


APPENDIX B2: CERTIFICATE OF SATISFACTORY EXECUTION –WORKS ONLY

<p>ACTIVITY (Title of Applicant Activity)</p>	<p>Contractor Entry: Contractor, PSCS, PSDP and Designer</p>		
<p>SITE Construction contract: (Title & brief description)</p>	<p>Clane Pumping Stating Upgrade Contract</p> <p>Glan Agua Ltd. designed and installed the upgraded system to two pumping stations (serving 3 housing estates) located south east of Clane village.</p> 		
<p>Site location:</p>	<p>Clane, Co. Kildare</p>		
<p>Proportion of Project undertaken by the Applicant</p>	<p>100%</p>	<p>Tender entity (<i>Sole trader/ Joint Venture</i>):</p>	<p>Private Limited Company</p>
<p>VALUE Construction contract value at award stage including cost of services where applicable:</p>	<p>€120,000</p>	<p>Construction contract value at completion (including cost of services where applicable:</p>	<p>€120,000</p>
<p>GENERAL INFO Role of Company in delivery of Service:</p>	<p><u>Scope of Works</u></p> <p>Glan Agua Ltd designed and installed the upgraded system to two pumping stations.</p> <p><u>Existing Problems:</u></p> <p>When Glan Agua Ltd. carried out an initial assessment of the problems:</p> <ul style="list-style-type: none"> • Pumps found to be tripping • Ultrasonic not working <p>The pumps in the pumping stations were tripping due to rags and the sumps were backing up acting as a cesspit. The pumps had been running manually by forcing a spring return as effluent had been backing up overflowing manhole covers.</p> <p>After investigation the ultrasonic was found to have a short in the cable from TX to RX, Glan Agua Ltd. were able to temporarily move the junction box inside the tank (suspect water ingress in the J box) and get the ultrasonic working.</p>		

The hydromanager was also programmed for the wrong head unit, Glan Agua Ltd. installed a new unit.

With the ultrasonic tested Glan Agua Ltd. assessed the pump performance and it was found that pump two was suffering a blockage and pulling excessive amps (in excess of 28) and tripping the breaker, however pump two was behaving as normal (pulling 12 amps) on each phase and it was decided to run this pump for the night.

The systems was left with the ultrasonic functioning and pump two running and pump station one awaiting interlock to be opened.

Pumping Station 1 – (2 x 27m³/hr Pumps)

Pumping station one is a simple pumping station, the building is of flat roof construction with the building divided into 2 rooms one containing a generator and one containing the electrical control panels, 3 in total one chemical tank and dosing pump. Panels contain the following

1. ESB incomer with side entry to main panel
2. Main control panel containing pump starting, overload equipment seal leak sensors OH sensors etc., various relays and a Hydromanager acting as the main control for the pumps using an XRS5 head in the tank.
3. Communications panel containing a low frequency radio signal. The only apparent function of this comms unit is to interlock the two pumping stations from operating together due to restrictions in the pipe diameters downstream of the pumping stations.

Outside the control building there is one valve chamber and one 8m deep holding tank. Within the valve chamber there are 2 isolation valves, 2 non return flap type valves and one Bauer connection with isolation valve. Within the main tank there are 2 ABS macerator pumps on guide rails with their main power cables plugged into industrial sockets at the top of the tank. Pumps at full capacity were pumping 27m³/hr There is also an Ultrasonic head (Milltronics XRS5) unit and a dosing tube feeding from the main control building.

Pumping Station 2 – (2 x 72m³/hr Pumps)

1. ESB incomer with side entry to main panel
2. Main control panel containing pump starting, overload equipment seal leak sensors OH sensors etc., various relays and a Siemens Milltronics Hydromanager 200 acting as the main control for the pumps using an XRS5 head in the tank.
3. Communications panel containing a low frequency radio signal. The only apparent function of this comms unit is to interlock the two pumping stations from operating together due to restrictions in the pipe diameters downstream of the pumping stations.

Outside the control building there is one valve chamber and one 8m deep holding tank. Within the valve chamber there are 2 isolation valves, 2 non return flap type valves and one Bauer connection with isolation valve. Within the main tank there are 2 ABS macerator pumps on guide rails with their main power cables plugged into industrial sockets at the top of the tank. Pumps at full capacity were pumping 72m³/hr. There is also an Ultrasonic head (Milltronics XRS5) unit and a dosing tube feeding from the main control building.

	<p><u>Solution:</u></p> <p>Glan Agua Ltd. designed and constructed a smaller operational pump sump within the original sump. This was done by constructing a 1.6m high party wall across a segment of the pump sump station floor. This was benched and the party wall fitted with a wall mounted penstock to allow pumping of retained emergency stored volumes as necessary. The existing inlet was extended to direct incoming flows to the operational pump sump.</p> <p>This was carried out in both Pumping Station 1 and 2.</p> <p><u>Works Included the following:</u></p> <ul style="list-style-type: none"> • Pumping Station Isolation, • Empty and clean the pumping station, • Erect internal scaffolding and safety measures within the confined space, including the installation of Gas detectors, • Installed stainless steel new party wall, • Newly operational sump benched, roof cored for penstock arm, penstock installed and inlet pipework extended, • Pump twin guiderails extended, • Electrical panels modified, • Pumps re-conditioned, • GSM Alarm dialout system installed, • System re-commissioned and made operational. <p><u>Health & Safety Aspects of the Contract</u></p> <ul style="list-style-type: none"> • Entry into Confined Space • Excavations • Structural Stability • Lifting Operations / Cranes • Road Works • Traffic Management • Scaffolding • Underground Services • Overhead Cables • Working at Heights • Piling • Vibration, Noise and Dust • Working with hazardous materials / live sewers 		
Name & address of Contracting Authority responsible for the project:	Kildare County Council, Devoy Park, Naas, Co. Kildare.		
Contracting Authority contact name:	Joe Keane	Phone no.:	045 980362
OTHER INFORMATION			
CONTRACTORS NAME:	Glan Agua Ltd.		