**Tender No. \*\*of 20\*\*-20\*\*Date: \*\*.\*\*.20\*\***

**OFFICE OF THE EXECUTIVE ENGINEER**

**PUBLIC HEALTH ENGINEERING DEPARTMENT**

**\*\*\*\*\*\*\*\* WATSAN DIVISION**

TENDER DOCUMENT FOR SURVEY, DESIGN,

SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF SOLAR PUMPING SYSTEM ALL COMPLETE WITH 5 YEARS FREE

SERVICE/ MAINTENANCE AS PER SPECIFIED IN THE TENDER DOCUMENT

FOR

(UNDER…………………….)



|  |  |
| --- | --- |
| TENDER AMOUNT  | Rs. \*\*\*\*\*\*.00 |
| EARNEST MONEY | Rs. \*\*\*\*\*\*.00 |
| Last Date of Sale of Tender  | \*\*.\*\*.20\*\*up to 11:00 Hrs. |
| Last Date of Submission of Tender | \*\*.\*\*.20\*\*up to 12.00 Hrs. |
| Date of Opening | \*\*.\*\*.20\*\*up to 13.00 Hrs. |
| Cost of Tender Document | Rs. \*\*\*\*\*\*.00 |
| Time Allowed for Execution of Work | \*\*months |

**PRESS TENDER NOTICE**

**PUBLIC HEALTH ENGINEERING DEPARTMENT**

# **TENDER NOTICE**

**The Executive Engineer, PHED, \*\*\*\*\*\*\* WATSAN Division, \*\*\*\*\*\*\*\*,** on behalf of the Governor of Mizoram invites bids Two envelope system with sealed item rate tender in prescribed form affixing Court Fee Stamp worth Rs. 7.5/- (non-refundable) for non-tribal and up-to-date House Tax Payee Certificate for tribal from reputed contractors experienced in similar type of works. The tender will be received in the office of the undersigned up to**\*\*:00 hours**on\*\*.\*\*.20\*\* Late submission of tender will not be accepted. The tender so received will be opened on \*\*.\*\*.20\*\*at**\*\*:00 hours** in presence of the intending tenderer or his authorized representative. If for any unforeseen reason, the Tenders could not be received & opened on the stipulated date & time, the same will be received and opened in the next working day at the same time for which no separate communication will be made.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| NIT No. | Name of work  | Tendered Amount (Rs) | Earnest Money (Rs) | Date of Opening | Time of Completion | Cost of Tender.(in Rs) |
| \*\* of 20\*\*-\*\* | Survey, design, supply, installation, testing & commissioning of solar pumping system all complete with 5 years free service maintenance as per specified in tender document for **\_\_\_\_\_\_\_\_\_\_\_ W.S.S** (under …………) | \*\*\*\*.00 | \*\*\*.00 | \*\*.\*\*.20\*\* | \*\* months | \*\*\*\*.00 |

Detailed tender document may be obtained from the Office of the undersigned on any working days on payment of Tender Cost as mentioned above (non -refundable) without which, the tender shall summarily be rejected. The undersigned reserves the right to reject any or all of the tenders without assigning any reason thereof. **The same may also be downloaded from PHED’s website at** [**www.phed.mizoram.gov.in**](http://www.phed.mizoram.gov.in)**. If the documents are downloaded from the website, the cost of tender documents may be included in a separate envelope in the Technical Bid. Sd/- (\*\*\*\*\*\*\*\*\*\*\*)**

**Executive Engineer, PHED**

**\*\*\*\*\*\*\* WATSAN Division**

*­*

*­­Memo No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ : Dated \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

*Copy to-*

1. *PS to Hon’ble Minister, PHED, Mizoram for favour of your kind information.*
2. *The Secretary (PHED), Govt of Mizoram for favour of kind information.*
3. *The Engineer-in-Chief (PHED), for favour of kind information.*
4. *The Chief Engineer \*\*\*\*\* (PHED), for favour of kind information.*
5. *The Superintending Engineer (PHED),\*\*\*\*\*\*\* WATSAN Circle, for information.*
6. *The Director, Information and Public Relation Department, Govt. of Mizoram for information and necessary action with a request to publish the Tender notice in two issues of Local Newspaper.*
7. *The System Analyst, PHED for information and upload of Tender Notice and Documents to PHED’s website.*
8. *Concerned file.*
9. *Office Notice board.*

**Executive Engineer, PHED**

**\*\*\*\*\*\*\*\*\* WATSAN Division.**

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**Form CPWD – 6**

**OFFICE OF THE EXECUTIVEENGINEER**

**PUBLIC HEALTH ENGINEERING DEPARTMENT**

**\*\*\*\*\*\* WATSAN DIVISION, \*\*\*\*\*\*\*.**

**NOTICE INVITING TENDER**

**(TENDER No.\*\* OF 20\*\*-20\*\*)**

Item rate tenders are invited on behalf of Governor of Mizoram from reputed registeredcontractors for the work:**Survey, design, supply, installation, testing & commissioning of solar pumping system all complete with 5 years free service maintenance as per specified in tender document for \*\*\*\*\*\*W.S.S including constructions of civil works as per schedule given in tender document (under J.J.M 2021-22).**

1. The enlistment of the contractors should be valid on the last date of sale of tenders.

In case the last date of sale of tender is extended, the enlistment of contractor should be valid on the original date of sale of tenders. In case both the last date of receipt of application for issue of tenders and sale of tenders are extended, the enlistment of contractor should be valid on either of the two date i.e. original date of sale of tender or on the extended date of sale of tenders.

* 1. The work is estimated to cost **Rs.\*\*\*\*\*\*\*.00** inclusive of all taxes viz. GST, Cess etc.
	2. Tenders will be issued to reputed CPWD/MPHE Department under Govt. of Mizoram, contractors with definite proof from the appropriate authority, which shall be to the satisfaction of the PHE Department. Standing Order for eligibility of different Classes of contractor corresponding on the tendered amount will be followed.
	3. Joint Venture is allowed.

2. Receipt of applications for issue of forms shall be stopped by **\*\*:00 Hrson\*\*/\*\*/20\*\***. Receipt of tender shall be stopped by **\*\*:00 Hrson \*\*/\*\*/20\*\*.**

Tender document consisting of plans, specifications, the schedule of quantities of the variousclasses of work to be done and the set of terms & conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents can be seen in the office of**the Executive Engineer PHED, \*\*\*\* WATSAN Division, \*\*\*\*\*,** between hours of \*\*:00 AM &\*\*:00 PM every dayfrom**\*\*/\*\*/20\*\*** except on Saturday and Sundays and Public Holidays to **\*\*/\*\*/20\*\*.**

3. Tender documents, excluding standard form, will be issued from his office,during the hoursspecified above, on payment of **Rs.\*\*\*\*\*/-** (Rupees one thousand only) in cash.

