

**LAND SOUTH OF
WARTON RECREATION GROUND,
ORTON ROAD, WARTON**

**AGRICULTURAL EVIDENCE
ON BEHALF OF
THE APPELLANT
BY**

TONY KERNON BSc(Hons) MRICS FBIAC

VOLUME 2: APPENDICES

LPA Reference: PAP/2025/0155

PINS Reference: APP/R3705/W/25/3371526

November 2025





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Consultants - **Ellie Clark** BSc(Hons) MBIAC **Dan Miller** BSc(Hons)*

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CURRICULUM VITAE

ANTHONY PAUL KERNON

SPECIALISMS

- Assessing the impacts of development proposals on agricultural land and rural businesses
- Agricultural building and dwelling assessments
- Equestrian building and dwelling assessments (racing, sports, rehabilitation, recreational enterprises)
- Farm and estate diversification and development
- Inputs to Environmental Impact Assessment
- Expert witness work



SYNOPSIS

Tony is a rural surveyor with 35 years experience in assessing agricultural land issues, farm and equestrian businesses and farm diversification proposals, and the effects of development proposals on them. Brought up in rural Lincolnshire and now living on a small holding in Wiltshire, he has worked widely across the UK and beyond. He is recognised as a leading expert nationally in this subject area. Married with two children. Horse owner.

Tony's specialism is particularly in the following key areas:

- assessing the need for agricultural and equestrian development, acting widely across the UK for applicants and local planning authorities alike;
- farm development and diversification planning work, including building reuse and leisure development, Class Q, camping etc;
- assessing development impacts, including agricultural land quality and the policy implications of losses of farmland due to residential, commercial, solar or transport development, and inputs to Environmental Assessment;
- and providing expert evidence on these matters to Planning Inquiries and Hearings, court or arbitrations.

QUALIFICATIONS

Bachelor of Science Honours degree in Rural Land Management, University of Reading (BSc(Hons)). 1987. Awarded 2:1.

Diploma of Membership of the Royal Agricultural College (MRAC).

Professional Member of the Royal Institution of Chartered Surveyors (MRICS) (No. 81582). (1989).

OTHER PROFESSIONAL ACTIVITIES

Co-opted member of the Rural Practice Divisional Council of the Royal Institution of Chartered Surveyors. (1994 - 2000)

Member of the RICS Planning Practice Skills Panel (1992-1994)

Member of the RICS Environmental Law and Appraisals Practice Panel (1994 - 1997).

Fellow of the British Institute of Agricultural Consultants (FBIAC) (1998 onwards, Fellow since 2004).

Secretary of the Rural Planning Division of the British Institute of Agricultural Consultants (BIAC) (1999 – 2017).

Vice-Chairman of the British Institute of Agricultural Consultants (2019 – 2020)

Chairman of the British Institute of Agricultural Consultants (2020 – 2022)

*Greenacres Barn, Stoke Common Lane,
Purton Stoke, Swindon SN5 4LL
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Website: www.kernon.co.uk*



EXPERIENCE AND APPOINTMENTS

- 1997 -----> **Kernon Countryside Consultants.** Principal for the last 27 years of agricultural and rural planning consultancy specialising in research and development related work. Specialisms include essential dwelling and building assessments, assessing the effects of development on land and land-based businesses, assessing the effects of road and infrastructure proposals on land and land-based businesses, and related expert opinion work. Tony specialises in development impact assessments, evaluating the effects of development (residential, solar, road etc) on agricultural land, agricultural land quality, farm and other rural businesses.
- 1987 - 1996 **Countryside Planning and Management,** Cirencester. In nearly ten years with CPM Tony was involved in land use change and environmental assessment studies across the UK and in Europe. From 1995 a partner in the business.
- 1983 - 1984 **Dickinson Davy and Markham,** Brigg. Assistant to the Senior Partner covering valuation and marketing work, compulsory purchase and compensation, and livestock market duties at Brigg and Louth.

RECENT RELEVANT EXPERIENCE

TRAINING COURSES

Landspreading of Non Farm Wastes. Fieldfare training course, 24 – 25 November 2009
Foaling Course. Twemlows Hall Stud Farm, 28 February 2010
Working with Soil: Agricultural Land Classification. 1 – 2 November 2017

TRANSPORT ENVIRONMENTAL ASSESSMENT CONTRIBUTIONS

Tony has provided EIA input, and Public Inquiry evidence as required, on around 40 major road projects across England and Wales.

NSIP/DCO SOLAR INPUTS

Heckington Fen Solar Park
Mallard Pass Solar Project
Penpergwm
Parc Solar Traffwll
Alaw Môn Solar Farm
Parc Solar Caenewydd
Tween Bridge Solar Farm
Gate Burton Energy Park
Great North Road Solar
Helios Renewable Energy Project
Dean Moor Solar Farm
Oaklands Farm Solar Park

Maen Hir Solar and Energy Project
The Droves Solar Farm
Bodelwyddan
East Pye Solar
Alleston Solar Farm
Steeple Renewables Project
Green Hil Solar Farm

EXPERT EVIDENCE GIVEN AT PUBLIC INQUIRIES AND HEARINGS

- | | | |
|------|---|--|
| 1992 | Brooklands Farm: Buildings reuse | Bonehill Mill Farm: New farm building |
| | Chase Farm, Maldon: Removal of condition | |
| 1993 | Haden House: Removal of condition | Manor Farm: New farm dwelling |
| 1994 | Brooklands Farm: 2 nd Inquiry (housing) | Cameron Farm: Mobile home |
| | Barr Pound Farm: Enforcement appeal | Land at Harrietsham: Enforcement appeal |
| | Fortunes Farm Golf Course: Agric effects | |
| 1995 | Village Farm: New farm dwelling | Attlefield Farm: Size of farm dwelling |
| | Claverdon Lodge: Building reuse | Bromsgrove Local Plan: Housing allocation |

