



Fosse Green Energy

EN010154

6.3 Environmental Statement Appendices

Appendix 10-C: Landscape Character Baseline

VOLUME

6

Planning Act 2008 (as amended)

Regulation 5(2)(a)

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009 (as
amended)

18 July 2025

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulation 2009 (as amended)

Fosse Green Energy Development Consent Order 202[]

6.3 Environmental Statement Appendices

Appendix 10-C: Landscape Character Baseline

Regulation Reference	Regulation 5(2)(a)
Planning Inspectorate Scheme Reference	EN010154
Application Document Reference	EN010154/APP/6.3
Author	Fosse Green Energy Limited

Version	Date	Issue Purpose
Rev 1	18 July 2025	DCO Submission

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1. Introduction

- 1.1.1 This Appendix sets out the relevant landscape character and features of the Principal Site, Cable Corridor and Study Area, including the published landscape character assessments at the national, district, borough and local level, identified across the Study Area.

2. Landscape Character of the Principal Site, Cable Corridor and Study Areas

2.1 Context

- 2.1.1 The following section sets out the landscape features and characteristics of the Principal Site, the Cable Corridor, and the Study Area.

2.2 Landscape Character of the Principal Site

- 2.2.1 With reference to **Figure 10-1: LVIA Study Area [EN010154/APP/6.2]**, the Principal Site covers land to the south of North Hykeham, Lincoln, and extends to the north and south of the A46 (the main road linking Newark on Trent and Lincoln) as well as to the east of the River Witham.
- 2.2.2 With reference to **Figure 10-3: Designations Relevant to LVIA [EN010154/APP/6.2]**, the Principal Site is not covered by any statutory landscape designations, i.e. National Parks or National Landscapes.
- 2.2.3 At the local level, and with reference to the Central Lincolnshire Local Plan (Ref 2), the Principal Site is not within an Area of Great Landscape Value. With reference to the Central Lincolnshire Local Plan, the majority of the Principal Site is in a strategic green corridor and green infrastructure zone.
- 2.2.4 The landscape character of the Principal Site is described below with reference to general geographic areas within the Principal Site boundary for ease of reporting.

Northern Part of the Principal Site

- 2.2.5 The northern part of the Principal Site extends northwards from the A46 to cover land between Morton and Thorpe on the Hill.
- 2.2.6 With reference to **Figure 10-2: Topography and Watercourses [EN010154/APP/6.2]**, the northern part of the Principal Site is situated across undulating landform which rises from the eastern edge of Morton (at 15 metres (m) Above Ordnance Datum (AOD)) to form a localised ridge between

Housham Wood and the A46, between 31m AOD and 25m AOD. The landform then falls eastwards from this ridge, to around 15m AOD at the eastern edge of the Principal Site, forming the valley floor and lower lying land to the south-east of Thorpe on the Hill.

- 2.2.7 The land use across the northern part of the Principal Site is mainly agricultural, characterised by medium to large scale geometric fields divided by hedgerows, trees and drainage ditches. This results in a regular and ordered pattern to the landscape, except in the lower lying parts of the valley, where the watercourses result in a more sinuous field pattern.
- 2.2.8 With reference to **Figure 10-3: Designations Relevant to LVIA [EN010154/APP/6.2]**, none of the vegetation within the northern part of the Site is ancient woodland, nor is it covered by any Tree Preservation Orders (TPOs).
- 2.2.9 With reference to **Figure 10-1: LVIA Study Area [EN010154/APP/6.2]**, there is a recreational value via the following Public Rights of Way (PRoW) within the northern part of the Principal Site:
- PRoW (public bridleway) TOTH|12/1 (forming The Avenue) and PRoW (public bridleway) TOTH|12/3, extending between the A46 and Eagle Barnsdale;
 - PRoW (footpath) TOTH|11/1, between Morton and the south of Tunman Wood;
 - PRoW (footpath) TOTH|13/1, along the eastern side of Tunman Wood;
 - PRoW (footpath) TOTH|7/3, TOTH/6A/1, TOTH|6/2, TOTH|6/3, TOTH|15/1 and TOTH|6/1, between Tunman Wood and Thorpe on the Hill; and
 - PRoW (footpath) TOTH|18/1, between the A46 and the eastern edge of Thorpe on the Hill.
- 2.2.10 With reference to **Figure 10-3: Designations Relevant to LVIA [EN010154/APP/6.2]**, there are no listed buildings, scheduled monuments, nor conservation areas or historic park and gardens within the northern part of the Principal Site.

Central Part of the Principal Site

- 2.2.11 The central part of the Principal Site extends southwards from the A46, between Witham St Hughs, Haddington and Thurlby, from where the Principal Site continues southwards to Clay Lane.
- 2.2.12 With reference to **Figure 10-2: Topography and Hydrology [EN010154/APP/6.2]** the central part of the Principal Site is situated across land which falls from the A46 (from around 25m AOD) to Witham St Hughs and Thurlby (around 10m AOD). The landform across the remainder of the central part of the Principal Site remains at a similarly low lying elevation, before rising to around 16m AOD at Clay Lane, at the southern edge of the Principal Site.

- 2.2.13 The land use is agricultural, consisting of a range of fields sizes, but which are larger in scale between Thurlby and Clay Lane. The fields are divided by drainage ditches, hedgerows and hedgerows with trees such that, aside from this vegetation, there is an open character to this part of the Principal Site.
- 2.2.14 With reference to **Figure 10-3: Designations Relevant to LVIA [EN010154/APP/6.2]**, none of the vegetation within the central part of the Principal Site is ancient woodland, nor is it covered by TPOs.
- 2.2.15 With reference to **Figure 10-1: LVIA Study Area [EN010154/APP/6.2]**, there is a recreational value via the following PRow within the central part of the Principal Site:
- PRoW (footpath) ThuN|4/1, between the A46 and Haddington;
 - PRoW (footpath) Aubo|11/2, to the south of Haddington;
 - PRoW (footpath) ThuN|3/1, to the south of Witham St Hughs; and
 - PRoW (footpath) ThuN|2/1 and PRow (footpath) ThuN|5/1 to the south of Thurlby.
- 2.2.16 With reference to **Figure 10-3: Designations Relevant to LVIA [EN010154/APP/6.2]**, there are no listed buildings, scheduled monuments, nor conservation areas or historic park and gardens within the central part of the Principal Site.

