



Government of Tamil Nadu
Agricultural Engineering Department

TENDER SCHEDULE
TECHNICAL BID

Name of Work	Supplying, Installation and Commissioning of Micro Irrigation System (Semi Permanent Rain Gun Sprinkler System) with Pump room in Western Block 5 & 6 at Sheep farm, Thalaivasal, Salem District
Location	Advanced Institute for Integrated Livestock and Animal Sciences (AIIRLIVAS), Thalaivasal block
District	Salem District
Scheme	NABARD
E.M.D Value	Rs.4,47,000/-
Tender Closing Date	06.04.2022

Government of Tamil Nadu
Agricultural Engineering Department

Name of Work	:	Supplying, Installation and Commissioning of Micro Irrigation System (Semi Permanent Rain Gun Sprinkler System) with Pump room	
Location	:	Western block 5 & 6 (87.50 acres) of Sheep farm, Thalaivasal Block	
District	:	Salem District	Scheme: NABARD

INDEX

Sl No	Title	Subject
TENDER SCHEDULE – TECHNICAL BID		
	Check Slip	
1	General Particulars	
2	Important instructions while filling tender documents	
3	Instructions to Tenderers	
4	General Terms and Conditions	
5	Additional information's	
6	Provision for Health and Sanitary arrangements	
7	Special conditions for Cement Concrete Cube Testing	
8	Conditions for Employing Technical persons	
9	Special conditions on Electrical works	
10	List of drawings	
11	Annexure A	
12	Annexure B	
13	Annexure C	
14	Annexure D	

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

CHECK SLIP

Kindly ensure compliance of the under-mentioned requirements, as per Tender Terms and Conditions.

Demand Draft No. _____ dated _____ for a value of Rs. _____
 (Rupees _____
 _____ only) drawn on (Bank) _____ Branch _____
 _____ in favour of Chief Engineer (Agrl. Engg.), Agricultural Engineering Department,
Chennai, payable at **Chennai**.

Sl. No.	Conditions	Yes / No
1	Whether Demand Draft for the mentioned EMD amount remitted is enclosed.	
2	Whether Copy of registered company/firm or authorized dealer of registered company with OEM letter is enclosed.	
3	Whether the undertaking from the company stating that the company was not blacklisted by the State Government or Central Government is enclosed	
4	Whether the copy of valid import license in case of imported materials is enclosed	
5	Whether Copies of Annual Report including Balance Sheet and Profit and Loss accounts for the last five audited years of the company certified by the Chartered Accountant is enclosed.	
6	Whether the details of Semi-Permanent Rain Gun Sprinkler system installed with copy of work order issued in the name of the bidder / invoice raised by the bidder and completion / experience certificate from the work order issued agency / from end user is enclosed	
7	Whether certificate of standards from CIPET and BIS is enclosed for all the components of the Rain Gun Irrigation System (pipes and fittings, etc.,)	
8	Whether Copy of GST registration Certificate and copy of latest GST return filed is enclosed.	
9	Whether Copy of Income Tax Permanent Account Number (PAN) and copy of latest five year IT filed statement of Tenderer is enclosed.	

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Sl. No.	Conditions		Yes / No
10	Whether two covers have been sealed duly superscribed as “Supplying, Installation and Commissioning of Micro Irrigation System (Semi Permanent Rain Gun Sprinkler System) with Pump room in Western Block 5 & 6 at Sheep farm, Thalaivasal, Salem District”	Cover 1 Technical bid	
		Cover 2 Price bid	
11	Whether these two sealed covers (Cover 1 – Technical bid and Cover 2 – Price bid) put in a larger cover duly superscribing the addressee, name of the work and wax sealed at appropriate places.		
12	Whether all the pages in the tender formats, Cover – A (Technical Bid) and Cover – B (Price Bid) have been duly signed by authorized signatory.		

Signature of the tenderer

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

GOVERNMENT OF TAMIL NADU
AGRICULTURAL ENGINEERING DEPARTMENT

1. **GENERAL PARTICULARS**

1	Tender Notice No	:	3/SCB(B)/2021–22, Dated: 02.03.2022
2	Name of work	:	Supplying, Installation and Commissioning of Micro Irrigation System (Semi Permanent Rain Gun Sprinkler System) with Pump room in Western Block 5 & 6 at Sheep farm, Thalaivasal, Salem District
3	Sale of Tender documents	:	From 03.03.2022 to 05.04.2022 (Between 11.00 AM – 3.00 PM) at O/o Chief Engineer (Agrl. Engg.), Agricultural Engineering Department, No. 487, Anna Salai, Chennai – 600 035
4	Last date and time for Sale of Tender documents	:	06.04.2022 – 11.30 AM
5	Last date and time for receipt of Tender Documents	:	06.04.2022 – 2.00 PM
6	Opening of tender	:	06.04.2022 – 3.00 PM
7	EMD (including GST)	:	Rs.4,47,000 (Rupees Four Lakh Forty Seven thousand only)
8	EMD (Demand Draft) to be drawn in the name of	:	Chief Engineer (Agrl. Engg.), Chennai
9	Cost of Tender documents	:	Rs.15,000 + 12% GST
	Note: 1. Cost of tender document is non-refundable. 2. Payment: Through Demand Draft in the name of Chief Engineer (Agrl. Engg.), Chennai payable at Chennai. 3. Tender document is available for free download at www.tenders.tn.gov.in		
10	Period for Completion of work	:	6 Months
11	Place of tender receiving / opening	:	O/o The Chief Engineer (Agrl. Engg.), Agricultural Engineering Department, No. 487, Anna Salai, Chennai – 600 035
12	Number of pages	Technical Document	: 52
		Bidding Document	: 29

TENDERER

NO.OF CORRECTIONS:

 CHIEF ENGINEER (AE)
 CHENNAI

13	Tender withdrawal conditions	- No tenderer is allowed to withdraw his tender during the Validity period of 90 days. - If a tenderer withdraws the tender within the validity period, EMD will be forfeited and the tenderer will be blacklisted.
14	Corrigendum(s)	It is the responsibility of the tenderer to watch the corrigenda in the tender website "www.tenders.tn.gov.in" till the last date of tender closing. The tender inviting authority will assume that the tenderer has seen the corrigenda and incorporated all the corrigenda points in main tender. The tender documents not incorporating the points / fulfilling the requirements as mentioned in the corrigenda will not be considered and will be summarily rejected.
15	Mode of execution	The work is to be executed in phased manner i.e. in 2 phases. Phase 1: Western block 5 & 6 – Zone 1 & Zone 2 (43.20 acres) Phase 2: Western block 5 & 6 – Zone 3 & Zone 4 (44.30 acres) After successful completion and testing of the phase 1 and based on the satisfactory certificate from the user department (AIIRLIVAS), the tenderer will be allowed to carry out the work for 2nd phase and should be completed in stipulated time. If the Phase 1 work is not satisfactory, the work order will be cancelled and the agreement will be terminated.

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

2. IMPORTANT INFORMATION TO THE TENDERERS FOR FILLING UP TENDERDOCUMENTS

Two cover system:

- I. **Cover 1**–The **EMD and Tender Schedule** should be placed in a separate cover superscribed as “**Technical Bid**”.
- II. **Cover 2- Price bid** should be placed in another cover super scribed as “**Price Bid**”.
- III. Both the covers should then be submitted in a single sealed cover.
- IV. Outer cover should be **addressed to the Chief Engineer (Agricultural Engineering), No. 487, Anna Salai, Nandanam, Chennai – 600 035**, the name of the tenderer and the name of the work being noted on the cover.
- V. Tenders not submitted in sealed covers **will be summarily rejected**
- VI. If the EMD is not available in Technical Bid (Cover 1), the tender will be rejected. If the EMD is enclosed in Price bid (Cover 2), even though the EMD is available, tender will be rejected.
- VII. Applicant firms must ensure they fill up above information clearly in enclosed sheet and attach all required documents (Self attested) indicated in the Rate Contract Tender document without fail.
- VIII. **Bids received without supporting documents for the various requirements mentioned in the tender document are liable to be rejected at the initial stage itself.**
- IX. The tenderers are requested to visit and investigate the site before quoting the rates.
- X. Scoring should be verified by the signature with seal on every attempt and overwriting not allowed.
- XI. If any document submitted in support of above parameters found false, the bid will be disqualified and EMD and security Deposit shall be forfeited and bidder shall be blacklisted.
- XII. The tender documents should reach the O/o Chief Engineer, Agricultural Engineering, **No. 487, Anna Salai, Nandanam, Chennai – 600 035 not later than 2.00 PM on 06.04.2022.**
- XIII. The tenders will be opened by the **Chief Engineer (Agricultural Engineering),**

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Chennai or the authority authorised by him in presence of Tender Award Committee at the Chief Engineer (AE) office at 3.00 PM IST (Indian Standard Time), on the same date in the presence of the tenderers or their authorized representatives, who choose to be present for the work of **Supplying, Installation and Commissioning of Micro Irrigation System (Semi Permanent Rain Gun Sprinkler System) with Pump room at Thalaivasal Block in Salem District with assistance from NABARD.**

- XIV. The Chief Engineer (AE) reserves the right of extending the last date for receipt of tenders and for postponing the date of opening of the tenders without assigning any reasons there for.

Price Bid:

1. The tenderer has to arrive at the total cost of work based on their competitive rates for each item and considering quantity. The total competitive cost (excluding GST) arrived should be quoted in the Tender Schedule.
2. The unit rate should be multiplied with the quantity and amount to be mentioned in Total column.
3. All unit rates and total amount should be written in figures as well as in words without any scoring.
4. Scoring in rates, if any should be attested by the tenderer.

Opening of Price Bid:

1. Price Bid Cover (Cover 2) will be opened only if the tenderer qualifies in the technical bid.
2. The opening of Price Bid cover on the same day of technical bid opening will be decided by the Tendering authority and if not opened on same day, the tenderers will be intimated about opening of price bid date and time.
3. The Chief Engineer (AE), Agricultural Engineering Department, Chennai does not accept any responsibility for the correctness or completeness of this schedule and this schedule is liable to alterations, omission, deductions or additions at the discretion of the Chief Engineer (AE), Agricultural Engineering Department, Chennai.
4. No alteration which is made by tenderer in the contract form, the conditions of contract, the drawings, specification, or quantities accompanying same will be recognized and if any such alterations are made the tender will be void.

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

3. INSTRUCTIONS TO TENDERER

1. **ADVICE FOR TENDERS:** -The tenderers are advised in their own interest to carefully read the tender documents and understand their purport unless the tenderer specifically states to the contrary in respect of any particular clause, it shall be presumed that he accepts all the terms and conditions as have been laid down in the tender document.
2. **ELIGIBILITY CRITERIA:** -Tenderers interested to quote against this tender must quote for complete supply, installation and commissioning of Micro Irrigation (Semi Permanent Rain Gun Sprinkler Irrigation) system as per specification in **ANNEXURE-B** and should furnish all valid required documents as per **ANNEXURE-A**
3. **DEVIATION IN SPECIFICATION:** - Normally no deviation from the specification laid-down will be accepted. However, if the tenderer feels that he can supply equivalent or better items, which shall fulfill the requirement of AED with different specifications, the tenderer should describe as to what respect and to what extent the item offered by them deviate from the specification even though deviation may be minor and how it will meet requirement. If Bureau of Indian Standards have fixed norm or specifications for the material given in Annexure - B, then supply has to be made as per ISI Standards in addition to specification laid down in **Annexure - B**.
4. **Execution of Irrigation System:-**The period of contract is 6 months. It would be clearly understood that any delay in execution will cause unascertainable damages to the user department. Only those parties should tender who are in a position to stick to the execution of works within the prescribed time.
5. The tenderers should give in writing the name of their authorized agency, which shall represent them along with a proof of his identity and his signatures duly verified by the Bankers of the tenders.
6. **PRINTING LANGUAGE:-**The tenderers should enclose with their offers descriptive catalogues, leaflets, manuals supplementing the description. All the literatures, leaflets etc., should be in English/Tamil or accompanied by English. This should be adhered to, strictly to enable objective evaluation of offers.
7. **TEST REPORT:** Tenderer should also enclose with their offers, the test report if any from any recognized agency with respect to their quoted item. Tenderers should clearly indicate their experience of manufacturing and assembling of the items quoted by them. Test report of materials from Govt. testing Centre will be preferred in consideration of technical bid.

