Lesotho Highlands Development Authority
P.O.Box 7332, Maseru 100, Lesotho. Telephone: 311280 Fax: 22310632

REQUEST FOR QUOTATIONS

CONTRACT LHDA NO.

QUOTATIONS FOR SITING AND DRILLING OF BOREHOLES IN FOUR VILLAGES

1. INTRODUCTION

The Lesotho Highlands Development Authority (LHDA) is a statutory body constituted under the Lesotho Highlands Development Authority Order No 23 of 1986. The LHDA is charged with the responsibility for the implementation, operation and maintenance of the Lesotho Highlands Water Project (LHWP) in Lesotho.

LHDA now invites suitably qualified contractors to tender to site, drill, construct and test four (4) boreholes in the Mokhotlong area.

2. INSTRUCTIONS TO BIDDERS – ADMINISTRATIVE REQUIREMENTS

2.1. INVITATION TO BID INFORMATION

2.1.1. Submission of Bids

All documents relating to this invitation must be submitted combined as the one 1 original and 4 copies bearing no identification of the bidder and marked ***"SITING AND DRILLING OF BOREHOLES QUOTATION AT KOUNG HA PHOHLA AND IN THABANG*** and deposited into the LHDA Tender box located on the 7th floor, Lesotho Bank Tower – Kingsway Road Maseru, on or before 12:00 HRS, on 16th January 2026.

The quotations will be opened on the same day in the presence of the interested parties, or their representatives in the finance branch board room situated on the 7th floor, LHDA Tower

2.1.2. Proposal Time Frames

a) Compulsory site, visit and pre-tender meeting 11th December 2025 at Polihali Operations Building at 0900 am.

b) This RFQ is issued as on 09th December 2025

c) Submission of proposals 16th January 2026

d) Completion of evaluation 30th January 2026

e) Notification of Award of contract as soon as practically possible and once relevant approvals are received

2.1.3. Contact Person

Request for further information and/or clarification **must only** be directed in writing to the following:

Procurement Office

7th Floor – Lesotho Bank Tower

Tel +266 22311280

Email – procurement@lhda.org.ls who will make copies of the clarification respond to other bidders.

3. SCOPE OF WORK FOR SITING AND DRILLING OF BOREHOLES IN FOUR VILLAGES

3.1. Purpose

The purpose of this assignment is to site boreholes, drill, construct and test four (4) boreholes in and around the villages of Ha Ramoruti and Makhomalong, Koung Ha Phohla and Thabang.

The report from the geohydrological survey commissioned by the Employer is attached as reference to this scope of works. According to this document, the optimum location where water can be found is at the following locations:

Village	Optimum Location
Ha Ramoruti	29◦17’13.35’’S and 28◦56’56.46’’E
Makhomalong Moreneng	29o17’01.94’’S and 28o56’16.14’’E

The Contractor shall verify this information on their own and confirm the water availability.

The execution of the works shall be in full compliance with relevant provisions of the National Water Act.

The geohydrological survey for Koung Ha Phohla (Existing Village) and Thabang (Mokhotlong Urban Site) has not been conducted. The Contractor shall perform borehole siting in the villages to determine the favourable position where a borehole can be drilled. Once complete, the Contractor shall document the positions in a Geohydrological Report and submit to the Engineer. The results of the report shall negate or confirm the drilling of the boreholes.

The Contractor shall only proceed to drill the borehole once the sitings have been approved by the Engineer, and in line with the scope of works. The existing Koung Ha Phohla Village and Thabang are located as per the table below:

Village	Optimum Location
Koung Ha Phohla	29°18'48.21"S and 28°56'17.72"
Thabang	29°18'15.14"S and 29° 1'48.04"E

4. TECHNICAL SPECIFICATIONS AND PROCEDURES FOR DRILLING AND CONSTRUCTION OF BOREHOLES

4.1. Nature of Contract

The Specifications are for the drilling of boreholes, equipping them and completion of all civil works involved.

