

**GOVERNMENT OF KERALA**  
**Agriculture Department**

O/o, State Agricultural Engineer,  
Directorate of Agriculture

No :AGRI/DOA/201/2023-2024

Dated :15-03-2024

**NOTICE INVITING TENDER**

**e-Government Procurement (e-GP)**

**TENDER NO. :AGRI/DOA/TR/154/2023\_5\_1\_1/1**

The **State Agricultural Engineer Agriculture Department, (AGRI)**O/o Office of the **State Agricultural Engineer ,Directorate of Agriculture**for and on behalf of the **Governor of Kerala** invites online bids for the work detailed below from the **Registered Bidders of Kerala PWD** or from any **State or Central Government Engineering Departments** which are having similar functionalities like **Kerala PWD**.

1	Name of Work	NABARD-AE(2)124/2023-Lift Irrigation projects for various Padashekharams in Wayanad under RIDF XXIX-General Civil Work
2	Location of Work	Wayanad
3	Estimated Cost of Work	Rs.31582392/-

4	Brief Description of Work	<p>As part of the project it is planned to provide the following infrastructures at various padashekharms included in the scheme.</p> <p><b>Padarikunnu Navajeevan Padashekharom</b></p> <p>It is proposed to construct the pump house for the scheme in the revenue land available at the padashekharom. The kaniyambetta panchayath has given the consent letter. There is a total of 72 Ha of land in Padarikunnu Navajeevan Padasekharam. As per prepared irrigation plan 6151m of pipe line net work is needed to provide irrigation water to each and every corner of the padashekharom without having any conveyance loss. For pumping approximately 30HP submersible pumpset is required to deliver a designed flow of 35 LPS with a maximum head requirement of 33m in the upstream side and 25HP submersible pumpset is required to deliver a designed flow of 32 LPS with a maximum head requirement of 30m. A total of 124 nos of spouts with 65mm GI pipe will be provided along the pipe net work with an average spacing of 50m along the line. It is designed to irrigate the entire field with two days of time with two shifts per day. About 50 nos of spouts can be opened for irrigation in a shift. It is proposed to provide the sliding mechanism with 200x100x7mm I section support frame leading to the stream bottom to install submersible pumpset in the stream bed for both the pumpsets. Since it is proposed to use about 55 HP it is required to bring 11 KV line with transformer of 100 KVA to ensure voltage for continuous operation of pumpset included in the scheme.</p> <p><b>2.Kaippattukunnu Padashekharom</b></p> <p>It is proposed to use the existing pump house for the scheme in the available revenue land near to the bank of Vilambukandam Puzha from which the water is taken for irrigation. There is a total of 51.4 Ha of land in Kaippattukunnu Padasekharam. It is proposed to provide three numbers of 20 HP Submersible pumpsets for the existing delivery lines of the scheme. The present pumps are about 35 years old and not working at the moment. Also it is proposed to extend the existing two lines of irrigation line at zone 2 of padashekharom about 900m more through the existing damaged canal in the area. Therefore a total of 1800m of pipeline is provided additionally. 36 spouts are provided additionally. Since it is proposed to use 3 nos of 20HP pumpsets a total of 60 HP is required. Therefore 11KV line extension is proposed with transformer of 100 KVA to ensure voltage for continuous operation of pumpset</p> <p><b>3.Thelembetta Padshekharom</b></p> <p>It is proposed to construct new pump house for the scheme in the available revenue land near to the bank of Puzha from which the water is taken for irrigation. There is a total of 84.3 Ha of land in Thelembetta Padasekharam. As per prepared irrigation plan 5928m of pipe line net work is needed to provide irrigation water to each and every corner of the padashekharom without having any conveyance loss. For pumping approximately 40HP submersible pumpset is required to deliver a designed flow of 77 LPS with a maximum head requirement of 25m. A total of 119 nos of spouts with 65mm GI pipe</p>
