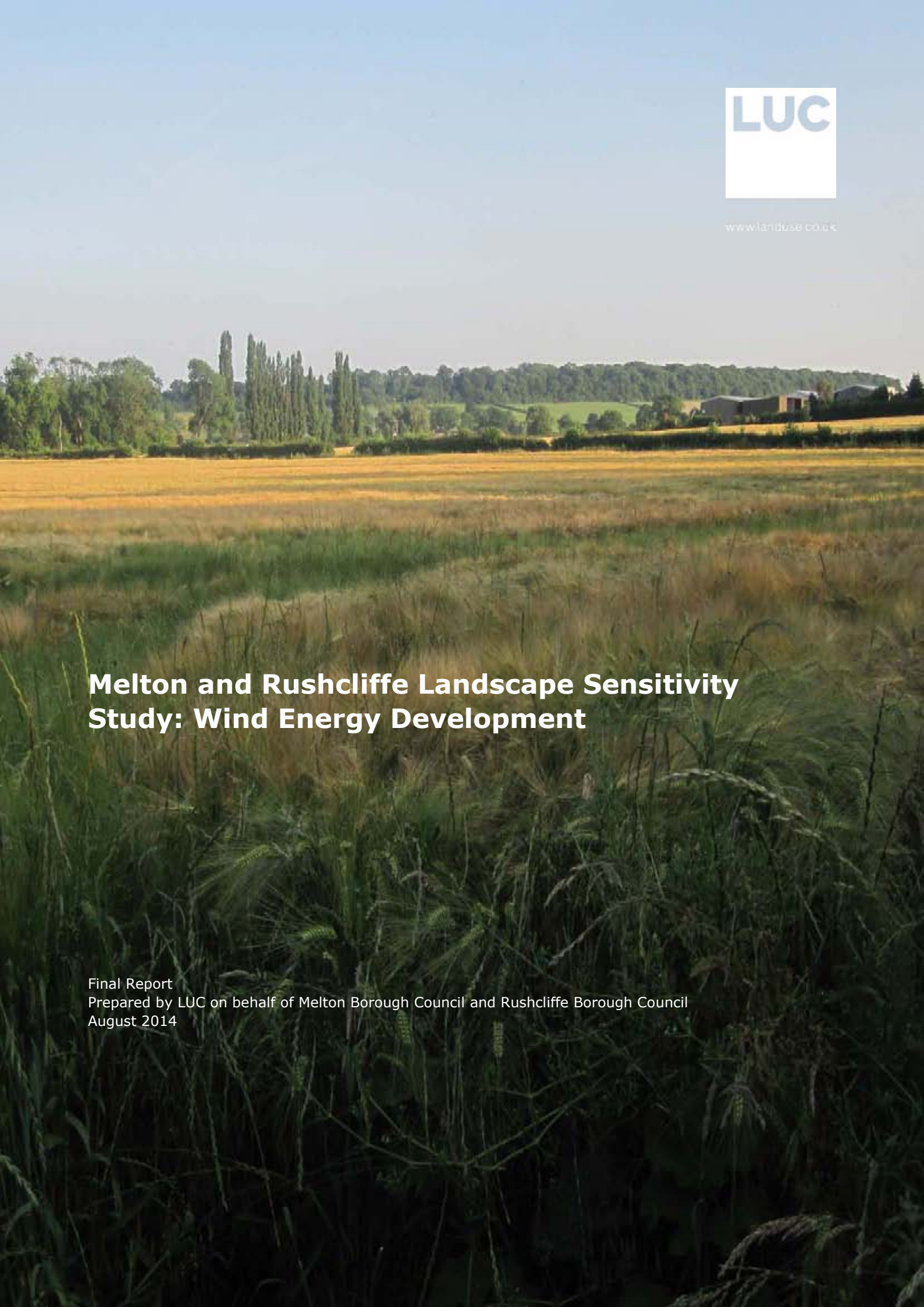

Melton and Rushcliffe Landscape Sensitivity Study: Wind Energy Development

Final Report
Prepared by LUC on behalf of Melton Borough Council and Rushcliffe Borough Council
August 2014

Project Title: Melton and Rushcliffe Landscape Sensitivity Study: Wind Energy Development

Client: Prepared by LUC on behalf of Melton Borough Council and Rushcliffe Borough Council

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1 Introduction

Background to the study

1.1 LUC was commissioned by Melton Borough Council and Rushcliffe Borough Council in April 2014 to undertake a study examining the sensitivity of the landscape of the two boroughs to wind turbine development at a range of scales. The study was overseen by a steering group of Melton Borough Council and Rushcliffe Borough Council officers.

1.2 Melton Borough and Rushcliffe Borough are faced with a range of challenges arising from a changing climate. Balancing the need to support the transition to a low carbon future (a core planning principle of the National Planning Policy Framework, NPPF) and the need for energy security (as recognised in the National Policy Statement for Renewable Energy Infrastructure, EN-3) with the management of the landscape is one of these challenges.

1.3 The NPPF states that planning authorities should "*take account of the different roles and character of different areas, promoting the vitality of our main urban areas, protecting the Green Belts around them, recognising the intrinsic character and beauty of the countryside and supporting thriving rural communities within it*". However, the National Planning Policy Framework establishes a presumption in favour of sustainable development unless any adverse impacts would significantly and demonstrably outweigh the benefits (NPPF, para. 14). This study will provide the evidence base upon which these decisions can more readily be made.

