

**Invitation to Tender (ITT) for Sitting, drilling, casting, and installation of five (05) Production wells in selected communities of Bugiri and Namayingo districts.**

**REF: GB-W-196**

|  |
| --- |
| **GOAL is completely against fraud, bribery and corruption.**  **GOAL does not ask for money for bids. If approached for money or other favours, of if you have any suspicions of attempted fraud, bribery or corruption please report immediately to email** [**speakup@goal.ie**](mailto:speakup@goal.ie)  **Please provide as much detail as possible with any reports** |

# About GOAL

Established in 1977, GOAL is an international humanitarian and development agency committed to working with communities to achieve sustainable and innovative early response in crises and to assist them to build lasting solutions to mitigate poverty and vulnerability. GOAL has worked in over 60 countries and responded to almost every major humanitarian disaster. We are currently operational in 13 countries globally. For more information on GOAL and its operations please visit <https://www.goalglobal.org/>.

GOAL has been working in Uganda since 1979, The GOAL Uganda country programme focuses on two of GOAL’s three strategic sectors: health (including WASH and health accountability programming) and livelihoods. GOAL Uganda mainstreams gender, and child protection across all programming. GOAL works on a district focused approach and uses a mixture of direct implementation and partnerships with local civil society organisations, private sector partners, and district local governments to give effect to our mission. GOAL Uganda is funded by a number of donors, including Irish Aid, charity: water, YAW and USAID.

# Proposed Timelines

|  |  |  |
| --- | --- | --- |
| **Line** | **Item** | **Date, year, time, and time-zone** |
| 1 | ITT published | 9th April, 2021 |
| 2 | Closing date for clarifications | 22nd April 2021 at 17:00 hrs EAT |
| 3 | Closing date and time for receipt of Tenders | 29th April 2021 at 17:00 hrs EAT |
| 4 | Tender Opening Location | GOAL Office, Plot 5448, Bonge Way Kiwafu Estate Kansanga, Kampala |
| 5 | Tender Opening Date and time | 30th April 2021 at 11:00hrs EAT |
| 6 | Contracting Period (estimate time) | 7th May 2021 |

# Overview of requirements

## Works Specification

GOAL invites contractors for sitting, drilling, casting, and installation of five (05) Production Boreholes in selected communities of Bugiri and Namayingo districts. REF: GB-W-196; the technical parameters must meet or exceed minimum specification requirements outlined in the technical specification to tenderers referred to in Appendix 3

GOAL would like to see the following issues addressed by the Contractors:

* Technical specification Appendix 3
* Financial Offer – refer to Appendix 4 for the Bills of Quantities (BOQ)
* Delivery/lead-time detailed work plan and methodology – refer to Appendix 5 for guidelines.

# Terms of the Procurement

## Procurement Process

### This invitation to tender (ITT) is under an open tender, the basic requirements with which proposals must comply with are detailed in section 5 of this ITT.

### The Contracting Authority for this procurement is GOAL.

## Clarifications and Query Handling

### GOAL has taken care to be as clear as possible in the language and terms it has used in compiling this ITT. Where any ambiguity or confusion arises from the meaning or interpretation of any word or term used in this document or any other document relating to this tender, the meaning and interpretation attributed to that word or term by GOAL will be final. GOAL will not accept responsibility for any misunderstanding of this document or any others relating to this tender.

### Requests for additional information or clarifications can be made up to 5 working days (as outlined in section 2-Proposed timelines) before the deadline, and no later. Any queries about this ITT should be addressed in writing to GOAL via email on [tenders@goal.ie](mailto:tenders@goal.ie) and answers shall be collated and published online at <https://www.goalglobal.org/tenders> in a timely manner.

## Conditions of Tender Submission

### Tenders must be completed in English.

### Tenders must respond to all requirements set out in this ITT and complete their offer in the Response Format.

### Failure to submit tenders in the required format will, in almost all circumstances, result in the rejection of the tender. Failure to resubmit a correctly formatted tender within 3 (three) working days of such a request will result in disqualification.

### Tenderers must disclose all relevant information to ensure that all tenders are fairly and legally evaluated. Additionally, tenderers must provide details of any implications they know or believe their response will have on the successful operation of the contract or on the normal day-to-day operations with GOAL. Any attempt to withhold any information that the tenderer knows to be relevant or to mislead GOAL and/or its evaluation team in any way will result in the disqualification of the tender.

### Tenders must detail all costs identified in this ITT. Additionally, tenders must detail any other costs whatsoever that could be incurred by GOAL in the usage of services and/or the availing of options that may not be explicitly identified/requested in this ITT. Tenderers’ attention is drawn to the fact that, in the event of a Contract/ Framework Agreement being awarded to them, the attempted imposition of undeclared costs will be considered a condition for default.

### Any conflicts of interest (including any family relations to GOAL staff) involving a tenderer must be fully disclosed to GOAL particularly where there is a conflict of interest in relation to any recommendations or proposals put forward by the tenderer.

### GOAL will not be liable in respect of any costs incurred by respondents in the preparation and submission of tenders or any associated work effort.

### GOAL will conduct this tender, including the evaluation of responses and final awards in accordance with the detail set out at in the Evaluation process. Tenders will be opened by at least three designated officers of GOAL.

### GOAL is not bound to accept the lowest, or any tender submitted.

### GOAL reserves the right to split the award of this contract between different bidders in any combination it deems appropriate, at its sole discretion.

### The Supplier shall seek written approval from GOAL before entering into any sub-contracts for the purpose of fulfilling this contract. Full details of the proposed subcontracting company and the nature of their services shall be included in the written request for approval. Written requests for approval must be submitted to the contract focal point identified in section 1.1 of the contract

### GOAL reserves the right to refuse any subcontractor that is proposed by the Supplier.

### GOAL reserves the right to negotiate with the Supplier who has submitted the lowest Bid that fully meets the technical requirements, for the purpose of seeking revisions of such Bid to enhance its technical aspects and/or to reduce the price.

### Information supplied by respondents will be treated as contractually binding. However, GOAL reserves the right to seek clarification or verification of any such information.

### GOAL reserves the right to terminate this competition at any stage.

### Unsuccessful tenderers will be notified.

### GOAL’s standard payment terms are by bank transfer within 30 days after satisfactory implementation and receipt of documents in order. Satisfactory implementation is decided solely by GOAL.

### This document is not construed in any way as an offer to contract.

### GOAL and all contracted suppliers must act in all its procurement and other activities in full compliance with donor requirements. Any contract(s) that arise from this ITT may be financed by multiple donors and those donors and/or their agents have rights of access to GOAL and/or any of its suppliers or contractors for audit purposes. These donors may also have additional regulations that it is not practical to list here. Submission of an offer under this ITT assumes Service Provider acceptance of these conditions.

### **Terrorism and Sanctions:** GOAL does not engage in transactions with any terrorist group or individual or entity involved with or associated with terrorism or individuals or entities that have active exclusion orders and/or sanctions against them. GOAL shall therefore not knowingly purchase supplies or services from companies that are associated in any way with terrorism and/or are the subject of any relevant international exclusion orders and/or sanctions. If you submit a bid based on this request, it shall constitute a guarantee that neither your company nor any affiliate or a subsidiary controlled by your company are associated with any known terrorist group or is/are the subject of any relevant international exclusion order and/or sanctions. A contract clause confirming this may be included in an eventual purchase order based on this request. Tenders must be completed in English.

### Any contract(s) awarded from this procurement procedure are likely to be subject to the EU General Data Processing Regulation (GDPR). Winning service provider(s) will be considered Data Processors, and GOAL will be the Data Controller. Any such contract(s) will contain appropriate instructions and clauses, and the Data Processor will be required to provide information on their Data Protection & Security procedures. GOAL reserves the right to rescind the award of contract should the Data Protection & Security procedures be considered (in GOAL’s sole opinion) inadequate, or if GOAL and the service provider cannot agree to minimum GDPR compliant contract terms

## Quality Control

3rd party companies may be contracted by GOAL to carry out random quality inspections of supplies carried out by the contracted party. The cost of the quality control inspections will be covered by GOAL.

In cases of supplier’s quality default in addition to Liquidated Damages section 21 of GOAL Standard Terms and Conditions the costs of the quality inspections and loading surveyor will be charged to the Contractor.

Sub-contracting: note section 3 in GOAL Standard Terms and Conditions. GOAL may choose to visit vendors, including sub-contractors (if any) as per of the evaluation process.

## Submission of Tenders

Tenders must be delivered Electronically with your offers in same email to [tenders@goal.ie](mailto:tenders@goal.ie) and in the subject field state:

* 1. ***GB-W-196 Siting, drilling and installation of five (05) Boreholes in Bugiri and Namayingo Districts.***
  2. ***Name of your firm with the title of the attachment***
  3. ***Number of emails that are sent e.g. 1 of 3, 2 of 3, 3 of 3.***

**Proof of sending is not proof of reception. Late delivery will result in your bid being rejected. All information provided must be perfectly legible.**

**All documents attached to emails must be in PDF or scan form. Any excel or word documents must be accompanied by a PDF or scan version of the document. Documents submitted solely in excel, word or other ‘soft copy’ format shall lead to the bid being rejected.**

## Tender Opening Meeting

Tenders will be opened at the date mentioned in the section 2 at the following location:

**GOAL Uganda-Kampala office**

**Bonge Way Plot 5448 Kiwafu Estate Kansanga Kampala - Uganda**

One authorised representative of each tenderer may attend the opening of the bids. Companies wishing to attend are requested to notify their intention by sending an e-mail at least 48 hours in advance to the following e-mail address: [procurement@ug.goal.ie](mailto:procurement@ug.goal.ie) Tenderers are invited to attend the Tender Opening Meeting at their own cost.

***Note: Due to the evolving nature of the Covid19 situation, companies who send an email to notify their intention to attend will be informed by return of email whether the tender public opening will proceed. This decision will be in line with local government regulations and GOAL’s health and safety decision at that time.***

# Evaluation Process

## Evaluation stages

Tenderers will be considered for participation in the Contract subject to the following qualification process:

|  |  |  |
| --- | --- | --- |
| **Phase #** | **Evaluation Process Stage** | **The basic requirements with which proposals must comply with** |
| *The first phase of evaluation of the responses will determine whether the tender has been submitted in line with the administrative instructions and meets the essential criteria. Only those tenders meeting the essential criteria will go forward to the second phase of the evaluation.* | | |
| 1 | **Administrative instructions** | 1. **Closing Date:**   Proposals must have met the deadline stated in section 2 of these Instructions to Tenderers, or such revised deadline as may be notified to Tenderers by GOAL. Tenderers must note that GOAL is prohibited from accepting any proposals after that deadline.   1. **Submission Method:**   Proposals must be delivered in the method specified in section 4.5 of this document. GOAL will not accept responsibility for tenders delivered by any other method. Responses delivered in any other method may be rejected.   1. **Format and Structure of the Proposals:**   Proposals must conform to the Response Format laid out in section 6 of these Instructions to Tenderers or such revised format and structure as may be notified to Tenderers by GOAL. **Failure to comply with the prescribed format and structure may result in your response being rejected at this stage.**   1. **Confirmation of validity of your proposal:**   The Tenderers must confirm that the period of validity of their proposal is not less than 90 (ninety) days. |
| **2** | **Essential Criteria** | **Minimum mandatory requirements of specifications or contract performance.**   1. **Valid Drilling Permit to ascertain approval from Ministry of Water to carry out borehole drilling works.** 2. **Valid trading licence to ascertain that the organisation is registered to carry out drilling works under the municipality.** 3. **Tax Clearance and VAT Registration Certificate to ascertain the tax status of the Contractor.** 4. **Certificate of Incorporation.** |
| *The second stage of the evaluation will involve an assessment of the Tenderer’s personal and legal circumstances, economic and financial standing, to fulfil the obligations of the contract* | | |
| **3** | **Legal, Economic & Financial Criteria** | **In-depth review of financial accounts and other documents submitted; tenderer is judged to have requisite financial stability.**   1. **Copies of AUDITED financial accounts for the last 2 years, including details of profit and loss and cash flow.** 2. **Bank statement of last six months (October 2020 – March 2021)** |
| *Each proposal that conforms to the Essential and Qualification Criteria will be evaluated according to the Award Criteria given below by GOAL.* | | |
| **4** | **Award Criteria** | Tenders will be awarded marks under each of the award criteria listed in this section to determine the most economically advantageous tenders.   1. Financial offer/BOQs 2. Delivery/Lead time 3. Technical Offer   a. Curriculum vitae (CV of the proposed technical personnel detailing qualifications, experiences and, registration certificate  b. Detailed methodology  c. Evidence of past experiences for the past three (3) years in drilling of production boreholes (reference letters and completion report from District Local Government) |
|  | | |
| **5** | **Post selection** | References and other checks are found to be clear, and quality is assessed. |

## Tender Evaluation

GOAL will convene an evaluation team which may include members of the Finance, Logistics, Programmes, Donor Compliance and Internal Audit.

