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AGRICULTURAL LAND CLASSIFICATION

Richmondshire Local Plan

MAFF
Leeds Regional Office

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MAP(S)

AGRICULTURAL LAND CLASSIFICATION REPORT - RICHMONDSHIRE LOCAL PLAN, SITES AT (A) GATHERLEY ROAD NORTH, (B) GATHERLEY ROAD SOUTH AND (C) CATTERICK BRIDGE, CATTERICK, NORTH YORKSHIRE

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:-	Around SE 229998.
Location Details:-	The Gatherley Road North and South sites lie north of Catterick Bridge immediately east of the A6136. The Catterick Bridge site adjoins the northern bank of the River Swale between the bridge and the A1.
Site Size:-	(a) Gatherley Road North:- 25.8 ha. (b) Gatherley Road South:- 9.5 ha. (c) Catterick Bridge:- 3.5 ha.

1.2 Survey Methods

Date Surveyed:-	June 1991.
Boring Density and Spacing Basis:-	Gatherley Road North and South 1 boring per hectare, Catterick Bridge 2 borings per hectare all at intervals predetermined by the National Grid.

Sampling Method:-	Hand auger borings to 100 cm.
Number of Borings:-	Gatherley Road North:- 25.
	Gatherley Road South:- 10.
	Catterick Bridge:- 6.

All land quality assessments were made using the methods described in "Agricultural Land Classification of England and Wales: Revised Guidelines and Criteria for grading the quality of agricultural land" (MAFF 1988).

1.3 **Land Use:-** Gatherley Road North - Arable and permanent pasture.
Gatherley Road South - Arable.
Catterick Bridge - Permanent pasture.

1.4 **Climate and Relief**

Average Annual Rainfall (AAR):-	717 mm
Accumulated Temperature above 0°C (January-June):-	1317 day °C
Field Capacity Days:-	181 days
Altitude average:-	65 m a.o.d.
maximum:-	70 m a.o.d.
minimum:-	60 m a.o.d.

Climatic limitation (based on interaction of rainfall and temperature values:-	Grade 2.
Relief:-	Gatherley Road North and South:- Flat to slightly undulating topography. Catterick Bridge:- Flat river terrace.
Slopes (°):-	Less than 7° at all sites.
Gradient Limitations:-	None.

1.5 Geology and Soil

Solid Strata:-	Carboniferous Limestone and Millstone Grit.
Depth of solid rock from surface:-	Greater than 1 metre.
Drift types:-	Glaciofluvial sand and gravel and river terrace deposits plus boulder clay on the northern part of the Gatherley Road North site.
Thickness of drift and distribution:-	Greater than 1 metre over the whole area.
Soil Types and Distribution:-	Freely drained light textured soils with a variable stone content on the gravel and terrace deposits. Imperfectly or poorly drained medium or medium over heavy textured soils on the boulder clay at Gatherley Road North.

Soil Textures (topsoils and subsoils):-	Terrace and gravel deposits:- Sandy loam topsoils over similar or lighter subsoils. Boulder clay:- Medium clay loam topsoils over similar or heavier subsoils.
Soil Series/Associations:-	
On 1/250000 map:-	Brickfield, Wick.
Identified on site:-	Gatherley Road North - Brickfield, Wick. Gatherley Road South - Wick. Catterick Bridge - Wick.
Soil Limitations and type:-	Droughtiness on light textured soils. Soil wetness on heavier soils.

1.6 Drainage

Soil type and Wetness Class:-	Terrace and sand and gravel soils:- Wetness Class I. Boulder Clay Soils:- Wetness Classes III and IV.
Drainage Limitations:-	Slowly permeable subsoils on the boulder clay soils.

2.0 Agricultural Land Classification Grades

(a) Gatherley Road North

The ALC grades occurring on this site are as follows:-

Grade/Subgrade	Hectares	Percentage of Total Area
2	2.95	11.5
3a	12.82	49.9
3b	9.97	38.8
Urban	0.02	0.1
Total	25.76	100

Grade 2

Distribution on site:-	Between Minto Grange and Deepdale.
Soil Type(s) and Texture(s):-	Medium sandy loam to medium clay loam topsoils over similar subsoils.
Depth to Slowly Permeable Layers:-	Greater than one metre.
Wetness and Drainage Class:-	Wetness Class I, well drained.
Stone Percentage and Type:-	5% of soft medium grained sandstone greater than 2 cm in the top 25 cm of soil.
Grade Limiting Factors:-	Climatic limitations.

