THURSTON NEIGHBOURHOOD PLAN

AGRICULTURAL LAND CLASSIFICATION AND SOILS

ANDREW ADAMS
JANUARY 2017

THURSTON NEIGHBOURHOOD PLAN

AGRICULTURAL LAND CLASSIFICATION AND SOILS

Contents

PURPOSE AND SCOPE OF THE REPORT 2
POLICY BACKGROUND 3
THE ALC SYSTEM 3
AGRICULTURAL LAND QUALITY IN THE CONTEXT OF SUFFOLK 4
CRITERIA AND GUIDELINES 4
ALC INFORMATION 5
SOIL INFORMATION 6
GREENFIELD AND BROWNFIELD 6
ASSESSMENT 6
CONCLUSIONS 7
EXPLANATION OF TERMS 1
CONSERVING AND ENHANCING THE NATURAL ENVIRONMENT 1
BROWNFIELD LAND, SOILS AND AGRICULTURAL LAND 2
CAN BROWNFIELD LAND HAVE A HIGH ECOLOGICAL VALUE? 2
SHOULD PLANNING TAKE ACCOUNT OF SOIL? 2
HOW CAN PLANNING TAKE ACCOUNT OF THE QUALITY OF AGRICULTURAL LAND? 3

Purpose and scope of the report

1. The purpose of this report is to provide information about Agricultural Land Classification and soils to inform site selection as part of the Thurston Neighbourhood Plan process.

2. The Thurston Neighbourhood Plan Team have requested land classification assessments for the following sites:

- Site 1 Ixworth Road
- Site 2 Fly Field - Bar Close
- Site 3 Heath Road
- Site 5 Meadow Lane
- Site 6 Norton Road - South of
- Site 13 South of Thurston - South of Beyton Road
- Site 19 West of Thurston - Barton Road

Policy Background

3. Government policy with regard to the protection and assessment of agricultural land and for soils protection are included at paragraphs 109 and 112 of the National Planning Policy Framework (NPPF) published in 2012.

4. The policy for Agricultural Land advises that decisions about land development should take into account the economic and other benefits of best and most versatile agricultural land. The policy makes clear that where significant development of agricultural land is demonstrated to be necessary, planning authorities should seek to use areas of poorer quality land in preference to that of higher quality.

5. Paragraph 109 advises that the planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes, geological conservation interests and soils.

6. The policy for soils and agricultural land is reaffirmed in the Natural Environment White Paper - The Natural Choice: securing the value of nature

The ALC system

7. The quality of agricultural land varies from place to place. The Agricultural Land Classification provides a standardised and robust method for assessing the quality of land to enable informed choices to be made about its future use within the planning system.

8. The ALC system classifies land into five grades with Grade 3 subdivided into Grade 3a and Grade 3b. The best and most versatile land for which policy

guidance seeks to give protection is defined as Grades 1, 2 and 3a. This is the land which is most flexible, productive and efficient in response to inputs and which can best deliver future crops for food and non-food uses such as biomass fibres and pharmaceuticals. Estimates are that grades 1 and 2 together form about 21% of all farmland in England and Subgrade 3a also covers about 21%.

Agricultural Land Quality in the Context of Suffolk

9. The following statistics give an illustration of the importance of agricultural land within Suffolk.

10. Best and most versatile agricultural land is a scarce non-renewable resource and this is especially the case within the Mid Suffolk area.

	Suffolk		Mid Suffolk	
Grade	**Hectares**	**%**	**Hectares**	**%**
Grade 1	4,568	1.2	0	0.0
Grade 2	95,686	25.1	15,947	18.3
Grade 3	195,314	51.3	67,931	78.0
Grade 4	47,143	12.4	2,404	2.8
Grade 5	1,164	0.3	0	0.0
Non-Agricultural	25,900	6.8	510	0.6
Urban	4,568	1.2	316	0.4

Table 1 – Agricultural Land Grading

Criteria and guidelines

11. The Agricultural Land Classification is based on physical limitations of land for production in the long term. Factors affecting the grade are climate, site and soil characteristics and the important interactions between them. Detailed guidance for the classification is set out in a comprehensive manual.

