OFFICE OF THE REGIONAL PROJECT DIRECTOR KERALA RURAL WATER SUPPLY AND SANITATION AGENCY

Regional Project Management Unit, Kannur - 670002 Tel-0497 2707601, Email rpmukannur@gmail.com

E-TENDER NOTICE

Dated: 18.10.2022

No.005/KRWSA/KNR/KRFB/KK/2022

The Regional Project Director, Kerala Rural Water Supply and Sanitation Agency, Regional Project Management Unit, Kannur-2 invites sealed competitive tenders (E-Tender) in electronic mode in ONE level system for the work detailed below from the contractors having valid and eligible A, B and C class registration from KPWD/KRWSA/CPWD/LSGD and Government institutions.

The tender is invited in One cover system from the registered and eligible firms through e-procurement portal of Government of Kerala (https://www.etenders.kerala.gov.in). Prospective bidders willing to participate in this tender shall necessarily register themselves with above mentioned e-procurement portal at free of cost.

The tender timeline is available in the critical date section of this tender published in www.etenders.kerala.gov.in.The brief details of tender are as follows.

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Tender No	005/KRWSA/KNR/KRFB/KK/2022						
Name of Project	KRFB – Relaying of Jalanidhi pipelines along Nileshwaram-Edathode PWD Road at Kinanoor Karinthalam Grama Panchayath, Kasaragod District.						
Name of work	KRFB – Relaying of Jalanidhi pipelines along Nileshwaram-Edathode PWD Road at Kinanoor Karinthalam Grama Panchayath, Kasaragod District.						
Probable Amount of Contract:	Rs.30,17,465/-						
Sale of Tender Documents	Documents are available in the site www.etenders.kerala.gov.in for free download						
Tender forms received by	Regional Project Director, KRWSA, Regional Project Management Unit, Kannur.						
Tender Fee:	Rs.2500/- + GST (GST is to be remitted by the bidder)						
EMD:	Rs.50,000/-						
Mode of payment (Tender Fee & EMD)	Online Payment						
Clarification regarding bid	All clarifications sought up to 03.00pm on 28-10-2022 will be answered through telephonic/email (Phone: 0497-2707601, 8281112061, 8281112060, 8281112041. Email: rpmukannur@gmail.com).						
Corrigendum	Corrigendum if any will be published in <u>www.etenders.kerala.gov.in</u>						
Tender submission	28-10-2022 up to 05.00 PM						
Tender opening	31-10-2022 at 03.00 PM						
Validity of Bid(Firm period)	90 days from the date of opening the tender						
Place of execution of agreement	Regional Project Management Unit, KRWSA, Kannur						
Place of execution of work	Kinanoor Grama Panchayath, Kasaragod District						
Period of completion of work	THREE Months from date of agreement.						

Interested bidders can get further details regarding the work from the office of the KRWSA, REGIONAL PROJECT MANAGEMENT UNIT, Near AKG Hospital, Talap, KANNUR.

All other relevant rules followed by KRWSA shall be applicable.



KERALA RURAL WATER SUPPLY AND SANITATION AGENCY (KRWSA)

Name of work KRFB – Relaying of Jalanidhi pipelines along Nileshwaram-Edathode PWD Road at Kinanoor Karinthalam Grama Panchayath, Kasaragod District.

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E-TENDER No: 005/KRWSA/KNR/KRFB/KK/2022

DUE DATE: 05.00 PM on 28-10-2022

NOTICE INVITING TENDER

REGIONAL PROJECT DIRECTOR KERALA RURAL WATER SUPPLY AND SANITATION AGENCY (KRWSA)

REGIONAL PROJECT MANAGEMENT UNIT
BUILDING NO.TP3/253, NEAR AKG HOSPITAL, TALAP, KANNUR – 670002
KERALA STATE

TEL. NO: 0497-2707601

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KERALA RURAL WATER SUPPLY AND SANITATION AGENCY (KRWSA)

FORM No. 83

E-Tender No: 005/KRWSA/KNR/KRFB/KK/2022

NOTICE INVITING TENDER FOR WORKS

Name of work KRFB – Relaying of Jalanidhi pipelines along Nileshwaram-Edathode PWD Road at Kinanoor Karinthalam Grama Panchayath, Kasaragod District

Last date and time for electronic submission of Tender - Up to 05.00 PM on 28-10-2022



KERALA RURAL WATER SUPPLY AND SANITATION AGENCY (KRWSA)

General Tender Terms & Conditions for Kerala State e-Procurement System through https://www.etenders.kerala.gov.in

This tender is an e-Tender and is being published online for the work supply and laying of PVC and GI pipes along Nileshwaram – Edathode PWD Road at Kinanoor Karinthalam Grama Panchayath, Kasaragod District.

The tender is invited in **ONE/TWO** (strike off whichever is not applicable) cover system from the registered and eligible firms through e-procurement portal of Government of Kerala (www.etenders.kerala.gov.in). Prospective bidders willing to participate in this tender shall necessarily register themselves with above mentioned e-procurement portal.

The tender timeline is available in the critical date section of this tender published in www.etenders.kerala.gov.in.

A). Online Bidder registration process:

Bidders should have a Class II or above Digital Signature Certificate (DSC) to be procured from any Registration Authorities (RA) under the Certifying Agency of India. Details of RAs will be available on www.cca.gov.in. Once, the DSC is obtained, bidders have to register on www.etenders.kerala.gov.in website for participating in this tender. Website registration is a one-time process without any registration fees. However, bidders have to procure DSC at their own cost.

Bidders may contact e-Procurement support desk of Kerala State IT Mission over telephone at 0471-2577088/188/388 or 0484-2336006, 2332262 or 0497-2764788, 2764188 or 0483-273294 or through email: etendershelp@kerala.gov.in or helpetender@gmail.com for assistance in this regard.

B). Online Tender Process:

The tender process shall consist of the following stages:

- i. **Downloading of tender document**: Tender document will be available for free download on www.etenders.kerala.gov.in. However, tender document fees shall be payable at the time of bid submission as stipulated in this tender document.
- **ii. Pre-bid meeting**: As mentioned in the tender documents.
- **iii. Publishing of Corrigendum**: All corrigenda shall be published on <u>www.etenders.kerala.gov.in</u> and shall not be available elsewhere.
- iv. **Bid submission**: Bidders have to submit their bids along with supporting documents to support their eligibility, as required in this tender document on www.etenders.kerala.gov.in. Hard copies of all tender documents and other supporting documents shall be submitted to the tendering Agency within three days of opening of the tender. However, the online submitted documents will always supersede the manually submitted hard copies of documents for tender evaluation.
- v. Opening of Technical Bid and Bidder short-listing: The technical bids will be opened, evaluated and shortlisted as per the eligibility and technical qualifications. All documents in support of technical qualifications shall be submitted (online). Failure to submit the documents online will attract disqualification. Bids shortlisted by this process will be taken up for opening/evaluating the financial bid.
- vi. Opening of Financial Bids: Bids of the qualified bidder's shall only be considered for opening and evaluation of the financial bid on the date and time mentioned in critical date's section.

C). Documents Comprising Bid:

(i). The First Stage (Pre-Qualification or Technical Cover based on 1cover or2 cover tender system):

Pre-Qualification or Technical proposal shall contain the scanned copies of the following documents which every bidder has to upload:

- i) Document 1 : Scanned copy of duly filled and signed preliminary agreement prepared in Kerala Stamp Paper worth Rs.200/-
- ii) Document 2 : Scanned copy of documents to prove eligibility criteria
- iii) Document 3: The NIT documents of the work downloaded from the website to agree with the tender conditions
- iv) Document : Any other documents as per the requirement of the tender conditions
- v) (the number may vary with departments/ PSUs requirement)

Kerala Rural Water Supply and Sanitation Agency (KRWSA) doesn't take any responsibility for any technical snag or failure that has taken place during document upload.

(ii). The Second Stage (Financial Cover or as per tender cover system):

The Bidder shall complete the Price bid as per format given for download along with this tender.

<u>Note</u>: The blank price bid should be downloaded and saved on bidder's computer without changing filename otherwise price bid will not get uploaded. The bidder should fill in the details in the same file and upload the same back to the website.

Fixed price: Prices quoted by the Bidder shall be fixed during the bidder's performance of the contract and not subject to variation on any account. A bid submitted with an adjustable/ variable price quotation will be treated as non - responsive and rejected.

D). Tender Fee and Earnest Money Deposit (EMD)

The Bidder shall pay, a tender fee and Earnest Money Deposit (EMD) or Bid Security amount as per the tender documents. GST towards tender fee shall be remitted by the bidder directly. The Bid security is required to protect the purchaser against risk of Bidder's conduct, which would warrant the forfeiture of security. Applicable taxes should be paid by the Bidder.

Online Payment modes The tender fee and EMD can be paid in the following manner through e-Payment facility provided by the e-Procurement system:

State Bank of India Multi Option Payment System (SBI MOPS Gateway): Bidders are required to avail Internet Banking Facility in any of below banks for making tender remittances in eProcurement System.

A)	Internet Banking Options (Retail)							
1	Allahabad Bank	32	Kotak Mahindra Bank					
2	Axis Bank	33	Lakshmi Vilas Bank					
3	Andhra Bank	34	Mehsana Urban Co-op Bank					
4	Bandan Bank	35	NKGSB Co-operative Bank					
5	Bank of Bahrain and Kuwait	36	Oriental Bank of Commerce					
6	Bank of Baroda		Punjab and Maharashtra Cooperative					
7	Bank of India	38	Punjab National Bank					
8	Bank of Maharashtra	39	Punjab and Sind Bank					
9	Bassein Catholic Co-operative Bank	40	RBL Bank					
10	BNP Paribas	41	Saraswat Cooperative Bank					
11	Canara Bank	42	Shamrao Vithal Cooperative Bank					
12	Catholic Syrian Bank	43	South Indian Bank					
13	Central Bank of India	44	Standard Chartered Bank					

14	City Union Bank	45	State Bank of India
15	Corporation Bank	46	Syndicate Bank
16	Cosmos Bank	47	Tamilnad Mercantile Bank
17	DCB Bank	48	Tamilnadu Cooperative Bank
18	Dena Bank	49	The Kalyan Janata Sahakari Bank
19	Deutsche Bank	50	TJSB Bank (Erstwhile Thane Janata
20	Dhanalaxmi Bank	51	UCO Bank
21 22	Federal Bank	52	Union Bank of India
22	HDFC Bank	53	United Bank of India
23	ICICI Bank	54	Vijaya Bank
24	IDBI Bank	55	YES Bank
25	Indian Bank		
26	Indian Overseas Bank		
27	IndusInd Bank		
28	Jammu & Kashmir Bank		
29	Janata Sahakari Bank		
30	Karnataka Bank		
31	Karur Vysya Bank		
B) Inte	ernet Banking Options (Corporate)		
1	Bank of Baroda	21	Laxmi Vilas Bank
2	Bank of India	22	Oriental Bank of Commerce
3	Bank of Maharashtra		Punjab & Maharashtra Coop Bank
4	BNP Paribas	24	Punjab & Sind Bank
5	Canara Bank	25	Punjab National Bank
6	Catholic Syrian Bank	26	RBL Bank

During the online bid submission process, bidder shall select **SBI MOPS** option and submit the page, to view the **Terms and Conditions** page. On further submitting the same, the e- Procurement system will re-direct the bidder to MOPS Gateway, where two options namely **SBI and Other Banks*** will be shown. Here, Bidder may proceed as per below:

- a) SBI Account Holders shall click SBI option with its Net Banking Facility., where bidder can enter their internet banking credentials and transfer the Tender Fee and EMD amount.
- b) Other Bank Account Holders may click **Other Banks** option to view the bank selection page. Here, bidders can select from any of the 54 Banks to proceed with its Net Banking Facility, for remitting tender payments.

*Transaction Charges for Other Banks vide SBI Letter No. LHO/TVM/AC/2016-17/47 – 1% of transaction value subject to a minimum of Rs. 50/- and maximum of Rs. 150/-.

Any transaction charges levied while using any of the above modes of online payment has be borne by the bidder. The supplier/contractor's bid will be evaluated only if payment status against bidder is showing "Success" during bid opening.

E). SUBMISSION PROCESS:

For submission of bids, all interested bidders have to register online as explained above in this document. After registration, bidders shall submit their Technical bid and Financial bid online on www.etenders.kerala.gov.in along with online payment of tender fee and EMD.

For page by page instructions on bid submission process, please visit www.etenders.kerala.gov.in and click "Bidders Manual Kit" link on the home page.

It is necessary to click on "Freeze bid" link/ icon to complete the process of bid submission otherwise the bid will not get submitted online and the same shall not be available for viewing/ opening during bid opening process.

