



**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 RENOVATION OF MALINDI FISHERIES
OFFICE**

Employer: State Department for Blue Economy & Fisheries
Project: Kenya Marine Fisheries Socio-Economic
Development Project (KEMFSED)
Contract Title: **CONSTRUCTION RENOVATION OF
MALINDI FISHERIES OFFICE**
Country: Republic of Kenya
Loan No./Credit No./Grant No.: 6540-KE
RFBNo.: KE-MOMBE&MA-KLF-2024-015-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: REMOVAL OF ASBESTOS**
 4. **BILL NO.4: BUILDING WORKS**
 5. **BILL NO.5 : MECHANICAL WORKS**
 6. **BILL NO.6: ELECTRICAL WORKS**
 7. **BILL NO.7: FOUL WATER DRAINAGE**
 8. **BILL NO.8: DRIVEWAY AND PARKING**
 9. **BILL NO.9: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN**
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.

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
	<i>(All Rates are V.A.T Inclusive)</i> <u>BILL NO.1: PARTICULAR PRELIMINARIES</u>	
1.1.1	<p>EMPLOYER</p> <p>The Employer is Kenya Marine Fisheries Socio Economic Development Project (KEMFSED)</p> <p>The term "Employer" and "KEMFSED" wherever used in the contract document shall be synonymous.</p>	
1.1.2	<p>PROJECT MANAGER</p> <p>The term "PM" wherever used in these Bills of Quantities shall be deemed to imply the ENGINEER as defined in the Conditions of Contract or such person or persons as may be duly authorised to represent him/her on behalf of the employer.</p>	
1.1.3	<p>ARCHITECT</p> <p>The term "Architect" 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>	
1.1.4	<p>QUANTITY SURVEYOR</p> <p>The term "Quantity Surveyor" 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>	
1.1.5	<p>ELECTRICAL ENGINEER</p> <p>The term "Electrical 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>	
1.1.6	<p>MECHANICAL ENGINEER</p> <p>The term "Mechanical 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>	
1.1.7	<p>STRUCTURAL ENGINEER</p> <p>The term "Structural 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>	
1.1.8	<p>PROJECT ENGINEER (PE) (Member of NPCU, State Department of Fisheries)</p> <p>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>	
	<i>Carried to collection</i>	-

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
1.1.9	<p>LOCATION OF SITE</p> <p>The site of the proposed works is in Malindi, 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.</p>	
1.1.10	<p>DESCRIPTION OF THE WORKS</p> <p>The works to be carried out under this contract is the construction of Malindi CPIU office Block at Malindi Town in Kilifi County. The project consists of the following:</p> <ol style="list-style-type: none"> 1. Demolitions including disposal of asbestos 2. Substructures 3. Concrete works 4. Walling. 5. Roofing. 6. Doors 7. Windows 8. Fittings. 9. Finishes. 10. Electrical works. 11. Mechanical works 12. Civil and external works 	
1.1.11	<p>FORM OF CONTRACT</p> <p>The Form of Contract shall be as stipulated in the Republic of Kenya's Standard Tender Document for Procurement of Building Works(2006 Edition Revised December 2015) included herein The Conditions of Contract are also included herein Conditions of Contract These are numbered from 1 to 37 as set out in pages 26 to 51 of these tender documents. 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</p>	
1.1.12	<p>BID BOND</p> <p>A bid bond shall be required in the amount stated in the invitation to tender or advertisement. Bid bond shall be from EITHER an insurance or bank.</p>	
1.1.13	<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 ENGINEER.The whole of the works shall be delivered up clean, complete and in perfect condition in every respect to the satisfaction of the ENGINEER.</p>	
1.1.14	<p>WORKING CONDITIONS</p> <p>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.The contractor must allow for compliance with all County & Statutory Authorities' laws & regulations.</p>	
	<i>Carried to collection</i>	-

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
1.1.15	CLAIMS 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 ENGINEER within the contract period. No claim shall be entertained upon the expiry of the said contact period.	
1.1.16	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.	
1.1.17	PRICING RATES The tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items for which no rate or price is entered by the tenderer will not be paid for when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities. 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. Prices quoted should be net inclusive of all taxes, must be in Kenya shillings. Prices shall remain valid for One Hundred and twenty (120) days from the closing date of tender. The rates and prices quoted by the tenderer shall only be subject to adjustment during the performance of the Contract if provided for in the Appendix to Conditions of Contract and provisions made in the Conditions of Contract.	
1.1.18	MATERIALS FROM DEMOLITIONS Any materials arising from demolitions SHALL NOT BE re-used shall become the property of the client unless otherwise advised.	
1.1.19	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.	
1.1.20	PAYMENTS GENERALLY The tenderer’s attention is drawn to the fact that the CLIENT WILL NOT MAKE ADVANCE PAYMENTS but pays for work done and materials delivered to sit: all in accordance with 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. The contractor is advised to deliver & concur on his claim for payment with the ENGINEER before the following site visit to enable approval of the same by the Acceptance & Approval Committee.The claim shall be prepared in the same format as these bills clearly showing quantities & rates (both work & materials). Both the ENGINEER & contractor should be able to locate & identify the items claimed from the main bill.	
1.1.21	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 ENGINEER. This is to include materials of the Contractor, nominated sub-Contractors and nominated suppliers.	
	<i>Carried to collection</i>	-

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
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ITEM	DESCRIPTION	AMOUNT
1.1.22	ADVANCE PAYMENTS The tenderer's attention is drawn to the fact that the Client does not make any advance payments	
1.1.23	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.	
1.1.24	TENDER DOCUMENTS Tender documents are as listed in Clause 2.1 of the Instruction to Tenderer's Page 8	
1.1.25	DELIVERY OF TENDER 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. 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.	
1.1.26	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.	
1.1.27	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 ENGINEER 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.	
1.1.28	VALUE ADDED TAX The Contractor's attention is drawn to the Legal Notice in the Finance Act part 3 Section 21(b) operative from 1 st September, 1993 which requires payment of VAT on all contracts. The Contractor should therefore include allowance in his rates and prices for VAT and any other Government taxes currently in force. NB: The Contractor should therefore include the tax within the rates.	
<i>Carried to collection</i>		-

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ITEM	DESCRIPTION	AMOUNT
1.1.29	<p>CONTRACT COMPLETION PERIOD</p> <p>The contract completion period in accordance with conditions of the Conditions of contract must be adhered to.</p> <p>The 'ENGINEER' shall strictly monitor the Contractors progress in relation to the progress chart and should it be found necessary the 'ENGINEER' 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.</p>	
1.1.30	<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 ENGINEER</p> <p>Date for Completion - 52 Weeks from date of Possession</p> <p>Liquidated and Ascertained - At the rate of Kshs.. 100,000... per week or part thereof:</p> <p>Prime cost sums for which the Contractor desires to tender</p> <p>Period of Interim Certificates - Monthly</p> <p>Period of Honouring Certificates - 30 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 OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

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

ITEM	DESCRIPTION	AMOUNT
	<p align="center"><i>(All Rates are V.A.T Inclusive)</i></p> <p align="center">BILL NO.2: GENERAL PRELIMINARIES</p>	
2.1.1	<p>PRICING OF ITEMS OF PRELIMINARIES AND PREAMBLES</p> <p>The term "Employer" and "KILIFI COUNTY" wherever used in the contract document shall be synonymous. Prices will be inserted against items of Preliminaries in the Contractor's priced Bills of Quantities and Specification.</p> <p>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. Failure to price an item shall not exempt the contractor from carrying out works described therein. Should the contractor fail to carry out works which he/she did not price and after having received a written instruction from the ENGINEER, then the value of such works shall be deducted from the very immediate certificate issued to the contractor.</p> <p>MoPW current rates, JBC, IQSK, manufacturers or fair rates shall be used by the ENGINEER in valuation of unpriced items which the contractor shall fail to execute. The contractor is advised to read and understand all preliminary items.</p> <p>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.</p>	
2.1.2	<p>FIRM PRICE CONTRACT</p> <p>Unless otherwise specifically stated in the Contract Data and/or Particular preliminaries this is a firm price contract and the contractor must allow in his tender rates for any increase in the cost of labour and/or materials during the currency of the contract.</p>	
2.1.3	<p>VISIT SITE AND EXAMINE DRAWINGS</p> <p>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.</p>	
2.1.4	<p>SUFFICIENCY OF TENDER</p> <p>The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of this tender for the works and of the rates and prices stated in the Priced Bills of Quantities, which rates and prices shall cover all his obligations under the Contract and all matters that are necessary for the proper completion and maintenance of the works.</p>	
2.1.5	<p>BONDS</p> <p>The Contractor shall find and submit with the Form of Tender a guarantor and who will be willing to be bound the Government in the amount of the bond.</p> <p>The amount of the bond is SPECIFIED IN THE PARTICULAR PRELIMINARIES</p> <p>The guarantor shall be an approved institution as specified in the particular preliminaries or invitation to tender 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>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR FISHERIES,AQUACULTURE
AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
2.1.6	<p>PERFORMANCE BOND</p> <p>5% bond shall be required from the specified institution.</p> <p>The period for supplying the bond shall be 14 days. No contract shall be signed, NOR shall any payment be made before the bidder has complied with the bond requirements</p> <p>Failure to deliver the bond within the specified period shall automatically disqualify the bidder and the tender shall be awarded to next most responsive bidder without reference to the defaulting bidder. Should the bidder commence works and subsequently fail to provide the bond, he shall be evicted from site without any reimbursement not withstanding the site having been handed over by the ENGINEER and client. The handing over only kick-starts the process and is not a waiver to bond conditions. The bond for the due performances of the Contract shall be valid up to the date of completion as certified by the ENGINEER. Any bond which provides otherwise or attempts to vary the duration of validity shall be invalid. The bond shall comply in all respects with the PPOA copy enclosed in the instructions to tender. A bond that does not match the PPOA copy shall be treated as NO BOND</p>	
2.1.7	<p>EXCEPTION TO THE STANDARD METHOD OF MEASUREMENT</p> <p>Attendance ; 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>Fix Only:-</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>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR FISHERIES,AQUACULTURE
AND BLUE ECONOMY**

