

OnSite provide solution for challenging engineering task with UV Lining



Client: Historic Hotel

Location: Bath

“Once again, OnSite proved that great solutions can be provided through collaborative working”



Access to upstream manhole inside the vault

OnSite Central Ltd were tasked with providing a solution for repairing a defective, 125 year old, 50m length of 225mmØ foul sewer, which ran through the vaults of a Victorian building that is now one of the most prestigious hotels in central Bath.

Access to the site was such that even completing an initial CCTV investigation required a very demanding confined space entry. The survey was carried out from an existing manhole inside a vault, downstream to the main sewer that was directly above an old coal bunker. The survey identified that the sewer was suffering from heavy encrustation and scale build up and was heavily fractured adjacent to a live lateral connection.

Solution

The solution was derived from the following combined client & safety requirements:

- A structural liner was required that would give maximum flow volume after repair
- The method of installation had to take into account the lack of any natural ventilation to the working area

- Access to the main sewer would require some construction from within the coal bunker

Specialist contractor Aqua Management Ltd, enabled access to main sewer by drilling a temporary access tunnel from a vault above the coal bunker, through the main sewer and into the coal bunker.

The encrustation & scale within the sewer was removed using one of OnSite’s hydraulic cutting robots from the upstream manhole inside the vault. The arisings were then removed with a bespoke “pig” cleaning system which was winched through the sewer from the new tunnel access inside the coal bunker.

The liner was then manually winched into position from the new access point in the coal bunker to the upstream manhole in the vault. The UV light train was installed from the same manhole into the liner, and cured in place.

All works were programmed between Onsite Central Ltd & Aqua Management who collaborated to complete this challenging engineering task in a remarkable three days.