During the evaluation period clarifications may be sought by e-mail from tenderers. Clarifications may include testimonials from customers in support of particular aspects of a tender, whether such aspects are contained in the original submission or in subsequent responses to requests for clarification. Deadlines will be imposed for the receipt of such clarifications and failure to meet these deadlines may result in the disqualification of the tenderer or loss of marks. Responses to requests for clarification shall not materially change any of the elements of the proposals submitted. Unsolicited communications from Tenderers will not be entertained during the evaluation period.

## Award Criteria

Prices might be in **UGX (Ugandan Shilling).** A comprehensive and clear breakdown of prices must be shown as part of the financial offer – any transport fees, taxes, customs charges, component parts, packing fees etc. must be shown separately.

Prices offered will be evaluated on full cost basis (including all fees and taxes).

Marks for cost will be awarded on the inverse proportion principle (shown below):

**Scorevendor = 35 x (pricemin / pricevendor)**

|  |  |  |
| --- | --- | --- |
| **No** | **Qualitative award criteria** | **Weighting (maximum points)** |
| 1. | Technical Offer:  a) Curriculum vitae (CV of the proposed technical personnel detailing qualifications, experiences and, registration certificate)  b) Detailed methodology  c) Evidence of past experiences in drilling of production boreholes (reference letters and completion report from District Local Government) | 55 |
| 2. | Delivery/Lead time | 10 |
| 3. | Financial Offer/Bill of Quantities (BoQs) | 35 |
|  | **Total number of points** | **100** |

**All financial offers must be made on the basis of ‘best and final offer’.**

# Response Format

## Introduction

All proposals must conform to the response format laid out below. Where a tender does not conform to the required format the Tenderer may be requested to resubmit it in the correct format, on the understanding that the resubmission cannot contain any material change from the original. Failure to resubmit in the correct format within 3 (three) working days may result in disqualification.

By responding to this ITT, each Tenderer is required to accept the terms and conditions of this ITT and to acknowledge and confirm their acceptance by returning a signed copy with its response. Should a Tenderer not comply with these requirements, GOAL may, at their sole discretion, reject the response.

If the Tenderer wishes to supplement their Response to any section of the ITT specifications with a reference to further supporting material, this reference must be clearly identified, including section and page number.

## Submission Checklist

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Line** | **Item** | **How to submit** | | **Tick attached** |
| **Electronic submission** | **Physical submission** |  |
| 1 | This checklist ticked | Ticked, scan and save as ‘Checklist’ | Tick and submit. |  |
| 2 | Appendix 1 - Company Details included section 2 & 3 | Sign, scan and save as ‘contact Details’ | Sign, stamp and submit. |  |
| 3 | Appendix 2 – Technical specifications signed | Complete, sign & stamp, scan and save as ‘Financial Offer’ | Complete, sign, stamp and submit. |  |
| 4 | Appendix 3 - Well Apron casting details signed | Sign & stamp, scan and save as ‘Well Apron casting details’ | Sign, stamp and submit. |  |
| 5 | Appendix 4 – Bill of Quantities filled and signed | Complete, sign & stamp, scan and save as ‘Financial Offer’ | Complete, sign, stamp and submit. |  |
| 6 | Appendix 5 – Delivery / Lead Time/ Workplan **in your own format signed** | Complete, sign & stamp, scan and save as ‘Workplan’ | Complete, sign, stamp and submit. |  |
| 7 | Appendix 6 – GOAL Terms and Conditions signed | Attach T&C signed | Submit signed copies |  |
| 8 | Valid drilling Permit | Attach copies of valid drilling Permit | Submit copies of valid drilling permit |  |
| 9 | Certificate of incorporation | Attach copies of Certificate of incorporation | Submit copies of Certificate of incorporation |  |
| 10 | Valid Trading license | Attach copies of Valid Trading license | Submit copies of Valid Trading license |  |
| 11 | Valid Tax clearance certificate and VAT registration | Attach copies of Valid Tax clearance certificate and VAT registration | Submit copies of Valid Tax clearance certificate and VAT registration |  |
| 12 | Bank statement for the last six months (October 2020-March 2021) | Attach copies of Bank statement | Submit copies of Bank statement |  |
| 13 | Audited accounts of the past two (2) years: 2020 & 2019 | Attach copies of Audited accounts | Submit copies of Audited accounts |  |
| 14 | Curriculum vitae (CV) of technical personnel detailing qualifications/certification and experiences of Geologist, Hydrogeologist, and Drillers, attach **evidence of academic credentials** for key personnel and **evidence of registration for Hydrogeologist with the Ministry of Water and Environment** | Attach copies of CV and evidence of academic credentials | Submit copies of CV and evidence of academic credentials |  |
| 15 | Evidence of previous Experience in similar works for the past three years | Attach copies of previous experience | Submit copies of previous experience |  |

**Appendix 1 - Company details**

1. **Contact Details**

This section must include the following information regarding the Individual or Company and any partners or sub-contractors:

|  |  |  |  |
| --- | --- | --- | --- |
| Name of the prime Tenderer |  | | |
| Registered address of the prime Tenderer |  | | |
| Company Name |  | | |
| Address |  | | |
| Previous Name(s) if applicable |  | | |
| Registered Address if different from above |  | | |
| Registration Number |  | | |
| Telephone |  | | |
| E-mail address |  | | |
| Website address |  | | |
| Year Established |  | | |
| Legal Form. Tick the relevant box | 🞏 Company  🞏 Partnership | | 🞏 Joint Venture  🞏 Other (specify): |
| VAT/TVA/Tax Registration Number |  | | |
| Directors names and titles and any other key personnel |  | | |
| Please state name of any other persons/organisations (except tenderer) who will benefit from this contract (GOAL compliance matter) |  | | |
| Parent company |  | | |
| Ownership |  | | |
| Do you have associated companies? Tick relevant box. If YES – provide details for each company in the form of additional table as per **Contact Details** | 🞏Yes 🞏No | | |
|  | **Primary Contact** | **Secondary Contact** | |
| Name |  |  | |
| Current Position in the Organisation: |  |  | |
| No. of years working with the Organisation: |  |  | |
| Email address |  |  | |
| Telephone |  |  | |
| Mobile |  |  | |
| Other Relevant Skills: |  |  | |
| Institution (Date from – to) |  |  | |
| Degrees or Diplomas |  |  | |

## Professional or Corporate Memberships

These are with external professional bodies that your company is registered with (please note this is not the company/ business registration details). Please attach copies of any relevant certificates or memberships and use more lines if necessary:

|  |  |  |  |
| --- | --- | --- | --- |
| No | Name of the body | Year of registration | Membership Number |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |

**Profile**

Tenderers should note that the information requested below will be required under the Essential Criteria. In total the answers to these questions should take no more than 2 pages

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Description** | **Response** | |
| 1 | An outline of the scope of business activities, and in particular details of relevant experience regarding contracts of this nature |  | |
| 2 | Provide details of two contracts of a similar nature carried out in the last two years (please state customer name, delivery location, value of contract, and dates) |  | |
| 3 | The number of years the Tenderer has been in business in its present form |  | |
| 4 | A statement of overall turnover and turnover in respect to the goods and services offered under the proposed agreement for the last three years as per the following table: | | |
| **Year** | **Overall Turnover UGX** | **Offered Goods Turnover UGX** |
| **2020** |  |  |
| **2019** |  |  |
| **2018** |  |  |
| 5 | Where the Supplier proposes to use subcontractors or resellers/ distributors in the execution of the agreement this section should include details of the quality assurance mechanisms used by the Supplier to monitor the activities of its subcontractors or resellers/ distributors. Suppliers should note that commitment to quality, as evidenced by the existence of such quality control procedures, will be used as a Qualification Criteria |  | |
| 6 | Any other relevant information |  | |

**References**

At least 2 (two) relevant references who may be contacted on a confidential basis to verify satisfactory execution of contracts must be supplied. These references may not be GOAL personnel or related to a GOAL contract. Respondents should supply this information for each of the references in the following format:

|  |  |  |
| --- | --- | --- |
| 1 | Name |  |
| Organisation |  |
| Address |  |
| Phone |  |
| Fax |  |
| Email |  |
| Nature of supply |  |
| Approximate value of contract |  |
| 2 | Name |  |
| Organisation |  |
| Address |  |
| Phone |  |
| Fax |  |
| Email |  |
| Nature of supply |  |
| Approximate value of contract |  |
| 3 | Name |  |
| Organisation |  |
| Address |  |
| Phone |  |
| Fax |  |
| Email |  |
| Nature of supply |  |
| Approximate value of contract |  |
| 4 | Name |  |
| Organisation |  |
| Address |  |
| Phone |  |
| Fax |  |
| Email |  |
| Nature of supply |  |
| Approximate value of contract |  |

By including the above information, tenderers confirm that they have consent from the data subject to share this information with GOAL for the purpose of providing a reference, to allow GOAL to analyse offers and award a contract under this tender; and that the data subject understands that the personal data may be shared internally within GOAL and externally if required by law and donor regulations; and may be stored for a period of up to 7 years from the award of contract.

