NABARD

Department of Premises, Security and Procurement,
NABARD Kerala Regional Office,
Punnen Road, Statue, Post Box No.220
Thiruvananthapuram -695001
Email: - dpsp.trivandrum@nabard.org

Invites

TENDERs

FOR

"Tender for Undertaking Road taring work and Re-laying underground Drainage Water System in NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram"

Date of issue of tender document	**05th November 2021**
Due date and time for submission of tender	**26th November 2021, 13:00hrs**
Date and time of opening technical bids	**26th November 2021, 15:00hrs**
Earnest Money to be deposited	**NIL**

Table of Contents

NABARD

NB. Kerala/ DPSP/SQ-66/ 1913 /2021-2022 05 November 2021

NOTICE INVITING TENDER

(Empaneled Agencies Only)

Dear Sir,

Tender for Undertaking Road taring work and Re-laying underground Drainage Water System in NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram

National Bank for Agriculture and Rural Development (NABARD) invites sealed offers/ tenders in two parts from empaneled contractors as per the terms and conditions contained in the tender ***for Undertaking road taring work and re-laying underground drainage water system in NABARD Gardens, Poojapura*** having office in Kerala only owing to COVID19 pandemic situation.

2. The tender Document may be obtained from the Bank's office located at National Bank for Agriculture and Rural Development. Kerala Regional Office ,Punnen Road, Statue Thiruvananthapuram – 695001 or downloaded from https://www.nabard.org

3.It may be noted that the tender document down loaded from the website is free of cost for the empaneled vendors.

4.The other details are given below:

Date of commencement of issue of tender	05th November 2021
Last date for receipt of tender **queries**	26 November 2021
Last date and time for **receipt** of Bids	13:00, 26 November 2021
Date and time of opening of technical bid	15:00, 26 November 2021
Place of receiving and opening of tenders	Kerala Regional Office ,Punnen Road, Statue Thiruvananthapuram – 695001 Ph 0471-2701653 email- dpsp.trivandrum@nabard.org
Number of envelopes (non-window, sealed) to be submitted	Three (3) Envelopes a) Sealed Envelope 1 -Pre Contract Integrity Pact b) Sealed envelope 2 containing technical bid of tender document c) Sealed envelope 3 containing Price Bid All the envelopes to be placed in one sealed envelope with "**Tender for**

	Undertaking Road taring work and Re-laying underground Drainage Water System in NABARD Gardens, Poojappura" Super scribed on the top of the cover.

5. Bank reserves the right to change the dates mentioned in the tender document which will be displayed, as corrigendum/ amendment, at the above websites on which tender documents are available. The Bidder may go through the above website for any corrigendum/ amendment issued if any.

6. Please note that all the information desired needs to be provided by the bidder in the formats specified by the Bank. The bidder shall bear all the costs associated with the preparation and submission of the bid and NABARD will, in no case, be responsible or liable for such costs, regardless of the conduct or outcome of tendering process.

7. The online payment proof is to be kept along with tender offers in envelope-2 with the technical bid. Offers received without deposit Cost of tender document before the date and time will be rejected.

8.Technical specifications, terms and conditions, various formats and proforma for submitting the tender offer are described in the tender document and its enclosures/ annexures.

9.Tender offer will be opened in the presence of the bidders or their representatives who choose to attend the opening of tender on the above mentioned date, time and place. The details of the representative who are going to participate in tender opening is to be emailed to dpsp.trivandrum@nabard.org on or before ***26 November 2021***, only that personnel will be allowed in the premises in view of COVID protocol. Submitted Tenders of Empanelled Vendors if later found that they do not have office in Kerala will invariably be rejected and no request on any of the grounds will be entertained later.

10.PRE-CONTRACT INTEGRITY PACT: Pre-contract Integrity Pact as per the format given below may be filled and submitted along with the Technical Bid, failing which the tender will not be considered. Pre Contract Integrity Pact should be submitted on Rs. 100 Stamp Paper only on first page and remaining document on normal A4 size pages duly signed by the bidder. We bring to your notice that the Name of the Independent External Monitor (IEM) Shri Pramod Kumar Sangewar, IRSS (Retd.) H. No. 12-5-65/1, Flat No. log Sri Harsha Sethuram Unique Vijayapuri Colony, South Lalaguda Secunderabad 5000 17 Telangana State

Yours faithfully

Annie Alexander
General Manager

FORM OF TENDER

05 November 2021

The Chief General Manager
NABARD, Kerala Regional Office
Punnen Road,
Thiruvananthapuram - 695001

Dear Sir,

Tender for Undertaking Road taring work and Re-laying underground Drainage Water System in NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram

Having examined the Technical bid and price bid of tender document relating to the works specified in the Memorandum hereinafter set out, having visited and examined the site of the works specified in the said Memorandum and having acquired the requisite information relating thereto as affecting the tender, I/We hereby offer to execute the works specified in the said Memorandum within the time specified, at the rates mentioned in the Price Bid and in accordance with all respects of the tender and with such materials are provided for, by and in all other respects in accordance with such conditions so far as they may be applicable.

MEMORANDUM

a) Description of work — Tender for Undertaking Road taring work and Re- laying underground Drainage Water System in NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram

b) Time allowed for completion of the work : One month

d) Retention Money Deposit : 5% from every R.A. Bill.

We understand that the time for completion shown above shall be reckoned from the date of issue of the Work Order.

Should this tender be accepted, I/We hereby agree to abide by and fulfil the terms and provisions or the said Conditions of the tender annexed hereto so far as they may be applicable or in default thereof to forfeit the EMD and pay to the National Bank for Agriculture and Rural Development, the amount mentioned in the said tender conditions.

Our Bankers are:

i)

ii)

The names of partners of our firm are:

i)

ii)

iii)

Name of the partner of the firm
Authorized to sign:

OR

Name or person having Power of
Attorney to sign the contract
(*Certified copy of the Power of Attorney should be attached*):

Yours faithfully,

Signature of Tenderer

PRE CONTRACT INTEGRITY PACT

(To be submitted on Rs. 100 Stamp Paper only on first page and remaining document on normal A4 size pages duly signed by the bidder)(Tenders without Pre-Contract Integrity Pact on Rs.100 stamp paper shall be rejected out rightly)

Between

National Bank for Agriculture and Rural Development (NABARD) hereinafter referred to as "The Principal"

And

..... hereinafter referred to as "The Bidder/Contractor"

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for "**Tender for Undertaking Road taring work and Re-laying underground Drainage Water System in NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram**". The Principal values full compliance with all relevant laws of the land, rules, regulation, and economic use of resources and of fairness /transparency in its relations with its Bidder(s) and/or Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitors (IEMs) who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 – Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

a. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will, in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

c. The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 – Commitments of the Bidder(s)/Contractor(s)

(1) The Bidder(s) / Contractor(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s) / Contractor(s) commit themselves to observe the following principles during participation in the tender process and during the contract execution

a. The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

b. The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.

c. The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)/Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any.

e. The Bidder(s) /Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

f. Bidder(s) /Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.

(2) The Bidder(s) /Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future contracts

If the Bidder(s) /Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form which put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s) /Contractor(s) from the tender process.

Section 4 – Compensation for Damages

(1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.

(2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 – Previous transgression

(1) The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process.

Section 6 – Equal treatment of all Bidders / Contractors/ Subcontractors

(1) In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor.

(2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors

(3) The Principal will disqualify from the tender process all bidders who do not sign the Pact or violate its provisions.

Section 7 – Criminal charges against violating Bidders(s) / Contractor(s)/ Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8 – Independent External Monitor

(1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by the Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement. The Independent External Monitor appointed for NABARD is: Note: The Name of the Independent External Monitor (IEM) mentioned in section 8 is **Shri Pramod Kumar Sangewar, IRSS (Retd.) H. No. 12-5-65/1, Flat No. log Sri Harsha Sethuram Unique Vijayapuri Colony, South Lalaguda Secunderabad 5000 17 Telangana State**

(2) The Monitor is not subject to instructions by the representatives of the parties and performs his/her functions neutrally and independently. The Monitor would have access to all Contract documents, whenever required. It will be obligatory for him / her to treat the information and documents of the Bidders /Contractors as confidential. He / she reports to the Chairman, NABARD.

(3) The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Sub-contractors.

(4) The monitor is under contractual obligation to treat the information and documents of the Bidder(s) /Contractor(s) / Sub-contractor(s) with confidentiality. The Monitor has also signed declarations on 'Non-disclosure of Confidential Information and of 'Absence of Conflict of Interest'. In case of any conflict of interest arising at a later date, the IEM shall inform Chairman, NABARD and recuse himself/herself from that case. Notice Inviting **Tender for Undertaking Road taring work and Re-laying Underground Drainage Water System in NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram**

(5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project, provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

(6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

(7) The monitor will submit a written report to the Chairman, NABARD within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposal for correcting problematic situations.

(8) If the Monitor has reported to the Chairman, NABARD, a substantiated suspicion of an offence under the relevant IPC/PC Act, and the Chairman NABARD has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

(9) The word 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings. If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharge/determined by the Chairman of NABARD.