	Harelands Farm: Barn conversion	Lichfield Local Plan: Against MAFF objection
	Castle Nurseries: Alternative site presentation	Hyde Colt: Mobile home / glasshouses
1996	Church View Farm: Enforcement appeal	Highmoor Farm: New farm dwelling
	Flecknoe Farm: Second farm dwelling	Gwenfa Fields: Removal of restriction
1997	Basing Home Farm: Grain storage issue	Yatton: Horse grazing on small farm
	Viscar Farm: Need for farm building / viability	Newbury Local Plan: Effects of development
	Lane End Mushroom Farm: Need for dwelling	
1998	Moorfields Farm: New farm dwelling	Two Burrows Nursery: Building retention
	Maidstone Borough LPI: Effects of dev'tment	Dunball Drove: Need for cattle incinerator
	Glenfield Cottage Poultry Farm: Bldg reuse	
1999	Holland Park Farm: Farm dwelling / calf unit	Lambriggan Deer Farm: Farm dwelling
	Northington Farm: Existing farm dwelling	
2000	Twin Oaks Poultry Unit: Traffic levels	Coldharbour Farm: Buildings reuse
	Meadows Poultry Farm: Farm dwelling	Heathay Farm: Mobile home
	Hazelwood Farm: Beef unit and farm dwelling	Wheal-an-Wens: Second dwelling
	Shardeloes Farm: Farm buildings	Apsley Farm: Buildings reuse
	Aylesbury Vale Local Plan: Site issues	Home Farm: Size of grainstore
	Deptford Farm: Buildings reuse	A34/M4 Interchange: Agricultural evidence
2001	Lambriggan Deer Farm: Farm dwelling	Weyhill Nursery: Second dwelling
	Blueys Farm: Mobile home	Mannings Farm: Farm dwelling
2002	A419 Calcutt Access: Effect on farms	Land Adj White Swan: Access alteration
	Cobweb Farm: Buildings reuse / diversification	Happy Bank Farm: Lack of need for building
	Philips Farm: Farm dwelling	Lower Park Farm: Building reuse / traffic
	West Wilts Local Plan Inquiry: Dev site	Stourton Hill Farm: Diversification
	Manor Farm: Building reuse	
2003	Fairtrough Farm: Equine dev and hay barn	Darren Farm: Impact of housing on farm
	Hollies Farm: Manager's dwelling	Greenways Farm: Farm diversification
	Land at Springhill: Certificate of lawfulness	Land at Four Marks: Dev site implications
	Oak Tree Farm: Mobile home	
2004	Chytane Farm: Objector to farm dwelling	Oldberrow Lane Farm: Relocation of buildings
	Crown East: Visitor facility and manager's flat	Forestry Building, Wythall: Forestry issues
	Swallow Cottage: Widening of holiday use	Lower Dadkin Farm: Mobile home
	Etchden Court Farm: New enterprise viability	Villa Vista: Viability of horticultural unit
	Attleborough Bypass: On behalf of Highways Agency	
2005	Howells School: Use of land for horses	Newton Lane: Enforcement appeal
	Otter Hollow: Mobile home	Manor Farm: Change of use class
	Springfield Barn: Barn conversion	South Hatch Stables: RTE refurbishment
	Ashley Wood Farm: Swimming pool	Trevaskis Fruit Farm: Farm dwelling
	The Hatchery: Mobile home	Tregased: Enforcement appeal
	Stockfields Farm: Building reuse	
2006	Manor Farm: Replacement farmhouse	Bhaktivedanta Manor: Farm buildings
	Sough Lane: Farm dwelling	Military Vehicles: Loss of BMV land
	Whitewebbs Farm: Enforcement appeal	Ermine Street Stables: Enforcement appeal
	Land at Condicote: Farm dwelling	Featherstone Farm: Replacement buildings
	Rye Park Farm: Enforcement appeal	Flambards: Mobile home and poultry unit
	Woodrow Farm: Buildings reuse	Manor Farm: Effect of housing on farm
	Rectory Farm: Retention of unlawful bldg	Goblin Farm: Arbitration re notice to quit
	Walltree Farm: Retention of structures	Terrys Wood Farm: Farm dwelling
	Weeford Island: Land quality issues	Etchden Court Farm: Mobile home
	College Farm: Relocation of farmyard	Hollowshot Lane: Farm dwelling and buildings
2007	Woolly Park Farm: Manager's dwelling	Barcroft Hall: Removal of condition
	Park Gate Nursery: Second dwelling	Kent Access Road: Effect on farms
	Penyrheol Ias: Retention of bund	Greys Green Farm: Enforcement appeal
	Hucksholt Farm: New beef unit in AONB	A40 Robeston Wathen bypass: Underpass
	The Green, Shrewley: Mobile home	Woodland Wild Boar: Mobile homes
	Brook Farm: Retention of polytunnels	