Locality.

KERALA RURAL WATER SUPPLY AND SANITATION AGENCY (KRWSA) NOTICE INVITING TENDER FOR WORK 1. FORM NO. 83

- 1.1. Electronic tenders are invited for and on behalf of the Beneficiary Committees of Choyyamkode Cheruva and Koovatty Water Supply Schemes, Kinanoor Karinthalam Grama Panchayath, from registered contractors (A, B, C & D as per PWD Manual 2012) for the work of supply and laying of PVC and GI pipes along Nileshwaram Edathode PWD Road at Kinanoor Karinthalam Grama Panchayath.
- 1.2. The items and sub-heads of works to be done are enumerated in the subjoined schedule. Unless otherwise specified, the tender must be for the whole or any individual work and part tenders are liable to rejection. A contractor may tender for more than one work with the earnest money deposit specified in each case, but shall not tender for any part of a work only, unless specifically so required.
- 1.3. All works shall be done in conformity with the specifications and conditions of contract in force in the KRWSA. In case of schedule rate contract, tenderers must quote their own rates specifically for each item without reference to the departmental estimates or the current schedule of rates and for percentage rate contract, only a single rate as an overall percentage above or below or at the rate given in the schedule by a single entry at the bottom of the schedule under the head quoted rate, may be made. The rates quoted shall be inclusive ones, covering all the operations contemplated in the specifications and tender schedules and all incidental work necessary for such operations such as shoring, bailing, from work, scaffolding, etc. "The rates quoted shall be inclusive of GST".
- (a) When tenders are delivered based on contractor's alternate designs, such tenders should be accompanied by a schedule of quantities of materials to be used for each item of work with complete detailed specifications and rate. In such cases the benefit of any savings in the quantities of materials actually used up under each item of work during execution will accrue to the department.
- (b) The overall percentage rate accepted and specified in the agreement shall not be varied on any account whatever.
- 1.4. The tenders shall be submitted electronically to the Regional Project Direcor, Kerala Rural Water Supply and Sanitation Agency (KRWSA), Regional Project Management Unit (RPMU), Building No.TP3/253, Near AKG Hospital, Talap, Kannur 670002 in the method available at the Government of Kerala e-Procurement website www.etenders.kerala.gov.in. All documents / attested copies shall be submitted electronically by scanning, digitally signing and uploading. The tender documents in original / attested copy of the documents shall be submitted within three days of opening of the tender. The contractors who are registered for e-tendering and having valid password can view the tender notice and the tender documents free of cost in the website. However on submission of tender, the tenderer will have to remit the cost of tender form viz. Rs.2,500/- electronically. Applicable GST/Taxes shall be remitted by the Bidder. The cost of tender form once paid successfully and credited to Kerala Rural Water Supply and Sanitation Agency (KRWSA) account will not be refunded even if the tender is cancelled at a later stage or the tenderer fails to upload his tender. Preliminary agreement in the prescribed form in Rs. 200/- Kerala Stamp Paper duly signed and sealed shall be uploaded without fail.

The tender schedule shall be filled up in the prescribed format provided in the tender document. For uploading the tender documents, the tenderer has to remit the amount towards cost of tender documents as well as the prescribed EMD of Rs.50,000/- through online payment mechanism for e-procurement system of Govt. of Kerala. Bidders are advised to visit the "Downloads" section of e-Procurement website (www.etenders.kerala.gov.in) for detailed instructions on making online payment using internet banking facility.

The tenders are to be uploaded electronically on or before 28-10-2022 up to 05:00 PM. The tender will be opened on 31-10-2022 at 03:00 PM by the Regional Project Director KRWSA, Kannur or such officer as may be authorized in this behalf in the presence of such of those tenderers or their authorized agents as may be present.

The total amount of each tender will be read out and all corrections in the tender will be attested by the tender opening officer with dates and initials and by the tenderer, if present. A list of corrections which remain unattested by the tenderer will be made out and pasted to each tender. Details of individual rates will be treated as confidential and will not be read out. For uploading the technical and price bids, the tenderer has to remit the amount towards cost of tender documents as well as the prescribed EMD through online payment gateway.

- 1.5. Selected contractor will be required to produce Income tax and GST clearance certificates before final payment is made for the work, and before security deposits released.
- 1.6. The contractors submitting tender should produce copies of solvency certificates clearly indicating to what extent they are solvent from the Tahsildar of the Taluk where they reside along with their tenders.
- 1.7. Each tenderer must also send a certificate of Income-tax verification from the appropriate Income tax Agency in the form prescribed therefore.

In the case of proprietary or partnership firm, it will be necessary to produce the certificate aforementioned for the proprietor or proprietors and for each of the partners as the case may be.

If a certificate has already been produced by the tenderer during the calendar year in which the tender is made in respect of a previous tender it will be sufficient if particulars regarding the previous occasion on which the certificate that produced are given.

All tenders received without a certificate as aforementioned will be summarily rejected.

- 1.8. The tenderer shall examine closely the Madras Detailed Standard Specification / CPWD specifications and also the standard preliminary specification contained therein and sign the Divisional Office copy of the Madras Detailed Standard Specification and its addenda volume in token of such study before submitting his tender unit rates which shall be finished work in site. He shall also carefully study the drawings and additional specifications and all the documents which form part of the agreement to be entered into by the accepted tenderer. The Madras Detailed Standard Specification / CPWD specifications and other documents connected with the contract such as specifications, plans, descriptive specification sheet regarding materials, etc, can be seen at any time during office hours on office days in the Office of the Regional Project Director, KRWSA, Kannur.
- 1.9. The tenderers attention is directed to the requirements for materials under the clause "Materials and Workmanship" in the 'Preliminary Specification'. Materials conform to the Indian Standard Specification

shall quote his rate accordingly.

1.10. Every tenderer is expected before quoting his rate to inspect the site of the proposed work. He should also inspect the quarries and satisfy himself about the quality and availability of materials. The names of quarries, Kilns, etc. where from certain materials are to be obtained will be given in the descriptive specification sheet. The best classes of materials are to be obtained from the guarries or other sources defined shall be used on the work. In every case the materials must comply with the relevant standard specification. Samples of materials as called for in the standard specification or in this tender notice, or as required by the Regional Project Director in any case, shall be submitted for the Regional Project Director approval before the supply to site of work is begun. If the Contractor after examination of the source of materials defined in the Descriptive Specification Sheet, is of opinion that materials complying with the standard or other specifications of the contract cannot be obtained in the Descriptive Specification Sheet he shall so state clearly in his tender and state wherefrom he intends to obtain the materials subject to the approval of the Regional Project Director. The Government will not, however after acceptance of contract rate pay any extra charges for lead or for any other reasons, in case the contractor is found latter on to have misjudged the materials available. Attention of the contractor is directed to the standard 'Preliminary Specification' regarding payment of seignior age tolls, etc.

Note: -The department does not undertake to construct or make available any approach road or other means of approach to the proposed work site and the tenderer shall get acquainted with the available means of approaches to the proposed site and quote for the various items. The department shall not be liable for any claim raised later on the plea of non-availability or non-access to the site.

- 1.11. The tenderer's particular attention is drawn to the sections and clauses in the standard Preliminary Specification' dealing with.
- (1) Test, Inspection and rejection of defective materials and work.
- (2) Carriage
- (3) Construction plant.
- (4) Water and Lighting
- (5) Cleaning up during progress and for delivery.
- (6) Accidents
- (7) Delays
- (8) Particulars of payment.

The contractor should closely peruse all the specification clauses, which govern the rates, which he is tendering.

- 1.12. In consideration of the tenderer being allowed to quote for the work he should keep the tender firm for a period of 90 days from the date of opening the tender during which period or till the tenders are decided whichever is earlier he will not be free to withdraw the tender. Any such withdrawal will entail forfeiture of the earnest money deposited for the work. Due to departmental or administrative reasons it is found necessary to keep the tender open for a further period, prior consent of the tenderer shall be obtained in writing for every further period of one month.
- 1.13. Before commencing work or within a week after the date when the acceptance of the tender has

been intimated to him, the tenderer shall deposit a sum sufficient to make up the balance of 4 percent of the probable value of contract which together with the amount of earnest money deposited shall be treated as security for the proper fulfillment of the same and shall execute an agreement for the work in the P.W. Schedule Form. If he fails to do this or in the case of P.W. contracts maintain a specified rate of progress (to be specified in each case in the tender schedule) the earnest money and security deposit shall be forfeited to KRWSA and fresh tenders shall be called for or the matter otherwise disposed off. If as a result of such measures due to the default of the tenderer to pay the requisite deposit, sign contracts or take possession of the work any loss to KRWSA results the same will be recovered from him as arrears of revenue, but should it be saving to KRWSA the original contractor shall have no claim whatever to the difference. Recoveries on this or any other account will be made from the sum that may be due to the contractor on this or any other subsisting contracts or under the Revenue Recovery Act, or otherwise the Government may decide.

Note: Investment in Treasury Savings Bank will alone be treated as acceptable form of security.

- 1.14. The acceptance of the tender rests with the Regional Project Director, Kerala Rural Water Supply and Sanitation Agency (KRWSA), RPMU, Kannur who does not undertake to accept the lowest or any particular tender.
- 1.15. The right to carry out the work in conformity with or in manner entirely different from the term of this invitation that may be considered most suitable before or subsequent to the receipt of tenders due to exigencies of work is reserved with the department.
- 1.16.Drawing, Schedule of quantities, specifications of work to be done and conditions of contract to be entered into can be seen at the office of the undersigned on any working day during office hours It shall be definitely understood that the KRWSA does not accept any responsibility for the correctness or completeness of the schedule that the schedule is liable to alternation by omissions, deductions or additions at the discretion of the competent departmental officer or as set forth in the conditions of contract. The tenderer will however base this tender amount in the case of lump sum tender on the basis of those quantities etc.
- 1.17. The contractors can view the tender notice and the tender documents free of cost in tender free view. However on submission of tender, the tenderer will have to remit the cost of tender form viz. Rs.2500/- (GST is to be remitted by the contractor) and the prescribed EMD of Rs.50,000/- electronically. The cost of tender form once paid successfully and credited to Kerala Rural Water Supply and Sanitation Agency (KRWSA) account will not be refunded even if the tender is cancelled at a later stage or the tenderer fails to upload his tender.
- 1.18. The earnest money deposit of the unsuccessful tenderers will be refunded immediately after tabulating tenders, keeping only the earnest money of the first 2 lowest tenderers.

The Earnest Money Deposit of the remaining unsuccessful tenders will also be refunded within a week from the date of acceptance of the tender.

- 1.19. Solicitors fee, if any, to be paid to the Law Officers of the KRWSA for scrutinizing or drawing up of agreements will be paid and the same recovered from the successful tenderer.
- 1.20. Tenderer must also state in their tenders if they are prepared to carry out at their tendered rates such portion or portions of the work as may finally be allotted to them by the officer deciding tenders.

Note: - The Department reserves the right to allot such portion of the work included in the tender at the rates quoted by the tenderer in the absence of specific noting by the tenderer to the contrary against clause 4 tender (Form 84) Such allotment shall not vitiate the acceptance and the tender shall indemnify KRWSA against any loss to KRWSA due to failure on the part of the tenderer to carry out such portion of the work allotted to him at the rates quoted by him.

- (a)The successful tenderer will have to carry out 25 per cent more of the estimated quantity of every item at his agreed rates.
- 1.21. Any further information necessary can be obtained at the office of the undersigned on all working days during office hours.
- 1.22. The work should be completed in all respects within 3 months from the date of work order.
- 1.23. Payment on lump sum basis or by final measurement at unit prices:
- a) Final measurements need not be taken unless either the contractor or the Regional Project Director claims extras to or deductions from the quantities of Schedule A.
- b) In case final measurements are claimed, they shall be taken only for those items which either the contractor or the Regional Project Director claims final measurements and the quantities of the remaining items in Schedule A shall be accepted as correct. The lump sum amount mentioned in the agreement will then be varied by addition thereto or deducting there from as the case may be the difference (if any), between the amounts mentioned in Schedule A for such items and the amounts arrived at by calculation at contract rates based on the revised quantities for the same, obtained by the final measurement aforesaid.
- c) It shall be accepted as a condition of the contract that the payment of the final bill to the contractor less the withheld amount and his acceptance thereof shall constitute a full and absolute release of Government from all further claims by the contractor under the contract.
- d) Payment for additions and deductions for omissions.
- No authorized variation shall vitiate the contract but additions and omissions shall be measured and dealt with in accordance with clause 23 (b)
- e) Items of work not expressly or impliedly described in the schedule plans or specifications will be treated as "extras" They will include only items of works which though highly necessary for the proper execution of the work and for its completion, were not provided for in the original contract.
- 1. The execution of an extra item of work and payment therefore will be based on the following conditions:
- i) There shall be an order in writing to execute the extra item of work duly signed by an Engineer not below the rank of an Regional Engineer before its commencement.
- ii) If the contractor finds, after examining the specifications and plants that extra are involved, he should give notice to the Engineer to this effect and shall proceed with the execution of the extra item, only after receiving instructions in writing from the Engineer.
- 2. Extra items may be classified as additional substituted or altered items, depending on their relation or otherwise to the original item or items of work.
- 3. The rates for extra items shall be worked out as below:
- i) In the case of all extra item whether additional, altered or substituted, if accepted rates for identical

items provided for in the contract,' such rates shall be applicable.