4. Tender must be accompanied with Earnest Money of **Rs\*\*\*\*\*.00**in the form of Bank Guarantee/ fixed deposit receipt or demand draft of a scheduled bank issued in favour of **the Executive Engineer, PHED, \*\*\*\*\* WATSAN Division, \*\*\*\*\*\*.** The tender and the earnest money shall be placed in separate sealed envelopes, each marked “Tender” and “Earnest Money” respectively. Both the envelopes shall be submitted together in another sealed envelope with the name of work and due date of opening written on envelope marked as **‘TECHNICAL BID’.**  The ‘**FINANCIAL BID’**should be placed in separate sealed (transparent tape accepted) envelope which shall contain only the ‘**Proforma of Schedules’**.Both the envelopes shall be placed together in another sealed (by wax only) envelope (Main Envelope) with the name of work and due date of opening written on envelope.

5. The bidder whose tender is accepted will be required to furnish **Performance Guarantee of 3% (ThreePercent) of the tendered amount within 10 days from issue of Letter of Intent**. This guarantee shall be in the form of Deposit at Call receipt of any scheduled bank/Banker’s cheque of any scheduled Bank/ Demand Draft of any scheduled bank/or Government Securities or Fixed Deposit Receipts or Bank Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule ‘F’ including the extended period if any, the contract shall be liable to be terminated.

6. Financial eligibility criteria for tenderer should be:- Average annual financial turnover on construction works should be at least 50% of estimated cost put to tender during the immediate last three consecutive financial years.

7. Canvassing whether directly or indirectly, in connection with tenderers is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.

8. The tenderer shall not be permitted to tender for works in the Circle/ Division responsible for award and execution of contracts, in which his near relative is posted as Accounts Officer or as an officer in any capacity between the grades of ExecutiveEngineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted Officer in the Department. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.

9. No Engineer of Gazette rank or other Gazetted Officer employed in Engineering or Administrative duties in the Department is allowed to work as a Contractor for a period of one Year after his retirement from Government Service, without the previous permission of the Government of Mizoram in writing. This Contract is liable to be cancelled if either the Contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of Mizoram as aforesaid before submission of the tender ir engagement in the Contractor’s service.

10. This **Tender Document**, along with latest **CPWD Form 8** shall form **part of the ContractDocument**. However, applicability of the Clauses of CPWD Form 8 listed at General Rules and Direction of this NIT may be referred,if any contradiction arises in any clauses of the NIT and clauses in CPWD form-8.Clauses in NIT supersede clauses in CPWD form-8. If any clauses of the NIT are not mentioned clearly, then CPWD Works Manual will be referred and applied.

11. The Government shall deduct CESS & GST as admissible on the value of work done from each bill of the contractor as per prevailing Government instruction/orders. In lieu, the department shall issue a certificate of deduction of the Tax at source to the contractor.

12. Quoted rate above the tendered shall be rejected summarily.

13. No tender will be considered for acceptance unless the detailed tender papers are duly purchased by the intending tendered. A copy of the receipt for the money deposited against purchase of the tender document shall have to be submitted along with the tender as a proof of purchasing the same.

14. **Tenderer has to read all terms and conditions of this tender documents carefully. Tenderer has to accept and comply with all terms and conditions of this tender.Overwriting in the proforma of schedule is not acceptable and corrections if any should be initialled and dated by the tenderer.**

15. Defect liability period of the contract shall be 12 (twelve) months from the date of commissioning. Any defect noticed in the system during this period shall have to be rectified by the contractor at his/ their own cost and risk and any further defect during the other 4(four) years of maintenance period shall have to be rectified by the contractor at free of costand the materials cost will be borne by the Department/Village Water & Sanitation Committee.

 Comprehensive Operation and Maintenance:

* The Contractor should provide 5 years comprehensive maintenance of the Solar Photovoltaic Water pumping system set, which shall include corrective maintenance as well as routine service visits during guarantee period. The bidder shall rectify defects developed in the system as specified above.
* Apart from the monitoring and regular periodical maintenance, inspection of system has to be done quarterly basis during the period specified above. The maintenance report has to be maintained in a prescribed table format in a register maintained at the site which should contain Month, Inspection Date, Action taken against the Defects found in the System and Remarks of the representative of representative ofVWSC along with signatures of both parties.

16. During this period training ofOperation and Maintenance, training on Operation and Maintenance should be given to VWSC/Dept who will be responsible for Operation and Maintenance of the system after expiry of maintenance period. After completion of Operation and Maintenance period, Tripartite Agreement should be signed at the time of handing over. The tenderer should submit the Operation and Maintenance Plan for the period of 1(one) year.

17. The Public Health Engineer Department, Govt. of Mizoram, reserves the right to add, amend or to delete any of the items of work or part thereof and the contractor shall carry out the same as per the instruction of the Engineer-in-Charge.PHED reserves the right to reject or accept any or all tenders wholly or partly with proper reasons on the grounds considered advantageous to the Department whether it is the lowest tender or not.

18. The Public Health Engineer Department, Govt. of Mizoram takes no responsibility for delay, loss or non-receipt of tenders sent by post. Unsealed tenders shall not be considered for acceptance.

19. The tender documents shall remain the property of the Public Health Engineering Department, and if obtained by one intending tenderer, shall not be used by any other tenderer.

20. The tender shall be completely filled in all respects and shall be tendered together with requisite information. Any tender incomplete in all particulars shall be liable to be rejected.

21. Tenderer who are not the Manufacturer or AuthorisedDealer should produce support letter from the manufacturer or AuthorisedDealer in regards to Supply, Installation, Testing and Commissioning.