1.4 In planning for renewable energy, local authorities are encouraged to take a positive approach by identifying suitable areas for renewable energy generation and its supporting infrastructure (paragraph 97 NPPF). This approach is also encouraged by the Planning and Climate Change Coalition as part of its good practice guide for local authorities. The recent written ministerial statement and subsequent National Planning Practice Guidance (NPPG) on renewables (see PPG Renewable and Low Carbon Energy, 2014) places particular emphasis on ensuring the right renewable energy development in the right location and the importance of local amenity and local landscape character in influencing choice of location (paragraph 005). This study will assist by identifying areas of greater and lesser sensitivity and providing guidance as to how development can be accommodated in the landscape of the boroughs.

1.5 The NPPF also promotes good design and suggests that "*Permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions*" (para. 64, NPPF). This study will provide guidance on design which will assist in clarifying what is considered by landscape professionals as good design in relation to the landscape.

1.6 The Councils recognise these opportunities and understand the need to maximise renewable energy generation (which can have environmental, economic, social and other benefits). However, the development of wind power generating installations within the boroughs needs to be managed carefully to achieve the greatest contribution towards energy needs, while at the same time ensuring that the important characteristics of the landscape are not unacceptably harmed.

1.7 At the time of writing (1st August 2014) there were 16 wind energy schemes operating in the Melton and Rushcliffe Boroughs (further details are provided in **Table 2.1** and **Section 2** below). There is increasing interest in development of various scales of wind energy developments, from single small turbines to much larger schemes.

1.8 In order to help understand how best to accommodate future wind energy development in the boroughs, Melton Borough Council and Rushcliffe Borough Council have commissioned an assessment of the sensitivity of the landscape to onshore wind energy installations, to include

recommendations on the appropriate siting and scale of wind energy developments within each of the boroughs Landscape Character Areas/Draft Policy Zones (DPZs)[1].

Aims and objectives of the study

1.9 The main aims of the study are to provide:

- an assessment of the landscape sensitivity of each landscape character area (Melton)/ draft policy zone (Rushcliffe) to different scales of wind energy development;
- maps showing the landscape sensitivity of each landscape character area (Melton)/ draft policy zone (Rushcliffe) to different scales of wind development; and
- guidance for the siting and design of potential wind energy proposals in each landscape character area (Melton)/ draft policy zone (Rushcliffe).

1.10 The study will help enable positive planning for renewable energy and guide the determination of planning applications (by supporting balanced decision-making that takes landscape character into account when weighing up the benefits and adverse effects of these developments).

1.11 In addition it will encourage good design and high quality planning applications containing clear and relevant information needed to make informed decisions.

Approach

Definitions of 'landscape sensitivity' and 'landscape capacity'

1.12 The terms 'landscape sensitivity' and 'landscape capacity' have been defined in various ways in a number of different guidance documents and studies.

1.13 The current Landscape Character Assessment (LCA) Guidance[2] does not provide a definition of 'landscape sensitivity', although 'landscape capacity' is defined as follows:

> *'Landscape capacity is the degree to which a particular landscape character type or area is able to accommodate change without significant effects on its character, or overall change of landscape character type. Capacity is also likely to vary according to the type and nature of change being proposed'* (LCA Guidance, 2002)

1.14 Topic Paper 6[3] that accompanies the LCA Guidance was published in 2004 to expand on the then current thinking about landscape sensitivity and landscape capacity, to stimulate debate and encourage the development of common approaches. Paragraph 4.2 of the supporting Topic Paper 6 states that: *"Judging landscape character sensitivity requires professional judgement about the degree to which the landscape in question is robust, in that it is able to accommodate change without adverse impacts on character. This involves making decisions about whether or not significant characteristic elements of the landscape will be liable to loss... and whether important aesthetic aspects of character will be liable to change"*.

1.15 Various other definitions have been used over the years by different landscape practitioners. The national Landscape Character Assessment guidance is currently being updated and this will include a definition of landscape sensitivity. The emerging LCA Guidance will note that care is

[1] The terms Landscape Character Areas (in respect of Melton) and Draft Policy Zones (DPZs) (in respect of Rushcliffe) refer to the landscape units of roughly equal size with similar characteristics, as identified in the Landscape Character Assessments for the two boroughs. The Melton Character Assessment (2006) uses the term 'Landscape Character Areas' whilst the Greater Nottingham Landscape Character Assessment (2009) which covers the borough of Rushcliffe, uses 'Draft Policy Zones'. However, the terms are broadly interchangeable. This study uses the term 'Landscape Character Units' (LCUs) as units for assessment- these are based on the Melton and Rushcliffe Landscape Character Areas and DPZs.

[2] Countryside Agency and Scottish Natural Heritage (2002) 'Landscape Character Assessment - Guidance for England and Scotland', prepared by Swanwick C and LUC

[3] Countryside Agency and Scottish Natural Heritage (2004) Landscape Character Assessment Topic Paper 6 – Techniques and Criteria for Judging Capacity and Sensitivity

needed in the way that 'landscape capacity' is used since it can imply the existence of an objectively defined threshold below which development is acceptable, and beyond which it is unacceptable. Rarely can such a threshold be defined with any accuracy, and thresholds will be dependent upon policy and need for renewable energy.

1.16 It is also important to recognise that judgements about the acceptability of landscape change can alter over time, not only in terms of our attitudes to a particular landscape but also in terms of our attitudes towards a particular type of change. This suggests that 'capacity' is a subjective concept and may vary over time. It is important that any assessment is clear about which elements of it are relatively objective and unlikely to be disputed, and which ones are more subjective and likely to be viewed differently by different stakeholders and potentially by the same stakeholders but at different times.

