

# Project Report

for

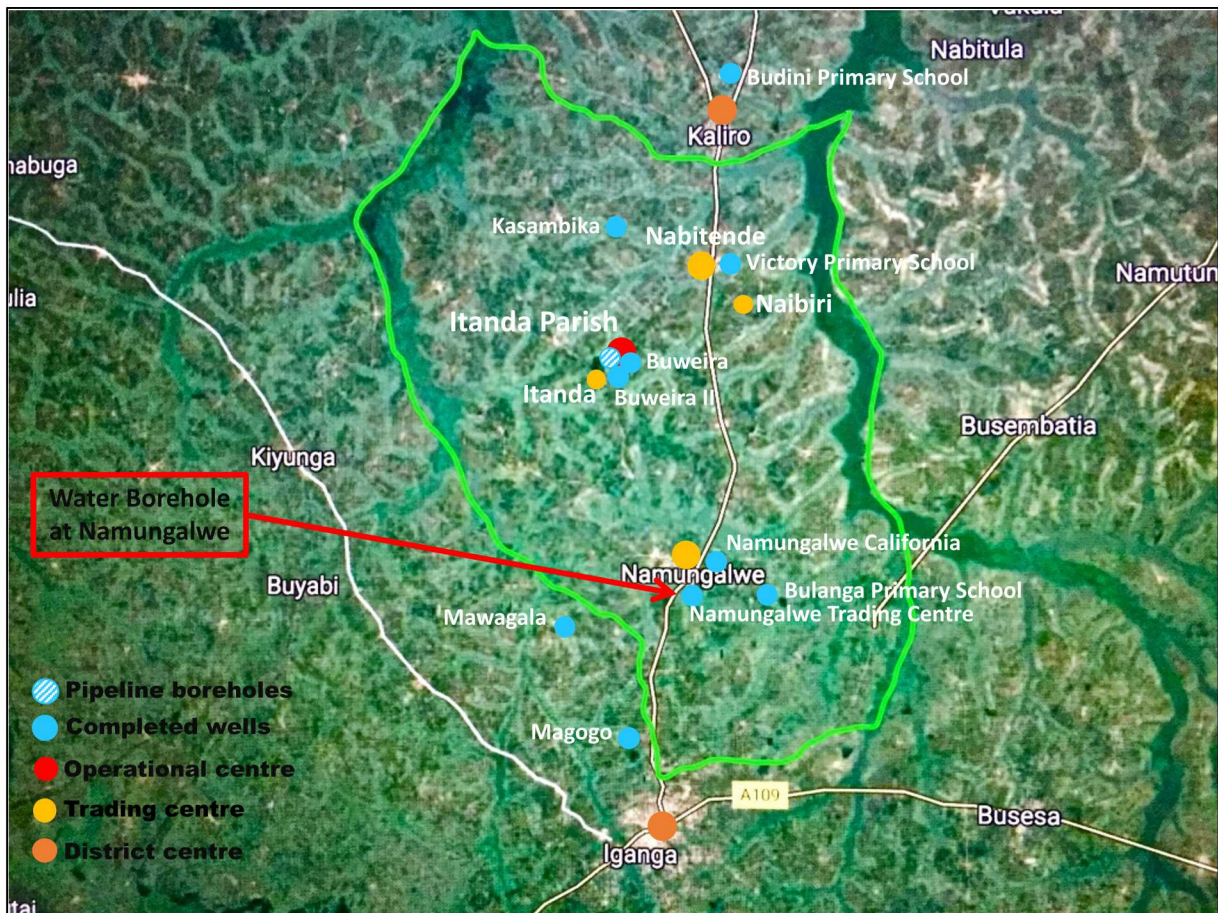
## Piped Water Supply at Namungalwe

Date: 25<sup>th</sup> April 2024

### 1. Background

In January 2021, Running Well completed its fourteenth water borehole in Namungalwe Trading Centre, which was partly funded by donations received from Worth Abbey Parish (the “Parish”).

Map showing the location of the water borehole at Namungalwe in Itanda parish



The water borehole was built in the centre of the village where there was no clean water provision in the immediate vicinity. It serves the whole community living in and around the trading centre.

At the time of construction, the total anticipated catchment of beneficiaries had been estimated at approximately 2,800 people. When we visited the water borehole during our trip to Uganda in May 2023, we met with members of the water committee as well as some of the wider community.

## **Pictures of the existing water borehole and community members at Namungalwe**



We were informed by our project team that the well was producing 10,000 litres per hour water yield, which is well above the Government's recommended yield of 5,000 litres per hour for a water borehole tapping system that is located in a town centre and used by the general public.

The chairperson of the water committee told us that the borehole was extremely busy and it was typical to see 200 jerry cans lined up in four directions throughout the day during the dry season because of the lack of other good clean water sources in the area. She was having to shut the borehole every evening otherwise people would queue up throughout the night to get clean water.

Given the high water yield from the borehole and the significantly higher demand for water in the community than had been originally envisaged, in consultation with our project team, we have made the decision to install a solar electric pump and tapping system at the site which will be funded in part by donations received from the Parish.

## 2. Project Rationale, Design and Development Programme

Our project team have advised that with the new solar power and tapping system, the Charity's borehole could produce 100,000 litres of water per day (with 10 hours of sunlight) and could easily serve 10,000 people. People change their water usage when there are taps and use more water if it is available by taps, i.e. for sanitation, washing, etc. The demand for clean water at Namungalwe is very high, with many thousands of people expected to use the tapping system once built.

The design of the Project is based on the demand for clean water coming from the community, and the predicted demand has been calculated based on flow simulations, which in turn have determined the size of pipes that are required for the system. The Project will have four tap stands, with one being located at the borehole, two approximately 500m from the borehole, and the third will be located approximately 800m from the borehole. A sufficient water pressure flow to each tap stand will be achieved directly from the water storage tank(s) using gravity alone. The Project will have one 10,000 litre storage tank or two 5,000 litre tanks.

### The proposed layout of the piped water supply



### Examples of the water storage tank, solar panels and tap stands that will be used



The total build period for the Project will be approximately 3 months, and with works due to start imminently, it should be completed by the end of July.

Development Programme												
Activity	MONTH 1				MONTH 2				MONTH 3			
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Mobilization of Equipment	█											
Construction of Reservoir base			█									
(Allow 1.5 months to set)			█									
Pumping tests-12-24hour pumping Tests				█								
Water sample analysis				█	█							
Reservoir installation										█		
Installation of Panels and Submersible Pump						█						
Pipe Laying and Stand Taps			█									
Preparation of completion report												█
Handing over												█

We are extremely grateful for the continued support of the Parish in providing the funding that will allow us to complete our first piped water supply and increase the clean water provision substantially at our water borehole to meet the needs of the local community at Namungalwe.