During the Execution of the work, the inspection, Verification and Testing charges should be borne by the tenderer.

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

8. ACCESSORIES & FITTINGS:-

The tenderer should indicate the followings separately in summary form:

Accessories and fittings which are standard with the machine as well which though not considered standard, are included in the scope of supply and included in the price bid.

9. WARRANTY FOR MATERIALS AND SYSTEM: The tenderer must ensure that the **warranty of materials** used for the installation of the micro irrigation system should be minimum of 5 years. The **warranty period for the system performance** should be minimum 1 year after the successful completion of the project.

10. COMPREHENSIVE MAINTENANCE: The tender accepting firm should maintain the whole Micro Irrigation system mandatorily for a period of **1 year with every quarterly visit after the expiry of one year warranty period at free of cost.**

11. QUOTATION OF PRICES: - Tenderer shall give final firm and net per unit price free from all escalation. Request for increase in price will under no circumstances be considered after opening of the tender. For the purpose of comparison and evaluation of bids, the tenderers are required to quote their rate item-wise, job wise for entire work i.e. material, civil work, installation and commissioning for the **warranty period of 1 year** for evaluation purpose.

12. QUOTING RATES BY TENDERER EXCLUDING GST

The Tenderer shall quote the rates (both in figures and words) for all the items of the Works described in the Bill of Quantities along with total tender price (both in figures and words) **excluding GST.**

GST RATES AT 12% FOR WORKS CONTRACT

Government of India has notified vide Notification No. 20 / 2017 – Central Tax (Rate), dated 22nd August, 2017 and Notification No.24 / 2017 – Central Tax (Rate), dated 21st September, 2017, the concessional rate of the Goods and Services Tax (GST) at 12% [CGST at 6% + SGST at 6%] is leviable for any Government Contract, whether Civil or Electrical, irrespective of the Goods and Services Tax (GST) rate applicable on purchase of goods used in the execution of Government Contract.

And the GST amount will be calculated at 12% from the sum of total tendered value quoted by the tenderer for construction cost (excluding GST) specified in the BOQ, Subject to GST rate applicable from time to time as recommended by the GST Council.

13. Preference: Preference will be given to the manufacturers of the items and having the past experience in the similar projects.

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

14. FORMAT AND SIGNING OF TENDER:

- a) Tenderers are required to submit their tender as per the prescribed Performa given in the **Annexure - C** of this technical document. The Tender prepared by the bidder and all correspondence and documents relating to the tender exchanged by the tenderer and purchaser, shall be written in the English. Each copy of the tender should be completed in all respect and should preferably be bound in one column. All pages of the tender and enclosures should be numbered consequentially and shall be signed by the Tenderer or a person or persons duly authorized to bind the Tender to the Contract. All the papers shall be tied and there shall not be any loose sheets. The letter authorization shall be indicated by written power of attorney accompanying the Tender.
- b) All pages of the Tender except for unamended printed literature shall be initialed by the person or persons signing the Tender with stamp.
- c) The bid shall contain no interlineations erasures or overwriting except as necessary to correct errors made by the tenderer, in which case such corrections shall be initialed by the person or persons signing the bid.

15. DEADLINE FOR SUBMISSION OF TENDERS:-Tender must be received by the department at address specified above, no later than time and date specified in the invitation for tender. In the event of the specified date for the submission of bids being declared a holiday by the Government, the Tender will be received upto the appointed time on the next working day.

16. LATE TENDER: Any Tender Received by the department after deadline for submission of tender prescribed by the purchaser, pursuant to NIT/Tender Document/any amendment will be rejected and/or returned unopened to the Tenderer.

17. OPENING OF TENDER: - The tender award committee will open tenders, in the presence of Tenderers or tenderers' representatives who choose to attend at specified time and date in the O/o Chief Engineer (AE), Chennai. The envelope containing the "**Technical bids**" shall be opened on the date of opening tender and "**Price Bids**" of tender only be opened based upon an examination of the documentary evidence submitted in technical bid for the Tenderer's qualification by the tenderer, as well as such other information as the tender award committee deems necessary and appropriate, found in order, date of opening of Price bid will be informed separately.

18. CLARIFICATION OF BIDS: - To assist in the examination, evaluation and comparisons of tenders, the tender award committee may at its discretion, ask the tenderer for clarification

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

of its bid. The request for clarification and the response shall be in writing and no change in price or substance of the bid shall be sought, offered or permitted.

19. FORFEITURE OF THE EARNEST MONEY: - Earnest Money shall be forfeited.

- (a) If a tenderer withdraws its tender during the period of Tender validity of 90 days or
- (b) In case of a successful Tenderer, if tenderer fails:
 - i. To sign the contract
 - ii. To furnish security deposit

20. DISPUTES or DIFFERENCES: - For all disputes or differences that may arise in connection with this tender or the interpretation of any of its terms or in any other way related to this tender directly or indirectly, the decision of Agricultural Engineering Department is final.

21. FOREIGN COMPANY: - The Indian agents bidding on behalf of any Foreign Company should be registered with DGS&D and the proof of registration should be furnished with offer. The offer will not be accepted if proof is not furnished. One agent cannot represent two different suppliers or quote on their behalf in the tender.

22. AWARD CRITERIA: - The tender award committee will award the contract to the successful tenderer whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated tender, provided further that the tenderer is determined to be qualified to perform the contract satisfactorily.

23. RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS: The tender award committee reserves the right to accept or reject any or all Bids, and to cancel the tendering process and reject all Bids any time prior to award of contract, without thereby, incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenders of the grounds for the purchaser's action.

24. NEGOTIATION: There shall normally be no post tender negotiation. If at all negotiations are warranted under exceptional circumstances then it can be with L-1 (lowest tenderer) only.

25. CONTRACTS:

- a) **SIGNING OF CONTRACT:** The successful tenderers within 15 days from date of issue the Work Order shall sign the agreement. All the terms and conditions in the tender document will be considered to be part of agreement, any variation in the terms and conditions as may be suggested by the tenderer and accepted by the department will be part of the agreement. The cost of stamping for agreement shall be borne by the successful tenderer.
- b) **SECURITY DEPOSIT:** The Successful Tenders within 15 days from date of issue

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

of Work order shall furnish the security deposit @ 2 % of the value of the work order in shape of Demand Draft.

26. REFUND OF EARNEST MONEY:

(A) Unsuccessful tenderers: In case of unsuccessful tenders who do not, withdraw their offers before the receipt of final decision, the earnest money if deposited by means of a Bank Draft shall be returned, without interest after the finalization of tenders or after expiry of validity period of the respective offer, whichever is earlier.

(B) Successful Tenderers:-The successful tenderers shall sign agreement and deposit the security money within 15 days from the date of issue of work order, in the form of demand draft. After the successful tenderer has completed formalities as stated above, the earnest money deposit will be refundable to him/ them. No interest shall be allowed on earnest money.

27. Mandatory documents to be attached (Without which the tender will be rejected)

- a. Earnest Money Deposit - EMD
- b. Copy of Registration certificate of the company / firm with Original Equipment Manufacturer supply letter
- c. Copy of Annual Turnover statement for atleast Rs.5 Crore in any one of the last five years duly certified by a Chartered Accountant
- d. Copy of Experience Certificates / Work Completion Certificates of minimum 3 similar kind of project to Government / Government undertaking for anyone of the project value more than Rs.50 lakhs in any of the past five financial years
- e. Copy of Income tax filing statement for past 5 financial years
- f. Copy of GST registration certificate and GST filing statement for past 3 filing periods.
- g. Details of technical persons to be employed with consent letter
- h. Copy of certificate of standards from CIPET, BIS, etc., is enclosed for all the components of the Rain Gun Irrigation System (pipes and fittings, etc)
- i. Format for Signing of Tender as per Annexure - C
- j. Necessary undertaking letter as per Annexure - D

28. Additional documents to be attached (if applicable)

- a. Copy of valid import license in case of imported materials
- b. Copy of PAN card
- c. Copy of Partnership agreement

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

4. GENERAL TENDER TERMS AND CONDITIONS

Tender Submission

- The Tenderers have the option to present the tender directly or to send it by registered post acknowledgement due on or before the last date for receipt of tenders.
- In case of sending tenders by registered post acknowledgement due, it is the responsibility of the tenderer himself to dispatch the tender sufficiently early so as to reach the tender opening authority before the date and time notified in the tender notice for opening of tenders.
- No representation/appeal of any kind will be allowed against belated receipt of tenders beyond the notified date and time or loss in transit etc.,
- The tenderers or their authorized representatives are expected to be present at the time of opening of tenders.
- The tender receiving officer will, on opening each tender prepare a statement of the attested and unattested corrections therein and hand it over to the tenderer concerned and initial all such corrections in the presence of the tenderer. If anyone of the tenderers or their agents finds it inconvenient to be present at the time, then in such a case the tender receiving officer will open the tender of the absentee tenderer and make out a statement of the unattested corrections and communicate it to him. The absentee tenderer shall then accept the statement of corrections without any question, what so ever.

Earnest Money Deposit

- **The EMD and Tender Schedule (Technical Bid) along with enclosures should be placed in a separate cover. Price bid should be placed in another cover. Both the covers should then be submitted in a single sealed cover.**
- The Earnest Money deposit will be refunded to the unsuccessful tenderers on application after intimation is sent about rejection of the tender.
- **The Earnest Money deposit will not be received in cash or cheque.** Tenders accompanied by cheques or cash will be summarily rejected.
- The Earnest Money Deposit will be retained in the case of successful tenderer and will not carry any interest. It will be dealt with as provided for in the tender.

Tenderer – Individual / Firm / Corporation

- If the tender is made by a firm owned by an individual, it shall be signed with his full name and his address shall be given. If it is made by a member of the firm, it shall be signed with the co-partnership name by a member of the firm who shall also sign his own name, and the name and address of each member of the firm shall be given. If the tender is made by a

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Corporation, it shall be signed by duly authorized officer, who shall produce with his tender, satisfactory evidence of his authorization. Such tendering Corporations may be required before the contract is executed, to furnish evidence of its corporate existence.

Income Tax verification of Tenderers

- Each tenderer must enclose a certificate of Income-tax verification from the appropriate Income – tax Authority in the form prescribed there for. This certificate will be valid for one year from the date of issue for all tenders submitted during the period. In the case of proprietary and partnership firm, it will be necessary to produce the certificate aforementioned for the proprietors and each of the partners, as the case may be. If the tenderer is a registered contractor and if a certificate for the current year had already been produced by him during the calendar year in which the tender is made it will be sufficient if particulars regarding the previous occasion on which the said certificate was produced are given. Tenders received without certificate as aforementioned will be summarily rejected.

GST Registration Certificate

- Each tenderer must enclose a copy of the **GST Registration certificate** of the firm / company from the appropriate authority and also a copy of the **latest GST clearance certificate**. Tenders received without certificate as aforementioned will be summarily rejected.

Tender validity

- The tender will remain **valid for a period of 90 days from the last date of tender opening**. The validity period can be extended further if the tenderer gives his consent in writing, specifying the period of extension.
- Action will be taken as per the Government orders in force, against the firms who have participated in the earlier tenders but failed to execute the agreement on some pretext after receipt of the work order.
- **No tenderer is permitted to withdraw his/their tender at any stage. If any tenderer withdraws his/their offer within the tender validity period his/their EMD/SD shall be forfeited and his/their name(s) will be recommended for black listing.**

Agreement of Successful tenderer

- It shall be expressly understood by the tenderer that, on receipt of written communication of acceptance of tender from the accepting authority, there emerges a valid contract between the AED and the tenderer for execution of the work without any separate written agreement. Hence for this purpose, the tender documents ie., tender notice, tender offered by the contractor, general conditions to the contract, special conditions to the contract, negotiation, correspondences, written

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

communication of acceptance of tender, etc., shall constitute a valid contract and that will be the foundation of the rights of both the parties to the contract. Provided that, it shall be open to the accepting authority to insist execution of any written agreement by the tenderer, if administratively considered necessary or expedient.

