CASE STUDY

SANDFORD FARM, READING

Landfill Reclamation

VertaseFLI was commissioned by Taylor Wimpey UK Limited to undertake landfill reclamation works required to allow the redevelopment of the site with over 500 residential properties with private gardens and large areas of public open space (POS).

The site occupies an area of approximately 20ha, with existing residential properties located immediately to the west and a river located to the east. The site was initially subjected to quarrying for gravel prior to landfilling with industrial/commercial waste from the 1960's to the early 1990's. Reclamation was required prior to construction of residential dwellings to remove the risk of landfill gas migration into properties and to improve the geotechnical properties of the materials.

CLIENT: TAYLOR WIMPEY UK LIMITED
LOCATION: WOODLEY, READING
PROJECT VALUE: CONFIDENTIAL
DURATION: 2 YEARS
SERVICES PROVIDED:
DESIGN INCLUDING GAS MODELLING, EXCAVATION OF LANDFIL MATERIAL, PHYSICAL PROCESSING, SOIL WASHING, LEACHATE CONTROL TREATMENT, REINSTATEMENT OF ALL MATERIALS.

VertaseFLI Role:

VertaseFLI was responsible for preparing all necessary pre-start documentation in order to allow the works to commence including the discharge of planning conditions directly associated with the remediation works. This included completing final detailed design of the works including extensive gas modelling in order to predict post remediation ground conditions and to ensure a maximum 'Amber 2' designation. Due to the sensitive location of the site, significant time was spent preparing a detailed communications strategy and contacting local residents prior to commencing works on site.

The excavation works comprised the removal of approximately 300,000 m³ of waste, together with 100,000m³ of inert clay cap. The excavated material was subjected to extensive physical processing to allow segregation into various material streams prior to characterisation. Subject to these characterisation works, material was segregated into material suitable for reuse on site and material requiring off-site recycling/disposal. To ensure the main objective of minimising offsite disposal, various end use scenarios and verification techniques were adopted and agreed with the Environment Agency, local authority contaminated land officer and the NHBC.

As well as managing risks to the environment, reinstatement works were undertaken in accordance with a site specific earthworks strategy prepared by VertaseFLI so as to ensure a suitable development platform was created.

Vertase FLI

CASE STUDY

EXCAVATING WASTE FROM HISTORIC INDUSTRIAL/ COMMERCIAL LANDFILLS

FORWARD DEWATERING FROM SUMPS

PROCESSING EXCAVATED LANDFILL WASTE USING PHYSICAL PROCESSING TECHNIQUES

HANDPICKING LANDFILL WASTE TO SEGREGATE MATERIALS SUITABLE FOR REUSE ON SITE

REINSTATEMENT OF MATERIALS WITHIN EXCAVATED VOIDS

SOIL WASHING PLANT UTILISED FOR PROCESSING AND SEPARATING EXCAVATED LANDFILL WASTE