22. Tenderer having an experience of design, supply, installation and commissioning of the least one SPV Pump in India under Govt Scheme is the most preferable for the tender. The tenderer may submit the authenticated copy of the certificate of successful completion/commission of the projects(for the Tender costing upto one crore)

**Or**

 Tenderer having an experience of design, supply, installation and commissioning of at least one number of Water Supply Scheme with SPV pumping systems of not less than 50% of static head prescribed in the tender with the discharge of not less than 50%litres per day prescribed in the tender for a single project under the Government Scheme(for the Tender costing more than one crore)

23. The one who give support letter should be responsible for all the defects of the system.

24. List of the staffs and their*EducationalQualifications(*with attested copy) of those who are proposed to be engaged for and after sales services, shall be submitted along with the tender, failing which, the tender may be termed as invalid.

25. Bidder shall have to submit copies of GST registration number issued by the appropriate authority.

26**. The terms, conditions and specifications mentioned in tender document shall be binding on the tenderer**and no condition or stipulation contrary to the conditions shall be acceptable. It may please be noted that the tenderer who do not accept terms and conditions stipulated inthis tenderdocument, their offersshall be liable to be rejected out-rightly without assigning any reason whatsoever. ***Tenderer should signed in each pages***. The pages of the tenders should be submitted in proper way in an organized manner.

27. **Solar Photovoltaic Modules :**

* Module supplied with the SPV water pumping system shall have certificate as per **IS 14286/IEC 61215** specification or equivalent national or international/standards. The name plate shall conform the **IS 14286/IEC 61215**. STC performance data supplied with the modules shall not be more then one year old.
* Modules must qualified to **IEC 61730** part I and Part II for safety qualification testing.
* There should be Automatic Cleaning Device for Solar PV modules.
* There should be a name plate fixed inside the module which will bear the following specifications:
1. Name of the manufacturer/distinctive logo.
2. Model Number
3. Serial Number
4. Year of manufacture

28. Tenderer must visit the proposed project site at **\*\*\*\*\*\* Village**, \*\*\*\*\*\*District of Mizoram to conduct a thorough site survey and the Techno-Economic feasibility studies of the project on his own expenses and **shall submit the design containing the Techno-Economic feasibility report**. **The tenderer should also obtain a site visit certificate from the concerned JE which will be verified by SDO, \*\*\*\*\*\*\* WATSAN Sub-Division, \*\*\*\*\*\*,** and shall be submitted in original along with the tender. The site visit certificate should be accompanied by self-photograph of the visitor at the site along with proposed site with Lat-Long.Tenders submitted without the site visit certificate shall be summarily rejected. The Department shall scrutinize thoroughly each Design of all tenderers and shall only consider the tenderer(s) whose design is/are found to be technically and economically feasible under the Climatic condition of Mizoram.

1. **Offer of those parties who are found qualified during the opening of tender will only be taken for
 further consideration, and after strictly scrutinizing based on the Technical Evaluation, the
 Financial bid will be open only for those parties who have qualified.**
2. The system must be designed and planned using computer based tools that can closely model the irradiation, rainfall pattern, power generation from the solar array, typical pump performance by considering Lat-Long of the proposed Solar Station. Planning and design should be done showing monthly system water outputs in line with the water requirements.Due to the complex nature and multiple variables involved in calculating solar system performance for every hour of a year it is deemed unrealistic to be able to do this without the use of proven computer-based modelling tools. The discharge/Day must be of the following requirement:
3. Average water delivery within a year in m3
4. The average discharge in a month should meet the requirement during the lean month.
5. Water delivery pattern of a whole year inm3

 The Tenderer must submit the Design in binding clearly showing all the design parameters for each stage(s).The check list will be:

* 1. Size of Solar Power Plant (KWp),
	2. Rated power of pump set (KW),
	3. Max. Flow rate (cubic meter per hour),
	4. Total head of each pump set(m),
	5. Speed of motor(rpm),
	6. Motor efficiency,
	7. Head loss(m),
	8. SPV efficiency(%),
	9. TotalHead(m).
	10. The require discharge should be achieved at duty point.

Note: Hazen Williams formula may be use in calculation.

 The following **chart** must also be included:

1) Customized Pump Characteristics.

2) Energy output with respect to rainfall throughout the year

3) Irradiation data considered for the village.

4) Table showing discharge of every Month.

1. Sub-letting of the works through Sub-Contract without the prior knowledge of the Department will not be allowed. Prior permission in writing should be taken from the Engineer-in-Charge.
2. The Successful tenderer shall be responsible for arranging and maintaining at his own cost, all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Before supplying the machineries, the successful tenderer must submit test report.
3. The system must have double dry run protection to protect the system in event of low water levels. The dry run protection must be of modular design, exchangeable and preferably a float mechanism.
4. The system must have Remote Monitoring System for enhancing accountability of Technical Parameters. Size of the cable proposed should be furnished. Cable length may be provided by the Department.
5. The date of starting the work will be 15 days from the date of signing agreement. Contract Agreement should be signed within 10 days from issue of LOI.
6. The site for the work will be handed over to the contractor free from all encumbrances.
7. **Handing over of the system to the Department:**
* Signing the checklist from beneficiaries and deputed staff of the vendor.
* Testing and trials of the installed system
* A operator training on repair and maintenance of the system
* Handing over the warranty papers to the Department
* Handing over of Operation and Maintenance documents to the Department
* Completion report along with complete drawing to be submitted to the Department
1. **Warranty:**
* The PV Modules must be warranted for output wattage, which should not be less 90% at the end of 10 years and 80% at the end of 25 years.
* The whole system including pump set shall be warranted for 5 years. Solar Pumping Systems must be warranted against any manufacturing/design/installation defects for a minimum period of 5 years.
* Sufficient spares for trouble free operation during the Warranty period should be made available as and when required.
* A warranty card for the modules and the motor pump set should also be provided to the beneficiary at the time of handing over of the system.
1. The successful tenderer should submit the Detailed Technical diagrams and Specifications of the Solar Pumping System within 1 month after commissioning of the system.

**(\*\*\*\*\*\*\*\*\*\*)**

**Executive Engineer, PHED**

**\*\*\*\*\*\*\* WATSAN Division.**

**CPWD form-7/8**

**OFFICE OF THE EXECUTIVE ENGINEER**

**PUBLIC HEALTH ENGINEERING DEPARTMENT**

**\*\*\*\*\*\*\*\* WATSAN DIVISION, \*\*\*\*\*\*\*\***

**...................................**

Item Rate/percentage rate Tender & Contract for Works

1. Tender No:**\*\* of 20\*\*-20\*\***
2. For the work of:-**Survey, design, supply, installation, testing & commissioning of solar pumping system all complete with 5 years free service maintenance as per specified in tender document for \*\*\*\*\*\*W.S.S including constructions of civil works as per schedule given in tender document (under J.J.M 2021-22).**

(i) To be submitted by **\*\*:00 hours on \*\*/\*\*/20\*\*to**

**TheExecutive Engineer, PHED**

**\*\*\*\*\*\*\* WATSAN Division, \*\*\*\*\*\*\*.**

(ii) To be opened in presence of tenderers’ who may be present at **\*\*:00 hours on**

**\*\*/\*\*/20\*\***the office of **TheExecutive Engineer, PHED**

**\*\*\*\*\*\* WATSAN Division, \*\*\*\*\*\*\*\***

Issued to: ………………………………………..…………………………………………………………..

