## Demolition, ground engineering and enabling works

Stourbridge, West Midlands

Client: Taylor Wimpey Site area: 7ha Timeframe: 22 weeks End use: 250 new homes

## Challenge

A full programme of enabling works to prepare this former quarry and industrial site for 250 new homes.

The canal-side site had been derelict for years, having first been used industrially in the 1880s. This left behind large concrete hardstandings, derelict buildings, and PAH and asbestos-contaminated hotspots.

Our team had to work around an operational logistics company based on the site, ensuring they retained access and that live services were maintained.

## Solution

We created a concurrent programme of demolition, remediation, and earthworks for efficiency.

Our team carried out ecological works to prevent migration of contamination into the canal, as well as providing tree protection areas and badger exclusion zones.

Where dilapidated listed buildings remained onsite, we carefully deconstructed surrounding the structures and removed asbestos.

Extensive underground obstructions meant we needed to carry out site-wide excavation. Our team re-compacted soils in accordance with the geotechnical specification, which enabled use of vibro-stone column foundations. We re-engineered the full road box, removing natural rock obstructions, and achieving a 15% CBR. This avoided requirement for a capping layer.

Finished levels were value-engineered to ensure optimum re-use of materials and create sufficient void space, eliminating off-site disposal. We lifted 18,000m3 of concrete and processed it into 6F2, as well as producing high-value recycled Type 1 and vibro-stone.

We remediated PAH-contaminated soil and groundwater, including where groundwater seepage had occurred in deep excavations. Japanese Knotweed was excavated under controlled conditions and removed off site, with a three-year treatment programme for the boundary put into place.

## RESULTS

- Avoided delays through our concurrent programme of works
- Processed and reused approx. 18,000m3 material onsite
- Processed and reused 100% of concrete onsite
- Produced high-value aggregated for re-use in the development
- Worked around an operational logistics firm, maintaining live services