- The tenderer shall examine closely the general conditions of the contract of Tamil Nadu Building Practice and also other conditions of contract contained therein and sign the copy of the Tamil Nadu Building Practice and its addenda volume in token of such study before submitting his tender which shall be for finished work in site. He shall also carefully study the drawings and additional specifications and all the documents connected with the contract. The Tamil Nadu Building Practice and other documents connected with the contract such as specifications, plans, descriptive specification sheet regarding materials etc., can be seen at any time between 11.00 a.m. and 3.00 p.m. on working days in the office of the **Chief Engineer (AE), Agricultural Engineering Department, Chennai** aforementioned.

Quality of materials

- The tenderer's attention is directed to the requirements for materials under the clause "Materials and Workmanship" in the General conditions to contract. Materials conforming to the Indian Standard Specifications shall be used on the work and the tenderer shall quote his rates accordingly.
- Every tenderer is expected, before quoting his rates to inspect the site of proposed work. He should also inspect quarries, and satisfy himself about the quality and availability of materials such as Bricks, M. Sand and HBS jelly etc., The best class of materials shall be allowed to use on the work. In every case the materials must comply with the relevant standard specifications. Samples of materials called for in standard specifications or in this tender notice or as required by the Executive Engineer (AE) in any case shall be submitted for the Executive Engineer (AE)s approval before the supply to the site of work is begun.
- Accordingly, the tenderers are requested to quote their own workable rates. The Agricultural Engineering Department will not however after acceptance of contract rate pay any extra charges for lead or for any other reasons in case the contractors found later on to have misjudged the materials available. Attention of the tenderers is directed to the General conditions of the contract regarding payment of seigniorages tolls, etc.
- The Tenderer's particular attention is drawn to sections and clauses in the General Conditions of contract dealing with:
 - Test, inspection and rejection of defective materials and work
 - Carriage

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

- Construction plant
 - Water and Lighting
 - Cleaning up during progress and for delivery
 - Accidents
 - Delays and
 - Particulars of Payment
 - The contractor should closely peruse all the specification clauses which govern the rate he/she is tendering.
- The attention of the tenderer is directed to the contract requirements as to the time of beginning work, the rate of progress and the dates for the completion of the whole work and its several parts. The following rate of progress and of proportionate value of work done from time to time as will be indicated by the Executive Engineer (AE)s certificates of the value of work done will be required. Date of commencement of work will be the date on which the site (or premises) is handed over to the contractor.

Period of Contract – 6 Months

Rate of progress after the issue of Work order

Period after date of commencement	Phase	Work to be completed based on contract LS amount
1 st month	Phase 1	Construction of Pump room and installation of pumps
2 nd month		Erection of RCC Pillars for sprinkler risers
3 rd month		Laying of pipelines and test run of the sprinkler system
4 th month	Phase 2	Erection of RCC Pillars for sprinkler risers
5 th month		Laying of pipelines and test run of the sprinkler system
6 th month		Training to farm staff for effective operation of sprinkler system

Installation of Sprinkler system

- After successful acceptance of the lowest tenderer, work order will be given to the firm
- The work should be executed in two phases as follows:
 - a. Phase I – Covering 43.20 acres in Zone 1 & Zone 2 of Western block 5 & 6**
 - b. Phase II – Covering 44.30 acres in Zone 3 & Zone 4 of Western block 5 & 6.**
- After completing Phase I, the firm has to conduct a successful trial run and get a

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

satisfactory certificate from the user department. i.e., AIIRLIVAS sheep farm authorities. Then, the Phase II work should be commenced and completed in stipulated time.

- If the Phase 1 work is not satisfactory, the work order will be cancelled and the agreement will be terminated.

- **The Electricity bill for conducting the test trial running of the system should be borne by the tender accepting firm.**

- The tenderer shall be responsible for manufacture, supply, site preparation and services, installation and commissioning of equipment, tests and trials, training, maintenance and handing over to the user department for operation.

- The tenderer will be responsible to educate the farm staff and for efficient operation of the sprinkler system for at least one year. In this case, an employee can be deputed from the tenderer side to constantly monitor the system and to give training to the farm staff after successful completion of the project at free of cost.

- **The tenderer quoting firm must have their local agency within the state of Tamil Nadu to attend the maintenance works in the project area.**

- No part of the contract shall be sublet without written permission of the Chief Engineer (AE), Agricultural Engineering Department, Chennai, nor shall transfer be made by power of attorney, authorizing others to receive payment on the contractor's behalf.
- **The Chief Engineer (AE), Agricultural Engineering Department, Chennai or tender approving authority reserves the right to reject any tender or all the tenders without assigning any reasons therefor.**

Employing a Technical person

- The tenderers who are themselves not professionally qualified shall undertake to employ qualified Technical men at their cost to look after work. The tenderer should therefore state in clear terms whether they are professionally qualified or whether they undertake to employ technical staff and if so give their professional qualifications of the staff to be employed.

- In case the selected tender is one who has undertaken to employ technical staff under him, he should see that one of the staff is always at site of the work during working hours personally checking all items of work and paying extra attention to such works as may demand special attention eg., reinforced concrete works etc.

- Tenderer submitting a tender, which the tender accepting authority considers excessive and / or indicate of the insufficient knowledge of current prices or definite attempt at profiteering, will render himself liable to be debarred permanently from tendering for such period as the tender accepting authority may decide.

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

- The fact of submitting the tender implies that the tenderer have actually inspected the site of works and have examined before tendering the nature and extent of various kinds of soil at various depths and have based their tenders on such examination by them and no future representation in this regard will be considered.

- A statement giving particulars of equipment and resources that will be put at the disposal of the work under the following classification should accompany the tender.

- a. Equipment (Transport of materials Viz. lorries and carts, concrete mixers)
- b. Organization: (i) Technical (ii) Unskilled
- c. Resources: Materials like teak wood, steel etc. and extent to which departmental help is not required for procurement of materials and transport of the same.
- d. Methods that will be adopted to speed up the work to ensure completion within or earlier than the time fixed for completion.

- The **Chief Engineer (AE), Agricultural Engineering Department, Chennai**, reserves to himself the right of allotting the different sub-works to different contractors or one and the same contractor as he may decide after the receipt of tenders.

- The contractors are liable to pay a penalty for non-employment of the technical staff as laid down in the conditions of employment of technically qualified personnel.

Security deposit

- The tenderer whose tender is under consideration shall attend the office of the Chief Engineer (AE), Agricultural Engineering Department, Chennai before the end of the period specified by written intimation to him. If the tenderer fails to attend the office before the end of specified period, his tender will not be considered. **He/She shall forthwith, upon intimation given to him/her of acceptance of his/her tender by the officer authorized, make security deposit of 2% of the value of contract in one of the form of Fixed Deposit with Auto renewal pledged in the name of Chief Engineer (AE), Agricultural Engineering Department, Chennai for the period of 2 years. The security deposit shall be retained as security for due fulfillment of contract.**
- On receipt of written communication of acceptance of tender if the tenderer fails to pay the requisite security deposit within the period specified in the written communication or backs out from the tender or withdraws his tender, the earnest money deposit shall be forfeited.
- If the contractor fails to carry out the contract, after paying the requisite security deposit, then he/she will be liable for the excess expenditure, if any incurred to complete the work as contemplated in the General conditions to the contract.

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Additional Security Deposit

- “On evaluation of tender if it is found that if the overall quoted amount of the tender is less than 5 to 15% of the value put to tender, the firm shall pay an additional security at 2% of the estimated value. If the tender discount exceeds 15% to 20%, the firm shall pay an additional security deposit of 50% of the difference between the quoted amount and estimated amount failure to furnish the additional security deposit within 15 days from the date of receipt of Acceptance order and execute the Agreement shall entail cancellation of award of contract and forfeiture of E.M.D. furnished.”

Retention Money

- 10% of value of work shall be recovered from each bill as retention money
- **The tenderer shall submit a Bank Guarantee (BG) from any nationalized bank authorized by RBI towards the performance Guarantee from the date of completion of works for an amount equivalent to the total amount recovered as retention money for a validity period of 1 year to be rolled over every year for the first five years.**
- **Out of the total amount recovered as Retention Money, , based on the yearly renewal of Bank Guarantee by the tenderer, 20% of the retention money will be released every year until the completion of warranty period of 5 years from the date of completion of work.**
- The E.M.D., Security Deposit and Additional Security Deposit shall be released only after the expiry of six months from the date of completion of work.

DEDUCTION OF GST ON WORKS CONTRACTS

- For the total value of contract/service which exceeds Rs.2.50 Lakhs, 2% GST Tax at source will be deducted (1% CGST & 1% SGST) as applicable from time to time in addition to 1% or 2% of TDS as per Income Tax Act.
- The Government of Tamil Nadu by act of 1999 has introduced section 7F to the Tamil Nadu general Sales Tax Act 1959 here in provisions have even introduced for “Deduction of Tax at Sources in works contract” at the time of payment.
- According to Section 7F of the TNGST Act 1959, every persons responsible for paying any sum to any dealer for (From the dealers/contractors) at the time of payment.
- **Civil works contract:** 2% of total amount payable to such dealers/contractors.
- All other works contract: 4% of the total amount payable to such dealers/ contractor.

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

- The amount so deducted shall be deposited to the Assessing Authority of Commercial Tax Department within 7 days of the amount so deducted along with a statement in the prescribed form(XXXVII).

Disputes in payment

- In the case disputes for claims up to Rs.50,000/- the **Chief Engineer (AE), Agricultural Engineering Department, Chennai** shall be final deciding authority. In case of claims exceeds Rs.50,000/- it should be referred to court.

5. Additional Information for civil works

1. The tenderer should make their own arrangements to procure cement, steel and all other materials (as per IS standards and its latest amendment from time to time) required for the work.
2. The tenderer shall make their own arrangements for clean, fresh water for use on the construction work and shall meet all charges therefor.
3. All iron work or steel work of every kind, except such as is to be embedded in cement concrete shall immediately on arrival at the site be properly scrapped and wire brushed and given a priming coat of red lead paint without claim for extra.
4. The Teak Wood shall be of best Indian Wood only and the country wood shall be species like Pillamarudu or Kariamarudhu only and shall be subject to inspection and approval by the Executive Engineer (AE) before use on work.
5. Holes and chassis for electric wiring, water supply, drainage etc., shall be provided as directed during the progress of work without claiming any extra charges.
6. All external corners, edges of beams, edges of door and window openings etc., shall be finished sharp using richer mortar and also finished truly vertical or horizontal as the case may be. The rate of plastering shall include the cost of finishing as above. No extra for finishing the corners, edges etc., will be paid.
7. The arrangements for MS rods for reinforcement for each RCC work shall be in accordance with the working drawings supplied.
8. The planks for forms and centering for RCC work shall be of well-seasoned timber approved by the Executive Engineer (AE) according to sub clause 10 of T.N.B.P. No. 30. They must be made smooth and perfectly level at top so as to give a smooth and even finish to the R.C.C. Ceiling. Alternatively, the contractor may use steel sheets over wooden frame provided, the required finish to the underside of the slabs is obtained. Mango planks shall not be used under any circumstances. Centering and form works shall be provided to the extent and area ordered by the Executive Engineer (AE) during the execution. Finishing shall be done as per

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

sub-clause 15 of TNBP No. 30.