 ……………………………………………………………………………………………………...

Signature of officer issuing the documents …………………………

Designation: **...............................................................................**

Date of Issue: …………………

**TENDER**

I/We have read and examined the notice inviting tender, schedules A, B, C, D, E & F, Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, Clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Governor of Mizoram within the time specified in Schedule ‘F’ viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to General Rules and Directions and in Clause 9 of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for ninety (90) days from the due date of its opening and not to make any modification in its terms and conditions.

A sum of Rs. \*\*\*\*\*\*.00 is hereby forwarded as Earnest Money in the form of treasury challan/fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/ Irrevocable Bank Guarantee issued by a scheduled bank. I/We agreed to furnish the prescribed Performance Guarantee within prescribed period, if fail to do so the Department have all the right to black list me/us and will not bid any contract under Public Health Engineering Department for a period of 2(years). Further, if I/We fail to commence work as specified, I/We agree that Government of Mizoram shall, without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely, otherwise the said performance guarantee shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained. Further, I/We agree that in case of forfeiture of Performance Guarantee as aforesaid, I/We shall be debarred for participation in the tendering of the any works for a period of 2(two) yearsunder Public Health EngineeringDepartment.

I/We undertake and confirm that eligible similar work(s) has/have been executed by us/through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in PHE DEPARTMENT in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Performance Guarantee.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated:

Signature of Contractor

Witness:

Postal Address

Address:

**CONDITIONS OF CONTRACT**

|  |  |  |
| --- | --- | --- |
| 1. Signing of Contract |  | The successful tenderer/contractor, on acceptance of his tender by the accepting Authority, shall, within 10 days from the date of issue of Letter of Intent sign the Contract Agreement. |
| 2. Performance Guarantee | i | The contractor shall submit an irrevocable Performance Guarantee of 3% (threepercent) ofthe tendered within 10(ten) days from the date of issue of LOI. |
|  | ii | The Performance Guarantee shall be valid up to the stipulated date of completion plus 60 days beyond that.  |
|  | iv | In the event of the contract being determined or rescinded,the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Governor of Mizoram. |
| 3. Recovery of Security Deposit | An amount of 5% of the gross amount of each running bill shall be deducted as a security deposit. This amount shall be released @ 1% per annum each for 5 years of maintenance period. |
| 4. Compensation for Delay | 1. For delay of work, the contractor shall pay to the Government compensation @ 1.5% per month not exceeding 10% of the Tendered Value of work or of the Tendered Value of the item or group of items of work.

 The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Government.  |
| 5. Time and Extension for Delay | PROGRAMME CHART(i) The Contractor shall prepare an integrated program chart in MS Project/Primavera software for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfillment of the program within the stipulated period.(ii) The program chart should include the following:(a) Descriptive note explaining sequence of the various activities.(b) Network (PERT/CPM/BAR CHART).(c) Program for procurement of materials by the contractor. |
| 6. Price schedule and terms and conditions of payment | 1. Price schedule as accepted is enclosed in the Schedule.
2. Payment will be made to the contractor in time on submission of bills based on progress of the work subject to availability of fund.
3. The Contractor shall be a liberty to submit Bills for payment every month during the completion period as mentioned earlier, and while payment on such bills, may be made by the Government after recovering or adjusting the Mobilization Advance upto 10% on each such monthly bill, disputed monthly bills, if any, may be settled mutually for payment and payment to an extent of 90% may be made on such bills pending final settlement.
 |
| 7. Materials to be Provided by the Contractor | The contractor shall, at his own expense, provide all materials, required for the works other than those which are stipulated to be supplied by the Government. The contractor shall, at his own expense and without delay; supply to the Engineer-in-Charge samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer-in-Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. The Engineer-in-Charge shall within thirty days of supply of samples or within such further period as he may require intimate to the Contractor in writing whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Engineer-in-Charge for his approval, fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with specifications, approval of the Engineer-in-Charge shall be issued after the test results are received.The Contractor shall at his risk and cost submit the samples of materials to be tested or analyzed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by the Engineer-in-Charge. The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.The contractor shall, at his risk and cost, make all arrangements and shall provide all facilities as the Engineer-in-Charge may require for collecting, and preparing the required number of samples for such tests at such time and to such place or places as may be directed by the Engineer-in-Charge and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Engineer-in-Charge or his authorized representative shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.The Engineer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default, the Engineer-in-Charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full powers to require other proper materials to be substituted thereof and in case of default, the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor. The contractor shall, at his own expense, provide a material testing lab at the site for conducting routine field tests. The lab shall be equipped at least with the testing equipment as specified in schedule F. |
| 8. Mobilization Advance | Mobilization Advance of 10% of the contract value at 10% per annum interest shall be given to the Contractor if applied fordepending on the availability of the fund. |
| 9. Work to be Executed in Accordance with Specifications, Drawings, Orders, etc. | The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the Engineer-in-Charge and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the standard specifications of Central Public Works Department specified in Schedule ‘F’ or in any Bureau of Indian Standard or any other, published standard or codeor Schedule of Rates or any other printed publication referred to elsewhere in the contract. The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all labor and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction. |
| 10. Foreclosure of contract due to Abandonment or reduction in Scope of Work | If at any time after acceptance of the tender, Government shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Engineer-in-Charge shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account ofany profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works. The contractor shall be paid at contract rates, full amount for works executed at site. |
| 11. Suspension of Work | (i) The contractor shall, on receipt of the order in writing of the Engineer-in-Charge, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof: The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-Charge.  |
| 12. Compensation incase of Delay of Supply of Materialby Govt. | The contractor shall not be entitled to claim any compensation from Government for the loss suffered by him on account of delay by Government in the supply of materials in schedule 'B' where such delay is covered by the difficulties relating to the supply of wagons, force majeure or any reasonable cause beyond the control of the Government.This will not be applicable for works where no material is stipulated. |
| 13. Action in case work not done as per Specifications | All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-in-charge, his authorized subordinates in charge of the work and all the superior Officers, Officers of the Quality Assurance Unit of the Department or any organization engaged by the Department for Quality Assurance and of the Chief Technical Examiner’s Office, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor’s agent shall be considered to have the same force as if they had been given to the contractor himself.  |
| 14. Contractor Liable forDamages,defects during maintenance period | If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerbs, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground continuous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work after a certificate final or otherwise of its completion shall have been given by the Engineer-in-Charge as aforesaid arising out of defect or improper materials or workmanship, the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense. |
| 15. Contractor to Supply Tools & Plants etc. | The contractor shall provide at his own cost all materials, machinery, tools & plants required for work execution and maintenance. |
| 16. Labor laws to be complied by the Contractor | (i) The contractor shall obtain a valid license under the Contract Labour (R&A) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.Any failure to fulfill these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work. |
|  | (ii) No labour below the age of eighteen years shall be employed on the work. |
|  | 1. The Engineer-in-Charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractors’ employ upon the work who may be incompetent or misconduct himself and the contractor shall forthwith comply with such requirements. In respect of maintenance/ repair or renovation works etc. where the labourhave an easy access to the individual houses, the contractor shall issue identity cards to the laborers, whether temporary or permanent and he shall be responsible for any untoward action on the part of such labour. AE/JE will display a list of contractors working in the colony/Blocks on the notice board in the colony and also at the service centre, to apprise the residents about the same.
 |
| 17. Work to be executed as per the approval of Engineer-in-Charge | All works to be executed under the contract shall be executed under the direction and subject to the approval of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on. |
| 18. Settlement of Disputes & Arbitration | All questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt by a Dispute Redressal Committee duly constitute by the state Government:  |
| 19. Levy /Taxes payable by Contractor | (i) Sales Tax/VAT/ GSTetc. Building and other Construction Workers Welfare Cess or any other tax or Cess in respect of this contract shall be payable by the contractor and Government shall not entertain any claim whatsoever in this respect.  |
| 20. Termination of Contract on death ofcontractor | Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Divisional Officer on behalf of the Governor of Mizoram shall have the option of terminating the contract without compensation to the contractor. |