Subgrade 3a

Distribution on site:-	The northern half of the site.
Soil Type(s) and Texture(s):-	Soils vary from medium clay loam topsoils over slowly permeable medium to heavy clay loam subsoils, to shallow medium sandy loam top and upper subsoils over stony material.
Depth to Slowly Permeable Layers:-	Clay loam soils are slowly permeable between 54 and 80 cm.
Wetness and Drainage Class:-	Wetness Class III, imperfectly drained on the heavier soils and Wetness Class I, well drained on the light soils.
Stone Percentage and Type:-	10 to 15% of soft, medium grained sandstones greater than 2 cm diameter within the top 25 cm of soil.
Grade Limiting Factors:-	Soil wetness on the clay loam soils and soil droughtiness on the shallow soils.

Subgrade 3b

Distribution on site:-	Along the contours between Minto Grange and Rosy Hill Farm.
Soil Type(s) and Texture(s):-	Medium sandy loam to clay loam topsoils over similar subsoils, with stony material at depth on the lighter soils.
Depth to Slowly Permeable Layers:-	On clay loam soils, depth to slowly permeable layer is less than 49 cm.
Wetness and Drainage Class:-	Clay loam soils, Wetness Class IV; sandy loam soils, Wetness Class I.
Stone Percentage and Type:-	Sandy loam soils contain 10-15% stones with a diameter greater than 2 cm.
Grade Limiting Factors:-	Soil wetness on clay loam soils and soil droughtiness on sandy loam.

Non Agricultural

Type and location of land included:-

Agricultural Buildings

Type and location of building included:-

Urban

Type of land use included:- Domestic dwellings at Minto Grange.

2.0 Agricultural Land Classification Grades

(b) Gatherley Road South

The ALC grades occurring on this site are as follows:-

Grade/Subgrade	Hectares	Percentage of Total Area
2	9.4	99.2
Urban	0.1	0.8
Total	9.5	100

Grade 2

Distribution on site:-	Grade 2 land covers the whole site.
Soil Type(s) and Texture(s):-	Well drained light sand and gravel soils consisting of medium sandy loam topsoils over similar subsoils.
Depth to Slowly Permeable Layers:	Greater than 100 cm.
Wetness and drainage Class:-	Wetness Class I, well drained.
Stone Percentage and Type:-	5-10% of hard stones greater than 2 cm diameter occur in the top 25 cm of soil.
Grade Limiting Factors:-	Climatic and soil droughtiness.

Non Agricultural

Urban

Type of land use included:- Dwelling House.

2.0 Agricultural Land Classification Grades

(c) Catterick Bridge

The ALC grades occurring on this site are as follows:-

Grade/Subgrade	Hectares	Percentage of Total Area
2	2.45	70.4
3a	0.90	25.9
3b		
4		
5		
Urban	0.13	3.7
Total	3.48	100

Grade 2

Distribution on site:-	The northern higher part of the site where there is no flood risk.
Soil Type(s) and Texture(s):-	Loamy medium sand to medium sandy loam topsoils over similar subsoils.
Depth to Slowly Permeable Layers:	Greater than one metre.
Wetness and drainage Class:-	Wetness Class I, well drained.
Stone Percentage and Type:-	5 to 10% of hard stones larger than 2 cm occur in the top 25 cm of soil.
Grade Limiting Factors:-	Climatic and soil droughtiness.

Subgrade 3a

Distribution on site:-	On the low lying ground adjoining the River Swale which is subject to flooding.
Soil Type(s) and Texture(s):-	Loamy medium sand to medium sandy loam topsoils over similar subsoils.
Depth to Slowly Permeable Layers:-	Greater than one metre.
Wetness and Drainage Class:-	Wetness Class I, well drained.
Stone Percentage and Type:-	10 to 15% of hard stones in the top 25 cm of the soil.
Grade Limiting Factors:-	Soil droughtiness and flood risk.

Non Agricultural

Urban

Type of land use included:- Disused Railway embankment.