Client would like to have a turnkey contract for the construction of fully operational drilled boreholes. For this the Contractor shall provide all labour, transport, plant, tools, equipment and materials and appurtenances, and shall perform all Works necessary to satisfactorily locate sites for drilling, construct and complete successfully drilled boreholes including lowering of borehole assembly with PVC casing and Screen and end cap, gravel pack at appropriate intervals and back

fill, close near surface water table aquifer, cleaning and development of said boreholes, pump test for **24 hours**, chlorinate borehole and construct apron.

The Contractor shall employ only competent workmen for the execution of the Works, and all such Works shall be performed under direct supervision of an expert water well driller/site supervisor.

4.2. **Contractor's Drilling equipment:**

The Contractor shall specify in the Schedule of Drilling Equipment, borehole development and other accessory equipment, its type and capacity that is to be used to undertake this work. Its capacity shall be sufficient to cope with the Works as stated in the Contract. It shall at all times be kept in full working order and good repair.

If the Client considers that the drilling equipment or any accessories in use on the site of the Works is in any way unsuitable, inefficient or inadequate in capacity; the Client shall have the right to call upon the Contractor to put such equipment in good order within seven days or alternatively to remove such plant and replace it with additional plant or equipment which the Client considers necessary to meet the requirements of the Contract. In the event that this requirement of the Contract is not satisfied, the Client reserves the right to terminate the Contract immediately.

No extra payment shall be made for the Contractor's change of drilling equipment, labour or other equipment required to complete the Works specified, nor for any incidentals thereto, the cost being deemed to be included in the schedule of rates.

4.3. **Site Selection:**

The Contractor will technically select all sites, prepare a Drilling Work Plan and communicate it in writing to the Client with a sketch. The Contractor shall receive from client the list of locations. Contractor upon visiting these locations will determine the road conditions for accessibility of the drilling rig and other heavy equipment. The Contractor will receive from client a list of additional reserve locations by order of priority as replacements for any dry or unsuccessful boreholes. Any changes or alternative sites will be in consultation with Client and designated representatives.

The Contractor will undertake the hydrogeological/geophysical survey and will assist the client (beneficiary farmer) to get the **construction certificate/permit** issued by the Department of Water Affairs.

4.4. **Borehole Construction:**

Basic methods of drilling are indicated below as a basic guide, mostly to maintain a few key dimensional specifications.

4.4.1. **Drilling Methods:**

The preferred method of drilling in consolidated compact formations is rotary percussion with air and/or foam flush. Boreholes will be drilled to a minimum internal diameter of **203mm** (**8"**) for the first **3 meters** for sanitary protection or for lowering temporary casings.

Then drill an internal diameter of **165mm** (**6.5″**) from **4 metres** to the depth of **100 meters** below ground level. Borehole drilling and construction will be supervised by the LHDA Project Management Unit. The Project Manager will consider a borehole successful only if it meets the above stated conditions of depth. The contractor shall ensure that the drilling rig have the capability of drilling beyond the anticipated depth by 30%.

In unconsolidated loose, unstable, collapsing formations, rotary with appropriate drilling stabilizer will be used. In such a case the drilling diameters will be telescopic starting with diameter large enough to lower temporary casing in upper collapsing formations and continue drilling with a final minimum diameter of 6½ inch bit. If other chemical fluids or solids are used to arrest collapsing of formations, the Contractor has to use proper borehole development and cleaning methods to make the use of borehole water is safe for drinking purposes. The Contractor will use such fluids or solids with the agreement of the Client. In no case will the use of Bentonite mud be allowed. Boreholes will be constructed with UPVC casing, screen and sand trap. All cost of using proper drilling fluids and solids is included in the rate per meter quoted. No additional payments will be made by client.

4.4.2. Water quality analysis

The Contractor shall take water samples for testing to determine the physiochemical and bacteriological quality of the water at the end of the test pumping. For this purpose, the Contractor shall supply and keep on site a minimum of 4 suitable two-litre capacity water containers. Samples shall be tested at a certified laboratory, and the test results shall be supplied to the Engineer within 7 working days of taking the sample. Engineer is especially interested in the water's properties which will cause corrosion as a comparison to **SANS 241: 2015** (or applicable WASCO Standards). This should be indicated in the test report.