**ANNEXURE – 1: GENERAL CONDITIONS FOR CONTRACTOR’S OWN DESIGN AND DESIGN DATA**

* 1. The contractor shall used a computerized design software and design Solar Water Pumping Schemefor**\*\*\*\*\*\*\*Village**with the following given data:
1. Number of Stage : \*\*(\*\*)
2. Pumping hour : (6 hrs/day or less

 depending upon Lat-Long)

1. Water demand : \*\*\*\* LPD
2. Static Head : \*\*\*m (Approximate)
3. Size of pumping main (to be consider) : \*\* mm Ø. GI pipe(m)
4. Length of pumping main : \*\*\*\*\*Rm

**1.2** The designed output data shall be submitted with all designed parameters along with the tender documents.The contractorshall submit comments/notes on the design methodology stating the feasibility for the project.

**1.3** The comments/notes on design will be checked by the Engineer-in-Charge of the Department and the tender will be accepted and work order will be issued by the competent authority only after verification and accepted bycompetent authority that the design submitted fulfill the requirements of the scheme.

**1.4** The contractor shall submit three copies of detailed design and drawing of the architectural, structure, piping works and hydraulics within 10 days of acceptance of tender.

**1.5** The Design Engineer will be required to attend the office of Engineer-in-Charge for preliminary discussion for scrutiny, remarks,etc. whenever required with all reference data, books, IS specification etc. at his own cost.

**1.6** It will be binding on the Design Engineer of contractor to clarify, modify, redesign and drawings after compliance of scrutiny remarks by the owner within 5 days of communication of remarks.

**1.7** On approval of design, contractor shall supply free of cost eight (8) sets of design and drawing duly bound for use of the owner. The contractor shall also furnish the sheet along with program of execution for completion of work within the time limit stipulated in the tender.

**1.8** Security deposit of the tender shall be forfeited if he fails to modify his design as per scrutiny remarks within specified time after levy of compensations as per tender agreement.

**1.9** Even though the design and drawing submitted by the contractor are approved by the owner / Engineer-in-Charge, the contractor will not be relieved of his contractual obligations to hand over the structure in sound condition duly tested.

In case of any damage / failure either during construction testing or after commissioning, whether due to faulty design or defective construction all repairs or reconstruction of the structure shall have to be carried out by the contractor, entirely at his risk and cost.

**ANNEXURE-2: GENERAL SPECIFICATIONS AND SPECIAL CONDITIONS**

**2.1** Materials and methods of construction for all civil works shall be as per relevant Indian standard specification, part of which are incorporated in the standard specification of PHED and MPWD and all will be followed during the execution of the work. The work shall be executed as per the guidelines and provisions of B.I.S. All materials shall conform to Indian standard code of practice National Building Code and CPHEEO manual to maintain quality of work.

**2.2** All materials to be used shall conform to the relevant specifications as per the latest version of the Indian Standards, unless otherwise stated in the detailed specifications of items of work. A set of specimen samples of all approved materials shall be kept in bottle or otherwise at site, cost of which is to be borne by the contractor.

**2.3** Water required for the execution of the work and for the water tightness test of water retaining structure shall be supplied by the contractor at his own cost in satisfactory manner to the Engineer-in-Charge of work.

**2.4** The source from which sand is to be obtained shall be subjected to the approval of Engineer-in-charge. The sand shall be clean, sharp and gritty to touch and be freed from earth and other impurities by washing. The sand shall be washed to such a degree that when a handful is mixed with clean water in a glass and allowed to stand for an hour the precipitate of mud over the sand shall not exceed 5%.

**2.5 Cement Mortar**

The mortar shall consist of cement and sand mixed in proportion defined in relevant schedule item for various item of work. Only measured quantity shall be used. The sand shall be shoveled in a wooden measure of a clean masonry platform, after removing the measure box and spreading out sand if necessary, the cement (in required proportion) shall be emptied on the top of sand.

The sand and cement shall be then turned over with shovels once dry and made into the form of a hollow cone; into this water can be poured and the whole shall then be turned over completely twice. The color and consistency shall at this stage be quite uniform, if not, further turning shall be done.

