





Falco has the experience and comprehensive range of expertise to provide an end-to-end solution for sewer connections and diversions.

Connecting properties to mains water infrastructure involves a number of technical and practical challenges.

We can manage all stages of the process from planning to obtaining approval and consents, liaising with multiple stakeholders and delivering the works in full compliance with current regulations and industry standards.

Our knowledge and experience built-up over many years of delivering and facilitating maintenance and development of underground infrastructure for the utilities sector, which includes eight-years as a tier-1 and tier-2 contractor for Thames Water, has given us intimate knowledge of the unique challenges involved and how to overcome them to deliver works that are fully compliant with Water Industries Act 1991.

Our management team boasts decades of combined experience in the water sector and we employ an in-house workforce of highly trained and skilled operatives who deliver sewer connections and diversion projects throughout London and the South East.

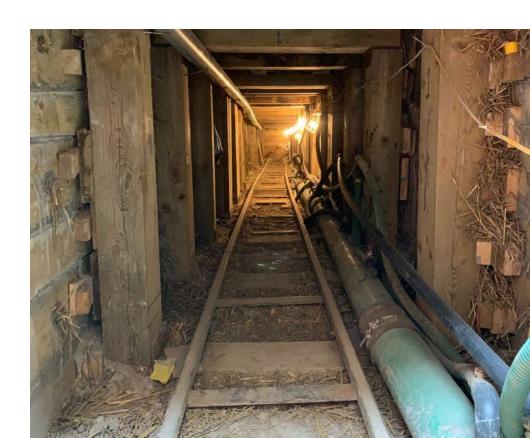
We work for developers, landlords, water authorities, local authorities, building contractors, public sector organisations and individual residents to provide a streamlined service to facilitate maintenance,

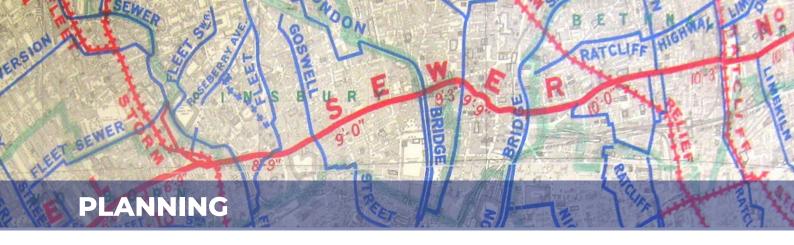
new-build and refurbishment projects.

All of our work is regulated against the utilities sector standard UVDB Verify and certificated against management systems ISO 9001 (quality), ISO 14001 (environmental) and ISO 45001 (health & safety).









Sewer connections and diversions need to be planned carefully and Falco's experienced water management team have the knowledge and expertise to navigate the technical and practical challenges to deliver works in full compliance with Sections 106 and 107 of the Water Industries Act 1991.

The process typically starts with a desk study during which we access public records to locate the most suitable mains sewer to connect to and determine the exact location of any other underground infrastructure that may impact the works.

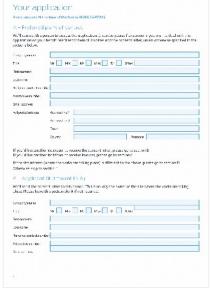
Our experts can manage the entire process of obtaining approval and gaining the consents necessary to carry out the work.

On your behalf we can complete the online application process which will be supported by the submission of documentation such as:

- Health & safety risk assessment
- Method statement (including specification of connection and materials)
- Detailed schematic and sectional drawings to show the exact location and the pipework and connection
- Project team organigram and credentials/accreditations



Should the project involve streetworks we can liaise with the local authority's Highways Department to obtain a Road Opening Notice, arrange fees, prepare a traffic management plan (if requited) and manage any notice period or further consultation







Falco specialises in deep excavation to facilitate the maintenance and development of underground utility infrastructure. We are therefore able to carry out all the works on-site to implement sewer connections and diversions from excavating and creating shafts and trenches, affecting any temporary works required to secure them to installing the pipework and connections, testing, statutory inspection and reinstatement.

