## Notice Inviting RFP

(to be published in newspapers/website)

No. Agri/Engg/4958/RFP/Solar Pump-set/ 2021-22/01

dtd. 20/08/2021.

Chief Engineer Agriculture, Assam on behalf of the Director of Agriculture, Assam invites Request Proposal for empanelment of manufacturers/ system integrators for Supply, Installation and Commissioning of SPV Water Pumping System and Installation of STW on turn-key basis in Assam. Interested suppliers who have qualified in the competitive bid published and conducted by Energy Efficiency Service Ltd. (EESL) on behalf of MNRE vide No. EESL/06/2020-21/KUSUM/SWPS/1-10HP/Off Grid/202101032 Dated 14-1-2021 may submit their proposal for empanelment. Detail RFP document may be downloaded from departmental website <a href="https://diragri.assam.gov.in">https://diragri.assam.gov.in</a>

The proposal shall be submitted electronically in PDF format as an attachment to <u>ceagriassan.yahoo.in</u> and the hardcopy to be submitted to O/o the Chef Engineer, Agriculture, Assam, Directorate of Agriculture, Khanapara, Guwahati-22 on or before 06/09/2021 from 10.00 AM to 5.00 PM.

The authority will not be liable for delay in submission of proposal due to any reason and system errors (if any).

Sd/-Chief Engineer, Agriculture, Assam Khanapara, Guwahati-22

## **REQUEST FOR PROPOSALS**

## **FOR**

Empanelment of manufacturers/ system integrators for Supply, Installation and Commissioning of SPV Water Pumping System and Installation of STW on turn-key basis in Assam

Issued by: Chief Engineer, Agriculture, Directorate of Agriculture,

Assam, Khanapara, Guwahati-22.

Contact Name: Chief Engineer, Agriculture, Assam

Email: ceagriassam@yahoo.in

RFP Issued: 24/08/2021

**Responses Due: 06/09/2021** 

#### 1. Introduction

The Chief Engineer, Agriculture, Assam on behalf of the Director of Agriculture, Govt. of Assam received an allocation of Rs. 423.07 Crore under RIDF for installation of Solar operated Shallow Tube Well for creation of irrigation potential in the state. The scheme intends to supply, installation and commissioning of SPV water pumping system and installation of shallow tube well (STW) on turn-key basis to small and marginal farmers at a subsidized rate which will be installed at various locations in different districts of Assam. The department proposes to install a total target of **11,700 nos.** of STWs in the State during the financial year 2021-22. However, 10% variation of target may occur. These STWs are to be operated with Solar Photovoltaic Water Pumping System with 2 HP DC Solar Pumps (Surface/Submersible) (PV Array capacity of 1800Wp).

The purpose of this Request for Proposals (RFP) is to empanel manufacturers/ system integrators, who have qualified in the competitive bid published and conducted by Energy Efficiency Service Ltd. (EESL) on behalf of MNRE vide No. EESL/06/2020-21/KUSUM/SWPS/1-10HP/Off Grid/202101032 Dated 14-1-2021, for "Supply, Installation and Commissioning of SPV Water Pumping System and Installation of STW" on turn-key basis under RIDF or any other state sponsored scheme, for the year 2021-22.

#### 2. RFP Timeline

Schedule of events for the RFP is as follows-

Event	Date	Time
RFP Issued	24/08/2021	4.00 PM
Webinar for clarification	01/09/2021	2.00 PM
RFP submission date (by email and hardcopy)	06/09/2021	10.00 AM to 5.00 PM
Publishing of Empanelled list	14/09/2021	5.00 PM

### 3. Admissible subsidy

As per schematic provision admissible subsidy is as follows:

SN	Particulars of item	Admissible subsidy	Farmer's share
1.	Supplying, installation and commissioning of SPV	85%	15%
	water pumping system.		
2.	Installation of STW (Civil work)	75%	25%
3.	Construction of 10000 litre capacity water storage tank	85%	15%
	(Optional item)		

## 4. Standard operating procedure (SOP)

Standard operating procedure will be as per guideline of the scheme as attached in Annexure-2

## 5. Technical Specification of Solar PV Water Pumping system

Technical specification of SPV water pumping system with 2 HP DC solar pumps (surface/ submersible) (PV array capacity of 1800Wp) shall be in compliance with technical specification mentioned for the same in the MNRE Bid stated above.

## 6. Benchmark cost of SPV water pumping system

Benchmark cost for standalone solar pumps is as approved by MNRE vide order no. 318/38/2018-GCRT dtd. 25.06.2020 (at Annexure-3) or rate approved by MNRE for the year 2021, as and when published will be applicable.

## 7. Scope of works

Scope of work for supply, installation and commissioning of SPV water pumping system and installation of STW should be in accordance with Scope of works attached at Annexure -1

## 8. Performance Security Deposit

Prior to empanelment, on issue of notice from purchaser, the successful Respondents shall deposit Performance Security initially for an amount of Rs.10 Lakh (Ten lakh) in the form of Fixed Deposit Receipt/ Bank Guarantee from any Nationalized/ Scheduled Bank duly pledged in favour of 'Chief Engineer, Agriculture, Directorate of Agriculture, Assam, Khanapara, Guwahati-22, payable at Guwahati. The Performance Security Deposit shall be adjusted time to time for a value equivalent to 3% of the contract amount. The Performance Security Deposit shall be valid up to 60 days after the date of completion of warranty and CMC period to be effective from the date of commissioning of the SPV pumping system. Failure on the part of the successful Respondents to deposit the Performance Security shall constitute sufficient grounds for de-listing. The Performance Security Deposit, as applicable, shall be forfeited in part, or full, if the Respondent not able to complete the contract as per contract agreement including warranty and CMC obligation. A model format for Bank Guarantee for performance security is attached at Annexure-4

#### 9. Format for Submission of RFP

All responses must be submitted electronically in PDF format as an attachment to an email and sent to the email address shown in the cover page of RFP document. The subject line of the email should be: "[Organization] Solar RFP Response." However, a hardcopy of the RFP required to be submitted by hand or by registered post as per RFP timeline stated above.