- ii) In the case of extra items whether altered or substituted, for which similar items exists in the contract, the rates shall be derived from the original item by appropriate adjustment of cost of affected components. The percentage excess or deduction of the contract rate for the original item with reference to the departmental estimated rate shall be applied in deriving the rates for such items.
- iii) In the case extra items, whether altered or substituted and for which similar items do not exist in the contract and rates exist in the schedule of rates, the rate shall be arrived at on the basis of the departmental data rate current at the time of ordering the extra item, after applying the tender deduction except on the cost of departmental material. Tender excess, if any, will not be applied.
- iv) In the case of additional items, the rates shall be arrived at on the basis of the departmental data rates current at the time of ordering the extra item or the date of commencement of the extra item whichever is earlier, after applying the tender deduction except on the cost of departmental material. Tender excess, if any, will not be applied.
- v) In the case of extra items, whether additional altered or substituted, for which the rates cannot be derived from similar items in the contract, and only partly from the departmental schedule of rates, the rates for such part or parts of items as are not covered in the schedule of rates shall be determined by the Engineer on the basis of the prevailing market rates giving due consideration to the analysis of the rate furnished by the contractor with supporting documents, including contractor's profit. This shall be added on to the departmental rate (including contractor's profit) current at the time of ordering or executing the extra item, whichever is earlier for the other part of the item for which rates can be derived from the schedule of rates.
- vi) In the case of extra item whether additional, altered or substituted, for which the rates cannot be derived either from similar item of work in the contract or from the departmental schedule of rates, the contractor shall within 14 days of the receipt of the order to carry out the said extra item of work, communicate to the Engineer the rate which he proposes to claim for the item, supported by analysis of the rate claimed and the department shall within one month thereafter, determine the rate on the basis of the market rate giving due consideration to the rate claimed by the contractor.
- vii) In the case of percentage rate contract, the rate for extra item shall be arrived at by applying the percentage excess or deduction to the departmental data rate as per the original schedule on which the tenders were invited.
- 4. Wherever the term 'Departmental data rate' appears, it shall mean the rate derived from the Departmental schedule of rates and shall include conveyance charges and contractor's profit.
- f) In cases in which the contractor has executed extra items not contemplated in the agreement but the rates of which require sanction of higher authorities the Regional Project Director may in such cases, sanction advance up to an amount not exceeding 75 per cent of the amount for the items at the rate worked out and certified by the Manager Technical. The Engineer shall in all such cases promptly record all authorized extra items executed by the contractor including detailed measurements and quantities thereof in the Measurement Book. He shall neither enter any rate for the same in the Measurement Book nor include such extra items in the body of the bill When the bill is received in the RPMU, the Manager Technical shall prepare a separate statement for those extra items showing the items

- 1.24. The contractor shall not without the previous sanction in writing of the Agency accepting the tender, execute any power of attorney in respect of any matter, touching this contract and any such power of attorney executed without such sanction shall not be recognized by or be binding upon KRWSA or their officers It shall be entirely within the discretion of the Agency accepting the tender either to grant such sanction or to refuse it or to revoke a sanction once given.
- 1.25. No part of the contract shall be sublet without written permission of the Regional Project Director nor shall transfer be made by power of attorney authorizing other to receive payment on the contractor's behalf.
- 1.26. The Regional Project Director or other sanctioning Agency reserves the right to reject any tender or all the tenders without assigning any reason thereof.
- 1.27.Cement and steel shall be supplied by the contractor and if supplied departmentally, their value will be recovered at DSR rates. Cement and steel as well as other materials so issued shall remain the property of KRWSA though in contractors custody and shall not be removed from the stores at work site expect under written authorization by a competent Agency not less than the rank of a Project Engineer. In case of M.S. rods, the maximum wastage up to but not necessary 5 percent may be allowed at the discretion of the Regional Project Director in charge of the work and the recovery will be made at the rates specified above.
- 1.28.Any other materials available in Departmental stores it issued to the contractor will be recovered at book value or issue rate plus 20 per cent supervision charges or market value or data rate whichever is higher. The fixing of market rate will be governed as per clause 1.33.
- 1.29. The contractor will be exempted from payment of seignior age for rubble and metal quarried from P.W.D. quarries exclusively for P.W.D work. If the P.W.D. quarries are not situated within a convenient distance from the site of the work, the contractor's quoted rates shall be inclusive of seigniorage, ground rent, etc., that may be payable to the owners of private quarries.
- 1.30. In making payment the total amount of the bill will be rounded off correct to the nearest rupee if the amount is above Rs. 25 and to the nearest paise if amount is below Rs. 25.

holidays, if there is no work on these days.)

The daily rate of hire fixed by the Regional Project Director shall be for a day of 8 hours or part thereof, between 8 a.m. to 5 p.m. with one hour's interval for lunch.

- b) If there is work on Sundays and other Public holidays, the hire charges for the rollers, shall be recovered at the rate of 1.20 times the rate of normal working days.
- c) When power rollers are worked on any day in excess of eight hours (that is outside the normal working day between 8 a.m. and 5 p.m.) hire at the rate of 1 .20 times the hourly rate applicable for that day (based on the rate for 8 hours) shall be levied for every extra hour or part thereof.
- d) The average out-turn expected from a power roller for a day of 8 hours shall be fixed by the Superintending Engineer (B & R) for the various items or road work A variation of plus or minus 12 1/2 per cent may be allowed to this average. If the daily out turn from the roller falls outside the permissible variations, the contractor shall be charged at one and a half times the rate of normal h ire for the day, specified for the roller concerned.

However, this clause shall not be applicable in cases where the variation is due to authenticated periods of breakdown of the roller or inclement weather.

- 1.32. In addition to the hire charges, necessary water, fuel, fire wood, diesel oil, (fuel oil) or powering, as the case may be required for the efficient working of the power roller, shall be supplied by the contractor at his cost.
- 1.33. Value of quantities of the departmental materials issued for the work either allowed to deteriorate or unaccounted for, amounting as it does to an excess supply over the sanction requirements shall be recovered at book value or issue rate plus 20 per cent supervision charges or market rates whichever is higher with GST and in addition specific penalty rate stipulated by the Department Market Value will be the retail selling price of the materials in the locality of the work or the nearest market town current on the day of issue, or recovery which is more. The Regional Project Director shall obtain the information and record within 7 days of such issue, sending a copy to the contractor. The decision of the Regional Project Director regarding current market rates shall be binding on the contractor. Unused balance if any, at the time of completion or termination of the contract, will not be accepted by the department. The cost of such materials amounting as it does to an excess over sanctioned requirements shall be recovered at book value + 20 per cent or current market rate whichever is higher and in addition to specific penalty rates as may be fixed by Regional Project Director in the form of Departmental Circular Order from time to time shall also be recovered at the direction of Regional Project Director.
- 1.34. Tenderers should declare that they are not related to any Government servant, who is in charge of or having control of the work. Relationship in this will be restricted to father; mother, son, daughter brother, sister, direct uncle, nephew, father-in-law, brother-in-law, mother-in-law, sister-in-law and first cousin of the officer concerned. If the above condition is found to have been contravened, when they tender the earnest money/security deposit of the tenderer/ tender will be forfeited and the contract entered into will stand cancelled.
- 1.35. The contractor will provide his own tools and plant, store sheds to store his own materials as well as those supplied by the department and will be entirely responsible for the proper use and safe custody of the latter and also for any loss, damage, theft, mishandling weathering or any cause what so ever.

- 1.36.In case of schedule rate contract, if different rates are quoted for the same specification of work under identical working condition at the same site/in different appendices of the schedule the lowest quoted rate will be accepted for the items in all the appendices.
- 1.37. The contractor shall be responsible for the safety of the labour employed by him and he shall be liable to pay the necessary compensation in case of accidents, as per the Workmen's Compensation Act.

The contractor will also be liable to abide by the fair wage clause condition attached separately.

- 1.38. Empty bags of cement used on the work need not be returned to the departmental stores. Value of empty cement bags will be recovered at rates fixed by the departmental from time to time.
- 1.39. If the department undertakes to supply particulars materials no claim for extra payment on account of delay in the supply of materials will be entertained.
- 1.40. In the case of construction of steining to wells, excessive tilts if any occurring to the extent which is more than the percentage allowed as per rules will have to rectified by the contractor at his own cost and if the contractor fails to attend to the same it will be got attend to by other agency and the cost thereof recovered from the original contractor.
- 1.41. The contractor should take a license under the current explosive rules to enable him to manufacture and posses the quantity of gun powder required by him for blasting, if necessary.
- 1.42. The contractor shall employ engineering personnel as detailed below for a period of one to two years according to the tenure of the contract. .

Cost of work executed	No. of personnel to be Employed
For work costing Rs.2	One Engineering
Lakhs up to Rs. 5 lakhs	Diploma Holder
Rs. 5 lakhs up to Rs. 10 lakhs	One Engineering Graduate and one Engineering Diploma Holder.
For works costing over 10 lakhs	One Engineering Graduate and two Engineering Diploma Holder

- 1.43. Tenders which are not in conformity with this tender notice are liable to rejection.
- 1.44. This tender notice with the conditions stated herein will form part of the contract documents.
- 1.45. In the case of schedule contracts when the rates quoted for a particular item in figures and words disagree, the rates quoted in words will be taken of the purpose of the settlement of the contract. The contractor is bound to accept these rates if the contract is awarded to him. Similarly in the case of percentage rate contract when the overall percentage rates quoted in figures and words disagree, the rates noted in words will be taken for the purpose of the settlement of the contract. The contractor is bound accept these rates if the contract is awarded to him.
- 1.46. The entries in the tender schedule issued by the department is in no way to be corrected by the tenderers and if the tenderers have to note anything, they should note the same as a foot note in the bottom of the page. If any correction is made by the tenderer in the tender schedule, the tenders are likely to be rejected.
- 1.47.In the case of the percentage rate contract, the overall percentage rate quoted by the contractor shall not be varied on any account whatever and it shall hold good for all items done irrespective of

variations in quantities.

1.48. The quantities provided for in the schedule may vary widely and contractor should be prepared to do any excess over the schedule quantities at his quoted rates for the works.

1.49. It shall be accepted as a condition of contract that the landed property or bank deposit based on which the solvency certificate was issued by the Revenue Department and produced during the time of Registration will not be alienated during the period of contract without the permission of KRWSA vide G.O. (P) No. 136/74/PW., dated 8th August 1974.

Regional Project Director

2. SPECIAL CONDITIONS

Name of work:— Supply and laying of PVC and GI pipes along Nileshwaram – Edathode PWD Road at Kinanoor Karinthalam Grama Panchayath, Kasaragod District.

- 2.1 All works shall be done in conformity with the specification and condition in the contract in force in KRWSA. For the labour portion, the tenderer shall quote only single rate as an overall percentage above or below or at the rates given in the schedule by a single entry at the bottom of the schedule under the head "quoted rate of the contractor". The tenderer shall quote for the supply of items required for the work as given in the schedule. The rates quoted shall be inclusive by covering all the operation contemplated in the specification and tender schedule and all incidental work necessary for such operations such as shoring, bailing out, form work, scaffolding, etc.
- 2.2. The contractor should upload the declaration in the form attached.
- 2.2. The rates quoted by the contractor for the various items shall be inclusive of all tools and plants required for the proper execution of work and all other incidental charges and separate claim for these will not be entertained under any circumstances.
- 2.3. The quantities shown in the schedule are only approximate and are subject to variations and the contractor is bound to do additional quantities of work if found necessary at his quoted rates.
- 2.4. All the rates quoted should be exclusive of GST also.
- 2.5. All corrections and insertions in the original tender or schedule whether in the printed matter or elsewhere shall be attested by the tenderer.
- 2.6. The contractor has to quote for the specification and unit noted in the schedule. No correction of specification, unit or quantity is admissible and if they make any correction in the specification, etc., the same will be rejected. If they have to note anything, they shall not the same as a foot note at the bottom of the page.
- 2.7. The earnest money deposit receipt should be attached to the tender, properly pledged, lest the tender will be rejected.
- 2.8. The contractor should note his Division Register Number and amount of permanent earnest Money deposited by him in his tender.
- 2.9. The contractor should produce the declaration in the form attached.
- 2.10. "The contractor is bound to carry out items of works which are not expressly or impliedly described in the tender schedule, plans, specifications and agreement but which are found necessary for the proper completion of the work during execution. Payment for such extra items will be made on the basis of extra item conditions vide clause 23 (c) of form No. GWD. 83."
- 2.11. For L.S. items the contractor will be paid only for the actual quantity of work done or materials supplied and labour engaged at agreed rates for such items and as per condition No.10 above for extra items but such payment will be limited to the lump sum quoted by the contractor. If he fails to quote definite L.S rates for such items the L.S. amount provided in the schedule will be operative in his case.
- 2.12. For materials issued for the work but not used and not returned to the store, GST at the prevailing

rates will be recovered in addition to the departmental recovery plus 20 percent storage.

