SOLAR WATER PUMPING SYSTEM FOR BISANDOUGOU

Item	Description	Unit	Quantity	Unit Cost (GMD)	Total Cost (GMD)
1	Solar Modules				
	The following solar modules in weather proof glass				
	enclosure rated between 200 - 300Wp inclined at 15%				
	to the horizontal incorporating water proof connection				
	boxes and connecting cable glands erected on an in-				
	situ concrete floor slab with concrete columns				
	mounting with anti-theft fixings and the whole				
	assembly able to withstand wind speed of 150km/hr				
	and with easy access for maintenanance and all sites				
	as detailed in drawings and specifications.				
	Array of solar modules capable of pumping:				
A	7 m3/hr at 53 m head to be installed in Bisandougou	No	1		
2	Module Support Structures				
	Install solar panel support structures as per technical				
	specifications including all excavation work				
	reinforecement and formwork required. In addition				
	underneath the module arrays and up to 1 meter around				
	the array surface, a 5 cm thick floor to be constructed.				
	The panels can optionally be attached to the tank				
	support structure in:				
A	Bisandougou	No	1		
3	Junction boxes				
	The following in easy mounted readily accessible array				
	junction box to satisfy the functions of decoupling,				
	parallelling, protection and isolating complete with				
	weather proof plastic casing and mounted in the shade				
	of the modules with anti- theft fittings as per				
	specifications				
	Array Junction box for Solar powered system in				
A	Bisandougou	No	1		

4	Pump Inverter			
	The following in easily accessible and mounted pump			
	inverter fixed on on supports structure with minimum			
	ground clearance of 600mm and enclosed in a sealed			
	weather and tamper proof housing and providing for			
	roto complete with built-in MPPT, self regulation,			
	cooling,protection			
	Pump inverter for pumping system delivering:	N.T.	1	
A	7 m3/hr at 53 m head to be installed in Bisandougou	No	1	
	Cl			
5	Submersible Pump			
	Directly coupled submersible centrifugal or helical			
	rotor pump to fit 6" cased borehole and constructed in			
	stainless steel with non return valve pressure of 2 bars			
	fitted with easily removable riser pipe with portable			
	water grade internal surface connected with useable			
	stainless steel, borehole head and the whole secured			
	with stainless steel cable aspvc or HDPE fittings at			
	pump outlet and per specifications. Rotor pump to match array and pump inverter for			
	pumping system:			
A	7 m3/hr at 53 m head to be installed in Bisandougou	No	1	
A	7 m3/m at 33 m head to be installed in Disalidougou	INO	1	
6	Wellhead and Surface Pipeworks			
	Borehole-head arrangement, (wellhead) to which both			
	the riser pipe and surface pipe work are to be			
	connected. It should be constructed of solid galvanised			
	steel and provided with two monitoring holes with			
	screwed caps. Plus headwork arrangement complete			
	with stainless steel pipe-work, cumulative water meter,			
	valve and threaded manometer socket, etc			
	Well head and headwork arrangements to be installed			
	in:			
A	Bisandougou	No	1	
7	Enclosure			

	Fence of galvanised wire mesh of minimum diameter of 3mm and supporting wire of minimum diameter 6mm to be constructed around the pumping system in:				
A	Bisandougou	No	1		
8	Auxillary Equipments				
	Auxillary Equipments comprising of cables, system protections, alluminium identification panels depicting the system parameters and anti theft screws to be installed in:				
Α	Bisandougou	No	1		
9	After Sales Services				
	Long-term arrangement for maintenance and repair facilities in-country during the first five years of operation of the solar water pumping system. During this period, the supplier will repair any fault and replace faulty components at no cost within 72 hours of notification of such fault in:				
Α	Bisandougou	No	1		
10	Transportation and Installation of all Facilities in:				
A	Bisandougou	No	1		
	TOTAL				