The RFP process may be withdrawn or cancelled by the Director of Agriculture, Assam at any time without assigning any reason thereof. The Director reserves the right to accept or reject any proposal, and to annul the empanel process and reject all proposal at any time prior to Award of Contract, without thereby incurring any liability to the affected proposer(s).

All costs associated with responding to this RFP will be borne by the Respondent.

The following information must be submitted in the proposal in the order shown.

SN	Particulars	Responses
		(separate sheet may be used)
1.	Business name (name of company)	
2.	Registered Office Address	
3.	E-mail	
4.	Web site	
5.	Authorized Contact Person(s) with name, designation, Address and Mobile Phone No., Email address/ Fax No. to whom all references shall be made	
6.	Proposer or his authorized signatory must put his seal & signature in each & every pages of this RFP document as token of acceptance. All formats, annexure provided in the RFP document must be completely filled (wherever required) and duly signed by the proposer or his authorized signatory with seal, failing which the proposal may be rejected.	
7.	Have the Respondent/Company ever been debarred By any Govt. Dept./ undertaking/ PSU.	
8.	GST No.	
9.	PAN No.	
10.	Year of Incorporation	
11.	Description of Respondent's capabilities in	
	providing its products and/or services	
12.	Organizational background and experience in	
	providing solar projects.	
13.	Key team members who would work on this project	
14.	A detailed technical description of proposed SPV water pumping system and all components	
15.	Description and specifications of the mounting structure, foundation and installation techniques, tracking system.	
16.	Warranty and CMC	
17.	Undertaking for execution of work as per Scope of Work for Supply, installation and commissioning of SPV water pumping system and installation of STW. (Format in Annexure-5)	
18.	Documentary evidence of being approved in the competitive bid published and conducted by Energy Efficiency Service Ltd. (EESL) on behalf of MNRE vide No. EESL/06/2020-21/KUSUM/SWPS/1-10HP/Off Grid/202101032 Dated 14-1-2021	

## Annexure-1

## SCOPE OF WORK FOR SUPPLY, INSTALLATION AND COMMISSIONING OF SPV WATER PUMPING SYSTEM AND INSTALLATION OF STW

1.	Supply, installation and commissioning of SPV water pumping System:
	The empanelled Respondent shall generate demand for their proposed SPV water pumping system
	among prospective farmers in various districts of the State of Assam and as per interest of
	beneficiary farmers, they will select the system from empanelled manufacturers/ system integrators.
	Respondent shall supply, install and commission of SPV water pumping system and install STW at
	various locations in different districts of Assam without any preference for any specific site/district or
	without any prejudice to any beneficiary.
1.1	The Respondent will have full responsibility for packaging, forwarding, transportation, supply and
	any type of breakages/ losses etc. thereto. The goods/ systems will be delivered at the destination,
	installed and commissioned at site in the perfect conditions.
1.2	Respondent shall install SPV water pumping system with 2 HP DC surface or submersible solar pump
	(PV Array capacity of 1800Wp) as the case may be, after installation of STW successfully.
	Manufacturers will have to put a Name plate/ Label and Mark Bar code &/ Serial No./ Code No. etc.
	of their products as per NABL/ MNRE/ BIS/ BEE or other applicable specification(s).
1.3	The Respondent shall be responsible for survey (selection of proper bore well/ tube well having
	sufficient yield in the premises of beneficiary), supply, installation & commissioning of various
	capacities/ heads of SPV water pumping systems with all required accessories and fittings i.e. SPV
	panels should be mounted on a suitable structure with a provision of three times manual tracking,
	surface/ submersible motor pump set with a suitable inverter/ controller with a provision of remote
	monitoring of pump, electronics (MPPT, Inverter, Electronics Protections), interconnected cables, on-
	off switch, GI/ HDPE riser pipe/ suction pipe & all required accessories, fittings related to civil works
	along with 5 years warranty & Comprehensive Maintenance Contract (CMC) etc. in different villages/
	sites located all over the state of Assam. The same make of solar panels, pumps and inverter/
	controller, for which the test report is submitted in the RFP, should be supplied by the Respondent.
1.4	Civil works for installation/ grouting of SPV pole/ mounting structure/ electrical work etc. shall be
	scope of Respondent. It should have proper foundation as the steel structure of solar panel has to
	withstand wind of up to 150 km/hr velocities. A model Plan and estimate of foundation for the steel
	structure of solar panel is attached at Annexure –6 which is exclusive of benchmark cost.
1.5	All metal casing or shielding of the pumping system shall be thoroughly grounded to ensure safety of
	the SPV water pumping system.

- An Operation and Maintenance Manual, in both Assamese and English language, should be provided with the SPV water pumping System. The manual should have information about solar energy photovoltaic modules, motor pump set, tracking system, mounting structures, Electronics & Switches etc. it should have also clear instructions about mounting of PV module, DO's and DONT's and on regular maintenance and trouble shooting of the pumping system. Name and address of the person or centre to be contacted in case of failure or complaint should also be provided. A warranty card for the modules and the motor pump set should also be provided to the beneficiary. Further, a certificate shall have to be provided by the Respondent, from any license holder contractor/ supervisor, certifying that all electrical works are carried out in accordance with applicable electrical safety standards prescribed by APDCL/ Govt. Of Assam from time to time.
- 1.7 The Respondent shall be required to submit performance report to the purchaser after commissioning on half-yearly basis till completion of Comprehensive Maintenance Contract (CMC) period. The Respondent will submit the consolidated annual performance report to the purchaser, which will contain an abstract of half-yearly reports submitted already.
- 1.8 The supplied materials should be strictly as per TS by MNRE, otherwise it will be liable for rejection. In case of any defective material or any type of substandard material is supplied, the material will be rejected and it will be the responsibility of the Respondent for taking back the rejected materials at his own cost within (15) fifteen days from the date of communication of rejection. Purchaser/beneficiary shall not be responsible for security/safety of the material rejected. Any type of fittings, accessories, assemblies, essentially required components as per NABL/ MNRE/ BIS/ BEE Standards & Practices as applicable, but not described or mentioned in bidding document shall have to be supplied by the Respondent at his own cost.
- 1.9 Defective materials will not be accepted under any conditions and shall be rejected outright without any compensation. The Respondent shall be liable for any loss/ damage sustained by purchaser due to defective work. The Respondent shall replace the defective material at his own expenses to the satisfaction of purchaser/ beneficiary. The Respondent 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 the materials.
- 1.10 There should be provision of remote monitoring on all systems through Remote Monitoring System. Such system shall be with the latest software/ hardware configuration and data connectivity for online/ real time monitoring, subject to availability of service network. In areas where internet services are not available, the data shall be made available through data logger. These systems should be supplied and maintained by the Respondent under CMC for 5 years.
- **1.11** The Respondent shall not assign, sublet or transfer the contract or any part thereof to any party without the prior express consent of the purchaser.
- 1.12 In the event of any of the breach of the conditions of the contract at any time on the part of the Respondent, the contact may be terminated by the purchaser without any compensation to the Respondent. All payments due shall be forfeited.
- 2. Five years Warranty and Comprehensive Maintenance Contract (CMC):
- 2.1 It is mandatory on the part of Respondent for providing post installation CMC services for maintaining and monitoring the commissioned SPV water pumping systems up to the period of 5 years from the date of commissioning. The date of CMC will begin from the date of commissioning of the SPV water pumping system.

