

DE LACEY WAY

Remediation Works

The site is part of the Monkhill Triangle in Pontefract, West Yorkshire. By 1905, excavations indicated to be associated with a clay pit. A large pond extended to all parts by the 1950s. By 1975 the pond had been backfilled. Our scope of works was as follows - De commissioning of boreholes, 2m turn over within the road corridor, 1mtr turn over within the plots to remove any unsuitable geotechnical/chemical made ground. Installation of a reinforced earthworks wall and reprofiling to our client's contours in preparation for 66No. affordable houses.

CLIENT: HARRON HOMES
LOCATION: PONTEFRAC, WEST YORK-SHIRE.
PROJECT VALUE: £740K
DURATION: 12 WEEKS
SERVICES PROVIDED: TURNOVER AND RE-ENGINEERING OF SOILS, REMOVAL OF OBSTRUCTIONS AND HOTSPOTS OF HYDROCARBONS, GEOTECHNICAL/CHEMICAL COMPLIANCE



VertaseFLI Role:

VertaseFLI were appointed as PC by Harron Homes to deliver the remediation of the site for a new housing site.

VertaseFLI were tasked with remediating the site by means of turnover, 2mtrs under the road corridor and 1mtr under the plots. This was to remove any unsuitable made ground for geotechnical and chemical purposes.

A surface water management plan was designed, agreed and implemented on site to prevent any runoff from site to surrounding receptors including Network Rail line.

Borehole decommissioning was undertaken with bentonite to the surface to prevent potential future gas migration to the surface.

VertaseFLI utilised frequent Chemical testing to identify impacted soils that exceeded the concentrations set within the remediation strategy. Geotechnical testing was also carried out to prove suitability of the site won material for the reprofiling of the site to the agreed contours.

Soils for reuse within the earthworks within the upper 1.0m below formation levels required testing to demonstrate its Calorific Value and quantification for Asbestos fibers fall below the "Near Surface Criteria".

The differing nature of materials – ash, coal measures, shale, organic content resulted in traditional geotechnical testing (NDG) not being suitable for the materials. Sand replacement tests (SRD) were utilised to prove compaction.

All materials that failed to meet the criteria set within the RMS, were removed from site to the Prince of Wales Restoration Hub with a chain of custody to track all material movements.

Red shale was encountered during the turnover process, additional Emery Expansion testing was required by our client to determine suitability during the construction phase.

In addition to the remediation, a reinforced earthworks wall was designed through ABG. This type of retaining wall was a first for VertaseFLI to install. Various challenges at the start with installation of the first baskets and associated reinforcement.

Further challenges with design issues with ABG, technical queries and response times.

Environmental monitoring was set up prior to the works commencing to record background levels, this continued during the remediation works with all data logged.

The remediation of the site has allowed for 66No. affordable houses to be built on the site.

VertaseFLI continued to be the principal contractor throughout the remediation works, this involved overseeing HHL roads and sewer contractors.



ROAD CORRIDOR TURNOVER 2M BELOW FRL



ROAD CORRIDOR ADDITIONAL EXCAVATION, SOFT SPOT BELOW 2M TURNOVER, ADDITIONAL 1M REQUIRED



PLOT EXCAVATION, 1M BELOW FFL



PLOT REINSTATEMENT/TRIMMING. DESIGN LEVELS AT 1150MM BELOW FFL



AB RETAINING WALL STEEL PANELS



COMPLETED AB SLOPE RETAINING WALL FINISHED FACE