK IN CONNECTION WITH SERVICES(BWICS) Builder's Work incidental to sanitary fittings, plumbing, drainage, electrical installations, concealed fixings Allow for making holes, chasing walls, floors, inclusion of sleeves and other items necessary for the proper carrying out of the installations including all builder's work of making good all surfaces	1	SUM		
	TOTAL FOR BWICS CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>SUMMARY</u>				
1	SUBSTRUCTURE				
2	SUPERSTRUCTURE				
3	WALLING				
4	ROOF AND RAINWATER DISPOSAL				
5	WINDOWS				
6	DOORS				
7	FINISHES				
8	FIXTURES AND FITTINGS				
9	BWICS				
	TOTAL FOR GATE HOUSE CARRIED TO GRAND SUMMARY				

FOUL WATER DRAINAGE

BILL NO. 6

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>EXTERNAL WORKS</u>				
	<u>ELEMENT NO. 1</u>				
	<u>EXTERNAL SOIL WATER DRAINAGE</u>				
6.1.1	Excavate trench for drain pipe average 1500 mm deep, part return fill and ram and remainder cart away	132	LM		
6.1.2	150 mm diameter "Golden Brown" UPVC pipe laid in trench and jointed	132	LM		
	Plain in situ concrete : class 15/20 : as per Engineer's detail				
6.1.3	150mm bed and surround to 150mm diameter pipe : including all necessary formwork	132	LM		
	Inspection Chambers				
	The following manholes of various sizes to be executed in accordance with the Engineer's drawings, average depths as stated complete and including filling, 150mm thick masonry walling abd, 150mm thick concrete floor slab Class 25/20, concrete blinding and benching Class 15/20, 20mm diameter cast iron stepping irons where necessary; waterproof plaster to internal and external surfaces; complete with and including heavy duty double air seal cast iron cover and frame, all to Engineer's details. (Rate to include cost of all excavations, concrete, formwork, reinforcement, lifting key hole and associated works); prepare surface of steel by Sand blasting; prime with 2 pack epoxy zinc phosphate primer ; apply three coats of marine grade gloss oil paint				
6.1.4	Internal dimensions: 600x 450x 1000mm deep	13	NO		
6.1.5	Ditto 850x1200x1500mm deep	3	NO		
	Carried to Forward				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Brought forward from page FD/1				
6.2.1	<p>Gulley traps Supply and lay 730 x 730 x 500mm deep gulley traps complete with 400 x 400 x 10mm thick mild steel grating welded to 10mm thick mild steel frame at 30mm centres, hot galvanized and painted to approval [Rate to include excavation, 150mm thick plastered masonry walls, class 25/20 concrete base, concrete cover too receive grating and all surface finishes];prepare surface of steel by Sand blasting; prime with 2 pack epoxy zinc phosphate primer ; apply three coats of marine grade gloss oil paint</p> <p>Grease Trap The following gulley trap to be executed in accordance with the Engineer's drawings, average depths as stated complete and including filling; 100mm thick concrete class 25/20 to external and internal walling; 150mm thick concrete floor slab Class 25/20, concrete blinding and benching Class 15/20, complete with and including heavy duty double air seal cast iron cover and frame, all to Engineer's details. (Rate to include cost of all excavations, concrete, formwork, reinforcement,lifting key hole and associated works); prepare surface of steel by Sand blasting; prime with 2 pack epoxy zinc phosphate primer ; apply three coats of marine grade gloss oil paint</p>	12	NO		
6.2.3	Internal dimensions size 1300x 500x 950mm deep	3	NO		
6.2.4	Extra over for back filling with selected imported material all to Project managers approval	60	CM		
	TOTAL OF EXTERNAL SOIL WATER DRAINAGE CARRIED TO ELEMENT SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 2</u>				
	<u>BIODIGESTER</u>				
6.3.1	Clear site of shrubs,grass and carting away the arisings	102	SM		
6.3.2	Excavate pit for biodigester not exceeding 1.5m deep	153	CM		
6.3.3	Ditto 1.5 - 3.0M deep	153	CM		
6.3.4	Ditto 3 - 4.5M deep	26	CM		
6.3.5	Extra over excavation in rock of any class	100	CM		
6.3.6	Return fill and ram selected excavated soil around walling	50	CM		
6.3.7	Cart away surplus excavated material	282	CM		
6.3.8	Planking and strutting to sides of all	1	ITEM		
6.3.9	Allow for keeping the excavations free from	1	ITEM		
6.3.10	50mm thick blinding class 15/20	102	SM		
6.3.11	200mm thick reinforced concrete class 25/20 slab in surface bed	102	SM		
6.3.12	200mm thick ditto to external walls	114	SM		
6.3.13	Ditto in baffle wall	106	SM		
6.3.14	200mm thick reinforced concrete class 25/20 in cover slab	102	SM		
	<u>Marineply formwork as before described to:</u>				
6.3.15	Sides of Rc external walling	228	SM		
6.3.16	Soffits of suspended slap	102	SM		
6.3.17	Sides of scum baffle wall	212	SM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
6.4.1	Edges of base slab 150-225mm girth	41	LM		
6.4.2	Edges of suspended slab 150-225mm girth	41	LM		
6.4.3	Box out formwork to opening size 600x450mm	10	NO		
	<u>High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :- Ribbed bars to KS ISO 6935-2:2007</u>				
6.4.4	Assorted sizes	12720	KG		
6.4.5	Form or leave hole in 250mm concrete walling for 100mm pipe including making good disturbed surfaces	8	NO		
6.4.6	15mm thick cement/sand (1:3) waterproof plaster to walls and soffit of cover slab	404	SM		
6.4.7	30mm thick cement/sand (1:3) waterproof screed to surface bed of internal floor	84	SM		
6.4.8	600x450mm heavy duty double air seal cast iron cover and frame	10	NO		
6.4.9	Soak Pit Provide materials and erect soak pit 1.2m internal diameter with 150mm thick perforated stone walling and 100mm thick concrete base class 25/20 and 150mm thick RC slab class 25/20 ; including 600 x 450mm heavy duty manhole cover and frame and 200mm dia crushed stone chips filling; allow for inlet; and all necessary excavations, reinforcement and formwork; to Eng details	1	NO		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>BIODIGESTER</u> Brought forward from page FD/3 Brought down from page FD/4 above				
	TOTAL OF BIODIGESTER CARRIED TO ELEMENT SUMMARY				
	<u>SUMMARY</u> <u>ELEMENT</u> 1 External soil water drainage 2 Biodigester				
	TOTAL FOR EXTERNAL FOUL WATER DRAINAGE CARRIED TO MAIN SUMMARY				

BOUNDARY WALL

BILL NO. 7

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>BOUNDARY WALL</u>				
7.1.1.	Clear site of all bushes, tufts and any small or large trees, including grubbing out roots and burn on site where directed	233	SM		
7.1.2.	Excavate oversite average 250mm deep and cart away	233	SM		
7.1.3.	Ditto for foundation trenches from reduced level : not exceeding 1.50 metres deep	120	CM		
7.1.4.	Ditto for column bases from reduced level not exceeding 1.50 metres deep	156	CM		
7.1.5.	Extra over all descriptions of excavations and removal from site for breaking up rocks: irrespective of class	100	CM		
	<u>Disposal of excavated material</u>				
7.1.6.	Fillings around sub- walls: backfill and compact in 150 mm layers: selected excavated materials	172	CM		
7.1.7.	Remove surplus spoil from site and deposit in spoil heaps and later spread on site as directed	104	CM		
	<u>Planking and strutting</u>				
7.1.8.	Planking and strutting to sides of all excavations: keep excavations free from all fallen materials	1	ITEM		
	<u>Disposal of Water</u>				
7.1.9.	Keep excavations free from all water including spring or running water.	1	ITEM		
	<u>CONCRETE WORK</u>				
	<u>Insitu concrete mix class 15 (20mm Maximum aggregate size): vibrated: reinforced</u>				
7.1.10.	50 mm Blinding to strips	80	SM		
7.1.11.	Ditto to column bases	104	SM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Insitu concrete class 25 (20mm Maximum aggregate size): vibrated: reinforced</u>				
7.2.1.	Strip foundation	16	CM		
7.2.2.	Stub columns	8	CM		
7.2.3.	Column bases	31	CM		
7.2.4.	Ground beam	8	CM		
	<u>High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :-</u>				
	<u>Ribbed bars to KS ISO 6935-2:2007</u>				
7.2.5.	Assorted sizes	5,370	KG		
	<u>Sawn timber formwork or MS plate formwork: to</u>				
7.2.6.	Vertical: sides of foundations in trenches	54	SM		
7.2.7.	Ditto to stub columns	119	SM		
7.2.8.	Ditto to column bases	104	SM		
7.2.9.	Ditto to ground beams	80	SM		
	<u>WALLING</u>				
	<u>Approved natural stone or coral stone ; load bearing 7.0 N/mm2: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar</u>				
7.2.10.	200mm thick walling	200	SM		
	<u>EXPANSION JOINT</u>				
7.2.11.	30 mm thick approved expansion joint filler	4	SM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
7.3.1.	15mm x 30mm approved expansion joint sealer : raking out groove in concrete <u>RC SUPERSTRUCTURE</u> <u>Insitu concrete class 25 (20mm Maximum aggregate size): vibrated: reinforced</u>	30	LM		
7.3.2.	Columns	13	CM		
7.3.3.	Beam <u>High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :-</u> <u>Ribbed bars to KS ISO 6935-2:2007</u>	6	CM		
7.3.4.	Assorted sizes <u>Sawn timber formwork or MS plate formwork: to</u>	2,550	KG		
7.3.5.	To columns	198	SM		
7.3.6.	To beams <u>NATURAL STONE WALLING</u> <u>Machine cut natural stone or machine cut coral stone or hollow concrete block walling ; load bearing 7.0 N/mm2: reinforced with 20 gauge 25mm hoop iron strips laid horizontally every alternate course: bedded and jointed in cement and sand (1:3) mortar</u>	54	SM		
7.3.7.	200mm. Thick walling <u>Pre-cast concrete class 20/20 concrete coping</u>	306	SM		
7.3.8.	250 x 50 mm high precast concrete coping weathered and throated on both sides and jointed to wall in cement sand mortar 1:3 all to approval	133	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
7.4.1.	Ditto 500x500x100mm thick	79	NO		
	<u>EXPANSION JOINT</u>				
7.4.2.	30 mm thick approved expansion joint filler	7	SM		
7.4.3.	15mm x 30mm approved expansion joint sealer : raking out groove in concrete	50	LM		
	<u>FINISHES</u>				
7.4.4.	15mm Thick cement sand (1:3) rendering to columns to receive stone cladding;	121	SM		
7.4.5.	15mm Thick cement sand (1:3) rendering to beam	133	SM		
	<u>Stone Cladding</u>				
7.4.6.	25mm thick polished mazeras stone cladding or other equal and approved to columns in cement and sand (1:3) mortar (m/s) with and including galvanised wire reinforcement;pattern to architect's approval	121	SM		
	<u>Key Pointing</u>				
7.4.7.	Extra over dressed stone walling for neat recessed horizontal key pointing in 10mm thick rod in cement mortar (1:3) both internal and external sides of walling; one coat of bituminous paint.	612	SM		
	<u>Vehicular Gate</u>				
	<u>Vehicular gate of purpose made mild steel in 75 x 50 x 3mm thick RHS framing. bottom, top and middle rail; 50 x 50 x 3mm thick SHS internal members at 400 mm centres; 200mm wide x 3mm mild steel plate welded over framing and middle rails on both sides;with and including purpose made heavy duty hinges, lock bolt and other necessary ironmongery; prime before fixing; to architect's detail</u>				
7.4.8.	Overall size 6000 x 2400mm high	1	No		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Pedestrian Gate</u> <u>Pedestrian gate of purpose made mild steel in 75 x 50 x 3mm thick RHS framing, bottom, top and middle rail; 50 x 50 x 3mm thick SHS internal members at 400 mm centres; 200mm wide x 3mm mild steel plate welded over framing and middle rails on both sides; with and including purpose made heavy duty hinges, lock bolt and other necessary ironmongery; prime before fixing; to architect's detail</u>				
7.5.1.	Overall size 1000 x 1950mm high	1	NO		
	<u>Prepare surface by sand blasting, apply one coat of 2 pack epoxy zinc phosphate primer; apply three coats of marine grade gloss paint</u>				
7.5.2.	To steel gates	34	SM		
	Carried to collection				
	<u>COLLECTION</u> <u>BOUNDARY WALL</u> Brought forward from page BW/1 Brought down from above page BW/2 Brought down from above page BW/3 Brought down from above page BW/4 Brought down from above page BW/5				
	TOTAL FOR BOUNDARY WALL CARRIED TO MAIN SUMMARY				