- 2.2 For carrying out the maintenance service during the warranty & CMC effectively, the Respondent shall establish at least one local service centre at each district where number of SPV water pumping systems commissioned by Respondent are equal or more than one hundred. The Respondent will maintain the records of maintenance/ certificate of half-yearly visits. As the maintenance facility is to be provided in the warranty of CMC, hence no additional payment will be made for maintaining the above inventory at the service centre.
- 2.3 It shall be the responsibility of the Respondent to ensure 100% working status during the five year warranty and CMC period. The Respondent will have to arrange all required instruments, tools, spares, trained manpower and other necessary facilities at service centre and shall repair/ replace all defective components such as SPV module, Inverter, controller, pump, mounting structures, electronics, wiring etc.; at his own cost against warranty.
- **2.4** During 5 year warranty and CMC service shall have two distinct components as described below:
  - a) **Preventive / Routine Maintenance**: This shall be done by the Respondent at least once in every six months and shall include activities such as cleaning and checking the health of SPV water pumping system, tightening of all electrical connections, adjusting nut & bolts, screws, members etc. of mounting structure, and any other activity that may be required for proper functioning of the SPV water pumping system as a whole.
  - b) Breakdown/ Corrective Maintenance: Whenever a complaint is lodged by the user/ purchaser, the Respondent or his representative shall attend to resolve the same in not exceeding (7) seven days from the date of intimation and the rectification/ replacement work done shall be certified by the District engineer/ beneficiary, failing of which the Breakdown/ Corrective Maintenance shall be done by the purchaser at the risk and cost of the Respondent and all such expenses shall be recovered from him.

#### 2.5 Insurance:

Insurance of the SPV water pumping system is under the scope of CMC covering the warranty period. The Respondent is responsible for insurance coverage of the SPV water pumping system for following events:

- a) Loss & theft
- b) Damages due to lightening, hailstorm or other natural calamities
- 2.6 After the commissioning of the SPV water pumping system, the following instance might lead to shortening of the CMC period. Accordingly it may lead to recovery of exigency charges @4% of the work order value of that pump, for each year of reduction from intended CMC period of 5 years.
  - a) Water level recedes below pump shutoff level
  - b) Theft of component(s)
  - c) Panel breakage/ damage
  - d) Bore well collapse
  - e) Controller damage

### 3 Timeline:

Respondent shall have to commission the SPV water pumping system within the time period allowed, on the basis of quantity and location of works, in the respective work order.

3.1 In case of non-commission of SPV water pumping system within the allowed time period due to unavoidable circumstances or event of Force Majeure, purchaser may grant time extension subject to justified reasons submitted by the Respondent to his satisfaction.

3.2	The time period specified in the work order shall be deemed to be the essence of the contract and
	the Respondent shall arrange all the needful within the stipulated period.
4	Installation of STW (Boring works)
4.1	As per requirement of site and aquifer condition, two separate provisions for STW are available. Viz.
	- (i) STW up to a depth of 45 meter by manual boring commissioned with surface pump and (ii) STW
	up to a depth of 75 meter by machine boring commissioned with submersible pump.
4.2	Site of construction of bore-well would be in the farm land of the beneficiary farmer
4.3	Construction of bore-well is exclusively for irrigation purpose
4.4	Construction of bore-well up to 45m depth of boring in case of surface/ centrifugal pump and up to
	75m depth of boring in case of submersible pump
4.5	Skilled artisan would be engaged for construction of bore-well
4.6	Boring works should to be executed as per plan and estimate approved by the Agriculture
	Department as attached in Annexure -7 and 8. Bill will be raised as per actual measurement recoded
	in MB for civil work of STW.
4.7	Explore the water bearing strata to achieve maximum yield from the bore-well.
4.8	Survey of site and any bore-well in the nearby field to assess the minimum boring required to
	achieve the desired yield.
4.9	Successful installation of STW to achieve adequate discharge after coupled with 2 hp surface/
	submersible solar pump.
4.10	Obtain satisfactory certificate indicating discharge (litre/sec), litho log of bore-well jointly signed by
	the beneficiary and Junior Engineer concerned.
4.11	Area affected by arsenic and Fluoride shall not be considered for construction of bore-well
4.12	Bore-well having inadequate discharge shall be considered as failure boring.
4.13	No. reimbursement shall be made against failure boring
4.14	The respondent must complete his job within the stipulated time frame.

## No. 318/38/2018-GCRT Government of India Ministry of New & Renewable Energy

Block No. 14, CGO Complex Lodhi Road, New Delhi Date: 25 July 2019

#### OFFICE MEMORANDUM

Subject: Benchmark costs for Off-grid Solar PV Systems and Solarisation of Grid Connected Agricultural Pumps for the Year 2019-20 –reg.