Section 10 – Other provisions

(1) This agreement is subject of Indian Law, Place of performance and jurisdiction is the Head Office of the Principal, i.e. Mumbai.

(2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

(3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

(4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(5) Issues like Warranty/Guarantee etc. shall be outside the purview of IEMs.

(6) In the event of any contradiction between the Integrity Pact and its Annexure, if any, the Clause in the Integrity Pact will prevail.

(For & On behalf of the Principal) _____ (For & on behalf of the Bidder/Contractor)

(Office Seal) (Office Seal)

Place _____
Date _____

Witness 1: (Name & Address)
_____
_____
_____

Witness 2: (Name & Address)
_____
_____
_____

Place: (SIGNATURE OF THE TENDERER)

Name:

Date: Seal:

GENERAL INSTRUCTIONS TO THE CONTRACTORS/ TENDERERS

1. Contractors are advised to visit the site and thoroughly understand the nature and scope of the works and be familiar with the site conditions before quoting.

2. The pre-qualification that has to be mandatorily that has to be complied with for participating in this bidding process is as listed below. The documents indicating the following criteria is to be included along with the bid for verification process.

   a) The bidder should have **experience** of similar works during the last **7 years**

   b) The annual turnover of the bidder during each of the last **3 years** should be at least **₹5.01lakh** and above

   c) The firm should have done at least:

      i) **three** similar works valuing not less than **₹ 6.68lakh** of the estimated cost;

      or

      ii) **two** similar works valuing not less than **₹8.36lakh** of the estimated cost;

      or

      iii) **one** similar work valuing not less than **₹13.37lakh** of the estimated cost.

3. The quantities indicated in the Bill of Quantities (BOQ) are only tentative and shall be executed only at the sole discretion of NABARD.

4. Quoted rates should be workable and reasonable and should include incidental and all overheads and profits. The contractor should furnish Rate Analysis for scrutiny of the rates by NABARD, if required.

5. Rates should include all Taxes, Duties, Levies, Wages as per Act, GST, loading, unloading, transportation of material to site, carting away the debris etc. and should be firm for the entire Contract period. No escalation of rates will be allowed for the entire contract period and extended time if any on any account.

6. Materials used should conform to relevant National/ International Codes.

7. Specifications and Method of Measurements shall be followed as applicable. However, in the absence of the same and / or in case of any discrepancy, the decision of NABARD will be final.

8. The items not covered in the Schedule of Quantities of the Contract Document shall be paid at the rates as per Rate Analysis based on the market prices supported by documentary proof with 15% towards Contractor's Overhead charges, plus Works

Contract Tax and GST as applicable. The Rate Analysis shall be submitted by the Contractor for scrutiny and approval of NABARD.

9. Income Tax, GST, Works Contract Tax and other taxes as applicable will be deducted from total payment due to the Contractor.

10. The Contractor should have valid License relating to his Contract and the workmen employed by the Contractor should also have the valid License and experience in their trade.

11. The Contractor should take necessary Insurance cover (CAR policy – contractor's all risk policy) at his cost for his persons employed at site and for third Party. Policies should be taken in the joint names of NABARD and the Contractor for which first name should be NABARD. The policy in original shall be deposited to NABARD within 14 days of awarding the work.

12. All the Standard Conditions of the Contract shall be binding on the parties as per Indian Contract Act and prevailing Rules.

13. The entire work is required to be completed as specified in the tender.

14. The Contractor shall comply with the provisions of Contract, Labor (Regulation & Abolition) Act, 1970, Minimum Wages Act and all other Labor Laws and other Statutory Regulations (both Central and State) that may be enforced from time to time by the appropriate authorities. NABARD shall not be held responsible for any penalty on failure of the any Labor Regulations. NABARD shall have the power to inspect the Wage Register and for physical verification of salary paid to the staff with reference to any records of the Contractor and to insist the Contractor to comply with Laws.

15. The Contractor should be responsible to fulfil all the obligations in connection with the workers employed by the Contractor for the purpose of the Contract and all the Statutory and other liabilities, if any, including minimum wages, leave salary, uniform, ex-gratia, gratuity, ESI, Provident Fund, Workman Compensation, if any, etc. in connection therewith shall be on the Contractor's account and payable by the Contractor.

16. The Contractor should obtain necessary permission that may be required for the purpose of this Contract from such authorities as may be prescribed by Law from time to time.

17. The Contractor or his authorized representative should visit the site regularly and if necessary meet NABARD's Engineer with prior appointment for any clarifications and to receive instructions, take measurements, etc. at the site.

18. The Contractor shall be fully responsible and shall compensate NABARD with suitable Insurance cover in the event of any damage to men or material, injury / damage or death as the case may be, caused directly or indirectly due to the negligence of the Contractor or his agents and / or his employees, or workmen. The decision of NABARD in this regard shall be final and binding.

19. Any act of indiscipline / misconduct / theft / pilferage / careless activities on the part of any employee engaged by the Contractor resulting in any loss to NABARD in kind or cash will be viewed seriously and NABARD will have the right to claim damages or levy fine and / or terminate the Contract forthwith, if necessary.

20. In case of any default or failure on Contractor's part to comply with all / any one of the Terms / Conditions, NABARD reserves to itself the right to take necessary steps to remedy the situation including, inter-alia, the deduction of appropriate amount/ s from dues otherwise payable to Contractor and / or by taking recourse to appropriate recovery proceedings.

21. If any dispute arises on any matter concerning this Contract, the decision of NABARD shall be final and binding.

22. The Contractor should not at any time do, cause or permit any nuisance on the site / do anything which shall cause unnecessary disturbances or inconvenience to the staff/visitors at site or near the site of work.

23. The work should be carried out with least inconvenience to other residents in the quarters. The workmen employed by the Contractor should abide by the Rules and Regulations maintained by NABARD in the premises, especially in respect of working hours, entry of the workers to the premises, interpersonal relation with the occupants etc.

24. The Contractor should obtain approvals, if any, necessary for the work from the statutory bodies on behalf of NABARD. The fees and other statutory charges, if any, will be reimbursed to the Contractor based on the original receipts produced to NABARD.

25. The Contract can be terminated by NABARD on 15 days' notice if services are found to be unsatisfactory and if there is no improvement even after issue of three notices to the contractor.

26. On-site storage space will be provided to the Contractor subject to availability. NABARD will not be responsible for Contractor's materials. The Contractor may be required to vacate the storage space and sheds as per exigency after making good the area clean without any extra cost to NABARD.

27. The Contractor shall provide everything necessary for the proper execution of the works. NABARD will not supply any 'T & P' and materials or any other equipment, materials, labor, etc. and no payment in this respect will be made by NABARD.

28. The Contractor shall supply, and maintain suitable single or double bamboo/MS scaffoldings with working plat forms at all levels, T&P etc. along the compound wall proposed to be reconstructed or any other area if required at his cost during the execution of any work and remove them as soon as the work is completed without any damage to existing structure/fittings/fixtures.

29. The Contractor shall not directly or indirectly transfer, assign or sublet the Contract or any part of it, without written permission of NABARD.

30. Any defect which may appear within the **Defect Liability Period** after the Virtual completion of work should be rectified by the Contractor at his cost and risk and only thereafter the Security Deposit will be refunded to the Contractor.

31. Security Deposit: In addition to ISD, Retention Money Deposit (RMD) will be deducted @ 5% of the gross value of the work done / each Running Bill and Final Bill till the Security Deposit (i.e. ISD plus RMD) amounts to 5% of contract value. This amount shall not bear any interest.The Security Deposit (SD) will not bear any interest. 50% of the total security deposit is refunded after virtual completion of the work and rest 50% will be refunded after Defects Liability Period from the date of Virtual Completion of works provided the Contractor has satisfactorily carried out all the rectification works and attended to all defects to the satisfaction of NABARD.

32. Defects LIABILITY period: **12 Months** from the date of Virtual Completion of works certified by NABARD.

33. Validity of Tender: Three months from the date of opening of Tender.

34. Liquidated Damages: 0.25% of the accepted Tender Value per week or part of the week subject to maximum of 5% of the value of work.

35. PAYMENT: The contractor shall be entitled to receive upto Rs5.00lakh as Running Bill payment after completion of work of approximately 50% of value of the contract and after submission of the bill with joint measurements with the Architect deputed by the Bank/Banks Engineer**.**

We accept all the above Terms and Conditions in all respects without any reservation.

(SIGNATURE OF THE TENDERER)

Place: Name:

Date: Seal:

SPECIAL CONDITIONS

1. The Tender is strictly on Item Rate basis.

2. All the pages of the Tender Document shall be signed by the Tenderer.

3. NABARD takes no responsibility for delay / loss in post or non-receipt of Tender Documents.

4. Tenders submitted by unauthorized agents and FAX / Telex / Telegraphic bids shall not be entertained / considered.

5. **Tenderers are advised to visit the site at their cost, conduct inspection of existing conditions so as to familiarize themselves with the site conditions, nature of works etc. and get all clarifications as necessary from NABARD before quoting the rates.**

6. The contractor should provide suitable scaffolding made out of bamboos / MS Pipes and stands with working platforms to his workers for carrying out the work hassle free, smoothly and safely. The rates quoted include the charges for supplying and erecting scaffolding and its removal after completion of work.

