
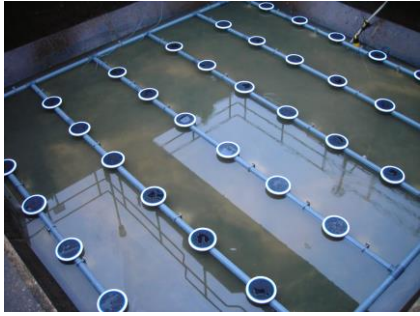



**APPENDIX B2: CERTIFICATE OF SATISFACTORY EXECUTION –WORKS ONLY**

<p><b>ACTIVITY</b> (Title of Applicant Activity)</p>	<p><b>Process, Civil, Mechanical &amp; Electrical Contractor</b></p>		
<p><b>SITE</b> <b>Construction contract:</b> (Title &amp; brief description)</p>	<p><b>Mountshannon WWTP Aeration Upgrade</b></p> <p>Glan Agua Ltd. was awarded the Process, Civil, Mechanical and Electrical Design contract for Mountshannon WWTP’s Aeration Upgrade. The appointment consisted of the design, build and commissioning of the upgrade of the Aeration system. This upgrade had two benefits; firstly the treatment capacity of the plant was increased to 750PE and secondly the energy efficiency of the plant was improved. The installed system replaced an inefficient existing surface aerator. A fine bubble diffused aeration system consisting 2no. blowers with variable speed drives, DO probe, PVC laterals, stainless steel air main manifold and new control panel were supplied. All works were carried out on a live plant with all incoming flows successfully managed and treated throughout the installation.</p> 		
<p>Site location:</p>	<p>Mountshannon, Co. Clare.</p>		
<p>Proportion of Project undertaken by the Applicant</p>	<p>100%</p>	<p>Tender entity (Sole trader/ Joint Venture):</p>	<p>Private Limited Company</p>
<p><b>VALUE</b> Construction contract value at award stage including cost of services where applicable:</p>	<p>€50,150</p>	<p>Construction contract value at completion (including cost of services where applicable:</p>	<p>€50,150</p>
<p><b>GENERAL INFO</b> Role of Company in delivery of Service:</p>	<p><b>Scope of Works</b></p> <ul style="list-style-type: none"> <li>• Design and Build fine bubble diffused aeration system for 750 PE.</li> <li>• Construct R.C. plinth for blowers.</li> <li>• Temporary over pumping and influent management ensuring minimal disruption to plant.</li> <li>• Empty and clean aeration tank including certified disposal of sludge.</li> <li>• Decommissioning and removal of existing surface aerator.</li> <li>• Mechanical and electrical installation and commissioning of 2no Blowers, DO probe, PVC laterals, air main stainless steel manifold, stainless steel brackets and 36no diffusers. Isolation valves provided on air main manifold.</li> </ul>  		

- Form 2 control panel complete with blower Variable Speed Drives, PLC and HMI. Fully automated DO control loop with operator adjustable set points via HMI. Alarms logged and displayed on HMI for operator acknowledgement. Future mixer starter section provided with automatic timed on/off control.
- Acted as Works Contractor, PSCS, PSDP and Designer on all aspects of the project.



### Secondary Treatment – Aeration System Upgrade

The process is an activated sludge with extended aeration. The blowers are configured on a duty/standby basis and feed into a common stainless steel air main with a drop leg into the aeration basin. Manual isolation valves on each blower discharge for isolation and maintenance purposes are provided. The lateral and distribution system for the diffusers are uPVC with stainless steel brackets and fixings. The diffusers are fixed to the aeration grid. The system also has a 20mm bleed line to allow water to be purged from the system. The blowers motor speed control is by variable speed drives. Automatic DO control is accomplished through simple changes in blower output, by varying the motor speed. The dissolved oxygen measurement and control system maintain the DO level within an operating band between 1 and 2 mg/l this set point is HMI adjustable. HMI shows status of blowers and DO probe with set point and alarm pages included. The system has been designed to deliver a SAOR of 8.26 kg O<sub>2</sub>/hr at full loading. The blower duty selected was 190 m<sup>3</sup>/hr at a pressure of 285mbar.



### Health & Safety Apects of the Contract

- Entry into Confined Space
- Lifting Operations / Cranes
- Underground Services
- Working at Heights
- Vibration, Noise and Dust
- Working with hazardous materials / live sewers

Name & address of Contracting

Clare County Council,

Authority responsible for the project:	New Road, Ennis, Co. Clare		
Contracting Authority contact name:	Tom Mellet	Phone no.:	00353 61 640815
<b>OTHER INFORMATION</b>			
Provider of Civil Construction: Glan Agua Ltd.			
Provider of Mechanical, Electrical & Process Design and Installation: Glan Agua Ltd.			
Project Supervisor (Design Stage): Glan Agua Ltd.			
Project Supervisor (Construction Stage): Glan Agua Ltd.			
<b>CONTRACTORS NAME:</b>	Glan Agua Ltd.		