2008	Weights Farm: Second dwelling	Whitegables: Stud manager's dwelling
	Hill Farm: Mobile home	Balaton Place: Loss of paddock land
	Relocaton of Thame Market: Urgency issues	Point to Point Farm: Buildings / farm dwelling
	Spinney Bank Farm: Dwelling / viability issues	Norman Court Stud: Size of dwelling
	Higham Manor: Staff accommodation	High Moor: Temporary dwelling
2009	Robeston Watham bypass: Procedures Hearing	Land at St Euny: Bldg in World Heritage Area
	Monks Hall: Covered sand school	Baydon Meadow: Wind turbine
	Porthmadog bypass: Road scheme inquiry	Meadow Farm: Building conversion
	Claverton Down Stables: New stables	Bishop's Castle Biomass Power Station: Planning issues
	Hailsham Market: Closure issues	Foxhills Fishery: Manager's dwelling
2010	Gambledown Farm: Staff dwelling	Bryn Gollen Newydd: Nuisance court case
	Oak Tree Farm: Farm dwelling	Swithland Barn: Enforcement appeal
	A470 Builth Wells: Off line road scheme	Woodrow Farm: Retention of building
	Hill Top Farm: Second dwelling	Stubwood Tankers: Enforcement appeal
	Sterts Farm: Suitability / availability of dwelling	Meridian Farm: Retention of building
2011	Poultry Farm, Christmas Common: Harm to AONB	Swithland Barn: Retention of building
	Wellsprings: Rention of mobile home	A477 Red Roses to St Clears: Public Inquiry
	Redhouse Farm: Manager's dwelling	Upper Bearfield Farm: Additional dwelling
	Lobbington Fields Farm: Financial test	North Bishops Cleeve: Land quality issues
	Fairtrough Farm: Enforcement appeal	Langborrow Farm: Staff dwellings
2012	Etchden Court Farm: Farm dwelling	Heads of the Valley S3: Improvements
	Trottiscliffe Nursery: Mobile home	Seafeld Pedigrees: Second dwelling
	Tickbridge Farm: Farm dwelling	Beedon Common: Permanent dwelling
	Blaenanthir Farm: Stables and sandschool	Upper Youngs Farm: Stables / log cabin
	Land at Stonehill: Eq dentistry / mobile home	Tithe Barn Farm: Enforcement appeal
2013	Cwmcoedlan Stud: Farm dwelling with B&B	Lower Fox Farm: Mobile home / building
	Barnwood Farm: Farm dwelling	Tewinbury Farm: Storage barn
	Spring Farm Barn: Building conversion	Church Farm: Solar park construction
	Baydon Road: Agricultural worker's dwelling	Land at Elsfield: Retention of hardstanding
	Stapleford Farm: Building reuse	Queensbury Lodge: Potential development
2014	Meddler Stud: Residential development	Kellygreen Farm: Solar park development
	Deer Barn Farm: Agricultural worker's dwelling	Spring Farm Barn: Building conversion
	Land at Stow on the Wold: Housing site	Land at Willaston: Residential development
	Allspheres Farm: Cottage restoration	Bluebell Cottage: Enforcement appeal
	Land at Stonehill: Equine dentistry practice	Clemmit Farm: Mobile home
2015	Spring Farm Yard: Permanent dwelling	Honeycrock Farm: Farmhouse retention
	Land at Valley Farm: Solar park	The Mulberry Bush: Farm dwelling
	Land at Haslington: Residential development	Redland Farm: Residential dev issues
	Manor Farm: Solar farm on Grade 2 land	Emlagh Wind Farm: Effect on equines
	Penland Farm: Residential development	Fox Farm: Building conversion to 2 dwellings
2016	Sandyways Nursery: Retention of 23 caravans	Wadborough Park Farm: Farm buildings
	The Lawns: Agricultural building / hardstanding	Delamere Stables: Restricted use
	Harefield Stud: Stud farm / ag worker's dwelling	Meddler Stud: RTE and up to 63 dwellings
	Newtown Bypass: Compulsory purchase orders	Land off Craythorne Road: Housing dev
	Barn Farm: Solar farm	Berkshire Polo Club: Stables / accomm
2017	Hollybank Farm: Temporary dwelling renewal	Harcourt Stud: Temporary dwelling
	Five Oaks Farm: Change of use of land and temporary dwelling	Clemmit Farm: Second redetermination
	Clemmit Farm: Redetermination	Stonehouse Waters: Change of use of lake
	The Lawns: Replacement building	
	Land at the Lawns: Cattle building	
2017	Low Barn Farm: Temporary dwelling	
	High Meadow Farm: Building conversion	
2017	Windmill Barn: Class Q conversion	

2018	Land at Felsted: Residential development	Watlington Road: Outline app residential
	Thorney Lee Stables: Temporary dwelling	A465 Heads of the Valley 5/6: Agric effects
	Benson Lane: Outline app residential	The Old Quarry: Permanent dwelling
	Park Road, Didcot: Outline app residential	Chilaway Farm: Removal of condition
2019	Coalpit Heath: Residential development	Leahurst Nursery: Temporary dwelling
	Mutton Hall Farm: Agric worker's dwelling	Icomb Cow Pastures: Temp mobile home
	Clemmit Farm: Third redetermination	Forest Faconry: Construction of hack pens
	Ten Acre Farm: Enforcement appeal	
2020	Harrold: 94 Residential dwellings	Hazeldens Nursery: Up to 84 extra care units
	Stan Hill: Temp dwelling/agric. buildings	Leahurst Nursery: Agricultural storage bldg
2021	Allspheres Farm: Enlargement of farm dwelling	Sketchley Lane, Burbage: Industrial and residential development
	Ruins: Dwelling for tree nursery	Park Solar Traffwl: Solar Hearing
2022	Thornbury: Local BMV	
2023	Penpergwym: Solar Farm Hearing	Scruton Solar Farm: Effects on BMV and food
	Mudds Bank: Equestrian workers dwelling	Land at East Burnham: Equestrian facilities
	Mallard Pass NSIP: Issue specific hearing	Fladbury: Housing on BMV land
	Bramford Solar: Loss of BMV / food	Pound Road, Axminster: BESS and BMV
	Gate Burton NSIP: BMV and Food	Wymondley Solar: Use of BMV
	Heckington Fen NSIP: Issue Hearing	Little Acorn Farm, St Keyne: Worker's dwelling
	Cutlers Green Solar: Use of BMV	
	Twigworth, Glos: Use of BMV land	Longhedge Solar: BMV and food security
	Sheepwash Solar, Kent: Use of BMV land	Oaklands Solar NSIP: Topic Hearing
	Wasdyke Solar, Grantham: Use of BMV	Old Malton Solar: Impacts on local agriculture
2024	Copper Bottom Solar, Camborne: Use of BMV	Knapthorne Solar: BMV
	East End Solar, Harlow: Use of BMV	Helios Renewables NSIP: Topic Hearing
	Sittingbourne, Kent: Housing on BMV	
	Murrells End Solar, Gloucester: BMV	Alaw Môn Solar Farm: BMV policy Wales
	Woolpots Solar: BMV	Fillongley Solar: BMV
	Chimmens Solar Farm: BMV	Glebe Solar: BMV
	Saxham Industrial: BMV and Industry	
	New Hall Farm Solar: BMV	
2025		

APPENDIX KCC2
Natural England's Technical
Information Note TIN049

Agricultural Land Classification: protecting the best and most versatile agricultural land

Most of our land area is in agricultural use. How this important natural resource is used is vital to sustainable development. This includes taking the right decisions about protecting it from inappropriate development.