4.4.3. Lithological logging:

Cuttings (min. 125 grams) of the strata penetrated shall be collected on site at every 1-meter interval. The Contractor shall take every possible precaution to guard against cutting contamination. Representative lithological samples shall be packed in sealed containers and with clear marked labels covering the borehole location, number and depth interval. The samples shall be stored in a location where they will not be contaminated by site conditions or drilling operations. It is a sole responsibility of a contractor to provide the lithological containers.

A sample of Lithological log with drill time log is shown in Annex 2 the contractor will apply verticality test to such borehole.

4.4.4. U-PVC Plain Casings:

a) The contractor shall ensure that the materials supplied are of good quality, adhering to the specifications provided in this document and in the BoQ. SADP will not authorize the installation or utilization of any material that is not in line with the requirements established in this document and BoQ.

b) The contractor will supply and install **U-PVC, class 10, drinking water standards, non-toxic plain casings with a 140 mm (5.5")** internal diameter and **6.7mm** thickness. The contractor should ensure verticality of the casings installed.

4.4.5. U-PVC Slotted/Screen Casings:

a) The contractor will supply and install **U-PVC, class 10**, drinking water standards, and non-toxic screen casings with an internal diameter of **140 mm (5.5") and 6.7 mm** thickness and with a slot size between **0.5mm to 1mm**. The quantity/length of screen casings to be installed in the borehole will vary respectively to the soil/aquifer formations. The Contractor will decide appropriate lengths of slotted screen in the aquifer intervals.

b) The boreholes will be fully cased to bottom. The threads both male and female are properly cleaned with a clean brush and cloth before they are joined.

4.4.6. Gravel Packing and Grouting:

a) The annular space between the casing and borehole wall is filled with filter packing materials in the screen intervals and back filling materials. The gravel packing mixture to be used depends on the sieve analysis results and the slot size of the screen. The contractor will do the sieve analysis and then determine the gravel pack materials. Gravel packing material will be stored in a way to avoid contamination or rain-washing finer materials. Iron and Calcareous grains will not be included in the gravel pack materials.

b) Gravel packing is carried out as continuous feed operations done usually by two people filling uniformly around the circumference of the pipe. It is advisable to add some water with a pipe so that the gravel flows down. If the gravel gets inside the temporary casing, the casing is slowly pulled out and gentle well development is done to allow gravel to settle properly to a height of **3 meters** above the top of the screen interval or the targeted water bearing formation. More gravel is added with development if the gravel settles down.

c) Backfilling and grouting are done when the minimum acceptable yield of **0.25** litres/ second is confirmed by development. The borehole cuttings or clayey soils are back filled up to **6 meters** below the ground surface.

d) The grouting is done with a concrete mix in the ratio of **1:2:3** of cement sand and gravel respectively. The gravel size should be no more than 6mm. Insert a **3-meter** Steel casing of **6 inches** diameter on to the PVC casing, both protruding above ground level by at least **0.5m**.

4.4.7. **Steel Casings:**

After successful completion of drilling of each borehole, a steel casing at a maximum depth of at least **3m** should be installed depending on the type of a formation at a maximum diameter of **8"** (inches).

4.4.8. **Borehole Depth:**

Boreholes shall be drilled to such depths as to penetrate below the shallow water table aquifers and tap the first potential deeper aquifer or aquifers in confined/semi-confined conditions with a minimum discharge of 0.25 litres per second to sustain continuous pump testing for 6 hours to ensure reliable operation of hand pumps fitted on them. The depth to be drilled should be at least 100 metres and at least six (6) meters below the main aquifer to provide proper installation of a hand pump and to provide a sand trap of 3 meters. If the discharge is less than 0.25 litres/sec., a decision to abandon the borehole or continue to drill deeper will be at the discretion of the Contractor.

