

REDDINGMUIRHEAD, POLMONT – REMEDIATION & ENABLING WORKS	
Description:	Major site remediation and preparation works for housing
Form of Contract:	ICE Design & Construct
Duration:	67 weeks
Contract Value:	£5,300,000
Client:	Redding Park Development Company
Clients Representative:	Pottie Wilson



This substantial project saw the remediation of the former ICI Nobel munitions factory and the adjacent former Redding Colliery at Reddingmuirhead, near Polmont. The munitions components had for many years leached high concentrations of heavy metals, - notably mercury - into the local environment, including the Forth and Clyde canal adjacent to the site.

I & H Brown worked closely with the Client and his design team to develop a viable solution to remediate and develop this 30 hectare site, which was recognised as particularly challenging. The site investigation and subsequent remediation strategy identified that, from a total excavation of 300,000m³, some 75,000m³ of contaminated material required treatment.

On award of the contract, the Client’s designer Wren & Bell was novated to I & H Brown.

When work began on site, early operations concentrated on extensive tree felling and site clearance. Sixteen separate setts were identified, from which badgers were relocated to other areas. During this phase, we also carried out trials of our proposed

methodology and spent several months grouting the abandoned mine workings beneath the site. In addition, three mine shafts were capped and three lagoons were created to provide 2,500m³ of attenuation for run-off waters.

The project then moved forward to the main phase of bulk earthworks, which was carried out alongside the careful segregation and treatment of contaminated material. Material contaminated with heavy metals underwent an on-site process of solidification/stabilization. Successful completion of this treatment ensured that the majority of the contaminated material achieved classification as Stabilised Non Reactive Hazardous Waste and was therefore suitable for disposal at a local landfill. Remediation also removed all remaining discarded ordnance and maximised the volumes of material suitable for on-site re-use. Experienced explosives engineers were on call at all times to supervise the handling of discarded ordnance. The bulk earthworks also included the crushing and recycling of concrete and brickwork from the abandoned facilities and the excavation and disposal of soils containing Japanese Knotweed.

Careful site management and ongoing testing ensured that run-off waters were suitable for discharge to the adjacent canal.

The site was registered under the Considerate Constructors scheme and our staff attended regular monthly liaison meetings with the local community.