ITEM	DESCRIPTION	AMOUNT
2.1.8	<p>ABBREVIATIONS</p> <p>The site of the proposed works is in Malindi Office, 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.</p> <p>C.M. Shall mean cubic metre S.M. Shall mean square metre L.M. Shall mean linear metre MM Shall mean Millimetre Kg. Shall mean Kilogramme No. Shall mean Number Prs. Shall mean Pairs B.S. Shall mean the British Standard Specification Published by the British Standards Institution, 2 Park Street, London W.I., England. "K.S" Shall mean the current Kenya Standard specification published by the Kenya Bureau of Standards, P.O. Box 54974, NAIROBI, Kenya. Ditto Shall mean the whole of the preceding description except as qualified in the description in which it occurs. m.s. Shall mean measured separately. a.b.d Shall mean as before described. "Approved" <i>Shall mean approved by the ENGINEER and the Employer in writing.</i> "As directed" <i>Shall mean as directed by the ENGINEER and the Employer in writing.</i> "Demolish" Shall be deemed to mean cutting away, breaking up, demolishing, pulling down, taking down, removing, etc., as the context requires and shall include in all cases temporarily strutting and supporting and making good remaining work as necessary, and clearing away and removing from Site all debris, etc. "Remove" Shall mean taking down, hacking up, breaking down, removing etc., and clearing away from Site and all other expenses thereby entailed. "Make good" Shall be deemed to mean all making good, fitting, facing up, plastering, paving, repairing and painting to match and jointing to remaining existing work. To "match" Shall mean to be equal to relevant existing work in design, workmanship and all other respects. "Re-fix" Shall apply to existing materials arising from the Works and shall mean take from store and fix in new position, including making good, repairing and adjusting as necessary.</p>	
2.1.9	<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 afterwards in the permanent work.</p>	
2.1.10	<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>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR FISHERIES,AQUACULTURE
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ITEM	DESCRIPTION	AMOUNT
2.1.11	<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 order materials to be obtained from local sources as early as necessary to ensure that 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>	
2.1.12	<p>SIGN FOR MATERIALS SUPPLIED.</p> <p>The Contractor will be required to sign a receipt for all articles and materials supplied by the ENGINEER 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 ENGINEER 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 ENGINEER</p>	
2.1.13	<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 ENGINEER Nominated Sub-Contractors are to be made liable for the cost of any storage accommodation provided especially for their use.</p>	
2.1.14	<p>ORDERING OF MATERIALS</p> <p>The Contractor must assist in alleviating the effects of possible shortages of materials by advance ordering of materials in order to maintain a continuous supply. Early delivery of materials will be permitted and included in interim certificates and upon request by the ENGINEER, the Contractor will be required to produce copies of order forms and invoices to establish that materials have been ordered in sufficient time and to check on material deliveries.</p>	
2.1.15	<p>SAMPLES</p> <p>The Contractor shall furnish at his own cost any samples of materials or workmanship required for the works that may be called for by the ENGINEER for his approval until such samples are approved by the ENGINEER and the ENGINEER, may reject any materials or workmanship not in his opinion to be up to approved samples. The ENGINEER 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 ENGINEER. The Contractor shall pay for the testing in accordance with the current scale of testing charges laid down by the Ministry of 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 ENGINEER The Contractor shall allow in his tender for such samples and tests except those in connection with nominated sub-contractors' work.</p> <p>Samples of paint, carpets, curtains & covers, tiles & timber shall be required for approval by the ENGINEER together with the employer.</p> <p>No alternate rate shall be offered on account that the employer has chosen a superior finish unless the bidder had attached the sample he priced.</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR FISHERIES,AQUACULTURE
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ITEM	DESCRIPTION	AMOUNT
2.1.16	<p>PUBLIC AND PRIVATE ROADS.</p> <p>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 ENGINEER.</p>	
2.1.17	<p>EXISTING PROPERTY.</p> <p>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 ENGINEER.</p>	
2.1.18	<p>ACCESS TO SITE AND TEMPORARY ROADS.</p> <p>Means of access to the Site shall be agreed with the ENGINEER 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 ENGINEER.</p>	
2.1.19	<p>AREA TO BE OCCUPIED BY THE CONTRACTOR</p> <p>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 ENGINEER.</p>	
2.1.20	<p>SECURITY OF WORKS ETC.</p> <p>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.</p>	
2.1.21	<p>PROGRESS CHART.</p> <p>The Contractor shall provide within two weeks of Possession of Site and in agreement with the ENGINEER a Progress Chart for the whole of the works including the works of Nominated Sub-Contractors ; one copy to be handed to the ENGINEER and a further copy to be retained on Site. Progress to be recorded and chart to be amended as necessary as the work proceeds.</p>	
2.1.22	<p>INSURANCE</p> <p>The Contractor shall insure as required in Conditions No 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 ENGINEER 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 ENGINEER 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 ENGINEER's inspection.</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR FISHERIES,AQUACULTURE
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ITEM	DESCRIPTION	AMOUNT
2.1.23	<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 ENGINEER and such directions shall be deemed to have been given to the Contractor in accordance with the Conditions of Contract.</p>	
2.1.24	<p>PROVISIONAL WORK</p> <p>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 ENGINEER Immediately the work is ready for measuring, the Contractor shall give notice to the ENGINEER. If the Contractor makes default in these respects he shall if the ENGINEER so directs uncover the work to enable all measurements to be taken and afterwards reinstate at his own expense.</p>	
2.1.25	<p>PROVISIONAL SUMS.</p> <p>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.</p>	
2.1.26	<p>ADJUSTMENT OF PROVISIONAL SUMS.</p> <p>In the final account all Provisional Sums shall be deducted and the value of the work properly executed in respect of them upon the ENGINEER's order added to the Contract Sum. Such work shall be valued , 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.</p>	
2.1.27	<p>PRIME COST (OR P.C.) SUMS.</p> <p>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 ENGINEER 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.</p>	
	<i>Carried to collection</i>	

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ITEM	DESCRIPTION	AMOUNT
2.1.28	<p>ADJUSTMENT OF P.C. SUMS.</p> <p>In the final account all P.C. Sums shall be deducted and the amount properly expended upon the ENGINEER'S order in respect of each of them added to the Contract sum. The Contractor shall produce to the ENGINEER 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" (as previously described) following P.C. Sums shall be adjusted pro-rata to the physical extent of the work executed (not pro-rata to the amount paid) and this shall apply even though the Contractor's priced Bill shows a percentage in the rate column in respect of them. 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.</p>	
2.1.29	<p>NOMINATED SUB-CONTRACTORS</p> <p>When any work is ordered by the ENGINEER 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".</p>	
2.1.30	<p>DIRECT CONTRACTS</p> <p>Notwithstanding the foregoing conditions, the Client 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.</p>	
2.1.31	<p>ATTENDANCE UPON OTHER TRADESMEN, ETC.</p> <p>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 ENGINEER and the work will be measured and paid for to the extent executed at rates provided in these Bills.</p>	
	<i>Carried to collection</i>	

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ITEM	DESCRIPTION	AMOUNT
2.1.32	<p>OFFICE ETC. FOR THE ENGINEER</p> <p>The Contractor shall provide, erect and maintain where directed on site a properly ventilated lockable office for the consultants, having a minimum floor area of 40 Square Metres complete with furniture (Tables, chairs e.t.c). Provision shall be made for artificial lighting and cleaning facilities for the duration of the works. Upon completion the Contractor shall dismantle and clear away the office. 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 ENGINEER 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 "ENGINEER" a modern and accurate level together with levelling staff, ranging rods and 50 metre metallic or linen tape.</p>	
2.1.33	<p>WATER AND ELECTRICITY SUPPLY FOR THE WORKS</p> <p>The Contractor shall provide at his own risk and cost all necessary water, electric lighting 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 ENGINEER . 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.</p>	
2.1.34	<p>SANITATION OF THE WORKS</p> <p>The Sanitation of the works shall be arranged and maintained by the Contractor to the satisfaction of the Government and/or Local Authorities, Labour Department and the ENGINEER.</p>	
2.1.35	<p>SUPERVISION AND WORKING HOURS</p> <p>The works shall be executed under the direction and to the entire satisfaction in all respects of the ENGINEER 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.</p>	
	<i>Carried to collection</i>	

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ITEM	DESCRIPTION	AMOUNT
2.1.36	<p>PROTECTION OF THE WORKS.</p> <p>Provide protection of the whole of the works contained in the Bills of Quantities, existing property, finishes, workmen employed on the site, employer's agents and the public; including casing , casing up, covering or such other means as may be necessary to avoid damage to the satisfaction of the ENGINEER 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 Client. Any damage or loss incurred due to the insufficiency of such protection must be made good by the Contractor</p>	
2.1.37	<p>WORKS TO BE DELIVERED UP CLEAN</p> <p>Clean and flush all gutters, rainwater and waste pipes, manholes and drains, wash (except where such treatment might cause damage) and clean all floors, sanitary fittings, glass inside and outside and any other parts of the works and remove all marks, blemishes, stains and defects from joinery, fittings and decorated surfaces generally, polish door furniture and bright parts of metalwork and leave the whole of the buildings watertight, clean, perfect and fit for occupation to the approval of the ENGINEER.</p>	
2.1.38	<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 and 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>	
2.1.39	<p>TRAINING LEVY</p> <p>The Contractor's attention is drawn to the legal notice 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>	
2.1.40	<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 ENGINEER. This includes the materials of the Main Contractor, Nominated Sub-Contractors and Nominated Suppliers.</p>	
2.1.41	<p>HOARDING</p> <p>The Contractor shall enclose the site or part of the works under construction with a hoarding 2400 mm high consisting of iron sheets on 100 x 50 mm timber posts firmly secured at 1800 mm centres with two 75 x 50 mm 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>	
2.1.42	<p>ALTERATIONS TO BILLS, PRICING, ETC.</p> <p>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.</p>	
	<i>Carried to collection</i>	

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ITEM	DESCRIPTION	AMOUNT
2.1.43	<p>PREVENTION OF ACCIDENT, DAMAGE OR LOSS</p> <p>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.</p>	
2.1.44	<p>GOVERNMENT ACTS REGARDING WORK, PEOPLE 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>	
2.1.45	<p>BLASTING OPERATIONS</p> <p>Blasting will only be allowed with the express permission of the ENGINEER 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 ENGINEER governing the use and storage of explosives.</p>	
2.1.46	<p>SIGNBOARD</p> <p>Allow for providing, erecting, maintaining throughout the course of the Contract and afterwards clearing away a signboard as designed, specified and approved by the ENGINEER.</p>	
2.1.47	<p>NUISANCE</p> <p>The Contractor must take such steps and exercise such care and diligence so as to minimize nuisance from dust, noise or any other cause, to the occupiers of adjacent properties</p>	
2.1.48	<p>PROTECTION OF TREES</p> <p>The Contractor shall in the course of construction take all necessary precautions to preserve any existing trees. The contractor will not cut down any tree(s) without express authority or written instruction by the ENGINEER and relevant authorities. He must at all times liaise with the ENGINEER in this regard. The cost of obtaining any necessary permits will be borne by the Contractor.</p>	
2.1.49	<p>EXTENDED PRELIMINARIES</p> <p>In case the Contractor suffers costs due to extended preliminaries as a result of excusable delays. Then the Employer shall compensate the Contractor the ACTUAL COST of such extended preliminaries plus 10% administrative costs. Such costs will be proven with payment receipts, payroll etc. No further claims shall be allowed with respect to the same.</p>	
2.1.50	<p>TIMELY PAYMENT FOR LABOURERS</p> <p>The Contractor shall ensure that his workers are paid their wages promptly and on time. If such payments are effected weekly the Contractor shall ensure that workers are paid on the appointed day to avoid any disruption of work occasioned by the failure of the Contractor to pay workers on time and shall be required to furnish proof to that effect,</p>	
	<i>Carried to collection</i>	

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ITEM	DESCRIPTION	AMOUNT
	COLLECTION	
	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	
TOTAL FOR GENERAL PRELIMINARIES CARRIED TO GRAND SUMMARY		

PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BILL NO. 3: REMOVAL AND DISPOSAL OF ASBESTOS				
3.1.1	Carefully Remove Asbestos roofing sheets from roof timber structure and cart away all materials, to be done by a NEMA registered person in accordance with Environmental Management act and in liason with project environment officer (a copy of the registration certificate to be submitted to the project manager before execution), public health and other government regulations, approximately 727.00 m2	1	item		
3.1.2	Carefully Remove Asbestos roofing sheets on site and cart away all materials, to be done by a NEMA registered person in accordance with Environmental Management act and in liason with project environment officer (a copy of the registration certificate to be submitted to the project manager before execution), public health and other government regulations, approximately 50.00 m2)	1	item		
	TOTAL FOR REMOVAL AND DISPOSAL OF ASBESTOS CARRIED TO GRAND SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BILL NO. 4: OFFICE BLOCK RENOVATIONS ELEMENT NO. 1: DEMOLITIONS AND ALTERATIONS "All Provisional" All items under this element shall be done carefully, and the contractor shall include in their rates, the cost of making good of disturbed surfaces, preparation of surfaces to receive new works and carting away all arising debris, or storing, all as directed by the ENGINEER The building is approximately 5m high and hence the contractor should include in his rates provision for appropriate scaffolding where necessary				
4.1.1	Carefully remove dilapidated corrugated prepainted roof covering as directed (342.00m ²)	1	item		
4.1.2	Carefully demolish existing entire roof timber structure and cart away as directed, approximately 3800lm	1	item		
4.1.3	Demolish existing dilapidated precast concrete permanent vents, approx 63sm	1	item		
4.1.4	Demolish superstructure 200mm thick coral block walling as directed, approximately 108sm	1	item		
4.1.5	Ditto 100mm thick, approximately 16sm	1	item		
4.1.6	Carefully demolish timber partition and store as directed, approximately 42sm	1	item		
4.1.7	Demolish existing dilapidated concrete worktops with and including concrete walling, blockboard shelves, and clear glass glazing, approx 40sm	1	item		
	Carried to collection				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.1.8	Carefully remove existing ceramic floor tiles with and including screed underneath as directed, approximately 210sm	1	item		
4.1.9	Hack off 15mm thick cement sand render to wall and column surfaces externally (plinth and superstructure) cart away debris and prepare surfaces to receive new (150.00m².)	1	item		
4.1.10	Ditto to plaster internally (100.00m².)	1	item		
4.1.11	Carefully remove dilapidated ceiling with and including dilapidated bandering and cart away as directed (210.00m²)	1	item		
4.1.12	Carefully remove dilapidated panelled doors complete with framing and ironmongery and cart away , size 1500x2400mm high (1No.)	1	item		
4.1.13	Carefully remove dilapidated grilled doors complete with framing and ironmongery and cart away , size 1500x2700mm high (1No.)	1	item		
4.1.14	Ditto door overall size 1500x2400mm high (1No.)	1	item		
4.1.15	Ditto door overall size 900x2100mm high (1No.)	1	item		
4.1.16	Carefully remove flush doors complete with framing and ironmongery and cart away , size 1000x2700mm high (2No.)	1	item		
4.1.17	Ditto door overall size 1000x2400mm high (5No.)	1	item		
4.1.18	Ditto door overall size 1000x2100mm high (2No.)	1	item		
4.1.19	Ditto door overall size 900x2100mm high (5No.)	1	item		
4.1.20	Ditto door overall size 800x2100mm high (2No.)	1	item		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.1.21	Carefully remove metal gate including rolling trail complete with framing and ironmongery and cart away, size 2700x2900mm high (1No.)	1	item		
4.1.22	Ditto door overall size 2600x2400mm high (1No.)	1	item		
4.1.23	Carefully remove dilapidated timber louvred windows with and including louvre blades and glazing, complete with framing and ironmongery and cart away, size 2200x1400mm high (4No.)	1	item		
4.1.24	Ditto window size 1500x1400mm high (5No.)	1	item		
4.1.25	Ditto window size 1000x1400mm high (1No.)	1	item		
4.1.26	Ditto window size 2600x1000mm high (6No.)	1	item		
4.1.27	Ditto window size 1950x1000mm high (2No.)	1	item		
4.1.28	Ditto window size 600x1400mm high (1No.)	1	item		
4.1.29	Ditto window size 600x900mm high (4No.)	1	item		
4.1.30	Carefully demolish existing dilapidated paving slabs around building, including grubbing up substructure works as directed, approximately 70sm	1	item		
	Carried to collection				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.1.31	Thoroughly wire brush dressed stone facing externally to receive paint (m.s) to the approval of the ENGINEER including repairing cracks on the wall approximately 60m long in cement sand mortar 1:3 and embedded approved chicken wire/mesh, approximately 143.00 sm	1	item		
4.1.32	Thoroughly scrap all existing paint internally and prepare surface to receive new paint (m.s) to the approval of the ENGINEER including repairing cracks on the wall approximately 20m long in cement sand mortar 1:3 and embedded approved chicken wire/mesh, approximately 428.00 sm	1	item		
4.1.33	Carefully cut through 150mm thick surface bed including grubbing all substructure works to create column bases 1000x1000mm wide, including making good all disturbed surfaces (71No)	1	item		
4.1.34	Provide all necessary support and carefully cut through 200mm thick coral block masonry wall for 200x200mm columns, including making good all disturbed surfaces (71No)	1	item		
	Carried to collection				
	COLLECTION DEMOLITIONS AND ALTERATIONS Brought forward from page FR/1 Brought forward from page FR/2 Brought forward from page FR/3 Brought down from page FR/4 above				
	TOTAL FOR DEMOLITIONS AND ALTERATIONS CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 2				
	SUBSTRUCTURES "All Provisional"				
	Excavation				
4.2.1	Excavate oversite to reduce levels commencing from stripped level exceeding 1.50 metres deep	5	CM		
4.2.2	Excavate trench for strip foundation not exceeding 1.5m deep	16	CM		
4.2.3	Ditto but for column bases	185	CM		
4.2.4	Extra over all descriptions of excavations and removal from site for breaking up rocks: irrespective of class	30	CM		
4.2.5	Return fill and ram	129	CM		
4.2.6	Cart away surplus excavated material and rock	77	CM		
	Planking and strutting				
4.2.7	Planking and strutting to sides of all excavations: keep excavations free from all fallen materials	1	item		
	Disposal of Water				
4.2.8	Keep excavations free from all water including spring or running water.	1	item		
	Hardcore Filling				
4.2.9	Imported hardcore filling including hand packing, levelling and consolidating in 150mm layers all to Engineers approval	51	CM		
4.2.10	50mm Thick Quarry dust blinding to the surface of hardcore rolled smooth to receive polythene sheeting	97	SM		
	Carried to collection				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Insecticide treatment				
	Approved termiticide 0.5% solution to be applied at the rate of 4 litres per square metre on top of hardcore filling over foundation walls				
4.2.11	To Quarry dust surface	97	SM		
	Mass Concrete Grade 15 in:				
4.2.12	50 mm blinding under strip footing	11	SM		
4.2.13	50 mm blinding under column bases	123	SM		
	Insitu concrete Grade 25 (20mm aggregate): vibrated: reinforced in:				
4.2.14	Strip Foundation	2	CM		
4.2.15	Column bases	49	CM		
4.2.16	Columns	8	CM		
4.2.18	Thicknessing	2	CM		
4.2.19	100mm sloping ramp	16	SM		
4.2.20	150mm surface bed	97	SM		
	Sawn formwork to:				
4.2.21	Sides of strip footing	7	SM		
4.2.22	Sides of columns	109	SM		
4.2.23	Edges of column bases 300-450mm high	109	SM		
4.2.24	Edges of surface bed 75-150mm high	36	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Ribbed Reinforcement Steel Bars Grade 100 to BS 4449 including cutting to length, bending, hoisting and fixing including all necessary tying wires and spacing blocks				
4.2.25	12mm diameter bars	834	KG		
4.2.26	10mm ditto	1,350	KG		
4.2.27	8mm ditto	349	KG		
	Mesh Fabric Reinforcement				
4.2.28	BRC Fabric mesh reinforcement Ref. A142; weighing 2.22kg per square metre(measured net no allowances made for laps) including bends tying wire and distance blocks.	97	SM		
	Walling				
4.2.29	200mm thick machine cut coral block wall bedded and jointed in cement sand(1:3) mortar and reinforced with and including 20sqwx25mm wide hoop iron in every alternate course.	49	SM		
4.2.30	200mm wide Hessian based bituminous felt. Damp proof course bedded in cement sand (1:3) mortar including 150mm end taps	35	LM		
	DAMP PROOFING				
	1000 Gauge polythene; 150mm laps; no allowances made for laps				
4.2.31	Horizontal; over 300mm wide	97	SM		
	Plinth Finishes				
4.2.32	15mm Thick cement sand (1:4) rendering to plinth; wood float finish	71	SM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.2.33	Prepare and apply three coats of premium quality bituminous paint to rendered walls; externally	71	SM		
	Paving slabs				
4.2.34	Excavate oversite to reduce levels commencing from ground level exceeding 1.50 metres deep	97	CM		
4.2.35	Excavate trench for edge wall foundation average 600mm deep, part return fill and ram remainder cart away	56	CM		
4.2.36	Plain concrete Grade 15 in strip foundation	14	CM		
4.2.37	200mm thick coral block edge walling in cement sand (1:3) mortar	63	SM		
4.2.38	300mm thick approved hardcore handpacked and compacted as before described	188	SM		
4.2.39	Treat hardcore surface and tops of walls with approved insecticide	188	SM		
4.2.40	600x600x50mm pre-cast concrete grade 20 paving slabs pointed in cement sand (1:3) mortar and laid on 50mm approved bed of sand.	188	SM		
	Carried to collection				
	COLLECTION SUBSTRUCTURES Brought forward from page FR/5 Brought forward from page FR/6 Brought forward from page FR/7 Brought down from page FR/8 above				
	TOTAL FOR SUBSTRUCTURE CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 3				
	SUPERSTRUCTURE				
	Insitu concrete Grade 25 (20mm aggregate): vibrated: reinforced in:				
4.3.1	Beams	25	CM		
4.3.2	Columns	10	CM		
4.3.3	250mm thick suspended floor slab	142	SM		
	Sawn formwork to:				
4.3.4	Sides and soffites of beam	136	SM		
4.3.5	Sides of columns	138	SM		
4.3.6	Edges of suspended floor slab 75-150mm high	43	LM		
	Ribbed Reinforcement Steel Bars Grade 100 to BS 4449 including cutting to length, bending, hoisting and fixing including all necessary tying wires and spacing blocks				
4.3.7	T20	KG	882		
4.3.8	T16	KG	1196		
4.3.9	T12	KG	2041		
4.3.10	T10	KG	1386		
4.3.11	T8	KG	154		
	Expansion Joint				
4.3.12	20 mm thick x 200 mm wide expansion joint with 'flexcell' joint filler or similar to engineer's approval	20	LM		
	Mastic Sealant				
4.3.13	20 mm x 20 mm deep mastic sealant or similar to engineer's approval	40	LM		
	TOTAL OF SUPERSTRUCTURE CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 4				
	WALLING				
	Coral stone machine dressed walling of the required minimum compressive strength of 10 N/mm ² bedded in cement sand (1:3) mortar reinforced with and including gauge 20swqx25mm wide hoop iron at every alternate course				
4.4.1	200mm thick machine -cut coral block walling Externally	59	SM		
4.4.2	Ditto but gable walling	39	SM		
4.4.3	200 mm Thick internally	324	SM		
4.4.4	Ditto but gable walling	26	SM		
4.4.5	100 mm thick internally	12	SM		
	Aluminium Framed Partition				
4.4.6	Heavy duty anodised powder coated aluminium framed partition comprising of 75x50x3mm RHS members, inclusive of interlocking beading, rubber and all other necessary accessories all to approval by the ENGINEER	268	SM		
4.4.7	6mm thick one way tint glass fixed to aluminium frame with approved mastic beading.	131	SM		
4.4.8	18 mm thick medium fibre board veneered both sides	98	SM		
4.4.9	50 mm thick Anodised aluminium louvres complete with mosquito gauze	39	SM		
