## MEOPHAM U3A HOW THINGS WORK GROUP

## Report on tour of Brighton's sewer system Thursday 31st May 2018

Our tour was booked for 18.30. As late as 16.00 (while many of us were still at home) Southern Water inspected the sewers to decide whether or not it was safe for the tour to go ahead. Despite not receiving confirmation 16 of the 18 members who were booked on the tour turned up at the starting point under the pier and, fortunately, the tour happened! We later discovered that there had been a surge in the morning, due to earlier thunder storms, that would have meant that a tour any earlier than ours would have been cancelled.

These famous sewer tours are unique. There is no other place in Britain where members of the public can walk through the labyrinth of tunnels beneath their towns, learning secrets from 150 years ago.

Tour guides took us through 366 metres of the 48km of sewers starting at the Brighton Pier and emerging through a manhole in the middle of Old Steine Gardens.

The system was built by the Victorians to keep the waste out of their backyards (literally!). They run under the city with four major channels: one coming in from Hove, one from Kemptown, one from via London Road and one via Lewes Road. Needless to say, those Victorian engineers really knew how to build structures that would last the test of time.

Building started in the 1870s and comprised a great seven-mile-long brick-lined sewer (7 million bricks were used), ventilating shafts and extended outfall piping. Relying solely on manual labour, the system, much as originally constructed, still serves Brighton to this day.

During the late 1990's a giant storm water collection drain – wide enough to drive a vehicle through – was constructed along the beach. To construct this drain, the workers used tunnelling machines similar to those used to cut the Channel Tunnel. The drains were then lowered to the tunnel depth via several deep shafts sunk at intervals along the beach, which were subsequently capped and covered. Pebbles were replaced on top of the shafts to return the beach to its former appearance and allow it to be available, once again, for public use. Normality and fresh air was thereby restored to Brighton and its beaches.

This sewer system has informed generations of civil engineers. These cavernous structures inspire imagination and have hosted many film makers and musicians to perform within their echoing walls. It really is an architectural jewel! Even today, the Victorian sewers help dispose of around 22 million gallons of waste water in the Brighton area every day. But in wet, stormy weather that can rise to 90 million!