7. Special care shall be taken by providing suitable covers like tarpaulins, polythene sheets etc. to prevent dust nuisance, if any, in the influence area of his work in the premises .

8. The work shall be carried out without any inconvenience to the staff / residents, the rates quoted shall include all the above precautions and for handling and re-arranging the materials used in the work or otherwise and also to place in its original position after completion of work and any damage to property caused by the Contractor shall be made good by the Contractor at his cost. The contractor has to wash and clean the floors in the influence area of his activities at his cost after his daily completion of work.

9. Rates should include for removal of debris out of work site to the safe limit earmarked in the premises daily basis, removal of debris out of the premises and dumping to Municipal Corporations dump yard periodically, removing stains, cleaning the site thoroughly and unless the same is done to the satisfaction of the NABARD's Engineer, the Bill will not be accepted.

10. The Contractor shall make necessary arrangement for watch and ward of his materials, tools, machines, scaffolding etc. stored for the execution of the work at his own risk and cost and NABARD will not be responsible on any account.

11. If the last date of receipt of Tender is a holiday, then submission of Tenders shall be shifted to next working day without change of time and venue.

12. The tenderers should quote their rates strictly adhering to Terms and Conditions stipulated in the Tender Document. Unsolicited correspondence after opening of

the Tender shall not be entertained. Conditional / deviated tenders may be rejected without making any reference to the bidders.

13. No tenderer will be allowed to withdraw his Tender during the validity period. Subletting of the Contract is not permitted.

14. Rates should be filled in the Tender neatly and as far as possible, no correction shall be made. The rates quoted should be written legibly in words and figures. If on check, differences are observed between the rates given by the Contractor in words and figures or in the amount worked out by him, the following procedure shall be followed.
    a. When there is a difference between the rates in figures and in words the rates which corresponds to the amounts worked out by the Contractor shall be taken as correct.
    b. When the amount of an item is not worked out by the Contractor or it does not correspond with the rate written either in figures or in words, then the rate quoted by the Contractor in words shall be taken as correct.
    c. When the rates quoted by the Contractor in figures and in words tallies, but the amount is not worked out correctly, the rate quoted by the Contractor shall be taken as correct and not the amount.

15. No advance shall be paid towards mobilization and cost of materials.

16.
    a. No compensation shall be admissible for any loss suffered by the Contractor during the execution of the work. It shall be the Contractor's sole responsibility to protect NABARD‘s staff and its employees against accidents from any cause and the contractor shall indemnify NABARD against any claims for damage for injury to person or property, resulting from any such accidents with necessary Insurance cover.

    b. The Contractor should take necessary Insurance cover (CAR policy – contractor's all risk policy) at his cost for his persons employed at site and for Third Party. Policies should be taken in the joint names of NABARD and the Contractor in which first name should be NABARD.

    c. Any damages caused to the building / premises during the execution of the work shall be made good by the Contractor at his risk and cost and if necessary, through suitable Insurance cover.

    d. The contractor at his cost and risk should shift / displace the Bank's furniture / fixtures etc. as per the needs to facilitate the job during the time of work and should re-shift the goods at its initial place without any damage.

17. The Contractor shall use necessary safety equipment and maintain all safety measures during the execution of works and ensure compliance of Safety Code as per Rules and Regulations in force.

18. The Contractor shall engage necessary qualified and experienced supervisory staff at his cost during the execution of the work for attending to day to day affairs. He shall keep record of daily work schedule and keep inform the progress to the Banks Engineer on daily basis.

19. The Contractor shall submit the bills along with the accepted and jointly recorded measurements with Architect/consultant deputed by the Bank / Banks Engineer and duly certified by the consultant/ NABARD's Engineer.

20. The Contractor should have necessary Contract License and comply with the Labour Laws as applicable.

21. Notwithstanding anything stated above, NABARD reserves the right to assess the Bidders capability and capacity to perform the contract, should the circumstances warrant such assessment in the overall interest of NABARD.

22. The decision of NABARD in awarding the work shall be final and can not be subjected to arbitration.

23. NABARD reserves the right to accept/ negotiate / reject any Tender either in whole or in part without assigning any reasons therefore whatsoever and without entering into any further correspondence and hence, NABARD shall be under no obligation to accept the lowest or any other Tenders received in response to this Tender. The decision of NABARD in this regard shall be final and undisputable.

24. NABARD also reserves the right of supersession of any of the conditions, stipulated in the Tender Document.

25. Rates quoted by the contractor shall be as indicated in the tender and is firm throughout the contract period and extended period if any.

DECLARATION BY THE CONTRACTOR

We / I have read and understood all the instructions / conditions made above and we / I have taken into account the above Instructions / Terms and Conditions while quoting the rates. We / I accept all the above Terms and Conditions without any reservation, in all respects.

Place :

DATE :

(SIGNATURE OF THE TENDERER)
ADDRESS :
NAME and SEAL

Scope of work

I) Tarring of Road

1. Preparation of Surface

   Prior to the application of bitumen, all vegetation, loose sealing compound, caked mud, animal dung, dust, dirt and foreign material shall be removed from the existing road and pavement.

   The rate for cleaning and repair works is to be included in the rate quoted. No additional claim in this regard will be entertained.

2. Applying Tack Coat of Straight Run Bitumen

   Providing and applying tack coat using hot straight run bitumen of grade VG-10 (conforming to IS: 73, 2013) including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler.

3. Preparation of Premix

   The aggregate shall be dry and suitably heated to temperature before these are placed in the mixer to facilitate mixing with the binder. Mixers of approved type shall be employed for mixing the aggregates with the bituminous binder.

   The mixing of binder with chippings shall be immediately transported from the mixer to the point of use in suitable vehicles of wheel barrows, the vehicles employed for transport shall be cleaned and be covered over in transit if so directed.

   The rate for the same is to be included in the rate quoted. No additional claim in this regard will be entertained.

4. Providing and Laying 2.5 Cm Thick Premix Carpet

   2.5 cm premix carpet surfacing with 3 cum of stone chippings of 12 mm nominal size per 100 sqm and bitumen emulsion (medium setting min 65% of bitumen contents), complying with IS:8887, using 96 kg per cum of chippings, including consolidation with road roller of 6 to 9 tonne capacity.

5. Spreading and Rolling

   The premixed material shall be spread on the road surface with rakes to the required thickness and camber or distributed evenly with the help of a drag spreader, without undue loss of time.

6. Providing and Applying Seal Coat

   This work shall consist of the application of a seal coat for sealing the voids in a bituminous surface laid to the specified levels, grade and cross fall (camber).

II) Re-laying of Drainage Water System

1 Providing and laying cement concrete using 20mm nominal size graded aggregate including compaction ,finishing the top surface to level ,curing etc.

2 Cutting full grout macadam road surfaces including W.B.M inclusive of cost of placing PCC 1:2:4 of required thickness by using 20mm nominal size aggregate, compacting, curing etc.

3 Demolishing PCC work for laying pipe lines including stacking of serviceable materials.

4 Removing & rearranging interlocking paver blocks flooring with manufactured sand/stone chips bed including stacking of serviceable materials.

5 Supply, Laying and Fixing in Position PVC drainage pipes of approved make including fitting &accessories as required by the site, cutting pipes to required length, necessary excavation, testing etc.

6 Providing and fixing PVC gully trap of approved make, including connection with PVC soil/waste pipe embedded in CC 1:4:8 finished smooth and fixing CI frame and cover of size 300mm*300mm.

7 Construction of manhole of internal dimension 600*600mm in 230mm thick brick wall in CM 1:3 over a bed of 150mm thick PCC 1:2:4, plastering with CM 1:3 finished smooth, fixing CI frame and cover of size 600mm*600mm and encasing of sewer connections to manhole in PCC 1:2:4

SIGNATURE OF THE TENDER

Technical specification

Part -I) Tarring of Road

1. Preparation Of Surface

Prior to the application of bitumen, all vegetation, loose sealing compound, caked mud, animal dung, dust, dirt and foreign material shall be removed from the existing road surface and pavement) by means of mechanical sweepers and blowers, otherwise with steel wire brushes, small picks, brooms or other implements as approved by the Engineer-in-Charge. The material so removed shall be disposed off from the site. The tack coat shall not be applied nor be atmospheric in the shade is not more than 16°C.

a) Repairs: pot holes or patches and ruts in surface course which is to be surface treated, shall be repaired by removal of all loose and defective material by cutting in rectangular patches and replacement with suitable material. For the purpose of repairs the area of pot holes shall be taken up to 0.75 sqm and depth up to 5 cm. All pot holes, patches and ruts up to 2.5 cm deep shall be repaired.

b) Cleaning: Prior to the application of the binder, all dust, dirt, caked mud, animal dung, loose and foreign material etc. shall be removed 30 cm on either side, beyond the full width to be treated, by brooms etc. The material so removed shall be disposed off as directed by the Engineer-in-Charge. For a water bound macadam surface, the interstices between the road metal shall be exposed up to a depth of about 10 mm by means of wire brushes. The surface shall then be brushed with soft brooms to remove all loose aggregate. Finally the traces of fine dust which get accumulated while brushing shall be thoroughly removed from the surface by blowing with gunny bags. The prepared surface shall be closed to traffic and maintained fully clean till the binder is applied.