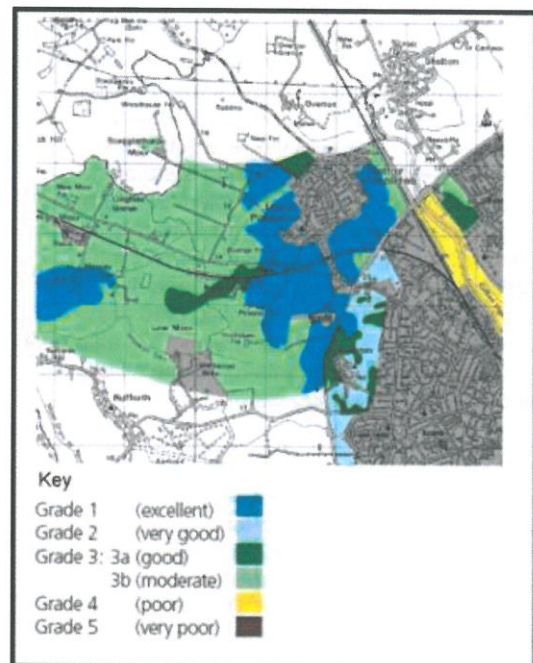
Policy to protect agricultural land

Government policy for England is set out in the National Planning Policy Framework (NPPF) published in March 2012 (paragraph 112). Decisions rest with the relevant planning authorities who 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 higher quality. The Government has also re-affirmed the importance of protecting our soils and the services they provide in the Natural Environment White Paper *The Natural Choice: securing the value of nature* (June 2011), including the protection of best and most versatile agricultural land (paragraph 2.35).

The ALC system: purpose & uses

Land quality varies from place to place. The Agricultural Land Classification (ALC) provides a method for assessing the quality of farmland to enable informed choices to be made about its future use within the planning system. It helps

underpin the principles of sustainable development.



Agricultural Land Classification - map and key

Second edition 19 December 2012

www.naturalengland.org.uk



Agricultural Land Classification: protecting the best and most versatile agricultural land

The ALC system classifies land into five grades, with Grade 3 subdivided into Subgrades 3a and 3b. The best and most versatile land is defined as Grades 1, 2 and 3a by policy guidance (see Annex 2 of NPPF). 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. Current estimates are that Grades 1 and 2 together form about 21% of all farmland in England; Subgrade 3a also covers about 21%.

The ALC system is used by Natural England and others to give advice to planning authorities, developers and the public if development is proposed on agricultural land or other greenfield sites that could potentially grow crops. The Town and Country Planning (Development Management Procedure) (England) Order 2010 (as amended) refers to the best and most versatile land policy in requiring statutory consultations with Natural England. Natural England is also responsible for Minerals and Waste Consultations where reclamation to agriculture is proposed under Schedule 5 of the Town and Country Planning Act 1990 (as amended). The ALC grading system is also used by commercial consultants to advise clients on land uses and planning issues.

Criteria and guidelines

The Classification is based on the long term physical limitations of land for agricultural use. Factors affecting the grade are climate, site and soil characteristics, and the important interactions between them. Detailed guidance for classifying land can be found in: *Agricultural Land Classification of England and Wales: revised guidelines and criteria for grading the quality of agricultural land* (MAFF, 1988):

- **Climate:** temperature and rainfall, aspect, exposure and frost risk.
- **Site:** gradient, micro-relief and flood risk.
- **Soil:** texture, structure, depth and stoniness, chemical properties which cannot be corrected.

The combination of climate and soil factors determines soil wetness and droughtiness.

Wetness and droughtiness influence the choice of crops grown and the level and consistency of yields, as well as use of land for grazing livestock. 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.

Versatility and yield

The physical limitations of land have four main effects on the way land is farmed. These are:

- the range of crops which can be grown;
- the level of yield;
- the consistency of yield; and
- the cost of obtaining the crop.

The ALC gives a high grading to land which allows more flexibility in the range of crops that can be grown (its 'versatility') and which requires lower inputs, but also takes into account ability to produce consistently high yields of a narrower range of crops.

Availability of ALC information

After the introduction of the ALC system in 1966 the whole of England and Wales was mapped from reconnaissance field surveys, to provide general strategic guidance on land quality for planners. This Provisional Series of maps was published on an Ordnance Survey base at a scale of One Inch to One Mile in the period 1967 to 1974. These maps are not sufficiently accurate for use in assessment of individual fields or development sites, and should not be used other than as general guidance. They show only five grades: their preparation preceded the subdivision of Grade 3 and the refinement of criteria, which occurred after 1976. They have not been updated and are out of print. A 1:250 000 scale map series based on the same information is available. These are more appropriate for the strategic use originally intended and can be downloaded from the Natural England [website](http://magic.defra.gov.uk/). This data is also available on 'Magic', an interactive, geographical information website <http://magic.defra.gov.uk/>.

Since 1976, selected areas have been re-surveyed in greater detail and to revised

Agricultural Land Classification: protecting the best and most versatile agricultural land

guidelines and criteria. Information based on detailed ALC field surveys in accordance with current guidelines (MAFF, 1988) is the most definitive source. Data from the former Ministry of Agriculture, Fisheries and Food (MAFF) archive of more detailed ALC survey information (from 1988) is also available on <http://magic.defra.gov.uk/>. Revisions to the ALC guidelines and criteria have been limited and kept to the original principles, but some assessments made prior to the most recent revision in 1988 need to be checked against current criteria. More recently, strategic scale maps showing the likely occurrence of best and most versatile land have been prepared. Mapped information of all types is available from Natural England (see *Further information* below).

