Remediation and earthworks on a former airfield

West Midlands

Value: £3m Site area: 450,000m2 Timeframe: 12 months End use: 400 new homes

Challenge

Earthworks and remediation on Phase 1 of a former airfield, ready for 400 homes. This forms part of a larger 3,500-home new village development.

The site had been used as an airfield and for open-air entertainment. Runways were still intact and needed clearing for development alongside remaining buildings.

Pockets of asbestos – typical of World War 2 sites – and areas of contamination also needed to be removed/treated.

Solution

We demolished airfield buildings, removing the runways and drag strip and remediating areas of contamination.

All development areas required earthworks, with our team moving approx. 250,000m³ of materials across haul distances of 1800m.

Because of the site's size, we chose GPS-enabled intelligent plant and 3D drone surveying to control works. Our fleet of intelligent excavators, dozers and rollers worked alongside ADTs to handle material.

The client design evolved midway through the programme, but, using our intelligent plant, we uploaded a new earthworks model to excavators and dozers within hours. We monitored progress using aerial drone surveys, producing detailed 3D maps of the site. This survey data was then shared on web-based platforms, allowing the entire team quick access.

Sustainability was a key focus on this project, with our team creating multiple public open spaces, as well as wetlands for flood prevention and wildlife. We also worked closely with local farmers to maintain drainage throughout the programme.

24,000m³ of asbestos-impacted material was remediated under an MMP, diverting it from landfill. This was achieved through cement stabilisation of soils, using our in-house tractor, as well as reuse of historical tarmac runways to form foundations for a multi-use games area.

RESULTS

- Project delivered under budget
- Phased site release meant development could start early
- Over 30,000m³ material sustainably processes and re-used
- Zero lost time incidents
- Delivered under strict COVID-safe rules