AGRICULTURAL LAND CLASSIFICATION REPORT - RICHMONDSHIRE LOCAL PLAN, SITE AT SCOTCH CORNER

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:-	NZ 213049.
Location Details:-	Immediately south west of the A1/A66/A6108 junction at Scotch Corner.
Site Size:-	33 ha.

1.2 Survey Methods

Date Surveyed:-	June 1991.
Boring Density and Spacing Basis:-	1 boring per hectare at 100 m intervals predetermined by the National Grid.

Sampling Method:-	Hand auger borings to 1 metre.
Number of Borings:-	33

All land quality assessments were made using the methods described in "Agricultural Land Classification of England and Wales: Revised Guidelines and Criteria for grading the quality of agricultural land" (MAFF 1988).

1.3	**Land Use:-**	Arable, apart from non agricultural uses in the north east part of the site.

1.4 **Climate and Relief**

Average Annual Rainfall (AAR):-	777 mm
Accumulated Temperature above 0°C (January-June):-	1223 day °C
Field Capacity Days:-	195 days
Altitude average:-	145 m a.o.d.
maximum:-	152 m a.o.d.
minimum:-	137 m a.o.d.

Climatic limitation (based on interaction of rainfall and temperature values:-	Grade 2.
Relief:-	
Slopes (°):-	Less than 7°.
Gradient Limitations:-	None.

1.5 Geology and Soil

Solid Strata:-	Carboniferous Limestone.
Depth of solid rock from surface:-	Greater than 1 metre.
Drift types:-	Boulder clay.
Thickness of drift and distribution:-	Greater than 1 metre.
Soil Types and Distribution:-	Poorly drained boulder clay soils cover the whole site.
Soil Textures (topsoils and subsoils):-	Medium to heavy clay loam topsoils over similar subsoils.
Soil Series/Associations:-	
On 1/250,000 map:-	Brickfield.
Identified on site:-	Brickfield and Dunkeswick series.
Soil Limitations and type:-	Soil wetness and workability.

1.6 Drainage

Soil type and Wetness Class:-	Wetness Classes III and IV over the whole site.
Drainage Limitations:-	Slowly permeable subsoil horizons.

2.0 Agricultural Land Classification Grades

The ALC grades occurring on the site are as follows:-

Grade/Subgrade	Hectares	Percentage of Total Area
3a	1.49	4.6
3b	21.91	67.6
4	2.76	8.5
5		
Non Agricultural	5.89	
Urban	0.35	1.1
Total	32.40	100

Subgrade 3a

Distribution on site:-	A small area in the centre of the site.
Soil Type(s) and Texture(s):-	Boulder clay soils consisting of medium clay loam topsoils over similar upper subsoils with slowly permeable heavy clay loam lower subsoils.
Depth to Slowly Permeable Layers:-	Greater than 52 cm.
Wetness and Drainage Class:-	Wetness Class III, imperfectly drained.
Stone Percentage and Type:-	None.
Grade Limiting Factors:-	Soil wetness and workability.

Subgrade 3b

Distribution on site:-	Widespread across the site.
Soil Type(s) and Texture(s):-	Boulder clay soils consisting mainly of medium to heavy clay loam topsoils over heavy clay loam to clay subsoils.
Depth to Slowly Permeable Layers:-	Generally between 30 cm and 55 cm depth.
Wetness and Drainage Class:-	Wetness Class III, imperfectly drained or Wetness Class IV poorly drained.
Stone Percentage and Type:-	None.
Grade Limiting Factors:-	Soil wetness and workability.

Grade 4

Distribution on site:-	Located adjacent to Sedbury Plantation in southern part of site.
Soil Type(s) and Texture(s):-	Boulder clay soils consisting of heavy clay loam topsoils over similar or heavier slowly permeable subsoils.
Depth to Slowly Permeable Layers:-	Between 30 cm and 50 cm depth.
Wetness and Drainage Class:-	Poor drained, Wetness Class IV.
Stone Percentage and Type:-	None.
Grade Limiting Factors:-	Soil wetness and workability.

Non Agricultural

Type and location of land included:-	Hotel and camping grounds in the north east corner of the site.

Urban

Type of land use included:-	Hotel located on the A6108.

Resource Planning Group
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