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		<p>will be provided along the pipe net work with an average spacing of 50m along the line. It is designed to irrigate the entire field with two days of time with two shifts per day. Since it is proposed to use about 40 HP pumpset for this scheme along with existing 20 HP and another 20 HP pumpset for Puthankunnu padshekharam it is required to bring 11 KV phase line with transformer of 100 KVA to ensure voltage for continuous operation of pumpset.</p> <p>The proposed pumphouse of the scheme is constructed in connection with the existing building therefore back side of the pumphouse wall is not provided in the estimate.</p> <p>It is also proposed to provide shutters with Vengai wood of 50mm thick for the existing VCB at site to ensure sufficient water stagnation in the up stream during summer period</p> <p><b>4.Puthankunnu Padshekharam</b></p> <p>It is proposed to construct new pump house for the scheme in the available revenue land near to the bank of Puzha from which the water is taken for irrigation. There is a total of 25.9 Ha of land in Puthankunnu Padasekharam. As per prepared irrigation plan 3120m of pipe line network is needed to provide irrigation water to each and every corner of the padashekhararam without having any conveyance loss. For pumping approximately 20HP submersible pumpset is required to deliver a designed flow of 28 LPS with a maximum head requirement of 25m. A total of 63 nos of spouts with 65mm GI pipe will be provided along the pipe network with an average spacing of 50m along the line. It is designed to irrigate the entire field with two days of time with two shifts per day.</p> <p><b>5.Panavally Padshekharam</b></p> <p>In Panavally padshekharam it is proposed to provide a new pump house instead of the damaged pumphouse in flooding along with a submersible motor to replace the damaged motor in the flooding. During flooding the pipes near the puzha side has washed away due to land slide of banks of puzha. Even though the pipes were replaced it again got damaged during the reconstruction work of the check dam. Therefore these pipes of size 140mm PVC Cl3 pipes to be replaced newly to start pumping. Providing 80m new 140mm PVC Cl3 pipe is proposed along with 200m 63mm PVC Cl3 in the supply line.</p> <p>The irrigation schemes will irrigate the area along with direct pumping, therefore no additional water storage tank and gravity distribution line is needed for irrigation. To design the pipe network the cost of PVC pipe lines has tripled in the market after covid pandemic and compared to the hike in HDPE pipe lines. Therefore HDPE pipe lines are taken for the design purpose. To ensure durability and life of pipe line HDPE PE 100 grade is taken for design. After doing the hydraulic network analysis of the individual scheme the sizes of pipes are finalized. Since pipe lines are meant for direct pumping, the pipe classes are calculated after calculating the water hammer pressure in the pumping lines. The pipes are joined using thermal welding and it will be permanent joint without having any possible leakages and damages in future. The scheme wise final list of pipes assigned after doing the hydraulic network analysis are as follows.</p> <p>The new pump houses 3 Nos of size 2.6m x</p>
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		2.6m is proposed for the scheme along with a 4x4m pump house at Thelambetta. The land for the construction of pumphouse of the scheme will be provided in the banks of Puzha by the respective Panchayaths. The floor slab of the scheme is proposed to rise by 2.75m to prevent the possible chances of entry of flood water in to the pumphouse. The size of the pump house is given 2.6mx 2.6m to provide store for the Samithi. It is proposed to rise the floor slab of the building to 2.75m with RCC 1:1.5:3 pillars in 0.25x0.25m size with connecting beams of size 0.25x0.25m in the same mix ratio. The floor slab is provided with RCC 1:1.5:3 for a thickness of 12cm. The side walls are proposed to make with solid cement block masonry in CM 1:6 for a thickness of 20cm. Sloped Roof slab is provided with RCC 1:1.5:3 for a thickness of 10cm. The door of the hall is provided with 1mm thick GI sheet in 40x40x6mm angle iron frame. One number of wooden window is proposed to provide with a size of 1.0mx1.5m with Two window glazed shutters in Anjili wood. One metre wide steps are provided to entre in to the hall in RCC 1:1.5:3. Applying one coat of water thinnable cement primer, Wall painting with acrylic emulsion paint and painting door and windows with synthetic enamel paint is proposed. For Puthenkunnu and Thelampetta Padashekharam the pump houses are constructed at a size of 2.5x2.5m and 4x4m respectively. The foundation of the pump houses are to be provided in DR masonry of size 75x75cm cross section and basement with 60x75cm cross section in RR Masonry. RCC belt in 1:1.5:3 is provided above the masonry for a thickness of 15cm. The side walls are constructed with solid cement blocks in CM1:6 with a thickness of 20cm. RCC 1:1.5:3 roof slab of thickness 10cm and 12 cm is provided to the pumphouses respectively.
5	Bid Security	Rs.100000/-
6	Bid Submission fee (Tender fee)	8270+(1489)GST
7	Period Of Completion	0 Days 6 Months 1 Years
8	Classification of Bidder	CIVIL-A
9	Last date and time for submission of bids	06-04-2024 at 11:00
10	Date and time of opening of tender	08-04-2024 at 11:30