12. The Classification is concerned with the inherent potential of land under a range of farming systems. The current agricultural use or intensity of use does not affect the ALC grade. This point is very important, especially if superficial or general assumptions are being made about land quality. The purpose for which an area of land is being used often reflects landowners/farmers land use choice based on a range of factors.

ALC information

13. Following the introduction of the ALC system in 1966 the whole of England and Wales was mapped from general reconnaissance field surveys, to provide general strategic advice on land quality for planners. These Provisional Series of maps were published on an Ordnance Survey base at a scale of One Inch to One Mile in the period 1967 to 1974. The scale and detail of the maps are not sufficiently detailed for use in the assessment of individual fields or potential development sites and should not be used other than for general guidance. The maps have not been updated and have been replaced with a 1:250000 scale map series which is based on the same information. These maps should only be used for strategic assessment only and not for individual site assessment.

14. Assessment of agricultural land quality at a field or site scale can only be made by carrying out a site survey based on the Detailed Guidance for the Grading of Agricultural Land. This involves detailed soil and land assessment including the digging of soil pits and auger sampling.

15. In view of the importance of land quality assessment for development decisions, it is possible to assess the likely occurrence of best and most versatile land at a strategic level. This gives a probability of occurrence for an area and, therefore, better informs plan making decisions.

16. As it is not possible to carry out detailed assessments at a field scale of the sites put forward for inclusion within the Neighbourhood Plan, a best assessment based on available information has been provided. This gives an occurrence scale based on probability as follows:

- Areas where more than 60% of land is likely to be 'best and most versatile' (High likelihood of 'best and most versatile land')
- Areas where 20 - 60% of land is likely to be 'best and most versatile' (Moderate likelihood of 'best and most versatile land')
- Areas where less than 20% of land is likely to be 'best and most versatile' (Low likelihood of 'best and most versatile land')

17. The accuracy of such assessment is related to the robustness of the information on which it is based. For the Thurston area, because of the lack of detailed site assessment information available from detailed surveys, the assessments have to be a best estimate. The only detailed survey information in the locality is for a site to the west of Elmswell village where land shown on the 1:250,000 map as being grade 2 was, following detailed survey, assessed as being grade 2, 3a and 3b.

Soil information

18. The importance of soils is recognised within the planning system and specifically referenced within the NPPF. The importance is considered more from recognition of the value of soils as a natural resource contributing to sustainable development rather than a particular site assessment issue. The importance is to recognise that soils perform a range of functions and, therefore, should be used and managed sustainably as part of land use decisions.

19. A Code of Practice for the Sustainable Use of Soils for Construction Sites gives guidance on the identification, planning and use of soils in construction projects.

20. Soils types and descriptions are included in the site assessments carried out and it would be recommended that reference is made to the Code of Practice within the Neighbourhood Plan as a source of good practice which should be adopted for any developments that might be carried out.

21. Within the site assessments below, reference to Soil Associations is made. Soil Associations are identified using information from the Soil Survey of England and Wales publications *Soils and their Use in Eastern England*. Soil Associations represent a number of soil types defined using a combination of geology, soil texture and the presence of distinctive features.

Greenfield and Brownfield

22. As part of the present assessment process some sites are clearly correctly identified as Greenfield and scored appropriately. However, others, although clearly Greenfield land, are not referenced or this land use scored. It would be emphasised that current land use does not reflect the quality of land. Current land use is a decision of the landowner/farmer and does not reflect potential or value.

Assessment

23. Based on the generalised 1:250000 maps, the best and most versatile land is likely to occur to the north of the village. Used as a strategic planning tool this general assessment should guide or weight development choices away from the northern side of the village and towards the east, south and west where land quality is shown as predominately grade 3 or less.

24. Table 2 gives a more detailed assessment of the site options for which the Neighbourhood Plan team have sought advice. This assessment is based on probability and gives an indication of the occurrence of the best and most

versatile land. Using this assessment appropriate weight can be applied to this aspect as part of the assessment process.

Conclusions

25. The assessment carried out has identified that sites to the North of the village have a greater probability of containing a high proportion of best and most versatile agricultural land than sites in other locations.

26. Individual site classifications can only be determined following detailed field work which might be prepared as part of a detailed planning application or as part of a wider detailed assessment.

