

AGRICULTURAL LAND CLASSIFICATION  
PENKETH (SITES A and B)  
WARRINGTON LOCAL PLAN

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AGRICULTURAL LAND CLASSIFICATION REPORT FOR  
LAND AT PENKETH, NEAR WARRINGTON

1. SUMMARY

- 1.1 The Agricultural Land Classification (ALC) survey for these two sites shows that the following proportions of ALC grades are present:

PENKETH A

<b>Grade/Subgrade</b>	<b>ha</b>	<b>% of site</b>
3a	31.2	72.3
3b	8.3	19.3
Non Agricultural	0.3	0.7
Agricultural Buildings	1.1	2.6
Water	0.2	0.5
Unclassified* <sup>1</sup>	2.0	4.6

\*<sup>1</sup> Unclassified land determined by railway and area around garage in the north.

PENKETH B

<b>Grade/Subgrade</b>	<b>ha</b>	<b>% of site</b>
3a	33.2	75.1
3b	8.5	19.2
Agricultural Buildings	1.3	2.9
Water	0.2	0.5
Urban	0.2	0.5
Unclassified* <sup>2</sup>	0.8	1.8

\*<sup>2</sup> Unclassified land determined by railway and land by Ash Villa

- 1.2 The main limitation to the agricultural use of land in both Subgrades 3a and 3b is soil wetness.

## 2. INTRODUCTION

- 2.1 The sites were surveyed by the Resource Planning Team in August and September 1989. Two soil pits were dug on a subsequent visit in September 1994. An Agricultural Land Classification survey was undertaken according to the guidelines laid down in "Agricultural Land Classification of England and Wales. Revised guidelines and criteria for grading the quality of agricultural land" (MAFF, 1988).
- 2.2 The two sites lie to the west of the village of Penketh and are bisected by the Liverpool-Warrington railway line.
- 2.3 The survey was requested by MAFF in connection with Warrington Local Plan.
- 2.4 This was a detailed grid survey at 1:10,000 scale with a minimum auger boring density of one per hectare. The attached map is only accurate at the base map scale and any enlargement would be misleading.
- 2.5 At the time of the original survey the majority of the two sites was in cereal stubble with wheat, barley and oats having been grown during the year. There were also limited areas of potatoes, permanent pasture, and rough grazing.

## 3. CLIMATE

- 3.1 The following interpolated data are relevant for the two sites (SJ 555 881)

Average Annual Rainfall	821 mm
Accumulated Temperature above 0°C (January to June)	1438 day °C

- 3.2 There is no overall climatic limitation on these sites.
- 3.3 Other relevant data required for land classification are as follows:-

Field Capacity Days	194
Moisture Deficit (Wheat)	89mm
Moisture Deficit (Potatoes)	77mm



#### 4. SITE

- 4.1 Three site factors of gradient, micro-relief and flooding are considered when classifying land.
- 4.2 These factors do not impose any limitation on the agricultural use of the land on these sites.

#### 5. GEOLOGY AND SOILS

- 5.1 The solid geology of the area consists of Permian and Triassic sandstones, which are overlain by deposits of boulder clay and limited areas of blown sand.
- 5.2 The soils derived from these drift deposits tend to be sandy loams overlying clay, sometimes with heavier clay soils near the surface, or sandier soils to great depth.

#### 6. AGRICULTURAL LAND CLASSIFICATION

- 6.1 Subgrade 3a occupies 31.2 ha on Site A and 33.2 ha on Site B (72.3% and 75.1% respectively of the total site areas)
  - 6.1.1 The soils typically consist of sandy loam topsoils overlying sandy clay loam or clay loam upper subsoils and clay lower subsoils. In limited areas clay occurs close to the surface but, conversely, some borings revealed a sandy profile to depth. These areas were too small to be mapped separately at this scale.
  - 6.1.2 The main limitation to the agricultural use of this land is soil wetness.
- 6.2 Subgrade 3b land covers 8.3 ha on Site A and 8.5 ha on Site B (19.3% and 19.2% respectively of the total site areas).
  - 6.2.1 These soils consist of sandy loam, sandy clay loam or medium clay loam topsoils overlying clay subsoils. The profiles are poorly drained and fall into Wetness Class IV.
  - 6.2.2 The main limitation to the agricultural use of this land is soil wetness.

- 6.3 Other land on Site A includes four small ponds (mapped as water and covering 0.2 ha), Non Agricultural land (at Laburnum Farm in the north, covering 0.3 ha), Agricultural Buildings (1.1 ha at Tughill Farm and Brook Farm) and Unclassified land (alongside the railway line and an area around the garage in the north, covering 2.0 ha).

Other land on Site B includes a small pond (covering 0.2 ha), Agricultural Buildings (covering 1.3 ha at Laburnum Farm, Brookside Farm and Brook House Farm), Urban land (0.2ha) and Unclassified land (alongside the railway line and at Ash Villa, covering 0.8 ha).

#### 6.4 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

##### PENKETH A

<b>Grade/Subgrade</b>	<b>Area in hectares</b>	<b>% of survey area</b>	<b>% of agricultural land</b>
3a	31.2	72.3	79.0
3b	8.3	19.3	21.0
Non Agricultural	0.3	0.7	-
Agricultural Buildings	1.1	2.6	-
Water	0.2	0.5	-
Unclassified	2.0	4.6	-
Totals	43.1	100	100

PENKETH B

<b>Grade/Subgrade</b>	<b>Area in hectares</b>	<b>% of survey area</b>	<b>% of agricultural land</b>
3a	33.2	75.1	79.6
3b	8.5	19.2	20.4
Agricultural Buildings	1.3	2.9	-
Water	0.2	0.5	-
Urban	0.2	0.5	-
Unclassified	0.8	1.8	-
Totals	44.2	100	100

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