

LEM Mining & Restoration Limited

Garswood Hall Farm, Crock Hey Restoration Strategy Implementation

Design: Duncan Ross Ltd

Project Brief:

Design and construction of a piped land drainage system as part of the site strategy to restore a former open cast mining site and render the land suitable for agricultural purposes.



Project Overview:

Crock Hey opencast mine worked the 'Wigan Five Feet' seam and the 'Wigan Four Feet' seam in the Garswood area of the Metropolitan Borough of St Helens, Merseyside. The mine closed in 2005 after coal production had fallen from 76,000 tonnes per annum in 2003 to around 4,300 tonnes in 2005.

Following the mine's closure the land was to be restored to agricultural use. Working with the client and following detailed surveys to assess the extent of the site's drainage problems, Duncan Ross Limited undertook the design and installation of extensive remedial drainage infrastructure across the former opencast mine site comprising the following:

- 20,420m of 80mm lateral piped drains at 9.0m centres.
- 1,000m of 160mm main drains.
- 725m of 100mm main drains.
- Installation of a 225mm bore hole link pipe, approximately 140m long.
- Construction of 5Nr glass reinforced concrete headwalls.
- Subsoil cultivation to an area of 20 hectares to improve soil structure and drainage generally.