The rate for cleaning and repair works is to be included in the rate quoted. No additional claim in this regard will be entertained.

2. Applying Tack Coat of Straight Run Bitumen

Providing and applying tack coat using hot straight run bitumen of grade VG-10 (conforming to IS: 73, 2013) including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications: On bituminous surface @ 0.50 Kg/sqm.

Bitumen shall be heated in a boiler to a temperature of 165°C to 175°C and maintained at that temperature. Temperature shall be checked at regular intervals with the help of a thermometer. Hot bitumen shall be applied evenly to the clean, dry surface by means of a pressure sprayer at specified rate. Even and uniform distribution of bitumen and never across it. Excessive deposits of bitumen caused by stopping or starting of the sprayer or through leakage or any other reason shall be suitably rectified.

The rate for applying tack coat is to be included in the rate quoted. No additional claim

in this regard will be entertained.

3. Preparation of Premix

a) The aggregate shall be dry and suitably heated to temperature as directed by Engineer-in-Charge before these are placed in the mixer to facilitate mixing with the binder. Mixers of approved type shall be employed for mixing the aggregates with the bituminous binder.

b) The binder shall be heated to the temperature appropriate to the grade of bitumen approved by the Engineer-in-Charge, in boilers of suitable design avoiding local overheating and ensuring a continuous supply. The aggregates shall be dry and suitably heated to a temperature as directed by Engineer-in-Charge before these are placed in the mixer. After about 15 seconds of dry mixing, the heated binder shall be distributed over the aggregates at the rate specified. The mixing of binder with chippings shall be immediately transported from the mixer to the point of use in suitable vehicles of wheel barrows, the vehicles employed for transport shall be cleaned and be covered over in transit if so directed.

c) Providing and Laying 2.5 Cm/4 Cm Thick Premix Carpet

Laying 2.5 cm premix carpet surfacing with 3 cum of stone chippings of 12 mm nominal size per 100 sqm and bitumen emulsion (medium setting min 65% of bitumen contents), complying with IS:8887, using 96 kg per cum of chippings, including consolidation with road roller of 6 to 9 tonne capacity etc.

The carpeting material will be brought from the hot mix plant only, available in the surrounding area.

4. Spreading and Rolling

The premixed material shall be spread on the road surface with rakes with rakes to the required thickness and camber or distributed evenly with the help of a drag spreader, without undue loss of time. The camber shall be checked by means of camber boards and inequalities evened out. As soon as sufficient length of bituminous material has been laid. Rolling shall commence with 6 to 9 tonne power rollers, preferably of smooth wheel tendon type, or other approved plant. Rolling shall begin at the edges and progress towards the centre longitudinally. Except on the super elevated portions rolling shall progress from the lower to upper edge, parallel to the centre line of the pavement. The consolidated thickness shall not at nay place be less than specified thickness by more than 25%. However, the average thickness shall be less than that specified in the item.

When the roller has passed over the whole area once. Any high spots or depressions which become apparent shall be corrected by removing or adding premixed materials.

No additional claim will be entertained in this regard. Rolling shall then be continued until the entire surface has been rolled to compaction and all the roller marks eliminated. In each pass of the roller, preceding track shall be overlapped uniformly by at least 1/3 width. The roller wheels shall be kept damp to prevent the premix from adhering to the wheels picked up. In no case shall fuel/lubricating oil be used for this

purpose. Rollers shall not stand on newly laid material as it may get deformed thereby.

The edges along and transverse of the carpet, laid and compacted earlier shall be cut to their full depth so as to expose fresh surface which shall be painted with a thin surface coat of appropriate binder before the new mix is placed against it.

5. Rectification

Where the surface irregularity fall outside the specified tolerances the contractor shall be liable to rectify it to the satisfaction of Engineer-In-Charge by adding fresh material and recompacting to specifications where the surface is low. Where the surface is high the full depth of the layer shall be removed and replaced with fresh material and compacted to specifications. No additional claim with regard to such rectification will be entertained.

6. Providing and Applying Seal Coat

This work shall consist of the application of a seal coat for sealing the voids in a bituminous surface laid to the specified levels, grade and cross fall (camber). Providing and laying seal of premixed fine aggregate (passing 2.36 mm and retained on 180 micron sieve) with bitumen using 128 kg of bitumen per cum of fine aggregate and 0.60 cum of fine aggregate per 100 sqm of road surface, including rolling and finishing with road roller all complete.

The binder shall be heated in boilers of suitable design, approved by the Engineer-in-Charge to the temperature appropriate to the grade of bitumen or as directed by the Engineer-in-Charge, The aggregates shall be dry and suitably heated to a temperature between 150°C and 165°C or as directed by the Engineer-in-Charge before these components are placed in the mixer. Mixing of binder with former.

The mix shall be immediately transported from the mixing plant to the point of use and spread uniformly on the bituminous surface to be sealed.

As soon as a sufficient length has been covered with the premixed material, the surface shall be rolled with an 8-10 tonne smooth-wheeled roller. Rolling shall be continued until the premixed material completely seals the voids in the bituminous course and a smooth uniform surface is obtained. Further, the prepared finished surface shall be protected from traffic for 24 hours or such period as may be directed by the Engineer-in-Charge.

7. Measurements and Rates

The length and width of the finished work shall be measured correct a cm along the finished surface of the road. The area shall be calculated in square meter, correct to two places of decimal. The rate shall include the cost of materials, labor and any other items of work that is involved in all the operations described above for the particular item.

Part - II) Re-laying of Drainage Water System

1) Cement Concrete Work:-

Water, cement, fine aggregate or sand shall be as read as Mortar

a) Coarse Aggregate

(i) General: Aggregate most of which is retained on 4.75 mm IS Sieve and contains only as much fine material as is permitted in IS 383 for various sizes and grading is known as coarse aggregate. Coarse aggregate shall be specified as stone aggregate, gravel or brick aggregate and it shall be obtained from approved/ authorized sources.

- Stone Aggregate: It shall consist of naturally occurring (uncrushed, crushed or broken) stones. It shall be hard, strong, dense, durable and clean. It shall be free from veins, adherent coating, injurious amounts of disintegrated pieces, alkali, vegetable matter and other deleterious substances. It shall be roughly cubical in shape. Flaky and elongated pieces shall be avoided. Aggregates from other than natural resources shall comply with the requirements of IS 383.

- Gravel: It shall consist of naturally occurring (uncrushed, crushed or broken) river bed shingle or pit gravel. It shall be sound, hard and clean. It shall be free from flat particles of shale or similar laminated material, powdered clay, silt, loam, adherent coating, alkali, vegetable matter and other deleterious substances. Pit gravel shall be washed if it contains soil materials adhering to it. These shall conform to IS 383 unless otherwise specified.

- Brick Aggregate: Brick aggregate shall be obtained by breaking well burnt or overburnt dense brick/ brick bats. They shall be homogeneous in texture, roughly cubical in shape and clean. They shall be free from unburnt clay particles. Soluble salt, silt, adherent coating of soil, vegetable matter and other deleterious substances. Such aggregate should not contain more than one percent of sulphates and should not absorb more than 10% of their own mass of water, when used in cement concrete. It shall conform to IS 306 unless otherwise specified.

