

P.O. Box 244 - 00511, Ongata Rongai.

Tel: +254 710 401 208 +254 733 867 112

Email: info@fadhilitrust.org Web: www.fadhilitrust.org

CALL FOR PROPOSALS FOR DRILLING OF A BOREHOLE AND INSTALLING A WATER PUMP FOR COMMUNITY IN CANAAN VILLAGE, MBUI NZAU SUB-LOCATION, KIBWEZI WEST CONSTITUENCY, MAKUENI COUNTY, KENYA

1. Introduction

Fadhili Trust is a Christian organization dedicated to working through partnerships to design, promote, and implement innovative and sustainable projects to transform rural communities holistically. One of the primary areas of focus for Fadhili Trust is Kibwezi West in Makueni County, an arid and semi-arid region where water scarcity significantly impacts the local population. In response to this challenge, the Mbui-Nzau Borehole project has been initiated. This project seeks to provide a reliable source of water for domestic use, directly addressing the needs of the community.

The Mbui-Nzau Borehole project aligns with the Sustainable Development Goals (SDGs), particularly Goal 6, which emphasizes the importance of clean water and sanitation. By facilitating access to water, the project not only enhances the quality of life for residents but also supports broader initiatives for sustainable development and community resilience.

2. Purpose for consultancy

Fadhili Trust is seeking a competent company to provide the services of drilling, test pumping, and equipping a borehole in Mbui-Nzau Sub-Location, Kibwezi West Constituency, Makueni County, Kenya.

3. Scope of Work

The Contract to be established is for the drilling, construction, and development of one borehole in Mbui-Nzau, Kibwezi West Constituency, Makueni County, KENYA. The borehole will be sunk to a depth of 200m bgl, achieving a full penetration of the A7/B2 aquifer. Additionally, a pumping test (step-drawdown and constant-rate pumping test) is to be carried out and analyzed to determine the safe pumping yield alongside the water quality analyses and the geophysical logging.

The project site is located off Mombasa Road east of Kibarani in Mbui Nzau Area. Access to the site from Makindu Town is through Mombasa Road driving to the left turn off the exit to join the road that leads to Mbui Nzau Market. Once on this road drive 4.9 kilometers past the SGR railway to the project site within Mbui Nzau Market.

4. Terms of Reference

The specific tasks are indicated on the detailed Bill of Quantities (BoQs) and will include but are not



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limited to the following:

- Mobilization of all plant, materials, equipment, and personnel to the project area.
- Drilling one (Nr.) borehole with a finished internal diameter of 8" to the required maximum depth of 200 meters, bgl.
- Supply and installation of plain steel 6" (152mm) Class B steel casing 4.5 mm thickness
- Grout between the casing and the borehole for the top ten meters
- Installation of gravel pack (2-4mm) (not laterite) to cover ALL the entire screened sections
- Borehole development by airlifting and/or surging for a minimum of 4 hours, with a n estimate of discharge and static water level measurement.
- Test Pumping for 24 hours, draw-down, yield recovery, and data analysis
- Bentonite or cement sealing compound to be done within the overburden are to prevent surface contamination
- Supply and Installation of surface casing (To be Retained) pro-rated as per the collapsing section
- Install 8" well head steel cap and cement slab of dimensions 1.0mx1.0mx10m. Collect water samples and carry out full water quality analysis (chemical and bacteriological analysis) in a reputable laboratory acceptable to the Project Manager and submit a water quality test report
- Develop a borehole completion report with well drawn architectural borehole design accompanied
 with a well-done test pumping report with computed borehole hydraulic parameters and drawdown
 curves, done by a licensed water sector professional and signed appropriately and the professional
 Number indicated on the report
- Demobilizing all equipment, including site cleanup, restoration, and wellhead completion.
- Make water reach the watering point from the borehole.
- Installation of a steel 1.m x1m x1m borehole lockable cover.
- Construction of steel-covered valve chambers and a borehole gantry 6m high of strong steel chambers
- Install a smart meter as recommended by the supervising consultant. This is a WRA requirement.

Deliverables

- End of drilling phase Borehole Completion report with the updated borehole design and signed by a licensed water Sector professional
- Fully finished, developed, and certified borehole as per final design and WRA filled-up forms
- Pumping test and interpretation report with a declaration of safe yield.



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Indicative Schedule of Activities

The prospective contractor shall submit a comprehensive work schedule in a Gantt chart format and a technical methodology proposal

The work schedule shall include setting up the base camp, and moving the drilling units and support equipment to the drill site and actual drilling exercise. It shall also include the construction of an elevated tank, installation of solar pumps, construction of water collection points, and site restoration and demobilization. This schedule shall be checked and approved by the Supervisor. The methodology encompasses on how the whole exercise will be undertaken citing technical specifications.