DRIVEWAY AND PARKING

BILL NO. 8

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>PARKING, DRIVEWAY AND WALKWAYS</u>				
	<u>ALL PROVISIONAL</u>				
8.1.1.	Clear site of all bushes, tufts and any small or large trees, including grubbing out roots and burn on site where directed	650	SM		
8.1.2.	Excavation to reduced levels not exceeding 1.50 m deep starting from the ground level	325	CM		
8.1.3.	Extra over all descriptions of excavations and removal from site for breaking up rocks: irrespective of class	100	CM		
	<u>Disposal of excavated material</u>				
8.1.4.	Load and cart away surplus material from the site as directed by the project manager.	325	CM		
	Road formation and subbase				
8.1.5.	Trim and compact formation to correct levels, cross-falls and longitudinal falls	650	SM		
	Imported Filling				
8.1.6.	Provide and lay Imported and approved murram backfill or other approved materials to make up levels, well watered, rolled and compacted to 100% MDD at optimum moisture content in 150mm thick Layers to Engineer's approval	325	CM		
8.1.7.	Provide, lay and compact hand packed hardcore to maximum thickness of 300mm for the parking area. To atleast 100% MDD (AASHTO T99) compaction, including all necessary scarification and water in layers of at most 150mm.	650	SM		
	Quarry dust				
8.1.8.	50mm thick quarry dust or any other equal and approved material in blinding surface of hardcore	650	SM		
	Herbicide Treatment				
8.1.9.	Herbicides to approval applied to the manufacturer's written instructions and subject to a TEN YEAR guarantee	650	SM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
8.2.1.	Concrete Paving Blocks 60 thick concrete paving block minimum strength 49N/mm ² laid on 50 mm thick quarry dust (m/s) and joint filled with sand and vibrated.	650	SM		
8.2.2.	Precast Concrete Channels Class 20/20 Provide, lay and joint 200x100mm channel in and including concrete Class 20/20 bed and haunch. Include for all necessary excavation and formwork to Eng details	140	LM		
8.2.3.	Ditto curved to plan	5	LM		
8.2.4.	Precast Concrete Kerbs Class 20/20 Provide, lay and joint 250x125mm precast concrete half battered kerb and 200x100mm channel on and including Class 20/20 bed and haunch. Include for all necessary excavation and formwork to Eng details	140	LM		
8.2.5.	Ditto curved to plan	20	LM		
	<u>WALKWAY</u>				
8.2.6.	Clear site of all bushes, tufts and any small or large trees, including grubbing out roots and burn on site where directed	65	SM		
8.2.7.	Excavation to reduced levels not exceeding 1.50 m deep starting from the ground level	33	CM		
8.2.8.	Extra over all descriptions of excavations and removal from site for breaking up rocks: irrespective of class	20	CM		
8.2.9.	<u>Disposal of excavated material</u> Load and cart away surplus material from the site as directed by the project manager.	33	CM		
8.2.10.	Road formation and subbase Trim and compact formation to correct levels, cross-falls and longitudinal falls	65	SM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
8.3.1.	Imported Filling Provide and lay Imported and approved murram backfill or other approved materials to make up levels, well watered, rolled and compacted to 100% MDD at optimum moisture content in 150mm thick Layers to Engineer's approval	33	CM		
8.3.2.	Provide, lay and compact hand packed hardcore to maximum thickness of 300mm for the walkway area. To atleast 100% MDD (AASHTO T99) compaction, including all necessary scarification and water in layers of at most 150mm.	65	SM		
8.3.3.	Quarry dust 50mm thick quarry dust or any other equal and approved material in blinding surface of hardcore	60	SM		
8.3.4.	Herbicides to approval applied to the manufacturer's written instructions and subject to a TEN YEAR guarantee	60	SM		
8.3.5.	Concrete Paving Blocks 60 thick concrete paving block minimum strength 49N/mm ² laid on 50 mm thickquarry dust (m/s) and joint filled with sand and vibrated.	65	SM		
8.3.6.	Precast Concrete Channels Class 20/20 Provide, lay and joint 200x100mm channel in and including concrete Class 20/20 bed and haunch. Include for all necessary excavation and formwork to Eng details	57	LM		
8.3.7.	Precast Concrete Kerbs Class 20/20 Provide, lay and joint 250x125mm precast concrete half battered kerb and 200x100mm channel on and including Class 20/20 bed and haunch. Include for all necessary excavation and formwork to Eng details	57	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
8.4.1.	ROAD AND PARKING MARKING Prepare and apply three coats of approved road marking thermoplastic paint on asphalt to surfaces not exceeding 100mm girth Yellow in colour	30	SM		
8.4.2.	<u>STORM OF WATER DRAINS</u> OPEN DRAINAGE 600mm wide(internal) open "U" drainage in rectangular fair faced insitu vibrated reinforced concrete class 25/20;including 750mm high x 250 mm thick reinforced concrete walling in T10 bars, 250 mm thick bottom slab reinforced in T10 bars ,50mm concrete class 15/20 blinding on 150mm hardcore filling; including all necessary excavations,strutting,reinforcement, formwork, plaster to all internal surfaces, plaster to all exposed external surfaces all as per Eng details.	22	LM		
8.4.3.	Ditto at courtyard	74	LM		
8.4.4.	600mm wide mild steel channel grating : comprising 40 x 40 x 6mm edge frame : infilled with 40 x 6mm flats at 50mm centres : 40 x 40 x 6mm frame set in concrete with 150mm long mild steel end split lugs : smooth weld joints; Prepare surface by sand blasting, apply one coat of 2 pack epoxy zinc phosphate primer; apply three coats of marine grade gloss paint :	96	LM		
8.4.5.	BOX CULVERT 2000 x 2000 x 400mm thick insitu vibrated reinforced concrete class 25/20 box culvert ;including 600mm high x 200 mm thick; laid on and including 50mm concrete class 15/20 blinding on 150mm hardcore filling; including all necessary excavations,strutting, formwork, reinforcements; all as per Eng details.	6	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
8.5.1.	Headwalls Headwall comprising of 5000mm long x 2000mm high x 350mm thick insitu vibrated reinforced concrete class 25/20 on and including concrete class 25/20 base size 3700 x 950 x 400mm thick on 50mm concrete class 15/20 blinding;with 100mm thick quarry dust blinding on 150mm hardcore filling; including all necessary excavations, strutting, formwork, reinforcements; all as per Eng details.	2	NO		
8.5.2.	Precast Concrete Invert Block Drains Class 20/20 300mm diameter round precast concrete invert blocks drain manufactured in accordance with BS 340 laid to slope and including 100mm murram bed;including 600 x 225 x 75mm thick side slabs : jointed and pointed in cement and sand 1:3 mortar : on compacted murram : as per Engineer's details jointing in cement and sand mortar;including all necessary excavations, strutting, formwork, reinforcements; all as per Eng details.	80	LM		
	Carried to collection				
	<u>COLLECTION</u> <u>PARKING, DRIVEWAY, WALKWAYS AND STORM WATER DRAINAGE</u> Brought forward from page DW/1 Brought forward from page DW/2 Brought down from page DW/3 Brought down from page DW/4 Brought down from above page DW/5 above				
	TOTAL FOR PARKING, DRIVEWAY, WALKWAYS AND STORM WATER DRAINAGE SUMMARY				

LANDSCAPING WORKS

BILL NO. 9

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>LANDSCAPING WORKS</u>				
	<u>ELEMNET NO 1.</u>				
	<u>GROUND PREPARATION AND GRASSING</u>				
	<u>Clearing and Levelling</u>				
9.1.1	Clear the site of all existing unwanted materials and scarify oversite commencing from main Contractor,s reduced levels, average 150 mm deep to allow for water seepage and retention remove all hardened ground, weeds and any deleterious materials; including carting away all arising wastes, raking and fine levelling of the ground.	1606	SM		
9.1.2	receive planters irrespective of size and spread; spread at varying depths as directed by the landscape architect or Project Manager	482	CM		
	<u>Supply and application of Manure.</u>				
9.1.3	Supply and apply prime quality fertilizers or compost manure at designated locations and as directed by the landscape architect or Project Manager	1606	SM		
	<u>Supply and Installation of Grass and Lawns</u>				
9.1.4	undermentioned grass sprigs untill fully established / to reasonable maturity. Grass should also be rolled with a light weight roller to even out 'bumby' areas. This should be carried out one to two weeks after installation Pemba grass springs spaced at 100mm centres both ways	906	SM		
	<u>Planting of Ground Covers</u>				
9.1.5	Clear site, level,excavate pits,supply,import red soil with manure,plant,weed,water and tend well assorted species of ground covers till full establishment as per the designs of the landscape architect or as directed by the Project Manager	400	SM		
	TOTAL CARRIED FORWARD				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BROUGHT FORWARD FROM PAGE LW/1				
9.2.1	<u>Planting of Shrubs</u> Clear site, level,excavate pits,supply,import red soil with manure,plant, weed, water and tend well assorted species of Shrubs; till full establishment/reasonable maturity as per the designs of the landscape architect or as directed by the Project Manager <u>Clear site, excavate pit,supply, import red soil with manure, plant, weed, water and tend well under-mentioned trees/large shrubs till full establishment/reasonable maturity and support the same with strong bamboo stakes, adequate in thickness for each tree.</u>	300	SM		
9.2.2	Assorted Species of Palm trees and other ornamental trees as per the designs of the landscape architect or as directed by the project manager	20	NO		
9.2.3	Assorted Species of other indegenous trees as per the designs of the landscape architect or as directed by the project manager.	50	NO		
9.2.4	<u>MAINTENANCE</u> Allow for a follow up of all installations and constructions to insure establishment and concept preservation. Including mowing, watering, training and trimming.	6	Months		
9.2.5	<u>LITTER BINS</u> <u>Supply, deliver and install litter bins to specification</u> Supply and install standard round swivel openable litter bin of galvanised steel with detailed pattern perforation, fixing to concrete footing or any other approved by project architect; overall size 600mm dia x 1200mm high	6	NO		
	TOTAL LANDSCAPING WORKS CARRIED FORWARD TO GRAND SUMMARY				