I am directed to convey the approval of competent authority for issuing of the benchmark costs for Off-grid Solar PV Systems and Solarisation of Grid Connected Agricultural Pumps for the Year 2019-20. System-wise benchmark costs are as under:

#### (i) Standalone Solar Pumps

Pump	Pump Type	Benchmark Cost (Rs. / HP)		
Capacity		General Category States	NER/ Hill States/ Island UTs	
0.5 HP	AC/DC Surface	53000*	58300*	
	AC/DC Submersible	68000*	74800*	
1 HP	AC Surface	102000	112200	
	AC Submersible	113000	124300	
	DC Surface	108000	118800	
	DC Submersible	119000	130900	
2 HP	AC Surface	65000	71500	
	AC Submersible	76000	83600	
	DC Surface	73000	80300	
	DC Submersible	86000	94600	
3 HP	AC Surface/ Submersible	67000	73700	
	DC Surface/ Submersible	74000	81400	
5 HP	AC Surface/ Submersible	56000	61600	
01	DC Surface/ Submersible	66000	72600	
7.5 HP	AC/DC Surface/ Submersible	56000	61600	
10 HP	AC/DC Surface/ Submersible	51000	56100	

<sup>\*</sup> Benchmark cost per system instead of per HP shown for 0.5 HP solar pumps

## (ii) Solar Lighting Systems

System	Benchmark Costs (Rs./Wp)	
	General Category States North Eastern States/Hill States/ Island UTs	
Solar Study Lamps	160	176
Solar Street Lights (with Li batteries)	299	328

## (iii) Standalone Solar Power Plants/Packs

Capacity	Battery back-	Benchmark Costs (Rs./Wp)	
	up (hrs)	General Category States	North Eastern States/Hill States/ Island UTs
Up to 10 kW	6	94	103
	3	74	81
	1	62	68
Above 10 kW	6	84	92
and up to 25 kW	3	66	72
	1	55	60

## (iv)Solarization of Grid-connected Agriculture Pumps

Capacity	Benchmark Costs (Rs./Wp)		
	General Category States North Eastern S States/ Island U		
Up to 10 kW	54	59	
Above 10 kW	48	52	

2. The above benchmark costs are inclusive of total system cost and its installation, commissioning, transportation, insurance, five year AMC/CMC, and applicable fees and taxes.

(Shobhit Srivastava) Scientist-C

To

## All Concerned

Copy to Dir. (NIC) to upload this on the Ministry's website

# Format for Bank Guarantee for Performance Security (To be on non-judicial stamp paper of Minimum Rs. 1000/-)

This Deed of Guarantee made on (Day) of (Month) of	
(Year) Between (hereinafter to be called as Guarantor	) or
77 1 0 111	•
Respondent), and in favour of the Director of Agriculture, Assam, (hereinafter to be called as the Authority) on	ı the
following Terms, and Conditions:	
In consideration of the [Insert name of the Respondent] submitting the RFP for "Solar Project Development"	vide
No.Agri/ Engg/ dtd and Authority considering such response to the RFP of [In	
name of the Respondent] (which expression shall unless repugnant to the context or meaning thereof include	
executers, administrators, successors and assignees) and selecting the Successful Respondent and issuing letter	
empanelment to (Insert Name of Successful Respondent) as per terms of RFP and the same having been accessful Respondent as per terms of RFP and the same having been accessful Respondent as per terms of RFP and the same having been accessful Respondent and issuing been accessed as the same having	
by the successful Respondent). As per the terms of the RFP, the [insert name & address of bank] hereby ag	
unequivocally, irrevocably and unconditionally to pay to the Authority at [Insert Name of the Place from	
address of the Authority forthwith on demand in writing from the Authority, or any officer authorized by it in	
behalf, any amount upto and not exceeding Rupees [Rupees (Total Value in wor	as)
only, on behalf of M/s [Insert name of the Respondent]. This guarantee shall be valid and binding on this Bank u	
and including and shall not be terminable by notice or any change in the constitution of the B	
or the term of Agreement or by any other reasons whatsoever and our liability hereunder shall not be impaire	
discharged by any extension of time or variations or alternations made, given, or agreed with or without	ou
knowledge or consent, by or between parties to the respective Agreement.	
Our liability under this Guarantee is restricted to Rupees(both in numbers and words)	
Our Guarantee shall remain in force until the Authority shall be entitled to invoke this Guarantee	
till The Guarantor Bank hereby agrees and acknowledges that the Authority shall have a right	nt to
invoke this BANK GUARANTEE in part or in full, as it may deem fit.	
The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand	d by
the Authority, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to m	ıake
the said payment to the Authority.	
The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions	and
notwithstanding any objection by [Insert name of the Respondent]. The Guarantor Bank shall not require	
Authority to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any reco	
against the Authority in respect of any payment made hereunder.	
This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Gauhati s	shal
have exclusive jurisdiction.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with s	suck
content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the man	
provided herein.	
This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructu	rinc
or any other change in the constitution of the Guarantor Bank.	3 1111
This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly the Author	oritz
shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arb	
proceedings against the selected Supplier, to make any claim against or any demand on the Supplier or to give	
notice to the Supplier or to enforce any security held by the Authority or to exercise, levy or enforce any distr	ress
diligence or other process against the Respondent.	
Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Ruj	
(Rupees only) and it shall remain in force until we are liable to pay the guaranteed amount of the state of the sta	oun
or any part thereof under this Bank Guarantee only if the Authority serves upon us a written claim or demand.	
Signature	
Name	
Power of Attorney No.	
For	
[Insert Name of the Bank]	
Banker's Stamp and Full Address.	
Dated this day of, 20	
Witness:	
1	
Signature	
Name and Address	
2	
Signature Name and Address	
INAILIC ALIU AUULCSS	

## Undertaking for execution of work as per Scope of Work for Supply, installation and commissioning of SPV water pumping system and installation of STW

(To be on non-judicial stamp paper of Minimum Rs. 100/-)

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W/- 1--1--- 41--4 ---- M/-

we declare that, we M/s	_ [insert name of the Respondent] are
Tick mark [√] where applicable)	
[ ] Manufacturer of major componen components] OR [ ] System Integrator	t of SPV water pumping system, namely[name of
Installation and Commissioning of SPV	amined and understood the RFP document for "Supply, Water Pumping System and Installation of STW" issued videDtd: and submit our proposal conforming to

We confirm that neither we nor any of our Affiliate has submitted proposal other than this proposal directly or indirectly in response to the aforesaid RFP.

We shall ensure that we will execute the project as per the provisions of the RFP and all the provisions of the said RFP shall be binding on us.