- Light weight aggregate such as sintered fly ash aggregate may also be used provided the Engineer-in-Charge is satisfied with the data on the proportion of concrete made with them.

ii) Deleterious Material: Coarse aggregate shall not contain any deleterious material, such as pyrites, coal, lignite, mica, shale or similar laminated material, clay, alkali, soft fragments, sea shells and organic impurities in such quantity as to affect the strength or durability of the concrete. Coarse aggregate to be used for reinforced cement concrete. Coarse aggregate to be used for reinforced cement concrete shall not contain any material liable to attack the steel reinforcement. Aggregates which are chemically reactive with alkalies of cement shall not be used. The maximum quantity of deleterious material shall not be more than five percent of the weight of coarse

aggregate when determined in accordance with IS 2386.

iii) Stacking: Aggregate shall be stacked on a hard, dry and level patch of ground. When stack piling, the aggregate shall not form pyramids resulting in segregation of different sized materials. It shall be stacked separately according to nominal size of coarse aggregates. Stacking shall be done in regular stacks, of height not exceeding 100 cm.

b) Two or more admixtures may not be compatible in the same solution. It is therefore mandatory that when two admixtures manufactured by the same manufacturers is being used simultaneously, the manufacturer shall certify their compatibility. In case the two or more admixtures are produces by different manufacturers, then, before their use in concrete, test shall be performed by the manufacturer to establish their compatibility, all such test reports shall be furnished to the Engineer-in-Charge for his approval before their use in concrete.

c) Admixture manufacturer's recommendation shall be carefully followed so as to ensure complete solution of the product or to prepare a standard solution of uniform strength for easier use.

d) In case of batch mixing plant at site the grading of aggregate shall be controlled by obtaining the coarse aggregate in different sizes and blending them in right proportions, the different sizes being stocked in separate stock piles. The material should be stock-piled for several hours preferably a day before use. The grading of coarse and fine aggregate should be checked as frequently as possible, the frequency for a given job being determined by the Engineer-in-Charge to ensure that the specified grading is maintained.

e) It is important to maintain the water cement ratio constant at its correct value.

f) Machine Mixing: The mixer drum shall be flushed clean with water. Measured quantity of coarse aggregate shall be placed first in the hopper. This shall be followed with measured quantity of fine aggregate and then cement. In case fine aggregate is damp, half the required quantity of coarse aggregate shall be placed in the hopper, followed by fine aggregate and cement. Finally the balance quantity of coarse aggregate shall be fed in the hopper, & then the dry materials are slipped into the drum by raising the hopper. The dry material shall be mixed for atleast four turns of the drum. While the drum is rotating, water shall be added gradually to achieve the water cement ratio as specified or as required by the Engineer- in-Charge. After adding water, the mixing shall be continued until concrete of uniform colour, uniformly distributed material and consistency is obtained. Mixing shall be done for atleast two minutes after adding water. If there is segregation after unloading from the mixer, the concrete should be remixed.The drum shall be emptied before recharging. When the mixer is closed down for the day or at any time exceeding 20 minutes, the drum shall be flushed cleaned with water.

g) Hand Mixing: When hand mixing has been specifically permitted in exceptional circumstances by the Engineer-in-Charge in writing, subject to adding 10% extra cement, it shall be carried out on a smooth, clean and water tight platform of suitable size. Measured quantity of sand shall be spread evenly on the platform and the cement shall be dumped on the sand and distributed evenly. Sand and cement shall be mixed intimately with spade until mixture is of even colour throughout. Measured quantity of coarse aggregate shall be spread on top of cement sand mixture and mixing done by showlling and turning till the coarse aggregate gets evenly distributed the cement sand

mixture. Three quarters of the total quantity of water required shall be added in a hollow made in the middle of the mixed pile and the material is turned towards the middle of pile with spade. The whole mixture is turned slowly over and again and the remaining quantity of water is added gradually. The mixing shall be continued until concrete of uniform colour and consistency is obtained. The mixing platform shall be washed and cleaned at the end of the day.

h) Placing

The concrete shall be deposited as nearly as practicable in its final position to avoid rehandling. It shall be laid gently (not thrown) and shall be thoroughly vibrated and compacted before setting commences and should not be subsequently disturbed. Method of placing shall be such as to preclude segregation. Care shall be taken to avoid displacement of reinforcement or movement of form work and damage due to rains. As a general guidance, the maximum free fall of concrete may be taken as 1.5 metre.

i) Compaction

Concrete shall be thoroughly compacted and fully worked around embedded fixtures and into corners of the form work. Compaction shall be done by mechanical vibrator of appropriate type till a dense concrete is obtained. The mechanical vibrators shall conform to IS 2505, IS 2506, IS 2514 and IS 4656. To prevent segregation, over vibration shall be avoided.

Compaction shall be completed before the initial setting starts. For the items where mechanical vibrators are not to be used, the contractor shall take permission of the Engineer-in- Charge in writing before the start of the work. After compaction the top surface shall be finished even and smooth with wooden trowel before the concrete begins to set.

j) Construction Joints

Concreting shall be carried out continuously upto construction joints. The position and arrangement of construction joints shall be as shown in the structural drawings or as directed by the Engineer-inCharge. Number of such joints shall be kept minimum. Joints shall be kept as straight as possible. Construction joints should comply with IS 11817.

k) When the work has to be resumed on a surface which has hardened, such surface shall be roughened. It shall then be swept clean and thoroughly wetted. For vertical joints, neat cement slurry, of workable consistency by using 2 kgs of cement per sqm shall be applied on the surface before it is dry. For horizontal joints, the surface shall be covered with a layer of mortar about 10-15 mm thick composed of cement and sand in the same ratio as the cement and sand in concrete mix. This layer of cement slurry of mortar shall be freshly mixed and applied immediately before placing of the concrete.

l) Curing

Curing is the process of preventing loss of moisture from the concrete. The following methods shall be employed for effecting curing. Moist Curing: Exposed surfaces of concrete shall be kept continuously in a damp or wet condition by ponding or by covering with a layer of sacking, canvas, Hessian or similar materials and kept constantly wet for at least 7 days from the date of placing concrete in case of ordinary Portland cement and at least 10 days where mineral admixtures or blended cements are used. The period of curing shall not be less than 10 days for concrete exposed to dry and hot weather conditions. In the case of concrete where mineral admixtures or blended cements are used, it is recommended that above minimum periods may be extended to 14 days.

2) Cutting full grout macadam road surfaces including W.B.M inclusive of cost of placing PCC 1:2:4 of required thickness by using 20mm nominal size aggregate, compacting, curing etc.

3) Demolishing PCC work for laying pipe lines including stacking of serviceable materials.

4) Removing & rearranging interlocking paver blocks flooring with manufactured sand/stone chips bed including stacking of serviceable materials.

5) Unplasticized PVC pipes for soil and waste discharge system inside buildings including ventilation and rain water system

(i) Laying of plastic pipes:-

a) Trenching should not be carried out too far ahead of pipe laying. The trench should be as narrow as practicable. This may be kept 0.3 m more than the outside diameter of the pipe and depth may be kept at 0.6-1.0 m depending upon traffic conditions.

b) The trench bottom should be carefully examined for the presence of hard subjects such as flints, rock projections or tree roots. In uniform, relatively soft fine grained Soils with the bottom of the trench brought to an even finish to provide a uniform support for the entire length of pipes, they may be laid directly on the trench bottom. In other cases the trench should be cut deeper and pipes on a prepared under bedding which may be drawn from excavated material, if suitable.

c) Pipe lengths are placed end to end along the trench. The glued spigot and socket jointing technique, as mentioned is adopted.

d) The trench is to be filled with the excavated soil.

e) For bending, the cleaned pipe is filled with sand and compacted by tapping with a wooden stick and the pipe ends plugged. The pipe section is heated with flame and the portion bent as required. The bend is then cooled with water, the plug removed, and the sand poured out and the pipe (bend) cooled again. Heating in hot air oven, hot oil bath, hot gas or other heating devices are also practiced.

f) Nominal outside diameter DN of pipes as per IS code are 110 and 160 mm. The outside surface color is dark gray.

g) Precautions in handling and storage: - Because of their light weight, there may be a tendency on the part of workers to throw for the PVC pipes. This should be discouraged and reasonable care should be taken in handling and storage to prevent damage to pipes. On no account should the pipes be dragged along the ground. Pipes should be given adequate support at all times. These pipes should not be stocked in large piles, especially under warm temperature conditions as the bottom pipes may be distorted thus giving rise to difficulty in pipe alignment and jointing. For temporary storage in the field where racks are not provided, care should be taken that the ground is level, free from loose stones. Pipes should not exceed three layers and should be so stacked as to prevent movement. It is also recommended not to store one pipe inside another pipe.

h) Solvent cemented joints: Solvent cement is a PVC polymer based viscous compound, consists essentially of a solution of vinyl chloride polymer or copolymer dissolved in a suitable volatile mixture of organic solvents. The solvent constituents

soften the mating surfaces, which diffuse into one another to from a 'cold weld'.

It should not be exposed to sun or heat and must be stored under shade in closed container. One kg of solvent cement is adequate for joining about 35 joints of 110 mm diameter pipe. To avoid evaporation, small cans or tubes of solvent cement can be used. Solvent cement joints are permanent in nature and strong in tension.

Solvent cement is available in three grades of viscosity as given below to cover a range of pipe sizes from 20 mm to 630 mm. Sufficient solvent cement shall be applied so that a wet-film thickness adequate enough to fill a gap in a pipe joint is formed. Selection is also dependent on the climatic conditions prevalent at the site.

Pipe size (mm)	**Cement type**	**Minimum viscosity**	**Minimum wet film thickness mm**
Up to 50	Regular bodied	90	0.15
63 to 160	Medium bodied	500	0.3
Above 200	Heavy bodied	1600	0.6

Medium bodied and heavy bodied cements may be used for smaller pipe sizes than that shown in shown in the table above. The reverse does not hold good.

ii) Procedure for joining

Step 1: Pipes are supplied with square-cut and de-burned ends. However, if pipes need to be cut to smaller lengths, use a fine-toothed hand saw and a box or a power saw with wood-working blades, with a suitable guide. The cutting must not raise a burr or ridge on the cut end of the pipe. Failure to remove the ridge will result in the fitting or socket being scraped away from the jointing surfaces, leading to a dry joint with probability of joint failure: Remove all burr and ridges with a deburring knife, file, or abrasive paper.