Developing a Method for Assessing Landscape Sensitivity to Wind Energy Developments in Melton and Rushcliffe

1.17 In order to develop a method for assessing landscape sensitivity to renewable energy developments, the project team considered different approaches used to assess landscape sensitivity and / or capacity in other studies across the UK. In summary:

- All assessments use a spatial framework, usually based on landscape character areas or landscape types.
- Different studies define 'landscape sensitivity' and 'landscape capacity' in slightly different ways, but they are all based on the LCA guidance definition or the Topic Paper 6 definitions described above.
- Some studies are called 'landscape sensitivity studies' and some are called 'landscape capacity studies', but often these terms are used to mean essentially the same thing.
- Some studies note that, when assessing capacity, it is necessary to consider where landscapes can accommodate change – this judgement is a separate step to the sensitivity study.
- Different studies make different assumptions on the type of development being assessed - some assessments are based on a generic turbine (usually with a height range) while other assessments are applied using different heights of turbines or different wind farm sizes.
- All the studies use criteria, based on landscape character, to assess landscape sensitivity – although the individual criteria vary between studies.

1.18 In addition LUC's recent work on assessing the landscape sensitivity to onshore wind energy developments in Newark and Sherwood and in Cheshire East helped inform a method for this study, as set out in **Chapter 4**.

Structure of the Report

1.19 **Chapter 2** presents the characteristics of wind energy development; **Chapter 3** presents the landscape character baseline for Melton and Rushcliffe; **Chapter 4** sets out the method for assessing sensitivity to wind energy development; **Chapter 5** provides a user guide to assist use of this report in designing and assessing proposals; **Chapter 6** provides generic guidelines for siting proposals; **Chapter 7** presents landscape sensitivity matrices for each Landscape Character Area, and **Chapter 8** summarises the results of the landscape sensitivity assessment.

1.20 **Appendix 1** provides a Glossary of terms used in the report; **Appendix 2** sets out the modifications made to the Rushcliffe Borough and Melton Borough Landscape Classifications for the purposes of this study; **Appendix 3** sets out views identified in Conservation Area Appraisals; **Appendix 4** replicates maps indicating views identified by the Parish Councils in Melton Borough in a consultation exercise MBC undertook with the Parish Councils in July 2013; and **Appendix 5** replicates maps produced by borough councillors from both Councils in June 2014 highlighting valued landmarks (pink highlighter), visitor locations and viewpoints (green highlighter) and views (black arrows).

2 Characteristics of wind energy development and potential effects on the landscape

2.1 In order to minimise effects on the landscape through siting and design, it is important to first understand the characteristics of wind energy development and how they may affect the landscape. The following sections describe the features of wind turbines and associated development, and consider potential impacts on the Melton and Rushcliffe landscapes. Current trends with respect to wind energy development in the study area are also discussed.

General features of wind energy development

2.2 The key components of wind energy development are the wind turbines, which may be grouped together into a wind farm. The majority of wind turbines consist of horizontal-axis three-bladed turbines, mounted on a steel tower. Other turbines, including two bladed turbines and vertical axis turbines, are available but less commonly deployed. Wind turbines are generally given planning permission for 25 years, although re-powering may take place after this period has elapsed, subject to further permission.

2.3 The main visible components of a horizontal-axis wind turbine are:

- the tower, generally a tubular steel structure though lattice towers are occasionally used for smaller turbines;
- the nacelle, which contains the generating equipment; and
- the rotor blades, mounted on the hub at the front of the nacelle.

2.4 Depending on the scale and design of the turbine, the transformer may be located inside or outside the tower. If outside it will usually be contained in a small box-like structure adjacent to the tower base. The tower itself sits on a concrete foundation which is hidden from view underground.

2.5 Turbines are most commonly coloured light grey, which has been found to be least visually prominent when turbines are viewed against the sky.

2.6 Turbines are available in a wide range of sizes, from very small roof-mounted machines designed for domestic use, to large commercial structures. The tallest turbines currently operating in the UK are in the region of 130 m, although turbines up to 150 m have received planning consent.

2.7 Besides overall size, the proportions of a turbine can also vary, particularly the length of the blades in relation to the height of the tower, and the size and shape of the nacelle. Where particularly short blades are mounted on a tall tower, or where long blades are placed on a short tower, the turbine may appear unbalanced or top-heavy. Larger turbines with longer blades have slower rotation speeds than smaller models.

2.8 In addition to the turbines themselves, developments involving large scale wind turbines typically require additional infrastructure as follows:

- road access to the site and on-site tracks able to accommodate the specialised heavy goods vehicles (HGVs) which are needed to transport the long turbine components and heavy construction cranes;
- a temporary construction compound and lay-down area for major components;
- borrow pits, which may be opened on larger sites to provide construction materials for the access tracks, avoiding the need for transportation of material to the site;

- construction of a buried concrete foundation and an area of hardstanding next to each turbine to act as a base for cranes during turbine erection;
- underground cables connecting the turbines (buried in trenches, often alongside tracks);
- one or more anemometer mast(s) to monitor wind direction and speed, usually a slender lattice tower or guyed mast of the same height as the turbine hubs; and
- a control building to enable monitoring and operation, often combined with a small substation.

2.9 Lighting requirements depend on aviation and can be required on turbines. However, aircraft warning lights can be infra-red and therefore not visible to the naked human eye. Guidance as part of this study advises that if lighting is required on turbines for aviation purposes, infra-red lighting should be adopted where possible to minimise visual impacts at night.

2.10 The District Network Operator (DNO) is responsible for establishing a connection between the substation and the national grid. For larger schemes this connection is usually routed via overhead cables on poles, but for smaller turbines may be routed underground. Since these are part of a separate consenting procedure these connections are not considered as part of the landscape sensitivity study.