ELECTRICAL INSTALLATIONS

BILL NO. 10

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<i>(All Rates are V.A.T Inclusive)</i> BILL NO. 10; ELECTRICAL WORKS				
	<u>SCHEDULE 1:</u> <u>GROUND FLOOR & GATE HOUSE</u> <u>Supply Install, Test and Commission Following:-</u> <u>LIGHTING POINTS</u>				
10.1.1	Lighting points wired in 3x4.5mm ² PVC/SC copper cables drawn in concealed 20mm diameter heavy gauge PVC conduit including all boxes, saddles and accessories for				
	i)One way switching	No.	80		
	ii)Two Way switching	No.	35		
10.1.2	<u>10A plastic switch plates as follows</u>				
	i)One gang one way	No.	29		
	ii)One gang two way	No.	4		
	iii)Two gang two way	No.	5		
	iv)Three gang two way	No.	1		
	<u>LIGHTING FITTINGS</u>				
10.1.3	Light fittings complete with all the necessary fixing accessories and rated energy lamps as follows:-				
	i) Type C	No.	8		
	ii) Exit Light	No.	7		
	iii) Type 600X600	No.	22		
	iv)Type 2	No.	17		
	v) Type 2D	No.	6		
	vi) Type 4	No.	4		
	vii) Type N	No.	35		
	viii) Type M	No.	21		
	ix) Type 4C	No.	2		
10.1.4	Motion Sensors for lighting in washrooms	No.	4		
	<u>POWER OUTLETS</u>				
10.1.5	Socket outlet point in Ring wiring of 3x2.5 mm ² PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No.	50		
10.1.6	13A Twin switched moduled socket outlet plate	No.	50		
10.1.7	20A Double Pole outlet point comprising of wiring in 3x4.0 mm ² PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No.	4		
10.1.8	20A Double pole switch complete with neon light	No.	4		
	<u>KITCHENETTE</u>				
10.1.9	Cooker point comprising wiring in 3x6.0mm ² PVC SC Cu cables drawn inside trunking	No.	1		
10.1.10	45A Cooker Control Unit incorporating a 13A switched socket outlet and neon indicator	No.	1		
10.1.11	Cooker connector	No.	1		
	<u>ELECTRICAL SWEEP FANS</u>				
10.1.12	Ceiling fan points wired in 3x2.5mm ² PVC/SC copper cables drawn in concealed 20mm diameter heavy gauge PVC conduit including all boxes, saddles and all accessories	No.	11		
10.1.13	<u>CEILING FANS</u>				
	i) 49W 1400mm 3-arm 5- speed, Ceiling fan complete with the regulator	No.	11		
10.1.14	Ceiling fan hook (M-10) complete with rawl bolt.	No.	11		
	TOTAL C/F TO NEXT PAGE				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F/ FROM PREVIOUS PAGE				
	<u>FIRE DETECTION AND ALARM SYSTEM</u>				
10.1.15	Fire alarm panel/Fire alarm bell/Break glass Unit Points/Smoke detector points comprising iring in 3x1.5mm ² fire risistant cables concealed in PVC conduits concealed in ceiling space but excluding bell and break glass unit	No.	28		
10.1.16	Addressable Call point	No.	6		
10.1.17	Addressable Sounder complete with beacon	No.	6		
10.1.18	Addressable Smoke detectors complete with base	No.	13		
10.1.19	Heat detectors complete with base	No.	2		
10.1.20	Single Loop, Expandable to 8, Intelligent Addressable fire alarm panel with atleast 200 addresses complete with full network capability,stand-by batteries and intergral battery charger, touch screen, thermal printer and CAN modules	No.	1		
10.1.21	Addressable Repeater Panel with atleast 30 characters LCD screen and RS483 Port	No.	1		
	<u>TELEVISION, CCTV AND DATA WORKS</u>				
10.1.21	16 SWG,(450 x 300 x 100)mm ³ flush mounted galvanised powder coated draw box for telephone & data works	4	No		
10.1.22	Telephone/Data outlet point comprising of concealed 20mm diameter HG PVC conduits plus draw wire	58	No		
10.1.23	RJ45, Single Data outlet plate				
	a) Single	14	No		
	b) Double	22	No		
	<u>DISTRIBUTION BOARDS</u>				
10.1.24	8-Way TP/N distribution board flush mounted complete 1No. 125A TPN integral isolator.	No.	1		
10.1.25	4- way SP/N Consumer Unit flush mounted complete 1No. SP/N integral isolator	No	2		
10.1.26	MCBs for the above boards				
	i)16A SP	No.	8		
	ii)20ASP	No.	8		
	iii)32ASP	No.	1		
	iv)45ASP	No.	1		
	v)Blanking Plates	No.	6		
	<u>SUB-MAINS CABLES</u>				
10.1.27	4 core 25mm ² PVCC/SWA/PVC (armoured) + 1X16mm ² single Core copper cables drawn inside HG conduits	LM	100		
10.1.28	3 core 10mm ² PVC/SWA/PVC (armoured) copper cables drawn inside 50mm diameter HG conduits	Lm	70		
	TOTAL C/F TO NEXT PAGE				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F/ FROM PREVIOUS PAGE				
10.1.29	Cable glands for the above cable	No.	6		
10.1.30	Cable lugs for the above cable complete with hydraulic crimping	No.	22		
10.1.31	Single phase isolator point comprising of wiring in 3x6.0 mm ² PVC-SC-Cu cables drawn inside 20mm diameter HC conduits	No	2		
10.1.32	32A Single phase Isolator complete with 3 pin industrial socket and plug	No	2		
10.1.33	Powder Coated Electrical Pedestal Socket Box with provision for 4No. Standard Twim sockets and 4 No. Standard Single Sockets	No.	11		
	TOTAL GROUND FLOOR C/F TO COLLECTION SUMMARY PAGE				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<u>SCHEDULE 2:</u>				
	<u>FIRST FLOOR</u>				
	<u>Supply Install, Test and Commission Following:-</u>				
	<u>LIGHTING POINTS</u>				
10.2.1	Lighting points wired in 3x4.5mm ² PVC/SC copper cables drawn in concealed 20mm diameter heavy gauge PVC conduit including all boxes, saddles and accessories for				
	i)One way switching	No.	81		
	ii)Two Way switching	No.	25		
10.2.2	10A plastic switch plates as follows				
	i)One gang one way	No.	21		
	ii)One gang two way	No.	3		
	iii)Two gang two way	No.	1		
	iv)Three gang two way	No.	1		
10.2.3	<u>LIGHTING FITTINGS</u>				
	Light fittings complete with all the necessary fixing accessories and rated energy lamps as follows:-				
	i) Exit Light	No.	6		
	ii) Type 600X600	No.	30		
	iii)Type 2	No.	19		
	iv) Type 2D	No.	7		
	v) Type 4	No.	1		
	vi) Type N	No.	39		
10.2.4	Motion Sensors for lighting in washrooms	No.	12		
	<u>POWER OUTLETS</u>				
10.2.5	Socket outlet point in Ring wiring of 3x2.5 mm ² PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No.	60		
10.2.6	13A Twin switched moduled socket outlet plate	No.	60		
10.2.7	20A Double Pole outlet point comprising of wiring in 3x4.0 mm ² PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No.	8		
10.2.8	20A Double pole switch complete with neon light		8		
	<u>KITCHENETTE</u>				
10.2.9	Cooker point comprising wiring in 3x6.0mm ² PVC SC Cu cables drawn inside trunking	No.	1		
10.2.10	45A Cooker Control Unit incorporating a 13A switched socket outlet and neon indicator	No.	1		
10.2.11	Cooker connector	No.	1		
	<u>ELECTRICAL SWEEP FANS</u>				
10.2.12	Ceiling fan points wired in 3x2.5mm ² PVC/SC copper cables drawn in concealed 20mm diameter heavy gauge PVC conduit including all boxes, saddles and all accessories	No.	12		
10.2.13	49W 1400mm 3-arm 5- speed, Ceiling fan complete with the regulator	No.	12		
	TOTAL C/F TO NEXT PAGE				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
10.2.14	Ceiling fan hook (M-10) complete with rawl bolt.	No.	12		
	<u>FIRE DETECTION AND ALARM SYSTEM</u>				
10.2.15	Fire alarm panel/Fire alarm bell/Break glass Unit Points/Smoke detector points comprising iring in 3x1.5mm ² fire risistant cables concealed in PVC conduits concealed in ceiling space but excluding bell and break glass unit	No.	18		
10.2.16	Addressable Call point	No.	3		
10.2.17	Addressable Sounder complete with beacon	No.	3		
10.2.18	Addressable Smoke detectors complete with base	No.	11		
10.2.19	Addressable Heat detectors complete with base	No.	1		
	<u>TELEVISION, CCTV AND DATA WORKS</u>				
10.2.20	16 SWG,(450 x 300 x 100)mm ³ flush mounted galvanised powder coated draw box for telephone & data works	4	No		
10.2.21	Telephone/Data outlet point comprising of concealed 20mm diameter HG PVC conduits plus draw wire	22	No		
10.2.22	RJ45, Data outlet plate				
	a) Single	4	No		
	b) Double	16	No		
10.2.23	TV outlet point comprising of 75Ω aerial cable (Co-axial) drawn in 25mm Ø full length heavy gauge plastic conduits cast in floor slab and concealed in the walls but without the outlet plate running from the TV point to the MATV on the roof	2	NO		
10.2.24	Single TV face plate	2	NO		
	<u>DISTRIBUTION BOARDS</u>				
10.2.25	8-Way TP/N distribution board flush mounted complete 1No. 125A TPN integral isolator.	No.	1		
10.2.26	MCBs for the boards above				
	i)16A SP	No.	6		
	ii)20ASP	No.	11		
	iii)32ASP	No.	3		
	iv)45A SP	No.	1		
	v)Blanking Plates	No.	3		
10.2.27	<u>SUB-MAINS CABLES</u>				
	4 core 25mm ² PVCC/SWA/PVC (armoured) + 1X16mm ² single Core copper cables drawn inside HG conduits	LM	105		
10.2.28	Cable glands for the above cable	No.	4		
10.2.29	Cable lugs for the above cable complete with hydraulic crimping	No.	20		
10.2.30	Powder Coated Electrical Pedestal Socket Box with provision for 4No. Standard Twim sockets and 4 No. Standard Single Sockets	No.	8		
	TOTAL FOR FIRST FLOOR C/F TO SUMMARY PAGE				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
10.3.1	<p><u>SCHEDULE 5 MAIN POWER DISTRIBUTION</u></p> <p>Free-standing purpose made front access sub main switchboard, modular, metal clad, manufactured in 12 SWG galvanised mild steel sheet and finished in cream (or appropriate colour) powder coating as shown on the schematic. The switchboard should consist of a PLC section. The switchboard to be complete with the following:-</p> <p>i) Digital multimeter with CTs and fuse protection capable of measuring voltage in the range 0 – 1000V, 3-phase, current in the range 0-630A, 3-phase, and all power system parameters (KW, KVA, KWHr, KVARs, Frequency, P.F., harmonics and all the parameters). The multimeter should be complete with selector switches for viewing/displaying the various parameters.</p> <p>ii) Set of neon phase presence indicator lamps</p> <p>iii) 150A adjustable TPN MCCB main incomer and having a short-circuit breaking capacity of 100KA at 415Vac, 50Hz.</p> <p>iv) 4 No. 150A TPN copper bus bars</p> <p>v) 3 No. 100A 3 P TPN MCCBs</p> <p>vi) 1 No. 63A SPN MCBs</p> <p>vii) 2 No. 32A TPN MCBs</p> <p>viii) Sufficient spare capacity for future development all fitted with 2 No. 63A SP MCBs & 2 No. 100A TP MCCB</p> <p>x) Sealable studs for all cover plate screws and all necessary accessories</p> <p>xi) 6mm perspex viewing window</p> <p>xii) Heavy duty rubber lining for all the perspex viewing windows</p> <p>xiii) 415V three-phase surge diverter, wired as shown, complete with enclosure with viewing window.</p> <p>xiv) 30 KVAR's automatic Power Factor Correction Capacitor Bank comprising the following:-</p> <p>a) 1 No 10 KVAR's 415 V,50Hz, 3-Phase</p> <p>b) 4 No 5 KVAR's 415 V,50Hz, 3-Phase</p> <p>c) 5 No Special contactors for capacitor switching</p> <p>d) 5 No Fuse bases and fuses for each capacitor protection</p> <p>e) 5 No Step indicator lamps</p> <p>f) 5 No Control circuit protection fuse/fuse holder</p> <p>g) 1 No. 5-Step automatic control regulator for maintaining power factor at the set level and regulating the switching of capacitor steps</p> <p>h) 1 No 150/5A Current transformer (to be mounted after the mains incoming circuit breaker)</p> <p><i>The bank to be made from low-loss bio-degradable capacitive units, complete with earthed enclosure. All the contactors, controls and indicator lamps, including a digital read-out screen, to be included.</i></p> <p>xv) Allow for Fireman's switch connection as indicated in the schematic drawing</p>	Item	1		
	TOTAL C/F TO NEXT PAGE				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
	xvi) Comprehensive protective multiple earthing of the board in 1500mm long 12mm diameter pure electrolytic copper earth rod deep driven to permanent moisture level, copper clamp. 120mm ² green earth lead complete with all accessories. (Note: Use parallel rods if effective earthing cannot be achieved with 1 No. rod).				
10.3.2	50mm ² PVC/SWA/PVC 4C armoured copper cable laid in ducts in trench from KPLC Meter to main low voltage board complete with glands and lugs	LM	100		
	UNDERGROUND CABLE DUCTING				
10.3.3	Allow for 300mm deep trenching and back filling for the cable mentioned before, Telecommunication and street lighting.	Lm	365		
10.3.4	Ducting for the above in 150mm HGPVC Pipes complete with haunching	Lm	365		
10.3.5	Allow for cable markers in concrete tiles marked "HATARI" for the item above	No.	36		
	<u>WATER PUMPS PROVISIONS</u>				
10.3.6	3 core 6mm ² PVC/SWA/PVC (armoured) copper cables drawn inside 32mm diameter HG conduits	Lm	60		
10.3.7	32A Single phase Isolator complete with 3 pin industrial socket and plug	No.	2		
	<u>BIO- DIGETSTER PROVISIONS</u>				
10.3.8	4 core 25mm ² PVC/SWA/PVC (armoured) copper cables drawn inside 32mm diameter HG conduits	Lm	50		
10.3.9	Cable glands for the above cable	No.	2		
10.3.10	Cable lugs for the above cable complete with hydraulic crimping	No.	10		
10.3.11	8-Way TP/N distribution board flush mounted complete 1No. 100A TPN integral isolator.	No.	1		
10.3.12	MCBs for the boards above				
	i)16A SP	No.	1		
10.3.13	ii)20ASP	No.	3		
	iii)32ASP	No.	5		
10.3.14	iv)32A TP	No.	4		
	v)Blanking Plates	No.	3		
10.3.15	Single phase isolator point comprising of wiring in 3x6.0 mm ² PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No.	5		
10.3.16	Three phase isolator point comprising of wiring in 5x6.0 mm ² PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No.	4		
10.3.17	32A Single phase Isolator complete with 3 pin industrial socket and plug	No.	5		
10.3.18	32A Three phase Isolator complete with 3 pin industrial socket and plug	No.	4		
10.3.19	150 x 100mm 12 gauge galvanised steel perforated cable tray for support of the cables.	Lm,	250		
10.3.20	Build 600 x 600 x 600mm deep power/communications manhole complete with internal plaster and heavy duty EAFW steel cover.	No.	20		
	TOTAL FOR POWER DISTRIBUTION C/F TO SUMMARY PAGE				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<u>SCHEDULE 4: 80KW SOLAR SYSTEM</u>				
10.4.1	72- cell 575W Monocrystalline Solar Modules, Efficiency 80%,Cell Specific Safety - Class II, Application Class A, Life time - 25Years, Guarantee - 10Years Rated Current (Im) 8.8A Rated voltage (Vm) 17.5v, Cell Efficiency - 15.0%	No.	160		
10.4.2	25KWh Lithium Battery Pack Smart Stirng Energy Storage System (ESS) including a smart Rack Controller. Max Charging & Discharge power: 25kW, IP65, Class A EMC Protection Rating, Type II DC Lightning Protection. Smart Rack efficiency: +98.5%,	No.	1		
10.4.3	Smart Power Control System, 80kW DC/AC hybrid Power inverter full protection function:over-voltage, over-frequency, over-current, over-temperature, AC short-circuit automatic protection, Rated Output power 40kW MPPT efficiency of upto 99.5% Pure Sinewave output	No.	1		
10.4.4	Solar MPPT charge controller with the following characteristics; PV open circuit voltage 500V, Max PV power 80kW, PV rated current 100A, MPPT input voltage 100-150vdc LCD display: Solar panel current, Solar panel voltage, Solar panel power, Battery group voltage,charge & current Protection function against solar reverse charge, solar reverse connection, battery reverse connection, battery overcharge , battery overcurrent	No.	1		
10.4.5	80 kW DC Isolators as ABB or schneider or an approved equivalent	No.	1		
10.4.6	100A TPN AC isolator as ABB or schneider or an approved equivalent	No.	1		
10.4.7	Irradiance sensor (Pyranometer) with Modbus RTU output as Huawei FusionSolar or an approved equivalent	No.	1		
10.4.8	Aluminium mounting frames, brackets and all accessories required to mount the P.V modules as per the specifications	No.	160		
10.4.9	Solar surge protection device rated for 300VDC or to the Engineers approval	No.	1		
10.4.10	List any other item necessary to complete the installation of the 40KW grid- tied solar system <i>Contractor to note that the inverter and batteries together with their associate works should be housed in a container. Rates included should include the container housing</i>	Lot			
	TOTAL FOR HYBRID SOLAR POWER C/F TO SUMMARY PAGE				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY

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**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<u>SCHEDULE 6</u>				
	<u>LIGHTNING PROTECTION</u>				
	Air Termination				
10.6.1	15mm diameter multiple point copper air terminal complete with base	No.	3		
10.6.2	Copper junction clamps for tape.	No.	3		
10.6.3	25 x 3mm turned copper tape	Lm	60		
10.6.4	Copper ridge saddle	No.	10		
10.6.5	D.C. tape clip	No.	27		
	Down Conductors				
10.6.6	25 x 3mm turned copper tape	Lm	30		
10.6.7	D.C. tape clip	No.	15		
10.6.8	Oblong test/junction clamp	No.	3		
10.6.9	Diameter 38mm HG PVC conduits for the down conductors above.	Lm	30		
	Earth Termination				
10.6.10	15mm diameter, 1200mm long solid copper earth rod, complete with driving stud and spike.	No.	3		
10.6.11	Earth rod-to-tape clamp type A.	No.	3		
10.6.12	Concrete inspection earth pit with 5 hole earth bar	No.	3		
10.6.13	1500mm x 1500mm copper earth mat made from 25mm x 3mm copper tape at 300mm spacing, buried at permanent moisture level and complete with all clamps, welding joints and 6m long 25mm x 3mm insulated copper tape clamped to the down conductors.	No.	3		
10.6.14	Soil treatment around the earth pits with marconite to achieve the required conductivity and obtain acceptable reading	Item	1		
10.6.15	Bonding and clamping to all metal work including water pipes, gas pipes, hand-rails, air-conditioning units, window frames, cladding, metal roof etc. and the main earth for the building.	Item	1		
	TOTAL FOR LIGHTNING ARRESTORS C/F TO SUMMARY PAGE				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<u>ELEMENT 10.7</u> <u>Supply, install, test, commission and set to work (To the full satisfaction of all parties to the contract) the following: -</u>				
	<u>CCTV</u>				
10.7.1	Dome Camera 4MP resolution, Excellent low light performance, Efficient H.265+ compression technology, IP67, 24/7 colourful imaging	No.	21		
10.7.2	Ditto but Bullet Cameras	No.	4		
10.7.3	Network Video Recording System base to be mounted in a 42U data Cabinet with the following features:- <ul style="list-style-type: none"> • Up to 32 channel IP cameras can be connected • Up to 576 Mbps high incoming bandwidth ensures IP cameras can be connected • 2 HDMI (different source) and 1 VGA interfaces16 HDD can be used for continuous video recording • 16 HDD can be used for continuous video recording • Supports some specialist cameras, including people counting camera/ANPR (automatic number plate recognition) camera/fisheye camera • Advanced streaming technology enables smooth live view in poor network conditions • Supports RAID 0, 1, 5, 6, 10 and N+1 hot spare for even more reliable data storage, effectively avoids data loss risks 	No.	1		
10.7.4	24 Port layer 2 100Mbps POE SFP Switch with Min 30W Power availability per port	No.	3		
10.7.5	GBIC transceiver modules (LC to LC) multimode for the switches above	No.	3		
10.7.6	Fibre Patch Panels for Data cable termination	No.	3		
10.7.7	9 U 600X600 wall mounted data cabinet complete with all accessories including power supply points	No.	3		
10.7.8	10TB Surveillance Hard Disk Drive	No.	8		
10.7.9	STP Cat 6 structured cables	Boxes	10		
10.7.10	STP Cat. 6 patch cord, 3M for the Cameras.	No.	30		
10.7.11	UPT Cat. 6A patch cord, 1M	No.	21		
10.7.12	Associated Fiber and UTP (CAT 6) cabling between field devices and Main Switch	Item	1		
	TOTAL FOR CCTV CARRIED FORWARD TO SUMMARY PAGE				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	ELEMENT 10.8 <u>Supply, install, test, commission and set to work (To the full satisfaction of all parties to the contract) the following: -</u>				
	ICT <i>Horizontal Cabaling</i>				
10.8.1	CAT 6A cable for Data/Telephone outlets	300	Lm		
10.8.2	24 port CAT 6 Data Modular Patch Panel for 4-Pair UTP termination	4	No.		
10.8.3	1M Factory terminated Cat 6 4 pair-SFTP RJ 45- RJ 45 patch cords to be used inside cabinet (includes 15No Spares)	83	No.		
10.8.4	3M Factory terminated Cat 6 4 pair-SFTP RJ 45- RJ 45 patch cords for data outlets (includes 15No Spares)	83	No.		
10.8.5	2U Cable managers/organisers	4	No.		
	ACTIVE EQUIPMENT				
10.8.7	24 Port layer 2 100Mbps POE SFP Switch with Min 30W Power availability per port	4	No.		
	BACKBONE CABLING				
10.8.8	24 Port ST Multimode, sliding Fibre Optic patch panel complete with LC type connectors for Multimode fibre	2	No.		
10.8.9	1M Factory Terminated Fibre optic patch cords complete with LC-LC TYPE connectors to be used inside cabinet	20	No.		
10.8.10	8 core Loose tube multimode fibre optic cable linking floor edge switches to core switch in the Server room	400	LM		
10.8.11	RJ45-ST media converters for each edge switch	4	No.		
	SERVER				
10.8.12	42U Server rack cabinet, black complete with mounting angles and rails in Server Room as described in the particular specification of this tender document	1	No.		
10.8.13	24 port Core network switch for routing voice	1	No.		
10.8.14	24 port Core network switch equivalent for routing data	1	No.		
10.8.15	Router	1	No.		
10.8.16	2U Cable managers/organisers	4	No.		
10.8.17	Wireless Access point	4	No.		
	TOTAL C/F TO NEXT PAGE				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
	TELEPHONY				
10.8.18	Hybrid IP-PABX capable of handling 50 extensions to include GSM modules plus all accessories to work	1	No.		
10.8.19	Standard UC Phone complete with all accessories	15	No.		
10.8.20	Executive UC Phone complete with all accessories	3	No.		
10.8.21	Operator Phones complete with all accessories. Each takes up to 16 concurrent lines	4	No.		
10.8.22	Voice Gateways with 2 x E1 Cards each and 1 x 4 Port FXO Cards. These can host total of 136 ISDN + CO Lines	1			
10.8.23	Any other items necessary to complete the system installation satisfactorily. (List, give quantities and price of the items) i)..... ii)..... ii)..... iv).....				
	TOTAL FOR ICT ARRIED FORWARD TO SUMMARY PAGE				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<u>SCHEDULE 9</u>				
	<u>GENERAL ITEMS</u>				
10.9.1	Carry out comprehensive 24-hour power analysis, after installing main switchboard, but before switching on load with a digital power meter (with printer) to: i) Record and print all the power system parameters. ii) Submit 3 copies of the print-outs. <i>(Note: Parameters must be satisfactory before building is switched on).</i>	Item			
10.9.2	Allow for presentation of all the required samples as per specifications, Bills of Quantities and Drawings.	Item			
10.9.3	Working/ Shop Drawings Prepare and submit three sets of record (shop) plan and isometric layout drawings to easily readable scale, A1 or AO paper size format as follows: i) general arrangement drawings of all mechanical services, equipment, plant etc ii) routes-types and sizes and arrangement of all pipeworks iii) any other details as per specifications Drawings are to be submitted in soft copy (CAD) and hard copy to the client, the architect and the engineer. The soft copies to be stored in SSD drive. Allow for preparation and submitting draft and three final copies of operation, instruction and maintainance manuals to Engineers approvals.	Item			
10.9.4	As Installed Drawings As above but for as built/ installed drawings	Item			
10.9.5	Prepare and submit Maintenance Manuals for all items installed.				
10.9.6	All other items of general preliminary to cover, but not limited to:- i)Attendance on all other sub-contractors, such as for Communication Services, Mechanical Installations, Security Installations, Sound Equipment/ Wiring Installations, Generator Installations, Lift Services, Solar Water Heating, V-Sat services etc. ii)Hiring and keeping a Supervisor/Foreman on site iii)Constant supervision of the works. iv)Provision of all the required spares. v)Testing and Inspection of materials/works. vi)Provision of labour camps. vii)Storage of materials. viii)Initial maintenance (During Defects Liability) ix)Providing water/electricity for the works. x)Protection of the works/materials xi)Clearing away on completion. xii)Preparing Final Account. xiii)Providing all Test Certificates, etc. Provisional Sum for Contribution to KPLC for power upgrade	Item			
	TOTAL C/F TO NEXT PAGE				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
10.9.7	<p>Allow for sub-contractors charges for liaison with Kenya Power and Lighting comprising the following:-</p> <p>i)Extracting load details from the drawings</p> <p>ii)Calculating total load, together with necessary diversity</p> <p>iii)Verifying the details with the engineer.</p> <p>iv)If need be getting the required documentation and letters from client for the purposes of Additional Load Applications</p> <p>v)Filling all the required forms, and generating correspondences for power application.</p> <p>vi)Presenting application and getting reference number.</p> <p>vii)Making regular follow-ups with Kenya Power</p> <p>viii)Facilitating inspection, approvals and certification by Kenya Power</p> <p>ix)Providing attendance and materials required for power connection.</p> <p>x)Filling out and submitting Commencement and Completion certificates</p> <p>xi)Handing over all approved drawings and certificates to the client.</p> <p>xii)Performing all other services required for power supply to site.</p> <p>xiii)Building/modifying all power manholes to KPLC standards.</p> <p>xiv)All other incidental KPLC requirements/charges.</p>				
	TOTAL FOR GENERAL ITEMS C/F TO SUMMARY PAGE				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY

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MECHANICAL INSTALLATIONS

BILL NO. 11

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<p><i>(All Rates are V.A.T Inclusive)</i></p> <p><u>BILL NO. 11; MECHANICAL WORKS</u></p> <p><u>ELEMENT NO. 11.1 (INTERNAL PLUMBING):</u></p> <p><i>Supply, deliver and install pipes, tubing and fittings as described and shown on the drawings. The pipes shall be PN 25PPR pipes where exposed to adverse weather conditions and all conforming to the current European standards for PPR installations and to the Engineers Approval. Pipe jointing shall be by polyfusion or use electric coupling, Rates must allow for all metal/plastic threaded adaptors where required for the connection of sanitary fixtures, valves, sockets, sliding and fixed joints support raceways, isolating sheaths, elastic materials, expansion arms and bends cross overs, couplings, clippings, connectors, joints etc. as required in the running legths of pipe work and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system. The pipes will be pressure tested before the plastering of wall commences and as per the manufactures recommended testing pressures</i></p> <p><u>PPR Pipes</u></p> <p>11.1.1 20mm diameter pipework in wall chase LM 30</p> <p>11.1.2 25mm Ditto LM 140</p> <p>11.1.3 32mm ditto LM 70</p> <p>11.1.4 40mm ditto LM 60</p> <p>11.1.5 50mm ditto LM 80</p> <p>11.1.6 63mm ditto LM 100</p> <p><u>Sockets;</u></p> <p>11.1.7 20mm diameter socket No. 5</p> <p>11.1.8 25mm ditto No. 30</p> <p>11.1.9 32mm ditto No. 20</p> <p>11.1.10 40mm ditto No. 50</p> <p>11.1.11 50mm ditto No. 30</p> <p>11.1.12 63mm ditto No. 20</p> <p><u>Bends</u></p> <p>11.1.13 20mm diameter bends No. 40</p> <p>11.1.14 25mm ditto No. 20</p> <p>11.1.15 32mm ditto No. 15</p> <p>11.1.16 40mm ditto No. 10</p> <p>11.1.17 50mm ditto No. 5</p> <p>11.1.18 63mm ditto No. 3</p>				
	TOTAL CARRIED TO NEXT PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
	<u>Tees</u>				
11.1.19	20mm diameter equal tees	No.	25		
11.1.20	25mm ditto	No.	41		
11.1.21	32mm ditto	No.	15		
11.1.22	40mm ditto	No.	10		
11.1.23	50mm ditto	No.	5		
11.1.24	63mm ditto	No.	3		
	<u>Reducers</u>				
11.1.25	25 x 20mm diameter Reducer	No.	18		
11.1.26	32 x 25mm ditto	No.	2		
11.1.27	40 x 32mm ditto	No.	2		
11.1.28	40 x 25mm ditto	No.	2		
11.1.29	50 x 32mm ditto	No.	2		
11.1.30	63 x 40mm ditto	No.	2		
	<u>Threaded Fittings</u>				
11.1.19	20mm diameter male/female threaded 90° bend/Elbow	No.	150		
11.1.20	25mm diameter mle/female PPR-M Adapter	No.	30		
11.1.21	32mm ditto	LM	36		
	<u>Nipples</u>				
11.1.22	20mm diameter G.I. nipple	No	4		
11.1.23	25mm ditto	No.	36		
	<u>Valves</u>				
11.1.24	20mm diameter approved medium pressure screw down full way non-rising stem wedge gate valve to BS 5154 PN 20 for series B rating, with wheel and hand jopints to steel tubing and complete with round male threaded transion fittings.	No.	2		
11.1.25	25mm ditto	LM	6		
11.1.26	32mm ditto	LM	6		
11.1.27	40mm ditto	LM	4		
11.1.28	50mm ditto	LM	4		
11.1.29	63mm ditto	LM	10		
	TOTAL INTERNAL PLUMBING CARRIED FORWARD TO MECHANICAL WORKS SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<p><u>ELEMENT NO. 11.2:</u></p> <p><u>SANITARY FITTINGS:</u></p> <p>Supply,deliver,install,test and commission the following sanitary appliances complete with all the accessories including all connections to the services,waste,joining to water supply,overflows,supports and all plugging and screwing to walls and floors.</p> <p><u>Note.</u></p> <p>(i). All sanitary fittings shall be in approved colour.</p> <p>(ii). The model and Ref. No. Indicated is only a guide to the type and quality of fittings.</p> <p>(iii). Equivalent and Approved models may be acceptable</p> <p><u>Flexible Tubing</u></p> <p>15mm diameter x 300mm long flexible connectors complete with Integral chrome plated angle valve for connecting the Sanitary fitting to water supply.</p> <p><u>Robe Hook</u></p> <p>Robe hook in approved viterous mounted to concealed screw to wall wedges.</p> <p><u>Close Couple Water Closet Suite</u></p> <p>Close Couple water closet suite in approved colour comprising of W.C. bowl,'p'or's' trap connector,heavy duty matching plastic seat and cover with metal top fixed to (crome plated) hinges and secured to floor or wall and complete with horizontal outlet to BS 3402 with 9 litre valveless Ceramic cistern and fittings including siphon,15mm diameter side inlet ball valves,20mm diameter side overflow,plastic flush bend,inlet connection,and chrome-plated lever.</p> <p><u>Counter top wash hand basin</u></p> <p>Wash Hand Basin 470mm by 470mm by 170mm counter top with one tap hole and chain stay hole,32 mm diameter chrome-plated pop up chain waste and fittings, approved first quality plastic bottle trap(32mm bottle trap) with 75mm seal.The basin to be supplied and installed complete with 15mm diameter heavy duty chrome plated -Brass Basin Tap</p> <p><u>Urinal Set</u></p> <p>Urinal system comprising of approved 2No. Ceramic urinal bowls and 3 No. division complete with domed waste fitting, concealed Push Button-Type Brass Urinal Flush Valve for 1/2" and any otheraccessories for proper functioning of the set</p> <p><u>Toilet Roll Holder</u></p> <p>9" Jumbo tissue dispenser in approved Plastic in approved colour.</p>				
11.2.1	15mm diameter x 300mm long flexible connectors complete with Integral chrome plated angle valve for connecting the Sanitary fitting to water supply.	No.	60		
11.2.2	Robe hook in approved viterous mounted to concealed screw to wall wedges.	No.	12		
11.2.3	Close Couple water closet suite in approved colour comprising of W.C. bowl,'p'or's' trap connector,heavy duty matching plastic seat and cover with metal top fixed to (crome plated) hinges and secured to floor or wall and complete with horizontal outlet to BS 3402 with 9 litre valveless Ceramic cistern and fittings including siphon,15mm diameter side inlet ball valves,20mm diameter side overflow,plastic flush bend,inlet connection,and chrome-plated lever.	No	14		
11.2.4	Wash Hand Basin 470mm by 470mm by 170mm counter top with one tap hole and chain stay hole,32 mm diameter chrome-plated pop up chain waste and fittings, approved first quality plastic bottle trap(32mm bottle trap) with 75mm seal.The basin to be supplied and installed complete with 15mm diameter heavy duty chrome plated -Brass Basin Tap	No	12		
11.2.5	Urinal system comprising of approved 2No. Ceramic urinal bowls and 3 No. division complete with domed waste fitting, concealed Push Button-Type Brass Urinal Flush Valve for 1/2" and any otheraccessories for proper functioning of the set	SET	2		
11.2.6	9" Jumbo tissue dispenser in approved Plastic in approved colour.	No.	26		
	TOTAL CARRIED TO NEXT PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
11.2.4	<u>Mirrors</u> 610 X 610 X 6mm thick polished plate silver backed with beveled edges mirror fixed with clear silicon to 100 x 25mm thick wrot mahogany molded framing in 4 labors plugged to wall using 4No. Wall plugs with 75mm long stainless steel screws, painted in three coats polyurethane varnish all to approval	No	9		
11.2.5	As above but 1200mmX600mmX25mm	No.	4		
11.2.6	<u>Shower Fittings</u> Concealed shower fitting consisting of 25mm diameter x 2500mm long PPR riser pipe for showers, 25mm diameter chrome plated brass cold water swivel/adjustable shower rose, Carina handle and Stop Cock	No.	2		
11.2.7	<u>Soap Dispenser</u> Wall mounted soap dispenser with a capacity of about 1.5 Litre and having a press action soap release mechanism complete with fixing screws. including allowing for initial soap supply. The soap dispenser shall be size 125x100x290mm high.	No	13		
11.2.8	<u>Bib Tap</u> 15mm diameter heavy duty bib tap or other equal and to approved catalogue	No	5		
11.2.9	<u>Soap dish</u> Semi recessed built in soap dish in approved vitreous of size 150x150mm in approved colour.	No.	15		
11.2.10	<u>Towel Rail</u> Chrome plated 20mm diameter x 800mm long approved towel rail and brackets as one piece, plugged and screwed into the wall.	No	2		
11.2.11	<u>Single bowl, single drainer kitchen sink</u> 16SWG Double Bowl, single Drainer, stainless steel (Grade 316) kitchen sink suitable for mounting on counter of size 1200x600mm. The bowl size to be 450x420x 300mm deep complete with chrome plated 40mm diameter waste fittings, plugs, chain stays, overflow including 1No. 15mm diameter heavy duty wall mount stainless steel bib tap.	No.	2		
	TOTAL CARRIED TO NEXT PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
	<u>Disabled persons Water Closet and Wash Hand Basin Facility</u>				
	Wheel chair accessible W.C facility Comprising of the following:-				
	(i)Close coupled W.C with 7.5 litre cistern with bottom inlet and overflow.The bowl shall e of size 375 x 560 x 420mm high.The bowl and cistern shall be manufactured from approved viterous complying with B.S 3402.The unit shall be complete with valveless cistern fitting including syphon,15mm side inlet ball valve,20mm diameter side overflow,plastic flush bend,inlet connector and reversible metallic chrome plated cistern lever.There shall also be a heavy duty seat(25mm high) and cover with chrome plated metal hinges,toilet roll holder,900 x 450 x 6mm thick mirror and Robe hook				
11.2.13	(ii)Semi-recessed wall mounted W.H.B of size 600 x 500 x 545mm high with flexible connectors to water taps.The basin shall be manufactured from approved vitreous complying with B.S 3402.It shall have one L/H tap hole with 15mm chrome plated lever action pillar tap,chrome plated waste,first quality bottle trap,pedestal and wall fixing bolts.	SET	4		
	(iii)Hinged support rail with toilet roll holder 770mm long manufactured in nylon coated aluminium and mounted on a wall fixing plate size 230x100mm,4No. 600mm grab rails with covered wall plates.The Disabled set shall be wheelchair accessible W.C facility.				
	<u>Hand Drier</u>				
