# *ANNEX II + III:* TECHNICAL SPECIFICATIONS + TECHNICAL OFFER

**Contract title: SUPPLY, DELIVERY AND INSTALLATION OF SOLAR EQUIPMENT FOR THE CONSTRUCTION OF WATER FOR LIVESTOCK PRODUCTION FACILITIES p 1 /…**

**Reference:** **MOBIP/SUPLS/2.6/2.6.2/T2SSUI**

**Columns 1-2 should be completed by the contracting authority**

**Columns 3-4 should be completed by the tenderer**

**Column 5 is reserved for the evaluation committee**

Annex III - the contractor's technical offer

The tenderers are requested to complete the template on the next pages:

* Column 2 is completed by the contracting authority shows the required specifications (not to be modified by the tenderer),
* Column 3 is to be filled in by the tenderer and must detail what is offered (for example the words ‘compliant’ or ‘yes’ are not sufficient)
* Column 4 allows the tenderer to make comments on its proposed supply and to make eventual references to the documentation

The eventual documentation supplied should clearly indicate (highlight, mark) the models offered and the options included, if any, so that the evaluators can see the exact configuration. Offers that do not permit to identify precisely the models and the specifications may be rejected by the evaluation committee.

The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offeredspecifications.

**Locations of Valley Tanks for Construction/Rehabilitation by MOBIP - delivery locations (Provision List)**

1. Luwero (Natyaaba VT. 20,000m3),
2. Mityana (Mpongo VT 20,000m3)
3. Nakasongola (KalungiVT 10,000m3),
4. Kiboga (Kateega VT 10,000m3).
5. Kiruhura (Rwendama VT 20,000m3),
6. Masaka (Kasange VT 20,000m3),
7. Kyotera (Kabano VT 20,000m3)
8. Mbarara (Nombe VT 10,000m3)
9. Kiryandongo (Kente VT 10,000m3)
10. Masindi (Myeeba VT 10,000m3) and
11. Lyantonde (Kanyogoga VT 10,000m3).
12. Butambala (Katabira VT 10,000m3),
13. Isingiro (Ntenga VT 20,000m3)
14. Sembabule (Lwera VT 20,000m3)
15. Kakumiro (Rwamadongo VT 20,000m3)

**Supplies required for a Valley Tank of 20,000l and 10,000l**

| **Description** | **Unit** | **Unit qty for 20,000m3 VT.**  | **Unit qty for 10,000m3 VT.**  |
| --- | --- | --- | --- |
| 1. **Solar pump development**
 |  |  |  |
| Submersible solar water pump with the pump characteristics; Q = 100m3/day and H=65m, complete with dry running protection. | Pcs | 1 | 1 |
| AC pump controller to run the pump with Q = 100m3/day and H=65m. | Pcs | 1 | 1 |
| CONTROL PANEL 7.5kW 4" | Pcs | 1 | 1 |
| Alarm system set with siren for intrusion and safety protection of solar modules, where intrusion detection is based on mechanical vibrations/ tampering of the solar array structure, wired and integrated within the installation; complete with all accessories. | Set | 1 | 1 |
| MANUALLY OPERATED CHANGE OVER SWITCH, AND ELECTRICAL DOL STARTER TO BE USED WITH THE GENERATOR OR ELECTRICITY INCASE OF LOW SUNLIGHT | Pcs | 1 | 1 |
| DROP CABLE 4mm2×4CORE, FLAT CABLE | No(m) | 100 | 100 |
| CABLE TERMINATION KIT | No(m) | 20 | 20 |
| SOLAR PANEL MOUNTING GALVANIZED STRUCTURE complete with Metallic structures and civil platforms, 3 m off the ground for solar panels. | Watt | 9000 | 9000 |
| 0.75mm2 ELECTRODE CABLE  | No(m) | 10 | 10 |
| ELECTRODES (PAIR) | No(m) | 1 | 1 |
| Pressure sensor with its accessories for automation of the pumping system | No | 1 | 1 |
| ELECTRICAL ACCESSORIES FOR INSTALLATION: cable tray Trunking about 5m, 6mm2 Underground (U/G) cable 40m includes all electricals for generator installations | No | 1 | 1 |
| EARTHING SYSTEM (25mm2 earth wire, copper mat, copper clamp, concrete earth pit & conductivity improvement materials) | No | 1 | 1 |
| LIGHTNING PROTECTION:(Arrestor, copper tape, copper mat, copper clamp, copper bolt & conductivity improvement materials) | No | 1 | 1 |
| AUXILLIARY LIGHTING SYSTEM WITH 75Wp, panel, 5Amp Regulator, 55AH Battery, 3LED Lights, Battery Box, Panel mount frame, light fixtures and cabling and accessories | No | 1 | 1 |
| 320Wp Mono crystalline Solar Panel, optimum voltage 30– 37V, current 8-9 Amps | No | 34 | 34 |
|  HDPE Pipe PN6 63mm  | No(m) | 500 | 500 |
| 1. **Plumbing works inside and outside the pump room including pipe for a pumping system**
 |  |  |  |
| 2” HDPE Suction pipe | Lm | 10 | 10 |
| 2” GI Pipe | Lm | 50 | 50 |
| 2”GI bends | No | 10 | 10 |
| 2”GI nipples | No | 50 | 50 |
| 2" GI Tees | No | 10 | 10 |
| 2” water meter  | No | 5 | 5 |
| 2” HDPE adapter | No | 20 | 20 |
| 2”GI unions | No | 50 | 50 |
| 2” Air valve | No | 5 | 5 |
|  2" Global valve | No | 5 | 5 |
| 2” pressure gauge | No | 5 | 5 |
| 2" pressure sensor complete with switch. | No | 5 | 5 |
| 3” water meter  | No | 2 | 2 |
| DN 250 ST/DI Double flanged pipe casing with reinforced concrete base to anchor the submersible pump.  | Pcs | 1 | 1 |
| Provide and lay machine crushed stone aggregate of size 25mm for a layer of thickness 50mm placed on top of gauge 1000dpm within the area covered by solar array.  | Tones | 40 | 40 |

**Technical Specifications**

| **1.****Item number** | **2.****Specifications required** | **3.****Specifications offered** | **4.** **Notes, remarks, ref to documentation** | **5.****Evaluation committee’s notes**  |
| --- | --- | --- | --- | --- |
|  | **Supply, delivery and installation of solar equipments.**  |  |  |  |
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| CABLE TERMINATION KIT |  |  |  |
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| 2" GI Tees |  |  |  |
| 2” water meter  |  |  |  |
| 2” HDPE adapter |  |  |  |
| 2”GI unions |  |  |  |
| 2” Air valve |  |  |  |
|  2" Global valve |  |  |  |
| 2” pressure gauge |  |  |  |
| 2" pressure sensor complete with switch. |  |  |  |
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