Landscape effects of wind turbines

2.11 Wind turbines can be substantial vertical structures, and larger models will inevitably be highly visible within the landscape. The movement of the blades is a unique feature of wind energy developments, setting them apart from other tall structures in the landscape such as masts or pylons. Wind energy development may affect the landscape in the following ways:

- construction of large turbines and associated infrastructure may result in direct loss of landscape features;
- wind turbines are tall vertical features that may alter perception of a landscape, potentially affecting the apparent scale of landforms;
- movement of rotor blades may affect characteristics of stillness and solitude, as well as drawing the eye to turbines which may be a relatively small feature in the landscape;
- the presence of turbines may increase the perceived human influence on the landscape, particularly in terms of overt modern development, and this can particularly affect landscapes which have a strong sense of naturalness or tranquillity, or which form a setting to heritage assets;
- wind turbines, even at relatively small sizes, can appear large in the context of human-scale features such as domestic buildings and trees;
- turbines on skylines may compete with existing landmark features for prominence where prominent skylines or landmark features are characteristic of the landscape; and
- in order to be as efficient as possible, turbines are often placed in elevated locations, where they may affect views from wide areas.

2.12 In undertaking any landscape sensitivity assessments it is necessary to acknowledge that varying attitudes to wind energy development are expressed by different individuals. Aesthetic perceptions can be positive or negative depending on individual attitudes to the principle and presence of wind generation.

Cumulative issues

2.13 As larger numbers of wind energy developments are built, it is increasingly necessary to consider their cumulative effects. Development of multiple proposals may eventually result in a situation where wind energy developments become the defining influence on the landscape such that

landscape character is changed. Differences between the scale and design of multiple schemes can also exacerbate cumulative impacts.

Trends in wind energy development in Melton and Rushcliffe

2.14 Data supplied by the Councils (dated 1st August 2014) provided a picture of operational and proposed wind energy development in the boroughs at the time of undertaking the assessment. This data represents a point in time view of development, which is continually changing as applications are consented or refused, and new proposals come forward. The data is tabulated in **Table 2.1** and illustrated in **Figure 2.1a** for Melton Borough and **Figure 2.1b** for Rushcliffe Borough.

Table 2.1: Existing and proposed wind energy schemes (at 1st August 2014)

Turbine Tip Height	Number of operational schemes	Number of consented schemes	Number of schemes in planning
Melton Borough			
<25m	6	2	
25 to 50 m	6	1	1
51 to 75 m		1	1
76 to 110 m		1	4
111 to 150 m			1
Rushcliffe Borough			
<25m	4	1	
25 to 50 m			2
51 to 75 m			2
76 to 110 m			3
111 to 150 m			

2.15 This data indicate that there are currently a total of 16 operational and 6 permitted wind turbine developments, ranging from single turbines under 20m to tip to groups of up to nine turbines of up to 79m to tip.

Image 1: View to two turbines at Moscow Farm (24.8m to tip)

Image 2: View to single turbine at Gaddesby (25.1m to tip)

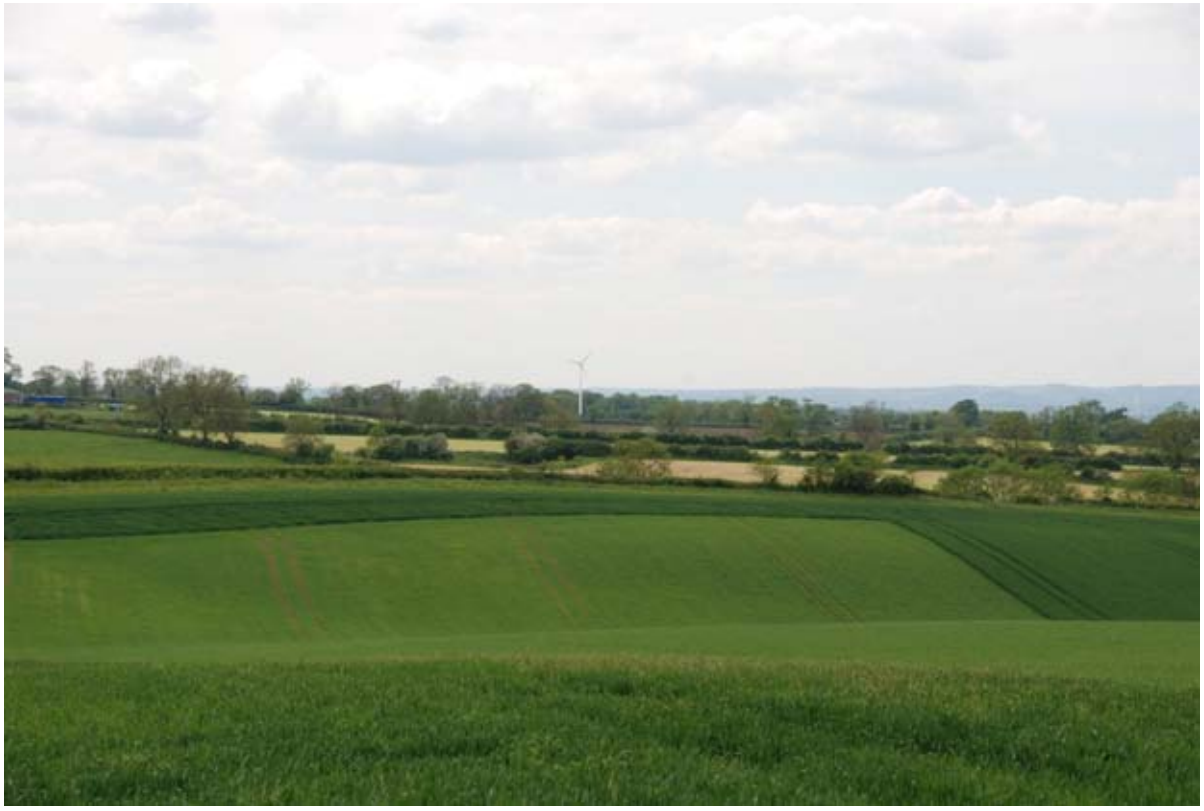

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Figure 2.1a:
Existing and Proposed Wind Energy Schemes in Melton Borough, August 2014