Eastern Part of the Principal Site

- 2.2.17 The eastern part of the Principal Site is located on the eastern side of the River Witham and extends south-eastwards towards the plains of the River Brant. The landform across the eastern part of the Principal Site is low-lying at around 10m AOD.
- 2.2.18 The land use is agricultural, consisting mainly of medium scale fields. The combination of this vegetation along with small scale woodlands results in an enclosed landscape character.
- 2.2.19 With reference to reference to **Figure 10-3: Designations Relevant to LVIA [EN010154/APP/6.2]**, none of the vegetation within the eastern part of the Principal Site is ancient woodland, nor is it covered by TPOs.
- 2.2.20 With reference to **Figure 10-1: LVIA Study Area [EN010154/APP/6.2]**, there is a recreational value to the eastern part of the Principal Site via the following PRow:
- PRoW (restricted byway) Aubo|13/1 and PRow (footpath) Aubo|10/1, to the east of the River Witham;
 - PRoW (restricted byway) Aubo|8/1 and PRow (restricted byway) Bass|20/1, to the east of Lincoln Road; and
 - PRoW (footpath) Bass|22/1, to the south of North Field Farm.
- 2.2.21 With reference to **Figure 10-3: Designations Relevant to LVIA [EN010154/APP/6.2]**, there are no listed buildings, scheduled monuments,

nor conservation areas or historic park and gardens within the eastern part of the Principal Site.

- 2.2.22 With reference to **Figure 8-2: Non-Statutory Designated Sites and Priority Habitats [EN010154/APP/6.2]**, the River Witham is a local wildlife site.

Principal Site Character of the Night Sky

- 2.2.23 The CPRE, the countryside charity, (Ref 3) has mapped the level of radiance (night lights) shining up into the night sky via differing colour bands, as demonstrated by the following extract of the on-line mapping presented in **Plate 1**.
- 2.2.24 The northern parts of the Principal Site are within an area of bright and brighter skies, (illustrated via the green, yellow and orange hatching) reflecting proximity to the A46 and the south-west edge of North Hykeham.
- 2.2.25 The central parts of the Principal Site are of varying night lighting, with the brighter night skies between the A46 and Aubourn (via the green hatching) with darker night skies across the southern part of the Principal Site (via the light blue hatching).
- 2.2.26 The eastern part of the Principal Site is illustrated as darker night skies (via the light and darker blue hatch).

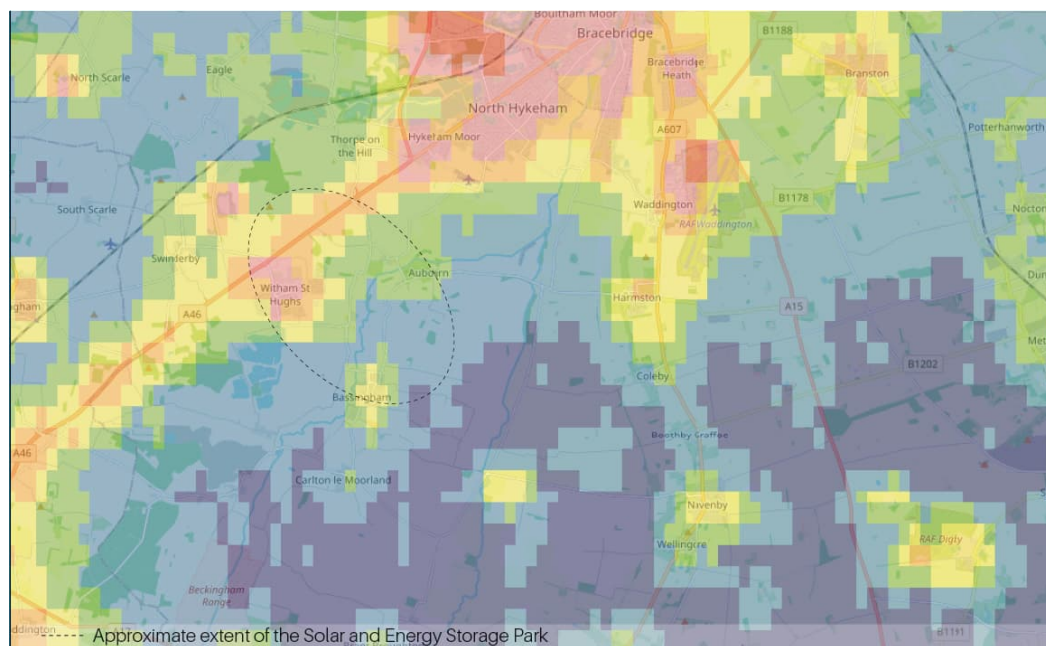


Plate 1: Extract of CPRE night sky mapping

Principal Site Landscape Summary

- 2.2.27 In summary, the Principal Site is situated across generally low-lying land, within the plains of the River Witham, at around 10m AOD. The exception is across the northern part of the Principal Site, where the landform rises to 31m AOD, forming part of a localised valley.

- 2.2.28 There is consistent arable land use across the Principal Site, but with localised variation in the field sizes. There are generally larger scale fields across the southern part of the Principal Site, in comparison to smaller scale fields across the northern and eastern parts of the Principal Site. There is a constant geometric pattern to the shape of the fields, which is reinforced by boundary hedgerows and trees. There is no ancient woodland, nor vegetation covered by TPOs, within the Principal Site.
- 2.2.29 The combination of the landform and vegetation patterns result in differing perceptions of openness and enclosure. In the northern and central parts of the Principal Site there is a more open character due to the combination of relatively elevated landform and more intermittent field boundaries. In contrast, across the eastern part of the Principal Site, there is a greater sense of enclosure, due to the lower lying landform and greater density of vegetation.
- 2.2.30 The Principal Site is not covered by any statutory landscape designations, nor does it contain any rare or distinctive landscape features.
- 2.2.31 There is a recreational value to the Principal Site, via numerous routes which often cross the landscape between the surrounding villages. There is also a natural capital value via the landform and vegetation patterns. With reference to **Section 3** of this Appendix, the Principal Site is also representative of the published landscape character assessments, which note this is a low lying agricultural area.
- 2.2.32 As arable land, there are inherently few sources of lighting within the Principal Site. However, the character of the night sky is influenced by the A46 and larger scale settlement, such that there is light trespass and skyglow, with brighter areas of night sky.

