

## LAND CLASSIFICATION AND SOIL NOTES FOR BLEAK HOUSE OPENCAST COAL SITE, CANNOCK

### Introduction

This 316 h/a site lies north of the A5190 Cannock to Chase Terrace road approximately 4km east of Cannock. The site slopes gently southwards from a high point of 230m at the northernmost part of the site to a low point of 165m alongside the B4154 Hednesford Road in the far south west corner of the site. The land is gently undulating or level and nowhere is slope a limitation to the agricultural use of the land.

The area receives an average annual rainfall of 765mm which is relatively evenly distributed throughout the year with a slightly drier period from February to June. The accumulated temperatures above 0°C (January to June) is 1262 which indicates that the site cannot be graded higher than grade 2 on climatic (AAR/ATO) criteria. The inter action of summer temperatures and rainfall produce moisture deficits of 79mm for wheat and 62mm for potatoes. The number of days the area is at field capacity is 178.

The whole area is underlaying by Middle Coal Measures but this is overlain by considerable depths of glacial drift. The glacial drift is slightly to moderately stony and has weathered to produce sandy soils often of considerable depth, e.g. Ireton, Isleham soil series or soils with sandy upper layers overlying clay subsoils e.g. Lea, Clifton and Salwick soil series. The deeper, sandier soils generally occur to the south and south east of the site. In many places, especially towards the south of the site soils have developed an organic rich topsoil e.g. Lea, Ireton and Isleham soil series.

In addition, there are several areas of disturbed land and colliery tips produced from past mining activity which create very mixed soils of generally inferior quality.

The site covers a smaller area than the original Bleak House application which was surveyed by the RPG in 1982. This site was re-surveyed during 1989 and 1990 using a 120cm dutch soil auger with observations being made to 120cm unless prevented from reaching this depth by stony or compacted layers. At the time of survey the south west part of the site was under arable cultivation typically oilseed rape and winter cereals. Most of the north by comparison was predominantly pasture with some fields of cereals and oilseed rape. Some land which is currently neglected was not in such a state at the time of the earlier survey. The centre of the site is under birch and scrub woodland and is classified as non agricultural land.

In addition to the main working site there is a long haul road linking the site to the disposal centre in Cannock. This haul road is approximately 3km long and crosses a mixture of undisturbed agricultural land, opencast coal land restored to agriculture and unrestored opencast coal workings.

## Agricultural Land Classification

Grade 3A land occupies 62.0 h/a and accounts for 19.6% of the site. The grade 3A land occurs as one large block in the south west and a smaller area in the north. The soils in the south typically have organic sandy loam topsoils overlying sandy clay loam with clay, loam and clay subsoils generally found below 45-50cm. These soils have easily worked topsoils though suffer from prolonged waterlogging in winter and are generally wetness class III or IV.

The smaller area of 3A land to the north has non organic sandy loam or sandy clay loam topsoil overlying clay by about 55-65 cm and belong to the Salwick soil series. Most of the soils are slightly stony and in places are very near the maximum permitted topsoil stone content of 15%.

Most of the grade 3A land in the south is under arable cultivation whilst the northern area was under pasture.

Grade 3B land occupies 125.2 h/a and accounts for 39.7% of the site. This is the most widespread grade of land found and occurs on a range of soils including some of the disturbed land caused by past mining activities. Most of the grade 3B land has sandy loam topsoils with its organic variants which overlay clay loam, sandy clay loam and subsequently clay subsoils. Towards the north east corner heavier clay loam topsoils occur overlying clay loam and clay subsoils. The soils generally suffer from prolonged waterlogging in winter and are generally wetness class IV. The soils are locally moderately stony, particularly in the far north and north west and in these areas topsoil stone content is the main limitation to the agricultural use of the land. At the time of survey most of this land was under pasture with some very poorly managed fields to the south east. Some fields of oilseed rape and winter cereals were also observed.

Grade 4 land occupies 16.5 h/a and accounts for 5.2% of the site. The grade 4 land occurs as one large area in the north west and several smaller areas. The grade 4 land falls into two distinct types:-

- (i) Disturbed land caused by past mining activity in the larger area to the north east and at the western end of the haul road.
- (ii) In low lying, wet areas which are very difficult to drain.

Some of the disturbed soils have an organic sandy loam or clay loam topsoil overlying compacted clay loam or clay within 40cm of the surface. These soils are waterlogged for long periods and generally belong to wetness class V. The soils in the low lying wet areas also have organic topsoils, lie in water receiving sites and are difficult to drain.

The land is characterised by rushy pastures which readily poach and are of restricted grazing value.

Non Agricultural land occupies 102.2 h/a and accounts for 32.4% of the site. The non agricultural land is composed of two main types:-

- (i) The large central block of birch and scrub woodland much of which is underlain by organic soils.
- (ii) Disturbed land which is not in agricultural use but is used for informal recreation, e.g. the disused tip at Heath Hayes.

Land Not Surveyed occupies 8.8h/a and accounts for 2.7% of the site. This land is situated at the west end of the haul road and includes the coal dispersal point on the site of the former mid Cannock Colliery.

Biddulph's Pool occupies 1.0 h/a and accounts for 0.4% of the site. This SSSI is situated in the south east corner of the site.

#### Summary Table

ALC Grade	Area (h/a)	%
Grade 3a	62.0	19.6
Grade 3b	125.2	39.7
Grade 4	16.5	5.2
Non-Agricultural land	102.2	32.4
Not Surveyed	8.8	2.7
Water	1.0	0.4