

Agricultural Land Classification Report

Willoughby in the Wolds

Land Adjoining Widmerpool Lane,
Land South of the Sub Station
And
Land at Thorpe in the Glebe

Undertaken by Davis Meade

11 and 14/11/2021

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1.0 Summary

The Agricultural Land Classification of lands, Land Adjoining Widmerpool Lane, Land South of the Sub Station And Land at Thorpe in the Glebe

was assessed by Barry Meade C.A.A.V on 11th and Thursday 14th November 2021.

There are two sites consisting of 12 main enclosures.

The soil type ranges from heavy loam to medium clay

Gradient - level.

Soil depth 4-9 inches.

The land on inspection is:

Approximately 182.4 acres

2.0 Introduction

Davis Meade was instructed by Exagen Projects Ltd to carry out a land quality assessment of the land shown edged black.

3.0 Subject

To investigate the designated land grades at land near Willoughby in the Wolds, and Thorpe in the Glebe , Leicestershire

4.0 Purpose

To advise Exagen Projects Ltd of the land classification of the designated land in relation to the potential installation of solar panels.

5.0 The Designated Land

The land consists of 12 enclosures.

6.0 Methodology

Soil samples were taken and examined from trial digs and from topsoil. Investigations showed topsoil depth from xx inches.

A desktop study of existing soils and climatic information was undertaken, followed by fieldwork to study soil and site limitations.

The land was classified using the system outlined in the Ministry of Agriculture, Fisheries and Food (MAFF now DEFRA) publication Agricultural Land Classification of England and Wales-Revised guidelines and criteria for grading the quality of agricultural land (October 1988).

This requires that the <u>lowest factor</u> to decide the grade (taking into account soil depth, stoniness, rain fall, gradient and water logging) is the deciding factor. The deciding factor was soil structure and stoneyness in all enclosures. Some fields were prone to waterlogging for short periods but not long enough to change the grade, but supports it.

7.0 Results

Note 1. The National Grid numbers (SK 6325 etc.) are calculated by reference to the centre of each field. This report is not able to locate the exact centre of a parcel so the number may vary with other references. However any location in the parcel will be unique to that parcel.

2 The acreages are estimate only taken from a "Magic" plan measurement .

7.1 The land.

Field No

Land Adjoining Widmerpool Lane and Land South of the Sub Station Willoughby in the Wolds

NG number

Acreage

16.7

Heavy loam, but medium clay at North West end. Topsoil depth 8". Level.

Grade 3b. Reason for grade soil depth, Soil structure and Land Classification description

SK 6326 2607

9.2

Medium Clay Few stones. Top Soil 6" depth. Level

Grade 4 Reason for grade soil depth, and Land Classification description

SK 2326 4121

12.9

Medium Clay Few stones. Top Soil 6" depth. Level

Grade 4 Reason for grade soil depth, and Land Classification description

4 SK 6326 4707 4.3

Medium Clay Some large 12cm stones. Top Soil 6" depth. Level

Grade 4 Reason for grade soil depth,. Not enough stones to reduce the grade further and Land Classification description

5 SK 6326 7614 21.3

Meduim Clay, Few Stones. 8-9"topsoil depth. Level

Grade 3b. Reason for grade soil depth, Soil structure and Land Classification description

6 SK 6325 9975 15.9

Meduim Clay, Few Stones. 8-9"topsoil depth. Level

Grade 3b. Reason for grade soil depth, Soil structure and Land Classification description

7 SK 6225 7162 14.3

All old permeant pasture.

Roadside field-

Remanets of old trackway and ridge and furrow . Heavy loam 4-6 " . Rough .

Grade 5 . Reason for grade soil depth, and Land Classification description

Lower parcels

Heavy loam old pasture. Undulating. 6-8" topsoil

Grade 4 Reason for grade undulating pasture and Land Classification description

Thorpe in the Glebe

Field Number

NG Number

Acreage

8

SK 6125 1883

22.4

Heavy clay soil ,6" depth. 5% stones on surface. Level.

Grade 4 Reason for grade, stoneyness, soil depth and structure. Reference to Agricultural Land Classification (ALC) description

9

SK 6125 4868

17.8

Heavy clay soil ,6" depth. 5% stones on surface. Level.

Grade 4 Reason for grade, stoneyness, soil depth and structure. Reference to Agricultural Land Classification (ALC) description

10

SK 6125 7054

24.5

Heavy clay soil ,6" depth. 5% stones on surface .Level.

Grade 4 Reason for grade, stoneyness, soil depth and structure. Reference to Agricultural Land Classification (ALC) description

11

SK 6125 8870

15.1

Heavy clay soil ,6" depth. 5% stones on surface. Level.

Grade 4 Reason for grade, stoneyness, soil depth and structure. Reference to Agricultural Land Classification (ALC) description

12

SK6125 9380

8.0

Heavy clay soil ,6" depth. 5% stones on surface. Level.

Grade 4 Reason for grade, stoneyness, soil depth and structure. Reference to Agricultural Land Classification (ALC) description

7.1.1 Soil designation from Soil Surveys of England & Wales for these sites.

Both sites are shown as 711i Wickham 5 Soil Drift over Cretaceous clay and sandstone. Some coarse loamy soils ,with slowly permeable subsoils Dairying on short term grassland, some cereals.

7.1.2 Site limitations

Soil Structure and stoneyness, but also in one case soil depth

7.1.3 Conclusion

. The land is Grade 3b, 4 and 5. Mainly at Thorpe in the Glebe it is Grade 4 because of topsoil depth. The substation is partly Grade 5 as the land may well have been tipped many years ago.

Based on the above findings and as required by the MAFF Publication where the <u>lowest grade</u> is taken in each case.

8.0 Grades Applicable to the Survey.

The MAFF publication specifies:

Subgrade 3b - moderate quality agricultural land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Grade 4 - poor quality agricultural land

Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land

Grade 5 - very poor quality agricultural land

Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

Note- More than 50% of the land in England and Wales comes in the Grade 3 category and most of that is **grade 3b.**



Appendices

Appendix 1- Description of All grades and sub grades

Appendix 2- maps of land at

Land Adjoining Widmerpool Lane, Land South of the Sub Station And Land at Thorpe in the Glebe

Appendix 3- Location Plan

DESCRIPTION OF ALL THE GRADES AND SUBGRADES

Grade 1 - excellent quality agricultural land

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

Grade 2 - very good quality agricultural land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

Grade 3 - good to moderate quality agricultural land

Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

Subgrade 3a - good quality agricultural land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including

cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

Subgrade 3b - moderate quality agricultural land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Grade 4 - poor quality agricultural land

Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

Grade 5 - very poor quality agricultural land

Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.