Water shall be added by measured quantities if the engineer so direct. Only such quantities of mortar shall be mixed at one time as can be used at once before it can set. No mortar, which has once caked or begun to set, shall be used, nor shall such mortar be remixed; but it shall be removed from the site of the work immediately.

**2.6 Cement concrete**

The concrete shall consist of an aggregate of the proportion by volume defined in relevant schedule item or work. Only measured quantity shall be used.

**2.7 Laying:** The cement, sand and stone chips shall be mixed properly in mechanical mixer in such a manner as to avoid loss of water. The concrete shall be mixed for minimum period of 2 minutes or unit it is of even colour and uniform consistency throughout. As soon as the concrete is mixed it should be removed to the work site with conveyor or pipe rapidly as practicable. The concrete laid will be vibrated for compaction by the vibrators. Slum test will be carried at site during execution of work.

**2.8 Curing:** The concrete laid shall not be disturbed and shall be kept thoroughly damped by means of wet matting and sand until it shall have become thoroughly set and hard enough to prevent its drying and cracking.

The aggregate shall consist of stone ballast of quality approved by Engineer-in-charge and shall consist of graded size 20 mm and down wards as per specification or the size mentioned in the item description. Curing period for PCC shall be 14 days minimum. Use of curing compound shall be opted as per manufacturer’s specification.

**2.9 Cement Plaster**

12 mm thick cement plaster in (1:3) proportion shall be applied on outside surface of all concrete works from 30cm below ground level up to top. The surface in contact with water will have 15 mm thick cement plaster of not less than (1:3) proportion with 3% water proofing compound. The concrete surface shall be properly hacked, washed, cleaned and applied with thick cement slurry before applying. All brick work unless otherwise specified will be plastered externally and internally with 12mm cement plaster (1:3) proportion.

The plaster shall be protected from sun, rain and frost at the contractor’s expense by such means as the engineer may approve.

To protect the plaster from the sun, ordinarily the whole surface shall be covered with wet sacks. The contractor shall keep the plaster continuously waited for a period of seven days after application.

**2.10 Painting**

All cement shall have two coats of synthetic enamel paint over a coat of priming as specified by the manufacture of the paint.

The make, shade and color of the paints shall have to be approved by the Engineer-in-charge before use.

**2.11 Inspection**

 The contractor should get the pump and machineries**,**etc. inspected by authorized officer before installation. Materials will not be considered acceptable without inspection-cum-acceptance certificate of approved PHED inspection personnel.

**2.12 Completion Drawings:**The contractor shall furnish on completion of the work and handing over the same to the Department, three sets of print plans, showing the working detail of the several components,unitsofthe plant and equipment.

# **ANNEXURE-3.1**

# **BILL OF QUANTITY (BOQ)FORPUMPS AND MACHINERIES**

* 1. **Solar water pumping system:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.No.** | **Description of Items** | **Unit** | **Qnty** | **Rate (in Rs.)** |
| 1 | Survey, Design, Supply, Installation, Testing & Commissioning of Solar Water Pumping System for **\*\*\*\*\*\*\* village** as the following specification:1. No. of stage: \*\* (\*\*\*)
2. SPV Power plant: Sufficient power plant
3. Type of pump sets: Submersible(centrifugal)
4. No. of pump sets: 1 running + 1 standby with all accessories for each stage.
5. System capacity: \*\*Cu.m/day.
6. Aggregate static head:\*\*\*\*m.
7. Auxiliary power: The above system will be inclusive of \*\* nos. DC security lighting system. Power transmission line of \*\*\*Rm including all its accessories etc. complete.

8. Solar Pump Controller & all accessories etc. complete as per IEC/EN of 702:1995 & 62253 standards. | Job | 1 | \*\*\*\*\*\*\*.00 |
| 2 | Earth work for:(a) Approach road to solar plate | Job | 1 | \*\*\*\*\*\*.00 |
| (b) Field for solar plate | Job | 1 | \*\*\*\*\*\*\*.00 |
| 3 | Construction of Submersible Weir for pumping | Job | 1 | \*\*\*\*\*\*.00 |
| 4 | Construction of RCC Sump-I \*\*\*\*\*\*litres capacity | Job | 1 | \*\*\*\*\*\*\*.00 |
| 5 | Design & Construction of RCC Sump-II for intermediate stage | Job | 1 | \*\*\*\*\*\*\*.00 |
| **TOTAL** | **\*\*\*\*\*\*\*.00** |

**(Rupees \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*) only.**

**PROFORMA OF SCHEDULES**

 (Operative Schedules to be supplied separately to each intending tenderer)

**SCHEDULE ‘A’**

Schedule of Quantities (as per PWD – 3).**Quoted rate should be both in figure and words. Details of Items at Schedule “D”**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sl.No.** | **Description of Items** | **Unit** | **Qnty** | **Quoted Rate (in Rs.)** | **Quoted Rate (in word)** | **Amount (in Rs.)** |
| 1 | Survey, Design, Supply, Installation, Testing & Commissioning of Solar Water Pumping System for **\*\*\*\*\*\*\* village** as the following specification:1. No. of stage: \*\* (\*\*\*)
2. SPV Power plant: Sufficient power plant
3. Type of pump sets: Submersible(centrifugal)
4. No. of pump sets: 1 running + 1 standby with all accessories for each stage.
5. System capacity: \*\* Cu.m/day.
6. Aggregate static head: \*\*\*m.
7. Auxiliary power: The above system will be inclusive of \*\* nos. DC security lighting system. Power transmission line of \*\*Rm including all its accessories etc. complete.

8. Solar Pump Controller & all accessories etc. complete as per IEC/EN of 702:1995 & 62253 standards. | Job | 1 |  |  |  |
| 2 | Earth work for:(a) Approach road to solar plate | Job | 1 |  |  |  |
| (b) Field for solar plate | Job | 1 |  |  |  |
| 3 | Construction of Submersible Weir for pumping | Job | 1 |  |  |  |
| 4 | Construction of RCC Sump-I \*\*\*\*\*\*litres capacity | Job | 1 |  |  |  |
| 5 | Design & Construction of RCC Sump-II for intermediate stage | Job | 1 |  |  |  |
| **TOTAL** |  |

Rupees ( .....................................) only

**SCHEDULE - 'B'**

Schedule of materials to be issued to the contractor:-**Note: No materials will be issued to the contractor.**

**SCHEDULE - 'C'**

Tools and plants to be hired to the contractor:-**Note: Tools and Plants should be arranged by the contractor.**

**SCHEDULE - ‘D’**

Detail item of work as per Bill of Quantity. Extra schedule for specific requirements/ document for the work, if any

**SCHEDULE - ‘E’**

Reference to General Rules and Directions.