2.3 Landscape Character of Cable Corridor

- 2.3.1 As shown on **Figure 1-2: Site Boundary Plan [EN010154/APP/6.2]**, the Cable Corridor partially overlaps with the Principal Site and extends from the Onsite Substation eastwards. With reference to **Figure 10-1: LVIA Study Area [EN010154/APP/6.2]**, outside of the Principal Site, the Cable Corridor extends for approximately 9km from the eastern edge of the Principal Site, underneath the River Brant, across part of Lincoln Cliff, the A607, to Navenby Heath, approaching the existing overhead pylons and terminating at the proposed Navenby Substation (subject to a separate application), serving as the point of connection to the National Grid.
- 2.3.2 The Cable Corridor is approximately 250m wide between the River Brant and the A607. To the east of the A607 and on the approach to the National Grid Connection point, the cable route is up to approximately 1.1km.
- 2.3.3 With reference to **Figure 10-2: Topography and Watercourses [EN010154/APP/6.2]**, between the Principal Site and the dismantled railway line at the base of Lincoln Cliff (the dipslope), the Cable Corridor crosses low-lying land, at approximately 10m AOD. From the dismantled railway line, the landform begins to rise to around 20m AOD and then more steeply across Lincoln Cliff, to approximately 80m AOD at the crest dipslope. From this crest,

the landform gradually falls eastwards, to approximately 50m AOD across Navenby Heath.

- 2.3.4 Agriculture is the main land use across the Cable Corridor, characterised by small to medium scale fields with regular boundaries that create a well ordered and formal field pattern.
- 2.3.5 The vegetation patterns are mainly field boundary hedgerows with trees. None of the vegetation across the Cable Corridor is ancient woodland, nor is it covered by any TPOs.
- 2.3.6 Other land uses across the Cable Corridor include the overhead pylons between Coleby Low Fields and National Grid Connection east of Navenby. These pylons and their associated wires also cross the Lincoln Cliff.
- 2.3.7 With reference to **Figure 10-1: LVIA Study Area [EN010154/APP/6.2]**, the following PRow are within the Cable Corridor:
- a. PRow (footpath) Bass|23/1 between Fen Lane and the River Brant;
 - b. PRow (footpath) Cole|4/1 to the south of Hill Rise; and
 - c. PRow (footpath) Cole|3/1 which forms part of the Viking Way Long Distance Route, between Coleby and Boothby Graffoe and PRow (footpath) Cole|1/2, to the east of the Viking Way.
- 2.3.8 With reference to **Figure 10-3: Designations Relevant to LVIA [EN010154/APP/6.2]**, the Cable Corridor is not covered by any statutory designations. An Area of Great Landscape Value (AGLV) covers the land between the dismantled railway and the top of the Lincoln Cliff.
- 2.3.9 With reference to **Figure 10-3: Designations Relevant to LVIA [EN010154/APP/6.2]**, there are no listed buildings, scheduled monuments, nor conservation areas or historic park and gardens across the Cable Corridor.
- 2.3.10 With reference to the previous extract of the CPRE on-line mapping (**Plate 1**), the Cable Corridor crosses an area of predominantly 'darker skies' (via the light and dark blue hatching) reflecting the agricultural land use and limited sources of lighting across the plains of the River Brant and to the east of the A15.

2.4 Landscape Character of the Study Area

- 2.4.1 As set out in the methodology section of this LVIA and with reference to **Figure 10-1: LVIA Study Area [EN010154/APP/6.2]**, the LVIA Study Area extends to 2km from the Principal Site and the Cable Corridor.
- 2.4.2 The relevant landscape features across the Study Area are set out below.

Landform and Watercourses

- 2.4.3 With reference to **Figure 10-2: Topography and Watercourses [EN010154/APP/6.2]**, the landform is low-lying at around 20m AOD across Swinderby, Morton and agricultural land uses to the north-west and north of

the northern part of the Principal Site. This is due to a localised valley system extending between the more elevated landform at Tunman Wood and Eagle. To the north-east of the northern part of the Principal Site the landform rises from the valley floor at around 15m AOD to Thorpe on the Hill, at 25m AOD. The landform then falls to the north of Thorpe on the Hill, to around 10m AOD across existing and former sand and gravel pits and Whisby Nature Reserve. The existing gravel extraction represents areas of damaged and highly modified landform, whilst many of the former gravel pits are now small to large scale lakes.

- 2.4.4 To the north-east of the central part of the Principal Site, the landform remains low lying and generally flat at around 10m AOD across the plains of the River Witham, South Hykeham and the southern edge of North Hykeham. To the south of the central part of the Principal Site, the landform falls very gradually from Clay Lane at around 15m AOD towards the River Witham and Norton Disney, at around 12m AOD. There is extensive alteration to the landform to the south of the Norton Disney, via a sand and gravel pit. To the south of the pit, the northern edge of Stapleford is situated at around 14m AOD. To the south-east of the River Witham, the landform is low lying at around 10m AOD, before rising very gradually across Carlton-le-Moorland, which is situated around 15m AOD. To the west of the central part of the Principal Site, the landform rises very gradually from around 10m AOD, across Witham St Hughs towards the A46, with modified landform to the west of Witham St Hughs at the disused airfield. The landform continues to rise very gradually to the south-west of the central part of the Principal Site, across Norton Wood to around 30m AOD. There are many small to large scale waterbodies at the base of Norton Wood, due to former gravel pits.
- 2.4.5 The landform remains low lying to the north of the eastern part of the Principal Site, at around 10m AOD, between the River Witham and the River Brant. Similarly, the landform remains at a similar elevation to the east and south of the eastern part of the Principal Site.
- 2.4.6 The landform to the north and south of the Cable Corridor is low-lying at around 10m AOD across the plains of the River Brant. The landform then rises across the Lincoln Cliff (the dipslope) and up to 80m AOD, before falling to the east of the dipslope.
- 2.4.7 To the east of the Cable Corridor, the landform falls from around 50m AOD across Navenby Heath, to the A15 and Temple High Grange Farm at 30m AOD, at the eastern edge of the Study Area.
- 2.4.8 To the west of the Cable Corridor, the landform is low lying, at around 10m AOD across the plains of the River Witham.

Vegetation

- 2.4.9 With reference to **Figure 10-1: LVIA Study Area [EN010154/APP/6.2]**, there is a consistent pattern of field boundary hedgerows and trees across the arable land uses within the Study Area.

