

PROJECT WATER TOWER ROOF REFURBISHMENT



Stonbury was contracted to extend the life of a water tower in the South of England. This included the removal and replacement of the entire roof slab.

Previous attempts to carry out concrete repairs to the roof soffit highlighted that the roof slab was in deplorable condition, so the decision was made to replace it with new.

The team erected scaffolding around the external tower wall and repositioned the digital aerials and dishes onto the scaffolding. This enabled the works to continue, without risk of radiation to the workforce.

The existing concrete roof slab was demolished in sections, using ultra-high water jetting techniques. Once complete, a birdcage scaffold was erected internally, to support the timber shuttering and new steel reinforcement. To complete the soffit, concrete was pumped up to the roof to form the new, watertight slab.

In addition to the original scope, the water tower received a full refurbishment to improve water quality and further extend the longevity of the asset. This included the

removal of the existing bituminous asphalt liner, with the use of ultra-high water jetting techniques. Dry grit blasting was also used to remove the remaining bitumen primer from the concrete surfaces.

Concrete repairs were undertaken to re-level the walls and floor, prior to the application of a DWI approved waterproofing system and an elastomeric polyurethane coating.

Finally, the internal pipework was coated, the washout valves were replaced, and a new waterproofing system with a non-slip finish was applied to the roof, the new perimeter handrailing, access covers and internal stainless steel ladders.

On completion of the required DWI curing procedures, the tank was cleaned and chlorinated and handed back to the client for reinstatement.