Step 2: Provide an approximately 2 mm wide, 15^{o} chamfer on pipe ends. A chamfer prevents the cement film from being wiped off into the interior of the socket during assembly.

Step 3: Before applying cement, insert the pipe end into the socket of the next pipe or fitting to check that interference occurs at about 1/3 to 2/3 of the socket depth. When the pipe end into the socket are at their extreme tolerances, the pipe can bottom (travel fully into) in the socket. In such a case, it should be a snug a fit. Loose or wobbly fit will result in joint failure. Another pipe end or the socket should be selected until these conditions are fulfilled. Mark the insertion depth on the pipe end with a felt tip pen or marker.

Step 4: Surfaces to be joined must be free of dust, dirt, oil, moisture and other foreign material. Wipe clean with a dry cloth. If this is not sufficient, use a chemical

(such as dichloro-methane, methyl ethyl-ketone or mechanical cleaner). With chemical cleaners, observe safety precautions. Ketones are inflammable.

Step 5: PVC solvent cement is quick drying, therefore it shall be applied as quickly and carefully as possible and in consistence with good workmanship. For larger sizes, it is advisable for two workers to work simultaneously on the pipe and socket. The Surface temperature of the mating surfaces should be above 0^{o} C but should not exceed 45^{o} C. Water can be used to cool the surfaces, but these should be wiped thoroughly dry before application of cement. Dip the applicator brush in the solvent cement and apply a liberal coat of cement to the end of the pipe up to the insertion depth. Apply a uniform thin coat of cement inside the socket, working axially from the inside of the socket to the outside. Do not apply any cement on the shoulders of the socket (socket-to-pipe transition area). Care should be taken not to apply excess cement inside the socket. Excess cement in the socket will be pushed further into the pipe during assembly and cause the pipe to soften and weaken at point. Hot and dry climates generally require slightly thicker coatings of solvent cement. In climates with large differences between day and night temperatures, it is advisable to make joints early in the morning or in the evening when it is cooler. Thus, the joints are prevented from being pulled apart if the pipes contract.

Step 6: Within 20 seconds after the last application of solvent cement, insert the pipe into socket in a single steady and every controlled but forceful. Press it in fully until it bottoms. No hammer blows should be used. If there is any sign of drying of the cement coat before insertion, the surface should be re-coated, avoiding application of excess cement in the socket. Once the insertion is complete, hold in place for 1 min without shifting the pipe in the socket.

Step 7: For large diameter pipes, two or more workers may be needed for this operation. Mechanical equipment such as levers and winches may be used. Care shall be taken to ensure that force is not transmitted to previously made joins. Until the cement is set, the pipe must be prevented from backing out of the socket.

Step 8: Immediately after assembly, wipe the excess solvent cement from the pipe at the end of the socket. A properly made joint will have a uniform bead around its entire perimeter. Any gaps in this bead may be indicative of an improper joint due to insufficient cement or the use of a lighter-bodied cement than the one recommended.

Step 9: Joints should not be handled until the requisite setting time has elapsed. Recommended setting times are a function of the ambient temperature at the job

Temperature ^{o}C	**Recommended setting times hr.**
15 to 40	1
5 to 15	2
-5 to 5	4
-20 to -5	6

site as given below.

After the setting time has elapsed, the pipe may be handled carefully for installation. Pressure testing may be carried out only after a curing period of 24 hours.

iii) Procedure for connection

Step 1: Pipes are supplied with the spigot and chamfered. However, if pipes have to be shortened for any reason, preparation of the ends will be necessary before assembly.

Step 2: Cutting of pipes, if required must be done on a jig to ensure that the cut is square to the axis of the pipe. It is recommended that the pipe be marked around the entire circumference prior to cutting. The pipe ends must be chamfered at an angle of 15^0 with a medium grade file and de-burred.

Step 3: Clean the spigot end of the pipe up to the insertion depth (depth of the corresponding socket). Remove all traces of mud, dirt, grease and gravel. Do not use any chemicals or solvents for cleaning. For stubborn areas of dirt, a very fine grade of emery or sand paper can be used lightly. Wipe the pipe with a clean cloth moistened with water and allow to dry completely.

Step 4: Clean the inside of the socket. Remove all traces of mud, dirt, grease and gravel. Do not use any chemicals or solvents for cleaning. For stubborn areas of dirt, a very fine grade of emery or sand paper can be used lightly. Wipe the inside of the groove with a damp cloth and allow to dry completely.

Step 5: Mark the insertion depth on the spigot of the pipe, if not already applied by the manufacturer. The insertion depth is equal to the depth of the socket of the pipe, measured up to the end of the parallel portion of the socket (excluding the shoulder). This distance is marked on the spigot (excluding the chamfer) with an indelible felt-tip marking pen.

Step 6: Insert the electrometric sealing ring into the groove. Rings to be used are system specific and shall be those supplied by the manufacturer for his own system. Form the ring into a heart shape by pinching a portion of the ring from the inside. Insert into the socket and release to seat into the groove. Ensure proper seating of the ring in the groove. If the ring is wrongly inserted it will lead to leakage. It may also dislocate completely during assembly.

Step 7: Apply lubricant to the outside of the spigot (consult the manufacturer). The lubricant should cover the entire surface of the spigot for at least half the insertion depth, starting from the end of the pipe. The lubricant used should not have any detrimental effect on the pipe, fittings or the elastomeric sealing ring and shall not be toxic, shall not impart any taste or odor to the water or encourage growth of bacteria. Do not use oil based or solvent based lubricants.

Step 8: Align the socket and spigot correctly in the horizontal and vertical places. Ensure that no sand or dirt adheres to the lubricated surfaces of the pipe.

Step 9: Insert the spigot end carefully into the socket. Place a firm wooden block

against the other end of the pipe and using a crow bar as a lever, push home the spigot up to the insertion depth mark. For larger sizes of pipe, the use of a jointing jack may be helpful. The jack can also be used to extricate a pipe from a socket. Plastic pipes may also be joined by Mechanical compression joints. Flanged joints, screwed or threaded joints and Union coupled joints.

6) Underground Pipes

a) Excavations required to be made for the installation of a building drainage system for any part thereof, within the walls of a building, shall be open trench work and shall be kept open until the piping has been inspected, tested and accepted.

b) Adequate precaution shall be taken to ensure proper compaction of back filled around the piping without damaging the piping. Trenches shall be backfilled in thin layers of 300 mm above the top of piping with clean earth, which shall not contain stones, boulders, cinder fill construction debris or other materials that would damage or break the piping or cause corrosive action. Mechanical devices such as bulldozers, graders etc., shall be permitted to then be used to complete backfill to grade.

c) Grade of horizontal drainage piping: Horizontal drainage piping shall be run in practical alignment and a uniform slope of not less than 20.8 mm per meter towards the point of disposal. Slope for piping equal to or larger than 102mm where slope of 20.8 mm per meter cannot be provided due to the depth of street sewer or due to structural features, slope not less than 10.4 mm per meter can be provided with prior approval of competent authority.

d) For variety of reasons, either water or drainage piping may develop leaks over a period of time. The fill material around these pipes will become saturated when leak occurs. Therefore, it is essential that portable water and waste piping not be allowed to share a common trench unless the building sewer is constructed of material approved for use within the building. Saturated soil becomes a bridge for bacterial travel between the pipes. Therefore, solid shelf for water line is provided 0.3m above and 0.3m horizontally from the sewer line.

e) Special Consideration must be given to trenches, parallel and deeper than footing that supports any building or structure. Tunneling and driving may be done in yards, court and drive ways of any building site. Casing pipe must be one pipe sixe larger than the pipe to be laid. Installation of piping is permitted for closer than the 45^{0} from the bottom of the building foundation, provided that the soil is extremely stable such as sand stone.

f) Water Fittings Laid Underground: Wherever practicable and except for pipes laid under a building , the vertical distance between the top of every water pipe installed below the ground and the finished ground level should be:

i) Not less than 750 mm and,

ii) Not more than 1350 mm

Where compliance with the minimum cover of 70 mm is impracticable, the water

fittings should be installed as deep as practicable below the finished ground level and be adequately protected against damage from any cause. Water fittings laid underground should be resistant to dezincification and be installed to accommodate any movement. Water fittings installed underground should not be joined or connected to any other water fitting by adhesives.

g) Trenching and grading: After the pipes have been laid, the next step is to check the grade and align the pipeline. This is very important in installing an underground sewer system. The pipe should be laid, so the flow of the sanitary waste in each length of pipe flows from the hub end to the spigot end or we could say the hub end is upstream. Each length of pipe should be placed starting at the lowest elevation and working up the grade; therefore, the spigot is inserted into the hub of the length laid previously. Each length should be checked as to its grade and alignment before the next length is placed. Batter boards are placed across the trench at about 25 to 50 feet intervals. Elevations are run and a mark is placed on the stakes at some even foot distance above the invert (the lowest point on the inside of the pipe) of the sewer. A nail is then driven in the top of the batter boards and a cord is stretched from board to board. The center line for the pipe is then transferred from the cord to the bottom of the trench by means of a plumb bob. Grade is transferred by means of a stick, marked in even foot marks, having a short piece fastened at a right angle to its lower end. Grade is checked by placing the short piece on the invert of each length of sewer pipe and aligning the proper mark on the grade rod to the cord.