New field survey

Digital mapping and geographical information systems have been introduced to facilitate the provision of up-to-date information. ALC surveys are undertaken, according to the published Guidelines, by field surveyors using handheld augers to examine soils to a depth of 1.2 metres, at a frequency of one boring per hectare for a detailed assessment. This is usually supplemented by digging occasional small pits (usually by hand) to inspect the soil profile. Information obtained by these methods is combined with climatic and other data to produce an ALC map and report. ALC maps are normally produced on an Ordnance Survey base at varying scales from 1:10,000 for detailed work to 1:50 000 for reconnaissance survey

There is no comprehensive programme to survey all areas in detail. Private consultants may survey land where it is under consideration for development, especially around the edge of towns, to allow comparisons between areas and to inform environmental assessments. ALC field surveys are usually time consuming and should be initiated well in advance of planning decisions. Planning authorities should ensure that sufficient detailed site specific ALC survey data is available to inform decision making.

Consultations

Natural England is consulted by planning authorities on the preparation of all development

plans as part of its remit for the natural environment. For planning applications, specific consultations with Natural England are required under the Development Management Procedure Order in relation to best and most versatile agricultural land. These are for non agricultural development proposals that are not consistent with an adopted local plan and involve the loss of twenty hectares or more of the best and most versatile land. The land protection policy is relevant to all planning applications, including those on smaller areas, but it is for the planning authority to decide how significant the agricultural land issues are, and the need for field information. The planning authority may contact Natural England if it needs technical information or advice.

Consultations with Natural England are required on all applications for mineral working or waste disposal if the proposed afteruse is for agriculture or where the loss of best and most versatile agricultural land agricultural land will be 20 ha or more. Non-agricultural afteruse, for example for nature conservation or amenity, can be acceptable even on better quality land if soil resources are conserved and the long term potential of best and most versatile land is safeguarded by careful land restoration and aftercare.

Other factors

The ALC is a basis for assessing how development proposals affect agricultural land within the planning system, but it is not the sole consideration. Planning authorities are guided by the National Planning Policy Framework to protect and enhance soils more widely. This could include, for example, conserving soil resources during mineral working or construction, not granting permission for peat extraction from new or extended mineral sites, or preventing soil from being adversely affected by pollution. For information on the application of ALC in Wales, please see below.

Agricultural Land Classification: protecting the best and most versatile agricultural land

Further information

Details of the system of grading can be found in: *Agricultural Land Classification of England and Wales: revised guidelines and criteria for grading the quality of agricultural land* (MAFF, 1988).

Please note that planning authorities should send all planning related consultations and enquiries to Natural England by e-mail to consultations@naturalengland.org.uk. If it is not possible to consult us electronically then consultations should be sent to the following postal address:

Natural England
Consultation Service
Hornbeam House
Electra Way
Crewe Business Park
CREWE
Cheshire
CW1 6GJ

ALC information for Wales is held by Welsh Government. Detailed information and advice is available on request from Ian Rugg (ian.rugg@wales.gsi.gov.uk) or David Martyn (david.martyn@wales.gsi.gov.uk). If it is not possible to consult us electronically then consultations should be sent to the following postal address:

Welsh Government
Rhodfa Padarn
Llanbadarn Fawr
Aberystwyth
Ceredigion
SY23 3UR

Natural England publications are available to download from the Natural England website: www.naturalengland.org.uk.

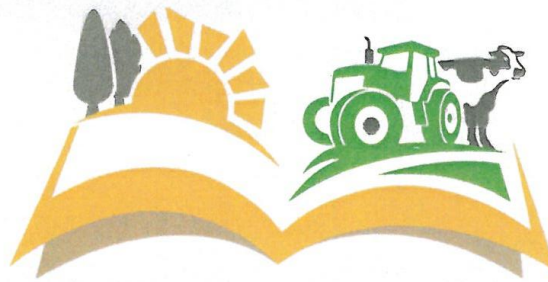
For further information contact the Natural England Enquiry Service on 0300 060 0863 or e-mail enquiries@naturalengland.org.uk.

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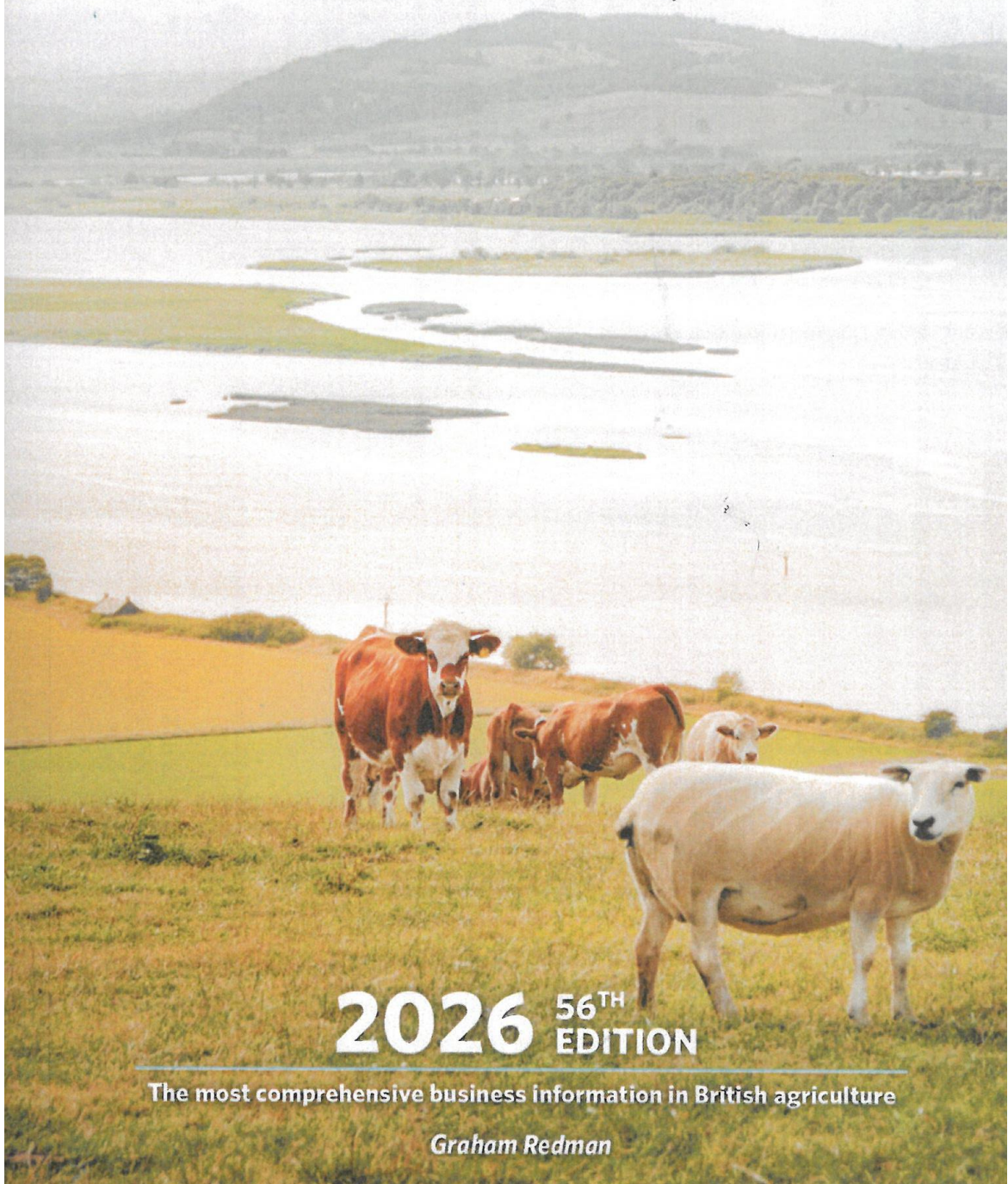
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APPENDIX KCC3
Extracts from the Nix Farm
Management Pocketbook