Excavation can be carried out by hand or by mechanical means, such as an excavator or crane. To prevent subsidence or loss of ground, the excavation is supported by temporary works i.e. using timber or hydraulic shoring techniques.

Timber headings are a traditional but unique method to create a tunnel beneath the pavement. This often avoids delays and costs caused by road closures etc.

The heading is driven from a drive shaft, typically located within the developer's site. Timber shoring is installed as the excavation proceeds to prevent loss of ground or subsidence. Where timber headings are not preferred, we can excavate traditional trenches.

Once the excavation is complete the pipework is laid to the desired line and gradient and connection affected according to the specification approved by the local water authority and the system's integrity will be tested.

We can arrange for the works to be inspected and certificated by the water authority and a certificate issued. Following this the underground void is backfilled and reinstated in accordance with the agreed specification.



All of our works including the reinstatement are carried out in full compliance with all relevant statutory and industry regulations including the Civil Engineering Specification for the Water Industry (CESWI), the Sewers & Adoption Guidelines and the New Roads and Street Works Act (NRSWA).







All Falco's sewer connection works are carried out according to relevant health & safety law including the Construction Design and Management (CDM) Regulations 2015.

We operate an occupational health and safety management system which is certificated against International Standard ISO 45001 and maintained by out in-house Health & Safety team.

This enables us to methodically and comprehensively manage the risks involved in working underground. The company is also accredited against the Contractors Health and Safety Assessment Scheme (CHAS).

Our management system is driven by risk assessment.

For each sewer connection project one of our NEEBOSH-accredited managers will carry out a risk assessment to identify the hazards and risks involved in delivering the works and determine the most appropriate measures to manage and mitigate them.

Our site operatives all have confined-space training and are registered with the Energy & Utility Skills Register (EUSR) for excavation work and accredited against the New Roads and Street Works Act (NRSWA).

All temporary works installed to facilitate sewer connection schemes are designed and maintained by competent temporary works coordinators and supervisors on site







We understand the value that developing and maintaining good communications with all stakeholders has on the success of sewer connection and diversion projects.

Our management team and fieldbased workforce have extensive skills and experience of liasing with all of those involved in the process including:

- Developers/landlords
- Local Authorities (i.e. Thames Water)
- Local Authority Highways Departments
- Other Statutory Undertakers e.g. BT, UKPN, Cadent/SGN etc
- Residents via letter drops or in-person liaison
- The Public our operatives receive annual customer care training to enable them to liaise effectively with persons they may encounter onsite
- Other contractors we endeavour to form collaborative relationships with other trades or service providers involved or affected by the works





Falco Construction provides comprehensive groundworks services to facilitate the installation, repair and maintenance of underground clean water and waste water infrastructure.

Our project teams use both traditional and innovative techniques to provide an efficient, responsive and unobtrusive service which enable works to be delivered on-time, to-specification and to-budget.

CLEAN WATER SERVICES

- Bursts and leakage repair
- Construction / diversion of mains
- Service laying
- Meter installation
- Pressure testing
- Chlorination

WASTE WATER SERVICES

- Construction/diversion and connection of pubic and private sewerage assets
- Shafts and headings.
 Specialists in deep drainage
- Clearance of blockages
- Installation of new or refurbishment of existing pumping stations
- Sewer rehabilitation
- Installation of rigid liners
- Grouting / brickwork repairs
- Pressure testing and surveying
- CCTV Surveys and man entry sewer surveys
- Confined spaces operations
- Installation of communications ducting within man entry sewers





CASE STUDY: CAMBRIDGE HOUSE (MAYFAIR)

Falco were appointed to facilitate the redevelopment of Cambridge House into a luxury hotel & apartment complex including construction of a 20 metre-deep basement. A live Victorian shaped sewer ran 6 metres under the site blocking excavation. This required an over-pumping solution to be devised involving the installation of two 500mm DI pipes within one floor to allow permanent gravity flow.