5. BOREHOLE DEVELOPMENT:

On completion of drilling, the Contractor will choose a suitable and appropriate borehole development method. The borehole shall be developed for a period of at least 1 hour in order to obtain a maximum yield of water that is free of suspended matter. Developing shall be carried out by airlift pumping and surging, jetting and block surging, or other techniques the contractor feels is more appropriate and efficient to suit the casing, hydro-geological and drilling conditions prevailing in that borehole. All boreholes shall be presented for testing free of any bridging or obstruction to the total depth. The Contractor should provide the equipment required for verticality testing as described in Lesotho regulations**.**

Upon completion of the borehole, the contractor should submit a report of the borehole drilling in which all the relevant information and drilling velocity, well casing and other well construction operations will be recorded. The contractor will also annotate all information pertaining to the appearance of water filtrations and aquifer, types of rock found and sampling details including geophysical testing analysis, drilling lithology log, sieve analysis, GPS coordinates, casing details, filter pack details and photographs.

6. PUMPING AND RECOVERY TEST:

A pumping test is required on a routine basis for each borehole. The Contractor will estimate the discharge from the air lifting rates or blow test during borehole development. Based on the estimated discharge, the Contractor will certify the borehole as either "successful" or "lost". For successful boreholes, the Contractor will

undertake at least **24 hours** pump testing of which the first three hours is a three step draw down test (each step for 1 hour). The discharges for the step drawdown test will be fixed by the contractor based on the well development results. High yielding boreholes, with a discharge of more than **2.5 litre/second** may be pump tested for **72 hours**. The **72 hours** pump test is conducted if the borehole is intended for a motorised pump. After conducting the step drawdown tests the borehole should be allowed to recover almost to the original static water level (**1 hour**) before the constant yield test is undertaken continuously for **16 hours** at the chosen/predetermined rate.

The first step could be minimum acceptable discharge of **0.25 liters / sec**. The second step will be at an estimated discharge from blow test (during the well development) and the third step will be 50 to 75% more than the estimated discharge from blow test. As a thumb rule the range of the three steps could be 0.5 liters/sec or above depending of development results, **0.75 liters /sec** and **1 liters/ sec**, and each step for 60 minutes. The continuous test of at least **16 hours** will be carried out at a discharge at which the dynamic water level will stabilize.

Recovery test will be for at least **12 hours** or such time when there is at least recovery of 90% of the static water level noted at the start of the pump test. The pump test data and the results of pump test shall be presented in the standard form to be provided by the project manager.

The Contractor shall have on site a 900 V-notch weir, preceded by a tank with baffles, for the measurement of flows. Small flows (less than 0.25 liters/second) can be measured by timing the filling of a vessel of known volume. The Contractor shall also have on site an operating electric dip meter, calibrated in centimetres or millimetres, and with visual/audible indicator of when the water level is reached. Readings of flow and water level shall be taken at the intervals defined on the test pumping form provided by the project manager. For accurate measurement, an electrical water level indicator with graduated tape for taking water level readings should be utilized. Recovery readings shall be taken for a minimum interval of 1 hour, during which period pumping test equipment shall not be removed from the borehole.

7. PROTECTION

During the contract period, when work is not in progress, the boreholes shall be kept capped in such a manner as to prevent the entrance of foreign materials. The Contractor shall remove any foreign matter at his own expense. On completion of each borehole, the Contractor shall supply and fit an approved permanent lock-up cap. Casing shall terminate not less than **0.5 meters** above ground level and are fitted with the approved lock-up cap. After successful completion of drilling, casing and testing head-works will be constructed in line with the guidelines given in the Head-work Manual which forms part of the documentation of this contract.

8. REQUIREMENTS

The contractors should ensure that:

8.1. Construction permit is acquired from DWA before drilling a borehole.

8.2. They are in possession of a Drilling Contractor's Certificate offered by DWA.

8.3. The complete drilling report with drilling data and borehole data is submitted to DWA upon completion

8.4. The borehole user (Farmer) acquires the Construction and Water Use Permits from DWA

8.5. Flow meter should be installed for ease of monitoring the abstractions from each borehole.

8.6. **Warranty**

The contractor will provide a twelve month warranty. The contractor will attend and correct all the technical related issues that the client will have within this period.

