

# Project Completion Report

## Reline of Leaking GRP Sectional Tank

### Frimley Park Hospital - London



## Project Overview

**Site address:** Frimley Park Hospital - London

**Completion Time:** 8 days

**Project Brief:** Reline CWST with a WRAS approved polyurethane, and repair external insulation.



## Scope of Works

- Arrival - Tank(s) to be drained down by Titan Mechanical Services. - **Complete**
- Surface Preparation – All accessible bolts tightened, and mastic joints assessed and repaired where necessary. All surfaces then abraded to raise a surface profile of ~75microns. - **Complete**
- Solvent free polyurethane coating - Where necessary, dehumidification/heating equipment will be used to ensure correct curing conditions are achieved. The solvent free polyurethane coating is applied by brush or roller to give a uniform even thickness of a nominal 500microns per coat. A minimum of two coats will be required to achieve a nominal specified thickness of 1000microns (1mm). - **Complete**
- Application of Stripe Coat – Product is applied by brush to all joints, edges, bolt heads, struts and other sharp protuberances to ensure any high-risk areas are secured and enable subsequent coating to be a seamless membrane. - **Complete**
- Application of First Coat - Product is applied by roller to all internal surfaces to a minimum 500-micron wet film thickness. - **Complete**
- Application of Second Coat - Product is applied by roller to all internal surfaces to a minimum 500-micron wet film thickness to achieve a desired 1000-micron total coating thickness on all internal surfaces. - **Complete**
- Re-commissioning – Upon completion of works, the tank(s) will be refilled and disinfected in accordance with the requirements of PD855468:2015, before being returned to service. A disinfection certificate will be issued along with a completion report. - **Complete**
- Repair insulation to the external of the tank. – **Complete**

## Photographic Evidence of Works Completed

The photo below shows the extent to which the cold-water storage tank was leaking, causing major operational difficulties in the plant room area:



## Photographic Evidence of Works Completed

CWST was in poor condition prior to preparation, with clear evidence of debonding in the mastic, and delamination of the GRP surface.



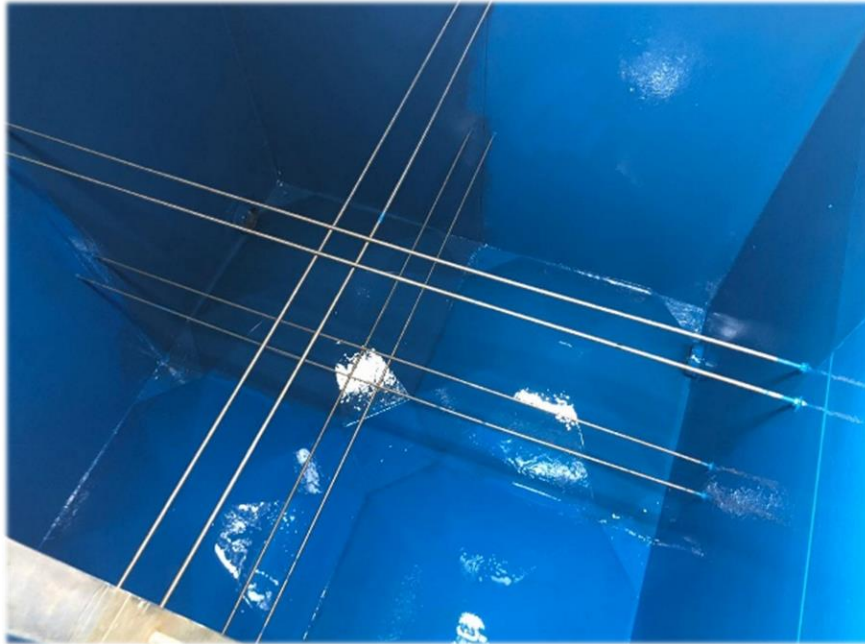
## Photographic Evidence of Works Completed

The photos below show the tank surfaces being prepared, ready to be relined:



## Photographic Evidence of Works Completed

The photos below show the first and second coats of a WRAS approved polyurethane being applied. A dry film thickness test was carried out during the process with an average thickness of more than 1000 microns achieved on all surfaces.



## Photographic Evidence of Works Completed

The photos below show before and after the tank insulation was repaired.

