

AGRICULTURAL LAND CLASSIFICATION

LICHFIELD LOCAL PLAN, WHITTINGTON

1. Summary

The Whittington site comprises 239 ha of which 220 ha is agricultural land. Of the agricultural land 5% is grade 2, 53% sub-grade 3a and 41% sub-grade 3b. The major agricultural limitations are stoniness, drought and wetness.

2. Introduction

The Whittington site is located 2km north of the village of Whittington. It is bounded to the west by a branch of the Trent Valley railway and to the north by Brookhay Wood. The site was surveyed by the Resource Planning Team in June 1993 to provide information for the Lichfield Local Plan. A grid survey method was used at a scale of 1:25000 with a sampling density of 1 per 4 hectares. Final mapping was at a scale of 1:25000 and enlargements of the map would not be accurate.

At the time of survey the land was mostly under cereals with some small areas in potatoes and in ley grass.

3. Climate

The average altitude of the site is 59m. The average annual rainfall within the vicinity of the site is 687 mm and the accumulated temperature above 0°C for the period January to June is 1407 day °C. There are no climatic limitations to the agricultural use of the site.

4. Relief

The site is level to gently undulating. There are no major relief features and gradient is not limiting.

5. Geology and Soil

5.1 The solid geology of the site is predominantly Red Marl with Sandy Bands, with an area of Sandstone along the south-western boundary. The solid geology has been partially mantled by drift consisting of Boulder Clay and First Terrace deposits. The Boulder Clay lies over the central part of the site between Thatchmoor farm and Brookhay farm, whilst the First Terrace deposits occur around Wetleyhay Wood, along Mare Brook and east of the railway.

5.2 The soils do not relate directly to geology and vary across the site. Along the eastern side and extending across the centre of the site, the soils are light textured with sandy loam topsoils overlying loamy sands and sands.

Droughtiness and stoniness are the two major limitations of these soils. To the north of this area there is an increase in the clay content of the topsoils and clay loams are found over loamy sands and sands. Stoniness is the major factor limiting the agricultural use of these soils.

Clay textured soils occur around Mare Brook in the west of the site and in a large area around the south-centre. The soils towards the western boundary of the site have red clay subsoils forming a slowly permeable layer, with gleying in the upper subsoil. Around Mare Brook the clay in the subsoil is grey and strongly mottled and forms a slowly permeable layer. This horizon lies directly beneath a well drained clay loam topsoil.

The clay soils in the south of the site have a higher silt content than those elsewhere. The topsoils are silty clay loams overlying either a gleyed silty clay loam over a silty clay, or directly over a silty clay. The silty clay is either reddish brown or red and forms a slowly permeable layer. These soils are only slightly stony and the major limitation to agricultural use is wetness.

To the west of these clay soils the subsoils become more coarsely textured. Silty clay loam topsoils overlie loamy sands. The subsoils are stony and although there is gleying there is no slowly permeable layer and the major limitation is drought.

6. Agricultural Land Classification

6.1 Grade 2

This grade is the least extensive on the site, covering 4.5% of the total area. It is restricted to an area around Thatchmoor farm. The soils consist of clay loams over sands and loamy sands. The subsoils are moderately stony and despite being gleyed the major limitation to agricultural use within this grade is droughtiness.

6.2 Sub-grade 3a

This sub-grade covers 49% of the total area and occurs as a broad band across the site. Topsoil texture varies between silty clay loams in the west to sandy loams in the east. Subsoils are loamy sands and sands and moderately stony. In the east of the site stoniness in the topsoil is the major limitation to agriculture in this sub-grade, whilst in the centre it is wetness and in the west, droughtiness.

6.3 Sub-grade 3b

This sub-grade covers 38% of the total area of the site and occurs in three areas. In the east, adjoining Wetleyhay Wood the soils are clay loams and sandy loams over loamy sands and sands. There is a high percentage of stones in the topsoil, (over 15%) and this is the major limitation to agricultural use.

Along the northern boundary of the site is an area of silty clay loam topsoils and sandy subsoils. The major agricultural limitation is drought in this area.

Clay soils extend from the western boundary and along Mare Brook down to the southern boundary of the site. The soils become increasingly silty towards the south. Clay loams overlie slowly permeable clays and gleying is present in the upper sub-soil. The major limitation to agricultural use in this area is wetness.

6.4 Land not in Agriculture

Woodland occupies 4.7% of the site, mostly comprising Wetleyhay Wood. Land classed as urban occupies 2% of the site, predominantly as Brookhay Lane and the lane to Thatchmoor cottage.

7. **Statistics**

Grade/Sub-grade	Area (ha)	% of total land	% of Agricultural land
2	10.9	4.5	5.0
3a	118.6	49.5	53.7
3b	91.2	38.0	41.3
Urban	5.6	2.0	
Agricultural buildings	1.9)		
Non-Agricultural land	0.2)		
Woodland	11.2)	6.0	
Open Water	0.2)		
Total	239.8		

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