- 2.13. For cement and M.S., rods issued for the work but not used a penalty of Rs. 20.00 per 50 kilograms of cement and Rs. 2.50 per kilogram of M.S., rods will be recovered in addition to the value, 20 percent storage and GST.
- 2.14. It will be the responsibility of the contractor to obtain necessary land for stacking the materials for arranging the work.
- 2.15. Metal of the required size alone should be brought to the site of the work. Breaking boulders or rubble into metal will not be allowed either on or the side of the road. Metal should be stacked on one side of the road only and in such a way as not to cause any hazards to traffic. The stacks should be formed as per the standard profile current in the department.
- 2.16. Granite stone metal supplied should be sound, hard, tough and durable, free from any decayed matter and of uniform colour and texture. Each piece should have sharp angular edges. The metal should not also contain any quarry dust or earth.
- 2.17. Silicious gravel shall consist of only hard nodules not more than 40 mm. or less than 6 mm dia, in any direction scraped from the hill sides and free from admixture of earth or laterite chips.
- 2.18. Sand supplied should be clean, sharp and gritty to the touch, free from clay and other impurities and obtained from running watercourses.
- 2.19. Variation in supply in each 200-meter length exceeding 1 per cent from the approved indent will not ordinarily be allowed. But supplied above 1 percent over the stipulated quantity in the particular 200 meter length may be accepted at the discretion of the Regional Project Director and in that case each ,will be paid at 3/4 of the agreed rate. Similarly if supplies fall short by more than 1 per cent recovery for this deficiency will be made at 1/4 of the agreed rates. Excess supplies or deficiency in supplies over 10 percent however will be accepted only at the discretion of the Regional Project Director subject to its being penalized at half of the agreed rates. The maximum penalty shall however be limited to 10 per cent of the contract.
- 2.20. The contractor will have to make his own arrangements to convey the materials supplied by the department and for stacking, of materials and site shed, etc. which are found necessary for the proper execution of the work. He will also be responsible for the safe custody of the materials till they are used on works.
- 2.21. The contractor should take out license for storing gun powder and explosives required for rock blasting as per Explosive Act 1940.
- 2.22. Empty cement bags will not be taken back but its cost Re. 1 per bag will be recorded towards value with the usual GST.
- 2.23. Recovery for M.S. rods shall be affected at agreed rates for the quantity actually used plus wastage, if any. The percentage of wastage will be fixed by the Regional Project Director, but at any rates it should not exceed 5 per cent of the actual usage.
- 2.24. If the department undertake the supply of any materials, no claim for extra payment due to delay in supply of those materials will be entertained.
- 2.25. If materials other than those specified in the tender are issued by the department, recovery will be affected at data rate plus storage plus GST or at current market rates at the time of issue whichever is

higher.

- 2.26. Hire charges of tar boiler and sprayer if supplied departmentally will be recovered at Rs. 5 per day for the whole period they are in the custody of the contractor.
- 2.27. Machinery like concrete mixer, pump set etc. if available will be supplied by the department as per rule and hire charges recovered from the contractor at the prevailing departmental rates. The contractor has to take the machinery from the store and return to the same spot at his cost and responsibility.
- 2.28.A day means 8 working hours for purpose of calculation of hire charges of rollers, pump sets and other machinery unless otherwise specified.
- 2.30. (a) "When power rollers (which term includes steam and diesel rollers) are hired out to contractors, hire charges for the rollers (which include cost of lubricating oils, grease, small stores and establishment charges but excludes cost of fuel), shall be recovered at the rate of Rs. 137 per day or eight hours or part thereof, for the full period the roller is hired out to the contractor including not-working days except, for authenticate periods of break down of the roller for the full working hours of a day (that is 8 hours from 8 am to 5 pm. including one hour's interval for lunch), and for Sundays and other public holidays, if there is no work on these days".
- ("The daily rate of hire fixed by the Superintending Engineer shall be for a day of 8 hours or part there of, between 8 am and 5 pm with one hours interval for lunch")
- (b) "If there is work on Sundays and other public holidays the hire charges for the roller, shall be recovered at the rate of 1.20 times, the rate for normal working days".
- 2.31. (a) "When power rollers are worked on any day, in excess or eight hours (that is outside the normal working day between 8 am and 5 pm hire at the rate of 1 .20 times the hourly rate applicable for that day, (based on the rate for 8 hours) shall be levied for every extra hour or part thereof'
- (b) "The average out-turns expected from a power roller for a day of 8 hours is as fixed by the Superintending Engineer, B & R, for the various items of road work. A variation of plus or minus 12 $^{1}/_{2}$ per cent may be allowed to this average. If the daily out turn from the roller falls outside the permissible variations the contractor shall be charged at $1^{1}/_{2}$ times the rate of normal hire for the day specified for the roller concerned. However, this clause shall not be applicable in cases were variation is due to authenticated periods of breakdown of the roller or inclement weather".
- (c) In addition to the hire charges, necessary water, split firewood, diesel oil (fuel oil) or powering as the case may be required for the efficient working of the roller, shall be supplied by the contractor".
- 2.32. If part payment is claimed for metal supply: 75 percent of the supply will only be made in the part bill. The spreading and consolidation should be done within two months of supply.
- 2.33. The payment of the earth work items will be made as per level measurements or tape measurements as per rules prevailing in the department.
- 2.34. All items should be carried out as per the relevant specification in the M.D.S.S. and all clause of preliminary specification should be complied with.
- 2.35. The moulds, shuttering, etc., required for the work should be made by the contractor and got approved by the departmental officers at site before use.

- 2.36. Tribes of the locality should be employed to the extent possible. The contractor should pay fair wages to the labour engaged on the work which will be fixed by the Government as specified in G.O. 18/8597/55/LD., dated 7th March 1956 and any dues to the labour will be recovered from his bill as fixed by the departmental officers.
- 2.37. The contractor alone is responsible for the safety of his labourers and damages, if any payable under "Workmen's Compensation Act" will be to his debit.
- 2.38. It shall be contractor's responsibility to protect the public and his employees against accident from any cause during execution of the work and he shall indemnify the Government against any claims for injury to person or property resulting from any such accident and he shall, were provisions of the "Workmen's Compensation Act" apply, take steps to properly insure against any claims there under.
- 2.39. The contractor shall be liable for any loss caused to the Government on account of the above work including any that may arise due to non fulfillment of the contract. He should comply with the rules laid down in the Central P.W.D Contract regulations regarding fair wages.
- 2.40. The work shall be completed in all respects and also at the rate of progress within the time limit and stipulations in the From No. 83 Notice inviting tender failing which the contractor is liable to be fined as stipulated in special condition No. 49.
- 2.41. Defects, if any noticed within 3 months (6 months in the cases of road works) from the data of completion of the work will be got rectified by the contractor, in default of which this will be attended by the department and the cost made good from the contractor.
- 2.42. The contractor should produce latest sales tax and agricultural income-tax clearance certificate and also income-tax clearance certificate for receiving final payment.
- 2.43. The contractor shall be responsible for payment of sales tax as per rules in force from time to time and the rates quoted for various items remain unaffected by any changes that may be made from time to time in the rate at which such tax is levied Sales tax, agricultural income tax and income tax due to Government from the contractor will be recovered from his bill for the work as per the advise of the authorities concerned.
- 2.44. All sums due to the Government under or by virtue of this contract shall be recoverable first from the security furnished by the contractor and if the same is found insufficient, such deficit amount shall be recoverable under the provisions of the Revenue Recovery Act for the time being in force as though the same were arrears of Land Revenue or any other manner as the Government may deem fit.
- 2.45. The contractor agrees that before final payment shall be made on the contract, he will sign and deliver to the Regional Project Director either in the measurement book or otherwise as demanded, a valid release and discharge from any and all claims and demands whatsoever for all matters arising out or connected with the contract. Provided that nothing in this clause shall discharge or release the contractor from his liabilities under the contract it is further expressly agreed that the Regional Project Director in supplying the final measurement certificate need not be bound by the proceeding measurement and payments. The final measurements, if any, of the Regional Project Director shall be final, conclusive and binding on the contractor.
- 2.46. The tender notice and Form No. 83 Notice Inviting Tender shall form part of the Agreement.
- 2.47. The date fixed by the Regional Project Director for the commencement and completion of works as

entered in this agreement shall be strictly observed by the contractor who shall pay damages at the rates of (1) one per cent on the estimated value of the contract for every day not exceeding five days that work remains un commenced or unfinished after the proper date and further to ensure good progress during the execution of works, the contractor shall be bound unless the contract provides otherwise in all cases in which the time allowed for a work exceed one month to complete. One fourth of the whole work to be done when one fourth of the whole time allowed for it has elapsed, one half of the work when one half of time has elapsed and three fourths of work when three fourth of time has elapsed and the penalty for the failure in either of these cases shall likewise be that the contractor shall be subject to pay daily damages at the rate of (1) one per cent on the estimated value of the amount of work that should be completed by that time. Provided always that entire amount of damages to be paid under the provisions of this clause shall not exceed in the whole amount of retention plus the security deposit. All damages payable under the provisions of this clause or clause 12 or of the conditions of contract shall be considered as liquidated damages to be applied to the use of this Government without reference to the actual loss sustained owing to the delay.

- 2.48. If during execution, the proportion of usage of material issued departmentally alone is varied for which the price has been fixed in the tender the quoted rate of the item will be allowed effecting short or excess of departmental materials actually used as well as labour charges for handling the short or excess if any provided is in the same position.
- 2.49. The earnest money deposit of the unsuccessful tenderers will be refunded immediately after tabulating the tenders keeping only the earnest money of the first two lowest tenderers the earnest money of the remaining two unsuccessful tenderers will be refunded within a week from the date of acceptance of tenders.
- 2.50. The contractor should engage at his own cost a diploma holder (Civil Engineering) with sufficient practical experience for the proper execution and supervision of work costing from Rs. 2 lakhs to 51akhs and one Engineering Graduate and one diploma holding (Civil Engineering) for works costing Rs. 5 lakhs up to 10 lakhs and one Engineering Graduate and two diploma holders for one or two years according to the tenure of contract.
- 2.51. All other conditions and specifications of contract are the same as those current in the department.
- 2.52. The method of measurements will be as per Indian standard 1200-1958.
- 2.53. All concrete should be machine mixed and vibrated.
- 2.54. The tenderer/contractor must clearly understand that the settlement of claims either by part bills or by final bill will be made only according to the availability of budget provision and allotment of funds made with the Regional Project Director in charge of the work under the respective head of account in which the work is sanctioned and arranged and also subject to the seniority of such bills. No claim for interest or for damages whatsoever shall be made for the belated settlement of claims of bills. No such claims shall be admitted by the Government.

2.55. Fair Wage Clause

(a) The contractor shall pay not less than fair wages to labourers engaged by him on the work:

"Fair Wages" means wage whether for time or piece work notified at the time of inviting tenders for the work and where such wages have not been so notified, the wage prescribed by the Central P.W.D. for the District in which the work is done.