We accordingly agreed to submit Performance Security Deposit in the event of acceptance of our proposal.

We hereby unconditionally and irrevocably agree and accept that the decision made by the Purchaser in respect of any matter regarding or arising out of the RFP shall be binding on us. We hereby expressly waive any and all claims in respect of RFP process in complete.

We confirm that there are no litigations or disputes against us, which materially affect our ability to fulfil our obligations with regard to execution of contract of capacity offered.

We confirm that we have studied the provisions of the relevant Indian laws and regulations as required to enable us to submit this proposal and execute the contract, in the event of empanelment of us. We further undertake and agree that all such factors as mentioned in the RFP have been fully examined and considered while submitting the proposal.

It is confirmed that our proposal is consistent with all the requirements of submission as stated in the RFP and subsequent communications from the Purchaser. The information submitted in our proposal is complete, strictly as per the requirements stipulated in the RFP and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our proposal. We confirm that all the terms and conditions of our proposal are valid for acceptance for a period as specified in the RFP. We confirm that we have not taken any deviation so as to be deemed non-responsive.

We undertake to supply, install and commission of our SPV water pumping system and install STW at various locations in different districts of Assam without any preference for any specific site/district or without any prejudice to any beneficiary from our end.

We undertake to generate demand for our SPV water pumping system among prospective farmers in

various districts of the State of Assam and we understand that as per interest of beneficiary farmers, they will select the system from empanelled manufacturers/ system integrators as per their choice.

We undertake to carry out the maintenance service during the warranty & CMC effectively for the stipulated period. We undertake that will maintain the records of maintenance/ certificate of half-yearly visits. We understand that as the maintenance facility is to be provided in the warranty of CMC, hence no additional payment will be made for maintaining the above inventory at the service centre.

We undertake that we shall establish at least one local service centre at each district where number of SPV water pumping systems commissioned by us are equal or more than one hundred.

We undertake to set up at least one outlet for delivery of pump-set to the beneficiaries in each of the districts for which the contract is awarded.

We confirm that in clear terms that all the facilities exist in our factory for inspection & testing and these will be made available to the Purchaser or his representative for inspection if Purchaser feels necessary.

We solemnly undertake that the responsibility of execution of the Contract as per the terms and conditions of the RFP/Contract Agreement shall be entirely ours.

We have thoroughly examined and understood the RFP and are fully aware of the scope of work required. We are hereby submitting our proposal as per provision made in the RFP only.

We shall be entirely responsible for all taxes, duties, license fees, etc. All taxes payable as per Government income tax & service tax norms will be payable by us. TDS will be deducted from our payment as per the prevalent laws and rules of Government of India and Government of Assam in this regard.

Dated the	day of	2019
Thanking yo	ou,	
Yours faithf	ully.	

For and on behalf of:

Signature: (Authorized Signatory)

Name of the Person:

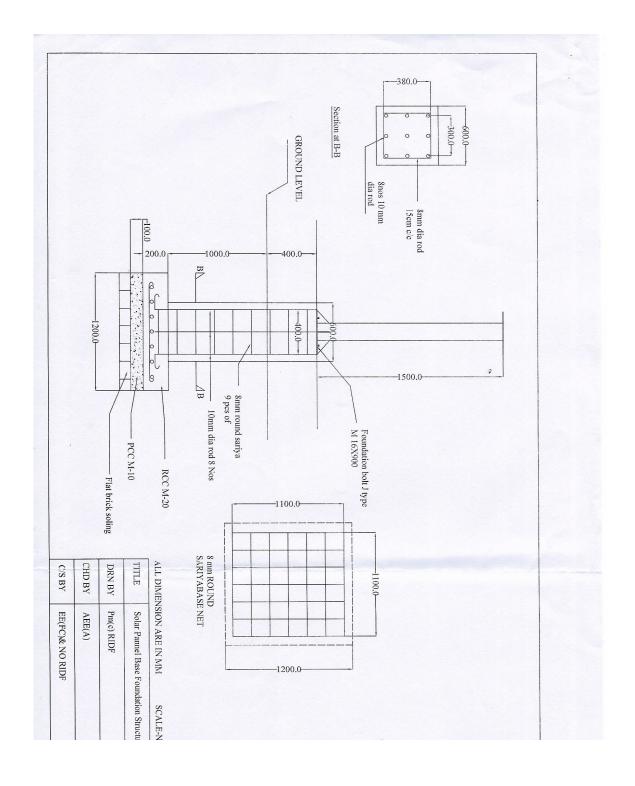
Designation:

Date: Place:

