



## Demolition of Hanchurch Reservoir

- Location:** Stoke-on-Trent
- Scope:** Demolition of reservoir structure incorporating soil strip, crushing and reinstatement works
- Disciplines:** Demolition, soil strip, crushing and reinstatement
- Client:** JN Bentley Ltd
- Programme:** Currently Ongoing
- Value:** £ TBC

Ron Hull Demolition Ltd were awarded the works following a competitive tender, based on competency and quality after demonstrating robust methods, policies and procedures.

### Scope of Works

The scope of works for the demolition of the redundant reservoir included incorporating soil strip, demolition, puncturing basement slab, crushing arisings, backfilling basement void and reinstatement of top soil.

The building was isolated prior to works commencing with all incoming redundant cables cut off (open ended) prior to works commencing.



The sequence of events consists of the following activities:

- Confirmation of isolations and decommission
- Soil strip in 22 metre sections and stockpiling
- Demolition of structure in 22 metre sections along bays
- Puncture of basement for drainage
- Demolition of pump house building down to basement floor slab
- Crushing of arisings
- Backfill of basement void
- Re-instatement of topsoil to footprint of the structure

### **New Volvo EC480E Long Reach**

Ron Hull Demolition's recent new arrival of the Volvo EC480E long reach excavator will be utilised to strip soil in 22 metre sections along bays.

The new EC480E has been supplied with both a high reach demolition three-piece boom and a multi demolition boom. When fitted with the three-piece demolition rig, Ron Hull's EC480E is capable of handling a maximum tool weight of three and a half tonnes, half a tonne more than standard thanks to the additional weight of the hydraulically adjustable undercarriage.

The Volvo long reach excavator will commence stripping topsoil from area 1.22 metre in length and 4 bays wide. The topsoil will be stock piled to the eastern side. The 70 tonne excavator will commence demolition to area 1 leaving intact the side wall elevation. The long reach excavator will then commence stripping area 3 of topsoil then move to area 4 and repeat the whole sequence followed by the excavators.

### **Description of Works**

The method & sequence will be repeated for the remaining areas leaving the last bay in-situ of areas 13,14 & 15. All arisings are to be placed against the wall highlighted in green to give lateral support to the wall before the roof structure is demolished.

A 30t excavator will have to make the demolition arisings into a stockpile ready for crushing. The concrete basement slab is to be punctured by hydraulic breaker for drainage.

The crushing element will then commence producing 6f2 material for backfill. The masonry arisings supporting against the wall are to be replaced by the crushed product.

The crushed material will be progressively levelled out behind the two side walls. The stockpiled topsoil will be removed from behind the walls and placed on top of the levelled crush on the footprint of the structure. The side walls will be demolished inwards to the footprint, processed and placed on the stockpile for crushing. The crushed materials will be levelled out and compacted by tracking over by the dozer. Topsoil to be levelled and shaped to contours of the surrounding areas.