- (b) The contractors shall notwithstanding the provisions of any contract to the country cause to pay a fair wage to labourers indirectly engaged on the work including any labour engaged by his subcontractor in connection with the said work as if the labourers, had been immediately employed by him.
- (c) In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this agreement the contractor shall comply with or cause to be complied with (the central P.W.D. Contractor's labour) regulations made by Government in regard to payment of wages, wage period deductions from wages, recovery of wages not paid and deductions unauthorizedly made maintenance of wages register, other terms of employment, inspection and submission of periodical returns and all wage cards, publication of scale of wages and returns and all other matters of a like nature.
- (d) The Regional Project Director or Manager Technical concerned shall have the right to deduct from the money due to the contractor and any sum required of estimated to be required for making good the loss suffered by a worker or workers by reasons of non fulfillment of the conditions of the contract for the benefit of the works, non payment of wages or deductions made from his or their wages which are not justified by their terms of the contract or non observance of the regulations.
- (e) Vis-a-vis the Central Government, the contractor shall be primarily liable for all payments to be made under and for the observance of the regulations aforesaid without prejudice to his right to claim from these sub contractors.
- (f) The regulation aforesaid shall be deemed to be a part of this contractor and breach thereof shall be a breach of this contract.

2.56. Clause 45 of M.D.S.S. - Accidents - Hoarding - Lighting - Observations - Watchmen

- (a) When excavations have been made or obstacles have been put in public thorough fares or in places where there is any likelihood of accidents, the contractor shall comply with any requirement of law on the subject, and shall provide suitable hoardings, lighting and watchmen as necessary.
- (b) It shall be the contractor's sole responsibility to protect the public and his employees against accident from any cause and he shall indemnify Government against any claims for damages for in jury to person or property, resulting from any such accidents and he shall, where the provisions of the Workmen's Compensation Act, apply, take steps to property insure against any claims there under.
- (c) On the occurrence of the accident which results in the death of any of the workmen employed by the contractor or which is so serious as to be likely to result in the death of any such workmen, the contractor shall within 24 hours of the happening of such accidents, intimate in writing to the concerned Project Engineer of the Kerala Rural Water Supply and Sanitation Agency (KRWSA) the fact of such accident. The contractor shall indemnify Government against all loss or damage sustained by Government resulting directly or indirectly from his failure to give intimation in the manner aforesaid including the penalties or fines if any pay able by Government a consequence of Government's failure to

give notice under the Workmen's Compensation Act or otherwise conform to the said Act in regard to such accident.

- (d) In the event of an accident in respect of which compensation may become payable under the Workmen's Compensation Act VIII of 1923 whether by the contractor or by the Government as principal it shall be lawful for the Regional Project Director to retain out of moneys due and payable to the contractor such sum of sums of money as may, the opinion of the said Regional Project Director, be sufficient to meet such liability. The opinion of the Regional Project Director shall be final in regard to all matters arising under this clause.
- (e) 1 % of the amount of bill amount will be recovered along with other recoveries towards the contribution to "Kerala Construction Works Welfare Fund Board"
- 2.57. The Tenderer should submit a preliminary Agreement executed and signed in Kerala Stamp Paper worth Rs. 200/- along with Tender documents failing which the tender will be rejected.
- 2.58. Work contract tax payable under the GST Act will be deducted from Contractors part bill/ Final bill at the specified rate.
- 2.59. The Bill of Quantities shall be read in conjunction with the instructions to bidders, conditions of contract, specification and drawings. For the construction of works, the quantities provided in the Bill of Quantities are estimated, 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 tendered in the Bill of Quantities in the case of item rate tenders. The rates and prices tendered in the priced Bill of Quantities shall, except in so far as it is otherwise provided under the Contract, include all the constructional plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out in the contact.
- 2.60. Same rate shall be quoted for repeated items, if any, in the Bill of Quantities and if quoted otherwise, lowest rate will only be considered.

Regional Project Director

FORM OF DECLARATION

1. I	do	hereby	declare	that	none	of	my
relations as per the list given is section, 6 and Schedule 1 A or	f the	Compar	nies Act,	1956	is in ch	narg	e of
the above work or are having control over it.							
2. I d	o he	ereby dis	tinctly an	ıd exp	ressly	dec	lare
and acknowledge that I have read the Madras detailed stand	lard	specifica	ations / C	PWD	specif	icati	ons
and the preliminary specifications therein.							

Contractor

Note: - If the contractor is found at any stage, to have suppressed any information required, his earnest money for the work is liable to be forfeited and the contract entered into will stand cancelled.

KERALA RURAL WATER SUPPLY AND SANITATION AGENCY

FORM OF TENDER

Form No. 84

OFFICE OF THE REGIONAL PROJECT DIRECTOR
KERALA RURAL WATER SUPPLY AND SANITATION AGENCY
REGIONAL PROJECT MANAGEMENT UNIT
BLDG. NO.TP3/253, NEAR AKG HOSPITAL, TALAP, KANNUR - 670002

Name of work:-. Supply and laying of PVC and GI pipes along Nileshwaram – Edathode PWD Road at

Kinanoor Karinthalam Grama Panchayath Kasaragod District.
Date of issue:
Name
Address of Tenderer
Details of EMD

3. Form No. 84

Specifications PART 1 – GENERAL

- 3.1. The rates tendered by a Contractor for the work shall include the cost of –
- (a) All labour and supervision thereof, all materials, tools, implements and plant of every description ladders, cordage, tackle, etc, as well as the provision of safe and substantial scaffolding required for the proper execution of the work in conformity with the specifications for the various items of work;
- (b) Supplying the requisite agency with necessary equipments, to set out the work as well as to afford facilities for such examination of the work as the departmental Officers may at any time consider desirable, as also to count, weigh and assist in the measurement or check measurement of the work or materials.
- (c) Providing and maintaining all temporary fences, shelters, lights watchmen and danger signals and such other precautions as are necessary for the protection of the work or materials, as well as to protect the public and those connected with the work from accidents at the site of, or on account of the work:
- (d) All sheds, mortar mills and mixing platform of every kind required for the proper execution of the work according to the specifications;
- (e) All fees and royalties of materials; and
- (f) Finally clearing away of all rubbish, surplus materials, plants etc., on completion of the work and pressing and leveling off and restoring the sire to a tidy condition, prior to handing over the work to the RPMU and leveling off and restoring the site to a tidy condition, prior to handing over the work to the Regional Project Director or his authorized assistant and also its maintenance until so taken over.
- 3.2 In the case of supplies of materials such as rubble, broken stones, gravel, sand, etc., which may have to be measured prior to being used on the work, the contractor must always stack or arrange them neatly on level ground or on ground cleared and leveled by him for the purpose in such manner as may be ordered by the Officer-in-charge so that they may be easily susceptible of inspection and measurement, the cost of such clearing, leveling and stacking or arranging being included in the rates for work, Each stack must be straight and of uniform section throughout and of the dimensions specified by the Officer-in-charge. Materials not stacked or arranged in accordance with instructions issued will not be measured and paid for.

The Contractor shall be bound to bear the expense of defense of any action or law proceedings that may be brought by person for any injury sustained owing to neglect of above precautions in connection with the execution of the work, and to pay any damages and cost which may be awarded in consequence.

The Contractor shall also help himself out of any difficulties of penalties arising from interference with private property in the execution of the contract.

The tenderer should state whether he has all the plant necessary for execution of the work. If in the opinion of the Regional Project Director, Contractor's own plant is neither sufficient for the proper execution of the work, the department may supply other available plant and recover reasonable hire for the same. The Regional Project Director's decision in the matter shall be final and binding on the Contractor.

The Contractor shall bear the running expenses inclusive of pay of the departmental staff attached to such plant and cost of repairs of al KRWSA plant while in his possession on hire as also the cost of restoring the same in good condition at the time of return, due allowance being made for fair wear and tear.

All materials and plant that are to be made over to be Contractor by the Department shall be handed over at him at the RPMU or Store Yards at RPMU Headquarters of the KRWSA General Stores and the charges for their handling, loading and unloading and conveyance to and from the respective work as also for stacking the materials neatly and in regular heaps on the ground or sheds to which they are brought, shall be deemed to be included in the rates for the work.

Unless otherwise specifically provided for in the Contract, the Contractor shall his own cost keep all portions of the work free from water whether due to springs, soakage or inclement weather and in a neat and sanitary condition and shall also see that drainage and sewage are prevented from entering the site of work or accumulating therein.

The Contractor shall be responsible for the proper use and bear the cost of protection of materials made over to him by the Department for use on the work and bear any loss from deterioration or from faulty workmanship or any other cause. The cost of materials thus allowed to deteriorate amounting as it does to an excess issue over sanctioned quantities will be recovered at rates 20 percent over the actual cost. The orders of the Regional Project Director in the matter shall be final and binding on the Contractor.

The Contractor shall be responsible to see that the level or other pegs, profiles, bench marks, masonry pillars or other marks setup by the Department for guidance in the execution of the work are not disturbed, removed or destroyed. If any such marks are in the opinion of the Regional Project Director found disturbed, removed as destroyed, they will be replaced by the Department at the cost of the Contractor.

- 3.11 Any materials brought to the site of work, or any work done by the Contractor but rejected by the Officer-in charge as being not up to the specifications shall in the case of materials supplied be then and there removed from or broken up at the site of work, and in the case of work done be dismantled or rectified at the expense of the Contractor, as may be ordered by the Officer-in-charge.
- 3.12 In all cases whether so specified in the contract or not, the work shall be executed in strict accordance with the Contractor's accepted tender and these specifications and with such further drawings and specifications and orders as may from time to time be issued by the Regional Project Director.
- 3.13 Whenever the Contractor is ordered by the Regional Project Director or his authorized assistant or subordinate to execute any item of work which is not in the tender, it shall be the Contractor's duty to get a special price arranged for the item and to see that it is written in the work spot order book that this order is initialed and dated by the Contractor and the Officer ordering that particular item of work. For any extra item executed by the Contractor and not as entered in the work spot order book and initialed both by the Contractor and the Departmental Officer ordering such extra item that Contractor shall have no claim or extra payment.
- 3.14 Any dispute or difference that may arise between the Regional Project Director and the Contractor on account of the contract, shall at the instance of either party be referred to the Regional Project Director, KRWSA whose decision given in writing shall be final conclusive and binding. The Regional Project Director may at this discretion delegated in writing, to any of his subordinates any of his power regarding these specifications.

Specification

Part II		Materials
Part III		Work
	(As current in the K	erala Rural Water Supply and Sanitation Agency (KRWSA))
Signature of	Tenderer	
Date		

KERALA RURAL WATER SUPPLY AND SANITATION AGENCY (KRWSA)

FORM OF TENDER

Name of work:	Supply and	laying of PV0	and GI pip	oes along	Nileshwaram	Edathode	PWD	Road at
Kinanoor Karint	thalam Gram	a Panchayath	Kasaragod	District.				

To

THE REGIONAL PROJECT DIRECTOR, REGIONAL PROJECT MANAGEMENT UNIT. KRWSA, BLDG.NO.TP3/253, NEAR AKG HOSPITAL, TALAP, KANNUR - 670002.

Sir, 1. I/We do hereby tender to execute the works enumerated in the Schedule accompanying in accordance with the terms in your tender notification dated and specifications and conditions of contract in force in KRWSA. 2. Copy of the specifications duly signed is also enclosed. receipt of order to start work, and/or the case of piece-works, maintain the minimum rate of progress specified in the Tender Schedule. 4. I/We do/ do not agree to accept and carry out such portion of the work included in my/our tender as may be allotted to me/us if the whole work be not given to me/us.

5. In consideration of I/We being registered as a contractor in the Kerala KRWSA, and invited to tender thereof and not to make any modifications in its terms and conditions which are not acceptable to Kerala Rural Water Supply and Sanitation Agency (KRWSA).

A sum of Rs Is hereby forwarded in cash/Treasury chalan deposit at open as aforesaid or make any modifications in that terms and conditions of the tender which are not acceptable to Kerala Rural Water Supply and Sanitation Agency (KRWSA).

If after the tender is accepted, I/We fail to execute the agreement as provided in clause 13 of tender notifications or to commence the execution of the works as provided in the conditions, I/We agree that the Kerala Rural Water Supply and Sanitation Agency (KRWSA) shall, without prejudice to any other right or remedy be at liberty to forfeit the said earnest money absolutely and also recover from me/us the entire loss that may be caused to the Kerala Rural Water Supply and Sanitation Agency (KRWSA) by the retender or arrangement of the work or otherwise under the provision of the Revenue Recovery Act or otherwise.

	i)	Tender Schedule :	
ii)		Earnest money Rs.	
iii)		Signed copy of specification	n:
ii) iii) iv)		Signed copy of plan:	
Usual si	ignature	of Tenderer	
ruii ivai			
Nationa	lity		
Place of	f residen	nce	
Date of	submiss	sion	

TENDER SCHEDULE

N.B:- (1) All rates to be inclusive. (2) Rates to be entered in words in remarks column. (3) The amount of the tender should be filled up and totaled by Subheads by the tenderer excepting for items for which definite quantities are not given in the Schedule.