- 2.4.10 In relation to the northern part of the Study Area, there is established vegetation across Morton, particularly bordering Morton Hall Prison. There are also mature woodlands at Eagle Hall Wood, Tunman Wood and Housham Wood which are situated across the upper parts of the valley sides. These woodlands are ancient and do not fall within the Site Boundary. To the north of the northern part of the Principal Site, the main areas of established vegetation are across Lincoln Golf Centre and Whisby Nature Park. There is also established vegetation along the southern edge of Thorpe on the Hill.
- 2.4.11 Between the northern and central parts of the Principal Site, the A46 is lined by established tree belts and hedgerows.
- 2.4.12 In relation to the central part of the Principal Site, there are small woodland blocks adjacent to South Hykeham Road, to the north-west, with established bordering the southern edge of North Hykeham. To the east of the central part of the Principal Site, there are small woodland blocks across the plains of the River Witham, including between Aubourn and Thurlby. These settlements are also well vegetated, by a high amount of residential garden vegetation and within their immediate settings. To the south of the central part of the Principal Site, the extent of vegetation increases in proximity to Norton Disney and around the sand and gravel pits. Established woodland also extends to the west of the Principal Site, bordering the lakes between Norton Land and Swinderby Road, and adjacent to Wood Lane. The majority of the woodland to the south of Wood Lane is ancient woodland.
- 2.4.13 In relation to the eastern part of the Principal Site, the surrounding vegetation patterns are characteristic of fenland, comprising low hedgerows dividing the fields and occasional copses near the farms. To the north of the eastern part of the Principal Site, there are small scale woodlands bordering Malborough and extending to Blackmore Road. Brant Plantation extends between the River Brant and Broughton Lane and consists of a notable tree belt, which in combination with the smaller scale woodlands results in a high degree of enclosure to the landscape to the north of the Principal Site. To the east of the eastern part of the Principal Site, the vegetation patterns are predominantly hedgerows field boundaries and small copses. The vegetation covers adjacent to River Brant consists mainly of willows and poplars. To the south and west of the eastern part of the Principal Site, the main vegetation patterns are similarly field boundary vegetation.
- 2.4.14 To the north of the Cable Corridor, between the River Brant and the base of Lincoln Cliff, the vegetation patterns consist of low hedgerows and shelter belts. Woodland cover is limited to a few copses scattered across the fields to the north of Hill Rise. A narrow belt of trees and shrubs also border the dismantled railway line. Across the Lincoln Cliff, the vegetation pattern includes hedgerows and trees separating the fields, along with established vegetation in the historic park and garden in Coleby.
- 2.4.15 To the east of the A607, the vegetation pattern consists mainly of hedgerows and hedgerows with trees. Small woodland blocks are sparsely scattered across the area. The largest is Good Man Wood located at the eastern edge of the Study Area, approximately 1.8km from the A607.

- 2.4.16 To the south and west of the Cable Corridor the main vegetation patterns are field boundary hedgerows and trees.

Settlement Pattern and Land Use

- 2.4.17 With reference to **Figure 10-1: LVIA Study Area [EN010154/APP/6.2]**, the settlement pattern is notably varied across the Study Area. Small to medium scale villages and towns are typically found around the Principal Site with arable land uses extending between these villages, crossed by numerous lanes and the A46, which is the main transport route in the northern part of the Study Area.
- 2.4.18 Morton is to the west of the northern part of the Principal Site. Morton is a small-scale settlement with scattered farmsteads adjacent to Eagle Road. The character of the settlement is influenced by Morton Hall Prison, which is a large complex of buildings with high security fences.
- 2.4.19 Eagle Barnsdale is to the north of the northern part of the Principal Site and comprises residential and commercial land uses adjacent to Southern Lane and Morton Lane.
- 2.4.20 Thorpe on the Hill is to the north-east of the northern part of the Principal Site. It is a small-scale village, comprising primarily residential land use and a few farms on the edge of the village. The Church of St Michael and All Angels is located centrally within the village.
- 2.4.21 Whisby Nature Park is a large area of lakes and waterbodies relating to former mineral extraction across the northern part of the Study Area.
- 2.4.22 The south-west part of North Hykeham is within the northern part of the Study Area. It extends from Lincoln, adjacent to the A1434, which converges with the A46 at the south-west edge of North Hykeham. The character is defined by extensive residential land uses, with employment land uses at the south-western edge of the settlement.
- 2.4.23 Aubourn is located across the flat and low-lying plains of the River Witham and is a small-scale settlement, centred around a one-way circular road. Aubourn is a small-scale residential area with two churches, including the Aubourn Clock Tower, which is a local landmark due to its position adjacent to the local road networks.
- 2.4.24 Haddington is broadly opposite Aubourn, on the western side of the River Witham and also situated across the low-lying plains of the River Witham. Haddington is a small hamlet with residential and farm buildings concentrated around the junction of Butts Lane and Dovecote Lane.
- 2.4.25 Witham St Hughs is to the west of the central part of the Principal Site. It is a medium scale settlement, with a high density of residential land uses across the central and eastern parts of the settlement, and with larger scale employment land uses across the northern and western parts of Witham St Hughs. There is also a concentration of new residential development on the

northern edge of the village. To the west of these land uses is the disused RAF Swinderby airfield.

- 2.4.26 Thurlby is a very small-scale residential area to the south-east of Witham St Hughs, concentrated around the junctions of Moor Lane and Bassingham Road.
- 2.4.27 Bassingham is located across the low-lying plains of the River Witham, to the south of Thurlby, with the river forming the western edge of the village. Bassingham is a medium scale settlement with a dense pattern of residential properties clustered between the local roads.
- 2.4.28 Carlton-le-Moorland is to the south of Bassingham and is a small-scale nucleated residential settlement with farm outbuildings.
- 2.4.29 Norton Disney is located to the south of the central part of the Principal Site, across low lying plain of the River Witham. Norton Disney is a small-scale, linear settlement adjacent to Main Street and Butt Lane. To the south of the village is a large gravel pit.
- 2.4.30 To the south-east of the Study Area, the settlement pattern is mainly small-scale farms across the plains of the River Brant, and therefore far more sparse in comparison to the plains bordering the Principal Site. The main concentration of settlements is distributed along Lincoln Cliff, via Coleby, Boothby Graffoe and Navenby.
- 2.4.31 Coleby is a small-scale, nucleated settlement with primarily residential land uses and a notable historic character via Coleby Hall Registered Park and Garden across the northern part of Coleby.
- 2.4.32 Boothby Graffoe is to the south of Coleby and is a small-scale, linear settlement adjacent to Main Street and Far End. The residential pattern has a strong historic character due to the local vernacular and Boothby Graffoe Hall.
- 2.4.33 Navenby is to the south of Boothby Graffoe and is a medium scale town, with a historic core and contemporary development extending to the west and east of the A607. It includes residential and commercial uses, such that there is more of suburban character to Navenby.