9. All cement concrete for RCC works shall be machine mixed and vibrated.
10. All lime mortar shall be grinded in a mortar mill as per TNBP (Tamil Nadu Building Practice).
11. The rates for brick work in all the floors includes the labour charges for fixing the frames of doors and windows and fixing G.I. pipes outlets for windows as per sub- clause 14 of TNBP No.31.
12. The rate for plastering includes providing cornice, band cornice, ceiling cornice and skirting wherever necessary as directed by the Department officers.
13. It is not obligatory on the part of the Department to supply any materials (Controlled or non-controlled) required for the constructions. The contractor is expected to make his own arrangements. The quality of these materials should conform to the specifications given in relevant IS codes. Ordinary Portland Cement 43 Grade grey colour SRC if necessary based on site condition (without any extra cost) confirming to IS Specification should be used. Steel rods should also conform to IS codes.
14. The cement brought and used should conform to ISS No. 269 of 1976 and steel should conform to IS No. 432/64 and 1786/79 (its latest amendment if any). It should be clearly understood that the rate quoted by the tenderer is inclusive of the cost of 43 grade Ordinary Portland Cement and steel including incidental charges such as conveyance, loading, unloading, stacking at site and testing charges etc., complete. The tenderer will be required to produce test certificate obtained from anyone of the Govt. Institutions for cement and steel brought to site. As and when required by the Department, the cement and steel brought to the site shall be tested by the Department from anyone of the approved Govt. Institutions and only when the test results conform to the ISI specification, the materials will be allowed to be used in the works.
15. Steel rods should be cut and placed as reinforcement with proper anchorage to the available rods at site so as to ensure the minimum wastage possible.
16. The cement brought by the contractor for use should carefully stacked in approved stores and on works as and when required the proper care so as to ensure the minimum wastage possible.
17. All the dismantled work should be made good plastered and cement painted to match the original surface.
18. For all RCC works the rate shall include the treatment of bearings as per plan of TNBP. No extra payments will be made.
19. If the rates are not separately called for, similar items of works in different floors, the contractor should quote, one rate applicable for all the floors indicated in the detailed plans,

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

any claims for extra rates for such items floor wise will not be entertained under any circumstances.

20. The tenderer should not employ the labour below the age of twelve years.
21. If night work required for fulfilling the agreed rates of progress, all arrangement shall be made by the tenderer inclusive of lighting without any claim for extra rate.
22. **Rates: The tenderer shall quote their total cost of the work based on rates for the finished item of work only as given in the schedule. It shall be clearly understood that no increase in the rates tendered for will be permissible on any account after the tenders are accepted.**
23. For interpretation on terms of the contract, if any, the decision of the **Chief Engineer (AE), Agricultural Engineering Department, Chennai is final and binding.**
24. The tenderer shall examine closely the General conditions of contract of the Tamil Nadu Detailed Standard Specifications issued in the G.O.(Ms.)No.2659, dated 23rd December 1970 and sign the copy kept in the office before submitting his tender.
25. The electrical works should be executed by a person or firm holding "A" grade or "B" grade license.
26. Once the offer of the tenderer is accepted by the Agricultural Engineering Department, if either the tenderers choose to withdraw this tender or for any reason refused to execute the agreement and comply with the terms of the tender and agreement, the amount deposited by the tenderer towards the EMD / SD and A.S.D. shall be forfeited and tenderer shall not be entitled to refund.
27. The contractor should take risk insurance against fire, other usual risk for all or any loss or damages occasioned by or arising out of acts of God, and in particular unprecedented flood, volcanic eruption, earthquake or other convulsion of nature, invasion, the act of foreign enemies, hostilities or warlike operations (before or after declaration of war) rebellion, military or usurped power, such policy should cover the construction period against the risk by the construction at his / their own cost and produce to the concerned Executive Engineer (AE) / Superintending Engineer (AE) within one month from the date of execution of the agreement failing which the AED shall be entitled to take out whatever policy as may be required to cover those eventualities and to effect recovery towards the cost of such policies from the contractor's payments with a penalty of 50% on the cost of such policies.
28. The clamps of G.I. pipes fittings should not be spaced more than 6" part from the wooden plug for pipe and bracket fittings should be properly fixed in C.M1:3 in holes made in and not hammered into the walls. The size of plugs should be not less than 1"sq. at this end and at the other end with the depth of not less than 3".

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

29. The contractor should procure approved quality of paint only in containers. The above container should be used in the presence of the Engineer and got approved before use. On any account paint in other than original container will not be allowed for use.
30. Recovery under Revenue recovery Act: Whenever any amount has to be paid by the contractor in view of termination of the contract by virtue of clause 57.4 (TNBP) or any amount that may be due or may become due from the contractor under these present and the contractor is not responding to the demand for the payments of the said amount, then the AED shall be entitled to recover the said amount as per the provisions of the Tamil Nadu Revenue Recovery Act, 1964 (Tamil Nadu Act. V of 1964).
31. The contractor should note their GST registration certificate No. in the tender form and produce the documental evidence for up to date GST clearance before final settlement of contracts.
32. **Any extension of time may not be granted by the authority unless the delay is caused by Natural Calamities.**
33. The tenderer is bound by all the condition of clauses of standard General condition of contract as amended time to time if is the course the contract, any G.O. is issued introducing new condition or clauses (for PWD / Other department), Supplemental Agreement must be executed by the contractor for implementing the condition.
34. In the event of the work transferred to any other unit Division the Executive Engineer (AE) / Assistant Executive Engineer (AE) who is in-charge of the units/Divisions/Sub-Division having jurisdiction over the above shall be competent authority to exercise all the powers and privilege of AED and to act on behalf of AED.
35. The tenderer shall form his own approach road to the work sites for which no extra amount will be due to him. On completion of work, the tenderer shall not be permitted to remove the materials laid for the formation of road. If the contractor is allowed to use the existing roads, he shall maintain them in good condition on at his own cost throughout the period of contract.
36. The work should be executed in accordance with the circular instruction of the Chief Engineer (AE), Agricultural Engineering Department, Chennai issued from time to time. Copy of the circular instruction can be perused in the department office during office hours.
37. During the course of contract period deductions of Income Tax shall be made as per the provisions of the Income Tax Act amended from time to time.
38. GST on construction contracts all the rates quoted in tender shall be inclusive of GST payable under general sales tax act amended from time to time and that the tenderers are responsible to file the GST return and tenderer is responsible to pay the amount as demanded by GST Department. No request for payment of GST separately in addition to

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

tendered rates due to and plea of subsequent levy or increase in tax will be entertained.

39. Royalty / seigniorage charges due for use of any quarry land shall be paid by the contractor.
40. The tenderer should be responsible for the safe custody storage of materials under dry conditions at the place of work spot approved by the Executive Engineer (AE).
41. The tenderer should abide by the labour regulation acts framed by the Government of Tamil Nadu.
42. Impounding minimum 10 cm of water over roofs for 48 hours before laying the weathering course and pressed tiles to check the water tightness.

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

6. **Provision of health and sanitary arrangements for workers**

(Applicable to all cases of work except works relating to roads, channels and canals)

The contractor's special attention is invited to clauses to the General conditions of contract of Tamil Nadu Building Practice (TNBP) and is expected to provide at his own expense the following amenities to the satisfaction of the Engineer.

- **First Aid**

At the work site there shall be maintained in a readily accessible place, first aid appliances and medicines including adequate supply of sterilized dressings and sterilized cotton wool. The appliances shall be kept in good order. They shall be placed under the charge of a responsible person who shall be readily available during working hours.

- **Drinking Water**

- Water of good quality fit for drinking purposes shall be provided for the workers on a scale of not less than 15 litres per head per day.
- Every water supply storage shall be at a distance of not less than 15 metres from any latrine drain or other source of Pollution.

- **Latrines and Urinals**

- There shall be provided within the areas of every work place, latrines and urinals in an accessible place and the accommodation separately for each of them shall be on the following scale or as directed by the Executive Engineer in any particular case.
- If women are employed separate latrines and urinals screened from those for men shall be provided on the same scale. Water flushed latrines are to be provided.

Sl. No.	Details	Seats
i.	Where the number of person employed does not exceed 50 persons	2 nos
ii.	Where the number of persons employed exceed 50 but less than 100 persons	3 nos
iii.	For every additional 100 persons	3 nos

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

- **Washing and Bathing places**

Adequate washing and bathing places shall be provided separately for men and women, such places shall be kept in clean and drained condition. Bathing or washing should not be allowed in or near any drinking water well.

- **Rest Sheds**

- At the work site there shall be provided free of cost two suitable sheds one for male and the other for female for rest; fit for the use of labourers.
- At every work place at which 50 or more women workers are ordinarily employed there shall be provided two huts of suitable size for the use of children under age of 6 years belonging to such women. One hut shall be used for infants games and play and the other as their shed room. The huts shall not be constructed on a lower standard than following.
- Thatched roofs
- Mud floors and walls
- Planks spread over the mud floor and covered with matting.
- The use of the huts shall be restricted to children, their attendants and mothers of the children.

- **Canteen**

A cooked food canteen on a moderate scale shall be provided for the benefit of workers, if it is considered expedient.

- **Insurance**

The contractor should insure the workers employed by them at the site of work for a minimum of Rs.1.00 lakh (Rupee One Lakh) each or more at his own cost.

7. SPECIAL CONDITIONS FOR SENDING THE CEMENT CONCRETE CUBES FOR TESTING

The tenderer should make arrangements for getting mould to the site for casting of cubes for testing of concrete strength.

- **Mould:** The concrete mould should be as per IS Specification (IS-516-1959) the details of which are as follows:

The mould shall be of metal, preferably steel or cast iron and strong enough to prevent distortion. It shall be constructed in such a manner as to facilitate the removal of the moulded specimen without damage and shall be so machined that when it is assembled ready for use, the dimensions and internal faces shall be accurate within following limits.

The height of the mould and the distance between opposite faces shall be the specified size $\pm 0.2\text{mm}$. The angle between adjacent internal faces and top and bottom planes of the mould shall be 90 ± 0.50 degrees. The interior faces of the mould shall be plane surface with a permissible variation of 0.03 mm. Each mould shall be provided with metal base plate having a plane surface and to support the mould during the filling without leakage and it shall be preferably attached to the mould by springs for screws.

The interior surfaces of the mould shall be thinly coated with mould oil to prevent adhesion of the concrete.

- **Compacting:** The concrete shall be filled into the mould in layers approximately 5 cm deep. Each layer shall be compacted either by hand or by vibration as described below (as per ISI). When compacting by hand, the standard tamping bar shall be used and the strokes of the bar shall be distributed in a uniform manner over the cross section of the mould as prescribed in IS code and for cubical specimen. In no case, shall the concrete be subjected to less than 35 strokes per layer for 15 cm cubes (as per IS code). When compacting by vibration each layer shall be vibrated by means of an electric or pneumatic hammer or vibrator. The concrete cubes shall be cured for 28 days and sent on 29th day for testing. If the day falls on a holiday, the cubes shall be sent on the next working day.
- The tenderer will be permitted to use their compression testing machine at site of work and have the cubes tested at site. In this regard the following practice shall be adopted.
- An exclusive cubicle of adequate size with ambient environment be made available at work site by the contractor for the purpose of testing of concrete cubes. A calibrated compression testing machine shall be installed on a suitable concrete base of required thickness and the machinery firmly anchored with bolts to the foundation concrete. The testing machine and its gauges should be properly calibrated and maintained to avoid occurrence of erroneous results. The sample cubes shall be tested as per IS 516 by the departmental AE/JE in

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

charge of the site under the supervision of the AEE concerned. The observations be recorded in an observation note book and the compressive strength of the cubes arrived at. The strength of the cube thus arrived must be recorded in the register and duly authenticated. However, in case of mass concrete like RCC raft slab and roof slab, a minimum of one set of cubes must be got tested from any one of the approved list of labs for its 28 days compressive strength. If the tenderer fails to make required testing arrangements at site, all the samples are need to be tested from the approved lab. Also, if any senior officer notices unacceptable testing procedure at site, the permission to test cubes at site will be withdrawn.

- Periodical calibration of the compression testing machine should be ensured by the contractor and same may be verified by the AED Engineers. Executive Engineer (AE) may specifically check this testing process and calibration during their site inspections and records. In case a test is due for a sample cube during their inspection the Executive Engineer (AE) may conduct the test and record.
- All the charges connected with the cube testing etc. shall be borne by the tenderer.
- If the concrete cube is found to be of lesser strength redoing the work will be ordered by the Engineer.

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

8. CONDITIONS FOR EMPLOYING TECHNICALLY QUALIFIED PERSONS

In case of tenderer, who is professionally qualified but not in a position to remain always at the site of the work during working hours personally checking all items of work and paying extra attention to such works as may demand special attention.(e.g.)work etc., he should employ technically qualified persons (as prescribed for the work) as follows:

- **One B.E./B.Tech (Agricultural Engineering) or B.E./B.Tech (Civil) or B.E./B..Tech (Mechanical) qualified technical assistants who are having minimum 2 years of experience in handling the installation and commissioning of pumps and micro irrigation system**

The employment of Technical Assistant could be based only on the value of contract. Engineers retired from Civil Engineering Department are also suitable to supervise the Civil Engineering works because of their experience in Civil Engineering field.