Appropriate Name of appendix			Description of items of work	Unit	Tendered inclusive rate per unit Rs. Ps.	Amount Rs. Ps.	Remarks (Here enter rate in words)
1	2	3	4	5	6	7	8
			Separately Attached				
			Carried over				

4. <u>ADDITIONAL TENDER CONDIT</u>IONS

- Annur-2 in the method available at the website www.etenders.kerala.gov.in. All documents / attested copies shall be submitted electronically by scanning, digitally signing and uploading. The tender documents in original shall be submitted within three days of opening of the Tender. The contractors who are registered for e- tendering and having valid password can view the tender notice and the tender documents free of cost in tender free view. However on submission of tender, the tenderer will have to remit the tender fee electronically. The tender fee once paid successfully and credited to Kerala Rural Water Supply and Sanitation Agency (KRWSA) account will not be refunded even if the tender is cancelled at a later stage or the tenderer fails to upload his tender. Preliminary agreement in the prescribed form in Rs. 200/- Kerala Stamp Paper duly signed and sealed shall be uploaded without fail. The tender schedule shall be filled up in the prescribed format provided in the tender document. For uploading the tender documents, the tenderer has to remit the amount towards tender fee as well as the prescribed EMD through online payment mechanism for e-procurement system of Govt. of Kerala.
- 4.2 The rate quoted by the contractor should be inclusive of hire charges for the tools and plant, sales tax, excise duty etc. and all other incidental charges and no extra claims on these account, will be admitted.
- 4.3 The contractor shall be bound to carry out all extra items not provided for in the schedule but found necessary during execution of the work.
- 4.4 The contractor shall examine whether there are any gas mains, electric or phone posts, cables, water main, sewers, covered drains etc., coming in the line of the trench and shall not excavate in such localities before such mains, cables or drains or sewer are diverted or other wise arranged for.
- 4.5 The contractor shall be responsible for any damage which may be caused to power or phone posts or cables or to building, walls or pipes etc., nearby on account of the excavation of the trench due to insufficient or lack of shoring or due to the result of bailing out or pumping or stagnation of water. The contractor shall make his own arrangements for supporting electric and telephone posts, electric and telephone cables, existing water mains during excavation and no extra payment will be give for this.
- 4.6 The contractor shall examine and satisfy himself that the beds of the trenches are firm and suitable for laying the pipes. Should any portion be found unsatisfactory, the contractor shall take necessary steps to make the trench firm and suitable for laying pipes.
- 4.7 The pipes, specials and valves etc., shall be handled very carefully during loading, unloading, conveying, lowering operations as per the directions of the Agency officers under their approved modes and with approved instruments and should be satisfied that they are not defective.
- 4.8 If any of the materials issued to the contractor in good condition become there after damage before/ or after being placed in the work, the contractor shall be liable for the damage and shall be charged at the rate fixed by the Agency as per rule.
- 4.9 No payment will be made for additional pumping for bailing out water that may be required due to

the fault of the contractor by way of inefficiency or delay in carrying out the works, defective works etc.,

- 4.10 The laid pipeline should be tested in convenient section not exceeding 150m length at a stretch/ in suitable length fixed by the Agency. The testing of pipeline has to be done under the presence of the Officer-in-charge and under their directions.
- 4.11 If test show any defect to the works, such portion has to be redone and got tested to satisfaction of the Agency officers at the contractors cost.
- 4.12 If for lack of special after commencing the work, pipes have to be laid with open end, they have to be closed by needle plugs, at no extra cost by the contractor.
- 4.13 All other conditions, and terms of contract are the same as those current in the Kerala Rural Water Supply and Sanitation Agency (KRWSA).
- 4.14 All the relevant clauses of the specifications for earth works, trenching, receipt, transport and custody of materials, conveyance to work site, laying, testing etc., for CI/ DI/ AC/ PVC pipes in the Madras Detailed Standard Specification/ CPWD/ISS shall apply to all kinds of pipes.
- 4.15 Where trenching done, caution boards, red flags and danger lights, should be provided by the contractor at his cost as per standard practices, details of which are available in the Regional Project Director's office.
- 4.16 After refilling the trenches, the contractor is responsible for a period of two months to maintain at his cost the surface of the refilled trenches free of depressions, potholes or other irregularities.
- 4.17 The contractor shall be responsible for the safe custody of all the materials take charge by him subject however to the direction and control of the officer in charge.
- 4.18 From the "On Account" payments, deductions shall be made by the Agency at the rate prevailing towards contribution to the Kerala Construction Workers Welfare Fund Board.
- 4.19 The FCC for the work of OH Reservoir/ GL Reservoir will be paid only after the tank is get tested by filling water as instructed by the Departmental Officers.
- 4.20 In addition to other test as per MDSS/CPWD/ and ISS, cube tests of concrete for RCC work shall be conducted as per relevant ISS with out any extra charges.
- 4.21 Whenever a day's concreting exceeds 15m3 concrete test cubes shall be cast as per standard specifications IS 456, IS 1199 (latest revision) etc., and got tested in approved laboratory to ensure the quality of the concrete work in the presence of departmental officers. The rate quoted shall be inclusive of this item and no separate payments shall be admissible.
- 4.22 Time of completion mentioned include the Monsoon Seasons also.
- 4.23 The tenderers shall submit the detailed programs of work along with the tender giving due consideration for the rainy seasons.
- 4.24 Tenderers should quote the rate as shown below: a) For labour rates the tenderers should quote percentage excess / reduction over the PAC b) The approximate quantities of materials such as steel, cement, pipes, specials etc required for the works is noted in Part II. The tenderers should quote the rate for supplying of materials for the work in Part II. The Price schedule shall be filled and submitted electronically.

- 4.25. The successful tenderer shall within fifteen days of receipt of the order of award of work (selection notice), deposit in the Treasury Savings Bank of Government of Kerala or NSC, towards security, 5% of the accepted contract value in favour of the Regional Project Director, (office address), Kerala Rural Water Supply and Sanitation Agency (KRWSA).
- 4.26 The EMD deposited by the tenderer shall be released as soon as the security amount as above is deposited. Bank guarantee or other form of Security Deposit shall not be accepted towards security on any account.
- 4.27 No exemption shall be allowed for initial security deposit and retention amounts for Govt/ Quasi Govt. undertakings unless there is specific order from government to that effect for this particular work and approved by the Agency.
- 4.28 The contractor should maintain the pipe lines for a period of 12 months after commissioning the work at the quoted rate. On the grant of completion certificate to the contractor by the Engineer in charge of the work and within one month of the commencement of the guarantee / maintenance period, 5% of contract value out of the total 8% of the security deposit shall be refunded to the contractor. The balance 3% of the security deposits shall be retained by the Agency as security against any inaccuracies and omission found in drawings, designs, calculations, diagrams, sketches, statement, bad quality of work and maintenance of the system during guaranty period or any shortage of materials which may come to light after the completion of the work and which the contractor shall be liable to rectify or make good. An amount of at least 5% of the contract value shall be kept apart for trial running and commissioning. An amount equal to 1% of the total contract value shall be set apart for maintenance period, commencing after completion and commissioning.
- 4.29 Liquidated damages @ 0.5% of the value of the unfinished portion of works, per week or portion thereof subject to a maximum of 10% of the total value of Contract will be realized from the contractor, beyond the agreed date of completion of the work. If the contractor fails to complete the work even after levying the maximum of the liquidated damages, the balance portion of the work shall liable to be terminated and arranged through other means at the risk and cost of the defaulted contractor.

4.30 For supplying and laying contracts

- a. The PVC pipes to be supplied under the contract if any shall be manufactured as per IS 4985 2000 as amended from time to time and shall bear ISI certification mark.
- b. The PE pipes to be supplied under the contract if any shall be manufactured as per IS 4984 1995 as amended from time to time and shall bear ISI certification mark.
- c. The DI pipes to be supplied under the contract if any shall be manufactured as per IS 8329 2000 as amended from time to time and shall bear ISI certification mark.
- d. The AC pipes to be supplied under the contract if any shall be manufactured as per IS 1592 1989 as amended from time to time and shall bear ISI certification mark. The specials such as AC couplings, rubber rings, CID sets, CI specials such as bends etc., shall also be supplied as per relevant IS codes.

- e. The CI pipes to be supplied under this contract shall be manufactured as per ISI 1536 1989 as amended from time to time shall bear ISI certification mark. The specials shall also be supplied as per relevant IS codes.
- f. The GI pipes to be supplied under this contract shall be manufactured as per ISI 1239 2004 (Part1) as amended from time to time shall bear ISI certification marks. The specials shall also be supplied as per relevant IS code.
- g. All pipes as per the scope of the work supplied should be factory tested and test certificate as per relevant specification/latest code of practice should be produced along with the pipe supplied. The testing of pipes and the authentication of test certificate should be done by an approved third party inspection agency agreeable to KRWSA and witnessed by the technically qualified officers of KRWSA, if the contract value exceeds Rs.100 lakhs and by a Departmental Officer deputed by KRWSA if the contract value is less than Rs.100 lakhs. The cost of testing by Department (KRWSA) officer shall be borne by the contractor within the quoted rate and no separate claim shall be allowed. The TA/DA of the departmental officer if deputed shall be borne by the KRWSA.
- h. All the pipe shall bear the inspection stamp of the inspection agency.
- i. The specials to be supplied shall be of the same class as the pipes and shall bear ISI marks, wherever IS specifications are available.
- j. The unit rate quoted for laying of pipes shall also include transportation of pipe and all other materials to the site.
- k. Payment shall be made to the contractor only after satisfactory laying and testing of the whole or part of the work.
- I. The contractor shall raise a claim for 75% of the value of the tested materials he has supplied at site, at estimate rate as secured advance, which shall be considered by the Agency as per secured advance rules of KRWSA. Sanctioning of such secured advances shall be at the discretion of the agreement Agency and shall not be taken as a right of the contractor.
- m. The contractor shall guarantee satisfactory performance of pipe line for a period of 12 months after completion of the work. During this guarantee / maintenance period, any repairs that shall be necessitated shall be carried out by the contractor without any extra cost and within the shortest possible time, failing which the work shall be arranged/ attended by the KRWSA at the risk and cost of the contractor.
- n. Necessary concrete anchor blocks, valve chambers etc, shall be provided by the contractor as per the approved plan. These items shall be quoted for as per quantities provided in the tender schedule.
- o. Under no circumstance, any price variation shall be allowed for the pipes and other material to be supplied as per this contract and the prices quoted shall remain firm.
- 4.31 E.D. Exemption Excise and customs duty exemption are available for W.S. projects as per notification of Government of India. The bidder shall refer such notifications/ Circulars/ Orders of the Government of India issued from time to time and shall quote his rates accordingly considering the exemption available.

The Kerala Rural Water Supply and Sanitation Agency (KRWSA) will give necessary certificate to the selected contractor to claim the exemptions on specific requests made by the contractor. Any conditional bids in this regard will not be considered. The quoted rates shall be deemed to be based on the exemption available and it is the responsibility of the contractor to avail the exemptions, the employer's responsibility being limited to the issue of necessary certificate. The certificate for exemption will be recommended by KRWSA, to the selected bidder to claim the exemption on specific request made by them, to the District Collector/ District Magistrate who are empowered to issue certificate for exemption.

4.32 The monetary benefit due to any reduction declared by Government of India/ State in the statutory duties and levies after the tender submission should be passed on to Kerala Rural Water Supply and Sanitation Agency (KRWSA). For affecting this, the detailed break up of their purchase cost showing clearly the basic prices, excise duty (in %). Sales Tax, transportation etc., shall invariably be noted. In cases where these are not mentioned, any reduction shall be assessed by Kerala Rural Water Supply and Sanitation Agency (KRWSA) with the present market rate of the material.

4.33. Pipes and other construction materials shall be stacked at site only in consultation with the Regional Project Director concerned and will not be stacked more than 5 days before commencement of work. The excess cut soil, boulders, rubbles, balance pipes/cables should be removed from the site at the cost of the contractor immediately after back filling is completed, at any rate within 48 hours of completion of works.

4.34 The Bar Charts, Work Plan, Work Schedule in the agreement shall be submitted for all works so as to monitor the progress of the works. The as laid map of pipe line works shall be submitted by the contractor along with the bill and the same shall be verified by the concerned officers before making payment. The as laid maps shall be kept in the RPMU separately for future reference and one copy along with the agreement.

4.35 Works should be carried out causing minimum hindrance to traffic and inconvenience to the public. In cases where traffic is not blocked, trenching, pipe laying, back filling and rectification are to be done simultaneously

4.36. Additional Performance Guarantee

The contractor who quotes very low rates will have to remit performance guarantee with a view to curb the tendency to quote low rates and execute the works unsatisfactorily. If the quoted rate is below 10% estimate rate (the quoted rate being x% below estimate amount), the contractor will have to remit performance guarantee equal to (x - 10) %. This will be released after satisfactory completion of the work.