Our approved TW contractor-status and familiarity with TWOSA/IAB approval processes for works in or close to trunk sewers was key to our selection. Falco's brief was to conclude negotiations with Thames Water, design the pumping scheme, build the permanent downstream manhole - also as a temporary discharge point - and a temporary upstream chamber as a wet well (pumping station) with a riser main in between.

The downstream permanent had to be excavated and built in a gap left in the secant piles underneath a large existing capping beam. As a double reinforced steel structure, it formed part of the

building structure with the inside wall forming part of the basement so needed to be watertight. A watertight bulkhead wall was installed to isolate the excavation from the trunk sewer surging. A temporary flume with NRV was installed to maintain flow until the pumps were ready.

Lack of space made excavating the pumping chamber to TW's satisfaction very challenging. Two reinforced concrete chambers (one permanent, one temporary) were constructed. The design interfaces involved close collaboraation with the Principal Contractor's design team and activities were sequenced to shorten programme.

We devised and implemented a 24/7 emergency response plan involving a one-hour call out throughout the

Sector: Water

Client: Thames Water Principle

Contractor: D E Group

Duration: 10 Months

Location: London W1

project in case of accidental damage to the pumping system

The works were completed on time allowing the client to immediately start excavating and building around and below the sewer's route. In 2022, Falco will return and fit the permanent solution to hand over to Thames Water as per Sewers for Adoption.









CASE STUDY: BATTERSEA (NORTHERN LINE EXTENSION)

Falco were appointed to construct a new combined sewer connection draining the new Battersea Power Tube Station and the Power Station development - a jointly funded scheme which is part of the Nine Elms Regeneration Project.

The installation called for construction of a six-metre deep manhole and a 23-metre timber heading out under Battersea Park Road to connect a 300mm pipe with Thames Water (TW) sewer Lower Level 1 (LL1)

LL1 is notorious for fast flow and surges during rainfall so excavating and drilling into it, from outside risked sewer collapse and flooding the heading. After detailed methodologies were successfully presented to Thames Water's Independent Authorising Body (IAB), Falco entered LL1 on a Saturday night when TW had reduced flow and core drilled a sample to establish its integrity.

A sealing plate was fitted to the inside and a steel pin through to the outside

so when the heading reached the outside, the pin would be found and ensure the break in was inside the sealed plate. The sealing plate was designed by Falco's Temporary Works designers who have a good relationship with Thames Water thus easing acceptance. Detailed surveying triangulated from inside the sewer, up to and across the road to the heading start point to ensure pinpoint accuracy

Innovative dewatering techniques were required when excavating the heading in pure ballast approximately one metre into the ground water.

As the ultimate client, London Underground Ltd closely scrutinised all documentation and the installation and had particular requirements e.g. regular grouting of the heading timbers as we progressed. Out of Hours working was required by Thames Water to enable them to isolate the water mains above as we passed beneath.

Sector: Water

Client: London Underground

Principal Contractor: Ferrovial Laing O'Rourke

Duration: 9 months

Completed: Dec 2019

Location: London SW11

Despite the challenging ground conditions combined with demanding requirements by London Underground and Thames Water, Falco completed the installation on time and budget. Installation of water mains to the station and additional deep site drainage were added to the package involving approximately 100 metres of HDPE water mains and associated valves etc. to serve the new station plus four more manholes and a series of 150mm - 500mm pipes installed.









CASE STUDY: MARYLANDS ROAD (MAIDA VALE)

Falco was appointed by the Insurance Division of water utility firm the Lanes Group Plc to resolve a longstanding flooding issue in a residential district of Maida Vale.

A camera survey had identified a broken drainage pipe beneath Marylands Road as the cause of the problem. Falco were instructed to gain access and undertake repair.