The tenderer should employ the technical staff for supervision of the work and see that one of them is, always at site during working hours personally checking all items of work that paying extra attention to such works is required special attention (e.g.) reinforcement concrete work, pipeline laying and erection and installation of motors and pumps.

Details of the Technical Persons to be employed

Name of member of technical staff proposed to be employed	QUALIFICATION	EXPERIENCE

In deciding the period of absence, the certificate from the Assistant Executive Engineer in-charge of the work counter signed by the Executive Engineer – in charge shall be taken as the conclusive evidence and I/we shall be bound by such a certificate.

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

9. SPECIAL CONDITION FOR ELECTRICAL WORKS

- The work shall be carried out in accordance with the General specification for electrical works and the code of practice for electrical wiring installation I.S. 732-1963 & I.S. 3043-1964 and as amended up to date. All installation shall comply with the requirements of Indian Electricity Rules 1956 & Act and I.S. Code amended up to date.
- Approval of the Engineer in-charge shall be taken well in advance for all materials and brand of materials to be used on work by the contractors, based on the approved brand of materials list enclosed in the tender. The choice of brand of materials from the approved list is at the discretion of the Engineer-in-charge and his decision will be final. The tenderer is bound to use the brand of materials selected by the Engineer-in-charge.
- The tenderer, on completion of work, shall supply completed plan along with insulation polarity and earth test reports before the installation is handed over to the Engineer in-charge in good condition in triplicate. The tests should be carried out in the presence of Engineer-in-charge at contractor cost.
- The tenderer shall make his own arrangement at his own cost for all general Tools and Plants (T&P) and spl. T&P required on the job.
- The tenderer shall make his own arrangements for storage of materials and watch and ward at his own cost, till the installation (completed work) is handed over to the Department after obtaining service connection from Electricity Board and testing the line. Any loss and tampering of materials for which the payment was made good by the Department will be made by the contractor at his own cost.
- All the debris due to electrical works shall be removed from site by the tenderer as soon as the work is completed.
- The internal E.I. shall be ordinarily carried out according to the drawing supplied with the schedule of work subject to change made by the Engineer-in-charge.
- The wiring route shall be marked at site first and get approval from the Engineer-in-charge before commencement of actual work. The work must be carried out as directed by Engineer-in-charge.
- PVC wiring shall be neatly painted with two coats for non-cracking paint / distemper suitable for painting PVC wire and of suitable colour to match the surroundings as per the direction of Engineer-in-charge.
- In place where electrical conduit is required to pass through wall/RCC column beam etc., the conduit shall be laid during the execution of work in consultation with the Engineer-in-charge so as to avoid the need for cutting the structure at a later date.

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

- The Teak Wood materials such as fillets, specials teak wood boxes and all materials shall be got approved from the Engineer-in-charge before use to ensure the quality of materials.
- In the case of recessed conduit works, the MS boxes shall also be recessed and covered with 1/8" (3 mm) helium/Bakelite sheet. The thickness of MS sheet shall not be less than 3 mm thick.
- Provision of fittings.
 - a. All switch Board shall be so placed that the bottom is normally 1.22 metre above floor level or such height as decided by the Engineer-in-charge.
 - b. All fittings shall be provided at 2.6 metre from the floor level or such height as decided by the Engineer in-charge.
 - c. The convenient 5/15 Amps plug socket shall be 25 cm. above the floor level or such height as decided by the Engineer in-charge.
 - d. Wiring shall run normally at 2.6 metre from the floor level or such height as decided by the Engineer in-charge.
- Tools and plant General and Spl. as required on the work is to be arranged by the contractor at his own cost.
- Brass tinned like/joint clips of 0.32 mm (30 gauge) thick up to 40 mm length and 0.40 (28 gauge) thick above 40mm length and of width shall be used on the work.
- Brass hinged brass hooks and eyes, single plank teak wood boards of 60mm minimum depth in case of open wiring and minimum depth of 100 mm in the case of concealed wiring and not less than 6.5 mm thickness shall be used to the works.
- Fixing of wooden battens.
 - a. The Screws shall be used for fixing the wooden batten and accessories at an interval not exceeding 50 cm. The thickness of batten shall be less than 10 mm.
 - b. The clips are provided on the wooden batten with screws/pins and spaced at an interval of 15 cm both in the case of horizontal and vertical run.
 - c. Round block shall not be less than 75 mm dia. and 40 mm deep and fixed by means of 2 nos. of screws.
- Modular type switches outlet of approved make wherever needed shall be used for recessed boards after getting the approval of Engineer in-charge.
- Only brass screws shall be used for fixing fitting switches plugs and sockets main boards and distribution board and T.W. accessories etc., required for the wiring.
- All conduit pipe of 16 mm and 19 mm MS conduit pipe shall be approved gauge (not less than 16 SWG : 14SWG) solid drawn of lap welded finished with galvanized stone enameled

finished. The saddles used shall not be less than 24 gauge upto 25 mm dia pipes and not less than 20 gauge for inner dia pipes.

- The main earthing shall not be less than 8 SWG copper (4.06mm) in case of copper wire earthing or 6 SWG.GI wire (4.98mm) in case of G.I. wire earthing. Separate earthing shall be provided for all mountings of rain Boards, distribution boards, 5/15 amps. C.S. plug sockets with not less than 14 SWG of copper (2.03 mm).
- Earthing shall conform to relevant I.S. Code 3043-1966, the G.I. Pipe earth electrode system is adopted G.I. pipe shall be of medium class 38/40mm dia. 3.75 meters long. The electrode/ shall be buried in the ground vertically with its top not less than 20 cm. below ground level, Normally an earth electrode shall provide 1.5 metres away from any building. In case of providing twin earthing the distance between the earth pits shall be 10 feet. Alternate layers of charcoal or cock and seal of minimum 15 cm thick are to be provided from the bottom of earth pit up to 1 metre below ground level and the masonry work is to be carried out in brick with the cement mortar 1:4 above the last layer and the top is to be covered by suitable cast iron frame and cover.
- Looping in system is to be adopted for wiring. Normally the looping of neutral of light, fan, plug point etc., should be restricted to three points for a single wire from the switch board.
- The wooden batten and specials shall not butt jointed and joints should be lap joined.
- The wiring must be done using bend and corners wherever necessary; sharp bending of cable must be avoided.
- The lighting circuit shall not have more than 10 point or a load of 800 watts whichever is less.
- Power wiring shall be kept separate and distinct from the lighting wiring.
- The contractor should be present at the premises at the times of effecting service connection by the Electricity Board authority and afford all facility for testing and commissioning the installation.
- The contractor should provide sufficient leads for connecting the main switches to meters and cut out provided by the Electricity Board at his own cost.
- The main switches should be numbered in paint for easy identification and the danger boards should be provided wherever necessary according to I.E Rules and regulations.
- Looping of neutral and connection wires in the switch boards must be carried out through mechanical connectors and proper insulation shall be provided inside the switch board

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

wherever necessary to avoid short circuiting the system.

- The scaffolding and the shed required for the electrical installation works should be put up by the contractor at his own cost.
- The Distribution Box used shall be metallic enclosed type with fuse unit and neutral link. The earthing for the main switches provided in the service connection Board should be properly interconnected and connected to the main earthing system.

10. **List of Drawings**

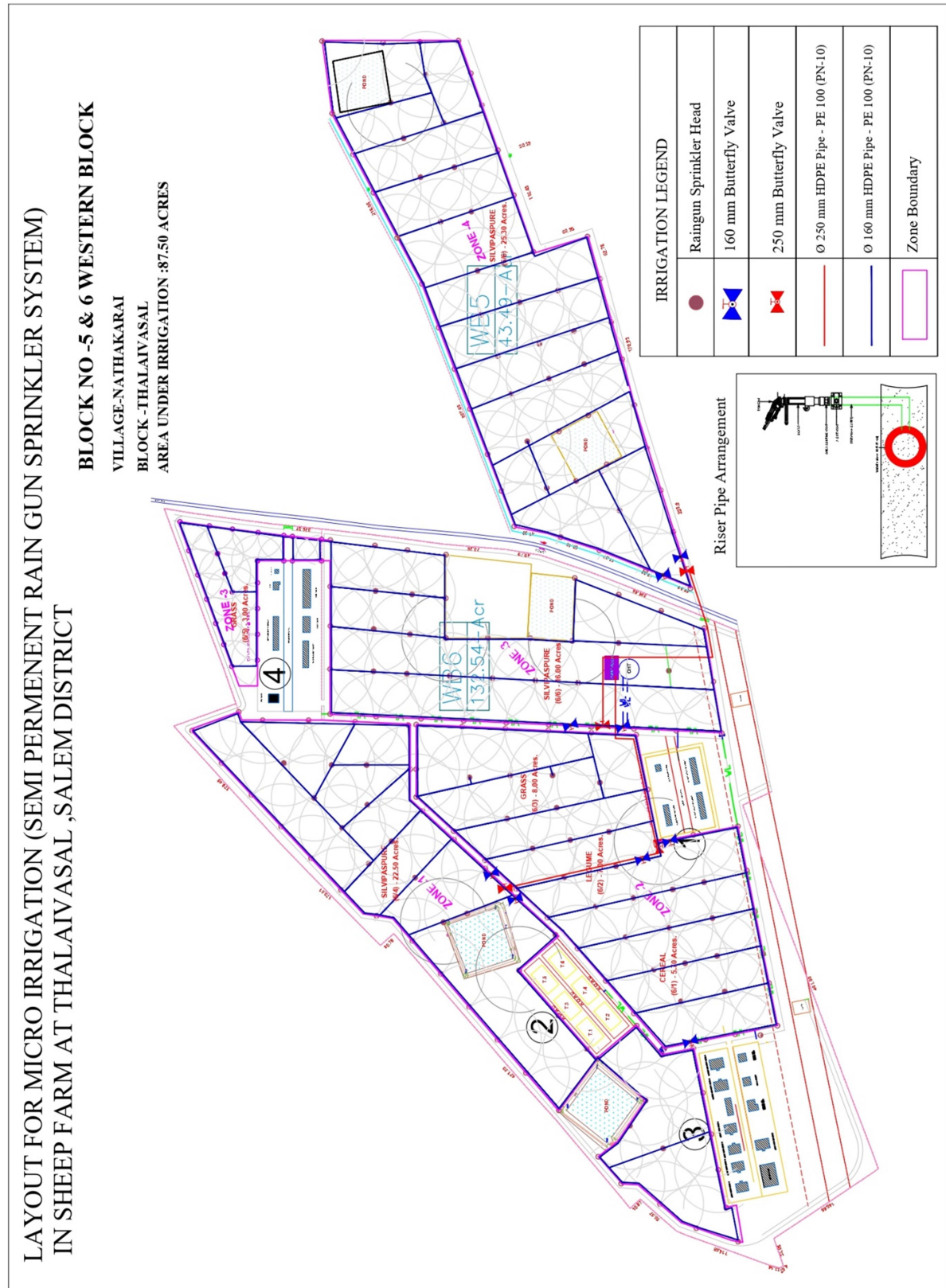
Sl. No.	Drawing No.	Description
1	1	Site Plan (Western block 5 & 6 in Sheep farm, Thalaivasal)
2	2	Line diagram for Water supply arrangements
3	3	Assembly drawing of Pumpset system
4	4	Pump room Plan and Elevation
5	5	Cross section of RCC pillar for Raingun sprinkler

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Drawing No.1 - Site Plan (Western block 5 & 6 in Sheep farm, Thalaivasal)