4.37. In case of disputes, all legal proceedings shall be instituted in the court within whose jurisdiction, the Tendering Officer's office is located.

If any of the conditions above are in contradiction to any of the clauses in the Form 83, Special Conditions, Form 84, the clause/conditions of the additional tender conditions shall prevail.

Regional Project Director

TECHNICAL SPECIFICATION AND CONDITIONS REGARDING THIS WORK

3.1.General

This work is for supplying and laying PVC/GI Pipes and specials. The work comprises of supplying, laying, testing, commissioning and maintaining (18months) of the pipes and specials with necessary control valves, specials for jointing pipes and valves. The works includes changing the existing water supply connection from old lines to newly laying pipelines. Support structures along canals, anchor blocks, etc; Road crossings, culvert crossings etc; wherever necessary is also a part of the work.

3.2. SUPPLY AND TESTING OF MATERIALS

- 1. The contractor shall supply all the materials including pipes and specials covered under the contract at his own cost. The pipes, specials etc. should be tested at the factory by one of the Third party inspection agencies acceptable to KRWSA and witnessed or by the technically qualified officers of KRWSA if the contract value exceeds Rs.100Lakhs and by departmental officer deputed by KRWSA if the contract value is less than 100lakhs. All cost for inspection charge to be borne by the contractor. Inspection certificates should be produced along with the materials. This third party inspection is mandatory for all pipes, specials and pumping and electromechanical equipments supplied by the contractor. Also ISI marked materials should alone be accepted, wherever ISI specification is available for such item. Any disputes between the contract and the supply in fixing the inspection agencies shall be a matter for settlement among themselves and the KRWSA shall not be a party to the cost of all materials and inspection as specified herein.
- **2.** The pipes to be supplied under this contract shall be manufactured as per relevant I.S. as amended from time to time and shall bear ISI certification mark.
- **3.** The quality of all pipes shall be verified and confirmed by the field officer not below the rank of Asst. Executive Engineer.
- **3.3.** The specials to be supplied shall be of the same class as the pipes and shall bear ISI marks, wherever I.S. specifications are available.
- **3.4.** The rate quoted for pipes and all materials shall also include all taxes and duties Construction workers Welfare fund contribution, transportation charge of pipes and all other materials to the site etc except GST.

3.5. GST Conditions.

All bidders for public works, goods and services should have valid GST registration. The lump sum amount quoted shall be exclusive of GST which may be paid or become payable on the completed work within the scope of this tender. In other words, the amount quoted shall be exclusive of GST prevailing as on the due date of the tender. While preparing bills,

the amount without taxes to be worked out. After arriving the value of work done without GST, the GST(as on now 12%) amount will be paid to the contractor as extra. In case of change in the GST rate between the date of invoice and date of supply OR last date of submission of tender and the date of release of payment for works done, the prevailing GST rate will be reckoned as per GST laws of Central and state Government for payments. Any variation in the tax rate of GST(increase or decrease) shall be adjusted at the time of bill processing, i.e, deduction in the case of decrease in GST Rate or addition in case of increase in GST Rate shall be made at the time of settlement of bills. The TDS and other deductions would be on payments made or credited to the supplier excluding GST. Taxes at applicable rates shall be deducted from the payments to the contractor as per rules without further correspondence. deductions from contractor's payment shall include Income Tax, Labour Welfare Fund as per the rate in force. However this shall not mean that only this amount shall be deducted. Any excess in taxes and duties with in the original contract period shall be borne by the Agency and any reduction in taxes and duties with in the period shall be deducted from the contractor's bill, on proof of remittance.

3.6. Deleted

- 3.7. A copy of memorandum of understanding (MOU) signed between the supplier of the pipe and the tenderer should be attached with the tender.
- 3.8. The contractor shall guarantee satisfactory performance of the pipeline for a period of 12 months after completion of the work. During the guarantee period any repairs that shall be necessitated shall be carried out by the contractor without any extra cost and within the shortest possible time, failing which the work shall be arranged / attended by the KRWSA at the risk and cost of the Contractor.
- 3.9 The contractor shall be bound to carry out works in excess of the quantities specified if required during actual execution on the same terms and conditions as per prevailing rules in KRWSA.
- 3.10. Hydraulic testing The usual hydraulic test shall be conducted after laying of pipes in trenches, in convenient length as specified in the relevant I.S. to ascertain leak proof joints and also as per the direction of departmental officers
- 3.11 The manufacturer's name and the make of the pipes quoted should be mentioned.
- 3.12 Valve chambers if required shall be provided.
- 3.13 Normally extension for time of completion will not be granted, but in unavoidable situation extension of time for completion will be granted but as per the prevailing rules & regulations in KRWSA.

3.14 Storage of Materials

The conveyance, unloading and stacking of materials procured for the project will be the responsibility of the contractor. Agency takes no responsibility for providing material stock yard. Contractor will not be allowed to stack the materials on road side in such a way to causes hindrance to normal traffic.

3.15 .Trenching

The soil type along the proposed alignment varies from "ordinary soil to hard soil". The trenching shall be done so as to provide a minimum cover of 1.00 m above the pipe crown and care should be taken to avoid sudden change in gradient and alignment. Vertical bends shall not be provided as far as possible. The minimum width of the trench shall be 200 mm on either side more than the outer diameter of pipe. Socket pits shall be taken at every joint before the laying of pipes to enable the body (shell) of the pipe rest directly on the leveled compacted bed in the trench. Wherever the trenching in clay or slushy soil is encountered, sand bedding (150 mm) shall be provided for the pipe and the trenching shall have minimum 100 mm extra depth for such portions. Any usable materials or valuables retrieved during excavation shall be the property of KRWSA and the same shall store separately under intimation to the Engineer in charge.

Only select fill material free of stones and sharp aggregates shall be used to refill the pipe trench to a height of 30 cm to the top of the pipe line. All the back filling shall be watered and compacted using mechanical compactors in layers to avoid any further settlement of refilled portion. Any excess soil after refilling of the trench shall have to be removed by the contractor and disposed of from site within a distance of 10 km as directed by the Engineer in charge.

The charges to be paid to PWD or any such Agency against restoration of road surface to be cut for this work shall be paid by the Agency. However, the tenderers shall take care to minimize the damages to tar surface while trenching for pipe laying or construction of valve chambers/anchor blocks etc. Contractors shall use asphalt cutters for minimizing such damages to tar surface.

Fencing along the alignment wherever required to prevent accidents and shoring on the sides of excavation to prevent damages to nearby structures is to be carried out and the same is included in the work. Caution boards should be placed while trenching is progressing and labour shall be engaged to control/divert the traffic if necessary. In major roads if there is a possibility of traffic diversions/restrictions, it may be informed well in advance to the engineer in charge to inform the traffic police for necessary approval. This type of work should be planned and done with prior approval of competent Agency with signboards and lighting etc. and completed strictly as per schedule.

3.16 Laying of Pipes

Pipes shall be laid in straight line in trenches so that the body directly rests on the soil bed.

Handling of pipes to lay in trenches or on any support structure must be done carefully and proper equipments should be used for the purpose. Any deviation from straight line shall be done using standard bends. In case where standard bends are not available for a particular shape of bend, specials fabricated with M.S. sheets of thickness not less than 8 mm may be used with prior approval of the Engineer in charge.

The laying of pipe should be made as far as possible on extreme side of the road so that minimum cutting of bitumen road will be carried out. The excavation should be done by engaging man mazdoor as far as possible to make minimum damage to the road. In case machine is used for excavation all the precaution should be taken so that no damage will be done to other parts of the road or telecommunication cables already laid through the road. All road crossings shall be done after informing the engineer in charge of the site well in advance. The amount claimed by the concerned department/local body etc. for the damage occurring to structures, cables coming in the alignment shall be recovered from the contractor's bill.

- (A) If there is existing pipe lines in the roads through which pipe are to be laid, extra care should be taken to avoid damage to this line during excavation. If any leakage or breakage occurring on the distribution it should be repaired within 24 hours at tenderer's cost. If the repair work is not done the rectification will be carried out departmentally and the actual cost incurred for the repair will be recovered from the contractors claim.
- (B) As far as possible the 90^0 bend in all culvert crossings shall be avoided and standard bends of 45^0 or less shall be used to minimize water thrust and blockage in bends. The entire road/ canal/ culvert crossings along the alignment of pipe line shall necessarily be carried out without affecting the alignment and gradient of pipe line.
- (C) Control valves are to be fixed on line as per specification. Scour valves shall be fixed in the suitable tee as directed by KRWSA officers. The scour valve should be located at places where the dewatered quantity of water is properly disposed off into natural water course or local drainage without causing any flooding.
- (D) Provision may be given in the pipe line for branching the pipe line in future will be possible as per the direction of department officers, with required type Tee or cross, where there a branch road joins the road through which pipes are being laid.
- (E) The culvert and bridges in the alignment of PVC pipeline shall be crossed by using GI pipes of corresponding size.

3.17. Jointing

The method of jointing and the materials for jointing shall be got approved by the Engineer in charge before the actual execution at site. All the required specials for the completion of the work should be supplied by the contractor.

3.18. Anchor Blocks

Sufficient number of anchor blocks of appropriate size shall be provided at all the bends in the pipeline -as per the standards & specifications of KRWSA / CPHEEO. All thrust

/anchor blocks shall be constructed in CC 1:2:4 and the typical designs shall be got approved by the Engineer in charge before the actual construction. Clamps wherever necessary are to be provided as approved by the Engineer in charge. The clamps shall be in MS flats of minimum 8 mm thickness & 50 mm width and painted with epoxy paints.

3.19 Road Crossings and Bends

All road crossings shall have to be planned in advance and carried out with the concurrence of the Engineer in charge. As far as possible 90^0 bends should be avoided at the road crossings and road bends etc. Contractors shall not be permitted to take angular deviation

at pipe joints more than $2/3^{rd}$ of the maximum angle, provided as "allowable" in the relevant specifications/product information.

3.20 Bridge/Culvert Crossings

The crossings may be done using DI/GI/MS pipes as decided by the Engineer in charge...

Crossing of pipeline over the culverts/bridges may be done either by taking up the pipe line at the road level, crossing the culvert and then going down or by scooping through the bottom of the culvert. In case where the pipe line crosses over the culvert, then an air valve shall be provided at the crust to avoid air block and if the pipe line is taken underneath the culvert, then joints must be avoided at portions below the culvert. In the former case care shall be taken to avoid 90° bends. Culvert crossings may also be done by carrying the pipeline outside the culvert body and supporting it on RCC pillars but without obstructing the vent way. The decision in this regard shall however be finalized by the Engineer in charge. Required numbers of D/F bends with suitable angles is to be fabricated using MS pipes. The pipes should be painted with anti-corrosive bituminous black paint over metal primer.

3.21 Fabrication and Welding

Any fabrication work for bends & specials shall be got approved by the Engineer in charge before actual fabrication. The schedule of such shop/site fabrication shall be intimated to the Engineer in charge in advance to enable him to inspect the fabrication and welding work. The contractor shall submit a welding procedure to the Engineer along with the data regarding certification, experience and other relevant details of the welders and got approved by the Engineer, before the commencement of any welding work for steel structures/specials. The corrosion protection planned for the fabricated components shall also be reported to the Engineer in charge and got approved. The location of the welding shop should be within the area of work and shall be easily accessible for the inspecting officers.

3.22 Testing of Pipe Line

The pipe line shall be tested in reaches of average length of 250 m. Contractors will not be

allowed to proceed with the work leaving more than 2 reaches of pipe line untested. The joints of all pipes/specials shall preferably be kept open until the testing is completed satisfactorily. The water required for testing of pipe line, the dummy pipes and test pumps etc. shall be arranged by the contractors and water Agency shall not be responsible for providing any such assistance.

3.23. Shifting of house connections

The existing house connections shall be disconnected from the old lines and shall be connected to the newly laying pipe line by using suitable specials.

3.24. Safety at Site

Tenderers alone shall be responsible for any damage to men and materials that may occur at site due to lapses in safety measures. Tenderers shall provide necessary caution boards and fencing as per the directions/ specifications of KRWSA for the trenches during the progress of work. Minimum 3 Nos. caution boards shall be placed in the approaching side & 2 nos. at the leaving side at the required distance as per the relevant safety codes. They shall also provide sufficient shoring to the sides of trenches to prevent collapse of the sides of the trenches and consequent damages to men and materials whenever the depth of trench exceeds 1.50 m or while excavating near other civil structures. During night hours, contractors shall provide sufficient lighting and watching at the site. Failure to adhere to these clauses shall attract fine and penalties by way of deductions from the payments to contractors at an amount worked out at department rates.