	TOTAL FOR WALLING CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 5				
	ROOFING AND RAINWATER HARVESTING "All Provisional"				
	FLAT ROOF FINISHES				
4.5.1	50 mm cement sand 1:3 water proof screed to flat roof slab laid to fall and crossfalls	SM	142		
4.5.2	Apply one coat bituminous primer to surface of screed including gutters	SM	142		
4.5.3	Supply, torch and apply bituminous membrane in 200mm overlaps ditto	SM	142		
4.5.4	Ditto sides of wall 200mm high	LM	43		
4.5.5	50 x 50mm internal angle fillet	LM	43		
4.5.6	300 x 300 x 50mm thick; heavy duty interlocking concrete tiles; butt joints straight both ways to cement and sand base (m.s) generally to;	SM	142		
4.5.7	Ditto sides of wall 200mm high	LM	43		
	STEEL TRUSSES				
	The following in 60No.Trusses welded and bolted in accordance with the fabricators shop drawings to the Engineer's approval				
4.5.8	50x50x4mm S.H.S rafter welded to gusset plate	409	LM		
	End of trusses				
	Mild steel				
4.5.9	50x50x4mm S.H.S vertical studs welded to rafters as kingpost	64	LM		
4.5.10	75x50x4mm R.H.S tie beam welded to vertical studs	273	LM		
4.5.11	50x50x4mm S.H.S bracings welded to rafters	381	LM		
4.5.12	30x30x3mm S.H.S bracings as top bracings to rafters	193	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Fittings				
4.5.13	200x200x8mm gusset plate with 4No. Holes to receive bolts	128	NO		
4.5.14	16mm diameter 200mm long bolt with head, nut and washer	512	NO		
	Purlins				
4.5.15	125x50x20x3mm thick steel Z-purlins welded to rafters	1,078	LM		
	Anti-sag rods				
4.5.16	12mm diameter anti-sag rods complete with washers and nuts	264	LM		
	ROOF COVERING				
4.5.17	0.4mm thick prepainted Box Profile aluminium roofing sheets as approved fixed with and including bolts, nails, cups and washer on purlins.	841	SM		
4.5.18	Ditto but matching ridge cap	72	LM		
	Painting and Decorations				
	Prepare and apply one undercoat zinc-rich primer and two finishing coats first quality polyamide paint on				
4.5.19	General surfaces of metal works	582	SM		
4.5.20	General surfaces of metal works girth 200-300mm	1,127	LM		
	RAIN WATER HARVESTING				
4.5.21	150mm Diameter uPVC gutter fixed to fascia board (m.s.) with heavy duty uPVC brackets at 1000 mm centers all to approval	144	LM		
4.5.22	Extra over gutter for stopped ends.	12	NO		
4.5.23	Ditto for rainwater outlets with nozzle for 100mm rainwater down pipe outlet.	16	NO		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<i>Rainwater Harvesting Cont'd</i>				
4.5.24	100mm uPVC diameter rainwater down pipe connected to water tank including all necessary accessories.	24	LM		
4.5.25	Extra over downpipe for anti-splash shoe	10	NO		
4.5.26	Supply, deliver and install vertical close end plastic moulded tank of capacity 10,000 litre size 2400 diameter x 2800mm high. The tank to be assembled complet 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 platform slab. The tank shall be to an approved manufacturer.	4	NO		
4.5.27	Construct water tank platform 150mm thick mass concrete grade 15 ground water tank base slab of 3200mm diameter on 200mm thick coral block walling and 250mm thick hardcore filling and 50mm thick blinding supported by 200mm thick coral block walling, 200mm x600mm wide mass concrete strip foundation 1200mm deep including all excavations, disposal and necessary formwork and 12mm thick plaster (1:3) and 25mm thick screeding on slab	4	NO		
	Carried to collection				
	COLLECTION ROOFING AND RAINWATER HARVESTING Brought forward from page FR/11 Brought forward from page FR/12 Brought down from page FR/13 above				
	TOTAL FOR ROOFING AND RAINWATER HARVESTING CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 6				
	DOORS				
	<i>Wrot mvule hardwood timber profiled to Architects specifications as described in:-</i>				
	Door frame				
4.6.1	250 mm x 50 mm thick, rebated with labours	119	LM		
	Architraves				
4.6.2	75 mm x 25 mm moulded	238	LM		
	Quadrants				
4.6.3	50 mm x 25 mm	238	LM		
	Beading to fanlight				
4.6.4	25 mm x 25 mm;	64	LM		
	Door				
4.6.5	Double door panel overall size; 1500 x 2400mm high with fanlight	3	NO		
4.6.6	Single door panel double action overall size; 1100 x 2400mm high ditto	6	NO		
4.6.7	Louvred door panel overall size; 900 x 2400mm high ditto	7	NO		
4.6.8	Single door panel overall size; 900 x 2400mm high ditto	5	NO		
	Purpose made Aluminium framed doors				
	Supply, assemble and fix the following purpose made powder coated aluminium framed door to B3087, Standard extruded profiles complete 4mm thick glass glazing with a complete set of approved ironmongery comprising of hat and coat hooks, door stops, and rubber buffers. All exposed aluminium section are to be powder coated. (Ref Architect's Detailing)				
4.6.9	Single leaf single swing fanlight door, overall size 900 x 2400mm high	3	NO		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Fire door 1100 x 2400x50mm fire rated door complete with necessary ironmongery to supplier details and Architect's approval Ironmongery Supply and fix the following ironmongery from an approved manufacturer including all necessary matching screws.	3	NO		
4.6.10	3 - Lever mortice lock with aluminium furniture	21	NO		
4.6.11	Heavy duty Door closer as an approved sample	13	NO		
4.6.12	Aluminium D-handles	30	PRS		
4.6.13	150 x 150mm Brass sex indicator plate	6	NO		
4.6.14	Indicator bolt "Vacant/Engaged"	6	NO		
	Painting and Decoration Prepare and apply one undercoat zinc-rich primer and two finishing coats first quality polyamide paint on				
4.6.15	Doors both internally and externally (Measured nett)	106	SM		
	Carried to collection				
	COLLECTION DOORS Brought forward from page FR/14 Brought forward from page FR/15				
	TOTAL FOR DOORS CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 7 WINDOWS Heavy Duty powder coated Aluminium windows to B.S. 4813 to be executed by an approved sub contractor Supply and fix powder coated aluminium sliding windows; standard hollow sections;100 x 50 x 2.5mm thick RHS horizontal and vertical frame members frames mitred at corners including all necessary intermediate reinforcing cleats/elements and all necessary all weather strips, rubber glazing strips, couplings ironmongery including sliding rails bars; fixing with stainless steel screws; plugging or fixing to concrete, block work or stone work; sealing with mastic; oiling and adjusting on completion; panes left open for glazing; all in accordance with referenced Engineer drawings and detail Please note that the sliding panels and fixed lights should not be spaced more than 1000 mm wide				
4.7.1	Window overall size 2400 x 1700 mm high;	21	NO		
4.7.2	Window overall size 1200 x 900 mm high;	7	NO		
4.7.3	Window overall size 600 x 675 mm high;	1	NO		
	Glazing Blue stopsol sheet glass and glazing with aluminium beadings.				
4.7.6	6mm thick glass in panes (0.50-1.00m ²)	93	SM		
4.7.7	Ditto but sandblasted glass	1	SM		
	Window cills				
4.7.8	200x50mm pre-cast concrete window sill bedded and pointed in cement sand (1:3) mortar, weathered and throated all to Engineer's detail and approval	64	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Painting and Decoration				
	Prepare and apply one undercoat zinc-rich primer and two finishing coats first quality polyamide paint:				
4.7.9	To burglar-proofing grilles; measured nett; internally and externally	94	SM		
	Prepare and apply three coats premium quality gloss oil paint to:				
4.7.10	Surfaces of window cill 200mm but not exceeding 300mm girth	64	LM		
	Carried to collection				
	COLLECTION				
	WINDOWS				
	Brought forward from page FR/16				
	Brought forward from page FR/17				
	TOTAL FOR WINDOWS CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 8				
	FIXTURES AND FITTINGS:				
	Reception Counter				
4.8.1	Plain concrete grade 15 in plinth	3	SM		
4.8.2	Reinforced concrete grade 20 in 100mm worktops	3	SM		
	Formwork to:				
4.8.3	Soffites of worktops	3	SM		
4.8.4	Edges of worktops 75-150mm high	11	LM		
4.8.5	10mm diameter high yield reinforcement bars	37	KG		
4.8.6	200mm thick coral block walling in cement/sand (1:3) mortar and reinforced with hoop iron at every alternate course	10	SM		
4.8.7	15mm thick cement sand (1:3) plaster to wall surfaces	10	SM		
4.8.8	Ditto but to soffites of worktops	3	SM		
4.8.9	Ditto but to edges	11	LM		
4.8.10	20mm thick cement sand mortar (1:3) to receive Cut stone cladding (m.s)	6	SM		
4.8.11	Dressed Coloured cut stone cladding to walls jointed in mortar to approval	6	SM		
4.8.12	20mm thick polished Granite on surfaces of counter with ground edges to approval	3	SM		
4.8.13	25 x 15mm aluminium bearers	11	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Worktops				
4.8.14	Plain concrete (1:3:6) in plinth	8	SM		
4.8.15	Reinforced concrete (1:2:4) in 100mm worktops	8	SM		
	Formwork to:				
4.8.16	Soffites of worktops	8	SM		
4.8.17	Edges of worktops 75-150mm high	24	LM		
4.8.18	10mm diameter high yield reinforcement bars	78	KG		
4.8.19	200mm thick coral block walling in cement/sand (1:3) mortar and reinforced with hoop iron at every alternate course	19	SM		
4.8.20	15mm thick cement sand (1:3) plaster to wall surfaces	19	SM		
4.8.21	Ditto but to soffites of worktops	8	SM		
4.8.22	Ditto but to edges	24	LM		
4.8.23	20mm thick cement sand mortar (1:3) to receive non-slip Ceramic floor tiles (m.s)	8	SM		
4.8.24	300x300x8mm thick non-slip ceramic floor tiles to Engineers approval fixed with tile adhesive to approval	8	SM		
4.8.25	25 x 15mm aluminium bearers	22	LM		
	Shelving				
4.8.26	25mm meru oak veneered Block Board (Both sides) shelves	80	SM		
4.8.27	75 x 50 wrot planed cypress members	102	LM		
4.8.28	Ditto but plugged	84	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p>COLLECTION</p> <p>FIXTURES AND FITTINGS</p> <p>Brought forward from page FR/19</p> <p>Brought forward from page FR/20</p>				
	TOTAL FOR FIXTURES AND FITTINGS CARRIED TO SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 9				
	FINISHES:- "All Provisional"				
	Wall Finishes				
4.9.1	12mm thick cement sand (1:3) plaster wall surfaces internally	1,112	SM		
4.9.2	Ditto 15mm thick rendering externally	413	SM		
	Backing; cement and sand 1:3 with approved integral dust proofing additive wood floated.				
4.9.3	15 mm thick to receive ceramic tiles	64	SM		
	Glazed wall tiles, local approved colour; glazed; to regular pattern bedding and jointing in cement mortar (1:3). Grouting joints with matching colour cement				
4.9.4	400 x 250 x 6mm glazed ceramic tiles to wall surfaces	64	SM		
4.9.5	PVC Edgings	56	LM		
	Floor Finishes				
	Screed; cement and sand 1:3 with approved integral dust proofing additive wood floated.				
4.9.6	32mm thick finished in red oxide nyll to approval	164	SM		
4.9.7	32mm thick receive ceramic tiles (m.s)	757	SM		
	Ceramic Tiles				
4.9.8	400x400x8mm thick non-slip ceramic floor tiles as to Engineers approval fixed with tile adhesive to approval	757	SM		
4.9.9	Dito 100x8mm thick skirting	166	LM		
	Carried to collection				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4.9.10	Ceiling Finishes 12mm thick high quality suspended acoustic ceiling panels comprising of V-carriers, suspended hangers, rails, flush jointing and trap doors, all to manufacturer's specifications and fixed/ hooked to steel roof structure, walling and concrete surfaces of an approved sample, all to Engineer's detail and approval	757	SM		
	Carried to collection				
	COLLECTION FINISHES Brought forward from page FR/22 Brought forward from page FR/23				
	TOTAL FOR FINISHES CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 10 PAINTING AND DECORATIONS Prepare and apply three coats PVA based premium quality silk vinyl emulsion paint or other equal and approved to:- 				
4.10.1	Plastered wall surfaces Prepare and apply three coats premium quality exterior paint as approved externally to:	1,112	SM		
4.10.2	Rendered wall surfaces	413	SM		
	TOTAL FOR PAINTING AND DECORATIONS CARRIED TO SUMMARY				

PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR FISHERIES,AQUACULTURE AND BLUE ECONOMY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUMMARY				
1	DEMOLITIONS AND ALTERATIONS				
2	SUBSTRUCTURE WORKS				
3	SUPERSTRUCTURE REINFORCED CONCRETE STRUCTURE				
4	WALLING				
5	ROOFING AND RAINWATER HARVESTING				
6	DOORS				
7	WINDOWS				
8	FIXTURES AND FITTINGS				
9	FINISHES				
10	PAINTING AND DECORATION				
	TOTAL FOR BUILDER'S WORK CARRIED TO GRAND SUMMARY				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>MECHANICAL WORKS:</u>				
	<u>ELEMENT NO. 1 (INTERNAL PLUMBING):</u>				
	<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>				
	<u>PPR Pipes</u>				
5.1.1	25mm diameter pipe	80	LM		
5.1.2	32mm Ditto	90	LM		
5.1.3	40mm Ditto	70	LM		
5.1.4	50mm Ditto	100	LM		
5.1.5	63mm Ditto	50	LM		
	<u>Sockets:</u>				
5.1.6	25mm diameter socket	30	No.		
5.1.7	32mm ditto	19	No.		
5.1.8	40mm Ditto	23	No.		
5.1.9	50mm Ditto	22	No.		
5.1.10	63mm Ditto	15	No.		
	<u>Tees:</u>				
5.1.11	25mm diameter PPR equal tee	33	No.		
5.1.12	32mm diameter PPR equal tee	24	No.		
5.1.13	40mm diameter PPR equal tee	15	No.		
5.1.14	50mm diameter PPR equal tee	25	No.		
5.1.15	63mm diameter PPR equal tee	20	No.		
	TOTAL C/F TO NEXT PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
	<u>Bends</u>				
5.1.16	25mm diameter bends	45	No.		
5.1.17	32mm ditto	30	No.		
5.1.18	40mm Ditto	20	No.		
5.1.19	50mm Ditto	16	No.		
5.1.20	63mm Ditto	12	No.		
	<u>Tees</u>				
	Extra over GI tubing for the following:				
5.1.21	25mm diameter PPR 90° elbow	25	No.		
5.1.22	32mm diameter PPR 90° elbow	15	No.		
5.1.23	40mm diameter PPR 90° elbow	20	No.		
5.1.24	50mm diameter PPR 90° elbow	20	No.		
5.1.25	63mm diameter PPR 90° elbow	10	No.		
	<u>Reducers</u>				
5.1.26	50x32mm diameter PPR reducer tees	30	No.		
5.1.27	50x40mm diameter PPR reducer tees	10	No.		
5.1.28	63x50mm diameter PPR reducer tees	15	No.		
5.1.29	80x50mm diameter PPR reducer tees	10	No.		
	<u>Threaded Fittings</u>				
5.1.30	50 x 1"ø ditto Male threaded adaptors	12	No.		
5.1.31	25 x 3/4"ø dia Male threaded adaptors (Brass threads).	25	No.		
5.1.32	32 x 1"ø ditto	30	No.		
5.1.33	50 x 1 1/2"ø dia Male threaded adaptors	24	No.		
5.1.34	63 x 1 1/2"ø dia Male threaded adaptors (Brass threads).	10	No.		
	<u>Nipples</u>				
5.1.35	25mm diameter G.I. nipple	20	No		
5.1.36	32mm ditto	20	No.		
	<u>Valves</u>				
5.1.37	25mm 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 head jopints to steel tubing and complete with round male threaded transion fittings.The gate valve to be as approved.	14	No.		
5.1.38	32mm ditto	8	No.		
5.1.39	40mm ditto	8	No.		
5.1.40	50mm ditto	9	No.		
	TOTAL INTERNAL PLUMBING CARRIED FORWARD TO BILL NO. 5 SUMMARY PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 2:				
	<u>SANITARY FITTINGS:</u>				
	Supply,deliver,install,test and commission the following sanitary appliances complete with all the accessories including all connections to the services,waste,jointing to water supply,overflows,supports and all plugging and screwing to walls and floors.				
	<u>Note.</u>				
	(i). All sanitary fittings shall be in approved colour.				
	(ii). The model and Ref. No. Indicated is only a guide to the type and quality of fittings.				
	(iii). Equivalent and Approved models may be acceptable				
	<u>Pedestal wash hand basin</u>				
5.2.1	Wash Hand Basin with pedestal size 510x420mm 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 wash hand basin to be as approved.The basin to be supplied and installed complete with 15mm diameter heavy duty Brass Pillar Tap as approved	2	No		
	<u>Toilet Pan</u>				
5.2.2	Toilet bowl complete with soft close seat cover	3	No		
	<u>Toilet Roll Holder</u>				
5.2.3	Semi recessed toilet roll holder in Vitreous China of size 165 x 165mm in approved colour as approved.	7	No.		
	TOTAL C/F TO NEXT PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
	<u>Soap Dispenser</u>				
5.2.4	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 as approved.The soap dispenser shall be size125x100x290mm high and shall be as approved.	6	No		
	<u>Mirrors</u>				
5.2.5	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	6	No		
	<u>Bib Tap</u>				
5.2.6	15mm diameter heavy duty chrome plated bib tap to an approved catalogue	5	No		
	<u>Flexible Tubing</u>				
5.2.7	15mm diameter x 300mm longg flexible connectors complete with Integral brass angle valve for connecting the Sanitary fitting to water supply, to be as approved.	16	No.		
	<u>Robe Hook</u>				
5.2.8	Robe hook mounted to concealed screw to wall wedges as approved	7	No.		
	<u>Single bowl, single drainer kitchen sink</u>				
5.2.9	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.	1	No.		
	TOTAL C/F TO NEXT PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
	Disabled persons Water Closet and Wash Hand Basin Facility				
	Wheel chair accessible W.C facility Comprising of the following:-				
5.2.10	<p>(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 vitreous china 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</p> <p>(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 vitreous china 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.</p> <p>(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 as approved.</p> <p><u>WC Flush Valves</u></p> <p>40mm diameter quiet exposed water closet dual flush valve, chrome plated, back entry, with integral vacuum breaker, non-hold-open features and non-return valve, inlet control stop, transition fittings and wall plate comprising flush valve, bent flush pipe and rubber pipe connector. The flush valve to be handle type. To be as 'Flush Master' or equal and approved.</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 other accessories for proper functioning of the set</p>	4	SET		
5.2.11		5	No.		
5.2.12		1	No.		
	TOTAL C/F TO NEXT PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
5.2.13	<u>Hand Drier</u> Automatic Hand Drier in approved colour operating on infra-red automatic sensing system with heating element,safety cut-out complete 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.	6	No.		
5.2.14	Arabic Shattaf Bidet spray c/w tube and head and fixing to wall.	7	No.		
5.2.15	<u>Four Wheel Waste Bin</u> 660 litres Heavy Duty Polyethene four wheel waste bin with snap fit lid, locking handle and 4No. Wheels. All to approval	2	No		
	TOTAL SANITARY FITTINGS CARRIED FORWARD TO BILL NO. 5 SUMMARY PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.3:</u>				
	<u>DRAINAGE:</u>				
	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				
	<u>Internal:</u>				
5.3.1	40mm diameter Grey UPVC waste pipe in wall chase.	50	LM		
5.3.2	50mm ditto but boxed in concrete floor slab	60	LM		
5.3.3	100mm ditto	80	LM		
	<u>Extra Ovetubing For:-</u>				
5.3.4	100x50mm diameter UPVC floor trap,grating and cover	15	No		
5.3.5	100mm diameter WC connector	13	No		
	<u>External:</u>				
5.3.6	100mm diameter Grey UPVC soil vent pipe with expansion coupling and fixing to wall with holder bats ducts	50	LM		
5.3.7	100mm diameter Golden Brown UPVC waste pipe in soil	50	LM		
5.3.8	200mm by 200mm u-shaped steel drainage channel	80	LM		
5.3.9	100mm dia Fulbora Outlets	10	No		
	TOTAL C/F TO NEXT PAGE				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
	<u>Extra Overtubing For:-</u>				
5.3.10	40mm diameter access tee and cap	10	No		
5.3.11	50mm ditto	10	No		
5.3.12	100mm ditto	15	No		
5.3.13	150mm ditto	3	No		
5.3.14	100mm diameter Inspection bend and Access cap.	10	No		
5.3.15	100mm diameter vent cowl	2	No		
5.3.16	100mm diameter weathering Slate and Apron	10	No		
5.3.17	100mm diameter medium duty UPVC gulley trap, grating cover and waste	7	No		
	TOTAL FOUL DRAINAGE CARRIED FORWARD TO BILL NO.5 SUMMARY PAGE				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 4: <u>STERILIZATION AND TESTING:</u> 5.4.1 Allow for sterilization and flushing out of entire cold water installation with chlorine to the Engineer's Satisfaction 5.4.2 Ditto for setting to work and testing the whole of the plumbing and drainage installation works both during progress and at completion to the satisfaction of the Engineer's satisfaction and to leave the whole installation in good working condition	1	ITEM		
		1	ITEM		
	TOTAL TESTING CARRIED FORWARD TO BILL NO. 5 SUMMARY PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.5:</u>				
	<u>BUILDER'S WORK IN CONNECTION WITH PLUMBING AND DRAINAGE</u>				
	<u>Masonry Gulley Trap</u>				
5.5.1	Construct masonry gulley trap size 200x200mm, approx depth 300mm, complete with seal and Fibre Reinforced Plastics cover, including all disposal and form work	7	No.		
	<u>Manholes and Covers</u>				
5.5.2	Construct Manholes size 600 x 450mm and averaging 750mm deep constructed in 100mm thick concrete base grade 15, approved 150mm block sides rendered all around in cement and sand (1:4). It shall have an approved Fibre Reinforced Plastics cover to approval, including all necessary excavations, disposal and form work.	7	No.		
	<u>Excavations</u>				
5.5.3	Excavate trench not exceeding 1.5m deep, average depth 600mm for laying of drain pipes as earlier described, part back fill, part load and cart away remainder	70	LM		
	<u>Chasing</u>				
5.5.4	Form chase in both 100mm and 200mm thick coral block wall to receive necessary pipe work and make good disturbed areas	50	LM		
	<u>Holes</u>				
5.5.5	Make a hole through 100mm thick coral block wall for small pipe and make good disturbed areas	8	No.		
5.5.6	Ditto but 200mm thick and for large	6	No.		
	TOTAL BUILDERS WORK CARRIED FORWARD TO BILL NO. 5 SUMMARY PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.6:</u>				
	<u>WATER RETICULATION - ALL PROVISIONAL</u>				
	<u>Roof Top Water Tanks</u>				