	DETAILED ESTIM RATE:- Schedule rate of	APWD	(Buildir	g) Schedu	le for the	year 20	13-2014		
L. 0	Description of item	Unit	NO	L	В	Н	TOTAL	Rate	Amount
	EARTH WORK								
1	Earth work in excavation for foundation trenches of walls, retaining walls, footings of columns, steps and septic tank etc. including refilling ( return filling ) the quantity as necessary after completing of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in the following classification of soils including bailing out water where necessary as directed and specified.								
	Foundation for Column	Cum	1	1.20	1.20	1.40	2.02		
	Total=						2.02	Rs.108.82	219.38
	BRICK SOLING								
2	Providing brick soling in Foundation and under floor laid to level and in panel after preparing the sul	or with lo-grade	as dire	ality picked ected inclu	jhama t ding cos	oricks, s t materia	and packed and al and labour		
	Brick on flat soling.	Sqm	1	1.20	1.20		1.44		
	TOTAL			1			1.44	368.71	530.94
	PCC 1:2:4						and the second second		
3	Plain cement concrete (1:2:4) works with coarse footing steps, walls etc. as directed and specified in be measured	cluding	curing	complete	n to 32m (shutter	m in fou ing whe	ndation bed for re necessary sha		
	Foundation for Column	Cum	1	1.20	1.20	0.10	0.14		
	TOTAL						0.14	4292.86	618.17
-	RCC				1	1			
	Providing and laying plain/reinforced cement crosstone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor	, and c k (form	uring c work a	omplete bi	it exclud	ing cost	OF TOTTI WORK and	1 2	
4	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor s  (A) In Substructure upto plinth level.  Foundation footing, columns with base, tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and	, and c k (form eparate	uring c work a	omplete bi	it exclud	ing cost	OF TOTTI WORK and	3	
4	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor S  (A) In Substructure upto plinth level.  Foundation footing, columns with base, tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100 mm thick upto plinth	, and c k (form eparate	uring c work a	omplete bi	it exclud	ing cost	OF TOTTI WORK and	1 2	,
4	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor s  (A) In Substructure upto plinth level.  Foundation footing, columns with base, tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and	, and c k (form eparate	uring c work a	omplete bi	it exclud	ing cost	OF TOTTI WORK and	2	,
4	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor s  (A) In Substructure upto plinth level.  Foundation footing, columns with base, tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100 mm thick upto plinth level. N) Without using admixture, c) M25 grade Foundation ( square portion)	y, and c k (form eparate	work a	omplete bu	ement w	ill be me	or form work and paid	2	,
4	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor s  (A) In Substructure upto plinth level.  Foundation footing, columns with base, tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100 mm thick upto plinth level. N) Without using admixture, c) M25 grade  Foundation (square portion)  Above GL	cum	work a	nd reinforc	1.20	o.20	easured and paid	5496.65	4353.38
4	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor S  (A) In Substructure upto plinith level.  Foundation footing, columns with base, tie and plinith beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100 mm thick upto plinth level. N) Without using admixture, c) M25 grade Foundation ( square portion)  Above GL.	cum	work a	nd reinforc	1.20	o.20	o.29	2	4353.38
4	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor S  (A) In Substructure upto plinth level.  Foundation footing, columns with base, tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100 mm thick upto plinth level. N) Without using admixture, c) M25 grade Foundation (square portion)  Above GL  TOTAL  TIMBER SHUTTERING (FORM WORK)  Providing formwork of ordinary timber planking so propping etc., height of propping and centering be properties and centering before the server for the structure forced concrete.	CUM CUM Cum	turing cowork a sely)	1.20 0.60	1.20 0.60	0.20	0.29 0.50 0.79	5496.65	4353.38
	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor S  (A) In Substructure upto plinth level.  Foundation footing, columns with base, tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100 mm thick upto plinth level. N) Without using admixture, c) M25 grade Foundation (square portion)  Above GL  TOTAL  TIMBER SHUTTERING (FORM WORK)  Providing formwork of ordinary timber planking so propping etc., height of propping and centering be properties and centering before the server for the structure forced concrete.	CUM CUM Cum	turing cowork a sely)	1.20 0.60	1.20 0.60	0.20	0.29 0.50 0.79	5496.65	4353.35
	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor S  (A) In Substructure upto plinth level.  Foundation footing, columns with base, tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100 mm thick upto plinth level. N) Without using admixture, c) M25 grade Foundation (square portion)  Above GL  TOTAL  TIMBER SHUTTERING (FORM WORK)  Providing formwork of ordinary timber planking so propping etc., height of propping and centering be removing the same for in situ reinforced concrete:	CUM CUM CUM	work a selection of the control of t	1.20 0.60  ugh finish g floor to c rete work i	1.20 0.60	0.20 1.40 g centerit exceed	0.29 0.50 0.79	5496.65	4353.35
	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor (A) In Substructure upto plinth level.  Foundation footing, columns with base, tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100 mm thick upto plinth level. N) Without using admixture, c) M25 grade Foundation (square portion)  Above GL  TOTAL.  TIMBER SHUTTERING (FORM WORK)  Providing formwork of ordinary timber planking so propping etc., height of propping and centering be removing the same for in situ reinforced concrete in Foundation	CUM CUM CUM Squared place as to g	work a selection of the control of t	1.20 0.60  ugh finish g floor to c rete work i	1.20 0.60	0.20 1.40 centerit exceed	0.29 0.50 0.79	5496.65	
	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor (A) In Substructure upto plinith level.  Foundation footing, columns with base, tie and plinith beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100 mm thick upto plinth level. N) Without using admixture, c) M25 grade Foundation (square portion)  Above GL  TOTAL  TIMBER SHUTTERING (FORM WORK)  Providing formwork of ordinary timber planking so propping etc., height of propping and centering be removing the same for in situ reinforced concrete a Foundation	CUM CUM CUM Squared place as to g	work a selection of the control of t	1.20 0.60  ugh finish g floor to c rete work i	1.20 0.60	0.20 1.40 centerit exceed	0.29 0.50 0.79	5496.65	
	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor (A) In Substructure upto plinth level.  Foundation footing, columns with base, tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100 mm thick upto plinth level. N) Without using admixture, c) M25 grade Foundation (square portion)  Above GL  TOTAL.  TIMBER SHUTTERING (FORM WORK)  Providing formwork of ordinary timber planking so propping etc., height of propping and centering be removing the same for in situ reinforced concrete in Foundation	cum  cum  cum  cum  cum  cum  cum  cum	uring c work a selection of the selectio	1.20 0.60  ugh finish g floor to c rete work i	1.20 0.60	0.20 1.40 centeric exceed	0.29 0.50 0.79 ng, strutting and ling 4.0M and 1.44 3.36	5496.65	
5	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor S  (A) In Substructure upto plinth level.  Foundation footing, columns with base, tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100 mm thick upto plinth level. N) Without using admixture, c) M25 grade Foundation (square portion)  Above GL  TOTAL.  TIMBER SHUTTERING (FORM WORK)  Providing formwork of ordinary timber planking so propping etc., height of propping and centering be removing the same for in situ reinforced concrete a Foundation  TOTAL.  STEEL REINFORCEMENT  Steel reinforcement for R.C.C. work including stra	CUM CUM CUM Sqm Sqm	uring c work a work a let you have a reconstruction of the let you have a reconstruct	1.20 0.60  ugh finish g floor to c rete work i 4.80 2.40  1.20	1.20 0.60  including eiling not n  0.39	0.20 1.40 centeric exceed	0.29 0.50 0.79 ng, strutting and ling 4.0M and 1.44 3.36	5496.65	
5	stone aggregate including dewatering if necessary reinforcement for reinforced cement concrete wor selection of the concrete works not less than 100 mm thick upto plinth level. N) Without using admixture, c) M25 grade Foundation (square portion)  Above GL  TOTAL.  TIMBER SHUTTERING (FORM WORK)  Providing formwork of ordinary timber planking so propping etc., height of propping and centering be removing the same for in situ reinforced concrete in the concrete selection of the concrete sel	CUM CUM CUM Sqm Sqm	uring c work a work a let you have a reconstruction of the let you have a reconstruct	1.20 0.60  ugh finish g floor to c rete work i 4.80 2.40	1.20 0.60  including eiling notin	0.20 1.40 centeric exceed	0.29 0.50 0.79  ng, strutting and ling 4.0M and  1.44 3.36 4.80	5496.65	1747.26

