



The pre-demolition audit of a public swimming pool helped the local council to set demolition tender targets, implement a site waste management plan and maximise resource efficiency.

‘Using the information from the pre-demolition audit, we were able to exceed our targets for recycling site waste,’ said Chris Pittman, Head of Policy, Partnerships and Property at the Borough Council of Wellingborough, ‘and achieve the high levels of resource efficiency we were looking for.’

The project

BRE was commissioned to carry out a pre-demolition audit of Wellingborough Swimming Pool. Having come to the end of its service life, the pool was due to be demolished prior to the construction of a new one.

This indoor public facility, which opened in 1970, was built using red brick to construct a building envelope containing a 25-metre pool, a smaller teaching pool and seating for spectators. The pools were set in concrete that was heavily reinforced to withstand the pressure of the water. The building had a flat roof covered with metal sheeting material.

The Borough Council of Wellingborough’s property department wanted an audit to be undertaken before the demolition work started, to ensure that the material arising would be managed efficiently and the waste hierarchy principle would be implemented throughout the project.



A pre-demolition audit of Wellingborough swimming pool found that more than 95% of materials arising could be recycled.

Waste hierarchy

The waste hierarchy typically has four elements:

Reduce: the most preferred option where waste is reduced by operating efficiently.

Reuse: items are reclaimed and used again for the same or different purposes.

Recycle: materials and items are recovered so that they can be put through a recycling process to produce new products.

Disposal: this is the least preferred option and is basically containment of

the disposed items, often in a landfill. Incineration can reduce the waste to a third of its original volume.

The audit

BRE conducted the pre-demolition audit using architectural drawings and data gathered during a site survey, as part of which non-invasive inspections were made and photographs taken.

The audit estimated the quantities of the different materials encased in the building and identified those materials that could be diverted for reuse and recycling.



Findings

The BRE audit identified the types of materials that would be generated by demolishing the swimming pool site – such as concrete, inert materials, metals and general waste – and calculated the quantities of each.

The audit found that at least 95% of the overall weight of the materials was suitable for recycling, and that several fixtures and fittings, such as the security fencing, could be reused. The remaining 5% of materials was suitable only for landfill purposes. The audit also investigated the presence of hazardous materials such as asbestos.

The pre-demolition audit provided the information needed to draw up the tender documents used to select and brief the demolition contractor. It also helped to ensure that the chosen contractor implemented the required site waste management plan and achieved the targets for recovering, reusing and recycling the materials arising from the demolition.

In line with the findings of the audit, the demolition contractor recovered the concrete, ceramics and inert materials. As the site

Product	Tonnes	%	Waste management option
Recycled aggregates	3,180	75	On-site recycling / for sale off site
Inert	780	18	On-site recycling
Metals	137	3	Off-site recycling
General waste	105	3	Landfill
Asbestos	47	1	Asbestos hazardous waste disposal
Security fence	4	0.1	Reclaim
Total:	4,253	100	96% of materials recycled.

Weight of demolition materials arising.



The security fencing was reclaimed.

did not need these materials for landscaping they were crushed to produce recycled aggregate for sale off site, along with the reclaimed items.

Sale of materials

There are a number of web-based facilities to help with the sale and reuse of recovered materials. For example, specific salvage items can be advertised for free on

www.salvo.co.uk, and low-value materials on www.salvomie.co.uk.

It is also worth contacting local architectural salvage merchants about specific items – Salvo publishes a directory of these on their website – and checking out the local options for usefully disposing of waste, which are listed on BREMAP, www.bremap.co.uk

Borough Council of
Wellingborough