9. EVALUATION CRITERIA

The evaluation of the quotes shall be based on the following criteria, which is in two parts, the Technical Evaluation and the Financial Evaluation. The Technical Evaluation Score will account for 70% of the final score, while the Financial Evaluation Score will account for 30% of the final score.

The evaluation shall be based on the criterion given in the table below which entails a technical assessment (Items 1 - 3) and a financial assessment (Item 4).

Table 1 – Evaluation Criteria

	CRITERION	POINTS
Technical Component of the Criteria		
1	**Quotation Presentation**	**5**
	Proposal that is clear, Complete, and conforms with the requirements of this RFQ	1 2 2
2	**Team Qualifications and Company Experience and references**	**50**
2.1	**Team Qualifications** a. Team Leader – Hydrogeologist with minimum of qualification BSc degree in hydrogeology or relevant, along with 3 years' experience b. Drilling Machine operator – relevant qualifications with experience of 3-5 years c. Environmental Health & Safety Personnel – at least certificate plus two years' experience –	10 10
2.2	**Company Experience** The company's experience over the last five years	15
2.3	**References: Three reference letters**	10
3	**Approach and Methodology and work Programme**	**20**
3.1	**Technical Approach and Methodology** A Proposal should demonstrate a clear understanding of the project requirements, draws attention to the issues related to the assignment, raises important issues that have not been stated in the RFQ, and provides means of solving such issues.	
Financial Component of the Criteria		
4	**A schedule of costs detailing fees and disbursements for the Project.**	**30**
TOTAL		**100**

For Service Providers to have their financial proposal evaluated, they must obtain a minimum technical score of 70%.

It should be noted that the financial component of the proposal will be evaluated using the equation below:

$$F_s = \frac{P \times 30}{P_o}$$

Where:

F_s = Score for Financial Component

P = Lowest Priced Quotation

P_o= Price of the Quotation being evaluated

The following scanned information should be attached to the quotation

1. Certified copy of the TAX clearance certificate
2. Certified copy of the Traders Licence.
3. Valid Category A or B certificate

10. BIDDING COST

The LHDA's Invitation to bid document is obtainable at LHDA with cost of 1000. However, the same documents can be accessed free of charge on LHDA website. However, bidders are soles responsible their own expenses in preparation and submissions of bids and any other related cost subsequent negotiation a with the LHDA.

11. BID VALIDITY AND PRICING

Bids will be valid for at least 120 days after the closing date and price will be firm for the entire implementation period

12. CURRENCY AND TAXES

Price quoted are to be:

12.1. In either maloti or rand (1 loti+1 Rand), where other currencies are inevitable, then the rate of exchange must be indicated and an indication whether it shall hold despite fluctuations or shall be determined at the time of contract signing.

12.2. The successful bidder will be subject to taxation laws applicable in the mountain Kingdom of Lesotho at time of tendering.

13. ADDITIONAL INFORMATION

13.1. Acceptance of the bids

This invitation to bid should not be construed as an agreement required solution. LHDA is not bound to enter into contract with the bidder who submits lowest bid. Bids will be only assessed in terms of the evaluation criteria

13.2. Modifications of terms

LHDA reserves the right to modify the terms of this invitation to bid at any time in its sole discretion. This includes the right to cancel this invitation to bid at any time prior to entering into a contract with the successful bidders; notice to the effect shall be given to all bidders

13.3. Ownership of the Bids

All documents, including bids, submitted to the LHDA become the property of the LHDA

13.4. **Confidentiality of the information**

All bids submitted by the bidders shall be held in strict confidence and will not be revealed to any other part

All information pertaining to the LHDA obtained by the bidder as a result of participation in this project is confidential and must not be disclosed without written authorisation from the LHDA