Name of Work:**Survey, design, supply, installation, testing & commissioning of solar pumping system all complete with 5 years free service maintenance as per specified in tender document for \*\*\*\*\* w/s/s including constructions of civil works as per schedule given in tender document (under JJM 2021-22).**

1. Estimated cost of work : Rs. **\*\*\*\*\*\*\*\*.00**
2. Earnest Money : **Rs\*\*\*\*\*\*\*.00 (** 2% of Tender Amount**)**
3. Performance Guarantee : Rs. **\*\*\*\*\*\*\*.00**(3 % of Tender Amount)
4. Security Deposit : Rs. **\*\*\*\*\*\*\*.00**(5 % of Tender Amount)

**SCHEDULE - 'F' (1 to 20 – Condition of Contract)**

**GENERAL RULES AND DIRECTIONS**

|  |  |
| --- | --- |
| Officer inviting Tender: | **Executive Engineer, PHED****\*\*\*\*\*\*\*\*\* WATSAN Division, \*\*\*\*\*\*\*\*** |
| Maximum percentage of quantity of items of work to be executed beyond which rates are to be determined in accordance with clause 12.2 and 12.3 | See below |

**Definitions:**

|  |  |  |
| --- | --- | --- |
| **2(v)** | Engineer-in-Charge | **Executive Engineer, PHED****\*\*\*\*\*\*WATSAN Division.****or****Concerned Sub-Divisional Officer** |
| **2(viii)** | Accepting Authority | **Chief Engineer \*\*\*\*, PHED. Mizoram** |
| **2(xi)** | Standard Schedule of rate | MPWD/PHE Schedule Rate |
| **2(xii)** | Department | PHE Department |
| **9(ii)** | Latest Standard CPWD Contract Form GCC | **Applicability of the Clauses under CPWD Form 8 for this particular tender are listed below** |

**Clause 1:**

|  |  |  |
| --- | --- | --- |
| **1** | Time allowed for submission of Performance Guaranteefrom the date of issue of letter of intent: | 10 Days |
| **2** | Maximum allowable extension beyond the periodprovided in (1) above | 5 Days |

**Clause 1(A):**

|  |  |  |
| --- | --- | --- |
| **I** | Security Deposit | 5% of the tendered value will be deducted |

**Clause 2:**

|  |  |  |
| --- | --- | --- |
| **I** | Authority for fixing compensation under clause 2: | **SE** |

**Clause 2A (Incentive for early completion):**

|  |  |  |
| --- | --- | --- |
| **i** | Whether Clause 2A shall be applicable | **No** |

**Clause 3& 3A (When contract can be determined):**Applicable.

**Clause 4 (Contractor liable to pay compensation even if action not taken under Clause3):**Applicable.

|  |  |  |
| --- | --- | --- |
| **i** | Number of days from the date of issue of letter of intent for reckoning date of start: | **20 Days** |
| **ii** | Milestone(s) as per table given below:- |
| **Sl. No** | Description of Milestone (Physical) | Time allowed in days for execution of work (from date of start) | Amount to be withheld in case of non-achievement of milestones |
|  | **No Description of Milestone (Physical) in The DPR** | **As before Column** | Penalty Clause applicable as per clause-2 of CPWD Form-8. |
|  | **“NIL”** | **“ NIL”** |
|  |  |  |
| **iii** | Time allowed for execution of work:: | **\*\* Months** |
| **iv** | Authority to decide: |
|  | (i) Extension of time: |  | As per CPWD Works Manual |
|  | (ii) Rescheduling of mile stones: |  | **SE i/c** |

**Clause 5 (Time and extension for delay):**

**Clause 6, 6A (Measurements of work done) :** Clause applicable

**Clause 7 (Payment on Inter to intermediate Certificate to be regarded as Advances)** : Not applicable

|  |  |
| --- | --- |
| Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment: | **Rs…….** |

**Clause 8, 8A and 8B (Completion Certificate and Completion Plans**) : Applicable

**Clause 9 (Payment of final bill)**: P**ayment will be made depending on the availability of Fund and no other claims shall be made by the contractor. Interest shall not be claimed by the contractor if payment is not made due to unavailability of fund.**

**Clause 10A (Materials to be provided by contractor):**All materials will be provided by the contractor at his own expense.

List of testing equipment to be provided by the contractor at site lab (**Contractor may list down all the equipments**).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  |
| 4 |  | 5 |  | 6 |  |

**Clause 10B(ii): Mobilization Advance:** Applicable if the contractor made a request in writing provided fund is available.

**Clause 10C:Payment on Account of increase in Price/wages due to Statutory Orders:**Not applicable.

**Clause 10CA: Payment due to variation in prices of materials after receipt of tender:** Not applicable

**Clause 10CC: Payment due to increase/decrease in Prices/Wages:** Not applicable

**Clause 10D: Dismantled Materials Govt. Property:** Applicable.

**Clause 11:**Applicable, all specification and appropriate latest IS Code and CPHEEO Manual will be followed for each item.

**Clause 12: Deviation on Extra Items,Substituted Items, Quantities etc. :A**pplicable

**Clause 13: Foreclosure of contract due to abandonment or reduction in Scope of work: A**pplicable

**Clause 14: Carrying out part work at risk & cost of Contractor: A**pplicable

**Clause 15: Suspension of work: A**pplicable

**Clause 16:Action in case work not done as per Specifications** : Applicable

**Clause 17: Contractor liable for Damages, defects during maintenance period :**Applicable

**Clause 18: Contractor to supply Tools and Plants :**

List of mandatory machinery, tools & plants to be deployed by the contractor at site **(Contractor has to list down the items with quantity, Owned/Leased and related documents must be furnished. Extra items**

**or quantity, if available, may also be mentioned)**:-

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl.No.** | **Item Description** | **Quantity** | **Unit** |
| 1 | Petrol engine Generator welding machine( Potable) | 1 | No |
| 2 | Chain Pulley – 5Tonnes capacity | 1 | No |
| 3 | Earth Anger-200mm bit | 1 | No |
| 4 | Digital Clamp Meter (AC/DC) | 1 | No |
| 5 | Pickup/Tippersfour wheel drive | 1 | No |
| 6 | Excavator/Bulldozer capacity | 1 | No |
| 7 | Diesel Generator, 3-phase, 125kVA | 1 | No |
| 8 | Concrete mixers of full bag capacity | 1 | No |
| 9 | Needle vibrator | 2 (1 Oil + 1 Electric) | No |