3.25 The rates tendered by a Contractor for the work shall include the cost of –

In the case of supplies of materials such as rubble, broken stones, gravel, sand, etc., which may have to be measured prior to being used on the work, the contractor must always stack or arrange them neatly on level ground or on ground cleared and leveled by him for the purpose in such manner as may be ordered by the Officer-in-charge so that they may be easily susceptible of inspection and measurement, the cost of such clearing, leveling and stacking or arranging being included in the rates for work, Each stack must be straight and of uniform section throughout and of the dimensions specified by the Officer-in-charge. Materials not stacked or arranged in accordance with instructions issued will not be measured and paid for.

- **3.26**. The Contractor shall be bound to bear the expense of defense of any action or law proceedings that may be brought by person for any injury sustained owing to neglect of above precautions in connection with the execution of the work, and to pay any damages and cost which may be awarded in consequence.
- **3.27** The Contractor shall also help himself out of any difficulties of penalties arising from interference with private property in the execution of the contract.

- **3.28** All other conditions existing KRWSA applicable to this tender also.
- **3.29** The contract shall be responsible for any damage which any be caused to power or phone post or cables or to and building, walls and pipes, etc. nearby on account of excavation of the trench due to insufficient or lack of shoring or due to the result of bailing or pumping or stagnation of water. The contractor shall make his own arrangements for supporting electric and telephone post, electric and telephone cables during excavation and no extra payment will be given for this.
 - **3.30**. The contractor shall examine and satisfy himself that the beds and of trenches are firm and suitable for laying the pipes. Should any portion be found unsatisfactory by him, the contractor shall bring it to the notice of the officer in charge in writing and on receipt of the letters orders take necessary steps to make the trench firm and suitable for lying pipes.
 - **3.31**. The Agency materials if any issued to the contractor shall be taken charges of at the pipe dumps or stores by the contractor after satisfying himself about their sound condition and granting receipt to the officer In Charge of the purpose of inspecting, weighing or testing the pipes and materials as he shall see fit to do.
 - **3.32**. All pipes, special, valves etc. shall be transferred and stored adjacent to their final possession on the work, where they are to be used such time as the officer in charge considers proper. This will usually be just before they are to be laid in the trenches as it is not.
 - **3.33**. The pipe special valves etc. shall be handled very carefully during loading, unloading, covering .lowering operations as per the direction of the Agency Officers under their approved modes and with approved implements and should be satisfied that they are not defective.
 - **3.34** If any of the materials issued to the contractor in good condition become there after damaged before, when or after being placed in the work the contractor for the damage of the rate fixed by the Agency as per rule.
 - **3.35**. No payment will be made for additional pumping for bailing out water that may be required due to the fault of the contractor by way of inefficiency or delay is carrying out the works defective works etc.
 - 3.36 The laid pipe lines should be tested in inconvenient section not exceeding 150 M length at a stretch/ in suitable length fixed by the Agency. The testing of pipe line has to be done under the immediate presence of the Asst. Engineer and Asst. Exe. Engineer of the Agency in charge and under their directions.
 - **3.37**. If test show any defect in the work, such portion has to be redone and got retested to satisfaction of the Agency officer at the contractor's cost.
 - 3.38 If for lack of specials after commencing the work, pipe have to be laid with open end,

they, have to be closed by wooden plugs at no extra cost by the contractor.

- **3.39** All other conditions and terms of contract are the same as those current in the KRWSA.
- **3.40**. All relevant clauses of the specification for earth works trenching, refilling, shoring, receipt, transport and custody or materials conveyance to work site, laying, testing etc. for cast iron AC/PVC pipes in the CPWD/ Madras Detailed Standard Specifications/ ISS shall apply to all kind of pipes.
- **3.41** Where trenching is done, caution board, road flags, and danger light should be provided by the contractor at his cost as per standard practices details of which are available in the Executive Engineers office.
- **3.42**. After refilling the trenches, the contractor is responsible for a period of two months to maintain at his cost, the surface of the refilling trenches free of depression, pot holes or other irregularities.
- **3.43**. The CONTRACTOR shall be responsible for the safety custody of all materials taken charge by him subject however to the direction and control of the officer in charge.
- **3.44**. 1% (One percent) bill amount including cost of departmental materials to be recovered toward the recovery on account of construction works "Works" Welfare Fund insisted as per Order No. G / 4 /1990 dated 10-6-1990 of the Chief Executive Officer C.W.W.F.B. (Govt. Endt. 33874/90/LAD dated 24-7-1990) Kerala Workers Welfare Board.
- **3.45** FCC. for the work of OH Reservoir /GD Reservoir will be paid only after the tank is tested by filling water as instructed by the Dept. officers without any extra cost.
- **3.46** In addition to other tests as per M.D.S.S/C.P.W.D. and I.S.S., cube testing of concrete of R.C.C. work shall be conducted as per relevant I.S.S. without any extra charges.

5. FORMS OF AGREEMENT

(A) FORM OF PRELIMINARY AGREEMENT

"Preliminary Agreement entered on this day of
(full name and address of the tenderer) hereinafter called the contractor of the other part for the execution of the agreement as well as for the execution of the work
WHEREAS Kerala Rural Water Supply and Sanitation Agency (KRWSA) invited tenders for the work as stated above by Notification No
Within Fifteen days after the date when the acceptance of the tender has been intimated to him, the tenderer shall deposit a sum sufficient to make to the balance which together with the amount of earnest money deposited shall be created as security for the proper fulfillment of the same and shall execute an agreement for the work in the stipulated manner. If he fails to do this or in the case of the contract to maintain a specified rate of progress (to be specified in each case in the tender schedule) the earnest money and security deposit shall be forfeited to KRWSA and fresh tenders shall be called for or the matter otherwise disposed off. If as a result of such measures due to the default of the tenderer to pay the required deposit to KRWSA results in any loss to KRWSA, the same will be recovered from him as arrears of revenue. The original contractor shall have no claim whatever to the sum that may be due to the contractor on this or any other subsisting contracts or under the Revenue Recovery Act or otherwise the KRWSA may decide.
NOW THESE PRESENT WITNESS AND it is mutually agreed as follows: The terms and conditions for the said contract having been stipulated in the said tender form to which the contractor has agreed, a copy of which forms part of this agreement, it is agreed that the terms and conditions stipulated therein shall bind the part to this agreement extend to which they are abrogated or altered by express terms and conditions herein agreed to and in which accept the express provisions herein all supersede those of the same tender form.
1. The contractor hereby agrees and undertakes to perform/fulfill all the operations and obligations with the execution of the said contract work

is awarded in favour of the contractor. 2. If the contractor does not come forward to execute the original agreement after the said work is awarded and selection notice issued in his favour commits breach of any of the conditions of the contract as stipulated in the NIT as quoted above within the period stipulated therein the KRWSA may rearrange the work otherwise or loss so sustained by the KRWSA can be realized from the contractor under Revenue Recovery Act as if arrears of land revenue as assessed, taking into consideration the prevailing PWD rate and after giving due notice to contractor. The acquisition taken by such Agency officer or officers shall be final and conclusive and shall be binding on the contractor.
3. The tenderer further agrees that any amount found due to the KRWSA under or by virtue of this agreement shall be recoverable from the contractor from his EMD and his properties movable and immovable as arrears of Land Revenue under the provisions of the Revenue Recovery Act for the time being or in any other manner as the KRWSA may deem fit in this regard.
4. The contractor further assures it is clearly understood that the settlement of claims either by part bills or by final bills will be made only according to the availability budget provision and allotment of funds to the Regional Project Director in charge of the work under respective heads of account in which the work is sanctioned and arranged and also subject to seniority of such bills. No claim for interest or for damages whatsoever shall be made for the belated settlement of claims of bills.
IN WITNESS WHERE OF Sri
Regional Project Director In the presence of witness
1.
2.
Signed and delivered by Sri the contractor

Note:- The form should be presented in Rs. 200/- valid stamp paper of Govt. of Kerala.

1.

(B) FORM OF FINAL AGREEMENT TO BE EXECUTED ON AWARD OF WORK
AGREEMENT NoWORKS CONTRACT.
AGREEMENT entered intoday of theTwo Thousand and between
of the one part and the Regional Project Director, (office address), Kerala Rural Water Supply and Sanitation Agency (KRWSA), for and on behalf of Kerala Rural Water Supply and Sanitation Agency (KRWSA) of the other part for the work of
Srithe contractor
1.
2.
Signed and delivered by the Regional Project Director, Kerala Rural Water Supply and Sanitation Agency (KRWSA), Regional Project Management Unit, Kannr and on behalf of the Kerala Rural Water Supply and Sanitation Agency (KRWSA).
Regional Project Director
In the presence of witness
1.
2.

$\underline{SCHEDULE-A}$

NUMBER #	TEXT #	NUMBER #	TEXT #
SI. No.	Item Description	Quantity	Units
1	2	4	5
1	Choyyomkode Cheruva scheme-Kinanoor Karinthalam GP		
2	PUMPING MAIN		
3	100.98.235 : Supply of uPVC Pipe, IS 4985: 2000 , 10kg/cm2, 75mm Dia.	1060.00	metre
4	100.1.1: Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m: All kinds of soil (Ref. Item No. 2.10.1 of DSR)	286.20	cum
5	100.9.7: Laying UPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipe line to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipe line with water to the required test pressure (excluding cost of pipes and specials). 75 mm nominal outer dia pipes.	1060.00	metre
6	18.12.7 : Providing and fixing G.I. pipes complete with G.I fittings including trenching and refilling etc. External work65 mm dia nominal bore	16.00	metre
7	DISTRIBUTION SYSTEM		
8	100.98.231 : Supply of uPVC Pipe, IS 4985: 2000 , 10kg/cm2, 32mm Dia.	371.00	metre
9	100.98.233 : Supply of uPVC Pipe, IS 4985: 2000 , 10kg/cm2, 50mm Dia.	630.00	metre
10	100.98.234 : Supply of uPVC Pipe, IS 4985: 2000 , 10kg/cm2, 63mm Dia.	598.00	metre

11	100.1.1: Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m: All kinds of soil (Ref. Item No. 2.10.1 of DSR)	369.99	cum
12	100.9.3: Laying UPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipe line to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipe line with water to the required test pressure (excluding cost of pipes and specials). 32 mm nominal outer dia pipes.	371.00	metre
13	100.9.5: Laying UPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipe line to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipe line with water to the required test pressure (excluding cost of pipes and specials) 50 mm nominal outer dia pipes.	630.00	metre
14	100.9.6: Laying UPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipe line to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipe line with water to the required test pressure (excluding cost of pipes and specials). 63 mm nominal outer dia pipes.	598.00	metre
15	K and the MOO K's and a set Karlada alam OD		
16	Kuvatty WSS-Kinanoor Karinthalam GP		
	PUMPING MAIN		
17	100.98.235 : Supply of uPVC Pipe, IS 4985: 2000 , 10kg/cm2, 75mm Dia.	1390.00	metre

18	100.1.1: Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m: All kinds of soil (Ref. Item No. 2.10.1 of DSR)	375.30	cum
19	100.9.7: Laying UPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipe line to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipe line with water to the required test pressure (excluding cost of pipes and specials). 75 mm nominal outer dia pipes.	1390.00	metre
20	18.12.7 : Providing and fixing G.I. pipes complete with G.I fittings including trenching and refilling etc. External work65 mm dia nominal bore	24.00	metre
21	DISTRIBUTION NETWORK		
22	100.98.234 : Supply of uPVC Pipe, IS 4985: 2000 , 10kg/cm2, 63mm Dia.	2300.00	metre
23	100.98.233 : Supply of uPVC Pipe, IS 4985: 2000 , 10kg/cm2, 50mm Dia.	1010.00	metre
24	100.98.231 : Supply of uPVC Pipe, IS 4985: 2000 , 10kg/cm2, 32mm Dia.	815.00	metre
25	100.1.1: Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m: All kinds of soil (Ref. Item No. 2.10.1 of DSR)	994.95	cum
26	100.9.6: Laying UPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipe line to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipe line with water to the required test pressure (excluding cost of pipes and specials). 63 mm nominal outer dia pipes.	2300.00	metre

27	100.9.5: Laying UPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipe line to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipe line with water to the required test pressure (excluding cost of pipes and specials) 50 mm nominal outer dia pipes.	1010.00	metre
28	100.9.3: Laying UPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipe line to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipe line with water to the required test pressure (excluding cost of pipes and specials). 32 mm nominal outer dia pipes.	815.00	metre