# Declaration re Personal and Legal circumstances

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| THIS FORM MUST BE COMPLETED AND SIGNED BY A DULY AUTHORISED OFFICER OF THE TENDERERS’ ORGANISATION. Please tick Yes or No as appropriate to the following statements relating to the current status of your organisation | | | Yes | No |
| 1 | The Tenderer is bankrupt or is being wound up or its affairs are being administered by the court or has entered into an arrangement with creditors or has suspended business activities or is in any analogous situation arising from a similar procedure under national laws and regulations | |  |  |
| 2 | The Tenderer is the subject of proceedings for a declaration of bankruptcy, for an order for compulsory winding up or administration by the court or for an arrangement with creditors or of any other similar proceedings under national laws and regulations | |  |  |
| 3 | The Tenderer, a Director or Partner, has been convicted of an offence concerning his professional conduct by a judgement which has the force of res judicata or been guilty of grave professional misconduct in the course of their business | |  |  |
| 4 | The Tenderer has not fulfilled its obligations relating to the payment of taxes or social security contributions in Ireland or any other State in which the tenderer is located | |  |  |
| 5 | The Tenderer, a Director or Partner has been found guilty of fraud | |  |  |
| 6 | The Tenderer, a Director or Partner has been found guilty of money laundering | |  |  |
| 7 | The Tenderer, a Director or Partner has been found guilty of corruption | |  |  |
| 8 | The Tenderer, a Director or Partner has been convicted of being a member of a criminal organisation | |  |  |
| 9 | The Tenderer, a Director or Partner is under investigation, or has been sanctioned within the preceding three (3) years by any national authority of a United Nations Member State for engaging or having engaged in proscribed practices, including but not limited to: corruption, fraud, coercion, collusion, obstruction, or any other unethical practice. | |  |  |
| 10 | The Tenderer has been guilty of serious misrepresentation in providing information to a public buying agency | |  |  |
| 11 | The Tenderer has contrived to misrepresent its Health & Safety information, Quality Assurance information, or any other information relevant to this application | |  |  |
| 12 | The Tenderer has colluded between themselves and other bidders (a bidding ring), and/or the Tenderer has had improper contact or discussions with any member of GOAL staff and/or members of their family | |  |  |
| 13 | The Tenderer is fully compliant with the minimum terms and conditions of the Employment Law and with all other relevant employment legislation, as well as all relevant Health & Safety Regulations in the countries of registration and operations | |  |  |
| 14 | The Tenderer has procedures in place to ensure that subcontractors, if any are used for this contract, apply the same standards. | |  |  |
| 15 | Consistent with numerous United Nations Security Council resolutions including S/RES/1269 (1999), S/RES/1368 (2001) and S/RES/1373 (2001), GOAL is firmly committed to the international fight against terrorism, and in particular, against the financing of terrorism. It is the policy of GOAL to seek to ensure that none of its funds are used, directly or indirectly, to provide support to individuals or entities associated with terrorism. In accordance with this policy, **the Tenderer undertakes to use all reasonable efforts to ensure that it does not provide support to individuals or entities associated with terrorism.** | |  |  |
| I certify that the information provided above is accurate and complete to the best of my knowledge and belief.  I understand that the provision of inaccurate or misleading information in this declaration may lead to my organisation being excluded from participation in future tenders. | | | | |
| Date | |  | | |
| Name | |  | | |
| Position | |  | | |
| Telephone number | |  | | |
| Signature and full name | |  | | |

1. **self-declaration of finance and tax**

|  |  |  |
| --- | --- | --- |
| **Turnover history** | | |
| **Turnover figures entered into the table must be the total sales value before any deductions**  ‘Turnover of related products’ is for companies that provide items or services in multiple sectors. Please enter information on turnover of items or services that are similar in nature to the items or services requested under this tender. | | |
| **Trading year** | **Total turnover** | **Turnover of related products** |
| **2020** |  |  |
| **2019** |  |  |
| **2018** |  |  |
| Include a short narrative below to explain any trends year to year | | |
|  | | |
| 1. **GOAL operates within the law of the country of operation and within international legal requirements. GOAL expects all companies to fulfil their legal obligations, including meeting their tax liabilities and duties in accordance with the relevant tax legislation. Please comment below if you feel there are any matters you need to bring to GOAL’s attention.** | | |
| *Please continue on a separate sheet if necessary.* | | |

I certify that the information provided above is accurate and complete to the best of my knowledge and belief. I understand that the provision of inaccurate or misleading information in this declaration may lead to my organisation being excluded from participation in future tenders.

Signed: (Director) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Print Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Company Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Appendix 2.** **Technical specifications**

**A) Technical Specification and Drawings**

**1.0 Scope of works**

The scope of the works requires that the successful contractor furnish only a successful borehole to the client. A successful borehole is defined as one conforming to all the requirements for the siting, drilling, pumping test, yield and water quality requirements. The proposed borehole depth shall not be less than 70m, borehole nominal diameter bore of 5” ND at completion, a minimum yield shall be 3,500 l/hr with recovery of not less than 65% in one hour. The well must passe the minimum acceptable potable water quality standards (Government of Uganda [GoU] acceptable water quality standards).

Wells whose yield is less than 3,500l/hr or whose water quality is not acceptable according to GoU standards will be replaced by the contractor at no further cost to GOAL. The drilling records for all unsuccessful wells shall be provided to GOAL including for poor quality wells.

The contractor will undertake thorough hydrogeological surveys in order to obtain the required high yield borehole within the community (ies) of interest or within reasonable distance to serve as a piped water source for the communities. This should be agreed with the supervising engineer.

The works includes hydrogeological survey, drilling of 5” ND borehole, installation of plain and screen casings, provision of gravel packing; development of the boreholes, pumping test for a production well; obtaining rock and water samples, provision of sanitary seal, well apron casting and site clearance. . Water quality sampling and analysis shall be carried out by the client and the contractor will allow timelines for this activity in his workplan.

As a statutory requirement, only a company with valid drilling permits and registered hydro - geologists are authorized to undertake these works.

* 1. **Location of the works**

The works are located in communities which will be identified by the project in Bugiri (Nabukalu, Buwunga, Bulidha, Muterere, Buluguyi, Bulesa, Kapyanga, Budhaya and Iwemba sub-counties) or Namayingo (Banda, Mutumba, Buyinja, Buswale and Buhemba sub-counties) districts.

Where there are failures because of any issues, GOAL will furnish the contractor with a replacement location in the same geographical area.

* 1. **Borehole siting (See Appendix 10.3B for additional detailed specification for siting)**

The Contractor is to carry out detailed geophysical analysis within the identified communities. A method of geophysical survey best suited to the geography/geology of the area is to be employed. The method specified in the technical proposal should be one used in practice.

The geophysical analysis will include the desk study, the hydro census, and the geophysical survey. The reports of the surveys will be included as part of the final reports submitted for the whole works.

The desk study will include a review of existing reports, borehole logs, topographical, geological, and hydrogeological maps, previous geophysical surveys and the evaluation of aerial photographs if any. The Contractor can always retrieve this data from the respective District Water Offices and/or archives in the Directorate of Water Resources Management– Ministry of Water and Environment.

The Contractor’s hydrogeologist should carry out a hydro-census in the vicinity of the target areas. This will include a detailed inventory of all existing water supplies to ensure that the current site does not affect nearby wells. The hydrogeologist will thus be able to make decisions that do not affect the success of the new boreholes.

Siting / Geophysics work is to be carried out by a registered hydrogeologist. The hydrogeologist shall be available for the specified contract period. Proposed changes to the hydro-geologist should be agreed with the supervising engineer/GOAL.

During the siting, the hydrogeologist should ensure that representatives of the local communities and institutions shall be involved. GOAL will assist with community liaison activities.

**2.0 Drilling site and Borehole siting (see detailed specifications for borehole siting Appendix 10.3A)**

The sites selected for drilling should be within the target communities and not further away than 0.75km from the center of the target community. Changes to locations and distances should be discussed and mutually agreed with the supervising engineer.

The hydrologist will use their experience to determine alternative suitable sites for borehole construction in case the initial site is abandoned for any reasons including dry wells. Boreholes should not be sited in or near places that get flooded during rains. Flood plains should be avoided. Additional measures should be taken to ensure that sites are located outside the minimum distances prescribed from sanitation installations, sources of pollution, landfills, graveyards, and animal kraals.

The Contractor shall drill the well at location as determined by their hydrogeological surveys. Access to the site shall be the responsibility of the Contractor. Tracks required for access of drilling plant, gear, camps and accessories to the well site shall be made by the Contractor and shall minimize as much as possible interference with existing fences and cultivated land. GOAL and the communities will be of assistance.

**3.0 Hydrogeology**

While deep wells have been constructed in these areas before, there is inadequate information regarding success rates and soil profiles. The conditions of drilling cannot therefore be precisely described, and the precise or proximate locations of aquifer(s) cannot be described. The Contractor hydrogeologist should therefore determine the most probable point with the best hydrogeological properties.

**4.0 Environmental protection of the site**

Care must be taken in the handling and storage of drilling fluids, oils, greases, and fuel to avoid introducing environmental contaminants and pollutants. The Contractor shall dispose of any toxic materials including drilling fluids, cuttings and discharged waters in a manner approved by GOAL and so as not to contaminate/pollute public and private property. The Contractor shall adhere to relevant National regulations and guidelines on Environmental protection that apply to drilling. The Contractor shall ensure that all their personnel are aware of Environmental protection requirements.

**5.0 Materials for the works and Workmanship**

Materials that will form part of the complete works must be supplied new and never used. Materials must comply with the minimum specifications in the relevant codes. Materials not specified here must comply with the minimum specifications in the relevant codes of practice. Where a national standard does not exist for the material, the relevant British Standard shall apply.

The Contractor is expected to carry out all works as specified and in a professional manner. The Contractor shall carry out operations in accordance with the terms of the contract and to the satisfaction of GOAL. The Contractor shall use suitable equipment and supply efficient and experienced staff.

a) The Contractor will provide an experienced project Coordinator to oversee the drilling and testing to be carried out under this Contract.

b) The Contractor will maintain a full crew on each drilling unit and test pump unit. If a member of crew quits for any reasons including illness or injury, the Contractor will replace him as soon as possible with a worker of similar experience.

c) If supervising engineer is dissatisfied with the performance of a member (s) of the crew, such members shall be informed of their shortcomings and warned by the Contractor. If no change results within a reasonable period, the Contractor will be notified and requested to take necessary measures on the unsatisfactory crewmember.

d) where one or more members of the drilling crew is absent for any reasons, the supervising engineer will notify the contractor and agree whether to proceed with drilling operations.

**6.0 Contractor to provide all equipment for the works**

All necessary machinery, equipment, and materials to carry out the works shall be provided by the Contractor. Test pumping equipment shall be independent from the drilling rig(s). Prior to mobilization GOAL shall verify the specifications and state of repair of all major items of plant and transport and shall have the right to order the removal and/or replacement of any items which in the supervising engineer’s opinion are insufficient or in unsatisfactory condition. Acceptance by GOAL of the Contractor’s proposed plant and transport does not relieve the Contractor of his obligations under this contract where such transport or plant fails to successfully complete the required works.

**7.0 Drilling**

a) Drilling method

The Contractor may use any motorized drilling technique that will achieve the depth and diameter required of the well, provided that the techniques used are those specified in his proposal and approved by GOAL. The rig to be deployed must be capable of drilling to at least a depth of 25% beyond the anticipated final depth at the required diameter. Temporary casing may be installed in the borehole to prevent formation heave or collapse.

The borehole depth shall not be less than 70m.

During rotary drilling using air as the circulating fluid, approved surfactants and artificial foam stiffening additives may be used if ground conditions warrant their use. Fluid additives of bentonite will not be accepted. Cellulose based reconstitution powder, or liquid polymeric additives may be required for viscosity enhancement. The Contractor will be required to state the type of polymer to be used and describe how the selected fluid additive will be mixed.

(b) Air Lift Yield

The Contractor is required to provide accurate airlift yields to GOAL. The method of the airlift yield estimation will be approved by GOAL.

**8.0 Strata sampling and borehole geo data**

While the drilling operation progresses, representative samples (min. 100 grams) of strata penetrated shall be collected at every Two (2) meters intervals or according to standard requirements of the Ministry of Water and Environment (MWE) where applicable. Strata samples will also be taken at every change in the profile and where water or an aquifer is struck.

At completion of drilling, the Contractor will be required to complete the borehole geo-log with all information describing the properties of the samples, appearances of water and aquifers, rock types and sampling details.

The Contractor will then complete the borehole log reports forms and supply them together with the borehole completion records including water quality test certificates to GOAL. Incomplete records or un-obtained samples are a reasonable ground for rejection of a borehole **(conditions of contract Clause 11).**

**The Contractor will be required to hand to GOAL at the end of the drilling operation borehole logs and pumping test data including information from dry/ low yielding/poor quality boreholes.**

**9.0 Borehole depth and diameter**

The Contractor shall drill to the total appropriate depth and to a diameter that shall allow minimum borehole nominal diameter bore of 5 inches at the completion of the borehole, including casing installation. Expected borehole depth is 70meters however, boreholes may be deeper or shallower than these stated values, in which case, the contractor must agree with the supervising engineer before any decision is taken.