**Clause 18A & 18 B:**Applicable

**Clause 19 (Labour Laws to be complied by the Contractor) :**Applicable

**Clause 20 (Minimum wages Act to be complied with)** : Applicable

**Clause 21(Works not to be Sublet. Action incase of insolvency)** : Applicable

**Clause 22**: Applicable

**Clause 23 (Changes in Firm’s Constitution to be intimated )** : Applicable

**Clause 24**: Applicable

**Clause 25: (Settlement of Disputes &Arbitration ) :** Applicable

|  |  |
| --- | --- |
| Constitution of Dispute Redressal Committee (DRC) | Competent Authority to appoint |
| As per provisions of CPWD Works Manual. | Secretary to the Govt. of Mizoram, PHE Department.  |

**Clause 26: (Contractor to indemnify Govt. against Patent Rights) :**Applicable

**Clause 27: (Lumpsum provisions in Tender) :**Applicable

**Clause 27: (Lumpsum provisions in Tender) :**Applicable

**Clause 28: (Action where no Specifications are Specified) :**Applicable

**Clause 29 & 29A: (Withholding and lien in respect of Sum due from Contractor) :**Applicable

**Clause 31, 31A & 32: (Water Supply) :**Applicable

**Clause 33: (Return of Surplus Materials) :**Applicable

**Clause 34: (Hire of Plant & Machinery) :**Applicable

**Clause 35: (Condition relating to use of asphaltic materials) :**Applicable

**Clause 36 (i): (These are minimum requirement. If available, in addition to this may also be mentioned).**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S No | Minimum qualification of Technical representative | Discipline | Designation (Principal Technical Representative | Minimum experience | Number | Rate at which recovery shall bemade from the contractor in theevent of not fulfilling provision of clause 36(i) |
| Figures | Words |
| 1 | Graduate Engineer | Mechanical |  | 5 Years | 1 |  |  |
| 2 | Diploma Engineer | Electrical |  | 3 Years | 1 |  |  |
| 3 | Diploma Engineer | Civil |  | 5 Years | 1 |  |  |

Note: A retired Assistant Engineer from Government service holding Diploma will be treated at par with Graduate Engineers.

**Clause 37: (Levy/Taxes payable by Contractor) :**Applicable.

**Clause 38: Conditions for reimbursement of levy/taxes if levied after receipt of Tender :**Not applicable.

**Clause 39:( Termination of Contract on death of contractor) : A**pplicable

**Clause 40:( If relative working in the Department then contractor not allowed to Tender) : A**pplicable

**Clause 41:( No Gazetted Engineer to work as Contractor within one year of Retirement) : A**pplicable

**Clause 43: Compensation during War Situations:**Not applicable

**SAMPLE FORMS**

**Form of Performance Security (Guarantee)**

**Bank Guarantee Bond**

In consideration of the President of India (hereinafter called “The Government”) having offered to accept the terms and conditions of the proposed agreement between…………………….and …………………. (hereinafter called “the said Contractor(s)”) for the work ……………. ………. …. …………… (hereinafter called “the said agreement”) having agreed to production of an irrevocable Bank Guarantee for Rs. …………. (Rupees ………………………………… only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

* 1. We, ……………. (hereinafter referred to as “the Bank”) hereby undertake to pay to the Government an amount not exceeding Rs. ……….. (Rupees………………. Only) on demand by the Government.
	2. We, …………….(indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the Government stating that the amount claimed as required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. ………………….. (Rupees ……………….only)
	3. We, the said bank further undertake to pay the Government any money so demanded not withstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.
	4. We, ………………… (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-Charge on behalf of the Government certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.
	5. We, ………………… (indicate the name of the Bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
	6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
	7. We, ………………. (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Government in writing.
	8. This guarantee shall be valid up to …………………………unless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs.…………………… (Rupees ………………..) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated the …….day of ……………for………………………..(indicate the name of the Bank)

**Sample letter of acceptance of tender**

[Reference para 20.4.9(1)]

GOVERNMENT OF MIZORAM

OFFICE OF THE ……………….

PHE DEPARTMENT, ………………….

No. ..................... Dated, the .....................

To

(Name and address of the contractor)

Subject : ................................................................................………..

 (Name of the work as appearing in the tender for the work)

Dear Sir (s),

Your tender for the work mentioned above has been accepted on behalf of the Governor of Mizoram at your tendered/negotiated tender amount of Rs……………………. (Rupees……………………only), which is .........% below/above the estimated cost of Rs. ....... ………..(Rupees…………………….only).

2. You are requested to submit the performance security/guarantee of Rs……… (Rupees…………

…………..only) within …… days\* of issue of this letter. The performance guarantee shall be in theprescribed form as provided in clause 1 of the General Conditions of Contract for CPWD Works, and shall be valid up to …………..

3. On receipt of the prescribed performance guarantee, necessary letter to commence the work

shall be issued, and the site of work handed over to you thereafter.

4. Please note that the time allowed for carrying out the work as entered in the tender (………….

days/weeks/months) shall be reckoned from the …………day\* after the date of issue of this letter.

Yours faithfully,

………………………………

………………………………

For and on behalf of Governor of Mizoram

(BY REGISTERED/SPEED POST)

**Sample letter for commencement of work**

[Reference para 20.4.9(2)]

**GOVERNMENT OF MIZORAM**

**OFFICE OF THE …………**

**PHE DEPARTMENT**

No. ..................... Dated, the .....................

To

(Name and address of the contractor)

Subject: ................................................................................………..

 (Name of the work as appearing in the tender for the work)

Ref: 1. Performance security/guarantee submitted by you vide your letter no………. dated...............for the above work.

2. This office letter of intent/acceptance of your tender no……………..date ….....……….

Dear Sir (s),

1. You are requested to contact the Executive Engineer ..................... (complete address) for taking possession of site and starting the work at once.

2. In continuation to the letters referred to above, you are requested to attend this office to complete the formal agreement within fifteen days from the date of this letter.

Yours faithfully,

…………………………………….., PHED,

……………………………………..

……………………………………..

For and on behalf of Governor of Mizoram