

B&A Land Regeneration Case Study



Southmead, Bristol

Engie Regeneration

March–July 2019

Bristol & Avon carried out remediation works on behalf of Engie Regeneration at the former Dumail Road school site in Southmead, Bristol. Visible asbestos containing materials were identified during site investigation works, which led to the development of a remediation strategy for this brownfield site.

The proposed residential development comprised the erection of 161 units and associated landscape, access and infrastructure works. The site was formerly part school and part public playing fields. The development work was undertaken in six phases, with contamination identified in four areas associated with the former playing fields.

The works involved the removal of low levels of asbestos cement found in the shallow topsoil on the site.



Remediation

A remediation strategy and risk reduction strategy had been developed to allow the segregation of materials for re-use on site in different areas of the completed development.

Information on the extent and type of asbestos contamination and likely depth based on the site investigation reports. Topsoil depths were anticipated to be between 0.20–0.35m.

Materials arising from the contaminated areas of the development were carried out under controlled conditions, by combination of mechanical excavation, direct disposal and handpicking. During the remediation works, handpicking of asbestos cement fragments from the soil was carried out so as not to further degrade or break the material.

A total of 1,300m³ of visually impacted topsoil materials were removed directly from the site to a treatment facility to divert soils from landfill, with a further 800m³ of topsoil/subsoil without visible asbestos removed to a recovery facility. After processing stockpiles on site, approximately 120 Kg of handpicked asbestos cement materials were disposed off site.



Southmead, Bristol



Challenges & Solutions

Construction works had already commenced on the uncontaminated areas of the site. The remediation was carried out in a phased approach so areas could be handed over to the construction team without delaying the programme.

The site was in a residential area with a number of properties overlooking the site. Maximizing the amount of soils allowed to be retained on site by remediation meant less vehicle movements off site and also reduced the number of loads of replacement soils to be imported.

Ambient background air monitoring was carried out to monitor the levels of any potential fibres being released from the soil during disposal and remediation works to demonstrate no risk to the construction workers or the wider community.

Materials remaining after processing were tested in stockpile to demonstrate that they were suitable for use in the development.



Added Value

Bristol & Avon worked with Engie Regeneration to sequence works to ensure no delay to construction works.

Works undertaken on site included topsoil strip, disposal of visually contaminated soil, disposal of soils without visible ACM and handpicking of topsoil stockpiles to enable re-use of materials on site in accordance with the agreed remediation strategy.

Detailed understanding of the remediation process and the problems faced allowed the successful segregation of materials to maximise the quantity of materials which were able to be re-used on site.

The result of the remediation meant soils could be re-used within the development and there would be no ongoing considerations required for normal aftercare/maintenance tasks.