5.6.1	Supply, deliver and install vertical close end plastic moulded tank of capacity 1,000 litres and (size 1160mm diameterx 1100mm 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 as approved	2	ITEM		
5.6.2	Supply, deliver and install vertical close end plastic moulded tank of capacity 5,000 litres and (size 1930mm diameterx 1960mm 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 as approved	1	ITEM		
	<u>Excavations</u>				
5.6.3	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	100	LM		
	<u>Pipe Work</u>				
5.6.4	50mm diameter PPR (PN-20) pump suction lines	100	LM		
5.6.5	50mm ditto but delivery lines	60	LM		
5.6.6	40mm diameter (PN-20) PPR Riser in wall duct and on roof terrace	20	LM		
5.6.7	50mm distribution pipework laid and jointed on roof terrace and pipe drop	50	LM		
5.6.8	40mm diameter (PN-20) PPR distribution Pipe laid and jointed in trench	40	LM		
5.6.9	50mm ditto	50	LM		
5.6.10	32mm diameter (PN-20) PPR Pipe laid and jointed in trench from water mains	24	LM		
5.6.11	40mm ditto	40	LM		
	TOTAL C/F TO NEXT PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
	<u>Extra Overtubing for:</u>				
	<u>Sockets:</u>				
5.6.12	32mm diameter PPR Sockets	10	No.		
5.6.13	40mm ditto	18	No.		
5.6.14	50mm ditto	25	No.		
	<u>Bends</u>				
5.6.15	32mm diameter bend/Elbow	10	No.		
5.6.16	40mm ditto	20	No.		
5.6.17	50mm ditto	40	No.		
	<u>Tees</u>				
5.6.18	40mm diameter (PN-20) PPR equal tee	19	No.		
5.6.19	50mm ditto	23	No.		
	<u>Valves</u>				
5.6.20	40mm diameter supply mains full way gate valve as approved	3	No.		
5.6.21	50mm ditto	3	No.		
	<u>Water Connection to Supply mains & Testing</u>				
5.6.22	50mm diameter G.I. equal tee	10	No		
5.6.23	50x40mm diameter G.I. reducer	10	No		
5.6.24	40mm diameter G.I. nipple	9	No		
5.6.25	50mm diameter PPR Adaptor	8	No		
5.6.26	40mm diameter full Way gate valve as approved	8	No		
	<u>Stand Pipe</u>				
5.6.27	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 as approved	6	ITEM		
	TOTAL C/F TO NEXT PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
5.6.28	<p><u>Mains Valve Chamber</u></p> <p>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 and frame in grease</p>	5	ITEM		
5.6.29	<p><u>Booster Pump Sets</u></p> <p>Booster Pump Sets (2No) for Roof Top water Tanks (M/S) mounted on a common Mild Steel base Frame and to approval,each set comprising of, One pump duty, One pump stand by, and each of capacity 4m³/hr against a Maximum Head of 25(metres) as approved. 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 as approved 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.</p>	1	ITEM		
5.6.30	<p><u>Testing</u></p> <p>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</p>	1	ITEM		
5.6.31	<p><u>Hose Reel Booster Pump Set</u></p> <p>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 25(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 100Litres 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.</p>	ITEM	1		
5.6.32	<p><u>Testing</u></p> <p>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</p>	ITEM	1		
	TOTAL C/F TO NEXT PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
	<u>Surface Mounted Water Storage Tanks</u>				
5.6.33	Supply, deliver and install vertical close end plastic moulded water storage tank of capacity 20,000 litres and (size 3370mm diameterx2550mm 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) and shall be as approved	1	ITEM		
5.6.34	Supply, deliver and install vertical close end plastic moulded water storage tank of capacity 10,000 litres and (size 2500mm diameterx2300mm high) . The tank to be assembled complete with cover and having screwed connections for 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. 3000mm high (M/S).	3	ITEM		
5.6.34	<u>Tank Base</u> Allow for the construction of the above mentioned tank base Approx.size 40000mm 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 grade 20 concrete floor slab, 15mm thick screed on the general faces of the tank base in (1:3) cement/sand mortar, 600mm widex1500mm deep srip foundation,including all Excavations and disposal	4	ITEM		
5.6.35	<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	1	ITEM		
	TOTAL WATER RETICULATION CARRIED FORWARD TO BILL NO. 5 SUMMARY PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p><u>ELEMENT NO.7 (FIRE FIGHTING AND PROTECTION SERVICES);</u></p> <p><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></p> <p><u>HOSEREELS</u></p> <p>Supply , deliver and install galvanised mild steel tubing to BS 1387 Class C, socketed joints to BS21 and galvanised malleable iron fittings including fixing and jointing. Tenderers must allow in their pipework prices for all the couplings, connectors, joints etc.required in the running length of pipework and also where necessary, for pipe fixing clips, holderbats plugged and screwed, brackets and pipe sleeves through structural members.</p>				
5.7.1	25mm diameter GMS tubing Surface Mounted	25	LM		
5.7.2	32mm diameter GMS tubing Surface Mounted	80	LM		
5.7.3	<p><u>Extra over GMS tubing for the following:</u></p> <p>25mm diameter galvanised malleable iron elbow</p>	5	No.		
5.7.4	32mm dia ditto	10	No		
	Tees				
5.7.5	25mm galvanised malleable iron equal tee	6	No		
5.7.6	32mm ditto	10	No		
	Reducing Bushes				
5.7.7	25 x 20mm galvanised malleable iron reducing bush	4	No		
5.7.8	32 x 25 mm ditto	3	No		
	Unions				
5.7.9	50mm diameter galvanised malleable iron union	4	No		
	Gate Valves				
5.7.10	25mm dia approved high pressure screw- down full way				
5.7.11	non-rising stem solid wedge disc gate valve to BS 5154				
5.7.12	PN 16 for Series B Rating with wheel head and joints				
5.7.13	steel tubing.	2	No		
5.7.14	32 mm Ditto	4	No		
	TOTAL C/F TO NEXT PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
	<u>Hosereels</u>				
5.7.15	Non recessed swinging type hosereel complete with 30 metres of 20mm internal diameter rubber fire hose with nylon spray/jet shut off nozzle , conforming to BS 5274	2	No		
5.7.16	Wire brush , clean, and paint complete installation with one coat of red oxide primer, undercoat, and gloss coat to Architects colour including banding and colour coding to British Standards	2	Sum		
	<u>Breaching Inlet inlets</u>				
5.7.17	Supply and Install Fire service 4" x 2 way breaching inlet connection complete with Drain Valves complying with BS 336:2010, PN16 Rated and non-return valves. The breaching inlets to be manufactured to comply to BS 5041	ITEM	1		
	<u>Breaching Inlet Cabinet</u>				
5.7.18	Supply and install breaching inlet cabinet, recessed type to accommodate 6" x 4 way breaching inlet manufactured to comply to BS5041-5	ITEM	1		
	<u>Valve Chamber</u>				
5.7.19	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 and frame in grease	ITEM	2		
	<u>External Fire Hydrant</u>				
5.7.20	Supply 2 way pillar type fire hydrant with dia 63 outlet to LCPB/EN 12845 standard	ITEM	2		
	<u>100 mm hydrant isolation valve</u>				
5.7.21	UL Listed/ FM Approved, Connection: Flanged as BS EN 1092-2/ Flanged as ASME B16.1, PN 16	ITEM	2		
	<u>Underground Piping</u>				
5.7.22	Supply, install below HDPE PN 20 to BS EN 12201, ISO 4427 ground pipe providing, fixing, jointing, testing in position & commissioning, including excavation & backfilling as required. Pipe connection, tees must be electrofusion/butt fusion fittings	LM	130		
	<u>Portable Fire Extinguisher</u>				
5.7.23	9Kg cartridge type general purpose portable dry powder fire extinguisher fully charged or equal and approved.	3	No.		
	TOTAL C/F TO NEXT PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
	<u>Carbon dioxide Gas Fire Extinguisher</u>				
5.7.24	5kg carbon dioxide gas portable fire extinguisher complete with pressure gauge,initial charge and mounting brackets	3	No.		
	<u>Water Carbon Dioxide</u>				
5.7.25	9.0Litre Water carbon dioxide (WCo2) portable fire extinguisher complete with pressure gauge,initial charge and mounting brackets.	3	No.		
5.7.26	<u>Signage</u>				
	Allow for the Signage for fire exits and fire instructions all as described in the particular specifications and to the Project Engineer's Approval.	1	ITEM		
5.7.27	<u>Testing</u>				
5.7.28	Allow for testing the whole fire fighting equipments to leave in sound working condition and to the Engineer's satisfaction	1	ITEM		
	TOTAL FIRE FIGHTING CARRIED FORWARD TO BILL NO. 5 SUMMARY PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.8				
	<u>ON-SITE WASTEWATER TREATMENT PLANT</u>				
	<u>Preliminaries, Drawings, Manuals, Handovers, Training, Regulatory Matters, Operation & Maintenance</u>				
5.8.1	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.	1	SUM		
5.8.2	Allow for Monthly Maintenance visits for period of Twelve (12) Months	1	SUM		
5.8.3	Allow to liaise with the NEMA authorities, assist client with submitting application and obtaining discharge licence for the Waste Water treatment Plant	1	SUM		
5.8.4	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		
5.8.5	Allow for any other item not necessarily mentioned here to provide a complete working system to the Satisfaction of the engineer	1	SUM		
	TOTAL C/F TO NEXT PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
	<u>WASTE WATER TREATMENT SYSTEM</u>				
	<u>Waste Water Treatment Plant</u>				
	Supply, Install, Test and Commission the Moving Bed Biofilm Reactor (MBBR) Waste Water Treatment System, With a capacity of treating 100PE with an average flow rate of 15,000 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.				
5.8.6	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		
5.8.7	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		
5.8.8	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		
5.8.9	Process Aeration Blowers 1.6 kW / 3 HP positive displacement (PD), one (1) duty, one (1) standby.	2	NO		
5.8.10	Fine bubble aeration system, in-basin pipes and connections to the top of the wall of the basin.	1	SUM		
	TOTAL CARRIED TO NEXT PAGE				

