



Johnson Wellfield Quarries, Crosland Hill

STATUS: Local Geological Site

COUNTY: West Yorkshire

DISTRICT: Kirklees

OS GRID REF. SE 1114 - 1113

OS 1:50,000 Landranger 110 Sheffield and Huddersfield

OS 1:25,000 Explorer 288 Bradford and Huddersfield

BGS 1:50,000 Sheet 77 Huddersfield

FIRST DESIGNATED by West Yorkshire Geology Group in 2008

DATE OF MOST RECENT SURVEY February 2008 by West Yorkshire Geology Group

DESIGNATION SHEET UPDATED August 2009

SITE DESCRIPTION:

One face of Wellfield Quarry has been left exposed as part of the quarry restoration plan. The rock is Upper Carboniferous (Namurian) Rough Rock and the face is about 250m long by 8-10m high. At the south end of the face there is a cutting, showing some interesting features, crossed by a footbridge. The rock is a medium-grained sandstone with much cross-lamination in small beds, sometimes flaggy in nature. Some beds wedge out or are replaced with micaceous siltstones with disseminated carbon. There are some plant fossils.

The jointing is very irregular, although there are some vertical joints around which the rock is fragmented and altered, called 'ruttles' by the quarrymen. Iron has moved through the rock and there are some very iron-rich orange sections, including Liesegang rings in places.

HISTORICAL ASSOCIATIONS:

The quarries on Crosland Hill are mentioned in the Huddersfield and Halifax memoir 1930 p184 (reference below). At the time there were a large number of important quarries which formed one of the main centres of stone quarrying in West Yorkshire. There are 12 named quarries, shown as working in 1930, on p199. These are mentioned in local trade directories from the 1900s onwards under various names. The memoir mentions that the buildings in Huddersfield and the nearby villages are very largely built of Crosland Hill stone, which appears to weather well.

EDUCATIONAL VALUE:

The face shows plenty of features which illustrate the sedimentary environment during which the Rough Rock was deposited during the Namurian epoch.

AESTHETIC CHARACTERISTICS:

Wellfield Quarry is subject to a planning application for site restoration which includes further landfilling with quarry waste. After that, it will be landscaped and a footpath will go close to the face so that the rocks and structures will be visible.

ACCESS AND SAFETY:

The site can only be accessed through the working quarry at present, so this would not be a good exposure for groups of students to visit. However, the site restoration plan for Wellfield Quarry includes footpaths from which the faces can be observed. The footpaths around the perimeter of the quarry are designed for wheelchair access, although there is a wall stile to reach some sections of path.