

Baildon Bank and Baildon Green Quarries

STATUS: Local Geological Site

OTHER DESIGNATIONS: Bradford Wildlife Site

COUNTY: West Yorkshire

DISTRICT: Bradford

OS GRID REF. SE 145 388 to SE 152 392

OS SHEET 1:50,000 Landranger 104 Leeds and Bradford

OS SHEET: 1:25,000 Explorer 228 - Bradford and Huddersfield

BGS 1:50,000 Geological Sheet 69 - Bradford (Solid and Drift Edition)

FIRST DESIGNATED by West Yorkshire RIGS Group in 1996

DATE OF MOST RECENT SURVEY West Yorkshire Geology Trust in August 2010

SCIENTIFIC INFORMATION produced by Neil Aitkenhead

DESIGNATION SHEET UPDATED October 2010



SITE DESCRIPTION

Exposures of Rough Rock and Rough Rock Flag sandstones at the top of the Millstone Grit Group, extend for approximately 1km above Baildon Green, forming part of a fine escarpment overlooking Airedale. The site has been quarried for much of its length, although there are still natural exposures in some places. The Rough Rock is interpreted by Bristow as a braided river sheet sandstone deposit.

There is a 50m deep quarry to the north of Baildon Bank quarry, with vertical faces on all sides, which used to be accessed by a tunnel through solid rock, now blocked off.

Baildon Bank Quarry (SE 150 390):

The extensive exposures of Rough Rock illustrate a range of structures including cross bedding, massive bedding, pebble horizons and sections with much finer bedding. The rock is generally coarse grained and weathered to a red/orange tint. Narrow bands of finer silts and shales within the massive bedding show differential weathering. Bristow, in the article which is referred to below, mentions that the exposure can be divided into two units. 'In the lower part, beds dip towards the west in bedsets up to 8m thick.

Sedimentary structures within the bedsets change from sets of trough cross-stratification to down-current-dipping sets of cross-stratification along strike. In contrast, the overlying cross-stratified sandstones have a palaeocurrent direction towards the south.'

Fallen blocks of rock contain fossilised plant remains, including a 6m length of a branch which is probably about 30cm, across in a huge fallen block near the east end of the quarry.

Baildon Green Quarry (SE 145 388):

A partly infilled and overgrown quarry exposes the boundary between the Rough Rock and the underlying Rough Rock Flags. This site well illustrates the 2 different types of bedding. Thick cross bedded sets up to 2m thick on thinner sets with shale, sandstone and siltstone interbeds.

HISTORICAL ASSOCIATIONS:

These quarries produced flagstones, kerb stones, lintels and building stones for the local area. Many smaller Rough Rock quarries in the district have been filled in. There was a brickworks at Baildon Green, which used ganister from Baildon Hill.

EDUCATIONAL VALUE:

These are suitable sites for studying depositional structures and the quarrying of building stone. The excursion may be extended by visiting the Rough Rock at Load Pit Beck in Shipley Glen (SE 128 394) and the Lower Coal Measures outlier on Baildon Moor.

AESTHETIC CHARACTERISTICS:

The top of the ridge is a good vantage point for views over the Aire Valley. Noon Nick glacial meltwater channel can be seen to the south-west.

ACCESS AND SAFETY:

Park along Green Lane (SE 152 390) and follow any one of numerous footpaths ascending Baildon Bank. In addition, there is access to both quarries from a footpath that runs along the top of the quarry and is accessible from West Lane, Baildon. The east end of Baildon Bank quarry is accessible by footpath from Salisbury Avenue, off West Lane, where there is parking.

The area in front of the quarry face is grassed allowing good access to the rock face. Flooded workings behind the main exposures are dangerous and should be avoided. Several quarry entrances have been blasted to prevent access. Parts of the site are used for climbing. The face of Baildon Bank quarry is unstable and rock falls are common. The footpaths are not made up for wheelchair use.