PROPOSED REHABILITATION OF FISHERIES OFFICE MALINDI - KILIFI COUNTY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BALANCE B/F FROM PREVIOUS PAGE				
5.8.11	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		
5.8.12	Allow for Coarse inlet Screen 2" slots for capture of large rags and solids. Fabricated with 50mm polypropylene structure & Stainless Steel.	1	NO		
5.8.13	Allow for PolyLok PL-625 Effluent Filter with 1/32" linear feet filter slot size for capture of smaller fine solids. E.fluent 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		
5.8.14	1 HP submersible RAS/WAS pumps	1	NO		
5.8.15	Influent pumps, one (1) duty and one (1) standby	2	NO		
5.8.16	Chemical dosing pumps and controls for sodium hypochlorite, plus chemical makeup tank. System for Chlorine Disinfection of Treated Waste Water.	1	SUM		
5.8.17	All pipe & fittings as required to complete the interconnecting system and all necessary fittings, valves and accessories.	1	SUM		
5.8.18	All Electrical wiring as required to complete the interconnecting system and all necessary conduits, fittings and accessories.	1	SUM		
5.8.19	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>				

[illegible]

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BILL NO. 5 SUMMARY PAGE:-				
5.1	INTERNAL PLUMBING				
5.2	SANITARY FITTINGS				
5.3	DRAINAGE				
5.4	TESTING				
5.5	BUILDERS WORK				
5.6	WATER RETICULATION				
5.7	FIRE FIGHTING				
5.8	WASTE WATER TREATMENT				
5.9	GENERAL ITEMS				
	TOTAL FOR MECHANICAL WORKS CARRIED FORWARD TO GRAND SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<p><i>(All Rates are V.A.T Inclusive)</i></p> <p><u>BILL NO. 6; ELECTRICAL WORKS</u></p> <p><u>SCHEDULE 1:</u></p> <p><u>GROUND FLOOR & GATE HOUSE</u></p> <p><u>Supply Install, Test and Commission Following:-</u></p> <p><u>LIGHTING POINTS</u></p> <p>Lighting points wired in 3x4.5mm² PVC/SC copper cables drawn in concealed 20mm diameter heavy gauge PVC conduit including all boxes, saddles and accessories for</p> <p>i)One way switching No. 54</p> <p>ii)Two Way switching No. 32</p> <p><u>10A plastic switch plates as follows</u></p> <p>i)One gang one way No. 26</p> <p>ii)One gang two way No. 10</p> <p>iii)Two gang two way No. 3</p> <p>iv)Intermidiatte switch No. 4</p> <p><u>LIGHTING FITTINGS</u></p> <p>Light fittings complete with all the necessary fixing accessories and rated energy lamps as follows:-</p> <p>i) Exit Light No. 6</p> <p>ii) Type 600X600 No. 24</p> <p>iii)Type 2 No. 12</p> <p>iv) Type 2D No. 2</p> <p>v) Type 4 No. 7</p> <p>vi) Type N No. 25</p> <p>viii) Type 4C No. 1</p> <p>ix) Type M No. 16</p> <p>x) Type C No. 6</p> <p>Motion Sensors for lighting in washrooms No. 4</p> <p><u>POWER OUTLETS</u></p> <p>Socket outlet point in Ring wiring of 3x2.5 mm² PVC-SC-Cu cables drawn inside 20mm diameter HG conduits No. 97</p> <p>13A Twin switched moduled socket outlet plate No. 97</p> <p>20A Double Pole outlet point comprising of wiring in 3x4.0 mm² PVC-SC-Cu cables drawn inside 20mm diameter HG conduits No. 19</p> <p>20A Double pole switch complete with neon light No. 19</p> <p><u>KITCHENETTE</u></p> <p>Cooker point comprising wiring in 3x6.0mm² PVC SC Cu cables No. 1</p>				
	TOTAL C/F TO NEXT PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F/ FROM PREVIOUS PAGE				
6.1.10	45A Cooker Control Unit incorporating a 13A switched socket outlet and neon indicator	No.	1		
6.1.11	Cooker connector	No.	1		
	<u>ELECTRICAL SWEEP FANS</u>				
6.1.12	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.	17		
	<u>CEILING FANS</u>				
6.1.13	i) 49W 1400mm 3-arm 5- speed, Ceiling fan complete with the regulator	No.	17		
6.1.14	Ceiling fan hook (M-10) complete with rawl bolt.	No.	17		
	<u>FIRE DETECTION AND ALARM SYSTEM</u>				
6.1.15	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.	50		
6.1.16	Addressable Call point	No.	9		
6.1.17	Addressable Sounder complete with beacon	No.	9		
6.1.18	Addressable Smoke detectors complete with base	No.	30		
6.1.19	Heat detectors complete with base	No.	1		
6.1.20	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		
	<u>TELEVISION, CCTV AND DATA WORKS</u>				
6.1.21	16 SWG, (450 x 300 x 100)mm ³ flush mounted galvanised powder coated draw box for telephone & data works	4	No		
6.1.22	Telephone/Data outlet point comprising of concealed 20mm diameter HG PVC conduits plus draw wire	67	No		

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	TOTAL C/F TO NEXT PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F/ FROM PREVIOUS PAGE				
6.1.23	RJ45, Single Data outlet plate a) Single b) Double	2 54	No No		
	<u>DISTRIBUTION BOARDS</u>				
6.1.24	10-Way TP/N distribution board flush mounted complete 1No. 125A TPN integral isolator.	No.	1		
6.1.25	MCBs for the above boards i)16A SP ii)20ASP iii)32ASP	No. No. No.	7 19 4		
	<u>SUB-MAINS CABLES</u>				
6.1.27	4 core 25mm ² PVCC/SWA/PVC (armoured) + 1X16mm ² single Core copper cables drawn inside HG conduits	LM	100		
6.1.28	Cable glands for the above cable	No.	4		
6.1.29	Cable lugs for the above cable complete with hydraulic crimping	No.	16		
6.1.30	Single phase isolator point comprising of wiring in 3x6.0 mm ² PVC-SC-Cu cables drawn inside 20mm diameter HG conduits	No	1		
6.1.31	32A Single phase Isolator complete with 3 pin industrial socket and plug	No	1		
6.1.32	Powder Coated Electrical Pedestal Socket Box with provision for 4No. Standard Twin sockets and 4 No. Standard double data outlet	No.	27		
	TOTAL GROUND FLOOR C/F TO COLLECTION SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
6.2.1	<p><u>SCHEDULE 2 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, KVAr, 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) 1 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</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>xv) Allow for Fireman's switch connection as indicated in the schematic drawing</p> <p>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. 120mm² green earth lead complete with all accessories. (Note: Use parallel rods if effective earthing cannot be achieved with 1 No. rod).</p>	Item	1		
	TOTAL C/F TO NEXT PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
6.2.2	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				
6.2.3	Allow for 300mm deep trenching and back filling for the cable mentioned before, Telecommunication and street lighting.	Lm	200		
6.2.4	Ducting for the above in 150mm HGPVC Pipes complete with haunching	Lm	200		
6.2.5	Allow for cable markers in concrete tiles marked "HATARI" for the item above	No.	10		
	<u>WATER PUMPS PROVISIONS</u>				
6.2.6	3 core 6mm ² PVC/SWA/PVC (armoured) copper cables drawn inside 32mm diameter HG conduits	Lm	120		
6.2.7	32A Single phase Isolator complete with 3 pin industrial socket and plug	No.	2		
	<u>BIO- DIGETSTER PROVISIONS</u>				
6.2.8	4 core 25mm ² PVC/SWA/PVC (armoured) copper cables drawn inside 32mm diameter HG conduits	Lm	50		
6.2.9	Cable glands for the above cable	No.	2		
6.2.10	Cable lugs for the above cable complete with hydraulic crimping	No.	10		
	TOTAL FOR POWER DISTRIBUTION C/F TO SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<u>SCHEDULE 3</u>				
	<u>30KW SOLAR SYSTEM</u>				
6.3.1	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.	70		
6.3.2	10 KWh Lithium Battery Pack Smart Storing Energy Storage System (ESS) including a smart Rack Controller, IP65, Class A EMC Protection Rating, Type II DC Lightning Protection. Smart Rack efficiency: +98.5%,	No.	1		
6.3.3	DC/AC off-grid 48V Power inverter full protection function: over-voltage, over-frequency, over-current, over-temperature, AC short-circuit automatic protection Rated Output power 30KW MPPT efficiency of up to 99.5% Pure Sinewave output	No.	1		
6.3.4	Solar MPPT charge controller with the following characteristics; PV open circuit voltage 500V, Max PV power 30KW, 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		
6.3.5	Racks/brackets to fit for item "4.31" above. To be Aluminium or approved equivalent resisting corrosion	No.	75		
6.3.6	Non-corrosive brackets to fit item "4.32" above	No.	75		
6.3.7	Non-corrosive brackets to fit item "4.33" above	No.	2		
6.3.8	Non-corrosive brackets to fit item "4.34" above	No.	1		
6.3.9	Solar surge protection device rated for 60VDC or to the Engineers approval	No.	1		
6.3.10	List any other item necessary to complete the installation of the 30KW solar system	Lot	1		

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	TOTAL FOR HYBRID SOLAR POWER C/F TO SUMMARY PAGE				
	<u>ELEMENT 4</u> <u>Supply, install, test, commission and set to work</u> <u>(To the full satisfaction of all parties to the contract) the following: -</u> <u>CCTV</u>				
6.4.1	Dome Camera 4MP resolution, Excellent low light performance, Efficient H.265+ compression technology, IP67, 24/7 colourful imaging	No.	11		
6.4.2	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 interfaces 16 HDD can be used for continuous video recording <ul style="list-style-type: none"> • 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		
6.4.3	24 Port layer 2 100Mbps POE SFP Switch with Min 30W Power availability per port	No.	2		
6.4.4	GBIC transceiver modules (LC to LC) multimode for the switches above	No.	2		
6.4.5	Fibre Patch Panels for Data cable termination	No.	2		
6.4.6	9 U 600X600 wall mounted data cabinet complete with all accessories including power supply points	No.	2		
6.4.7	10TB Surveillance Hard Disk Drive	No.	8		
6.4.8	STP Cat 6 structured cables	Rolls	10		
6.4.9	STP Cat. 6 patch cord, 3M for the Cameras.	No.	15		
6.4.10	UPT Cat. 6A patch cord, 1M	No.	15		
6.4.11	Associated Fiber and UTP (CAT 6) cabling between field devices and Main Switch	Item	1		

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	TOTAL FOR CCTV CARRIED FORWARD TO SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	ELEMENT 5 <u>Supply, install, test, commission and set to work</u> <u>(To the full satisfaction of all parties to the</u> <u>contract) the following: -</u> ICT Horizontal Cabaling 6.5.1 CAT 6A cable for Data/Telephone outlets 30 Rolls 6.5.2 24 port CAT 6 Data Modular Patch Panel for 4-Pair UTP termination 3 No. 6.5.3 1M Factory terminated Cat 6 4 pair-SFTP RJ 45- RJ 45 patch cords to be used inside cabinet (includes 15No Spares) 63 No. 6.5.4 3M Factory terminated Cat 6 4 pair-SFTP RJ 45- RJ 45 patch cords for data outlets (includes 15No Spares) 63 No. 6.5.5 2U Cable managers/organisers 3 No. ACTIVE EQUIPMENT 6.5.6 24 Port layer 2 100Mbps POE SFP Switch with Min 30W Power availability per port 3 No. BACKBONE CABLING 6.5.7 24 Port ST Multimode, sliding Fibre Optic patch panel complete with LC type connectors for Multimode fibre 3 No. 6.5.8 1M Factory Terminated Fibre optic patch cords complete with LC-LC TYPE connectors to be used inside cabinet 63 No. 6.5.9 8 core Loose tube multimode fibre optic cable linking floor edge switches to core switch in the Server room 450 LM 6.5.10 RJ45-ST media converters for each edge switch 3 No. SERVER 6.5.11 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. 6.5.12 24 port Core network switch for routing voice 1 No. 6.5.13 24 port Core network switch equivalent for routing data 1 No. 6.5.14 Router 1 No. 6.5.15 2U Cable managers/organisers 3 No. 6.5.16 Wireless Access point 8 No.				
	TOTAL C/F TO NEXT PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	BALANCE B/F FROM PREVIOUS PAGE				
	TELEPHONY				
6.5.17	Hybrid IP-PABX capable of handling 50 extensions to include GSM modules plus all accessories to work	1	No.		
6.5.18	Standard UC Phone complete with all accessories	31	No.		
6.5.19	Executive UC Phone complete with all accessories	5	No.		
6.5.20	Operator Phones complete with all accessories. Each takes up to 16 concurrent lines	3	No.		
6.5.21	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			
6.5.22	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				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<u>SCHEDULE 6</u> <u>SOLAR STREET LIGHTING</u>				
6.5.1	Type P4	No.	15		
6.5.2	Type M	No.	24		
6.5.3	7 meter Long Class B Galvanized Iron Solar Street Lighting pole as per detail for Type P4 lighting	No.	15		
6.5.4	7 meter Long Class B Galvanized Iron Solar Street Lighting pole as per detail for Type M lighting	No.	6		
6.5.5	Excavate holes to take the poles above, average depth 1000mm, install pole back-fill with concrete, and compact to natural ground level.	No.	21		
	TOTAL FOR SOLAR STREET LIGHTING C/F TO SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<u>SCHEDULE 7</u>				
	<u>GENERAL ITEMS</u>				
6.7.1	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			
6.7.2	Allow for presentation of all the required samples as per specifications, Bills of Quantities and Drawings.	Item			
6.7.3	Working/ Shop Drawings Prepare and submit three sets of record (shop) plan and isometric layout drawings to easily readable scale, A1 or A0 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 pipework 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 maintenance manuals to Engineers approvals.	Item			
6.7.4	As Installed Drawings As above but for as built/ installed drawings	Item			
6.7.5	Prepare and submit Maintenance Manuals for all items installed.				
6.7.6	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.	Item			
	TOTAL C/F TO NEXT PAGE				

