

Thames Water: Thames Tideway Tunnel



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Background

The Thames Tideway Tunnel project will upgrade London's sewerage system to cope with the demands of 21st-century London. Starting in west London, the main tunnel generally follows the route of the River Thames to Limehouse, where it continues north-east to Abbey Mills pumping station near Stratford. There it will be connected to the Lee Tunnel, which will transfer the sewage to Beckton sewage treatment works in east London. The Thames Tideway Tunnel project will address the discharge of untreated sewage from combined sewer overflows. The flows diverted into the Thames Tideway Tunnel will be stored in the tunnel and pumped out for treatment at Beckton.

Services provided

Structural Soils Limited (an RSK company) has provided site investigation services in support of the scheme since its inception, within Thames Water's existing works, on the public highway and private land. These works have been completed directly for Thames Water or under the auspices of other delivery partners including Thames Tideway Tunnel. Services provided include

- acting as principal contractor
- liaison with local authorities and other stakeholders
- wireline rotary drilled boreholes to depths up to 90 m below ground level
- cable percussion boreholes
- traffic management
- excavation and reinstatement of the public highway in accordance with the New Roads and Streetworks Act

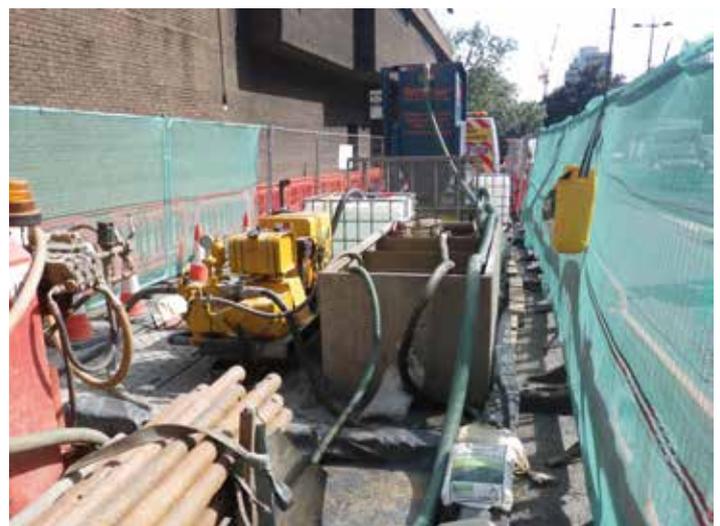
- works in public areas, including sensitive London parks
- buried utilities surveying (by RSK's SafeGround team)
- in situ permeability testing including variable head and packer testing
- geophysical logging
- installation of deep standpipes for water quality monitoring
- electronic water level data logging
- work on contaminated 'yellow' and 'red' sites
- preliminary risk assessments
- due diligence contamination investigations.

Challenges faced

- Working within central London or busy operational sites
- Small, restricted sites
- 2012 summer drought and water conservation measures
- High-profile locations in areas of public access
- Health, safety and wellbeing delivered to the highest levels
- Strict site access and delivery protocols
- Night and weekend shifts
- Noise restrictions
- Contaminated land and asbestos
- Unexploded ordnance risks
- Difficult ground conditions
- Unplanned acts by other contractors



Beretta T44 rotary drilling rig undertaking rotary wireline coring



Drilling flush water recirculation system including a Siltbuster®

For further information, please contact:

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