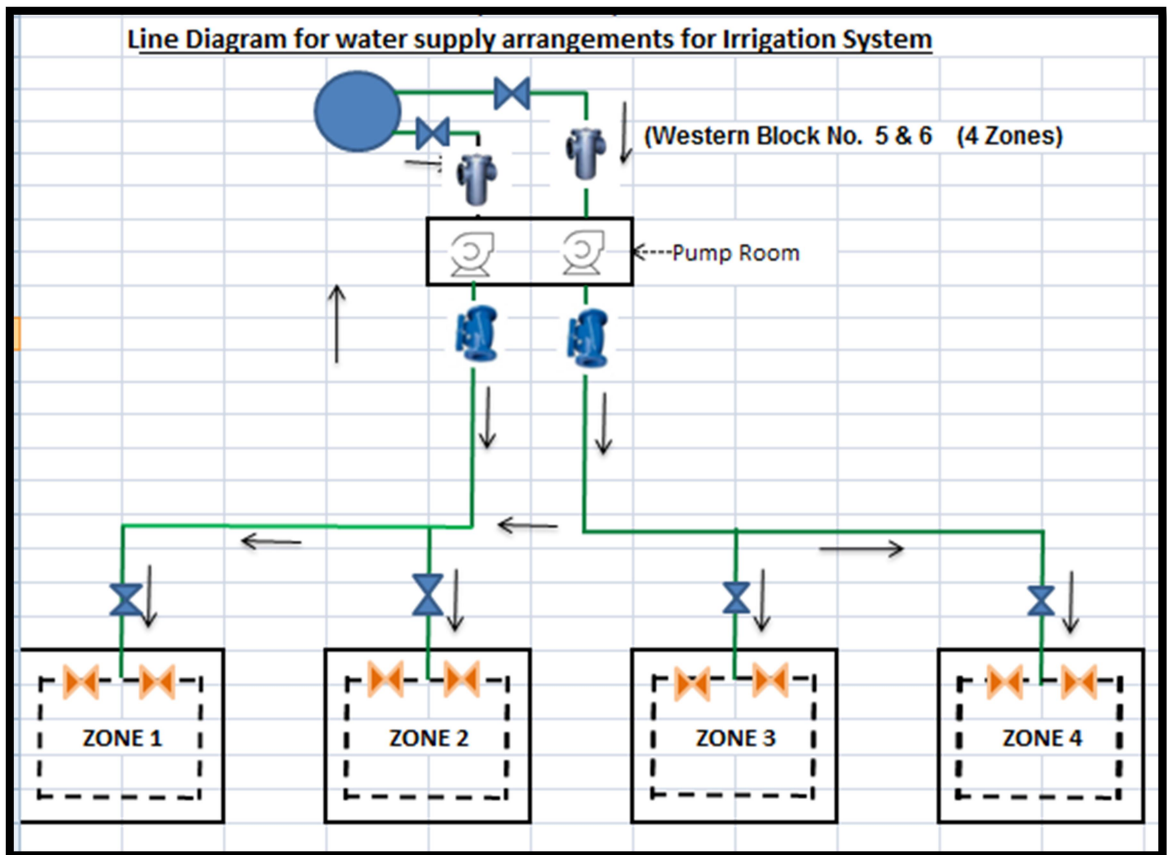


TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Drawing No.2 - Line diagram for Water supply arrangements

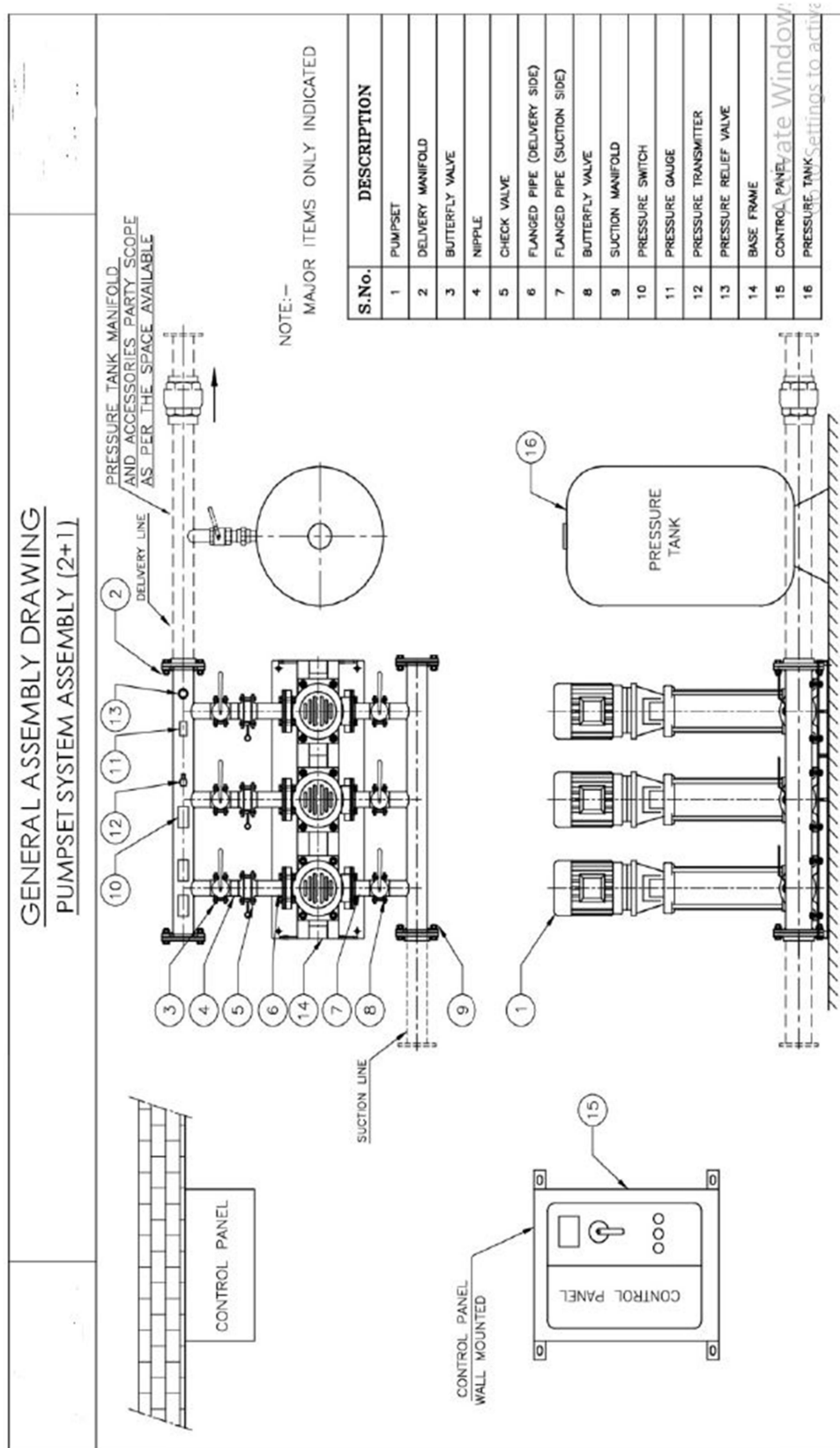


TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Drawing No.3 - Assembly drawing of Pumpset system

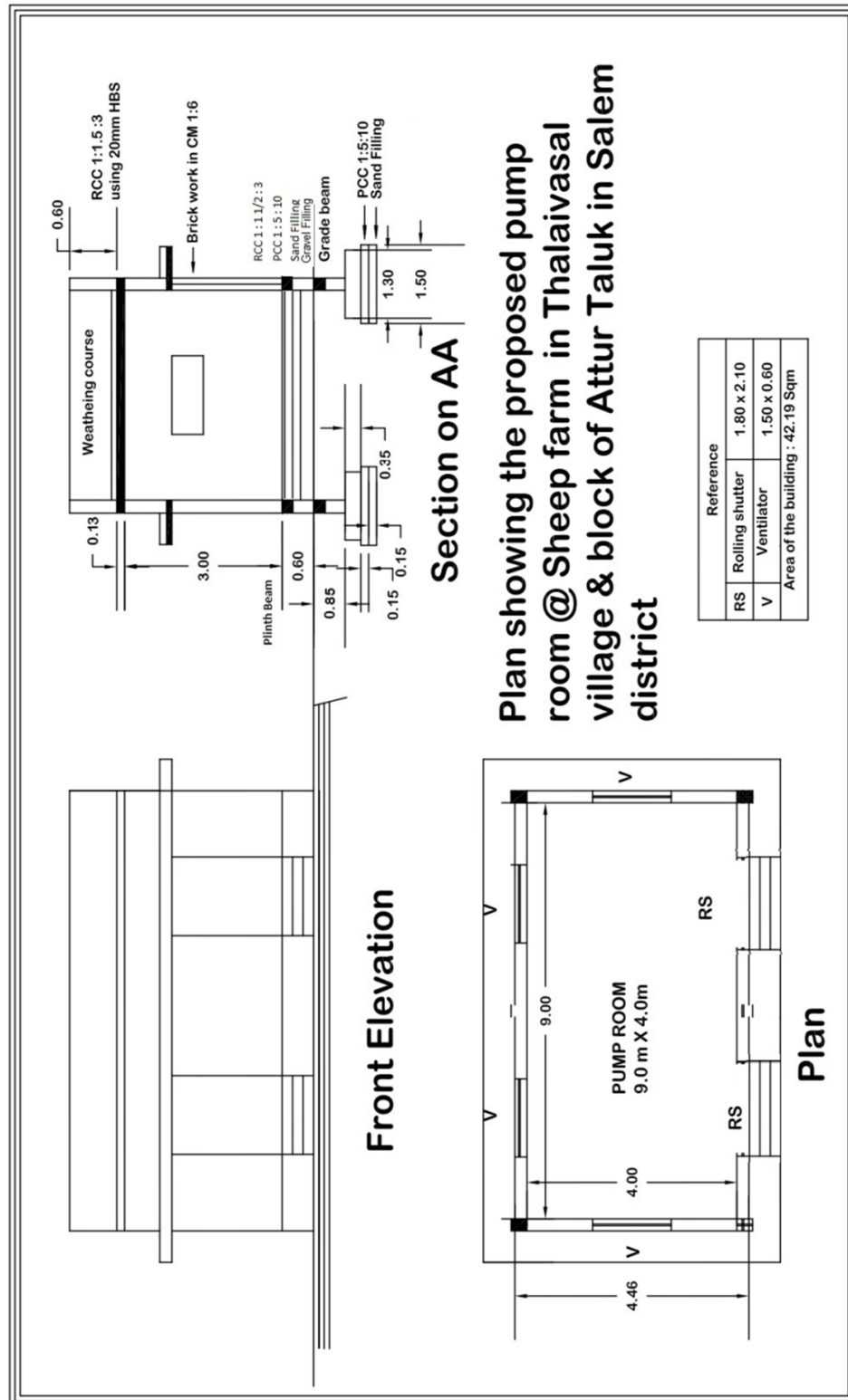


TENDERER

NO.OF CORRECTIONS:

