

IN TU In

Lightning Protection Upgrade – HVI Dower Aerial Installation

Lightning Protection Installation on **Digesters 1-4**

Thames Water Utilities, Digesters 1-4, Maple Lodge STW

Scope of Works

- Installation
- · Work in conjunction with other contractors i.e civils team, scaffolding team, Crane team, MEWP driver to upgrade the existing Lightning Protection System.

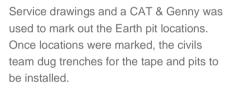


The Task

Power Testing Ltd successfully won the contract to upgrade the existing Lightning Protection System on Digesters 1-4 at Maple Lodge STW.

Works involved installing 10no. HVI Power Lightning Protection Aerials and 2no. 25m Freestanding Lightning Protection Masts

The installation of 22no. Earth pits with 2 Earth Electrodes installed in each pit. 10no. Aerial locations were marked out using the specification drawings.



12no. Earth Bars were installed at each of the aerial locations and a Grey HVI cable was installed around each tank linking the earth bars to ensure ultimate Lightning Protection. Grey Insulated Copper Tape was installed from the Earth Bars to the Earth Pits with a high

The complete system was then tested and



The client was delighted with the speed and accuracy whilst installing the new system. He was very impressed with how



Project Achievements

- · Worked closely with TWU to minimise operational risks & disruption to the onsite services.
- Careful planning and coordination to ensure the job run smoothly.
- Efficient project management involving third parties.
- Lighting Protection System.
- · Successful transfer of the old protection system to the new system.





Client: Thames Water Utilities

Location: Digesters 1-4, Maple Lodge STW

Project: Lightning Protection Upgrade