**10. Temporary casing**

Installation and diameter of any temporary casing required for the successful construction of the boreholes will be at the discretion of the Contractor provided that the completed borehole meets the specifications and design required under this Contract and is approved by the Supervising engineer. The cost for supply, installation and removal of temporary casing shall be entirely borne by the Contractor.

**11. Casing and screens**

Aquifer zones shall be completely with *U*PVC screens supplied by the Contractor and shall have a minimum wall thickness of **3.3mm** for 5 inches **ND** casing. The supervising engineer however reserves the right to vary these specifications if deemed necessary. The collapse resistance of the casings shall normally be a minimum of 6.5kg/cm2, while that for screens shall be a minimum of 50% of that of the casing. The screen open area shall not be less than 4% and shall have a uniform slot size of 1mm. Screen length should not be compromised to save cost as this can result in a dry borehole.

Sections of the screen shall be provided in maximum 3m lengths and joined watertight by either flush threaded connections, or by an appropriate method recommended by the screen manufacturer or an equivalent standard, so that the resulting joint shall be strong and have the same structural integrity as the casing and the screen themselves. In some cases, the lower end of the screen shall be completed with a sump of minimum 0.5m and maximum 2m length. The bottom end shall be sealed with a suitable bottom cap.

The casing and screens must be centralized in the well so that an annular space of at least 25mm exists between the well wall and the casing. Suitable centralizers shall be provided to allow the casing screen to be set correctly in the center of the well. A centralizer shall be used every 3m.

**12. Verticality and Alignment**

All wells shall be vertical, shall be drilled and cased straight, and all casings/screens shall be set round, plumb and true to line. If required, the Contractor shall make a verticality test during and after drilling and at his own expense to demonstrate that the departure from the vertical does not exceed 0.1% between ground level and the bottom of the well. If this departure is exceeded, the Contractor shall make the necessary corrections without additional payment. If the error cannot be corrected, drilling shall stop and a new well shall be drilled. The abandoned well shall be backfilled and /or capped. No payment shall be made for re-drilling, the sealing/backfilling of the abandoned well, or for moving to a new site. Any materials (i.e. casing, screens, gravel pack, cement, etc.) lost in the abandoned well shall be at the Contractor’s cost.

**13. Loss of equipment**

Any equipment lost down a well must be removed by the Contractor or the well shall be considered a lost bore. A replacement well shall have to be constructed at the Contractor’s expense.

**14. Lost bore**

If completion of the well is prevented by any of incident to the plant, ground conditions, jamming of the tools, or casing or any other cause, the well shall be deemed to be lost and no payment shall be made for that bore or for any materials not recovered there from, nor for any time spent during drilling or while attempting to overcome problems.

In the event of a lost bore, the Contractor shall construct a new well. The option of declaring any bore lost shall rest with the Contractor, subject to the approval of the supervising engineer.

**A lost bore shall be treated as follows:**

1. The Contractor may salvage as much casing and screen from the lost well as possible and may use it if is not damaged in a replacement well, with the approval of GOAL.
2. Any material supplied by the Employer and salvaged damaged shall become the property of the Contractor, and the Contractor shall compensate the Employer accordingly.
3. The lost bore shall be sealed by concrete or cement grout, which shall be placed from the botttom upward by methods approved by GOAL.
4. The upper 2 meters of the lost bore shall be backfilled with native topsoil. Sealing of such abandoned wells shall be done in such a manner as to avoid accidents or subsidence, and to prevent it from acting as a vertical conduit for transmitting contaminated surface or subsurface waters into the water bearing formations.

**15. Water supply for drilling**

The Contractor shall make his own arrangement for obtaining, transporting, and pumping of water required for drilling purposes and for use by the drilling crew at their camp site.

**16. Well design**

The closed hole (shallow well) design shall be used for all wells constructed in this contract. Any well designed as an open well shall therefore be rejected and GOAL shall not make payments for such works. ***Refer to typical design notes below and the drawings at the Appendix 10.3*** **Design Notes:** - Drilled with 10 5/8" bit to final depth where necessary finished with 8" bit to final depth. Cased with 6" ND uPVC Class D casing, 6mm wall thickness. Screened sections should be adjacent to aquifer zones and gravel packed.

**17. Gravel pack**

The Contractor shall supply suitable gravel pack. Prior to delivery, samples of the gravel pack shall be subjected to a grain size analysis at the Contractors expense and GOAL must approve the results before the gravel pack is used. Gravel pack shall consist of washed, well-rounded particles of a uniform grading of between 2.5 and 4.0mm, shall comprise at least 95% siliceous material and must contain no clay, shale, silt, fines, excessive amounts of calcareous material or crushed rock. The gravel pack needs to be installed slowly and carefully, preferably with a tremie pipe and a funnel.

**18. Sanitary seal**

To provide an effective seal to the entry of contaminants, the upper **3 meters** of the annular space between the casing and the well wall shall be grouted using suitable prepared cement slurry. Grout is to be injected into the annulus in a single operation so that a complete and continuous seal is achieved.

**19. Development and cleaning of wells**

Well development must be undertaken before the Contractor moves to the next site. Development and cleaning of the wells, to remove native silts, clay and drilling fluid residues deposited on the well wall during the drilling process, shall be carried out by the Contractor upon completion of the drilling and installation of casings. The borehole should be flushed until it is free of fine silts and turbidity. When the water clears, the borehole should flush for an additional period of not less than 30 minutes.

Whenever possible, natural well development must be used. If organic drilling fluids are used, they shall be broken down chemically according to manufacturer’s recommendations before or during development. Cleaning may be carried out by airlift pumping, surging, backwashing, or jetting, to the approval of GOAL. Clay de-segregation by means of Sodium Hexametaphosphate (“Calgon”) treatment may, in some cases, also be called for by GOAL.

The method proposed by the Contractor for development of wells shall be submitted to GOAL in writing for his approval. Development of wells shall be effective from the depth at which water is encountered to the bottom of each well. Development shall continue for such time as directed by GOAL and until GOAL is satisfied that the water is as free from fine particles as possible. Upon completion of development, any accumulation of material shall be removed from the bottom of the well by airlifting.

**20. Test Pumping (See Appendix 10.3B detailed spec for test pumping and yield measurement)**

The Contractor shall perform test pumping to establish well efficiency and assess the aquifer properties, and shall provide a suitable, self-contained, mobile test-pumping unit. The method for varying the discharge rate of the pumps shall depend on the type of pump used. The Contractor shall ensure the provision of a suitable means of achieving the range of constant flow rates specified.

The production well shall be subjected to 72 hours constant discharge with at least 3 steps, pumping test at intervals of 90 minutes per step completed prior to the constant test. Aquifer recovery shall be monitored until 90% of the created draw down is achieved or for a period equivalent to a quarter the time used for the constant test, whichever occurs first. GoU guidelines – pumping test of wells- January 2019 shall be adopted.

The technical proposal should therefore define the methodology to be used for determining the appropriate yield of the well. However, discharge yields at every stage during the exercise shall be agreed with the supervisor on site.

**21. Water level observation**

The Contractor shall apply appropriate electronic contact water level gauges for measuring water level in the wells. Measurements shall be made at predetermined intervals, depending on the nature of the test. Well head arrangement shall permit these gauges to be inserted.

Water level shall be measured to 5mm accuracy during test pumping by the Contractor by means of an electronic contact gauge (dipper). The frequency of measurement shall be as specified on the agreed test pumping data form, or one otherwise determined by GOAL.

Discharge shall be measured by volumetric methods or means of approved measuring device. During test pumping, discharged water shall be disposed-off sufficiently far from the well to prevent recharge.

**22. Water Quality Testing**

Sampling and delivery of water samples for microbial and physicochemical analysis shall be carried out by GOAL in a reputable GoU laboratory. Any well with poor water quality measured against the National standard will be rejected and no payments shall be made for such wells. A water sample shall be taken at the end of the pumping test by the clients’ representative on site, well-sealed, preserved and delivered to the Laboratory. The analysis results shall be shared with the contractor

Where the contractor is dissatisfied with the water quality results presented by GOAL, he/she is at liberty to carry out parallel confirmatory tests at his own cost.

Onsite water quality tests will be performed by a representative of GOAL in the presence of the contractor’s selected personnel. The following parameters that can be performed on site using portable water quality testing meters will be tested. The results of these tests shall be included as part of the final borehole records.

* **Electrical conductivity**
* **Temperature**
* **PH**
* **Turbidity**

The following parameters will be tested by GOAL in a reputable GoU laboratory.

* **Physical Parameters – Colour apparent (PtCo), Turbidity (NTU), Electrical Conductivity (µS/cm), TSS (mg/L)**
* **Chemical Parameters – Nitrate(mg/L N), Total Hardness (mg/L), Fluoride (mg/L F), Chloride (mg/L Cl-), Sulphate (mg/LSO42-), Total Iron (mg/L Fe) Manganese (mg/L Mn), TDS (mg/L), Calcium (mg/L Ca2+), Magnesium (Mg/L Mg2+), Bicarbonate (mg/L CaCO3), Alkalinity (total mg/L CaCO3)**

**23. Capping of well**

During well construction, installation, development and test pumping, the Contractor shall use industrial made well caps. The Contractor shall also use all reasonable measures to prevent entrance of foreign matter into the well. The Contractor shall be responsible for any objectionable materials that may fall into the well and any effect it may have on water quality or quantity until completion of the Works and acceptance by GOAL.

**24 Acceptance of well**

GOAL shall accept the well upon satisfactory completion of all drilling operations, installation of casings and screens, development works, pumping tests, presentation and approval of complete drilling reports and logs and provided the well yield is above minimum recommended values and water quality tests are suitable for potable water according to the GOU standards.

**25. Standby time**

In the event of delays occurring because of the action or inaction of GOAL, for which the Contractor would be entitled to claim Standby Time, the Contractor shall notify GOAL immediately in writing. A claim for Standby Time is only effective if all the Contractor’s plant, equipment, and personnel are on site, available for work and in a serviceable condition. Standby Time shall not exceed the standard working day as defined in the Contract Data, and any claim shall only be deemed to start at the date and time of a notice in writing to GOAL.

**26. Concrete apron/platform casting and hand pump installation**

Upon receipt of satisfactory water quality results and after being verified by GOAL, the Contractor shall cast a concrete slab on the wells according to these specifications.

The Contractor shall construct concrete platform for each successful borehole carrying out the following activities in order:

Excavate square pit 1350x1350x400mm deep around casing pipe and cast platform in mass concrete (mix 1:2:4/20mm agg.) conforming to the dimensions and other specifications; ***refer to the drawings attached.***

Cure concrete for not less than 5 days and protect it from excessive sunshine and vandalism (using gunny bags, wet sand and thorny bushes, etc).

Plaster platform in cement screed to a smooth finish, then engrave the borehole details provided by GOAL on the platform

**29. Clearing the site**

Upon completion of works, the site must be left free from debris, hydrocarbons and waste, and all pits must be filled up. A site not delivered clean may render the well unacceptable.

**30. Records and reporting (See Appendix 10.3)**

The Contractor shall keep daily activity records for each borehole. The records shall contain the information as specified below. In addition, separate records should be supplied for each borehole upon completion.

**i) Daily Record**

\_ Site name

\_ Reference number of boreholes

\_ GPS Co-ordinates of borehole (latitude / longitude)

\_ Date of reporting

\_ Names of foreman and drillers

\_ Method of drilling

\_ Make, model, type and size of drilling rig

\_ Diameter of hole, and depth of changes in diameter

\_ Depth of hole at start and end of shift or working day

\_ Depth and size of casing at start and end of shift or working day

\_ Description of strata drilled with depth of transitions encountered

\_ Depth at which water is struck

\_ Yield of air lifted water, when drilling or developing with air in litres per second.

