AGRICULTURAL LAND CLASSIFICATION
CHESHIRE MINERALS SUBJECT PLAN
SILICA SAND, SITE 5

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AGRICULTURAL LAND CLASSIFICATION REPORT FOR CHESHIRE MINERALS SUBJECT PLAN SILICA SAND, SITE 5

1 SUMMARY

1.1 The Agricultural Land Classification (ALC) Survey for this site shows that the following proportions of ALC grades are present:

Grade/Subgrade	ha	% of site
2	27.5	77.5
3a	6.7	18.9
Other land	1.3	3.6

1.2 The main limitation to the agricultural use of land in Grade 2 is soil droughtiness.

1.3 The main limitation to the agricultural use of land in Subgrade 3a is soil wetness.

2 INTRODUCTION

2.1 The site was surveyed by the Resource Planning Team in January 1996. An Agricultural Land Classification survey was undertaken according to the guidelines laid down in the "Agricultural Land Classification of England and Wales - Revised Guidelines and Criteria for Grading the Quality of Agricultural Land" (MAFF 1988).

2.2 The 35.5 ha site is situated to the west of Congleton, between the A54 and A534 roads at Smethwick Green. With the exception of Bag Mere to the north west of the site, the land surrounding the survey area is predominantly in agricultural use.

2.3 The survey was requested by MAFF in connection with the Cheshire Minerals Subject Plan.

2.4 At MAFF Land Use Planning Unit's request this was a detailed grid survey at 1:10000 with a minimum auger boring density of 1 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 survey the site was under permanent grass and cereals.

3 CLIMATE

3.1 The following interpolated data are relevant for the site (SJ 800 638) :

Average Annual Rainfall (mm)	768
Accumulated Temperature above 0°C January to June (day °C)	1374

3.2 There is no overall climatic limitation on the site

3.3 Other relevant data for classifying land include:

Field Capacity Days (days)	186
Moisture Deficit Wheat (mm)	88
Moisture Deficit Potatoes (mm)	75

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 limitations on the agricultural use of the land.

5 GEOLOGY AND SOILS

5.1 The solid geology of the area is comprised of Middle Keuper Marl - British Geological Survey Sheet 110, Macclesfield, 1 Inch. This is overlain by deposits of Quaternary undifferentiated fluvio-glacial deposits, and Boulder Clay.

5.2 The underlying geology influences the soils which have a sandy loam texture across the majority of the site, with heavier textures around the eastern and southern boundaries.

6 AGRICULTURAL LAND CLASSIFICATION

6.1 Grade 2 - occupies 27.5 ha (77.5%) of the survey area and is found in the centre of the site up to the western and northern site boundaries.

6.1.1 These soils typically have a sandy loam texture overlying sand to depth or loamy sand and sand to depth, with few or no stones within the profile. The moisture balance places these soils into Grade 2.

6.1.2 The main limitation to the agricultural use of this land is soil droughtiness.

6.2 Subgrade 3a - occupies 6.7 ha (18.9%) of the survey area and is found around the eastern and southern boundaries.

6.2.1 The soil generally has a clay loam texture over sandy clay loam to depth or sandy clay loam and clay to depth. Observations of gleying place these soils into Wetness Class II.

6.2.2 The main limitation to the agricultural use of this land is soil wetness.

6.3 Other land occupies 1.3 ha (3.6 %) of the site as woodland and open water.

6.4 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

Grade/Sub-grade	Area in Hectares	% of Survey Area	% of Agricultural Land
2	27.5	77.5	80.4
3a	6.7	18.9	19.6
Other land	1.3	3.6	
Totals	**35.5**	**100**	**100**