 CHIEF ENGINEER (AE)
 CHENNAI

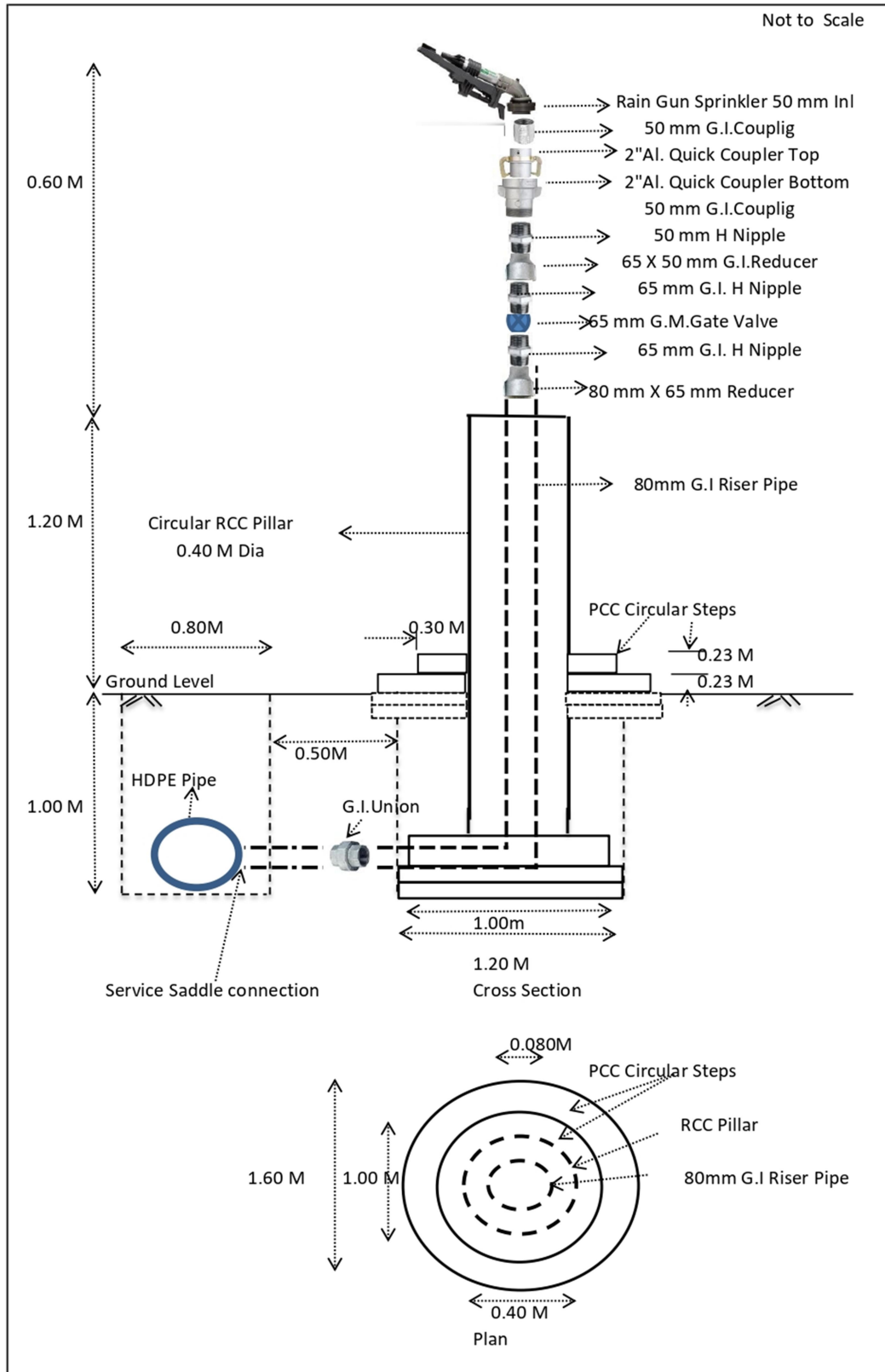
Drawing No.4 - Pump room Plan and Elevation



TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Drawing No.5 - Cross section of RCC pillar for Raingun sprinkler

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Annexure - A
ELIGIBILITY CRITERIA

The applicant firms should meet the following Eligibility Criteria to participate in the tender and should enclose documentary proof for fulfilling the Eligibility.

Sl. No.	Minimum Eligibility criteria	Proof to be furnished
1	Applicant should be a Proprietary firm/ Partnership firm/ Registered company and Participation of Joint Venture (JV) companies (2 companies only) having experience in the field of installation of pumps, pipelines and micro irrigation (Rain Gun sprinkler system) existing for the past three years (2018-19, 2019-20, and 2020-21).	Copy of the registration certificate of the firm from any Government entity should be submitted. In case of Joint Venture firm, the Joint Venture agreement shall be furnished. Copy of agreement/ Certificate of incorporation/ original equipment manufacturer letter for supply, installation and factory trained team should be submitted.
2	Consortium agreements are allowed. Each partners of the consortium should be a proprietary firm/registered company (under companies act of India 1956) in existence for at least three audited years.	a) Certificate of incorporation or registration of all the partners shall be submitted. b) Copy of consortium agreement shall be submitted (OR) a letter of intent to execute a consortium agreement in the event of a successful bid shall be signed by all the partners and submitted with the bid together with the copy of the proposed consortium agreement or articles or association. c) In case of consortium, all partners of the consortium shall be liable jointly and severally for the execution of the contract in accordance to the contract terms and a statement to this effect shall be included in the letter of intent.
3	Applicant firm should not have been blacklisted by any of the State/Central Government or Organizations of the State/Central Government.	Necessary Undertaking letter should be furnished as per the format in Annexure – D.

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Sl. No.	Minimum Eligibility criteria	Proof to be furnished
4	Applicant firm/consortium shall have a minimum turnover of Rs.5 Crore in any one of the last five audited years (from financial year 2016-17) (Turnover of the parent company only is allowed).	Annual Report including Balance Sheet and Profit & Loss accounts for the last five audited years shall be submitted. Summarized sheet of Annual turnover for the last five audited years certified by the Chartered accountant to be furnished.
4	The applicant firm/consortium should have prior experience in installation of at least 3 numbers of similar type of Semi-Permanent Rain Gun Sprinkler Irrigation System to any Government/Government undertakings for which any one of the value of work should be more than Rs.50 Lakh anywhere in India in past Five years.	Details of Semi-Permanent Rain Gun Sprinkler Irrigation System installed with copy of work order issued in the name of the bidder / invoice raised by the bidder and completion certificate from the agency issued work order / from end user should be enclosed (Translated documents in English duly signed by Notary Public to be enclosed).
5	The applicant firm shall have valid GST registration certificate.	Copy of valid GST registration certificate for CGST and SGST shall be furnished. Latest GST returns filed details to be furnished.
6	Income tax returns	IT returns filed for past five financial years (2016-17 to 2020-21) to be furnished.
7	Employing Trained persons for Installation of pipes and irrigation system	The firm should have trained persons on Electro fusion jointing for HDPE works.
8	The tenderer quoting firm must have their local agency within the state of Tamil Nadu to attend the maintenance works in the project area	Copy of the certificate of the agency of the firm should be furnished.

Important Note:

- In case of Joint Venture companies (JV) the turnover of JV Companies and the previous installation experience of JV Companies together shall be taken into account. The valid GST registration for each of the JV company to be furnished. **A member of JV firm shall not be permitted to participate either in individual capacity or as a member of another JV firm in the same Bid.**

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

- **Special Conditions for Consortium agreement :**

- 1) In case of consortium, it would be sufficient if the prime bidder makes the remittance of the cost of the bid document.
- 2) In case of a successful bid, the agreement shall be signed by the prime bidder so as to be legally binding on all the partners.
- 3) The prime bidder shall be authorized by the consortium partners to act on their behalf to incur liabilities and receive instructions for and on behalf of him and all the partners of the consortium and entire execution of the contract including payment shall be done exclusively to the prime bidder.
- 4) All partners of the consortium shall be liable jointly and severally for the execution of the contract in accordance to the contract terms and a statement to this effect shall be included in the authorization mentioned above as well as in the bid and in the agreement (incase of successful bid). The consortium agreement should indicate precisely the role of the members of the consortium in respect of the contract.
- 5) Copy of the consortium agreement shall be submitted with the bid. Consortium agreement should be registered in India.
- 6) Alternatively, a letter of intent to execute a consortium agreement in the event of a successful bid shall be signed by all the partners and submitted with the bid together with the copy of the proposed agreement. The consortium agreement should be registered before execution of agreement with AED so as to be legally valid and binding on all partners.
- 7) Only one bid will be allowed from a consortium. The partners of consortium are not allowed to bid individually or to be the partners of another consortium who has also offered the bid.

Annexure - B**TECHNICAL SPECIFICATIONS of the Semi Permanent Rain Gun Sprinkler Irrigation System
with Pump room**

The Minimum technical requirements for the installation of Sprinkler irrigation system under the programme are furnished below:

Sl. No	Description	Specification
1	Supplying of HDPE Pipe 250 mm dia	HDPE (high-density polyethylene) Pipe (PE-100-PN10)IS No 4984/2016
	Supplying of HDPE Pipe 160 mm dia	HDPE (high-density polyethylene) Pipe (PE-100 PN10) IS No 4984/2016
	Supplying of Full and part Circle Rain Gun Sprinkler head	The Full and part Circle, Rotor type, Stainless steel Rain Gun Sprinkler with Throw radius 50.00 metre, Flow 50.00 m ³ /h Pressure 5.50 Bar - Vari angle system with manually adjusted (adjustable Trajectory- 15 deg to 45 deg)- automatic brake system for angle setting – Self Lubricating Sealed Bearing –Fan type Spray in startup of the system – Light weight – 2” BSP Female Threaded inlet
	Supplying and Fixing of Butterfly valve 150 mm dia for 160 mm HDPE pipe Butterfly valve 250 mm dia	DI Wafer type Butterfly Valve Manufacturing, supply and delivery of resilient seated wafer type butterfly valve in accordance with EN 593, centric disk mounted in three maintenance-free bearing bushes, tight in both flow directions, Replaceable rubber sleeve with integrated seal for functionally reliable use for flared flanges, welding flanges, PE flanges as well as loose flanges with V-collar, Stable seat due to collar with vulcanized support ring. Vacuum tight upto 1 Torr. Face to face length acc.to 558-1, basic series 20(DIN 3202/k1). With Electrostatic epoxy powder coating (EP-P) inside and outside color blue RAL 5005 with minimum coating thickness of 250 microns. The EPDM rubber & Epoxy Powder should be approved by W 270.(EP-P it is resi-coat powder approved for drinking water application, applied through fusion bonding technology process by dipping the shot-blasted casted components heated upto 200 deg C).
	50 mm Aluminum quick coupling (Bottom) – Female threaded	Suitable for Rain gun sprinkler head
	50 mm Aluminum quick coupling (Top) – Female threaded	Suitable for Rain gun sprinkler head
	80 mm G.I. pipe (Medium)	As per IS 1239/Part I/2004
	65 mm G.M. Gate valve	As per IS BS 5154 and related IS Specifications
	50 mm G.I. pipe “B” class	As per IS 1239/Part I/2004
	160 mm HDPE coupling (Electro fusion)	P 100 – PN 10
	160 mm HDPE Tee (Electro fusion)	P 100 – PN 10

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Sl. No	Description	Specification
	160 mm –90 degree HDPE bend (Electro fusion)	P 100 – PN 10
	160 mm x 90 mm HDPE service saddle	P 100 – PN 12.5
	160 mm x 63 mm HDPE service saddle	P 100 – PN 12.5
	250 mm HDPE coupling (Electro fusion)	P 100 – PN 10
	250 mm HDPE Tee (Electro fusion)	P 100 – PN 10
	250 mm – HDPE 90 degree bend (Electro fusion)	P 100 – PN 10
	250 x 160 mm HDPE reducer(Electro fusion)	P 100 – PN 10
	250 x 63 mm HDPE service saddle	P 100 – PN 12.5
	pressure gauge 63 mm	Pressure Gauge 63 mm (Glycerin filled upto 400 kg/cm ²)
	80 mm GI elbow	As per IS 1239/Part II
	80 x 65 mm GI reducer	As per IS 1239/Part II
	65 mm H nipple	As per IS 1239/Part II
	65 x 50 mm GI reducer	As per IS 1239/Part II
	50 mm G.I.H nipple	As per IS 1239/Part II
	50 x 20 mm GI reducer	As per IS 1239/Part II
	50 mm flange set for air release valve	As per IS 1239/Part II
	Joining HDPE pipes	Joining HDPE Pipes and Specials by electro fusion welding joints using fusion equipment as per ISO 21307-2011 and as per IS 7634 (part-2) : 2012 including cost of hire charges for Electro fusion equipment power supply arrangements etc., complete as per directed by AED Officers.
	160 mm pipe	
	160 mm fittings	
	250 mm pipe	
	250 mm fittings	
	Lowering HDPE pipes	Lowering HDPE pipes and specials to trench and laying to proper grade and alignment and as directed by the AED Officers
	160 mm dia	
	250 mm dia	
	Supplying of Pump – vertical multistage centrifugal pump with inlet and outlet ports on the same level	Pump–Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron – all other wetted parts are in stainless steel. System - Single Variable frequency Drive with Hydro pneumatic pumping System Manifold – 2 Working + 1 Stand by Pump(3 Nos. parallely connected) Each Pump capacity – 55Cu.m./Hr Total Head– 80.0M RPM– 2900 to 3000 Efficiency Code – IE 3