\_ Time log showing rate of penetration in minutes per metre, type of bit, standby time due to breakdown.

\_ Depth intervals at which formation samples are taken

\_ Records of components and quantities used or added to the drilling fluid or air.

\_ Water level at the start of each working day

\_ Electrical conductivity measurements during test pumping

\_ Problems encountered during drilling

\_ Details of installations in the borehole (if any)

\_ Depth, size and description of well casing

\_ Depth, size and description of well screens

\_ Aquifer depth and SWL after completion of well

A copy of the Daily Record log shall be made available daily to the Supervisor, including any other pertinent data as may be requested by the Supervisor.

**ii) Borehole Completion Record**

\_ As per standard Borehole Completion Form.

\_ Detailed drillers geological log.

\_ Borehole design and installation details (as-built drawing)

**ii) Monthly Contract progress report**

The Contractor shall submit a monthly progress report detailing progress on the contract. The month report shall include the progress of projects successfully completed, problems encountered that are hindering progress and remedial recommendations to accelerate contract progress.

**iii) End of Contract Report.**

The Contractor shall prepare an end of Contract report, which should address at the minimum the following issues.

1. The selected sites

*(Suitability, accessibility)*

2. The drilling /test pumping methodologies

*(Type of drilling, designs used, test-pumping methods)*

3. Contract schedules and duration

*(Summarised diary of events and actual durations)*

4. Summary of results and analysis

*(Table showing locations, well numbers, depths, casing type and depths, driller’s and test pumping yields, water quality and any other information necessary)*

5. Casing /screens received and used on the Contract (if any)

*(Table showing casings received, used, damaged and balances)*

6. Problems encountered

*(With accessibility, formations, equipment and community, etc)*

7. Suggestion for improvement

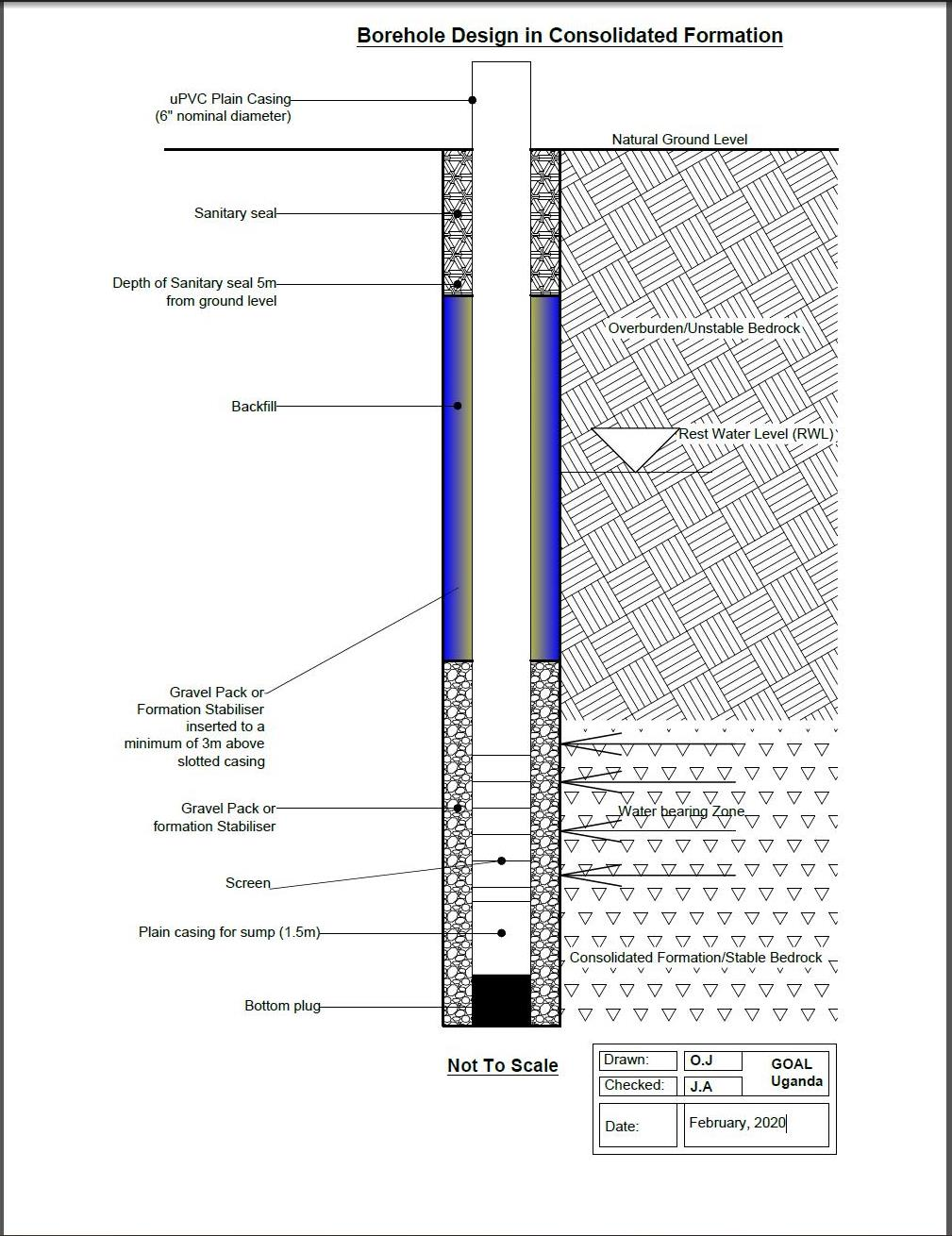
*(On supervision, documentation, durations, etc)*

8. Borehole Completion Records,

*(Original Drilling and test pumping logs bound separately from the report)*

9. Any other information that the Contractor may deem important or necessary. Two copies of the End of Contract Report (one without the Borehole Completion Records) shall be submitted to the Supervisor.

**Borehole design: Consolidated formations**



**Schematic Drawings for Well Apron Construction**

*(Refer to attachments at the appendix 3 for drawings)*

**B) Terms Of Reference - Geophysical Survey**

**1.0 Scope of Works**

The Contractor’s hydrogeologist will carry out a detailed geophysical survey in the identified / selected communities located in Bugiri / Namayingo District.

A method of geophysical survey best suited to the geography/geology of the area is to be employed. The hydrogeologist should preferably discuss the methods they are to employ with GOAL before commencement of the works.

Representatives from the local community shall be involved in these activities and GOAL Uganda will assist with community liaison activities.

**The geophysical analysis will include four elements.**

1. **Desk study**

The hydrogeologist should review existing reports, borehole logs, topographical, geological, and hydro geological maps, previous geophysical surveys and the most current aerial photographs available. The consultant must state the sources of all this information and make them available in their reports.

1. **Hydro census**

The Contractor shall carry out a hydro census in the vicinity of the target areas. This includes a detailed inventory of all existing water supplies and data on well depths, yields, water quality, static water levels, etc. If the hydrogeologist requires any additional information that may be held by GOAL, they should request this this. The hydrogeologist will remain responsible for verifying and compiling all relevant information (both from GOAL and others) in order to compile a comprehensive study.

The following are additional features that can be compiled from the hydro census

* Identify details of water-related features (e.g. storm water channels, erosion gullies, weirs, diversion embankments), and disused or abandoned boreholes and wells.
* Identify features where water could collect in rainy periods (quarries, borrow pits, seasonal puddles, etc.).
* Identify potential sources of contamination (latrines, waste disposal sites, animal kraals, defecation sites, animal watering points, soak-away pits and drains, etc.).
* Identify visible features and symptoms (e.g. borehole casing rusted away at the surface, presence of algal blooms in stagnant water) that indicate the potential for water contamination.
* Identify water sources and, where possible, indicate the flow rate and the quality of each water source.

**It is important for the hydrogeologist to present to the GOAL technical team the results of their findings after the desk study and the hydro census but before commencement of the detailed geophysical surveys. Initial findings may inform the selection or inclusion of sites for more detailed studies.**

1. **Geophysical Survey and initial recommendations**

After the desk study and hydro census, the hydro geologist will use the findings to carry out the preliminary geophysical surveys and the detailed surveys.

1. **Final conclusions and Reports**

The hydrogeologist shall compile the final siting reports which will form part of the complete report for all the works.

**2.0 Inspection**

GOAL Uganda or their authorised representative has the right to witness the surveys and the Contractor or their hydrogeologist shall provide reasonable assistance to allow access as and when required by GOAL Uganda

**3.0 Clearance of Site after works**

Upon completion of the survey works, the Contractor’s hydrogeologist shall remove from the site all equipment, tools, surplus materials, rubbish and temporary works and shall leave the site clean and in a condition satisfactory to GOAL Uganda.

**4.0 Safety and Protection of Environment**

The Contractor or their hydrogeologist shall, through the contract period, be responsible for the safety of all persons entitled to be on the survey site and to keep the site in an orderly state to avoid any danger to such persons. The Contractor further undertakes to ensure that he will abide by safety procedures as set out by the government and regional authorities in conducting this work, and by implementing clean environmental procedures whilst conducting this work.

The number of locations given to the Contractor which will require the siting are included in the contract. At each location/geophysics survey site three possible borehole sites shall be indicated and rated/prioritised in order of preference, according to the survey results.

**5.0 Data Analysis**

Interpretation and evaluation of data arising from the desk study and hydro census is a critical early activity since preliminary conceptual models relating to the ground water systems within the project area will be based upon this information.

All data collected should be entered into a computer database and made available to GOAL during the survey period. It should form part of the appendices of the final report. The hydrogeologist should present their findings for each batch of complete preliminary surveys and final surveys.

**6.0 Geophysical methods**

Each geophysics survey should include (but not limited to) the following

* + - 3 x VES (Vertical Electrical Soundings)
    - 1.5km Resistivity Profiling
    - Interpretation of data
    - Verbal recommendations and marking of 3 sites

**7.0 Interpretation**

Results of the geophysical surveys should be recorded daily on completion of the field activities. Processing and interpretation of data should be carried out on site and the geophysicist will identify potential borehole sites. At each location (geophysics survey site) three possible borehole sites are to be indicated in the field with marking pegs cast in concrete and rated in order of preference according to the survey results. GPS coordinates for each of these sites will also be recorded.

**8.0 Reporting**

**The hydrogeologist should avoid the use of generic reports which do not have anything in common with the project. Technical reports should indicate a level of awareness and detailed study of the field areas. Copied or modified reports when encountered will be rejected together with the whole survey claimed.**

**Three stages of reporting shall be completed:**

* Inception reports summarising the findings of the desk study and the results of the hydro census. The report will provide 1:50,000 scale location maps which will show existing water points, aerial photographs, and topographical maps showing contours, drainage and surface water bodies.
* Field reports which provide the results and interpretations of the geophysical surveys. Potential borehole site shall be identified together with the target aquifer and recommendations for drilling, including method of drilling and borehole design. The sites will be ranked according to their respective groundwater potential. Three (3) sites shall be identified for the borehole location under investigation. A copy of the field report shall be provided for the community of each respective site. Field reports shall be submitted to GOAL Uganda field staff upon the completion of each survey to facilitate timely completion of drilling activities. Additionally, this information shall be presented in a briefing to the GOAL field staff.
* Final Report shall provide a detailed account of all project activities and include all the archive, hydro census and geophysical survey results. Both soft and hard copies of the final report shall be handed to GOAL (GOAL Uganda).

**9.0 Equipment**

The Contractor shall provide all equipment (geophysical and otherwise) necessary to carry out geophysical surveys as described above in the technical specification. All equipment must be properly calibrated and in full working order. The suitability and appropriateness of the equipment shall be verified by GOAL Uganda, prior to commencement of work.