Melton Borough Council

Surrounding authorities

Status

- Operational
- Consented
- In planning[1]

[1]This includes schemes which have been refused planning permission but at the time of writing (1st August 2014) are still within the allowed period for making an appeal

Map Scale @ A3:1:150,000

LUC

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CB:DM EB:Green_C LUCLON 6053-01_0012_Melton_Turbines_Rev1 20/08/2014

Source: RBC, MBC

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Figure 2.1b:
Renewable Energy Applications in Rushcliffe Borough, August 2014

Rushcliffe Borough Council

Surrounding authorities

Status

- Operational
- Consented
- In planning[1]

[1]This includes schemes which have been refused planning permission but at the time of writing (1st August 2014) are still within the allowed period for making an appeal

Land West Of Oldhill Lane, East Bridgford, Nottinghamshire

Land South of Oldhill Lane, East Bridgford, Nottingham

Shelton Lodge Farm, Longhedge Lane, Shelton

Land East Of Spa Lane, Orston, Nottinghamshire

St James Business Park, Grantham Road, Radcliffe On Trent, Nottinghamshire

Butt Field Recreational Ground, Station Street

Land South West of Whatton Manor Stud, Manor Lane Whatton

West Bridgford School, Loughborough Road, West Bridgford

Rushcliffe Country Park, Mere Way, Ruddington

British Geological Survey, Nicker Hill, Keyworth

Land SW of Melton Road Upper Broughton

Land North Of Manor Barn Farm, Station Road, Upper Broughton, Nottinghamshire

Ashfield District

Gedling District (B)

Newark and Sherwood District

City of Nottingham (B)

North West Leicestershire District

Charnwood District (B)

Melton District (B)

0 5 10 km

Map Scale @ A3: 1:110,000

LUC

CB:VG EB:Green_C LUCLON 6053-01_0011_Rush_Turbines_Rev1 20/08/2014

Source: RBC, MBC

3 The baseline landscape

The landscape of Melton and Rushcliffe

3.1 Melton and Rushcliffe Boroughs are located in the East Midlands, to the south east of Nottingham and to the east of Leicester. Both boroughs are predominantly rural with a varied and attractive landscape of undulating hills, river valleys and escarpments.

3.2 The National Character Area Map (published by the Countryside Commission, English Nature and English Heritage, 1996) shows four national level character areas within Melton and Rushcliffe, illustrated on **Figure 3.1:**

- Leicestershire and Nottinghamshire Wolds (NCA 74);
- Trent and Belvoir Vales (NCA 48);
- High Leicestershire Hills (NCA 93); and
- Kesteven Uplands (NCA75).

3.3 Changes to the character of landscape are likely to be driven by a number of factors including a need to meet demands for new housing, improve transport links as well as a shift towards low carbon forms of energy generation.

3.4 Key future proposals within Rushcliffe include new areas of housing and employment at Melton Road, Bingham, RAF Newton, Cotgrave Colliery, South of Clifton (covering most of Clifton Slopes DPZ) and East of Gamston.

Existing landscape character studies

3.5 A number of character studies have been undertaken covering Melton Borough and Rushcliffe Borough. The character units defined and described within these published assessments have been reviewed as part of this study and contribute to the evidence base for the study.

Rushcliffe Borough

3.6 The Greater Nottingham Landscape Character Assessment (2009) provides a county-level classification of landscape character types and areas across six local authority areas, including Rushcliffe, set broadly within the framework of National Character Areas. Five landscape character areas have been identified within Rushcliffe Borough, which are sub-divided into 14 Draft Policy Zones (DPZs).

3.7 The following table sets out the landscape character areas and the DPZs that sit within them.

Table 3.1 Landscape Character Areas within Rushcliffe Borough - Greater Nottingham Landscape Character Assessment (2009)

Greater Nottingham Landscape Character Areas	Greater Nottingham Draft Policy Zones within Rushcliffe Borough
The Nottinghamshire Wolds	NW1 Gotham and West Leake Wooded Hills and Scarps NW02 East Leake Rolling Farmland NW03 Widmerpool Clay Wolds NW04 Cotgrave Wooded Clay Wolds
Vale of Belvoir	BV01 Vale of Belvoir
South Nottingham Farmland	SN01 Clifton Slopes SN02 Ruddington Alluvial Farmland SN03 Mickleborough Fringe SN05 East Bridgford Escarpment Farmland SN04 Cotgrave and Tollerton Village Farmland SN06 Aslockton Village Farmland
Trent Valley	TSV01 Attenborough Wetlands TSV02 Soar Valley
Trent Washlands	TW01 Trent Washlands: Gamston and Edwalton River Meadowlands TW02 Trent Washlands: Polser Brook River Meadnows TW03 Trent Washlands: Holme Pierrepont and Bassingfield Village Farmlands TW04 Trent Field River Meadowlands TW07 Shelford Village Farmlands TW51 Stoke Lock River Meadowlands TW055 West Bridgford Recreational Fringe

Melton Borough

3.8 The Leicester, Leicestershire and Rutland Landscape and Woodland Strategy (2001) provides a county-level assessment of the landscape character of Leicestershire, including the landscapes of the borough of Melton. The assessment has identified 18 landscape character areas (LCAs), broadly relating to National Character Area boundaries, of which seven lie within the Melton Borough boundary.

