

**AGRICULTURAL LAND CLASSIFICATION
STONE ROAD, TITTENSOR**

**Resource Planning Team
ADAS Statutory Group
WOLVERHAMPTON**

**ADAS Ref: 25/RPT/0580
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AGRICULTURAL LAND CLASSIFICATION REPORT FOR STONE ROAD, TITTENSOR

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	18.0	48.0
3a	15.4	41.0
3b	0.7	1.9
4	3.4	9.1

- 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 topsoil stone content and/or slope gradient.
- 1.4 Land in Sub-grade 3b is limited by soil depth.
- 1.5 Land in Grade 4 is subject to annual flooding.

2. INTRODUCTION

- 2.1 The site was surveyed by the Resource Planning Team in January 1994. 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 37.5 ha site is situated north east of Tittensor, Stoke-on-Trent, to the east of Stone Road, and is bounded by the River Trent, Stone Road and an industrial depot. The site is wholly in agricultural use.
- 2.3 The survey was requested by MAFF in connection with a proposal by Tarmac for a business development.
- 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 sown to winter wheat.

3. CLIMATE

3.1 The following interpolated data are relevant for the site:

Average Annual Rainfall	780 mm
Accumulated Temperature above 0°C January to June	1359 day °C

3.2 There is no overall climatic limitation on the site

3.3 Other relevant data for classifying land include:

Field Capacity Days	192 days
Moisture Deficit Wheat	89 mm
Moisture Deficit Potatoes	75 mm

4. SITE

4.1 Three site factors of gradient, micro relief and flooding are considered when classifying land.

4.2 Gradient limits land in the south west of the site to Subgrade 3a.

4.3 Flood information obtained from the National Rivers Authority (NRA), Severn Trent Region, indicates that the River Trent floods annually during February and March for periods of 7 to 14 days. This affects land bordering the River Trent in the north and south of the site, which has been classified as Grade 4.

4.4 Micro-relief does not impose any limitation to the agricultural use of the land.

5. GEOLOGY AND SOILS

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5.1 The solid geology of the area is comprised red sandstone and marls - British Geological Survey Sheet 123, 1 Inch. Quaternary Drift deposits of Alluvium border the River Trent.

5.2 The underlying geology influences these soils which generally have a sandy loam texture across the majority of the site and a clay loam or silty clay loam texture in the areas of river alluvium.

6. AGRICULTURAL LAND CLASSIFICATION

6.1 Grade 2 - occupies 18.0 ha (48.0%) of the survey area and is found largely over the northern and central areas of the site.

6.1.1 These soils typically have a sandy loam topsoil texture overlying a sandy clay loam or a sandy loam subsoil over fluvial gravels to depth.

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

6.2 Subgrade 3a - occupies 15.4 ha (41.0%) of the survey area and is found largely over the southern half of the site, with an isolated area in the north east.

6.2.1 The soils have a sandy loam topsoil texture overlying sandy loam or clay loam subsoils and fluvial gravels to depth.

6.2.2 The topsoils in the eastern part are slightly stony (upto 15%). The main limitation to the agricultural use of the land is topsoil stone content.

6.2.3 Soils in the western part and also the isolated area in the north are limited by gradient to Subgrade 3a.

6.3 Subgrade 3b - occupies 0.7 ha (1.9%) of the survey area and is found in an isolated area in the northwest of the site close to a raised pipeline. The land is slightly uneven.

6.3.1 These soils have shallow medium sandy loam topsoils over impenetrable subsoils. The main limitation to the agricultural use of the land is soil depth.

6.4 Grade 4 - occupies 3.4 ha (9.1%) of the site and is found bordering the River Trent in the north and south of the site.

6.4.1 These soils either have a silt loam or silty clay loam topsoil texture, overlying a silty clay loam subsoil in the south, or a clay loam or sandy loam topsoil texture overlying a sandy subsoil to depth in the north.

6.4.2 The limitation to the agricultural use of this land is annual flooding.

6.5 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

Grade/Sub-grade	Area in Hectares	% of Survey Area
2	18.0	48.0
3a	15.4	41.0
3b	0.7	1.9
4	3.4	9.1
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Total	37.5	100.0
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