Bid documents including the Bill of Quantities (BoQ) can be downloaded free of cost from the e-Government Procurement (e-GP) Website [www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in). All bid documents are to be submitted online only and in the designated cover(s)/ envelope(s) on the e-GP website. Tenders/bids shall be accepted only through online mode on the e-GP website and no manual submission of the same shall be entertained. Late tenders will not be accepted. A bid submission fee shall be remitted online during the time of bid submission.

Price Bid shall only be submitted through online. Details regarding remittance of Bid Submission Fee and Bid Security, Bid preparation and submission are mentioned in the bid document.

The bids shall be opened online on 08-04-2024 at 11:30 at the office of the O/o Office of the State Agricultural Engineer, Directorate of Agriculture in the presence of the Bidders /their authorized

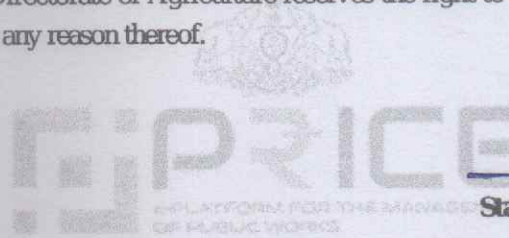
representatives who wish to attend at the above address. If the tender opening date happens to be on a holiday or non-working day due to any other valid reason, the tender opening process will be done on the next working day at same time and place.

More details can be had from the Office of the State Agricultural Engineer, Agriculture Department (Agriculture Department) O/o Office of the State Agricultural Engineer, Directorate of Agriculture during working hours.

All other existing conditions related to bidding in force in the Kerala Public Works Department will be applicable in this tender also unless expressly defined in the bidding document. The Tender Inviting Authority/Employer shall not be responsible for any failure, malfunction or breakdown of the electronic system while downloading or uploading the documents by the Bidder during the e-procurement process. Details required for e-payment (Details of bank account having core banking facility and email address of the bidder) shall be furnished along with the tender. Tenders not accompanied by these details will be rejected. All subsequent Government orders connected to tenders and any revision in the rates of taxes would also be applicable to this tender.

Bonus will be paid to the bidder at the rate of 1% of the estimated PAC, subjected to a maximum of Rs.5 lakhs (Five lakhs) in case of works which exceed TS power of Superintending Engineer and also if and only if the work is completed within 85% of the original time of completion (TOC) specified in the TS estimate which is calculated as per the guidelines issued by the Chief Engineer of each wing.

The State Agricultural Engineer, Agriculture Department (AGRI), O/o Office of the State Agricultural Engineer, Directorate of Agriculture reserves the right to accept or reject any or all tenders without assigning any reason thereof.



**State Agricultural Engineer**  
**V. BABU**  
PEN: 512348

Agriculture Department (AGRI) Engineer  
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Vikas Bhavan, Thiruvananthapuram-695 033

**O/o Office of the State Agricultural Engineer,**  
**Directorate of Agriculture**  
(For and on behalf of Governor of Kerala)