

**AGRICULTURAL LAND CLASSIFICATION**  
**LICHFIELD LOCAL PLAN, KINGS BROMLEY**

**1. SUMMARY**

The Kings Bromley site consists of 452 ha of which 428 ha is agricultural land. The agricultural land comprises 17% grade 2, 56% grade 3a and 27% grade 3b. The principal major agricultural limitations are droughtiness, topsoil stone content and wetness.

**2. INTRODUCTION**

The Kings Bromley site is located 1 km south of the village of Kings Bromley and is bounded to the west by the A515 and to the south by the Trent and Mersey Canal. 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 most of the site was under cereals, oilseed rape and grass, but with onions and potatoes being grown on the eastern portion of the site.

**3. CLIMATE**

The average altitude of the site is 62 m and the average annual rainfall within the vicinity of the site is 685 mm. The accumulated temperature above 0°C for January to June is 1404 day °C. There are no climate limitations to the agricultural use of the site.

**4. RELIEF**

The site is almost level with some slight undulations. There are no major relief features and no limitations due to slope.

**5. GEOLOGY AND SOIL**

5.1 The solid geology of the site consists of Red Marl with sandy bands. This has been overlain by Older River Gravels in the south of the site and First Terrace deposits in the north. Small areas of alluvium occur along the northern and south-eastern margins of the site.

5.2 The soils are generally coarse textured and stony with loamy topsoils over sandy subsoils. However there is variation over the site.

In the east the soils are slightly heavier with sandy clay loam topsoils over loamy sand subsoils. There are occasional bands of clay in the subsoil. Westwards across the site the soils become lighter with sandy loam topsoils occurring over loamy sand and sand

subsoils. There is a high subsoil stone content throughout the site ranging between 15% and 60%. There is no apparent pattern to this distribution, however the lowest percentages occur in the east and the highest to the south of the centre of the site. Similarly topsoil stone content varies across the site but is lowest in the east and highest in the north-west and centre. In the latter two areas stoniness is the major limiting factor to agricultural use.

In the north of the site, around Bourne Brook the soils are the heaviest on the site. Clay loam topsoils overlie clays and sandy clay loams and the subsoils are gleyed. The major limiting factor on these soils is wetness.

Over the rest of the site, where stoniness is not a limitation drought is the major factor limiting agricultural use.

## **6. AGRICULTURAL LAND CLASSIFICATION**

### **6.1 Grade 2**

This grade covers 16% of the site and occurs in four areas. The largest extent occurs in the east of the site, north of Alrewas Hayes. The soils here consist of sandy clay loam topsoils over sandy loams and loamy sands, with bands of clay being encountered occasionally within the subsoil. Drought is the main limitation to agricultural use in this area.

The second most extensive area of this grade occurs in the south of the site around Woodend Common Barn. The topsoils are sandy clay loams and sandy loams and the subsoils consist of clay, sandy clay and sandy clay loam. The subsoils are gleyed and have a slowly permeable layer and wetness is the main limitation to agriculture in this area.

The third area occurs in the centre of the site where deep sandy loams overlie sands and loamy sands and drought is the main limiting factor. The fourth area is in the north east corner of the site where sandy loam topsoils overlie clay loam subsoils and drought is the major limitation to agricultural use.

### **6.2 Sub-grade 3a**

This is the most extensive grade on the site and covers 53% of the total area. The soils consist of sandy loam topsoils over loamy sands and sandy subsoils. Subsoil stone content averages 25% and this contributes to the droughtiness of these soils which is the major limiting factor within this grade. There are isolated areas within this grade where stoniness is the major limiting factor.

### **6.3 Sub-grade 3b**

This sub-grade covers 25% of the site. In the north, around Bourne Brook, wetness is the major limitation in the clay textured subsoils. Elsewhere within this sub-grade the soils are more coarsely textured and stony and the major limitation is either droughtiness or stoniness, depending on location.

#### 6.4 Land not in Agriculture

Woodland occupies 2.5% of the total area and occurs as isolated plantings around the site. Non-agricultural land is restricted to farm tracks around the site.

6.5	<u>Grade/Sub-grade</u>	<u>Area (ha)</u>	<u>% of agricultural land</u>	<u>% of total land</u>
	2	72.6	17	16.1
	3a	239.9	56	53.1
	3b	115.6	27	25.6
	Urban	5.4		1.2
	Agricultural buildings	4.8		1.0
	Non-Agricultural	1.5		0.3
	Woodland	11.3		2.5
	Open Water	<u>0.8</u>		0.2
	TOTAL	451.9		
	Total Agricultural Land	428.1		

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