Qualifications, Experience, and Skills

The following skills are expected in the team at a minimum:

a) The project Manager/drilling engineer

The project Manager/drilling engineer should have a BSc. in Geology/Hydrogeology/Hydrologist or civil/water engineer or equivalent technical qualification with over 3 years in an active drilling environment The Project Manager should have at least 10 years of experience in Borehole drilling, construction, management, and operation of water projects. Registration with relevant professional bodies(GRB, GSK, EBK, IEK, KETRB, IET) including NCA as site agent/supervisor, is a mandatory requirement.

b) Rig Operator

A minimum drilling experience of 8 years in different geological terranes with 3 years out of the 8 years in a Mud-drilling programme

A requisite training preferably a Certificate/Diploma in Groundwater technology from the Kenya Water Institute(KEWI) or any other reputable institution equivalent to KEWI. An NCA Certificate and KEWI certificate should be attached alongside a personal resume and recommendations.

c) Foreman

The foreman should have relevant technical qualifications such as at least a Diploma in water and/or Civil engineering or related qualifications. At least five years of experience in the operation of BH drilling and day-to-day quality check, control and provide technical support. Registration with the relevant professional bodies including NCA as site agent/supervisor is mandatory

5. Terms of Payment

Payments to the drilling contractor will be made in milestones as follows:

• 50% will paid after mobilization of equipment, technical staff, and signing of the contract.



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- 30 % after satisfactory completion of drilling casing and test-pumping which will be confirmed and approved by the supervisor.
- 15% upon completion of all the tasks as per this TOR, testing, and project completion.
- 5% to be held as retention for 3 months to take care of any defects.

6. Application Criteria

Interested drilling contractors should submit a detailed proposal capturing the following:

Mandatory requirements:

- A Copy of the Certificate of Incorporation/Registration,
- A copy of the Current Tax Compliance certificate from Kenya Revenue Authority, certified
- Copy of Valid and current Business Permit,
- Articles of Association/Memorandum of Understanding (the 1st, 2nd, and the signed page with share distribution) disclosure of business ownership (Directors/ Partners /Sole Proprietor),
- Bid Bond

Technical Requirements:

- A copy of CR12 Form and a copy of the National Construction Authority (NCA 5) registration Certificate for at least Class 8 which must be in the waterworks Category. They should be attached as Annexes.
- Ministry of Water, Sanitation & irrigation Hydrogeologist License and Contractor's license
- Company Experience: Evidence of Company proven experience with details of contracts and references for works undertaken similar in drilling and BH operation (Attach at least 2 completed contracts with certificate of completion)
- Proven track record, technical expertise and experience. Provide a brief overview of how the proposed candidates meet the qualifications, experience, and skills requirements. Attached CVs and Certificates of the project manager, foreman, and rigs operator as annexes.
- A three (3-)month bank statement up to November 2024.
- A costed BOQ on company letterhead and signed by the Managing Director
- A detailed work plan with a Gantt chart
- A technical proposal detailing how the Contractor will undertake the works

7. Submission of Quotes

The Bids shall be submitted in soft copies through: info@fadhilitrust.org with the subject **BOREHOLE DRILLING**

8. Site visit/Inspection

The bidder is strongly advised to visit and examine the site of works and its surroundings and obtain for himself, at his own expense, all information that may be necessary for preparing the tender and entering



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into the contract. The bidder shall be fully responsible for the reliability and accuracy of all information so obtained. Bidders should contact Mathew Mutembei on the Fadhili Trust Office Line at +254 710401208 for directions to the site for evaluation.

9. Request for clarifications

All queries and additional information regarding the bid are to be channeled through <u>info@fadhilitrust.org</u> strictly and must be received no later than **Thursday** the **28**th **of November**, **2024** at **noon Local Time**.

10. Deadline for submission of the quotation

The technical and financial proposals must be received not later than **Monday**, 2nd **December**, 2024 at 3:00 pm, East African Time.

11. Evaluation criteria

Evaluation will be based on administrative, technical, and financial requirements. Failure to submit any of the documents requested at the administrative level will result to disqualification.

12. Notification of the results

Only the successful bidder will be notified, and if you do not receive email communication within two weeks after the expiry of the deadline, consider your bid not successful

13. Language for the bids

The language for the bids shall be **English** only.

Disclaimer

This is only an invitation to bid and Fadhili Trust reserves the right to either amend or cancel it at any time with or without notice. In such cases, Fadhili Trust shall accept no liability whatsoever. The prospective bidder is wholly responsible for any costs related to the preparation and submission of their quotations. Fadhili Trust is not bound to accept the lowest or the highest bidder and the decision of the Fadhili Trust Procurement Review Committee shall be final.