	Automatic Hand Drier in approved colour operating on infra-red automatic sensing system with heating element,safety cut-out comlete with a 30-seconds safety timer,plastic rawl plugs and fixing screws.The hand drier to have a heating capacity of 3.1Kw and performance flow rate of 3.82 Litres/Min and to be of size270x264x143mm deep.It shall have anoise level of below72.5dBA at 1.5m.	No	12		
11.2.13	Arabic Shattaf Bidet spray c/w tube and head and fixing to wall.	NO	16		
	TOTAL SANITARY FITTINGS CARRIED FORWARD TO MECHANICAL WORKS SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<p><u>ELEMENT NO. 11.3:</u></p> <p><u>FOUL DRAINAGE:</u></p> <p>Supply,deliver and install the following UpVC,MUpVC,soil and waste systems,respectively to B.S 5255 with fittings fixed Key Terrain High Grade Golden Brown and Grey UPVC soil and waste pipe and jointing in accordance with manufacture's printed instructions and manufactured by reputable manufacturers.Tenderers must allow in their pipework prices for all the couplings,clippingsconnectors,joints,e.t.c as required in the running lengths of pipework and also where necessary,for pipe fixing clips,holder bats plugged and screwed for the proper and satisfactory functioning of the system</p> <p><u>Internal</u></p> <p>11.3.1 40mm diameter Grey UPVC waste pipe in wall chase. LM 20</p> <p>11.3.2 50mm ditto LM 40</p> <p>11.3.3 40mm ditto but boxed in concrete floor slab LM 20</p> <p>11.3.4 50mm ditto LM 70</p> <p><u>Extra Ovetubing For:-</u></p> <p>11.3.5 100x50mm diameter UPVC floor trap,grating and cover No 33</p> <p>11.3.6 100mm WC connector No 16</p> <p>11.3.7 40mm diameter access tee and cap No 13</p> <p>11.3.8 50mm ditto No 19</p> <p>11.3.9 100mm diameter inspection bend and acces cap. No 16</p> <p><u>Extra Ovetubing For Cont'd:-</u></p> <p>11.3.10 100mm diameter vent cowl No 6</p> <p>11.3.11 100mm diameter medium duty UPVC gulley trap,grating cover and waste NO 8</p> <p><u>External</u></p> <p>11.3.12 100mm diameter Grey UPVC soil vent pipe with expansion coupling and fixing to wall with holder bats ducts LM 24</p> <p>11.3.13 150mm diameter Golden Brown UPVC waste pipe in soil LM 120</p>				
	TOTAL FOUL DRAINAGE CARRIED FORWARD TO MECHANICAL WORKS SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<p><u>ELEMENT NO. 11.5:</u></p> <p><u>BUILDER'S WORK IN CONNECTION WITH PLUMBING AND DRAINAGE:</u></p> <p><u>Masonry Gulley Trap</u></p> <p>Construct masonry gulley trap size 200x200mm, approx depth 300mm, complete with seal and concrete cover, including all disposal</p> <p><u>Manholes and Covers</u></p> <p>Construct Manholes size 600 x 450mm and averaging 750mm deep constructed in 100mm thick concrete base class 15/20, approved 150mm block sides rendered all around in cement and sand (1:4).It shall have an approved heavy duty Fibre Reinforced Plastic cover and frame ,Including all necessary excavations, disposal and form work.</p> <p><u>Excavations</u></p> <p>Excavate trench in soil/murram for Water Mains supply pipes not exceeding 1200mm deep ,lay pipe,part return in fill, ram and surplus cart away</p> <p><u>Chasing</u></p> <p>Form chase in both 100mm and 200mm thick coral block wall to receive necessary pipe work and make good disturbed areas</p> <p><u>Holes</u></p> <p>Make a hole through 100mm thick coral block wall for small pipe and make good disturbed areas</p> <p>Ditto but 200mm thick and for large</p>	No.	7		
11.5.1		No.	7		
11.5.2		No.	16		
11.5.3		LM	120		
11.5.4		LM	300		
11.5.1		No.	16		
11.6.1		No.	12		
	TOTAL BUILDERS WORK CARRIED FORWARD TO MECHANICAL WORKS SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<u>ELEMENT NO. 11.7:</u>				
	<u>WATER RETICULATION</u>				
	<u>Roof Top Water Tanks</u>				
11.7.1	Supply, deliver and install vertical close end plastic moulded tank of capacity 1,000 litres and. The tank to be assembled complete with cover and having screwed connections fo inlet, outlet, overflow, 32mm high pressure ball valve, drain pipes and any other item necessary for its proper functioning.. The tank shall be installed on a flat roof base	No.	3		
	<u>Excavations</u>				
11.7.2	Excavate trench in soil/murram for Water Mains supply pipe not exceeding 1200mm deep ,lay pipe,part return in,fill ram and surplus cart away	LM	150		
	<u>Pipe Work</u>				
11.7.3	100mm diameter PN 16 HDPE pump suction lines	LM	30		
11.7.4	100mm diameter Ditto but Delivery line	LM	70		
11.7.5	63mm diameter Ditto but Delivery line	LM	80		
11.7.6	32mm diameter (PN-20) PPR Pipe laid and jointed in trench from water mains	LM	12		
11.7.7	40mm ditto	LM	8		
	<u>Extra Overtubing for:</u>				
	<u>Sockets:</u>				
11.7.8	32mm diameter PPR Sockets	No.	8		
11.7.9	40mm ditto	LM	20		
	<u>Bends</u>				
11.7.10	40mm diameter bend/Elbow	No.	8		
	<u>Tees</u>				
11.7.11	40mm diameter (PN-20) PPR equal tee	No.	4		
	<u>Valves</u>				
11.7.12	32mm diameter supply mains full way approved gate valve	No.	4		
11.7.13	40mm ditto	No.	8		
	<u>Water Connection to Supply mains & Testing</u>				
11.7.14	50mm diameter G.I. equal tee	No	1		
11.7.15	50x40mm diameter G.I. reducer	No	1		
	TOTAL CARRIED TO NEXT PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
11.7.16	40mm diameter G.I. nipple	No	2		
11.7.17	50mm diameter PPR Adaptor	No	1		
11.7.18	40mm diameter full Way approved gate valve	No	1		
	<u>Meter Connection</u>				
11.7.19	Allow for 25mm diameter approved Meter Connection from the Local Water Authority including paying for all the necessary charges,if any	ITEM	1		
	<u>Stand Pipe</u>				
11.7.20	15mm diameter bib tap suitable for connecting to a hose pipe complete with threaded adaptors.The tap to be complete with 5-metre long 20mm diameter pipe,bends,e.t.c.The chrome plated bib tap to be approved by the engineer	ITEM	8		
	<u>Mains Valve Chamber</u>				
11.7.21	Construct Mains Valve Chamber size 600x600x500mm deep with 100mm thick concrete block rendered all round in cement and sand mortar (1:4) including hinged iron cover amd frame in grease	ITEM	1		
	<u>Booster Pump Sets</u>				
11.7.22	Booster Pump Sets (2No) for Roof Top water Tanks mounted on a common Galvanized Steel base Frame and to approval,each set comprising of, One pump duty, One pump stand by, and each of capacity 5m ³ /hr against a Maximum Head of 15metres. Each pump set shall be complete with control panel, MCBs, Pressure and Float switches, Overload protection, ON/OFF Buttons, Indicator Lights, Non -Return and Gate valves and a Pressure Vessel of Approx Capacity 60Litres including all other accessories for proper fuctioning. The pumps shall be connected in that when the Running Duty pump fails the Standby Pump starts up automatically.	ITEM	1		
	<u>Testing</u>				
11.7.23	Allow for connecting the above earlier described Booster pumps to the pump delivery and suction lines, including Test Pumping and testing the whole of the water Reticulation system both during progress and at commissioning to the Engineer's satisfaction and to leave the system in and good sound working condition.	ITEM	1		
	<u>Surface Mounted Water Storage Tanks</u>				
11.7.24	Supply, deliver and install vertical close end plastic moulded water storage tank of capacity 24,000 litres and (size 3220mm diameterx3400mm high). The tank to be assembled complete with cover and having screwed connections fo inlet, outlet, overflow, 32mm high pressure ball valve, drain pipes and any other item necessary for its proper functioning.. The tank shall be installed on a reinforced flat surface platform base approx. 900mm high (M/S).	ITEM	2		
	TOTAL CARRIED TO NEXT PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
	<u>Surface Mounted Water Storage Tanks For Fire Rain Water Collection & Raw Water Distribution</u>				
11.7.25	Supply, deliver and install vertical close end plastic moulded water storage tank of capacity 24,000 litres and (size 3220mm diameterx3400mm high) . The tank to be assembled complete with cover and having screwed connections fo inlet, outlet, overflow, 32mm high pressure ball valve, drain pipes and any other item necessary for its proper functioning.. The tank shall be installed on a reinforced flat surface platform base approx. 900mm high (M/S). R.O	ITEM	3		
11.7.26	<u>Tank Base</u> Allow for the construction of the above mentioned tank base Approx.size 3500mm diameter x 900mm high consisting of 200mm thick coral block wall,100mm thick well compacted hardcore filling,50mm thick blinding,Approved Damp proof membrane,A142 BRC Mesh,100mm thick vibrated class 20/20 concrete floor slab, 15mm thick screed on the general faces of the tank base in (1:3) cement/sand mortar, 600mm widex1500mm deep strip foundation,including all reinforcement, Excavations and disposal	ITEM	4		
11.7.27	<u>Testing</u> Allow for testing the general water supply and reticulation systems to level in sound working condition and to the Engineer's satisfaction	ITEM	1		
	TOTAL WATER RETICULATION CARRIED FORWARD TO MECHANICAL WORKS SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<u>ELEMENT NO.11.8:</u>				
	<u>FIRE FIGHTING AND PROTECTION SERVICES</u>				
	<u>Supply,deliver and install the following fire fighting equipment in positions indicated on the contract drawings or as shall be instructed by the Engineer.Tenderers during pricing should allow for all fittings,jointings,couplings,including unions and clamps,where necessary for the proper functioning of the installation.</u>				
	<u>Hose Reels.</u>				
11.8.1	20mm diameter x 30Metre long swinging type hose reel complete with delivery hose,nozzle,mild steel feed pipe,isolation valve,guide,bracket and all other accessories.	No.	4		
	<u>Hose Reel Fire Tank</u>				
11.8.2	Supply, deliever and install vertical close end plastic moulded tank of capacity 10,000 Litre (Size 1830 diameter x 2020mm high) .The tank to be assembled complete with cover and having screwed connections for inlet, outlet and overflow, 32mm medium pressure ball valve, drain pipes and any other necessary item for its proper functioning. The tank shall be mounted on a flat slab.	ITEM	1		
