

St Bede's School – Drainage Works Case Study

St Bede's School in Streatham had a persistent problem with ponding on a recently resurfaced area of the school entrance. This was leading to flooding within the school building during heavy rain and the resulting storm water not getting out to the main trunk sewer under the main road. Power + Line was brought in to find the cause of the problem and to carry out repairs to ensure the ponding did not happen again.

To avoid school hours Power + Line brought in specialist jetting and pipe survey contractors over the weekend. They carried out jetting works and conducted a video survey of the system. This survey revealed two things that contributed to the system not working properly. Firstly, tree roots from an adjacent beech tree had broken through the original glazed 6" pipe on an old joint about 3 metres back from the main outfall manhole. This ingrowing root had seriously restricted the flow inside the pipe.



Shallow trench dug to expose gully pots

Secondly, there were significant backfalls between the gully pots and the connecting plastic pipe work of the newly installed storm water system. Power + Line carried out excavations in and around the main outfall manhole to expose the root damaged section of pipe and replaced it with a new section. We also cut back any other adjacent tree roots and redirected two large roots away from the pipework under the supervision of the local council environmental tree warden. Before backfilling and compaction a layer of weed guard geotextile was laid to deter future weed growth in that area.



Work in progress at St Bede's School

We then turned our attention to the backfalls between the gully pots and their associated plastic pipe work and connections. This involved replacing the existing gully pots with deeper pots of greater capacity with higher discharge spigots. These were installed and connected to the modified pipe work and tested by filling before being backfilled and finally reinstated with new 10mm tar.

During the course of the works all excavations were shored up and safely surrounded with Heras fencing and any incomplete excavations were covered with 8' x 4' steel road plates.