**C) Terms of reference - Test Pumping**

**1. Introduction and Background**

GOAL is desirous that the Contractor performs Test Pumping of all wells in conformity with the procedures outlined here in the terms of reference. The output of the test pumping will form part of the drilling report presented at the end of the borehole drilling and construction works.

**2. Scope of Works**

The Contractor, by accepting the terms of this contract with GOAL, accepts and understands that the primary purposes of conducting test pumping are as detailed below: -

1. To determine the reliable long-term yield (or ‘safe’ yield) of a borehole, and therefore whether the borehole can be regarded as a ‘success,’ and how many people it will be able to supply.
2. To assess the hydraulic performance of a borehole, usually in terms of its yield-drawdown characteristics thus how much drawdown it takes to yield a certain amount of water
3. To derive the hydraulic properties of the aquifer.
4. Pumping tests are the classic (and perhaps the only) way to derive *in situ* aquifer hydraulic properties, such as transmissivity and the storage coefficient, or to reveal the presence of any hydraulic boundaries.
5. To test the operation of the pumping and monitoring equipment, to make sure that everything is working safely and efficiently, and if applicable, to confirm that the Contractors have done their job properly.
6. To determine the effects of abstraction on neighbouring abstractions (sometimes referred to as derogation).
7. To determine the environmental impact of the abstraction. All groundwater abstraction eventually has an impact; it is only a matter of where, when and whether the impact is acceptable.
8. To provide information on water quality. Is the water quality suitable for the intended use? Is it stable in the long term? Are there likely to be any problems such as drawing in saline or polluted water after extended periods of pumping?
9. To optimize operational pumping regimes (especially from multiple-borehole sources), including selecting the most suitable pumping plant for long-term use, and estimating probable pumping and/or treatment costs.
10. To help determine the correct depth at which the permanent pump should be installed in the borehole (the subjects of pump choice and installation are covered in other guidance documents).

**The Scope of the work will be to:**

1. Carry out desk study on the drillers yields, borehole depths, well diameters and screen depths of the drilled boreholes.
2. Perform Test pumping for all the drilled wells and the following tests will be conducted:

* At least 3 step tests each of a duration of 90mins.
* Constant rate test for a minimum duration of 72 hrs.
* Aquifer recovery shall be monitored until 90% of the created draw down is achieved or for a period equivalent to a quarter of the duration of the constant test, whichever occurs first.

1. Complete all forms related to test pumping as detailed by MWE guidelines.
2. Carry out interpretation of all the test pumping results according to the methodology described by MWE guidelines.
3. Present all findings in a comprehensive report, of which the contents must comply with the demands of this ToR. All field and raw data will also be made available to GOAL.

**3. Test Pumping Procedure and expected out put**

GOAL expects the Contractor to follow the laid down pump testing procedure in the TOR for coming up with the results that will form part of the Drilling report. The chart hereunder outlines the procedure and expected output of the test pumping.

**Flow chart and test procedure and Deliverables**

Output/Deliverables

Activity

Procedure

1. The geological and hydrogeological context.

2. Completion of forms requested by the client related to well details.

3. Description of surface water features in the study area.

4. Risk assessment of any seasonal on the outcome of the tests.

5. A Map including the location of all the test sites and other features ensuring consistency of naming protocol.

1. Determination of aquifer Transmissivity by graph,

2. Further well performance diagnosis

Measurement of residual draw down following the constant rate test until SWL is reached

Recovery

Consult well drilling logs, study drillers yields, water strike levels, borehole depths, borehole diameters. Consult geographical maps of the area

C

Desk Based Studies

**4. Equipment for the Test Pumping**

1. Determination of aquifer Transmissivity by graph,

2. Presentation of records water levels by graph.

Constant rate pumping at safe yield with measurement of yield and draw down for 72 hours

Constant rate pumping test

1. Determination of nonlinear (B) and nonlinear (C) well losses.

2. Graphing of yield versus drawdown using the above.

3. Graphing of linear drawdown versus actual draw down.

4. Determination of safe yield based on above.

3 Stage step tests with measurement of yield and draw down, minimum of 90 minutes per step

Step Pumping tests

The Contractor shall provide the following equipment in order to conduct the test pumping detailed in these Terms of Reference:

1. An appropriately sized pump fitted with a non-return valve (NRV) in order to be able to conduct the recovery test, as detailed in section 2,
2. A rising main fit for the purpose of conducting these tests, i.e. without any leaks,
3. Adequate pipework to ensure that discharge from the well achieves a minimum distance of 100m from the well and that the risk of recharge to the aquifer/well is minimised for the duration of the tests,
4. The power generating capacity and necessary fuel to run the pumping equipment,
5. Means to accurately control the yield of the pump by either inducing extra pumping head by valve or varying the frequency of electrical supply to the pump, should the pump be compatible with this technology,
6. An accurate and well calibrated means of measuring flow from the well. Note that any device such as a V-Notch weir used for measuring flow MUST be calibrated on site using the ‘stopwatch and container’ method,
7. An accurate means with which to measure water levels in the well throughout the duration of the test. Note that if a dipper meter is used then it should be of a type with sensitivity adjustment to avoid erroneous errors caused by ‘cascading fractures’ and any pumping induced turbulence in the well,
8. An accurate means to measure time, e.g. stopwatch,
9. A conductivity, temperature and pH meter (combination or individual), calibrated prior to each of the tests that will be used for (step and constant rate test),
10. A means to measure turbidity, either manual or electronic,
11. A camera for taking pictures of the site, related installations and any observed water quality issues, e.g. high turbidity and/or sand content,
12. Copies of the field data forms provided in this document and additional note paper for unforeseen needs,
13. Sets of graph paper, both linear/logarithmic and linear/linear, for the plotting of field curves to verify data and make some field calculations for better conducting other tests.

**As stated in section 4, the consultant will provide details of all the above equipment in the final report.**

**5. Objectives**

**The Desk-based Study**

The desk-based study will include collecting the following information:

1. All drilling and construction details of the borehole(s)/wells(s) to be tested
2. Gathering of information on static water levels, water quality information, well depth, well diameter, height of measurement point above ground level.
3. Gathering of information related to the basic geology and hydrogeology of the area. If a previous geophysical survey is available from the site then the consultant must mention these and, if possible, present the findings in the final report,
4. Ascertain if there are any surface water features in the study area which might reasonably be expected to have an interaction with the aquifer and could be affected by a pumping test,
5. Conduct a risk-based assessment of the validity of these tests in terms of seasonal factors that might affect the performance of the aquifer and/or the well at other times of the year from that during which the tests are conducted.

**6. The Step Test**

**Introduction**

The Contractor will understand that the purpose of conducting a step test is to establish the short-term relationship between yield and drawdown for the well/borehole being tested. This is achieved by measuring drawdown at a range of yields. The following can reasonably be expected to be determined from the test:

1. The performance of the well, i.e. the relationship between drawdown and yield for a range of flows even when that flow might not have been achieved during the test,
2. The linear well losses, or B factor, and non-linear well losses, or C factor, for the well according to the relationship[[1]](#footnote-2);

Where, sw is the drawdown in the well (m), Q has the dimensions [L3/T], B has the dimensions [T/L2] and C has the dimensions [T2/L5].

And the following equation relationship should yield a straight line[[2]](#footnote-3);

Where Q/sw is termed the specific drawdown and has dimensions [L/L3/T]

1. The maximum safe yield of the well, often taken to be the yield (and associated drawdown) where linear well losses (BQ) by themselves account for at least 50% of the drawdown
2. The safe yield of the well, often taken to be 80-90% of the maximum safe yield.

**Note: Information obtained from the step test will be critical in the proper design of the constant rate test. For example, yield can decline during a constant rate test as drawdown deepens and pumping head increases – data from the step test can help the hydro geologist to ensure that the correct adjustment are made at the appropriate time during the constant rate test.**

**A period of at least 24 hours must be given between the Test pumping and the completion of drilling.**

The Contractor will ensure the following:

1. The datum for all water level measurements must be chosen and adhered to for the duration of this test and all others conducted subsequently and this point must be reported,
2. The test shall comprise three steps with yields set using the following calculation.

**Q1 = Qdes/3, Q2 = Qdes/2, Q3 = Qdes**

Where; Qdes is the design yield, estimated from the constant test and allowing for a safety factor that will ensure that the last step is not beyond the capacity of the well and the depth of installation of the pump, i.e. that the PWL*[[3]](#footnote-4)* should not arrive at the level of the pump,

1. Each step will continue for a minimum duration of 60 minutes,
2. Multiple and accurate flow measurements shall be made throughout the duration of the test and especially immediately after the change in yield from one step to another,
3. The interval of measurement for the water level in the well (PWL) during each step adheres to the MWE recommendation set forth on the test pumping data recording sheets.

Every 30 seconds for the first 10 minutes,

Every minute up until 30 minutes, and then

Every 5 minutes up until 120 minutes.

1. Ideally the drawdown should stabilise - reach a ‘steady’ or ‘quasi-steady state’ - before the end of each step. If this is not the case, then the consultant understands that the method of interpretation of the data differs from that of a standard ‘steady-state’ analysis and must present this in the final report[[4]](#footnote-5)

**7. Constant rate test**

**Introduction**

The Contractor shall carry out constant-rate test for all drilled boreholes. The well is to be pumped at a constant rate for 72 hrs while the water levels and pumping rates are monitored simultaneously. The same equipment used for step test shall be used.

**Constant-rate test procedure**

If all the equipment is ready, and people have been assigned their tasks, the procedure for conducting a constant-rate test is as follows:

1. Choose a suitable local datum (such as the top of the casing) from which all water-level readings will be taken and measure the rest-water level. The water level must be at rest before the start of the test, so the test should not be conducted on a day when the borehole is being drilled or developed, or when the step test is taking place.
2. Open the valve to the appropriate setting and switch the pump on, starting the stopwatch at the same time. Do not keep changing the valve setting to achieve a pumping rate (a round number in liters per minute, for example). Rather, aim for an approximate rate and measure the actual rate.
3. Measure the water level in the borehole every 30 seconds for the first 10 minutes, then every minute until 30 minutes have elapsed, then every 5 minutes until 2 hours have elapsed. After 2 hours, observe how quickly the water level is still falling, and decide an appropriate frequency for water-level readings until the end of the test. If the water level is falling very slowly, then a reading every 30 minutes or even every hour may be enough. If the test is to continue for several days, review the measurement frequency depending on the behaviour of the water level. If you miss the planned time for a water-level reading, write down the actual time the reading was taken. Record all the readings on the standard form recommended by MWE
4. Measure the pumping rate soon after the start of the test, and then at intervals during the test (every 15 minutes would be reasonable for the first few hours, then decide a suitable frequency for the remainder of the test). If there is a noticeable change in the rate of increase of drawdown, or if the pump sounds different, then measure the pumping rate at those times as well. If the pumping rate changes significantly (say by more than 10%), then adjust the valve setting to maintain as steady a pumping rate as possible throughout the test but be careful not to over-adjust and make the problem worse.
5. At the end of the test, switch the pump off, note the time (or restart the stopwatch), and immediately start measuring the water level recovery.