	CEMENT PLASTER SKIRTING WI MORATR IN PROPORTION		,					
7	Foundation portion 1	Sqm	1	2.40	0.40	0.96		
,	Foundation portion 2	Sqm	1	0.60	0.60	0.36		
	TOTAL					1.32	230.44	304.18
		TC	TAL					9774.93
Price escalation due to old schedule rate 21% (@3% per year for 7 year)								2052.73
		Total amount w	ith rate	escalation=				11827.66
		Deduction	1 5% fc	or VAT				591.38
_		Net Amount aff	er ded	uction VAT =				11236.28
	ADD 12% GST							
		TOTAL VAL	UE O	F WORK				12584.63

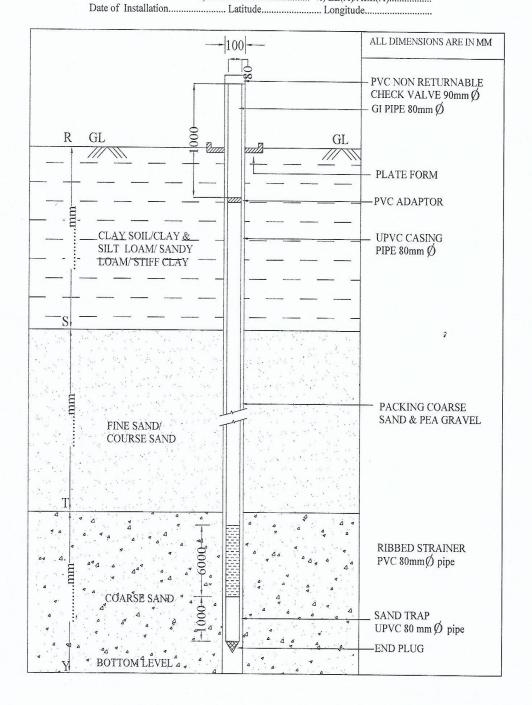
SAY RUPEES 12580.00 (Rupees twelve thousand five hundred eight only )



#### Annexure –7

_		Annexure –7						
MODEL ESTIMATE FOR INSTALLATION OF SHALLOW TUBE WELL (STW) UP TO  METER DEPTH								
Rate based on Schedule of rate of PHE for 2015-16 & APWD(B) for 2013-14								
	SOR							
SN	No terial cos	Description of item	Unit	Quantity	Rate	Amount		
<b>A.</b> I <b>via</b>	5.1 (h)	Medium duty Galvanized Iron (GI) pipe 80	Meter	1.5	611.1	916.65		
1	3.1 (11)	mm dia having ISI Mark	1,16,61	1.5	011.1	710.03		
2	5.3 (6)	UPVC Casing pipe withstanding 6kgf/cm <sup>2</sup> 80	Meter	38.5	310.2	11942.70		
		mmdia						
3	5.2 (c)	PVC ribbed screen stainer 80 mm dia having	3.6		471.0	2027.20		
4		ISI mark, PVC non returnable check valve 90mm dia	Meter	6	471.2	2827.20		
-		having ISI mark.	Nos.	1	300	300.00		
5	6.1.7 (h	PVC End plug, 90 mm dia best quality having						
	(110)	ISI Mark.	Nos.	2	54.2	108.00		
6	6.1.1(h)	1 6	Nos.	5	42	210.00		
7	6.1.2 (h	·   1	Nos.	1	78	78.00		
9		PVC suction pipe dia 75mm with working		•	150	1.50.00		
10	6.8.1 (a	pressure 6kgf/cm <sup>2</sup> ) Solvent cement (250 ml)	Meter No.	1	150 152	150.00 152.00		
10	0.6.1 (a	SUB TOTAL(A)=	NO.	1	132	16,684.55		
D I .1		· , ,				10,00 1100		
<b>B. Lat</b>	7.1.3	for Installation of STW  Labour charge of making bore hole of 100 mm dia						
-	, 11.0	and collecting sample of soil at every 3.00 Meter						
		depth.						
		a. For 0 to 20 m depth	Meter	20	193.6	3872.00		
		b. For 20 m to 40 m depth	Meter	20	301.6	6032.00		
		c. For 40 m to 60 m depth	Meter	5	372.4	1862.00		
2	7.1.12	Labour charge of sinking lowering, fitting fixing of	Meter	45	25.9	1165.50		
		Direct Action (Tara hand pump assembly in position with 90 mm/50 mm dia P.V.C casing pipe with ribbed						
		screen placed in potable water bearing strata with 40						
		mm dia sand trap with end cap at bottom of well,						
		washing the bore well etc. and supplying necessary jointing materials including carriage of materials and						
		cleaning and priming the tube well all complete as						
3	7.1.16	directed.  Providing and packing coarse sand around stainer and	Meter	45	9.5	427.50		
3	7.1.10	casing pipe including supplying and carriage of	Meter	43	9.3	427.30		
		materials all complete as directed and specified.						
4	7.1.21	Labour charges for providing Bentonite clay including	Meter	2	544.5	1089.00		
		the cost of Bentonite clay around 150/200 mm dia tube well up to depth of 6 m from top.						
		•				1/ //0 በበ		
C. Cer	nent Con	SUB TOTAL(B)= crete Floor base (1.50m X 1.50m)				14,448.00		
		Construction of floor base Flat Brick soiling,						
		P.C.C and R.C.C, Plastering works as directed.	Sq.m			3874.00		
		(enclosed estimate)		CL TOT	AL (C)	3874.00		
Sub TOTAL-( C ) TOTAL ( A + B+C)=								
		Dadust 50/ Wat		IUIAL (A	т <b>Б</b> +С)=	35,006.55 1 750 33		
		Deduct 5% Vat				1,750.33 33,256.22		
	A 11 120/ CCT							
	Add 12% GST							
		Carr D -				37,246.97		
		Say Rs.				37247		