Infrastructure

- 2.4.34 The A46 is a dual carriageway which crosses the northern part of the Study Area in a straight alignment. It has tall lighting columns along the central reserve. The other main roads are the A607, which broadly follows the alignment of the crest of the Lincoln Cliff and the A15 in the eastern part of the Study Area.
- 2.4.35 There is a railway line across the northern part of the Study Area, extending along the valley floor between Eagle Hall Wood and Tunman Wood, as well as across Whisby Nature Park.
- 2.4.36 Overhead pylons extend between Thorpe on the Hill and Whisby Nature Reserve to the south-west edge of North Hykeham. The pylons then extend

south-east, across the River Witham, to the east of Aubourn and Malborough, to cross the River Brant. From the River Brant the pylons extend across the dipslope, between Coleby and Boothby Graffoe, to cross Navenby Heath in the eastern part of the Study Area. These pylons are a detracting feature in the landscape, due to their form, height and overhead cables.

Public Rights of Way (PRoW) and Other Public Access

- 2.4.37 With reference to the online mapping and **Figure 10-1: LVIA Study Area [EN010154/APP/6.2]**, PRoW extend across the northern part of the Study Area, between Swinderby and Morton, as well as around Thorpe on the Hill and across Whisby Nature Park. There are several informal paths across Tunman Wood.
- 2.4.38 There are several routes across North Hykeham and the plains of the River Witham, including bordering Aubourn and Bassingham. To the east of the Principal Site, there is limited public access across the fens overall, with no routes adjacent to the River Brant.
- 2.4.39 Routes across the southern part of the Study Area are mainly located to the south of Norton Disney and Carlton-le-Moorland.
- 2.4.40 To the west of the Principal Site, the PRoW are concentrated to the north and south of Witham St Hughs, with the majority of the landscape across the western part of the Study Area not publicly accessible.
- 2.4.41 The main concentration of PRoW in the east of the Study Area are across the Lincoln Cliff, including Viking Way Long Distance Route. These routes connect the settlements located on the cliff.
- 2.4.42 There are a few PRoW between the River Brant and the foot of Lincoln Cliff, but most of the land to the north-east and east of the Cable Corridor is not publicly accessible. There are several PRoW to the south-east of Navenby, extending to Temple High Grange Farm.

Designations

- 2.4.43 With reference to **Figure 10-3: Designations Relevant to LVIA [EN010154/APP/6.2]**, the Principal Site Study Area is not covered by any statutory landscape designations. Land between the dismantled railway and crest of the Lincoln Cliff is an AGLV.
- 2.4.44 Ancient woodland within the Study Area includes Housham Wood, Tunman Wood, Eagle Wood and Norton Big Wood, which are located in the northern and western parts of the Study Area.
- 2.4.45 With reference to **Chapter 7: Cultural Heritage [EN010154/APP/6.1]**, there are numerous listed buildings across Swinderby, Morton and Thorpe on the Hill north of the Principal Site. There is a listed building at Housham Wood Farm, adjacent to Housham Wood.
- 2.4.46 In relation to the central part of the Study Area, there are also numerous listed buildings across Aubourn, Haddington, Thurlby, Bassingham, Norton Disney

and Carlton-le-Moorland. Hall Close is a scheduled monument to the south of Haddington and Bassingham Conservation Area covers the central and south-western parts of the village.

- 2.4.47 In the south-east there are Conservation Areas within Coleby, Boothby Graffoe and Navenby, containing several listed buildings. Somerton Castle Scheduled Monument is to the south of the Cable Corridor, situated between the River Brant and the dismantled railway line. Coleby Hall is a Grade II Registered Park and Garden located at the northern edge of Coleby.
- 2.4.48 With reference to **Chapter 8: Ecology and Nature Conservation [EN010154/APP/6.1]**, Whisby Nature Park is a Local Nature Reserve and Local Wildlife Site (LWS). The River Witham is also a LWS, along with parts of Norton Big Wood, to the west of the central part of the Principal Site.

Character of the Night Sky

- 2.4.49 With reference to the extract of the online mapping presented in **Plate 1**, the northern parts of the Study Area are areas of brighter night skies, (illustrated via the green, yellow and orange hatching). This is mainly due to the A46 and North Hykeham.
- 2.4.50 Surrounding the Principal Site, there are several areas of bright skies (illustrated via the light pink hatching), including at Morton Hall Prison and Witham St Hughs, due to the residential land uses. There are also localised areas of brighter lighting at Bassingham and Carlton-le-Moorland (via the yellow and green hatching).
- 2.4.51 The character of the night sky is darker between the River Witham and River Brant, due to the mainly arable land use, illustrated via the light and dark blue hatches.
- 2.4.52 The Study Area between the valley of River Witham and Bassingham Lane is illustrated as not lit (via the light and darker blue hatch) except the settlements including Aubourn, Bassingham and Carlton-le-Moor, where the sky remains brighter (illustrated via the green and yellow hatch).
- 2.4.53 The south-east of the Study Area is illustrated as an area of darker night skies (via the light and darker blue hatch), except for the settlements of Coleby, Navenby and Barn Farm south of Church Lane, where the sky is brighter (illustrated via the green and yellow hatch).

Tranquillity

- 2.4.54 With reference to the CPRE's tranquillity on-line mapping (Ref 3), the level of tranquillity is reduced in proximity to the A46, the railway line in the northern part of the Study Area and the settlements. The level of tranquillity in the south-east of the Study Area is also reduced along the Lincoln Cliff, due to the concentration of the settlements and the A607.
- 2.4.55 In comparison, the remaining part of the Study Area is illustrated as higher levels of tranquillity.

3. Published Landscape Character Assessments

3.1 Overview

- 3.1.1 This section summarises the relevant published landscape character assessments which cover the Study Area at the national, regional, county and district level. In each case, the key characteristics which are relevant to the Study Area are included, along with relevant stated guidelines for the management of future change. These published studies have also been used to inform the identification of more detailed Local Landscape Character Areas described in Section 4.

3.2 National Character Areas

- 3.2.1 National Character Areas (NCA) have been defined and described by Natural England. These are broad scale character areas with stated key characteristics and Statements of Environmental Opportunity (SEO) to guide future landscape management and which have informed the Proposed Development design.