	<u>Pipework (G.I)</u>				
11.8.3	20mm diameter medium grade galvanized mild steel supply pipe	LM	12		
11.8.4	25mm ditto	LM	12		
11.8.5	32mm Ditto	LM	12		
11.8.6	40mm ditto	LM	42		
11.8.7	50mm Ditto	LM	80		
	<u>Sockets</u>				
11.8.8	25mm diameter (G.I)socket	No.	3		
11.8.9	32mm Ditto	No.	3		
11.8.10	40mm ditto	No.	8		
11.8.11	50mm Ditto	No.	18		
	<u>Unions</u>				
11.8.12	20mm diameter (G.I)union	No.	4		
	<u>Bends/Elbows</u>				
11.8.13	20mm diameter (G.I) bend	No.	8		
11.8.14	32mm Ditto	No.	2		
11.8.15	40mm Ditto	No.	1		
	<u>Tees</u>				
11.8.16	25mm diameter (G.I)equal tee	No.	2		
11.8.17	50mm Ditto	No.	1		
	TOTAL CARRIED TO NEXT PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
	<u>Reducers</u>				
11.8.18	25x20mm diameter G.I. Reducer	No.	2		
11.8.19	32x25mm ditto	No	2		
11.8.20	40x32mm ditto	No	2		
11.8.21	50x40mm ditto	No	2		
	<u>Nipples</u>				
11.8.22	20mm (G.I) nipple	No.	4		
	<u>Painting</u>				
11.8.23	Prepare prime and apply two coats of gloss oil paint - RED - on the general surfaces of the above described Hose Reel supply pipes	ITEM	1		
	<u>Hose Reel Booster Pump Set</u>				
11.8.24	Booster Pump Set for Hose Reels consisting of 2No. parallel duty pumps mounted on a common Mild Steel base Frame to approval,each of capacity 12m³/hr against a Maximum Head of 15(metres) . The pump set shall be complete with control panel, MCBs, Pressure and Float switches, Overload protection, ON/OFF Buttons, Indicator Lights, Non -Return and Gate valves and a Pressure Vessel of Approx Capacity 300Litres including all other accessories for proper fuctioning. The pumps shall be connected in that when the Running Duty pump fails the Standby Pump starts up automatically.	ITEM	1		
	<u>Testing</u>				
11.8.25	Allow for connecting the above earlier described Booster pumps to the pump delivery and suction lines, including Test Pumping and testing the whole of the water Reticulation system both during progress and at commissioning to the Engineer's satisfaction and to leave the system in good and sound working condition	ITEM	1		
	<u>Supply,deliver and install the following Portable Fire extinguishers to positions indicated on the conract drawings and as instructed by the Engineer:-</u>				
	<u>Dry Powder Fire Extinguisher</u>				
11.8.26	9Kg catridge type general purpose portable dry powder fire extingusher fully charged or equal and approved.	No.	4		
	<u>Carbon dioxide Gas Fire Extinguisher</u>				
11.8.27	5kg carbon dioxide gas portale fire extinguisher complete with pressure gauge,initial charge and mounting brackets	No.	4		
	<u>Water Carbon Dioxide Fire Extinguisher</u>				
11.8.28	9.0Litre Water carbon dioxide (WCo2) portable fire extinguisher complete wth pressure gauge,initial charge and mounting brackets.	No.	4		
	TOTAL CARRIED TO NEXT PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
11.8.29	<u>Signage</u> Allow for the Signage of fire hose Reel, fire exits and fire instructions all as described in the particular specifications and to the Project Engineer's Approval.	ITEM	4		
11.8.30	<u>Testing</u> Testing the whole fire fighting equipments to leave in sound working condition and to the Engineer's satisfaction	ITEM	1		
	TOTAL FIRE FIGHTING CARRIED FORWARD TO MECHANICAL WORKS SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<p><u>ELEMENT NO.11.9:</u> <u>ON-SITE WASTEWATER TREATMENT PLANT</u> <u>Preliminaries, Drawings, Manuals, Handovers,</u> <u>Training, Regulatory Matters, Operation &</u> <u>Maintenance</u></p> <p>Allow for Start-Up & Training Programme of Clients designated Site Operators & Maintenance Personnel. A start-up and operator training program enables the operator to learn about the treatment process and the equipment used in the process. Start-up involves pre-commissioning checks of the process mechanical and electrical equipment. After wet-testing procedures, maintenance and servicing requirements are given. When the process has been commissioned, operator training will take place so that the operator/s can learn operational monitoring, process cycle changes, and troubleshooting. Personnel to be full capable of regular and routine maintenance tasks and reporting.</p>				
11.9.1	Allow for Monthly Maintenance visits for period of Twelve (12) Months	1	SUM		
11.9.2	Allow to liaise with the NEMA authorities, assist client with submitting application and obtaining discharge licence for the Waste Water treatment Plant	1	SUM		
11.9.3	On completion of the Waste water treatment plant, take water samples as necessary to Certified Laboratory for testing. Submit tests and results to NEMA along with all necessary application forms and obtain NEMA approval and licence to operate the Waste Water treatment Plant	1	SUM		
11.9.4	Allow for any other item not necessarily mentioned here to provide a complete working system to the Satisfaction of the engineer	1	SUM		
11.9.5	<p><u>WASTE WATER TREATMENT SYSTEM</u> <u>Waste Water Treatment Plant</u></p> <p>Supply, Install, Test and Commission the Moving Bed Biofilm Reactor (MBBR) Waste Water Treatment System, With a capacity of treating 350PE with an average flow rate of 57,300 lts per day. With a BOD load of 40Kgs per day, Ammonia Nitrogen load of 4Kgs per day. With minimum treated discharge requirement of BOD <30mg/lit, TSS <30mg/lit, Ammonia Nitrogen <20mg/lit. Complete with all Media, Screens, Pumps, Aeration Blowers, Aeration Diffusers, Manifolds, Level sensors, Valves, Piping, Fittings and Accessories to fully conform to the specified discharge requirements.</p>	1	Item		
	TOTAL CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BROUGHT FORWARD FROM PREVIOUS PAGE				
11.9.7	Main control panel (MCP), NEMA 4 free-standing enclosure with forced air ventilation. The MCP is the "intelligence" of the treatment process. Electrical Control Panel with PLC, electrical isolators, overload protection, Equipment running and trip indication lights, automatic and manual override switches. Minimum IP 55 enclosure. Audio-visual alarm indicator to be provided outside the control shed. Allow for PLC complete with Graphical Human Machine Interface (HMI). Alarm, fault and process indicators will be displayed on the process control panel.	1	NO		
11.9.8	Allow for high specification internet based Remote Monitoring & Control using GSM/GPRS/IoT technology with real-time monitoring, control and alerts of the status and alarms of the plant's operations by both supplier and client parties. User access via mobile phone App, web portal, SMS/Email alerts for critical plant condition.	1	SUM		
11.9.9	Allow for MBBR media of High Quality Virgin High Density Polyethylene (HDPE). Quality of media shall have Specific Gravity of 0.96 and bulk density of 125kg/m ³ . Required Surface Area specification shall be 675m ² /m ³ .	1	SUM		
11.9.10	Process Aeration Blowers 1.6 kW / 3 HP positive displacement (PD), one (1) duty, one (1) standby.	2	NO		
11.9.11	Fine bubble aeration system, in-basin pipes and connections to the top of the wall of the basin.	1	SUM		
11.9.12	9" Fine Bubble Disc diffusers. Specification is PTFE coated EPDM membranes. PTFE protective layer is to ensure extended useful lifespan of diffusers over standard EPDM diffuser products.	35	NO		
11.9.13	Allow for Coarse inlet Screen 2" slots for capture of large rags and solids. Fabricated with 50mm polypropylene structure & Stainless Steel.	1	NO		
11.9.14	Allow for PolyLok PL-625 Effluent Filter with 1/32" linear feet filter slot size for capture of smaller fine solids. Effluent Filter shall come with automatic shutoff ball for closing outlet to avoid solids wash through during servicing, as acting as a gas deflector.	3	NO		
11.9.15	1 HP submersible RAS/WAS pumps	1	NO		
11.9.16	Influent pumps, one (1) duty and one (1) standby	2	NO		
11.9.17	Chemical dosing pumps and controls for sodium hypochlorite, plus chemical makeup tank. System for Chlorine Disinfection of Treated Waste Water.	1	SUM		
11.9.18	All pipe & fittings as required to complete the interconnecting system and all necessary fittings, valves and accessories.	1	SUM		
11.9.19	All Electrical wiring as required to complete the interconnecting system and all necessary conduits, fittings and accessories.	1	SUM		
	TOTAL CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
11.9.20	BROUGHT FORWARD FROM PREVIOUS PAGE Allow for Installation of Wastewater Treatment Plant Equipment, include all Labour, Transport & Sundries Costs	1	SUM		
	<u>TOTAL FOR ON-SITE WASTEWATER TREATMENT PLANT CARRIED TO SUMMARY</u>				
11.10.1	<u>ELEMENT NO.11.10:</u> <u>GENERAL ITEMS</u> Allow for mobilization, tools and all necessary equipment on site	1	Item		
11.10.2	Allow for co-ordination of works with the Main Contractor and other Sub-contractors	1	Item		
11.10.3	Allow for preparation of all "shop" drawings and submitting to the Engineers for approval prior to commencement of work on site	1	Item		
11.10.4	Allow for preparation of all "As Built" Drawings immediately after Practical Completion of the works.	1	Item		
11.10.5	Allow for the preparation of all "Operations & Maintenance Manuals" immediately after Practical Completion of the works.	1	Item		
11.10.6	Allow for on-site Training of the Operators for specialised equipment	1	Item		
11.10.7	Allow for city council water connection & borehole meter connection	1	Item		
	<u>TOTAL FOR GENERAL ITEMS CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<u>MECHANICAL WORKS SUMMARY PAGE:</u>				
11.1	INTERNAL PLUMBING BROUGHT FORWARD FROM MECH/3				
11.2	SANITARY FITTINGS BROUGHT FORWARD FROM MECH/8				
11.3	FOUL DRAINAGE BROUGHT FORWARD FROM MECH/10				
11.4	TESTING				
11.5	BUILDERS WORK B				
11.7	WATER RETICULATION				
11.8	FIRE FIGHTING BROUGHT FORWARD FROM MECH/27				
11.9	ON-SITE WASTEWATER TREATMENT PLANT BROUGHT FORWARD FROM MECH/42				
11.10	GENERAL ITEMS				
	TOTAL FOR MECHANICAL WORKS CARRIED FORWARD TO GRAND SUMMARY PAGE				

