

WINCHEAP WATER WORKS 1869-1999

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Note: for more on water supply in earlier periods, see separate article on water supply (indexed under 'street scenes') which appears in the Notebook.

By the 1860s the Canterbury's water supply was drawn from a variety of sources: from the Stour, from local wells, from medieval conduits in Military Road and near St Martin's church, and from the storage tank in the castle owned by Canterbury Gas and Water Company. The castle supply consisted of no more than a pump and cistern; water came straight from the river, without filtration or settling tanks. Correspondence in local papers in the mid 1860s declared most Canterbury drinking water as 'unfit for human use'. The river was 'defiled - thick and yellow in rainy weather' with 'floating dirt and thick scum' at mill dams, and 'dissolved filth' that was 'immeasurable'. The local surgeon James Reid summed up the situation with 'This water is only fit for flushing drains and watering streets'.



1 Dunelm overview today



2 three construction dates!

A new pumping station, built in Wincheap in 1869, addressed these problems. Designed by Samuel Collett Homersham, a hydraulic engineer with special interests in patterns of rainfall and water softening, the complex was operational by 1870. Apart from the massive pumping engine that could be heard and felt a mile away, the site included a boiler house, coal store, tall chimney, cooling pond and water reservoirs. The choice of design for the new large building was unusual and vaguely colonial - apparently making use of plans intended originally for India. Water was drawn from two deep bore holes in the chalk at the rate of 1000 gallons a minute, and pumped under pressure through a 12 inch main pipe to a 350,000 gallon holding tank on the top of St Thomas' Hill, near what is now Kent College. The tank was 60 ft across and nearly 20 ft deep, half underground and the rest above. Attached to the wall of the Chief Engineer's office in Wincheap was a telescope trained on the holding tank on the hill 1½ miles to the north. His eyes were focused on a large red disc, cut in two - the upper half was fixed but the lower half was attached to a float in the holding tank. By this wonderfully 'Heath Robinson' arrangement, the Chief Engineer could know when the holding tank was full.

Water from the new system showed major improvements in several ways: it was extracted at a permanent temperature of 51° Fahrenheit; it was 'free from living or dead germs or organisms of any kind, and from organic

matter animal or vegetable'; it was 'clear, colourless and bright'; 'pleasant and refreshing to the taste'; and it had no taint of gas, as was evident with supplies from the castle which also served as the city gas supply.

Another significant change was that the new water supply was delivered under high mains pressure - and this was of vital importance to the fire services. Their fire hoses could now reach 'half way up the flag mast on the Westgate'. A serious test of the new supply came in 1876, when the local watchmakers and jewellers Trimnells were contracted to clean the cathedral clock above the south west entrance. A mix of benzoline fumes and the flame from an unauthorised workman's lamp resulted in an explosion and fire. The new water supply was sufficient to cope with the fire, but sadly Henry Trimnell, aged just 34, was badly burned in trying to extinguish the flames, and died a few days later. He was buried in St Dunstan's churchyard.



Two further bore holes were added in 1924, and a water tower near the reservoir four years' later. The whole scheme lasted until 1993, when the reservoir was taken out of use. In April 1997 owners of the pumping station (by now Mid Kent Water) sought permission to pull down the building in order to repair boreholes at the site. Despite a petition organised by the Wincheap Society and signed by 1000 people, consent was given, with a proviso that the replacement building should be a replica of its predecessor. The resulting retail space was opened on 27 August 2001 for Courts Furniture company. In 2002 an extension was added, now used by Carpet Right. The remainder of the site is now used by Dunelm. Three date stones on the face of the present building commemorate the building of the original plant (1869), the opening of the replacement building (2001) and the completion of its extension (2002).



3 ironwork from 1869?



4 water tower by Kent College erected 1928



5 pipe over the Stour



6 pipe in Hambrook Marshes

Remains of this impressive Victorian enterprise (apart from the facsimile building) include

- walls and ironwork surrounding the pump house site
- lengths of water main crossing the River Stour and a tributary in Hambrook Marshes
- a few 'CWW' metal cover plates left in the city - the acronym is presumably for Canterbury Water Works
- the water tower still stands at the top of St Thomas' Hill, apparently not used for water storage but providing a base for communication aerials
- beside the water tower, remains of the reservoir have survived - they are in a dangerous state and should not be visited



7 Canterbury Water Works?
(St Peter's Street)



8 Canterbury Water Works?
(St Margaret's Street)

Sources: helpful correspondence with Len Parrick regarding street furniture; also Crompton (2006); Homersham (1873); Report on (Canterbury) deaths and causes of death (1871); also newspapers: Kentish Observer 1865 precise date uncertain (on poor quality of water supply); Whitstable Times 9 August 1873 (on Homersham dispute); Kentish Gazette 17 June 1876 (on death of George Trimnell); Kentish Gazette 3 May 2001 (on rebuilding of Thanington premises)