



Unlocking a former gasworks and LNG storage site

Partington, Greater Manchester

Client: Vistry Partnerships and Trafford Housing Group

Value: £3.5m

Site area: 129,000m²

Timeframe: 78 weeks

End use: 600 private and affordable homes

Challenge

Preparing the site of a former gasworks and Liquified Natural Gas (LNG) storage facility for 600 private and affordable-homes.

To unlock this brownfield site for development, we needed to overcome multiple issues in the ground. These included:

- Over 250,000m³ of material to turnover and reengineer
- Concrete bases and blast wall foundations that extended 5mbgl
- Three high pressure gas mains running across the site
- A very high water table
- Saturated peat and PFA

Solution

We engaged early with the EA to ensure regulatory sign-off.

The site had a long industrial history, and legacy remediation works had been carried out. However, these weren't well documented and there was little information on legacy contamination.

Despite this, we created a detailed methodology that met the regulator's requirements.

Using our in-house equipment, we treated hydrocarbon-impacted material onsite, and stabilised PFA and peat within the road box and service corridors.

Spent oxide was also removed from site due to elevated levels of heavy metals.

Using our in-house 3DMC technology, we efficiently reused soils under an MMP. This included pinpointing specific areas of concern to comply with the foundation solution and geo-technical specification.

Over 50,000m³ of concrete was broken out and processed for reuse in the final development. This was part of a full made-ground-depth turnover to allow for a driven pile - foundation solution.

We worked closely with multiple stakeholders, including a gas distributor. Our team operated in close proximity to their high-pressure gas mains, which ran across the site.

RESULTS

- 99% of material processed and re-used onsite
- Achieved regulatory sign-offs through early involvement
- Minimal import of aggregate, due to onsite recycling
- No lost time incidents