National Character Area Profile 47: Southern Lincolnshire Edge, 2024 (NCA 47)

- 3.2.2 With reference to **Figure 10-4a: National Landscape Character Areas [EN010154/APP/6.2]**, NCA 47 (Ref 4) covers the eastern part of the Study Area, including land between the A15 and the foot of the dipslope.
- 3.2.3 NCA 47 is a large geographic area, extending between the south-east of Lincoln and the east of Grantham, covering 570 km². The published study describes the NCA 47 as an area of:

“clear character defined by the dramatic limestone cliff to the west and the dipslope that drops gently away to the edge of the fens in the east. It shares the cliff and the dipslope, and many landscape characteristics, with the Northern Lincolnshire Edge. It is an open landscape with far-reaching views over the Trent and Belvoir Vales and up to Lincoln Cathedral. On the free-draining higher ground, landcover is primarily arable, in large geometric fields divided by limestone walls, with few trees or woodland. On the wetter, heavier clay soils to the east and south-west, pasture is more prevalent; hedgerows are the predominant boundary and the landscape has a more intimate, enclosed feel, with more trees, woodland and parkland.”

- 3.2.4 The relevant key characteristics of the NCA 47 are:

“Elevated arable escarpment with a distinct cliff running north–south along the western boundary, providing far-reaching views over the Trent and Belvoir Vales NCA;

Productive loamy soils on the limestone plateau, giving rise to a large-scale open landscape of arable cultivation with large, regular fields and few boundaries of tightly cut hedgerows or rubble limestone walls;

Semi-natural habitats in small, isolated fragments, with pockets of woodland on clay soils, fen at the foot of the dipslope and flower rich limestone grassland, particularly along road verges;

Sparse settlement on higher land, with springline villages along the foot of the cliff, parklands and country estates such as Rauceby and Belton on lower ground, and larger settlements – including Sleaford, Ruskington and Metherringham – to the east of the dipslope;

Long, straight roads and tracks, often with wide verges, including Ermine Street, which follows the route of a key Roman north–south route; and

Vernacular architecture and walling, especially in villages, of local warm-coloured limestone with dark brown pantiles.”

3.2.5 The relevant SEO are:

“SEO 3: Ensure that new development is planned and executed to preserve a sense of place, sense of history, tranquillity and biodiversity, while minimising water use and avoiding exacerbation of flooding and habitat fragmentation; and

SEO 4: Enhance the provision for access and recreation while maintaining the tranquillity of undisturbed areas and providing educational opportunities and interpretation.”

National Character Area Profile 48: Trent and Belvoir Vales, 2014 (NCA 48)

3.2.6 With reference to **Figure 10-4a: National Landscape Character Areas [EN010154/APP/6.2]**, NCA 48 (Ref 5) covers the central and western parts of the Study Area.

3.2.7 NCA 48 is a large geographic area, extending south-west of Lincoln to Nottingham and covering 1776 km². The published study describes the NCA 48 as an area characterised by:

“by undulating, strongly rural and predominantly arable farmland, centred on the River Trent. A low-lying rural landscape with relatively little woodland cover, the NCA offers long, open views...”

3.2.8 The relevant stated key characteristics of NCA 48 are:

“Agriculture is the dominant land use, with most farmland being used for growing cereals, oilseeds and other arable crops. While much pasture has been converted to arable use over the years, grazing is still significant in places, such as along the Trent and around settlements;

A regular pattern of medium to large fields enclosed by hawthorn hedgerows, and ditches in low-lying areas, dominates the landscape;

Extraction of sand and gravel deposits continues within the Trent flood plain and the area to the west of Lincoln. Many former sites of extraction have been flooded, introducing new waterbodies and new wetland habitats to the landscape;

Extensive use of red bricks and pantiles in the 19th century has contributed to the consistent character of traditional architecture within villages and farmsteads across the area. Stone hewn from harder courses within the mudstones, along with stone from neighbouring areas, also feature as building materials, especially in the churches; and

A predominantly rural and sparsely settled area with small villages and dispersed farms linked by quiet lanes, contrasting with the busy market towns of Newark and Grantham, the cities of Nottingham and Lincoln, the major roads connecting them and the cross-country dual carriageways of the A1 and A46.”

3.2.9 The following SEO are relevant:

“SEO 2: Enhance the woodland and hedgerow network through the planting of small woodlands, tree belts, hedgerow trees and new hedgerows to benefit landscape character, habitat connectivity and a range of ecosystem services, including the regulation of soil erosion, water quality and flow;

SEO 3: Enhance the rivers and their flood plains for their ecological, historical and recreational importance, their contribution to biodiversity, soil quality, water availability and in regulating water flow and the important role they play in underpinning the character of the area; and

SEO 4: Maintain and enhance the character of this gently undulating, rural landscape. Promote and carefully manage the many distinctive elements that contribute to the overarching sense of place and history of the Trent and Belvoir Vales.”

3.3 Regional Published Landscape Character Assessments

The East Midlands Regional Landscape Character Assessment, 2010

- 3.3.1 The East Midlands Regional Landscape Character Assessment (Ref 6) identifies Landscape Character Groups (LCG) and Types (LCTs).

LCG 4: Lowland Vales (LCG4)

- 3.3.2 With reference to **Figure 10-4b: East Midlands Regional Landscape Character Areas [EN010154/APP/6.2]**, LCG 4 covers the eastern and central parts of the Study Area.

LCT4a: Unwooded Vales (LCT4a)

- 3.3.3 With reference to **Figure 10-4b: East Midlands Regional Landscape Character Areas [EN010154/APP/6.2]**, LCT 4a covers the western and central parts of the Study Area. LCT 4a is described by the published study as:

“generally characterised by productive mixed agriculture, set within an enclosed landscape of low, well maintained hedgerows. Wide areas are under permanent pasture, often grazed by dairy herds...Rivers and streams are also an important landscape feature... The vast majority of the Vales retain a deeply rural and tranquil character, with farms and small nucleated villages located throughout areas of productive farmland, linked by narrow winding lanes and roads. Despite low levels of woodland cover, local landform, hedgerows and shelter belts create visual containment and give the Vales landscape an intimate character. By contrast, panoramic views are possible from elevated locations albeit contained by rising land at the edges of the Vales.”

- 3.3.4 The relevant stated key characteristics are:

“Extensive, low lying rural landscape underlain by Triassic and Jurassic mudstones and clays and widespread superficial deposits;

Expansive long distance and panoramic views from higher ground at the margin of the vales gives a sense of visual containment;

Low hills and ridges gain visual prominence in an otherwise gently undulating landscape;

Complex drainage patterns of watercourses that flow within shallow undulations often flanked by pasture and riparian habitats;

Limited woodland cover; shelter belts and hedgerow trees gain greater visual significance and habitat value as a result;

Productive arable and pastoral farmland, with evidence of increasing reversion to arable cropping in recent times;

Regular pattern of medium sized fields enclosed by low and generally well maintained hedgerows and ditches in low lying areas; large modern fieldscapes evident in areas of arable reversion; and

Sparsely settled with small villages and dispersed farms linked by quiet rural lanes.”