**8. The Recovery Test**

**Introduction**

The recovery test for the wells must be done and the results presented together with the test pump results. The purpose and benefits of conducting a recovery test is outlined below:

1. They provide a means to verify results from the constant rate test,
2. The absence of variations in pumping rate that might occur during the constant rate test lead to smoother graphing of residual drawdown[[5]](#footnote-6) data,
3. They can help GOALs’ supervisor propose a future pumping regime.
4. Water levels in the well can be easier to measure during this type of test due to the absence of cascading fractures and/or pump induced turbulence in the well,

**The Recovery Test Procedure**

The following procedure shall be followed for the recovery test:

1. The pump shall be provided and installed by the Contractor and ensure that a non-return valve (NRV) has been fitted immediately above the pump to prevent backflow of Water in case of pump failure.
2. This test MUST be started immediately after the constant rate test described above and not after any other pumping event at the site,
3. Water level measurement intervals will be the same as for the constant rate test, detailed in MWE well recovery data monitoring tool.
4. Data will be recorded on the form developed or recommended by MWE

**9. Analysis and Interpretation and reporting**

The analysis and interpretation of the test pumping results will be done by analysing the time taken for the well water level to recover to its original level before test pumping. For wells that do not recover more than 50% of their original static water level in a period of one hour such wells will be deemed unsuccessful. The Contractor will be expected to produce accurately measured raw field data in the final report and this is the basis for consideration of successful execution of the contracted works.

The Contractor’s final report will indicate the actual yield of the well.

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| Signed: |  | | |
| Print name: |  | Position: |  |
| Company Name: |  | Date: |  |
| Address: |  | | |

**Appendix 3. Well Apron Casting Drawing**

**See PDF file attached.**

**Appendix 4. Financial Offer/BOQ**

**See Excel file attached.**

**Appendix 5. WORKPLAN/METHODOLOGY**

1. Workplan

Present a timeline workplan (block diagram) detailing the chronological layout of each component of the construction, and how long approximately it will take to complete each stage. There may be overlapping tasks – please be as clear as possible. This shall be submitted as an excel, word or Microsoft Office project document. Bidders are expected to use their technical experience and reference to the technical specification. Please detail any deviations or improvements with justification to the specifications reflected in the TOR.

2. Methodology

This is a descriptive summary on how the bidder intends to achieve the various construction stages of the project. Explain the work plan and confirm that you are working to the specifications detailed in the TOR - Appendix 4. Please detail any deviations or improvements with justification to the specifications reflected in the TOR.

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| Company Name: |  | Date: |  |
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**Appendix 6 - GOAL terms and conditions**

**TERMS AND CONDITIONS FOR CONTRACTS FOR WORKS**

1. SCOPE AND APPLICABILITY

These Terms and Conditions for Contracts for Procurement of Goods apply to all deliveries of goods made to GOAL notwithstanding any conflicting, contrary or additional terms and conditions in any purchase order or other communication from the Supplier. No such conflicting, contrary or additional terms and conditions shall be deemed accepted by us unless and until we expressly confirm our acceptance in writing.

1. LEGAL STATUS

The Supplier shall be considered as having the legal status of an independent contractor vis-à-vis GOAL. The Supplier, its employees, sub-contractors and associates shall not be considered in any respect as being the employees of GOAL. The Supplier shall be fully responsible for all work and services performed by its employees, subcontractors and associates, and for all acts and omissions of such employees, subcontractors and associates.

1. SUB-CONTRACTING

In the event the Supplier requires the services of a sub-contractor, the Supplier shall obtain the prior written approval of GOAL for all sub-contractors. The Supplier shall be fully responsible for all work and services performed by its sub-contractors and suppliers, and for all acts and omissions of such sub-contractors and suppliers. The approval of GOAL of a sub-contractor shall not relieve the Supplier of any of its obligations under this Contract. The terms of any sub-contract shall be subject to and conform to the provisions of this Contract.

1. OBLIGATIONS

The Supplier shall neither seek nor accept instructions relating to this contract from any authority external to GOAL. Suppliers may not communicate at any time to any other person, government or authority external to GOAL, any information known to them by reason of their association with GOAL which has not been made public, except in the course of their duties or by authorization ofGOAL: nor shall Suppliers at any time use such information to private advantage. These obligations do not lapse upon termination/expiration of their agreement with GOAL.

1. ACCEPTANCE AND ACKNOWLEDGEMENT

Initiation of performance under this contract by the supplier shall constitute acceptance of the contract, including all terms and conditions herein contained or otherwise incorporated by reference.

1. WARRANTY

The Supplier warrants upon delivery and for a period of twelve (12) months from the date of delivery that goods purchased under this Contract will conform in all material aspects to the applicable manufacturer's specifications, government or international standard or contractually agreed standard for such goods and will be free from material defects in workmanship, material and design under normal use. The warranty does not cover damage resulting from misuse, negligent handling, lack of reasonable maintenance and care, accident or abuse by anyone other than the Supplier.

1. CHECKS AND AUDIT

The Supplier shall allow any external auditor authorised by GOAL to verify, by examining the documents and to make copies thereof or by means of on-the-spot checks of original documents, the implementation of the contract and conduct a full audit, if necessary, on the basis of supporting documents for the accounts, accounting documents and any other document relevant to the financing of the project. The Supplier shall ensure that on-the-spot access is available at all reasonable times. The Supplier shall ensure that the information is readily available at the moment of the audit and if so requested, that the data be handed over in an appropriate form. These inspections may take place up to 7 years after the final payment.

Furthermore, the Supplier shall allow any external auditor authorised by GOAL carrying out verifications as required to carry out checks and verification on the spot in accordance with the procedures set out by the donor or in the European Union legislation for the protection of the financial interests of the European Union against fraud and other irregularities.

To this end, the Supplier undertakes to give appropriate access to any external auditor authorised by GOAL carrying out verifications as required to the sites and locations at which the project is implemented, including its information systems, as well as all documents and databases concerning the technical and financial management of the action and to take all steps to facilitate their work. Access given to agents of any external auditor authorised by GOAL carrying out verifications shall be on the basis of confidentiality with respect to third parties, without prejudice to the obligations of public law to which they are subject. Documents must be easily accessible and filed so as to facilitate their examination and the Supplier must inform GOAL of their precise location.

The Supplier guarantees that the rights of any external auditor authorised by GOAL carrying out verifications as required to carry out audits, checks and verification shall be equally applicable, under the same conditions and according to the same rules as those set out in this Article, to the Supplier's partners, and subcontractors. Where a partner or subcontractor is an international organisation, any verification agreement concluded between such organisation and the donor applies.

1. RULE OF ORIGIN AND NATIONALITY

If any rules of origin and nationality are applicable due to donor requirements, limiting the eligible countries for goods, legal and natural persons, such rules shall be stated or referred to in the contract document. In such instances the Supplier must adhere to these rules and be able to document and certify the origin of goods and nationality of legal and natural persons as required.

Failure to comply with this obligation shall lead, after formal notice, to termination of the contract, and GOAL is entitled to recover any loss from the Supplier and is not obliged to make any further payments to the Supplier.

1. INSPECTION & TESTING

The duly accredited representatives of GOAL or the donor shall have the right to inspect/test the goods called for under this Contract at Supplier’s stores, during manufacture, in the ports or places of shipment, and the Supplier shall facilitate such inspections. GOAL may issue a written waiver of inspection at its discretion. Any inspection carried out by representatives of GOAL or the donor or any waiver thereof shall not prejudice the implementation of the other relevant provisions of this Contract concerning obligations subscribed by the Supplier, such as warranty or specifications.

1. LICENCE

The Contract is subject to the obtaining or holding of any license or other governmental authorisation that may be required. It shall be the responsibility of the Supplier to obtain such license or authorisation. GOAL may, at its discretion, use its best endeavours to assist.

1. FORCE MAJEURE

Force Majeure shall mean Acts of God, strikes, lockouts, discontinuation or termination of donor funding, laws or regulations of operating country, industrial disturbances, acts of the public enemy, civil disturbances, act of war (whether declared or not), explosions, blockades, insurrection, riots, epidemics, landslides, earthquakes, extreme weather events, civil disturbances, and any other similar unforeseeable events which are beyond the parties' control and cannot be overcome by due diligence.

In the event of and as soon as possible and no later than fifteen (15) days after the occurrence of any cause constituting Force Majeure, the Supplier shall give notice and full particulars in writing to GOAL of such occurrence or change if the Supplier is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this Contract. The Supplier shall also notify GOAL of any other changes in conditions or the occurrence of any event that interferes or threatens to interfere with its performance of this Contract. On receipt of the notice required under this article, GOAL shall take such action as, in its sole discretion, it considers to be appropriate or necessary in the circumstances, including the granting to the Supplier of a reasonable extension of time in which to perform its obligations under this Contract, or termination of the Contract if any delay will force an extension to the delivery schedule.

Notwithstanding anything to the contrary in this Contract, the Supplierrecognizes that the work and services may be performed under harsh or hostile conditions caused by civil unrest. Consequently, delays or failure to perform caused by events arising out of, or in connection with, such civil unrest shall not, in itself, constitute Force Majeure under this contract.

1. DEFAULT

In case the Supplier fails to comply with any term of the Contract, including but not limited to failure or refusal to make deliveries within the time limit specified, they shall be liable for all damages sustained by GOAL, and GOAL may procure the goods from other sources and hold the Supplier responsible for any excess cost occasioned thereby. GOAL may collect damages from the Supplier in lieu of purchasing the goods from other sources. GOAL may by written notice terminate the right of the Supplier to proceed with deliveries or such part or parts thereof as to which there has been default, or if any delivery is late, GOAL may cancel such delivery or the entire Contract.

1. REJECTION

In the case of goods purchased on the basis of specifications or samples or both, GOAL shall have the right to reject the goods or any part thereof if they do not conform with the specifications of the Contract in the opinion of GOAL or is not delivered in due time.

GOAL shall have the right to reject the goods in the event that the packing is not in accordance with the terms of the Contract.

When the goods or any part thereof have been rejected, GOAL shall have the right, without prejudice to the provisions of Article 9, to demand from the Supplier the immediate delivery of acceptable goods in replacement thereof in accordance with the contract or to purchase other similar goods elsewhere and to claim from the Supplier the amount of loss or damages sustained by reason of the default.

Goods or any part thereof in GOAL's possession which have been rejected by GOAL must be removed at the Supplier's expense within such period as GOAL may specify in its notice of rejection.

After such notice has been dispatched to the Supplier, the goods or any part thereof will be held at the latter's risk. Should the Supplier fail to remove the goods as required by the notice of rejection, GOAL may dispose of them, without any liability to the Supplier whatsoever, in such manner as it deems fit

1. AMENDMENTS

No change in or modification of this Contract shall be made except by prior agreement between the Responsible Buyer in GOAL in Ireland and the Supplier.

1. ASSIGNMENTS & INSOLVENCY

The Supplier shall not assign, transfer, pledge or make other disposition of this Contract or any part thereof or of any of the Supplier’s rights, claims or obligations under this Contract except with the prior written consent of GOAL.

Should the Supplier become insolvent or should control of the Supplier change by virtue of insolvency, GOAL may without prejudice to any other rights or remedies, terminate this Contract by giving the Supplier written notice of termination.

1. PAYMENT

The Supplier shall invoice GOAL and the terms of payment shall be thirty (30) working days after presentation of a legal invoice and signed waybill or other documents showing delivery has been made.

1. INDEMNIFICATION

The Supplier agrees to indemnify, hold and save GOAL harmless and defend at its own expense GOAL, its officers, agents and employees from and against all suits, claims, demands and liability of whatever nature or kind, including costs and expenses thereof and liability arising there from, with respect to, arising from or attributable to acts or omissions of the Supplier or its employees or sub-contractors in or relating to the performance of this Contract. This provision shall extend to, but shall not be limited to, product liability claims.

GOAL will promptly notify the Supplier of any such suit, claim, proceeding, demand or liability within a reasonable period of time after having received written notice thereof, and will reasonably cooperate with the Supplier, at the Supplier’s expense, in the investigation, defence or settlement thereof, subject to the privileges and immunities of GOAL.