NIX FARM MANAGEMENT POCKETBOOK



2026 56TH
EDITION

The most comprehensive business information in British agriculture

Graham Redman

WHEAT

Feed Winter Wheat

Production level	Low	Average	High	
Yield: t/ha (t/ac)	7.0 (2.8)	8.2 (3.3)	9.4 (3.8)	
	£/ha (ac)	£/ha (ac)	£/ha (ac)	£/t
Grain at £185/t	1,295 (524)	1,517 (614)	1,739 (704)	
Straw in Swath	150 (61)	150 (61)	150 (61)	
Total Output	1,445 (585)	1,667 (675)	1,889 (765)	203
Variable Costs £/ha (£/ac):				
Seed.....		81 (33)		10
Fertiliser.....		297 (120)		36
Sprays.....		301 (122)		37
Total Variable Costs		679 (275)		83
Gross Margin £/ha (ac)	766 (310)	988 (400)	1,210 (490)	120

Fertiliser Basis 8.2t/ha				Seed:		Sprays £/ha:	
Nutrient	Kg/t	Kg/Ha	£/Ha	£/t C2	£510	Herbicides	£131
N	23	190	£187	Kg/Ha	175	Fungicides	£115
P	7.0	57	£60	% HSS	30%	Insecticides	£4
K	10.5	86	£49	£/t HSS	£353	PGRs	£19
						Other	£33

1. *Yields.* The average yield is for all winter feed wheat, i.e. all varieties and 1st and subsequent wheats. See over for First and Second Wheats. The whole wheat yield including feed and milling, winter and spring crops is 8.06t/ha (10-year average *Defra*).

The table below offers a weighted estimate of yield variations according to wheat type based on a national 10-year average yield of 8.06t/ha. Percentages compare yield categories with 'all wheat'. These yields are used in the gross margins.

Calculation of spread of 'average yields depending on wheat type –

	Yield Adjustment	Winter	1st WW	2nd WW	spring	Total
t/ha		101%	102%	93%	85%	100%
Total	100%	8.14	8.27	7.49		8.06
Feed	101%	8.22	8.35	7.57		8.14
Bread	93%	7.57	7.69	6.97	5.92	7.49
Biscuit	99%	8.06	8.19	7.42		7.98

2. *Straw* is sold in the swath. Assume half the baled value is swath value £70/tonne at 4.2t/Ha winter and 3.8t/ha spring wheat (rounded up).
3. *Seed* is costed with a single purpose dressing. Up to a third of growers require additional seed treatments, specifically to suppress BYDV. This can add £175/t of seed (£31/ha) or more. This has not been added in the gross margins.
4. This schedule does not account for severe *grass weed infestations* such as Black Grass or Sterile Brome. Costs associated with managing such problems can amount to up to £200/hectare additional agrochemical costs. Yield losses increase as infestation rises:

OILSEED RAPE

Winter Oilseed Rape

Production level	Low	Average	High	
Yield: t/ha (t/ac)	3.0 (1.2)	3.50 (1.4)	4.0 (1.6)	
	£/ha (ac)	£/ha (ac)	£/ha (ac)	£/t
Output at £410/t	1230 (498)	1,435 (581)	1,640 (664)	410
Variable Costs £/ha (£/ac):				
Seed.....		73 (29)		21
Fertiliser.....		261 (106)		75
Sprays.....		277 (112)		79
Total Variable Costs		610 (247)		174
Gross Margin £/ha (ac)	620 (251)	825 (334)	1,030 (417)	236

Fertiliser Basis 3.5t/ha				Seed:		Sprays £/ha:	
Nutrient	Kg/t	Kg/Ha	£/Ha	£/Ha C	43	Herbicides	£135
N	54	190	£187	£/Ha Hy	88	Fungicides	£71
P	14	49	£52	£/Ha HSS	29	Insecticides	£18
K	11	39	£22	C:Hy:HSS	20:20:60	PGRs	£0
	Seed write-off	8%		Kg/Ha	5.5	Other	£53

Spring Oilseed Rape

Production level	Low	Average	High	
Yield: t/ha (t/ac)	1.9 (0.8)	2.25 (0.9)	2.6 (1.1)	
	£/ha (ac)	£/ha (ac)	£/ha (ac)	£/t
Output at £410/t	779 (315)	923 (374)	1,066 (432)	410
Variable Costs £/ha (£/ac):				
Seed.....		69 (28)		31
Fertiliser.....		117 (47)		52
Sprays.....		145 (59)		64
Total Variable Costs		331 (134)		147
Gross Margin £/ha (ac)	448 (181)	592 (240)	735 (298)	263