7) Providing and fixing PVC gully trap of approved make, including connection with PVC soil/waste pipe embedded in CC 1:4:8 finished smooth and fixing CI frame and cover of size 300mm*300mm

a) Manholes Construction

i) At every change of alignment, gradient or diameter of a drain, there shall be a manhole or inspection chamber. Bends and junctions in the drains shall be grouped together in manhole as far as possible. The maximum distance between manholes shall be 30 m.

ii) Manholes of different types and sizes as specified shall be constructed in the sewer line at such places and to such levels and dimensions as shown in the drawings or as directed by the Engineer -in-Charge. The size specified shall indicate the inside dimensions between brick faces of the manholes.

iii) Where the diameter of the drain is increased, the crown of the pipe shall be fixed at the same level and necessary slope given in the invert of the manhole chamber. In exceptional cases and where unavoidable, the crown of the branch sewer may be fixed at lower level but in such cases the peak flow level of the two sewers shall be kept the same.

iv) Sewers of unequal sectional area shall not be jointed at the same invert in a manhole. The invert of the smaller sewer at its junction with main shall be at least 2/3 the diameter of the main above the invert of the main. The branch sewers shall deliver sewage in the manhole in the direction of main flow and the junction must be made with care so that flow in main is not impeded.

v) No drain from house fittings, e.g. gully trap or soil pipe, etc. to manhole shall normally exceed a length of 6 m unless it is unavoidable.

vi) Manholes 90 × 80 cm are generally constructed within compound for house drainage only and near the buildings for house drainage. Manholes 1.2 m × 90 cm are generally constructed for main drainage work for depths less than 1.5 m.

vii) Manhole 1.4 m × 90 cm is of the arched type and is generally constructed for main drainage works where depth is 1.50 m or more. The width of manholes shall be increased more than 90 cm on bends or junctions or pipes with diameter greater than 450 mm and that the benching width on either side of the channel is minimum 20 cm.

viii) Manholes 1.4 m internal diameter are generally constructed for main drainage works where depth is 2.45 m or more as an alternative to manholes of arch type. The diameter shall be increased suitably, for pipes with diameter greater than 450 mm in the same manner as in the case of rectangular manholes.

ix) Before deciding size of manholes, Local Municipal Bye Laws shall be consulted. As a general guide some typical type designs of manholes followed in Delhi have been shown in Fig. 19.4 to 19.7.When manholes are constructed on foot path, these shall be provided with cover of medium duty casting and when built within the width of the road under vehicular traffic, these shall be provided with cover of heavy duty casting.

SIGNATURE OF THE TENDERER

\

DECLARATION BY THE CONTRACTOR

We / I have read and understood all the instructions / conditions made above and we / I have taken into account the above Instructions / Terms and Conditions while quoting the rates. We / I accept all the above Terms and Conditions without any reservation, in all respects.

Place :

DATE :

(SIGNATURE OF THE TENDERER)
ADDRESS :
NAME and SEAL

LIST OF APPROVED MAKE OF MATERIALS / TRADE.

Unless otherwise mentioned any one of the approved makes or brands shall be allowed to be used. Other specific equivalent brands with BIS mark may be allowed to be used if approved by NABARD.

The tenderer shall distinctly understand that **it will not be their prerogative to insist on a particular brand** from the list. Final selection will be done with the approval of NABARD.

If the schedule of quantities prescribes a particular brand of materials or fittings, the same shall be considered while quoting the rates.

Sl No	Material	Approved Make
1	Cement	Ultra-tech Cements, Sankar cement, ACC Cements, or approved equivalent
2	Sand	Well washed M sand for masonary work and Well washed Plastering MSand for plastering works. All M Sand to be free from Quarry dust
3	Wall Putty	Birla White / JK White or approved equivalent
4	Brick	First quality country burnt RED bricks
5	White Cement	Birla White , J K or approved equivalent
6	CPVC Pipes/fittings	Finolex/Supreme/Ashirvad or approved equivalent
7	Reinforcement steel	HYSD – FE 500 D bars conforming to IS 456. JSW Panther, TATA, VIZAG.
8	20 mm Aggregate	Well graded 20 mm blue aggregate

I / We agree to execute the work with the supply of materials as per the specifications indicated above.

Place :
DATE :

(SIGNATURE OF THE TENDERER)
ADDRESS :

ANNEXURE -I

ARTICLES OF AGREEMENT

(On a Rs 200/- Non- Judicial stamp paper)

THIS ARTICLES OF AGREEMENT made on the _____ day of the month _____between the National Bank for Agriculture and Rural Development having its Kerala Regional Office at Thiruvananthapuram- 695001 (hereinafter referred to as "the Employer") on the one part

and

_____
_____
_____
_____
_____
_____
_____

(hereinafter referred to as "the Contractor") on the other.

WHEREAS the Employer is desirous of carrying out the..... .... has caused specifications describing the work to be done.

AND WHEREAS the said specifications and the Schedule of Quantities have been signed by or on behalf of the parties hereto. AND WHEREAS the Contractor has agreed to execute upon the subject to the Conditions set forth herein and to the conditions set forth in the Special Conditions and in the Schedule of Quantities and Conditions of Contract (all of which are collectively hereinafter referred to as "the said Conditions") the works shown upon the said Drawings and / or described in the said specifications and included in the Schedules of Quantities at the respective rates therein set forth amounting to the sum as therein arrived at or such other sum as shall become payable thereunder (herein after referred to as "the said Contract Amount").

NOW IT IS HEREBY AGREED AS FOLLOWS

1. In consideration of the said Contract Amount to be paid at the times and in the manner set forth in the said Conditions, the Contractor shall upon and subject to the said Conditions execute and complete the work shown upon the said drawings and described in the said Specifications and the Schedule of Quantities.

2. The Employer shall pay the Contractor the said Contract Amount, or such other sum as shall become payable, at the times and in the manner specified in the said conditions.

3. .In the said conditions herein before mentioned, the Chief General Manager, NABARD Kerala Regional Office, Thiruvananthapuram shall act on behalf of the employer.

4. The said Conditions and Appendix thereto shall be read and construed as forming part of this Agreement, and the parties hereto shall respectively abide by, submit themselves to the said Conditions and perform the agreements on their part respectively in the said Conditions contained.

5. The agreement and documents mentioned herein shall form the basis of this Contract.

6. This Contract is neither a fixed Lump sum Contract nor a piece work Contract but is a Contract to carry out renovation work to be paid for according to actual measured quantities at the rates contained in the Schedule of Rates and probable quantities or as provided in the said conditions.

7. The Contractor shall make good any damages done to walls, floors, etc., after the completion of such works.

8. The Employer reserves to itself the right of altering the nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this Contract.

9. Time shall be considered as the essence of this Contract and the Contractor hereby agrees to commence the work soon after the site is handed over to him or from tenth day after the date of issue of formal work orders as provided for in the said Conditions whichever is later and to complete the entire work within three months subject nevertheless to the provisions for extension of time.

10. All payments by the Employer under this contract will be made only at Thiruvananthapuram.

11. All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Thiruvananthapuram, and only Courts at Thiruvananthapuram shall have jurisdiction to determine the same. It is agreed that the Contractor shall not delay the carrying out of the works by reason of any such matter, question or disputes being referred to the Courts.

12. That the several parts of the Contract have been read by the Contractor and fully understood by the Contractor.

Signature Clause:

SIGNED AND DELIVERED BY

By the hand of shri

_____

(Name and Signature)

_____ in the presence of

(1)_____

Address _____

(2) _____

Address _____

(Witness)

SIGNED AND DELIVERED BY THE NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT

By the hand of Shri

_____

(Name and Designation)

_____ in the presence of

(1)_____

Address _____

(2)

_____Address

_____ (witness)

ANNEXURE-II

VIRTUAL COMPLETION CERTIFICATE

Having executed the work in terms of the contract, we hereby certify and affirm that we have virtually completed the contracted works.

We hereby certify that the work has been executed wholly to our satisfaction and with materials and workmanship in accordance with the contract.

We do certify further that we have executed the work in accordance with the applicable laws and without any transgression of such laws.

Signature of the Contractor / Tenderer:

Name:

Address:

Seal:

Place:

Date:

ANNEXURE - III

LETTER OF INDEMINITY AND UNDERTAKING

(to be submitted by the successful Tenderer)

The Chief General Manager,
National Bank for Agriculture and Rural Development
Kerala Regional Office,
Punnen Road, Statue, Post Box No.220
Thiruvananthapuram -695001

Dear Sir,

'Tender for Undertaking Road taring work and Re-laying underground Drainage Water System in NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram'

WHEREAS the National Bank for Agriculture and Rural Development, a corporation established under the National Bank for Agriculture and Rural Development Act, 1981 (hereinafter referred to as 'NABARD') has expressed desire to avail _____(type of procurement) at ____(place) as per the Schedule hereunder written and which are hereinafter for brevity sake referred to as _____, subject to our furnishing declarations and indemnity as contained hereafter.

