



AGRICULTURAL RESEARCH COUNCIL

REQUEST TO TENDER FOR: AEI01REQ000530

Drilling and Commissioning of Two (2) Solar-Powered Boreholes in KwaZulu-Natal Province

Declaration of Acceptance of Special Conditions for the RFQ



1.1 SPECIAL CONDITIONS FOR THE TENDER

The bidders shall provide the ARC (accompanying the bid document on the closing date/time) with the signed Declaration of Acceptance of Special Conditions for the tender:

Description
<p>1. Borehole siting and geophysical surveys by Geohydrologists (Use geological and hydrogeological maps, and Advanced Electronics Survey Machines)- both Pulse Quick Wavelet Transform (PQWT), and Magnetic method (Proton Magnetometer). These survey techniques must be used interchangeably.</p> <p>The hydro-geological report must be signed-off by a professional Certified Natural Scientist that is registered with SACNASP and submitted to ARC.</p>
<p>2. The service provider/drilling contractor will drill according to a drilling target/depth as per the borehole siting and geophysical survey.</p>
<p>3. Upon a completion of a borehole drilling work, time must be allocated to conduct a 48-hour borehole yield test, after which the borehole yield test certificate must be issued to ARC.</p>
<p>4. Water tests-Chemical and microbial analysis All the tests must be done according to the SANS 241-1: 2015 standards and must be conducted at SANAS Accredited Laboratory. The test reports must be provided with conclusions.</p>
<p>5. Upon a completion of a borehole drilling work, time must be allocated to conduct a 24-hour borehole yield test, after which the borehole yield test certificate must be issued to ARC.</p>
<p>6. Survey work to locate True North must be conducted by either a Geomatics Professional (GPr) or Geomatics Technologist (GTg). This work will guide the alignment/mounting of solar modules to North Facing Position and must be done before mounting of solar modules. The survey report must be signed-off by a professional GPr or GTg and submitted to ARC.</p>
<p>7. In all solar electrical installation, either Installation Electrician (IE) or a Master Installation Electrician (MIE) will be required to submit his/her registration certificate from the Department of Labour to ARC before electrical work commences. The IE or NIE who will be signing off the electrical CoC must be in control on site and carry out or supervises the work effectively. The electrical COC must be submitted as part of the solar powered borehole commissioning.</p>

Note: Single-Phase Tester cannot work with DC and will therefore not sign off on DC installations, which would include solar PV installations.

8. All warranty and workmanship certificates must be submitted to ARC. The service provider must offer Warranties, both for the installation as a whole and for its components (solar modules, MPPT solar pump controller, pump, structural system for module support and so on), this will include operation and maintenance manual. These certificates should be handed during commissioning of the system.

9. The drilling and commissioning of the solar powered borehole will happen in phases(stages).

For example, phase 2, which is the actual drilling of boreholes will only continue if the Geohydrologist was able to detect/locate potential groundwater source. If the potential groundwater source was not found, survey costs will be paid and the subsequent phases, namely, drilling, 48-hour borehole yield test, geomatics survey (For locating True-North for solar modules alignment), solar PV installation and fencing will be terminated.

If phase 1, borehole siting and the geophysical was successful, phase 2, which is borehole drilling will continue according to the drilling target. If the borehole is successful with sufficient water, subsequent phases such as 24-hour borehole yield test, geomatics survey, solar PV installation and fencing will continue. In an unfortunate circumstance, where the borehole is deemed unsuccessful, drilling costs will be paid and subsequent phases will not continue.

10. The service provider must organize an activity schedule for the project execution in consultation with ARC project manager/personnel. This schedule must be planned to allow the project manager (From ARC) time to manage the projects effectively. For example, drilling works for 2 sites cannot happen at the same time as this will deprive the project manager of the opportunity to manage all drilling works. This will apply to all project activities.

11. The service provider commits to the following requirements of workmanship and product warranties as listed in the following table.

Component	Warranty Period
Solar modules	12 Year product warranty 25 Years linear power performance Warranty
Pump/motor	Minimum of 1 years
MPPT solar pump controller	Minimum of 1 years
Remaining components	Minimum of 1 year
Workmanship warranty/guarantee for all installations	1 Year
Structural: Solar module structural support	5 years

Note, the product warranties will be checked against any product delivered onsite.

12. A service provider must obtain an approval to conduct drilling work from local municipal or regulatory authorities. Thus, an approval letter for drilling must be submitted to ARC before any drilling work can commence and registration of the borehole must be facilitated by the service provider

13. During handover and commissioning, the service provider must comprehensively train farmers on how to use the solar powered borehole (Inclusive of operation and maintenance)

I, _____ the _____ undersigned,
(name) _____ in submitting the accompanying bid, do
hereby acknowledge and accept/do not the Special Conditions for the Tender in every
respect:

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Signature

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Date

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Position

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Name of bidder