- 3.3.5 There are no specific development guidelines in the East Midlands Regional Landscape Character Assessment in relation to renewable energy. However, in relation to ‘built development’, tree planting is noted as being able to help integrate new development into the landscape. In relation to ‘forestry and woodland’, stated guidelines include new tree planting to help integrate development.

3.3.6 In relation to 'agriculture and land management' the guidelines are:

"The aim should be to protect existing rural landscape features, whilst encouraging positive management of those features lost or under threat. In particular, the restoration of hedgerows should be given priority where there is evidence of decline. The creation of new hedgerows and permanent pasture along watercourses should also be a priority, enhancing the visibility of streams and dykes, whilst increasing the occurrence of semi-natural habitats."

LCT 4b: Wooded Vales (LCT 4b)

3.3.7 With reference to **Figure 10-4b: East Midlands Regional Landscape Character Areas [EN010154/APP/6.2]**, LCT 4b: Wooded Vales covers the south-western part of the Study Area.

3.3.8 LCT 4b is described by the published study as:

"The Wooded Vales generally has a strong sense of place, with major landform features flanking the lower lying areas creating broad scale visual containment. High levels of woodland cover are in evidence when compared to the Unwooded Vales and add to local distinctiveness and provide a coherent and recognisable character and strong identity."

3.3.9 The relevant stated key characteristics of LCT 4b are:

"Gently undulating landform formed over soft mudstone and clay geology, sharing many characteristics with the wider Unwooded Vales Landscape Character Type;

Deposits of superficial geology, particularly cover sands and till influences local land use and semi-natural habitat cover;

Low hills and ridges gain visual prominence; elevated landform fringing vales give broad sense of containment;

Numerous watercourses flow within shallow undulations often flanked by pasture and riparian habitat;

Relatively high levels of woodland cover, with notable tracts of ancient semi-natural woodland along outer fringes of parishes and large coniferous plantations;

Productive arable and pastoral farmland, with evidence of increasing reversion to arable cropping;

Irregular shaped assorted fields marked by belts of trees and tall hedgerows, juxtaposed with regular pattern of medium sized fields associated with enclosure of land, with low and generally well maintained hedgerows and ditches in low lying areas; and

Open, modern fieldscapes created by hedgerow removal in areas of arable reversion."

LCG 6: Limestone Farmlands (LCG6)

- 3.3.10 With reference to **Figure 10-4b: East Midlands Regional Landscape Character Areas [EN010154/APP/6.2]**, LCG 6 covers the eastern part of the Study Area.

LCT6a: Limestone Scarps and Dipslopes (LCT6a)

- 3.3.11 With reference to **Figure 10-4b: East Midlands Regional Landscape Character Areas [EN010154/APP/6.2]**, LCT 6a covers the eastern part of the Study Area, between the A15 and the foot of the dipslope.

- 3.3.12 LCT 6a is described by the published study as:

“large scale arable land uses and the character of many of the stone built villages along the lower scarp slopes... The escarpment, known locally as the Lincolnshire Edge or Cliff, rises above the Trent Vale and forms a prominent and distinctive landscape feature and backdrop to views eastwards from the neighbouring vale.”

- 3.3.13 The relevant stated relevant key characteristics of LCT 6a are:

*“Limestone escarpment and dip-slope with strong north south alignment;
Diverse patterns of land use and regular spring line settlements along scarp in contrast to the more open and exposed dipslope;*

Limestone villages retain strong historic character, and provide strong link to the nature of the underlying geology;

Ermine Street forms a significant feature of the landscape, and continues to dictate landscape patterns and boundaries;

Place names and some indicator species are reminders of once widespread heathland; and

Evidence of declining landscape condition across intensively farmed areas.”

- 3.3.14 In respect of ‘built development’, guidelines for shaping the future landscape include protecting the character of the countryside and consider the visual impact of any new development, with the aim of protecting key views and vistas and ensuring view lines are maintained.

- 3.3.15 In respect of ‘infrastructure’, the stated aims for future management include:

“to protect the character of the landscape by siting infrastructure away from visually prominent locations and ensuring installations are of an appropriate size and scale. Increased sharing of masts and sites between operators should also be considered, along with removal of redundant masts.”

- 3.3.16 In respect of ‘energy provision’, the guidelines are:

“The aim should be to protect the character of the landscape by appropriately siting and designing new wind energy installations. There is potential for strategic regional and sub regional level guidance on

commercial wind energy schemes, including cumulative impact, informed by the EMRLCA and other studies. In addition, planning guidance should be produced at the county and/or district level where necessary, establishing the most appropriate sites for development and setting out the criteria against which new applications will be assessed.”

- 3.3.17 In respect of ‘agriculture and land management’ the stated guidelines are:

“The aim should be to protect existing landscape features, whilst encouraging positive management of those features lost or under threat. The restoration of hedgerows and stone walls should be given priority, creating a stronger field pattern and helping to integrate new development into the landscape. The priority should also be to protect the mosaic and diversity of land use, seeking opportunities to restore grassland and areas of pasture.

- 3.3.18 In respect of ‘forestry and woodland’, the stated guidelines are:

“The aim should be to plan for new woodlands, ensuring new planting schemes take full advantage of opportunities to enhance the scarp slope, integrate new development into the landscape, and contain future growth. The aim should also be to manage existing trees and woodland, encouraging new planting to ensure a varied structure, whilst removing invasive species.”

3.4 District Landscape Character Assessments

North Kesteven District Landscape Character Assessment, 2007

LCT: Trent & Witham Vales

- 3.4.1 With reference to **Figure 10-4c: North Kesteven District Landscape Character Areas [EN010154/APP/6.2]**, LCT: Trent and Witham Vales covers an extensive area of land in the western part of the Study Area, extending to the south-west of Lincoln.

Sub-area 2: Terrace Sandlands (sub-area 2)

- 3.4.2 With reference to **Figure 10-4c: North Kesteven District Landscape Character Sub-Areas [EN010154/APP/6.2]**, sub-area 2 Terrace Sandlands covers the western part of the Study Area.