1. **Prices.** The price used is £390/t plus oil bonuses at 44% oil content making £410/. The bonus is paid on the percentage of oil over 40%, at 1.5 times the sale value of the crop and an equal but opposite penalty below 40%. For example, in this case, the bonus is on 4% oil x £410 x 1.5 = £25.
2. **Spring OSR Inputs:** Seed as per WOSR, but 35% conventional, 5% HSS, 60% hybrid. Fertiliser: N/P/K at 70/32/25 kg/ha. Sprays, Herbicides. £55, Fungicides, £43, Insecticides £14, and Others £33/ha
3. **Winter Versus Spring:** As little as 6,000 hectares of spring OSR are grown in the UK which is 2.5% of the entire crop. The financial reward is slim compared with other combinable crops.

APPENDIX KCC4
Guide to Assessing Development
Proposals on Agricultural Land
(Natural England)



(<https://www.gov.uk/government/organisations/natural-england>)

Guidance

Guide to assessing development proposals on agricultural land

Updated 5 February 2021

Applies to England

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1. Policies to protect agricultural land and soil

Developers and local planning authorities (LPAs) should refer to the following government policies and legislation when considering development proposals that affect agricultural land and soils. They aim to protect:

- the best and most versatile (BMV) agricultural land from significant, inappropriate or unsustainable development proposals
- all soils by managing them in a sustainable way

Natural England uses these policies to advise on development proposals as a [statutory consultee](https://www.gov.uk/guidance/consultation-and-pre-decision-matters#Statutory-consultees) (<https://www.gov.uk/guidance/consultation-and-pre-decision-matters#Statutory-consultees>) in the planning process.

1.1 A Green Future: Our 25 Year Plan to improve the Environment 2018

[A Green Future: Our 25 Year Plan to Improve the Environment](https://www.gov.uk/government/publications/25-year-environment-plan) (<https://www.gov.uk/government/publications/25-year-environment-plan>) sets out the government's 25-year plan to improve the health of the environment by using natural resources more sustainably and efficiently. It plans to:

- protect the best agricultural land
- put a value on soils as part of our natural capital
- manage soils in a sustainable way by 2030
- restore and protect peatland

1.2 National Planning Policy Framework (NPPF)

LPAs should use the NPPF to make decisions about the natural and local environment to:

- protect and enhance landscapes, biodiversity, geology and soils
- recognise soils as a natural capital asset that provide important ecosystem services
- consider the economic and other benefits of BMV agricultural land, and try to use areas of poorer quality land instead of higher quality land
- prevent soil, air, water, or noise pollution, or land instability from new and existing development

Read [Chapter 15: Conserving and enhancing the natural environment](https://www.gov.uk/guidance/national-planning-policy-framework/15-conserving-and-enhancing-the-natural-environment) (<https://www.gov.uk/guidance/national-planning-policy-framework/15-conserving-and-enhancing-the-natural-environment>) for full details.

1.3 Town and Country Planning (Development Management Procedure (England) Order) (DMPO) 2015

Planning authorities must consult Natural England on all non-agricultural applications that result in the loss of more than 20 hectares (ha) of BMV land if the land is not included in a [development plan](https://www.gov.uk/guidance/national-planning-policy-framework/3-plan-making) (<https://www.gov.uk/guidance/national-planning-policy-framework/3-plan-making>). For example, this includes the likely cumulative loss of BMV land from the proposed development if it's part of a phased development.

This is required by [schedule 4\(y\) of the Order](http://www.legislation.gov.uk/uksi/2015/595/schedule/4/made) (<http://www.legislation.gov.uk/uksi/2015/595/schedule/4/made>).

1.4 Planning Practice Guidance for the Natural Environment

[Paragraphs 001 and 002: Planning Practice Guidance for the Natural Environment](https://www.gov.uk/guidance/natural-environment#brownfield-land-soils-and-agricultural-land) (<https://www.gov.uk/guidance/natural-environment#brownfield-land-soils-and-agricultural-land>) explain why planning decisions should take account of the value of soils and [agricultural land classification \(ALC\)](#) to enable informed choices on the future use of agricultural land within the planning system.

2. LPAs: consult Natural England

You must consult Natural England for development proposals that are both:

- likely to cause the loss (or likely cumulative loss) of 20ha or more of BMV land
- not in accordance with an approved development plan

Natural England will advise you on the level of impact the proposal may have on BMV agricultural land. Natural England will take into account the type of development and its likely long-term effects.

Email consultations@naturalengland.org.uk or write to:

Natural England consultation service
Hornbeam House
Electra Way
Crewe Business Park
Crewe
Cheshire
CW1 6GJ

3. LPAs: how to use agricultural land classification (ALC)

You can use ALC to help inform decisions on the appropriate sustainable development of land.

ALC uses a grading system to enable you to assess and compare the quality of agricultural land in England and Wales.

A combination of climate, topography and soil characteristics and their unique interaction determines the limitation and grade of the land. These affect the:

- range of crops that can be grown
- yield of crop
- consistency of yield
- cost of producing the crop

4. About ALC grades

ALC is graded from 1 to 5.

The highest grade goes to land that:

- gives a high yield or output
- has the widest range and versatility of use
- produces the most consistent yield
- requires less input

BMV agricultural land is graded 1 to 3a.

4.1 Grade 1 – excellent quality agricultural land

Land with no or very minor limitations. A very wide range of agricultural and horticultural crops can be grown and commonly includes:

- top fruit, for example tree fruit such as apples and pears
- soft fruit, such as raspberries and blackberries
- salad crops
- winter harvested vegetables

Yields are high and less variable than on land of lower quality.

4.2 Grade 2 – very good quality agricultural land

Land with minor limitations that affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown. 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.

