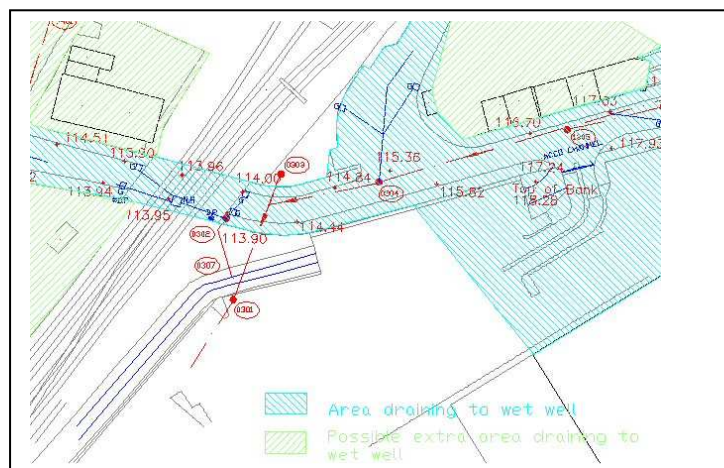


Scheme, Bridgeman Street, Walsall, highway flooding.



This road under a railway bridge is the lowest part of Walsall Town Centre and the area has flooded on several occasions during the last thirty years. Various studies have been done in the past to cure the problem. Pumps were installed many years ago, but they were never able to cope with the deluge of water. Several survey companies and consultants were employed over the years to find a solution without success.

I was asked to look at the problem that had plagued the town for many years. I decided to take the view that the engineers that this road and railway junction would not have done so without providing a suitable drainage provision. I just needed to find it and get it working again. After discussions with Network Rail and Severn Trent Water provided no clues, I did a level survey to determine where the road could drain to, as the road did not flood during moderate rain so there must be an outfall. I surveyed and produced a catchment plan to better understand the area.



The nearest possible surface water outfall was this manhole, which was not on the sewer or railway records, yet a developer had found an old manhole on this 600mm diameter pipe, and built new manholes onto to connect his SW drainage. We later found that this is a public surface sewer not on the sewer records. However while the levels worked we could not prove the connection, as this manhole was 500m from the flood area. No one can jet that far, and the volume of water meant that dye trace would no show and silt levels prevented CCTV, STW denied a connection existed.

The next time the road flooded I took levels on the floodwater and compared them with water levels in this manhole. The above manhole, which is over 5m deep, was flooded to 2m from the cover and at the exact same level as the floodwater on the road. Severn Trent accepted this evidence and cleaned the sewer allowing flood levels to drop. Further improvement works are ongoing.