13.5. **Acceptance of terms**

All terms and conditions of this invitation to bid are deemed to be accepted by the bidders and incorporated by reference in their bids, except such conditions and provision that are expressly excluded. There will be an opportunity to review these conditions upon selection of the successful bidder and during subsequent negotiations

The quotation or sections thereof the successful bidder may form part of the final contract

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REQUEST FOR QUOTATIONS

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ANNEX 1: BOQ FOR DRILLING A BOREHOLE WITH A DEPTH OF 80-100 METRES

Schedule of Rates	QTY	UNIT	Unit Rate (LSL)	Total (LSL)
Preliminary work				
Geophysical survey and borehole siting	4	days		
Sub-total Geophysical Survey				
Borehole Construction				
Drilling Activities				
Mobilisation and Demobilisation		km		
Site preparation and clearing	4	each		
Setting Drilling Rig	4	each		
Drilling Rotary Air Percussion 225mm for 1st 3 m (8 inch)	12	m		
Drilling Rotary Air Percussion 165mm for the rest of depths (77 m)	77	m		
Sub-total drilling activities				
Installation of drilling materials				
Supply and Install 6 1/2" 3m plain steel casing	1	no		
Supply and Install 5" class 10 u-PVC Plain Casing (2.8 m x 140 mm OD)	20	no		
Supply and Install 5" class 10 u-PVC Slotted Casing (2.8 m x 140 mm OD)	8	no		
Supply and Install 160 mm OD class 10 PVC end cups	1	no		
Backfilling, supply and grout the Installed steel casing (clean gravel)	1	no		
Quartz Sand/gravel filter (> 2 mm x 40 kg)	4	bags		
Concrete collar (1m x 1m x 0.3m) (mix ratio 1:2:3)	4	each		
Borehole development (min 1hr)	4	hr		
Sub-total drilling material installation				
Total Borehole Construction				
Test Pumping				
Mobilisation of pumping Test Equipment		km		
Pump testing HC Borehole				
Step- drawdown	4	hr		
Constant rate	16	hr		
Recovery	12	hr		
Pump test Installation and retrieval	4	hr		
Sub-total pumping test				
GRAND TOTAL				

ANNEX 2: LITHOLOGY (STRATA PARTICULARS)

FROM	TO	STRATA DESCRIPTION (COLOUR, GRAIN SIZE AND TEXTURE)	WATER BED*

ANNEX 3: PENETRATION RATE

From	To	Min/m	From	To	Min/m	From	To	Min/m
0	1		50	51		100	101	
1	2		51	52		101	102	
2	3		52	53		102	103	
3	4		53	54		103	104	
4	5		54	55		104	105	
5	6		55	56		105	106	
6	7		56	57		106	107	
7	8		57	58		107	108	
8	9		58	59		108	109	
9	10		59	60		109	110	
10	11		60	61		110	111	
11	12		61	62		111	112	
12	13		62	63		112	113	
13	14		63	64		113	114	
14	15		64	65		114	115	
15	16		65	66		115	116	
16	17		66	67		116	117	
17	18		67	68		117	118	
18	19		68	69		118	119	
19	20		69	70		119	120	
20	21		70	71		120	121	
21	22		71	72		121	122	
22	23		72	73		122	123	
23	24		73	74		123	124	
24	25		74	75		124	125	
25	26		75	76		125	126	
26	27		76	77		126	127	
27	28		77	78		127	128	
28	29		78	79		128	129	
29	30		79	80		129	130	
30	31		80	81		130	131	
31	32		81	82		131	132	
32	33		82	83		132	133	
33	34		83	84		133	134	
34	35		84	85		134	135	
35	36		85	86		135	136	
36	37		86	87		136	137	
37	38		87	88		137	138	
38	39		88	89		138	139	
39	40		89	90		139	140	
40	41		90	91		140	141	

41	42		91	92		141	142	
42	43		92	93		142	143	
43	44		93	94		143	144	
44	45		94	95		144	145	
45	46		95	96		145	146	
46	47		96	97		146	147	
47	48		97	98		147	148	
48	49		98	99		148	149	
49	50		99	100		149	150	