3.9 The more recent Melton Landscape Character Assessment (2006) provides a detailed assessment of the borough, based on a refinement of the county-level assessment, but with additional areas identified and a greater focus on the areas surrounding towns and villages. An update in 2011 was largely focused on the area surrounding Melton Mowbray in order to provide further detail and a sensitivity study intended to inform the policies and proposals of the Development Framework and in particular the allocation of development sites for a range of uses around the town.

3.10 The following table sets out the landscape character areas identified within Melton (as defined within the Landscape Character Assessment, 2006).

Table 3.2 Regional and Borough-level Landscape Character Areas

NCA	Melton Landscape Character Areas
Leicestershire and Nottinghamshire Wolds	3 Wolds Scarp
	4 Wolds Top
	5 Knipton Bowl
	6 Ridge and Valley
	7 Village Pastures (multiple areas)
	9 Parkland (two areas, both within the east of the borough)
	10 Mixed Farmland
	12 Wreake Valley
	13 Eye Valley
	16 Farmland Patchwork (two areas to the east of Melton, to the north and south of the Eye Valley)
	17 Open Arable (multiple areas occur across the borough, with two areas located in this NCA)
	19 Asfordby Quarry
	20 Melton Farmland Fringe
	21 Melton
Kesteven Uplands	8 Limestone Edge
	17 Open Arable (multiple areas within the borough, with a single area located in part within this NCA)
Trent and Belvoir Vales	1 Vale of Belvoir
	2 Bottesford
	7 Village Pasture (multiple areas within different parts of the borough)
High Leicestershire	7 Village Pasture (multiple areas within different parts of the borough)
	11 Pastoral Farmland
	14 Gaddesby Valley

NCA	Melton Landscape Character Areas
	15 High Leicestershire Hills
	17 Open Arable (multiple areas occur across the borough, with a single area located in this NCA)
	18 Traditional Pasture

Spatial framework for assessment

3.11 The landscape classifications were reviewed to consider if they could be used as a spatial framework for the landscape sensitivity study.

3.12 The Greater Nottingham Draft Policy Zones (DPZs) within Rushcliffe Borough were considered to form a good scale for the assessment of landscape sensitivity and were considered to be largely fit for purpose, although a number of small areas within the north were amalgamated (see **Appendix 2 Modifications to the Melton Borough and Rushcliffe Borough Landscape Classification)**.

3.13 It was judged appropriate to make some small refinements to the landscape classification as set out in the Melton Landscape Character Assessment (2006) to ensure that assessment units (Landscape Character Units) are of an appropriate scale and share characteristics and features which are most relevant when judging sensitivity to wind energy developments. The amendments made, with reasons, are set out in detail in **Appendix 2 Modifications to the Melton Borough and Rushcliffe Borough Landscape Classification**.

3.14 As a result, the following assessment units form the spatial framework for this Landscape Sensitivity Assessment (see **Table 3.3**). In this study they are referred to as **Landscape Character Units** and are mapped on **Figure 3.2**.

Table 3.3 Spatial framework (Landscape Character Units based on Landscape Character Areas in Melton Borough and Draft Policy Zones in Ruchcliffe Borough)

	Landscape Character Units[4]
Melton Borough	
1	Vale of Belvoir (includes BV01 from Rushcliffe and LCA1 Vale of Belvoir from Melton)
2	Leicestershire Wolds: Belvoir Scarp (LCA3 Wolds Scarp)
3	Leicestershire Wolds: Dalby to Belvoir Wolds (LCA4 Wolds Top)
4	Leicestershire Wolds: Knipton Bowl (LCA5 Knipton Bowl)
5	Leicestershire Wolds: Ragdale to Saltby Wolds (LCA6 Ridge and Valley and 7 Village Pastures)
6	Kesteven Uplands: Saltby and Sproxton Limestone Edge (LCA8 Limestone Edge)
7	Leicestershire Wolds: Belvoir and Croxton Parkland (LCA9 Parkland)
8	High Leicestershire Hills: Great Dalby and Gaddesby Pastoral Farmland (LCA11 Pastoral Farmland)
9	Leicestershire Wolds: Wreake Valley (LCA12 Wreake Valley)
10	Leicestershire Wolds: Eye Valley (LCA13 Eye Valley and an area of LCA 17 Open Arable (the area occurring to the east of Burton Lazars/north of Little Dalby)
11	High Leicestershire Hills: Gaddesby Valley
12	High Leicestershire Hills: Burrough Hills
13	Leicestershire Wolds: Buckminster, Wymondham and Freeby Farmland (LCA17 Open Open Arable and LCA16 Farmland Patchwork)
14	Leicestershire Wolds: Asfordby Quarry (LCA19 Asfordby Quarry)
15	Leicestershire Wolds: Melton Farmland Fringe (LCA21 Melton Farmland Fringe)
18	Nottinghamshire Wolds: Widmerpool Clay Wolds (includes part within Melton and part within Rushcliffe): NW03 Widmerpool Clay Wolds within Rushcliffe and Mixed Farmland LCA as defined within the Melton Landscape Character Assessment.

[4] Landscape Character Units are the assessment units created for the purposes of this study. They are based on the Landscape Character Areas from Melton's Landscape Character Assessment (2006) and the Draft Policy Zones (DPZs) from the Greater Nottingham Landscape Character Assessment (2009)- which covers Rushcliffe borough. These units describe single unique geographical areas of roughly equal sizes that share similar characteristics.