4.3 Grade 3 – good to moderate quality agricultural land

Land with moderate limitations that 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.

4.4 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 crops including:

- cereals
- grass
- oilseed rape
- potatoes
- sugar beet
- less demanding horticultural crops

4.5 Subgrade 3b – moderate quality agricultural land

Land capable of producing moderate yields of a narrow range of crops, principally:

- cereals and grass
- lower yields of a wider range of crops
- high yields of grass which can be grazed or harvested over most of the year

4.6 Grade 4 – poor quality agricultural land

Land with severe limitations which significantly restrict the range of crops or level of yields. It is mainly suited to grass with occasional arable crops (for example 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 using the land. The grade also includes arable land that is very dry because of drought.

4.7 Grade 5 – very poor quality agricultural land

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

5. LPAs: carry out ALC assessments to support your planning decisions

For an overview of ALC use:

- [1:250,000 scale regional ALC maps](http://publications.naturalengland.org.uk/category/5954148537204736) (<http://publications.naturalengland.org.uk/category/5954148537204736>) (grade 3 land is not divided into subgrades 3a and 3b)
- [1:250,000 scale regional maps predicting the likelihood of BMV agricultural land](http://publications.naturalengland.org.uk/category/5208993007403008) (<http://publications.naturalengland.org.uk/category/5208993007403008>)

These maps are not at a scale suitable or accurate for assessment of individual fields or sites.

You can assess if a development proposal is likely to affect BMV agricultural land by using the [post 1988 ALC Magic map](http://magic.defra.gov.uk/MagicMap.aspx?chosenLayers=dudleystampIndex,backdropDIndex,backdropIndex,europaIndex,vmlBWIndex,25kBWIndex,50kBWIndex,250kBWIndex,miniscaleBWIndex,baseIndex&box=449447:459357:467834:470294&useDefaultbackgroundMapping=false) (<http://magic.defra.gov.uk/MagicMap.aspx?chosenLayers=dudleystampIndex,backdropDIndex,backdropIndex,europaIndex,vmlBWIndex,25kBWIndex,50kBWIndex,250kBWIndex,miniscaleBWIndex,baseIndex&box=449447:459357:467834:470294&useDefaultbackgroundMapping=false>) and [detailed site survey reports](http://publications.naturalengland.org.uk/category/6249382855835648) (<http://publications.naturalengland.org.uk/category/6249382855835648>).

If no site survey reports are available, a [new detailed survey](#) may be necessary.

6. Use ALC to support your planning decisions

Use ALC survey data to assess the loss of land or quality of land from a proposed development. You should take account of smaller losses (under 20ha) if they're significant when making your decision. Your decision should avoid unnecessary loss of BMV land.

6.1 Protect soil

You should make sure development proposals include plans to:

- [manage soils in a sustainable way during construction](https://www.gov.uk/government/publications/code-of-practice-for-the-sustainable-use-of-soils-on-construction-sites) (<https://www.gov.uk/government/publications/code-of-practice-for-the-sustainable-use-of-soils-on-construction-sites>)

- avoid peat extraction
- protect soils from contamination
- [reclaim land after mineral working or landfilling](https://www.gov.uk/government/publications/reclaim-minerals-extraction-and-landfill-sites-to-agriculture)
(<https://www.gov.uk/government/publications/reclaim-minerals-extraction-and-landfill-sites-to-agriculture>)

6.2 Carry out new surveys

If there's not enough information from previous data, you may need to have a new field survey to plan for development or to inform a planning decision. You should use soil scientists or experienced soil specialists to carry out new surveys. They should be:

- members of the British Society of Soil Science, the British Institute of Agricultural Consultants or similar professional body
- knowledgeable about the [ALC 1988 guidelines](http://publications.naturalengland.org.uk/publication/6257050620264448)
(<http://publications.naturalengland.org.uk/publication/6257050620264448>)
- experienced in soil description and ALC assessments

6.3 Survey requirements

For a detailed ALC assessment, a soil specialist should normally make boreholes:

- every hectare on a regular grid on agricultural land in the proposed development area
- up to 1.2m deep using a hand-held auger

They should:

- dig small inspection pits by hand to a minimum depth of 1m to add supporting evidence to the borehole data
- dig pits where there's a change in main soil type and ALC grade to provide a good depiction of the site
- combine the survey results with local climate and site data to plot on an Ordnance Survey (OS) base map
- use a base map at an appropriate scale for detailed work, such as 1:10,000 scale

7. Developers: check if your proposal affects agricultural land

Use the [post 1988 ALC Magic map](http://magic.defra.gov.uk/MagicMap.aspx?chosenLayers=dudleystampIndex,backdropDIndex,backdropIndex,europeIndex,vmlBWIndex,25kBWIndex,50kBWIndex,250kBWIndex,miniscaleBWIndex,baseIndex&box=449447:459357:467834:470294&useDefaultbackgroundMapping=false) (<http://magic.defra.gov.uk/MagicMap.aspx?chosenLayers=dudleystampIndex,backdropDIndex,backdropIndex,europeIndex,vmlBWIndex,25kBWIndex,50kBWIndex,250kBWIndex,miniscaleBWIndex,baseIndex&box=449447:459357:467834:470294&useDefaultbackgroundMapping=false>) and detailed [site survey reports](http://publications.naturalengland.org.uk/category/6249382855835648) (<http://publications.naturalengland.org.uk/category/6249382855835648>) to help you assess whether a development proposal is likely to affect BMV agricultural land. If no suitable data exists, you may need to carry out a [detailed survey](#) to support your planning application.

7.1 Free and chargeable advice

Natural England offers advice for proposals. Some initial advice is free. More [detailed advice is chargeable](https://www.gov.uk/guidance/developers-get-environmental-advice-on-your-planning-proposals#when-you-can-pay-for-agency-advice) (<https://www.gov.uk/guidance/developers-get-environmental-advice-on-your-planning-proposals#when-you-can-pay-for-agency-advice>), for example if your proposal is 20ha or more and requires more detailed advice.

Email: consultations@naturalengland.org.uk

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