NOW THEREFORE THIS LETTER OR INDEMNITY WITNESSETH THAT:

We, the_____(Tenderer) hereby declare and certify that we are the rightful owners/ licensees of the said article/ service/ solution offered for sale to NABARD and that the sale of the said article/ service/ solution to NABARD by us and the use thereof by NABARD does not infringe the property or other intellectual property or copy rights of any other person and that the same does not infringe the Copy of Rights Act, 1957 or any other Act for the time being in force.

We, the said_____(Tenderer) hereby agree to indemnify and keep indemnified and harmless NABARD, its Officers, servants, agents and other authorized persons against any action that may be brought against us for infringement of the right of property or other intellectual property or copy rights in respect of the said systems package supplied by us to NABARD and will defend the same at our cost and consequences and will pay or reimburse NABARD, its officers, servants, agents and other authorized persons from all costs and other expenses that they may be put to or incur in that connection in accordance with the terms as provided for within the end User License Agreement that accompanies the said systems.

We, the said_____(Tenderer) hereby also agree to indemnify and keep indemnified and harmless NABARD, its Officers, servants, agents and other authorized persons against any third party claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by our employees or agents, or by any other third party resulting from or by any action, omission, or operation conducted by or on behalf of us and against any and all claims by employees, workmen, contractors, subcontractors, suppliers, agent(s), employed, engaged, or otherwise working for us, in respect of any and all claims under the Labour Laws including wages, salaries, remuneration, compensation or like.

SCHEDULE (Please list all the hardware supplied to NABARD for providing this service on a separate sheet)

Yours faithfully

(Name and Designation) of

Annexure IV
Basic Information

S.No.	Particulars	Tenderers Response
1.	Name of the Applicant/ Organization and address of Registered Office	
2.	Year of establishment	
3	Type of the Organisation (like Sole Proprietorship, Partnership, Private Limited Company, Limited Company, or Cooperative Society, etc.)	
4.	Name of the Proprietor/ Partners/ Directors of the Organisation/ Firm	1. 2. 3. 4. 5.
5.	Details of Registration a) Whether registered as partnership firm or company, etc. b) Name of Registering Authority c) Registration No. d) Date of Registration	 a) b) c) d)
6.	Whether registered/ empaneled for similar works with: a) Government/ Semi-Government/ Municipal Authorities or any other Public Organisation (Yes/No) b) If yes, name of authority; and c) Since when	 a) b) c)
7.	Details of experience in the field of civil construction	
8.	a) Areas of business activities, other than civil construction, if any, and b) Place and address of such business	a) b)
9.	a) Address of office through which the proposed work of the Bank will be handled; and b) Name & designation of Officer-in-charge	
10.	Adequate and satisfactory evidence to indicate financial capacity of the person/ Organisation to undertake the said construction work	
11.	a) Names of bankers b) Full address of bankers	
12.	Yearly turnover of the Organisation during the last three years	2019-20 Rs. ……..lakh 2018-19 Rs. ……..lakh 2017-18 Rs.

		……..lakh
13.	Will the applicant be able to provide Bank Guarantee or other equivalent form of security from a scheduled nationalized bank? (Yes/No)	
14.	Number of supplementary sheets attached	
15.	a) Whether any civil suit/ litigation has arisen in the contracts executed by the applicant during the last five years (Yes/No) b) If yes, please give following information (suit-wise/ project-wise): i) Name of the Project & Organisation ii) Nature of work iii) Work Order No. and Date iv) Present stage of work v) Value of contract vi) Brief details of litigation	

Notes: Please attach self-certified copies of the following documents:

a) Latest Income Tax Clearance Certificate
b) Audited Balance Sheet and Profit & Loss Account for the past three years.

Place:
DATE:

(SIGNATURE OF THE TENDERER)
ADDRESS:

NAME & SEAL

ANNEXURE- IX
PROFORMA FOR ELECTRONIC PAYMENT

Details of Bank account to be furnished by the contractor/ service provider for effecting payment

Name and address of contractor/ service provider with phone nos.

.....
.....
.....

1	Name of the account holder (As appearing in the Bank account)	
2	Name of the Bank	
3	Name of the Branch	
4	Account number	
5	RTGS/ NEFT/ IFS Code	
6	Type of account (Savings, current, etc.)	
7	PAN Number	
8	GSTN Number	

Please attach (1) a photocopy of one cancelled cheque leaf of the above Bank account and (2) copy of PAN card and (3) allotment letter / registration letter under GSTN.

Place:
DATE:

(SIGNATURE OF THE TENDERER)
ADDRESS:

NAME

NABARD

PART- II

PRICE BID

Tender for Undertaking Road taring work and Re-laying Underground Drainage Water System in NABARD Gardens, Dr Pai Road, Poojapura, Thiruvanthapuram

SCHEDULE OF QUANTITIES

(Rate to be quoted in this sheet only)

This is an item rate tender. The Amount quoted shall be firm and shall include all costs, allowances, Transportation, taxes, levies, Works Contract tax and excluding GST (Which should be quoted separately). The rates quoted for each and every item should be self-sustaining and reasonable.

Sl. No.	Description of work	Quantity	Unit	Rate	Amount
I	**Taring of Road**	**A**		**B**	**AXB**
1	Providing and applying tack coat using hot straight run bitumen of grade VG-10 (conforming to IS: 73, 2013) including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications. Laying 2.5 cm premix carpet surfacing with 3 cum of stone chippings of 12 mm nominal size per 100 sqm and bitumen emulsion (medium setting min 65% of bitumen contents), complying with IS:8887, using 96 kg per cum of chippings, including consolidation with road roller of 6 to 9 tonne capacity etc.	680	m^2		
2	Providing and laying seal of premixed fine aggregate (passing 2.36 mm and retained on 180 micron sieve) with bitumen using 128 kg of bitumen per cum of fine aggregate and 0.60 cum of fine aggregate per 100 sqm of road surface, including rolling and finishing with road roller all complete.	680	m^2		
	TOTAL				
	GST				
	Grant Total with GST(A)				

II	**Re-Laying of Underground Drainage Water System**				
1	Providing and laying cement concrete using 20mm nominal size graded aggregate including compaction, finishing the top surface to level complete as directed	6			
2	Cutting full grout macadam road surfaces including W.B.M inclusive of cost of placing PCC 1:2:4 of required thickness by using 20mm nominal size aggregate, compacting, curing etc.	60			
3	Demolishing PCC work for laying pipe lines including stacking of serviceable materials.	10			
4	Removing & rearranging interlocking paver blocks flooring with manufactured sand/stone chips bed including stacking of serviceable materials.	25			
5	Supply, Laying and Fixing in Position PVC drainage pipes of approved make includin11g fitting &accessories as required by the site, cutting pipes to required length, necessary excavation, testing etc.				
5(i)	110mm-4inch 3.2mm thick type B pipe	85			
5(ii)	160mm 6 inch, 4mm thick type B pipe	300			
6	Providing and fixing PVC gully trap of approved make, including connection with PVC soil/waste pipe embedded in CC 1:4:8 using 20mm metal, encased in a chamber of 300mm built with 115mm brick masonry in CM 1:3 over a bed of CC 1:4:8 using 20mm aggregate 100mm thick, plastering with CM 1:3 finished smooth and fixing CI frame and cover of size 300mm*300mm	40			
7	Construction of manhole of internal dimension 600*600mm	6			

	in 230mm thick brick wall in CM 1:3 over a bed of 150mm thick PCC 1:2:4, plastering with CM 1:3 finished smooth, fixing CI frame and cover of size 600mm*600mm and encasing of sewer connections to manhole in PCC 1:2:4				
	TOTAL				
	GST				
	Grand Total with GST(B)				
	TOTAL(A+B)				

Grand Total Amount without GST (In Words)……..

……...

Grand Total Amount with GST (In Words)……

……..

Note:

1. The basic rate means the market price of the material. The contractor has to submit the bill of authorised dealer from whom procurement of material is done by the contractor in respect of items for the basic rate has been mentioned in the Price Bid. The permissible variation in basic rate will be 5% in the mentioned value beyond that necessary deduction/extra payment will be made to contractor as applicable.

2. The tenderers should visit work site and assess site conditions and scope of work before quoting the rates.

3. Rates are to be quoted inclusive of all prevailing taxes like GST, etc as per scope of the work and after visiting the site.

4. The contractor shall include all prevailing taxes like GST etc. in the quoted rates as stated in the Clause of General Instruction of the Technical bid.

6. The contractor has to quote for all the items of the tender. Incomplete tenders and tenders without EMD will be rejected.

Accepted all terms & conditions of technical & price/financial bid

Place:

Date :
Address of the contractor:

Name & Seal:

(Signature of the Tenderer)