## **SPECIMEN COPY**



Name & Signature of Farmer/Beneficiary

Name & Signature of Supervising officer (Jr. Engr)

Countersigned by

Name & Signature of Contractor (if engaged)

EE(A)/AEE(A)

## **Annexure-8**

## Estimate for installation of Shallow Tube Well (STW) up to 75 M depth using Rotary Rig. Rate based on SOR, PHE for 2015-16 & APWD (B) for 2013-14

SN	SOR No.	Item Details	Unit	Qty	Rate (Rs)	Amount
A. Ma	terial Cost	<u> </u>				(Rs)
1	5.1 (h)	Medium duty galvd. Iron (Gl) Pipe 125 mm dia having ISI Mark	Metre	1.50	1162.70	1744.05
2	5.3 (6)	UPVC Casing pipe withstanding 6 kgf/cm <sup>2</sup> , 125 mm dia	Metre	65.00	628.90	40878.50
3	5.2	PVC ribbed screen strainer with nylon 125 mm dia having ISI mark, with opening space between 12% to 25% of the surface area and with average size of slot in between 1 mm to 1.50 having ISI mark.	Metre	9.00	709.10	6381.90
4	5.3	UPVC Column pipe withstanding 6 kgf/cm <sup>2</sup> , 40 mm dia. Having ISI mark	Metre	45.00	146.80	6606.00
5	6.1.7 (h)		Nos	1.00	306.00	306.00
6	6.1.1 (h)	PVC socket 140 mm dia pressure 6kgf/cm <sup>2</sup>	Nos	14.00	210.00	2940.00
7	6.1.2 (h)	PVC adopter	Nos	1.00	220.00	220.00
8	6.1.6	UPVC Reducing Socket 40 x 30 mm	Nos	1.00	237.00	237.00
9	6.8.1 (a)	Solvent cement (500 ml)	Nos	1.00	299.00	299.00
	•	Sub Total (A)	•	•	•	59612.45
B. Lab	our cost fo	or installation of STW				•
1	8.1.1	Preparation of site for placement of the drilling rig including excavation of mud pit, circulation drain, collection chamber etc. all complete	Each	1.00	8126.00	8126.00
2	8.1.2	Movement of rig from the divisional HQ to the driling site incl. cost of POL all complete as directed.	Km	30.00	29.00	870.00
3	8.1.3.a	Transportation of ancillary equipment To and fro including cost of POL all complete as directed upto 100 km distance divisonal HQ	Km	30.00	43.40	1302.00
4	8.1.4.a	Transportation of all store materials as directed upto 100 Km distance divisional HQ	Km	30.00	43.40	1302.00
5	8.1.5.a	Transportation of air compression as directed upto 100 km distance divisional HQ	Km	30.00	43.40	1302.00
6	8.1.8 (b)	Providing water supply facilities at drilling site all complete as directed. By installing 1 no 5 Hp dewatering	Each	1.00	5412.00	5412.00
7	8.2.2	Boring in hard soil/pebble/Gravl by bit size 7 7/8 and collecting sample of soil at every 3.0 m depthall complete as directed. Using Rotary Rig.	Metre	75.00	1,289.00	96,675.00
8	8.5.1	Extraction of drilling pipe/bits including washing of bore hole all complete as directed.				
		1st Day	Metre	30.00	113.50	3405.00
		2nd Day	Metre	55.00	113.50	6242.50
		3rd Day	Metre	75.00	113.50	8512.50
9	7.1.14	Labour charge for sinking, lowering, fitting, fixing in position of 150 mm dia UPVC pipe assemblyComplete as directed.				

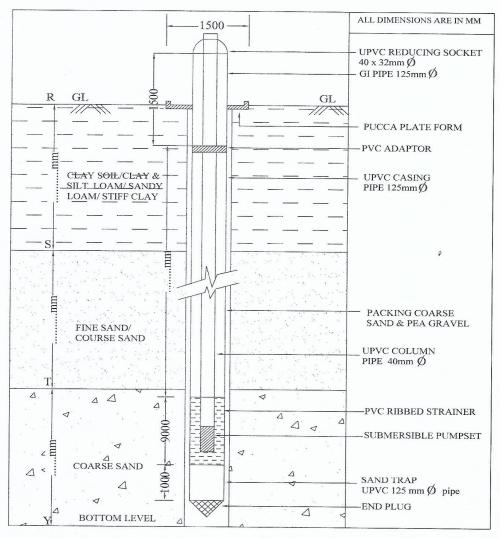
		0 to 50	Metre	50	62.6	3130	
		50 to 100	Metre	25	73.2	1830	
10	8.5.5	Developing the bore well with air compressor, make - kirloskar/cumins all complete as directed.	Hr.	4.00	2593.50	10374.00	
11	8.5.6	Supplying and packing in pea gravel around the periphery of caising including screening, wasing etc. all	Cu. m	5.74	2563.80	14716.21	
Sub 7	Total (B)		1			163199.21	
(C) C	ement Con	trete floor base (1.50 m x 1.50 m)					
1		Construction of floor base Flat Brick soling, PCC and RCC, Plastering works as directed.	Sq.m	2.25		3874.00	
		Sub Total (C)	<u> </u>			3874.00	
		Total (A+B+C)				226685.66	
		Deduction 5% VAT added				11334.28	
		Sub-Total =				215351.36	
Add 12% GST							
	Grand Total =						
	Say Rs.						
		(Rupees Two Lakh Forty One Thousand One Hun	dred Nin	ety Four	Only		

## SPECIMEN COPY

LITHOLOG OF STW (Max. Depth upto 75m for Diesel/Electrical/SPV Pumpset) 

v) Dist..... vi) EE(A)/AEE(A).....

Date of Installation...... ..... Latitude...... Longitude....



Name & Signature of Farmer/Beneficiary

Name & Signature of Supervising officer (Jr. Engr)

Countersigned by

EE(A)/AEE(A)

.....(SEAL)

Name & Signature of Contractor (if engaged)