Andrew Adams
January 2017

Site	Agricultural Land Quality of Area from 1:250000 map	Strategic assessment (see key below)	Main Soil Association from 1:250000 soil map	Comment
1 – Ixworth Road	2	High	Swaffham Prior	
2 – Fly Field	3	High/Moderate	Worlington and Swaffham Prior	High probability due to proximity to grade 2
3 – Heath Road	3	Moderate	Worlington	
5 – Meadow Lane	2 and 3	High/Moderate	Worlington	High probability due to proximity to grade 2
6 – Norton Road	3	Moderate	Worlington	
13 – South of Thurston	3 and 4	Low	Worlington	
19 – West of Thurston	3	Moderate/High	Swaffham Prior/Worlington/Melford	

Table 2 – Site Assessment

Key to Strategic Assessment

- Areas where more than 60% of land is likely to be 'best and most versatile' (**High likelihood of 'best and most versatile land')**
- Areas where 20 - 60% of land is likely to be 'best and most versatile' (**Moderate likelihood of 'best and most versatile land')**
- Areas where less than 20% of land is likely to be 'best and most versatile' (**Low likelihood of 'best and most versatile land')**

Key to Soil Associations

Swaffham Prior – Well drained calcareous coarse and fine loamy soils over chalk
Worlington – Deep well drained sandy and coarse loamy soils with local variations
Melford – Deep well drained fine loamy over clayey

Appendix 1

Explanation of terms

Extract from National Planning Policy Framework

11. Conserving and enhancing the natural environment

Paragraphs 109 to 125

109. The planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, geological conservation interests and soils
- recognising the wider benefits of ecosystem services
- minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures
- preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate

110. In preparing plans to meet development needs, the aim should be to minimise pollution and other adverse effects on the local and natural environment. Plans should allocate land with the least environmental or amenity value, where consistent with other policies in this Framework.

111. Planning policies and decisions should encourage the effective use of land by re-using land that has been previously developed (brownfield land), provided that it is not of high environmental value. Local planning authorities may continue to consider the case for setting a locally appropriate target for the use of brownfield land.

112. Local planning authorities should take into account the economic and other benefits of the best and most versatile agricultural land. Where significant development

of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality.

Extract from National Planning Guidance

Brownfield land, soils and agricultural land

Can brownfield land have a high ecological value?

It can do. A core principle in the National Planning Policy Framework is to encourage the effective use of land by reusing land that has been previously developed (brownfield land), provided that it is not of high environmental value. This means that planning needs to take account of issues such as the biodiversity value which may be present on a brownfield site before decisions are taken.

Defra has published information on Open Mosaic Habitats, a specific type of habitat that is of high ecological value and which occurs on brownfield land. Where insufficient information is available, survey work may be appropriate to assess ecological value before decisions on development are taken.
In addition, planning may need to take account of contamination.

Paragraph: 024 Reference ID: 8-024-20140306

Revision date: 06 03 2014

Should planning take account of soil?

The National Planning Policy Framework states that the planning system should protect and enhance valued soils and prevent the adverse effects of unacceptable levels of pollution. This is because soil is an essential finite resource that provides important 'ecosystem services', for example as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution.
As part of the government's 'Safeguarding our Soils' strategy, Defra has published a code of practice on the sustainable use of soils on construction sites, which may be helpful in development design and setting planning conditions.

Paragraph: 025 Reference ID: 8-025-20140306

Revision date: 06 03 2014

How can planning take account of the quality of agricultural land?

The National Planning Policy Framework expects local planning authorities to take into account the economic and other benefits of the best and most versatile agricultural land. This is particularly important in plan making when decisions are made on which land should be allocated for development. Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality. The Agricultural Land Classification provides a method for assessing the quality of farmland to enable informed choices to be made about its future use within the planning system. Natural England provides further information on Agricultural Land Classification. The Agricultural Land Classification system classifies land into five grades, with Grade 3 subdivided into Sub-grades 3a and 3b. The best and most versatile land is defined as Grades 1, 2 and 3a and is the land which is most flexible, productive and efficient in response to inputs and which can best deliver food and non-food crops for future generations. Natural England has a statutory role in advising local planning authorities about land quality issues.