PUMP HOUSE

BILL NO. 12

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<i>(All Rates are V.A.T Inclusive)</i>				
	<u>ELEMENT NO 1</u>				
	<u>SUBSTRUCTURE WORKS (All Provisional)</u>				
	<u>EXCAVATION AND EARTHWORKS</u>				
	<i>Excavation including maintaining and supporting sides and keeping free from water, mud and falling materials: No allowance is made in the excavations for working space; contractor to factor in working space in his rates:</i>				
12.1.1	Clear site of all bushes, tufts and any small or large trees, including grubbing out roots and burn on site where directed	20	SM		
12.1.2	Excavate oversite average 150mm deep and cart away	20	SM		
12.1.3	Excavate trench for strip foundation: not exceeding 1.5m deep	12	CM		
12.1.4	Excavate for column bases: not exceeding 1.5m deep	9	CM		
12.1.5	Extra over excavation from rock in any position	21	CM		
	<u>Disposal of excavated material</u>				
12.1.5	Return, fill and ram extra excavation materials around foundation	11	CM		
12.1.7	Load and cart away surplus material	10	CM		
	<u>Disposal of Water</u>				
12.1.8	Allow for keeping the whole of the excavation free from mud, water and fallen materials	1	Item		
	<u>Planking and strutting</u>				
12.1.9	Allow for planking and strutting sides of excavation	1	Item		
	<u>Filling</u>				
12.1.10	300mm thick (minimum) approved hardcore handpacked in layers not exceeding 150mm	2	CM		
12.1.11	50mm thick murrum dust or any other equal and approved material in blinding surface of hardcore	8	SM		
	<u>Insecticide Treatment</u>				
12.1.12	Treat hardcore surface with approved antitermite applied in accordance with the manufacturer's instructions and subject to a TEN YEAR guarantee	8	SM		
	TOTAL EXCAVATION AND EARTHWORKS, CARRIED FORWARD TO ELEMENT COLLECTION				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>SUBSTRUCTURES CONTINUED</u>				
	<u>CONCRETE WORKS</u>				
12.2.1	50mm thick concrete blinding to surfaces of strip footing & column bases (concrete class 15/20)	14	SM		
	<u>Vibrated reinforced concrete class 25/20 to:-</u>				
12.2.2	Strip footing	2	CM		
12.2.3	Columns Bases	3	CM		
12.2.4	Foundation Columns	1	CM		
12.2.5	150 mm thick ground floor slab	11	SM		
12.2.6	Extra over ditto to forming or leaving 400mm wide shallow Cable channels, average 450mm deep 'U' channel in hardcore and floor slab including hand packing to sides of channel, 150mm thick concrete to sides and bed of channel including 50mm blinding and all necessary formwork and reinforcement, all to detail and approval	7	LM		
	<u>High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :-</u>				
12.2.7	Assorted bars	470	KG		
12.2.8	BRC mesh type A142 as before described	11	SM		
	<u>Marineply formwork as Described. Allow for setting to special steel propping, strutting, fillets, nails, etc to:</u>				
12.2.9	Sides of strip footing	6	SM		
12.2.10	Ditto but to column bases	8	SM		
12.2.11	Ditto but to sides of foundation columns	5	SM		
12.2.12	Ditto but to edges of floor slab 75mm - 150mm thick	13	LM		
	<u>FOUNDATION WALLING</u>				
12.2.13	200mm solid coral block foundation wall in cement:sand (1:3) reinforced with hoop iron at every to alternative course	15	SM		
	<u>WATERPROOFING</u>				
12.2.14	1000 gauge polythene DPM	11	SM		
	<u>PLINTH FINISHES</u>				
12.2.15	15mm cement and sand (1:4) render trowelled smooth and comprising 12mm thick backing and 3mm finishing coat.	7	SM		
	<u>Painting and Decoration</u>				
12.2.16	Prepare and apply 3 coats of approved first quality bituminous paint or equal and approved to rendered surfaces	7	SM		
	TOTAL SUBSTRUCTURE WALLING AND CONCRETE WORKS, CARRIED FORWARD TO ELEMENT COLLECTION				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	Total Excavation and Earthworks brought forward from page PR/2				
B	Total Substructure Walling and Concrete Works brought forward from page PR/3				
	TOTAL ELEMENT NO.1 (SUBSTRUCTURE WORKS), CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>SUPERSTRUCTURES</u>				
	<u>ELEMENT NO 2</u>				
	<u>SUPERSTRUCTURE REINFORCED CONCRETE WORKS</u>				
	<u>Vibrated Reinforced Concrete Class - 25/20 to:-</u>				
12.4.1	Beams	1	CM		
12.4.2	Columns	1	CM		
12.4.3	150 mm Thick Suspended floor slab	21	SM		
	<u>High Tensile Reinforcement Bars to B. S. 4449 including cutting, bending and all necessary spacer blocks : (Provisional) :-</u>				
12.4.4	Asorted bars	930	KG		
	<u>Marineply formwork as Described. Allow for setting to special steel proping, strutting, fillets, nails, etc to:</u>				
12.4.5	Sides of Beams	8	SM		
12.4.6	Sides of columns	8	SM		
12.4.7	To soffits of suspended slabs	21	SM		
12.4.8	To Edges of first floor slabs 75-150mm high	19	LM		
	TOTAL FOR ELEMENT NO.2 (SUPERSTRUCTURE REINFORCED CONCRETE WORKS), CARRIED FORWARD TO SUMMARY				
	<u>ELEMENT NO.3</u>				
	<u>WALLING</u>				
12.4.9	200mm machine cut coral stone wall abd in cement:sand (1:3) reinforced with hoop iron at every to alternative course (internally and externally)	24	SM		
	<u>WATERPROOFING</u>				
12.4.10	Hessian based bituminous felt damp proof course 200mm wide	36	LM		
	<u>Pre-cast concrete class 20/20 concrete coping</u>				
12.4.11	300 x 75 mm high precast concrete coping weathered and throated on both sides and jointed to wall in cement sand mortar 1:3 all to approval	19	LM		
12.4.12	Ditto 550 x 350mm pier cap ditto to columns	4	NO		
	<u>Pre-cast concrete Grade 20 precast ventilation blocks</u>				
12.4.13	1000x1000x200mm thick vents block with floral motifs; bedded and jointed in cement and sand (1:3) mortar and reinforced every alternate course with hoop iron.;To architect's details	9	SM		
	TOTAL FOR ELEMENT NO. 3 (WALLING), CARRIED FORWARD TO SUMMARY				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR FISHERIES.AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 4</u> <u>ROOFING</u>				
	<u>FLAT ROOF FINISHES</u>				
12.5.1	50 mm cement sand 1:3 water proof screed to flat roof slab laid to fall and crossfalls	21	SM		
12.5.2	Apply one coat bituminous primer to surface of screed.	21	SM		
12.5.3	Supply and apply 4mm thick bituminous felt membrane heat welded in 200mm overlaps and all necessary surface preparations; applied strictly in accordance with printed manufacturer's instructions; provide a 10 year guarantee	21	SM		
12.5.4	Ditto sides of wall 200mm high	19	LM		
12.5.5	50 x 50mm internal angle fillet	19	LM		
12.5.6	200 x 200 x 25mm thick high quality clay tiles or equal approved on roof slab bedded and jointed in cement mortar 1:3 and 25mm joint pointed with red cement slurry	21	SM		
12.5.7	100mm high matching skirting	19	LM		
12.5.8	<u>Rainwater goods</u> Extra over for running outlet	4	NO		
12.5.9	100mm x 75 x 0.6mm PVC down pipes fixed to wall with holding clips at 1200mm centres	13	LM		
12.5.10	Extra over for swan neck 1000mm long	4	NO		
12.5.11	Extra over for shoe 1000mm long	4	NO		
	TOTAL FOR ELEMENT NO. 4 (ROOFING) CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 5</u> <u>DOORS</u> <u>Supply, assemble and fix the following Mild/Galvanized Steel double door comprising of 75x50x3mm frame with louvre vents and all necessary furniture; The door should be assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand mortar (1:4); prepare surface by Sand blasting; apply one coat of 2 pack epoxy zinc phosphate primer; apply three coats of marine grade gloss paint (Ref Architects Detailing)</u>				
12.6.1	Overall size 1500mm x 2400mm high	1	NO		
	TOTAL FOR ELEMENT NO. 5 (DOORS), CARRIED FORWARD TO SUMMARY				
	<u>ELEMENT NO.6</u> <u>INTERNAL FINISHES</u> <u>Wall and Concrete Finishes</u> 15mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to walls and concrete surfaces Prepare surface, apply undercoat and apply three coats 12.6.3 PVA based premium quality marine grade silk vinyl emulsion paint or other equal and approved to plastered surfaces <u>Floor Finishes</u> <u>Cement and sand (1:4) screeding smooth trowelled</u> 12.6.4 32mm Thick floor screed <u>Paving slabs</u> 12.6.5 Supply and fix 50 mm thick precast concrete paving slabs size 600 x 600 mm bedded and pointed in cement and sand mortar. <u>Ceiling</u> 12.6.6 12mm cement and sand (1:4) plaster to concrete surfaces trowelled smooth. Prepare surface, apply undercoat and apply three coats 12.6.7 PVA based premium quality marine grade silk vinyl emulsion paint or other equal and approved to plastered surfaces <u>EXTERNAL FINISHES</u> <u>Walls</u> <u>25mm thick cement and sand (1:3) render to:-</u> 12.6.8 25mm thick cement and sand rendering to walls, finished with a wood float. <u>Prepare and apply one undercoat and two finishing coats marine grade weatherguard(silicone based) exterior paint as approved to:</u> 12.6.9 Plastered surfaces of walls				
	TOTAL FOR ELEMENT NO. 6 (FINISHES) CARRIED TO SUMMARY BELOW				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
12.7.1	<u>ELEMENT NO.7</u>				
	BUILDERS WORK IN CONNECTION WITH SERVICES(BWICS) Builder's Work incidental to plumbing and electrical installations Allow for making holes, chasing walls, floors, inclusion of sleeves and other items necessary for the proper carrying out of the installations including all builder's work of making good all surfaces	1	SUM		
	TOTAL FOR ELEMENT NO. 7 (BWICS) CARRIED TO SUMMARY BELOW				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>PUMP ROOM BUILDING WORKS SUMMARY</u>				
1	Total for Element No. 1 (Substructure Works), brought forward from page PR/3				
2	Total for Element No. 2 (Superstructure Reinforced Concrete Works), brought forward from page PR/4				
3	Total for Element No. 3 (Walling), brought forward from page PR/4				
4	Total for Element No. 4 (Roofing) brought forward from page PR/5				
5	Total for Element No. 5 (Doors) brought forward from page PR/6				
6	Total for Element No. 6 (Finishes) brought forward from page PR/6				
7	Total for Element No. 7 (BWICS) brought forward from page PR/7				
	TOTAL FOR PUMP ROOM CARRIED TO GRAND SUMMARY				

DAYWORKS

BILL NO. 13

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	DAYWORKS				
	Note: All rates provided by the contractor to include and cover for profits and overheads, transport, insurances and premiums as required by regulatory authorities and all other mark-up				
	<u>Labour</u>				
13.1.1	Foreman	1	Hrs		
13.1.2	Driver	1	Hrs		
13.1.3	Skilled Labour	1	Hrs		
13.1.4	Unskilled Labour	1	Hrs		
13.1.4	Steel fixer	1	Hrs		
	Materials				
13.1.5	Cement Portland BS 12/1978	1	Ton		
13.1.6	Reinforcement	1	Kg		
13.1.7	Aggregates for concrete	1	Ton		
13.1.8	Wrot shuttering timber	1	Sm		
13.1.9	Wrot Shuttering timber	1	Lm		
13.1.10	Timber for trenches	1	Sm		
13.1.11	Sand	1	Ton		
13.1.12	Building Stones	1	Sm		
13.1.13	Flatbed Trailer	1	Hrs		
13.1.14	Wheel Loader	1	Hrs		
13.1.15	Truck (25 T), Including Driver	1	Hrs		
13.1.16	Truck (8 T), Including Driver	1	Hrs		
13.1.17	Tipper Truck (5 T), Including Driver	1	Hrs		
13.1.18	Pick-up (4WD), Including Driver	1	Hrs		
13.1.19	Land Rover, Including Driver	1	Hrs		
	Total carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Plant and Equipment				
13.2.1	Sedan-2000cc, Including Driver	1	Hrs		
13.2.2	Welding Machine (300A)	1	Hrs		
13.2.3	Ultrasonic Thickness Gauge	1	Hrs		
13.2.4	Elcometer for Paint Thickness	1	Hrs		
13.2.5	Compressor (600CFM)	1	Hrs		
13.2.6	Generator (5 KVA)	1	Hrs		
13.2.7	Generator (10 KVA)	1	Hrs		
13.2.8	Power Grinder/Brush	1	Hrs		
13.2.9	Scrapping/Cleaning/Handtools (Set)	1	Hrs		
13.2.10	Hand Painting Tools	1	Hrs		
13.2.11	Paint Sprayer (Including Compressor)	1	Hrs		
13.2.12	Concrete Mixer (0.4 M3)	1	Hrs		
13.2.13	Jack Hammer	1	Hrs		
13.2.14	Vibrator for (Concrete Work)	1	Hrs		
13.2.15	Mobile Crane (25T), including operator	1	Hrs		
13.2.16	Mobile Crane (5T), including operator	1	Hrs		
13.2.17	Trailer (25T), including operator	1	Hrs		
13.2.18	Allow for any other items of Materials, Plant or Equipment				
	a)		Item		
	b)		Item		
	c)		Item		
	d)		Item		
	e)		Item		
	Total carried to collection				

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p>COLLECTION</p> <p>DAYWORKS</p> <p>Brought forward from Page DW/1</p> <p>Brought forward from Page DW/2</p>				
	TOTAL FOR DAYWORKS CARRIED TO GRAND SUMMARY PAGE				

PROVISIONAL SUMS

BILL NO. 14

PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY

[illegible]

GRAND SUMMARY
inc VAT

**PROPOSED CONSTRUCTION OF FISHERIES HEADQUARTERS IN KILIFI FOR THE STATE
DEPARTMENT FOR FISHERIES,AQUACULTURE AND THE BLUE ECONOMY**

GRAND SUMMARY

BILL NO.	DESCRIPTION	FOR TENDERER'S USE ONLY	FOR OFFICIAL USE ONLY
		K.SHS.	K.SHS.
1	Particular Preliminaries		
2	General Preliminaries		
3	Environmental and Social Management Plan	3,520,000.00	
4	Office Building		
5	Gate House		
6	Foul Water Drainage		
7	Boundary Wall		
8	Driveway and Parking		
9	Landscaping Works		
10	Electrical Works		
11	Mechanical Works		
12	Pump Room		
13	Day Works		
14	Provisional Sums	13,500,000.00	
	TOTAL CARRIED TO FORM OF TENDER		

Amount in words. Kenya shillings

.....Cents

Tenderer's Signature and stamp.....

Address

Date

Witness Signature

Address

Date

12. GRAND SUMMARY

Contract Name: CONSTRUCTION OF FISHERIES OFFICE

RFBNo.: KE-MOMBE&MA-KLF-2024-014-CW

<i>General Summary</i>	<i>Page</i>	<i>Amount</i>
BILL NO. 1: PARTICULAR PRELIMINARIES	PP/7	
BILL NO. 2: GENERAL PRELIMINARIES	GP/13	
BILL NO.3: ESMP	ESMP/6	
BILL NO.4 : OFFICE BUILDING	OB/22	
BILL NO.5: FOUL DRAINAGE	FD/4	
BILL NO.6: DRIVEWAY	DW/6	
BILL NO.7: LANDSCAPING	LW/2	
BILL NO.8: MECHANICAL WORKS	MECH/17	
BILL NO.9: ELECTRICAL WORKS	ELEC/19	
BILL NO.10: DAY WORKS	DW/2	
<i>Subtotal of Bills</i>	<i>(A)</i>	
<i>Total for Daywork (Provisional Sum)*</i>	<i>(B)</i>	
<i>Provisional Sum of Kenya Shillings Eight Million Only (Kes 8,000,000.00) for fluctuationsⁱⁱ</i>	<i>(C)</i>	<i>8,000,000.00</i>
<i>Total of Bills Plus Provisional Sums (A + B + C)ⁱ</i>	<i>(D)</i>	
<i>Add Provisional Sum of Kenya Shillings Eight Million Only (Kes 8,000,000.00) for Contingency Allowanceⁱⁱ</i>	<i>(E)</i>	<i>8,000,000.00</i>
<i>Bid Price (D + E) (Carried forward to Letter of Bid)</i>	<i>(F)</i>	

i) All Provisional Sums are to be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clauses 13.4 and 13.5 of the General Conditions except with respect to DAAB Fees and Expenses for which Sub-Clause 13.4 of the Particular Conditions – Part B shall apply.

ii) To be entered by the Employer.* For evaluation purposes, Provisional Sum, other than Daywork will be excluded