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

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT
	<u>ELECTRICAL INSTALLATIONS SUMMARY PAGE</u>				
6.1	TOTAL FOR SCHEDULE 1 GROUND FLOOR				
6.2	TOTAL FOR SCHEDULE 2 MAINS DISTRIBUTION				
6.3	TOTAL FOR SCHEDULE 3 SOLAR POWER				
6.4	TOTAL FOR SCHEDULE 4 CCTV				
6.5	TOTAL FOR SCHEDULE 5 ICT				
6.6	TOTAL FOR SCHEDULE 6 SOLAR STREET LIGHTING				
6.7	TOTAL FOR SCHEDULE 7 GENERAL ITEMS				
	TOTAL FOR ELECTRICAL WORKS, CARRIED TO GRAND SUMMARY				

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BILL NO.9: FOUL WATER DRAINAGE				
	ELEMENT NO. 1				
	EXTERNAL SOIL WATER DRAINAGE				
7.1.1	Excavate trench for drain pipe average 1500 mm deep, part return fill and ram and remainder cart away	31	LM		
7.1.2	150 mm diameter "Golden Brown" UPVC pipe laid in trench and jointed	31	LM		
	Plain in situ concrete : class 15/20 : as per Engineer's detail				
7.1.3	150mm bed and surround to 150mm diameter pipe : including all necessary formwork	31	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 20/20, 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				
7.1.4	Internal dimensions: 600x 450x 1000mm deep	5	NO		
TOTAL OF EXTERNAL SOIL WATER DRAINAGE CARRIED TO ELEMENT					

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 2				
	BIODIGESTER				
7.2.1	Clear site of shrubs,grass and carting away the arisings	10	SM		
7.2.2	Excavate pit for biodigester not exceeding 1.5m deep	15	CM		
7.2.3	Ditto 1.5 - 3.0M deep	15	CM		
7.2.4	Ditto 3 - 4.5M deep	10	CM		
7.2.5	Extra over excavation in rock of any class	12	CM		
7.2.6	Return fill and ram selected excavated soil around walling	5	CM		
7.2.7	Cart away surplus excavated material	32	CM		
7.2.8	50mm thick blinding class 15/20	10	SM		
7.2.9	200mm thick reinforced concrete class 25/20 slab in surface bed	7	SM		
7.2.10	200mm thick ditto to external walls	33	SM		
7.2.11	Ditto in baffle wall	18	SM		
7.2.12	200mm thick reinforced concrete class 25/20 in cover slab	7	SM		
	Marineply formwork to:				
7.2.13	Sides of Rc external walling	66	SM		
7.2.14	Soffits of suspended slap	7	SM		
7.2.15	Sides of scum baffle wall	36	SM		
7.2.16	Edges of base slab 150-225mm girth	11	LM		
7.2.17	Edges of suspended slab 150-225mm girth	11	LM		
Carried to collection					

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
7.2.18	Box out formwork to opening size 600x450mm	20	NO		
	Ribbed Reinforcement Steel Bars Grade 100 to BS 4449 including cutting to length, bending, hoisting and fixing including all necessary tying wires and spacing blocks				
7.2.19	Assorted sizes	3700	KG		
7.2.20	Form or leave hole in 250mm concrete walling for 100mm pipe including making good disturbed surfaces	16	NO		
7.2.21	15mm thick cement/sand (1:3) waterproof plaster to walls and soffit of cover slab	66	SM		
7.2.22	30mm thick cement/sand (1:3) waterproof screed to surface bed of internal floor	7	SM		
7.2.23	600x450mm heavy duty double air seal cast iron cover and frame	2	NO		
Carried to collection					
	BIODIGESTER Brought forward from page FD/3 Brought down from page FD/4				
TOTAL OF BIODIGESTER CARRIED TO ELEMENT SUMMARY					

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUMMARY				
	ELEMENT				
1	External soil water drainage				
2	Biodigester				
TOTAL FOR EXTERNAL FOUL WATER DRAINAGE CARRIED TO MAIN SUMMARY					

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES, AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>BILL NO. 10: PARKING, DRIVEWAY (ALL PROVISIONAL)</u>				
8.1.1.	Excavation to reduced levels not exceeding 1.50 m deep starting from the ground level	825	CM		
8.1.2.	Imported Filling Supply, spread, water and compact murrum sub base material 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.	825	CM		
8.1.3.	Provide, lay and compact hand packed hardcore as base material 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.	248	CM		
8.1.4.	Sand Bed 50mm thick sand bed course to receive concrete paving blocks	825	SM		
8.1.5.	Herbicide Treatment Herbicides to approval applied to the manufacturer's written instructions and subject to a TEN YEAR guarantee	825	SM		
8.1.6.	Concrete Paving Blocks 210 x 105 x 80 thick cabro paving block minimum strength 49N/mm ² laid on 50 mm thick sand bed (m/s) and joint filled with sand and vibrated.	825	SM		
8.1.7.	Precast Concrete Channels Provide, lay and joint 200x100mm channel in and including concrete Class 15/20 bed and haunch. Include for all necessary excavation and formwork to Eng details	107	LM		
8.1.8.	Ditto curved to plan	12	LM		
Carried to collection					

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES, AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
8.1.9.	Precast Concrete Kerbs Provide, lay and joint 250x125mm precast concrete half battered kerb including Class 15/20 bed and haunch. Include for all necessary excavation and formwork to Eng details	107	LM		
8.1.10.	Ditto curved to plan	12	LM		
	<u>WALKWAY</u>				
8.1.11.	Excavation to reduced levels average depth not exceeding 300 mm deep and cart away	143	SM		
8.1.12.	Imported Filling Supply, spread, water and compact marrum sub base material 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.	43	CM		
8.1.13.	Provide, lay and compact hand packed hardcore as base material 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.	43	CM		
8.1.14.	50 mm thick sand bed course to receive paving blocks	143	SM		
8.1.15.	Herbicides to approval applied to the manufacturer's written instructions and subject to a TEN YEAR guarantee	143	SM		
8.1.16.	Concrete Paving Blocks 210 x 105 x 80 thick cabro paving block minimum strength 49N/mm ² laid on 50 mm thick sand bed (m/s) and joint filled with sand and vibrated.	143	SM		
8.1.17.	Precast Concrete Channels Provide, lay and joint 200x100mm channel in and including concrete Class 15/20 bed and haunch. Include for all necessary excavation and formwork to Eng details	106	LM		
Carried to collection					

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
FISHERIES,AQUACULTURE AND BLUE ECONOMY**

ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Precast Concrete Kerbs				
8.1.18.	Provide, lay and joint 250x125mm precast concrete half battered kerb and 200x100mm channel on and including Class 15/20 bed and haunch. Include for all necessary excavation and formwork to Eng details	106	LM		
	ROAD AND PARKING MARKING				
	Prepare and aplpy three coats of approved road marking thermoplastic paint on asphalt to surfaces not exceeding 100mm girth				
8.1.19.	Yellow in colour	45	SM		
	<u>STORM OF WATER DRAINS</u>				
	OPEN DRAINAGE				
8.1.20.	600mm wide(internal) open "U" drainage in rectangular fair faced insitu vibrated reinforced concrete class 20/20;including 600mm high x 200 mm thick reinforced concrete walling in T12 bars, 200 mm thick bottom slab reinforced in BRC A142 ,50mm concrete class 15/20 blinding on 150mm hardcore filling; including all necessary excavations,strutting, formwork, plaster to all internal surfaces, plaster to all exposed external surfaces all as per Eng details.	117	LM		
8.1.21.	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 :	117	LM		
	BOX CULVERT				
8.1.22.	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.	1	LM		
Carried to collection					

**PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR
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ITEM.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Headwalls				
8.1.23.	Headwall comprising of 5000mm long x 2000mm high x 350mm thick insitu vibrated reinforced concrete class 20/20 on and including concrete class 20/20 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		
	Invert Block Drains				
8.1.24.	300mm diameter round precast concrete invert blocks drain manufactured in accordance with BS 340 laid to slope and including 100mm murrum bed;including 600 x 225 x 75mm thick side slabs : jointed and pointed in cement and sand 1:3 mortar : on compacted murrum : as per Engineer's details jointing in cement and sand mortar;including all necessary excavations,strutting, formwork, reinforcements; all as per Eng details.	117	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 above page DW/4				
TOTAL FOR PARKING, DRIVEWAY, WALKWAYS AND STORM WATER					

BILL OF QUANTITIES FOR PROPOSED NATIONAL MARICULTURE RESEARCH AND TRAINING CENTRE

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
9.0.1	<p>(All Rates are V.A.T Inclusive) BILL NO. 9; ESMP PRELIMINARIES FOR HEALTH AND SAFETY, AIR AND NOISE MONITORING & CONTROL, WASTE MANAGEMENT</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>SAFETY, HEALTH AND WELFARE OF WORKERS 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> <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> <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>	Item	1	1,500,000.00	1,500,000.00
	Total Carried to Collection			Ksh	1,500,000.00

BILL OF QUANTITIES FOR PROPOSED NATIONAL MARICULTURE RESEARCH AND TRAINING CENTRE

<p>9.0.2</p>	<p><u>SANITATION OF THE WORKS</u> 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> <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>9.0.3 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> <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>9.0.4 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>Item</p>	<p>1</p>	<p>200,000.00</p>	<p>200,000.00</p>
		Item	1	200,000.00	200,000.00
		Item	1	300,000.00	300,000.00
	Total Carried to Collection			Ksh	700,000.00

<p>9.0.5</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>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>	<p>Item</p>	<p>1</p>	<p>50,000.00</p>	<p>50,000.00</p>
<p>9.0.6</p>		<p>Item</p>	<p>1</p>	<p>300,000.00</p>	<p>300,000.00</p>
	<p>Total Carried to Collection Below</p>			<p>Ksh</p>	<p>350,000.00</p>
	<p><u>SECTION SUMMARY- ESMP</u></p> <p>Total Brought Forward from Page ESMP/1</p> <p>Total Brought Forward from Page ESMP/2</p> <p>Total Brought Forward from Above</p>				<p>1,500,000.00</p> <p>700,000.00</p> <p>350,000.00</p>
	<p>TOTAL FOR DAY WORKS CARRIED TO GRAND SUMMARY</p>				<p>2,550,000.00</p>

PROPOSED CONSTRUCTION OF FISHERIES OFFICES IN MALINDI FOR THE STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND BLUE ECONOMY

[illegible]

10. GRAND SUMMARY

Contract Name: CONSTRUCTION RENOVATION OF MALINDI FISHERIES OFFICE

RFBNo.: KE-MOMBE&MA-KLF-2024-015-CW

<i>General Summary</i>	<i>Page</i>	<i>Amount</i>
BILL NO. 1: PARTICULAR PRELIMINARIES	PP/1	
BILL NO. 2: GENERAL PRELIMINARIES	GP/1	
BILL NO.3: REMOVAL OF ASBESTOS	AR/1	
BILL NO.4: BUILDING WORKS	FR/1	
BILL NO.5 : MECHANICAL WORKS	Mech/1	
BILL NO.6: ELECTRICAL WORKS	Elec/1	
BILL NO.7: FOUL WATER DRAINAGE	FD/1	
BILL NO.8: DRIVEWAY AND PARKING	DW/1	
BILL NO.9: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN	ESMP/1	3,460,000.00
<i>Subtotal of Bills</i>	<i>(A)</i>	
<i>Total for Daywork (Provisional Sum)*</i>	<i>(B)</i>	
<i>Provisional Sum of Kenya Shillings One Million Only (Kes 1,000,000.00) for fluctuationsⁱⁱ</i>	<i>(C)</i>	<i>1,000,000.00</i>
<i>Total of Bills Plus Provisional Sums (A + B + C)ⁱ</i>	<i>(D)</i>	
<i>Add Provisional Sum of Kenya Shillings One Million Two Hundred Thousand Only (Kes 1,200,000.00) for Contingency Allowanceⁱⁱ</i>	<i>(E)</i>	<i>1,200,000.00</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