Rushcliffe Borough	
1	Vale of Belvoir (includes BV01 from Rushcliffe and LCA1 Vale of Belvoir from Melton)
16	Nottinghamshire Wolds: Gotham and West Leake Wooded Hills and Scarps (NW01)
17	Nottinghamshire Wolds: East Leake Rolling Farmland (NW02)
18	Nottinghamshire Wolds: Widmerpool Clay Wolds (includes part within Melton and part within Rushcliffe): NW03 Widmerpool Clay Wolds within Rushcliffe and Mixed Farmland LCA as defined within the Melton Landscape Character Assessment.
19	Nottinghamshire Wolds: Cotgrave Wooded Clay Wolds (NW04)
20	South Nottinghamshire Farmlands: Clifton Slopes (SN01)
21	South Nottinghamshire Farmlands: Ruddington Alluvial Farmland (SN02)
22	South Nottinghamshire Farmlands: Mickleborough Fringe (SN03)
23	South Nottinghamshire Farmlands: East Bridgford Escarpment Farmland (SN05)
24	South Nottinghamshire Farmlands: Cotgrave and Tollerton Village Farmland (SN04)
25	South Nottinghamshire Farmlands: Aslockton Village Farmland (SN06)
26	Trent Valley: Attenborough Wetlands (TSV01)
27	Trent Valley: Soar Valley (TSV02)
28	Trent Washlands: West Bridgford to East Bridgford Washlands (TW01, TW02, TW03, TW04, TW07, TW51)

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Figure 3.1:
National Character Areas

Melton and Rushcliffe Borough Councils

Surrounding authorities

National Character Areas

30 : Southern Magnesian Limestone

38 : Nottinghamshire, Derbyshire and Yorkshire Coalfield

47 : Southern Lincolnshire Edge

48 : Trent and Belvoir Vales

49 : Sherwood

69 : Trent Valley Washlands

70 : Melbourne Parklands

71 : Leicestershire and South Derbyshire Coalfield

73 : Charnwood

74 : Leicestershire and Nottinghamshire Wolds

75 : Kesteven Uplands

93 : High Leicestershire

94 : Leicestershire Vales

Map Scale @ A3:1:175,000

LUC

CB:DM EB:Goosen_V LUCLON 6053-01_001_NCAs_Rev1 16/07/2014

Source: Natural England

RBC Assessment Units

- 16 : Nottinghamshire Wolds: Gotham and West Leake Wooded Hills and Scarps
- 17 : Nottinghamshire Wolds: East Leake Rolling Farmland
- 18 : Nottinghamshire Wolds: Widmerpool Clay Wolds
- 19 : Nottinghamshire Wolds: Cotgrave Wooded Clay Wolds
- 20 : South Nottinghamshire Farmlands: Clifton Slopes
- 21 : South Nottinghamshire Farmlands: Ruddington Alluvial Farmland
- 22 : South Nottinghamshire Farmlands: Mickleborough Fringe
- 23 : South Nottinghamshire Farmlands: East Bridgford Escarpment Farmland
- 24 : South Nottinghamshire Farmlands: Cotgrave and Tollerton Village Farmland
- 25 : South Nottinghamshire Farmlands: Aslockton Village Farmland
- 26 : Trent Valley: Attenborough Wetlands
- 27 : Trent Valley: Soar Valley
- 28 : Trent Washlands: West Bridgford to East Bridgford Washlands

MBC & RBC Assessment Units

- 1 : Vale of Belvoir

MBC Assessment Units

- 2 : The Leicestershire Wolds: Belvoir Scarp
- 3 : The Leicestershire Wolds: Dalby to Belvoir Wolds
- 4 : The Leicestershire Wolds: Knipton Bowl
- 5 : The Leicestershire Wolds: Ragdale to Saltby Wolds
- 6 : Kesteven Uplands: Saltby and Sproxton Limestone Edge
- 7 : The Leicestershire Wolds: Belvoir, Stapleford and Croxton Parkland
- 8 : High Leicestershire Hills: Great Dalby and Gaddesby Pastoral Farmland
- 9 : The Leicestershire Wolds: Wreake Valley
- 10 : The Leicestershire Wolds: Eye Valley
- 11 : High Leicestershire Hills: Gaddesby Valley
- 12 : High Leicestershire Hills: Burrough Hills
- 13 : The Leicestershire Wolds: Freeby, Buckminster and Wymondham Farmland
- 14 : The Leicestershire Wolds: Asfordby Quarry
- 15 : The Leicestershire Wolds: Melton Farmland Fringe

0 10 20 km

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Figure 3.2: Landscape Character Assessment Units

- Melton and Rushcliffe Borough Councils
- Surrounding authorities

Map Scale @ A3:1:175,000

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Source: LUC, Rushcliffe & Melton Borough Councils

Landscape designations and landscape-related heritage designations

3.15 The study area contains no nationally designated landscapes (National Parks and Areas of Outstanding Natural Beauty) or locally designated landscapes.

3.16 Landscape-related heritage designations include Registered Historic Parks and Gardens and Conservation Areas which often have an important relationship to their setting (specific heritage assets such as listed buildings and Scheduled Monuments are noted where they form important landscape features).

3.17 There are six Registered Historic Parks and Gardens (Stapleford Hall and Belvoir Castle in Melton Borough and Stanford Hall, Holme Pierrepont Hall, Flintham Hall and Kingston Hall in Rushcliffe Borough). These are shown on **Figure 3.3.**

3.18 There are a total of 73 Conservation Areas within the study area: 44 in Melton Borough; and 29 in Rushcliffe Borough. Conservation Area Appraisals have been prepared for all Conservation Areas in the boroughs. A number of these identify important views or features of the surrounding landscape which contribute to the special character of the conservation areas and these are summarised in **Appendix 3** and referred to in the sensitivity assessments for relevant Landscape Character Units.