Our project team applied to Westminster City Council for a Section 50 Street Works Licence. Our traffic management plan included several parking bay suspensions to locate our works site but managed to keep the road open throughout.

The works involved machine and manual techniques. Using a 14-tonne excavator we excavated a 2.4 sqm shaft to a depth of six metres in the carriageway and a 6.5 metre timber heading was hand-dug to locate the damaged pipe.

This was replaced with a new Vitrified Clay Pipe and connected to the mains trunk sewer. The timber heading was carefully backfilled with foam concrete and the shaft backfilled and reinstated.

Sector: Water

Client: Lanes Group Plo

Duration: 4 weeks

Completed: Nov 2019

Value: £80k

Location: London W9









Falco Construction's core business is the design, installation and maintenance of assets for the Electrical, Water and Telecoms sectors.

Established in 2005, the organisation has developed rapidly to now work directly for major blue-chip clients delivering multi-discipline, complex programmes of work to a very high standard.

Falco operates throughout the South East from its headquarters in East London.

At any given time we have up to 95 Mobile teams operating throughout London and the South East which allows us to provide a

24/7 rapid-response service for attending emergencies and reactive works.

Investment in manpower, plant, technology and management systems has enabled the company to build a well-deserved reputation for professionalism, reliability and attention to detail.

Our highly-skilled in-house workforce includes NRSWA, Confined Space, and Trench Support trained operatives who also possess CSCS and/or CPCS accreditation.

The company operates an integrated health, safety, quality and environmental (HSQE)

management system which provides Falco with the framework and discipline to deliver consistently high quality work in a safe and sustainable manner.

Accreditations by Achilles and UVDB Verify attest to the robustness of our systems.

Falco is a tier-1 and tier-2 contractor for Thames Water and UKPN. We also work for a number of utility/civil engineering contractors including: Laing O'Rourke, Skanska, Costain, Clancy Dockwra, Amey, McNicholas and Barhale among others

















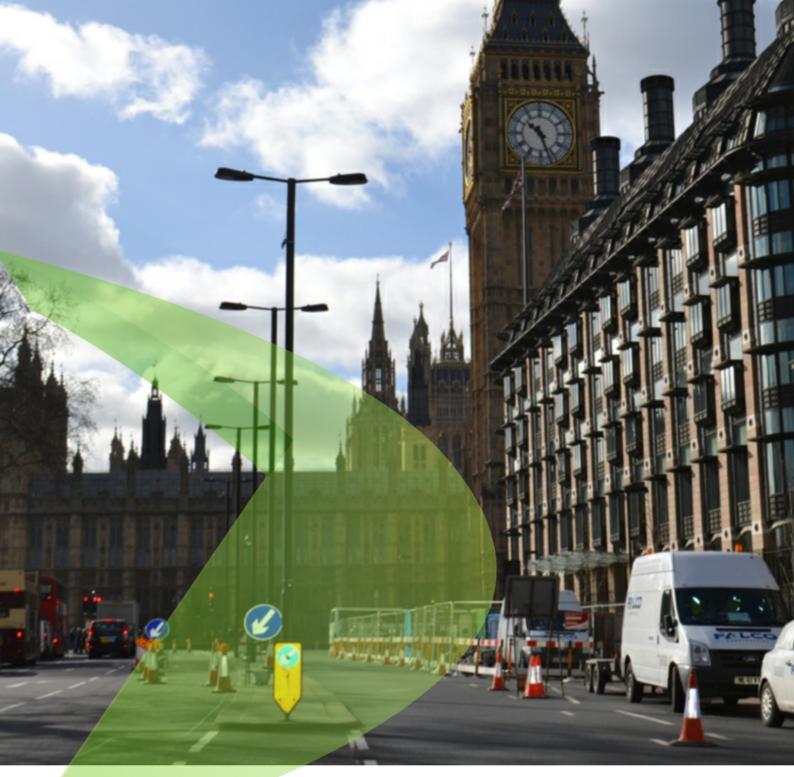












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