The Supplier shall not permit any lien, attachment or other encumbrance by any person or entity to remain on file in any public or official office or on file with GOAL against any monies due or to become due for any work done or materials furnished under this Contract, or by reason of any other claim or demand against the Supplier.

1. DATA PROTECTION

The Supplier hereby acknowledges that it shall comply with all applicable requirements of The General Data Protection Regulation (EU 2016/679); The Data Protection Acts 1988-2018; and The E-Privacy Directive 2002/58/EC, as amended from time to time (the “**Data Protection Legislation**”) should Personal Data be accessed, viewed or in any way Processed by the Supplier. If during the term of the Contract it is contemplated that the Supplier will Process Personal Data, the Supplier shall only engage in such Processing where a data processing agreement has been put in place. GOAL reserves the right to rescind any Contract should the Supplier’s data protection and security procedures be considered (in GOAL’s sole opinion) non-compliant with the Data Protection Legislation. Defined terms in this clause 18 will have the meaning set out in the Data Protection Legislation as defined above.

1. CONFIDENTIALITY

The Supplier shall not advertise or otherwise make public the fact that he is a Supplier to GOAL without specific approval from GOAL. Nor shall the Supplier in any manner whatsoever use the name of GOAL, or any abbreviation thereof, in connection with his business or otherwise. Non observance of these conditions shall entitle GOAL to cancel the Contract, or any part thereof, and to hold the Supplier liable for any damages which GOAL has sustained as a result thereof.

1. DISPUTES - ARBITRATION

Any claim or controversy arising out of or relating to this or any contract resulting here from, or to the breach, termination or invalidity thereof, shall be, unless settled amicably through negotiation, submitted to arbitration in accordance with Irish law.

1. USE OF NAME, EMBLEM OR OFFICIAL SEAL

Unless authorised in writing by GOAL, the Supplier shall not advertise or otherwise make public the fact that he is a Supplier to GOAL or use the name, emblem or official seal of GOAL or any abbreviation of the name of GOAL for advertising purposes or for any other purposes

1. LIQUIDATED DAMAGES

Late delivery, or dispatch outside the agreed shipping schedule, shall be subject, without notice, to an assessment of liquidated damages equivalent to 1 percent of the Contract value per day or part thereof. The assessment will not exceed 10 percent of the contract value. GOAL has the right to deduct this amount from the Supplier’s outstanding invoices, if any. This remedy is without prejudice to any others that may be available to GOAL, including cancellation, for the Supplier’s non-performance, breach or violation of any term or condition of the Contract.

Acceptance of goods delivered late shall not be deemed a waiver of GOAL’s rights to hold the Supplier liable for any loss and/or damage resulted therefrom, nor shall it act as a modification of the supplier’s obligation to make future deliveries in accordance with the delivery schedule.

1. ANTI-BRIBERY/CORRUPTION

The Supplier shall comply with all applicable laws, statutes and regulations relating to anti-bribery and anti-corruption including but not limited to the UK Bribery Act 2010 and the United States Foreign Corrupt Practices Act 1977 (“Relevant Requirements”).

The Supplier shall have and maintain in place throughout the term of any contract with GOAL its own policies and procedures to ensure compliance with the Relevant Requirements.

No monies are payable to GOAL by the Supplier in association with the execution of this contract if the Supplier is approached by a GOAL member of staff for a payment, commission, ‘kickback’ or associated payment or any other advantage of any kind, and they are obliged to report the request or payment directly to GOAL’s Country Director within thirty-six hours. Failure to report any request for payment by a GOAL member of staff or actual payment by the Supplier to a GOAL member of staff to the GOAL Country Director shall result in the immediate termination of any contract and may result in the disqualification of the supplier from participation in future contracts with GOAL.

This contract shall be automatically terminated, and the Supplier shall have no right to any form of compensation, if it emerges that the award or execution of the contract has given rise to unusual commercial expenses.

Such unusual commercial expenses are commissions not mentioned in the main contract or not stemming from a properly concluded contract referring to the main contract, commissions not paid in return for any actual and legitimate service, commissions remitted to a tax haven, commissions paid to a recipient who is not clearly identified or commissions paid to a company which has every appearance of being a front company

1. ANTI-PERSONNEL MINES

The Supplier guarantees that it is not engaged in the sale or manufacture, either directly or indirectly, of anti-personnel mines or any components produced primarily for the operation thereof. Any breach of this representation and warranty shall entitle GOAL to terminate this Contract immediately upon notice to the Supplier, at no cost to GOAL.

1. ETHICAL PROCUREMENT

The Supplier represents and warrants that neither it, nor any of its suppliers is engaged in any practice inconsistent with the following code of conduct for suppliers: Employment is freely chosen, freedom of association and the right to collective bargaining are respected, working conditions are safe and hygienic, no child labour/protection of children is ensured, living wages are paid, working hours are not excessive, no discrimination is practiced, regular employment is provided, no harsh or inhumane treatment is allowed, any harm to the environment shall be avoided or limited. Any breach of this representation and warranty shall entitle GOAL to terminate this Contract immediately upon notice to the Supplier, at no cost to GOAL. Suppliers must adhere to the principles of humanitarian aid.

1. PRIOR NEGOTIATIONS SUPERSEDED BY CONTRACT

This Contract supersedes all communications, representations, arrangements, negotiations, requests for proposals and proposals related to the subject matter of this Contract.

1. INTELLECTUAL PROPERTY INFRINGEMENT

The Supplier warrants that the use or supply by GOAL of the goods sold under this Contract does not infringe on any patent, design, trade-name or trade-mark. In addition, the Supplier shall, pursuant to this warranty, indemnify, defend and hold GOAL harmless from any actions or claims brought against GOAL pertaining to the alleged infringement of a patent, design, trade-name or trade-mark arising in connection with the goods sold under this Contract.

1. TITLE RIGHTS

GOAL shall be entitled to all intellectual property rights including but not limited to patents, copyrights and trademarks, with regard to material which bears a direct relation to, or is made in consequence of, the services provided to the organisation by the Supplier. At the request of GOAL, the Supplier shall take all necessary steps, execute all necessary documents and generally assist in securing such property rights transferring them to the organisation in compliance with the requirements of the applicable law.

Title to any equipment and supplies which may be furnished by GOAL and any such equipment shall be returned to GOAL at the conclusion of this Contract or when no longer needed by the Supplier. Such equipment, when returned to GOAL, shall be in the same condition as when delivered to the Supplier, subject to normal wear and tear.

1. PACKING

The Supplier shall pack the goods with new, sound materials and with every care, in accordance with the normal commercial standards of export packing for the type of goods specified herein. Such packing materials used must be adequate to safeguard the goods while in transit. The Supplier shall be responsible for any damage or loss that can be shown to have resulted from faulty or inadequate packing.

1. SHIPMENT AND DELIVERY

All goods shall be delivered to the agreed place of delivery as stated in the Contract, at the Supplier's risk of loss of or damage to the goods until delivery, unless otherwise provided for in the Contract.

1. INSURANCE

The Supplier shall provide and thereafter maintain for the duration of this contract and any extension thereof all appropriate workmen’s compensation insurance or its equivalent with respect to its employees to cover claims for personal injury and death in connection with this contract. The supplier shall, upon request, furnish proof to the satisfaction of the GOAL, of such liability insurance. The supplier shall further provide such health and medical insurance for its agents and employees, as the supplier may consider advisable. The service provider will in all cases ensure they have third party liability cover for the duration of the contract.

1. TERMINATION OF CONTRACT

Either party may cancel this Contract before the expiry date of the Contract by giving notice in writing to the other party. The period of notice shall be five days in the case of contracts (including purchase orders) with a total period of less than two months or fourteen days in the case of contracts with a longer period.

In the event of the Contract being terminated prior to its due expiry date in this way, the Supplier shall be compensated only for the actual supplies delivered to the satisfaction of GOAL. Additional costs incurred by GOAL resulting from the termination of the Contract by the Supplier may be withheld from any amount otherwise due to the Supplier from GOAL.

GOAL reserves the right to withhold payments while any investigation is taking place into suspected wrongdoing or breaches of policy. GOAL reserves the right to make no payment of sums due (even when goods or services have been supplied), in instances where wrongdoing is present.

1. OVERRIDING CLAUSE

In the event of any conflict or inconsistencies between these Terms and Conditions or any other document which forms part of the Contract, the Contract shall prevail except where they have been amended (by specific reference to the relevant clause and paragraph of these Terms and Conditions) as provided for herein.

1. WITHHOLDING TAX

GOAL reserves the right to deduct withholding tax from the Supplier's invoice if so required by law. This will apply unless the Supplier has supplied in advance the required documentation proving its exemption from withholding tax (e.g. withholding tax exemption certificate).

1. GOVERNING LAW AND JURISDICTION

These Terms and Conditions shall be governed by the laws of Ireland and subject to the exclusive jurisdiction of the Irish Courts.

1. BANK GUARANTEE

When specifically requested by GOAL, a bank guarantee from a well reputed bank acceptable to GOAL in the currency in which the Contract is payable and for an amount to be prescribed by GOAL shall be obtained by the Supplier at his expense and deposited with GOAL before the start of the Contract. In the event of any loss, damage and/or extra costs incurred by GOAL by reason of the Supplier's default, negligence or failure to perform the terms and conditions of the Contract or any part thereof, that part of any such loss, damage and/or extra costs which is represented by the full or by any lesser amount of such guarantee shall be immediately and initially reimbursable to GOAL from such guarantee without prejudice to its right to hold the Supplier liable for the full amount of such loss, damage and/or extra cost. The guarantee shall be valid for a period of not less than 30 days after the date of arrival at destination of the last specified delivery.

1. ENVIRONMENTAL STANDARDS

Suppliers should as a minimum, comply with all statutory and other legal requirements relating to environmental impacts of their business. Areas which should be considered are:

* Waste Management
* Packaging and Paper
* Conservation
* Energy Use
* Sustainability
* Sourcing and origin of raw materials
* Supply chain transparency

1. HUMAN TRAFFICKING

GOAL has adopted a policy supporting the prohibition of trafficking in persons including the trafficking-related activities for any purpose, including the use of forced labour. Suppliers and their employees, and agents shall not: —

* Engage in severe forms of trafficking in persons during the period of performance of the contract;
* Procure commercial sex acts during the period of performance of the contract;
* Use forced labour in the performance of the contract;
* Destroy, conceal, confiscate, or otherwise deny access by an employee to the employee’s identity or immigration documents, such as passports or drivers' licenses, regardless of issuing authority;
* Use misleading or fraudulent practices during the recruitment of employees or offering of employment, such as failing to disclose, in a format and   language accessible to the worker, basic information or making material misrepresentations during the recruitment of employees regarding the key terms and conditions of employment, including wages and fringe benefits, the location of work, the living conditions, housing and associated costs (if employer or agent provided or arranged), any significant cost to be charged to the employee, and, if applicable, the hazardous nature of the work

Should the Supplier become aware of, or suspect, human trafficking activities during the execution of the contract the Contractor must immediately inform GOAL to enable appropriate action to be taken.

In respect to any contract funded by the UK Government the Supplier is expected to be familiar with the terms of the UK Modern-Slavery Act 2015, and to abide by the conditions of that Ac

Company Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**STAMP OF SUPPLIER:**

1. After Jacob (1946), note that some hydrogeologists consider that the quadratic relationship in this equation is too simplistic and that CQ2 should be replaced by CQn, where n is >1. However, the quadratic relationship often serves as a good enough relationship. [↑](#footnote-ref-2)
2. Often termed the Hantush-Bierschenk plot. [↑](#footnote-ref-3)
3. PWL = pumping water level [↑](#footnote-ref-4)
4. [↑](#footnote-ref-5)
5. [↑](#footnote-ref-6)