Historic landscape character assessment

3.19 The Nottinghamshire Historic Landscape Characterisation Project (HLC) (Nottinghamshire County Council, 2000) covers the area of Rushcliffe. It identifies various historic field patterns (including patterns of fossilised open fields), river valley meadows, woodland, and parks and gardens. These historic landscape features/ types are considered to have a higher sensitivity to wind energy development. The Nottinghamshire Historic Landscape Characterisation can be found at: http://www.nottinghamshire.gov.uk/learning/history/historicbuildings/heritageprojects/.

3.20 A Historic Landscape Characterisation project has also been undertaken for Leicestershire, Leicester and Rutland (Leicestershire County Council, 2010) which covers the area of Melton. It identifies areas of heathland and common, areas of ridge and furrow, broadleaved woodland, mixed woodland, parkland, village greens, parks and gardens, country houses, marsh and floodplain fields (most traditionally used as meadows). These historic landscape features/ types are considered to have a higher sensitivity to wind energy development. The Leicestershire, Leicester and Rutland Historic Landscape Characterisation can be found at: http://www.leics.gov.uk/index/leisure_tourism/local_history/archaeology/historic_landscape_characterisation.htm.

Landmarks/ views of Borough-wide importance

3.21 Landmarks/views of Borough-wide importance were identified through a desk based review of maps and existing landscape character assessments, as well as field work. Information provided by borough councillors from both Councils (who attended a presentation by LUC on 11th June 2014, see **Appendix 5**) was also used to inform the assessment but since these were the views of a few people they were not necessarily representative of all the valued views across the two boroughs.

3.22 The aim was to objectively identify primary landmarks of Borough-wide importance, views of which it is desirable to preserve; secondary landmarks of Borough-wide importance, views of which it is desirable to preserve; and views from popular viewpoints which enable an appreciation of the landscape of the two Boroughs. These are set out in **Table 3.4** and mapped in **Figure 3.4**.

3.23 In addition, there are a number of views noted as important in the Boroughs' Conservation Area appraisals. These have not all been mapped, but information about these views extracted from conservation area appraisals is set out in **Appendix 3**.

3.24 There will be many other locally valued views that will need to be considered when siting and designing wind energy developments within any area. Some of the most obvious ones are noted in the assessments for each Landscape Character Unit where relevant, although these lists are not exhaustive and a detailed visual assessment would be required as part of the siting and design of any wind energy development and as part of the process of Landscape and Visual Impact Assessment (LVIA). **Appendix 4** sets out views identified as important by the Parish Councils in a consultation exercise MBC undertook with the Parish Councils in July 2013.

Table 3.4 Landmarks/ views of Borough-wide importance

Important landmarks/ views	Reason for selection & description
Primary Landmarks	
Belvoir Castle	Belvoir Castle stands on the site of a Norman castle that was rebuilt C16, demolished in 1649, rebuilt in 1655-68 and remodelled in 1801-30 by James Wyatt. It is a Grade 1 listed building that is prominent on the Belvoir scarp and seen from across most of the study area, forming a focus of views.
Iron Age Fort, Burrough Hill	Described on Leicestershire County Council's website[5] as "*one of the most striking and historic features in the landscape of eastern Leicestershire*", this well-preserved Iron Age hill fort dramatically crowns a steep-sided promontory of land reaching 210m (690 ft).
Secondary Landmarks	
Church spires and towers	Churches form local skyline landmarks across much of the study area, in fact they are a particularly distinctive feature of the landscape of these two Boroughs. These churches contribute to the historic character and scenic quality of the Boroughs and it is desirable to conserve them as landmark features.
Windmills	A small number of windmills are scattered across the area, particularly in the east. They form local landmark features where they occur and it is desirable to conserve them as

[5] http://www.leics.gov.uk/country_parks_burrough_hill.htm

Important landmarks/ views	Reason for selection & description
	landmark features.
Views of Borough-wide importance	
Views from Belvoir Castle	Belvoir was built to command views of the surrounding countryside (Belvoir means 'beautiful view' in French). Today the views from publicly accessible areas around the grounds are restricted by mature trees surrounding the castle. However, the main façade of the castle faces north-east and long views are available to the east and northeast from the northeastern terrace. In addition, wide views across the Vale of Belvoir are available from the minor road which passes to the west of the castle, where a car park and main entrance to the castle are located. From here the view over the Vale of Belvoir is characterized by a rural patchwork of fields, bordered by hedgerows and punctuated by woodlands and historic villages. It is desirable to preserve the expansive and rural patchwork character of this view. There are also close historic links between Belvoir Castle and St Mary's Church, Bottesford (from the 13th century the Lords of Belvoir played an important part in the development of St Mary's) and it is desirable to maintain uninterrupted views of the spire of St Mary's from the Castle.
Panoramic view from Burrough Hill Country Park Viewpoint	Marked as a viewpoint on OS map, this hill fort provides a great vantage point providing views over the undulating plateau that forms Great Dalby and Gaddesby Pastoral Farmland, the Wreake/Eye Valley (in which Melton Mowbray sits) and towards the Wolds to the north of Melton and the escarpment of High Leicestershire to the west. This is an undulating lush and rural farmed landscape of fields, woodlands, scattered farmsteads and villages (with prominent churches). The landscape also includes pylons, telegraph poles and wind turbines – although the view is rural. On the horizon to the west the Ratcliffe on Soar power station can be seen on a clear day. It is desirable to preserve the expansive and rural character of this view.

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Figure 3.3:
Historic Parks and Gardens and Conservation Areas

- Melton and Rushcliffe Borough Councils
- Surrounding authorities
- Historic Parks and Gardens
- Conservation Areas

Map Scale @ A3: 1:175,000

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Source: English Heritage, MBC, RBC