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Sl. No	Description	Specification
		Minimum Operating Capacity for one unit – 110 Cum/Hr Suction Manifold – 5" X 3" or Suitable with 3 Nos of Butterfly Valve Delivery Manifold - 5" X 3" or Suitable with Check Valve – 3 Nos., Butterfly Valve- 3 Nos., Pressure Switch, Pressure Transmitter, Pressure Gauge ,and Pressure relief Valve Pressure Tank – 1000 Lits in 16 Bar Impeller Make – Stainless Steel Chamber– Stainless Steel Shaft– Stainless Steel Base Frame– Cast Iron Pressure rating for connection: PN 16 Power (P2) required by pump: 18.5 kW Mains frequency: 50 Hz Rated voltage: 3 x 220-240D/380-415Y V Maximum Operating Pressure: 16 Bar The pump is fitted with a 3-phase, fan-cooled asynchronous motor Control panel – Suitable for Operating 3 Pumps (1 unit) simultaneously with dry run protection (Installation as per drawing enclosure)
	Supplying and Fixing of D.I. Non return valve including all accessories 160 mm dia 250 mm dia	DI Non – Return Valve–Manufacture, Supply and Delivery of DI D/F Slanted seat Swing Check Valve. Body of ductile cast iron of Grade GGG 40 or equivalent grade and disc of ductile cast iron GGG 40 or equivalent grade with fully encapsulated EPDM rubber, where both faces can be used. Electrostatic epoxy powder/liquid coating (EP-P) inside and outside color blue RAL 5005 with minimum coating thickness of 250 microns. The EPDM rubber & Epoxy Powder should be approved by W 270. (EP-P) it is a resi-coat powder approved for drinking water application, applied through fusion bonding process by dipping the shot-blasted casted components heated up to 200 deg C). Face to face dimensions as per EN558-1, series 48 and flange connections as per EN 1092-2/IS 1538.
	Supplying and fixing of D.I. Single chamber air release valve (50 mm) including all accessories	DI SINGLE CHAMBER AIR RELEASE VALVE–Manufacture, Supply and Delivery of Tamper proof DI single chamber air release valves with pressure range from PN 10/16 with body and cover made of Ductile Iron of Grade GGG 40 or equivalent grade conforming to IS 1865 with Food Grade Epoxy Powder coating (EP-P) inside and for outside of colour blue RAL 5005. All internal parts such as float, shell etc., cover bolts, made of Austenitic alloy steel of SS AISI 304/316. The float shall be made of Polytetrafluroethylene/ Austenitic alloy steel of AISI 304/316. Gaskets and seals of EPDM / Neoprene rubber for TWAD Board works anywhere in

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Sl. No	Description	Specification
		Tamil Nadu.
	Supplying and Fixing of Strainer including all accessories	Flange type Carbon Steel Basket type strainer (connection size 250 NB, Body size – 300 NB) with SS 40 mesh with drain provision.
	Vertical TPN distribution board for 100 Amps	Double door, IP 43, as per IS 8623 III: impact resistance IK09 frame MCCB incomer & Three phase MCB as outgoing with 4 way MCCB + 12 Modules (100 A)
	TNEB Meter board	TNEB meter board suitable for 3 phase 200A service connection made up of suitable angle iron frame work of size 3feetx2feet using angle iron of size 1-1/2"x1-1/2"x1/4" rigidly fixed on wall covered with hylem sheet of size 3feetx2feet of 12mm thickness with necessary bolts and nuts supports and supply and fixing of 3No.200A fuse units (500V), 1No.neutral link ,46ithnecessa flat of size 1"x1/4 "with inter connection of EB meter to fuse units by 19/16 PVC insulated copper wire with earth connection complete
	200 A TPN Double break switch	200A TPN sheet steel double break switch with HRC fuses and neutral on suitable angle iron frame work with MS cable entry boxes and with earth connection only
	Cable 3 1/2* 35 sq.mm	3-1/2 x 35 sq.mm PVC armoured LTUG cable in a trench to be excavated at a depth of 0.75 metre putting 0.15 metre layer of sand and covering the cable completely with bricks and sand and refilling the earth to make good
	Earthing	Earthing as per the ISI specification with an earth electrode of 2.10 metre Class'B' GI pipe of dia not less than 40mm with copper earth plate of size 125m x 50 mm x 6mm with necessary funneling arrangements 46ith necessary masonry work and with 38mm RCC cover slab for brick masonry
	Earth connection wire	8 SWG G.I. Wire
	Civil works	The required civil works for the erection of RCC concrete pillars for sprinkler units, 2 circular steps around the RCC pillar and pump room should be undertaken by the installing firms as per the Tamil Nadu Standard Specifications in force. Trenching and backfilling upto 3 feet for pipe laying and other accessories should be carried out by the undertaking company.

Specifications

- System will be installed at Western block 5 & 6 in Nathakarai village of Sheep farm, Thalaivasal, Salem district (Tamil Nadu).
- **These are tentative quantities of material, hence firm may visit the site before quoting the rates, if so desired**
- Underground HDPE pipe of suitable size of reputed make like Supreme /Jain or equivalent will

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

be preferred

- Vertical Multi Stage Centrifugal Pump of reputed make like Kirloskar / Aquasub / KSB / CRI / Groundfos or equivalent.
- Rain Gun of about 50 metre throw radius made up of stainless steel with uniform distribution profile with adjustable jet breaker assembly, various interchangeable nozzles provide better control in watering and irrigation of desired area and crops.
- Performance chart of the Rain Gun must be enclosed indicating the operating pressure of the systems.
- Air release valve, pressure release valve and non-returning valve etc., may be provided as per ISI mark of reputed make, if available
- RCC pillar for sprinkler unit for each riser size 0.40 m dia (1 m below ground level, 1.2 m above ground level) of cement concrete to be constructed by the bidder.
- 2 Circular steps around the RCC pillar for sprinkler unit (1 m below ground level, 1.2 m above ground level) of cement concrete to be constructed by the bidder.
- Aluminium Quick coupling (Bottom) made up of the high quality metal for easy installation and removal of rain-gun during shifting with the help of Aluminium Quick coupling (Top)
- Trenching and back filling up to about 1 metre depth will be carried out by the bidder for laying the pipes and other accessories
- Preference may be given to the reputed manufacturing companies for the underground HDPE pipe, motor and pumps and other materials.

Annexure - C
Format and Signing of Tender

Date:.....

From

To

The Chief Engineer (AE),
Agricultural Engineering Department,
No. 487, Anna Salai,
Nandanam,
Chennai –600 035

Sir,

I / We do hereby tender and if this tender be accepted, undertake to execute the following work

Name of work & Location	Supplying, Installation and Commissioning of Micro Irrigation System (Semi Permanent Rain Gun Sprinkler system) with Pump room
-------------------------	--

as shown in the drawings and described in the specifications deposited in the Office of the **Chief Engineer (AE), Agricultural Engineering Department, Chennai** with such variations by way of alterations, additions to, and omissions from the said works and method of payment as are provided for in the conditions of contract for the sum of Rupees. (in words and figures)

.....

or such other sum as may be arrived at under the clause of the General conditions of contract relating to "Payment on lump-sum basis or by final measurement at unit prices".

I / We have also completed the price bid for which I/We agree to execute the work and receive payments on detailed final measurement at Unit Prices.

I/We hereby distinctly and expressly declare and acknowledge that, before the submission

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

of my/our tender, I/We have made such examination of the contract documents and the plans, specifications and quantities and of the location where the said work is to be done and such investigation of the work required to be done and in regard to the material required to be furnished as to enable me/us thoroughly to understand the intention of the same and the requirements, covenants, agreements, stipulations and restrictions contained in the contract, and in the said plans and specification and distinctly agree that I / we will not hereafter make any claim or demand upon the Department based upon or arising out of any alleged misunderstanding or misconception, or mistake on my part of the said requirements, covenants, agreements, stipulations, restrictions and conditions.

I/We being a registered contractor enclose an income-tax verification / have already produced an income tax verification certificate in respect of (here particulars of the previous occasion on which the certificate was produced should be given) _____

I/We enclose herewith a Demand Draft for the payment of the sum of each tenderer must pay as **Earnest Money Deposit, a sum of Rs.4,47,000 (Rupees Four Lakh and Forty Seven thousand only)** as earnest money not to bear interest. If my/our tender is not accepted this sum shall be returned to me/us on my/our application when intimation is sent to me / us of rejection or at the expiry of 90 days/ from the date of this tender whichever is earlier. If my / our tender is accepted, the Earnest Money Deposit shall be retained by the Department as security for the due fulfillment of the contract.

If, upon written intimation to me/us by the **Chief Engineer (AE), Agricultural Engineering Department, Chennai** indicating that my/our presence is required for the purpose of enquiry, I/we fail to attend the said office before the end of Period specified on such intimation and if upon intimation being given to me / us by the **Chief Engineer (AE), Agricultural Engineering Department, Chennai** on acceptance of my/our tender, I/We fail to make the additional Security deposit or to enter into the required agreement as defined in the tender notice, then I/We agree to the forfeiture of Earnest Money Deposit. Any notice required to be served to me / us here under shall be sufficiently served on me / us if delivered to me / us personally or forwarded to me / us by post (registered or ordinary) or left at my / our address given herein, such notice shall if sent by post be deemed to have been served on me/us at the time when in due course of post it would be delivered at the address to which it is sent.

I/We fully understand that a written agreement is to be entered into between me/us and the Department which is to be first signed by me / us and then by the proper officer authorised to enter into contracts on behalf of AED in normal course. However, I/We fully understand that on receipt of written communication of acceptance of tender from the accepting authority, there

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

emerges a valid contract between the AED and the tenderer for execution of the work without any separate written agreement. Hence, for this purpose, the tender documents i.e., tender notice, tender offered by the contractor, general conditions to the contract, special conditions to the contract, negotiation, correspondences, written communication of acceptance of tender, etc., shall constitute a valid contract and that will be the foundation of the rights of both the parties to the contract and further it shall be open to the accepting authority to insist execution of any written agreement by the tenderer, if administratively considered necessary or expedient.

The tenderers are instructed to fill the following and enclose necessary documents:

1. **Particulars of the company/ firm where registered:-**

Name of the company with full address, contact number and e-mail	Type of the firm i.e prop./pvt. Ltd./ Ltd. etc. with its registration no.	Name and contact no. of Prop./ partners/ Directors etc

2. **Financial statement including Annual report:** (i.e. Balance sheet and profit and loss account) duly signed by Statutory Auditor of last 5 years along with copies.

Financial year	Annual Turnover (Rs. in Crore)	Annual Profit/ loss (Rs. in Crore)	Remarks
2016-17			
2017-18			
2018-19			
2019-20			
2020-21			

3. **Previous Experience details:** Orders of similar quantum executed to any Government/Private Department on quoted model over the last five years.

Year	Name , Address & Mobile number of Beneficiary	Area covered (acres)	Work order No. & Date	Value	Remarks
2016-17					
2017-18					

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Year	Name , Address & Mobile number of Beneficiary	Area covered (acres)	Work order No. & Date	Value	Remarks
2018-19					
2019-20					
2020-21					

4. Income tax filing Details:

PAN No.	Returns for Last Three Years (attached)	
	Year	Copy attached (Yes / No)
	2016-17	
	2017-18	
	2018-19	
	2019-20	
	2020-21	

5. GST clearance Details:

GST Registration No.	GST clearance details for latest periods (attached)	
	Period	Copy attached (Yes / No)

I hereby certify that all the information mentioned above are true and in case any information is found to be incorrect, my bid may be treated as rejected.

Stamp of the Company

Date:

Place:

Signature of Tenderer :

Name of Authorized Signatory :

Designation:

Phone No:

Mobile No:

E-mail id:

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI

Annexure - D
FORMAT FOR UNDERTAKING

I /We_____ (Name, Designation and Address) hereby declare that my firm/Company has not been black-listed by any of the Govt. Department/ Organization /PSUs /Institution etc., and no arbitration case is pending in any Government organization.

Signature of Authorized designatory

Name :

Designation:

Name of the Firm/Company:

Full Address:

Date:

Place:

Phone No:

Mobile No:

E-mail id:

TENDERER

NO.OF CORRECTIONS:

CHIEF ENGINEER (AE)
CHENNAI