- 3.4.3 The relevant stated key characteristics are:

“Gentle, subtle undulations in topography, dominance of woodland blocks and hedgerow trees, large and less managed hedgerows;

A noticeable ridge of sand and gravel deposits circles the farmland south of Norton Disney Hall, which highlights the geological contrast with the River Witham vale to the east and the Trent vale to the west, and partially defines the character area boundary;

Woodland, both broadleaved and conifer plantation is a dominant feature of the landscape and plays a key role in defining landscape character. Its presence greatly influences the length of views and sense of openness or enclosure. Vistas open out and close up dependent on the position of the woodland blocks in the landscape;

Sandy deposit geology gives rise to pine and gorse dominated roadsides, and sand and gravel extraction has some impact upon the landscape. Land reclamation post extraction has created a large expanse of open water with significant wildlife benefits, and a prominent but possibly incongruous landscape feature locally;

Avenues of trees occasionally line minor roads, increasing the intimacy and detail of the area;

Settlement is scattered and road patterns are similarly winding and irregular, in contrast to the more regular and spinal network seen in the Witham and Brant Vales;

The estate village of Doddington dominates the northern section of this area, with its stunning Elizabethan Hall and parkland central to this estate village;

The presence of the MOD firing range at Beckingham has mixed influence on the landscape; and

A lack of arable farming in this pocket of the character area creates subtle and soft layering of grassy pasture, straggly and irregular boundary hedges and post and wire fencing."

3.4.4 The published study notes:

"The Terrace Sandlands sub-area continually changes in openness and enclosure, heightened by the distinctive changes in direction when travelling along the roads within this sub-area. The woodland blocks throughout the sub-area often prevent any wide open views, but then breaks within woodland blocks regularly increase the depth of view."

3.4.5 The relevant stated opportunities for enhancement within sub-area 2 are mainly focused on residential development but are:

"Further development along the A46 corridor should have regard to the more sensitive landscapes within the areas to the north and south of this major transport route, looking to blend design with the built and landscape character of the Terrace Sandlands;

There is the opportunity for new housing and also smaller scale non-residential development to pay much greater regard to the need to reflect the character of the older villages to the north and south of the A46 within the Terrace Sandlands;

Care needs to be taken to ensure that the landscape character remains linked to the north and south, with common themes retained on each side of the road. There is also opportunity for more woodland planting in the vicinity of this corridor, to reduce the impact of the road and replicate the more enclosed and wooded nature of the landscape to the north and

south. This would be beneficial in reducing the severing nature of the road, whilst ensuring that its obvious straight form as a historic Roman road is retained;

This sub-area has benefited from a noticeable amount of roadside planting, and some of these individual trees are starting to contribute to its character, replicating the mature avenues seen alongside the minor roads. This enhancement is very much in keeping with the sub-area, and should continue to ensure that the roadside trees as valued features within the sub-area present a good range of age and size, as to ensure the continuation of this important element of the sub-area."

Sub-area 4: Lincoln Fringe (sub-area 4)

- 3.4.6 With reference to **Figure 10-4c: North Kesteven District Landscape Character Sub-Areas [EN010154/APP/6.2]**, Sub-area 4 Lincoln Fringe covers land in the north-west part of the Study Area.

- 3.4.7 The relevant stated key characteristics of sub-area 4 are:

"Developed urban areas on Lincoln City's periphery, but which fall with North Kesteven District Council;

Comprise of small areas heavily developed with little 'landscape' distinctiveness; and

Present context for urban-rural fringe uses and issues."

- 3.4.8 The published study notes of sub-area 4 that it is a:

"predominantly developed areas which lie in between the four key Green Wedges, and which together define the interface between urban and rural areas."

Sub-area 5: Witham & Brant Vales

- 3.4.9 With reference to **Figure 10-4c: North Kesteven District Landscape Character Sub-Areas [EN010154/APP/6.2]**, sub-area 5 Witham and Brant Vales covers the central part of the Study Area.

- 3.4.10 The relevant stated key characteristics of sub-area 5 are:

"Defined in the east by the base of the Lincoln Cliff scarp slope, to the south by the district boundary, the Terrace Sandlands to the west, and the southern outskirts of Lincoln City to the north.

Extensive low lying, generally flat valley of twin rivers Witham and Brant running from the south to north east of the sub-area.

Pronounced landform or topographical variation absent from the sub-area;

Twin, small rivers generally present a very subtle influence on their presence often only notable through riparian vegetation and flooded fields;

Across the sub-area tree cover is limited, but has a disproportionately high influence on the landscape as the level terrain allows hedgerow and

copse trees to foreshorten views across the vale, often allowing a strong band of tree and hedge between land and the large skies;

Settlement pattern is defined by attractive, small nucleated and sometimes linear villages of red brick and pantile construction to the central and western extent of the sub-area;

The impact of roads on the landscape is generally low once away from the A17 and A46. As across the Study Area elsewhere, overhead high and low voltage transmission lines can be prominent;

Pressures for change in the Vale predominately relate to minerals operations, intensive agricultural practice and associated development, and to flood alleviation works;

There is widespread evidence of historic field boundary loss, particularly in the east;

Landscape strengthening and enhancement is evident through boundary reinstatement and tree planting across the vale. Increased amounts of set-aside land are also visible within the central and western bands which help soften the landscape and have visibly enhanced biodiversity interest;

Development within and to the edge of the Vale's settlements has generally been delivered having sound regard to local vernacular design and has integrated well with the historic environment; and

New development to the south of North Hykeham is prominent within the flat landscape as the vale meets the city."

3.4.11 The published study notes that the sub-area is:

"a large landscape character sub-area defined primarily by its low, flat landscape of intensively farmed character in the north west of the district...; and

Key vistas from within and out of the character sub-area are limited by the foreshortening effects of field boundaries, small woodland coverts and watercourse levees on an otherwise low and level area. However, views up to the Lincoln Cliff, defining the eastern boundary, are extensive from much of the area, although the impression of elevation is not as pronounced from below as it is from on the Cliff itself."

3.4.12 Stated opportunities for enhancement are:

"Integrate relevant landscape character restoration objectives, such as field boundary strengthening into agri-environment schemes such as Farm Stewardship Proposed Developments. Seek planning gain opportunities through development proposals;

Biodiversity enhancements across these areas are evident and should be further developed in line with LBAP priorities; and

These enhancements serve to provide needed variety in the texture and colour of the vale in contrast to the monotone, intensively cropped and improved land."

LCT: Lincoln Cliff

- 3.4.13 With reference to **Figure 10-4c: North Kesteven District Landscape Character Sub-Areas [EN010154/APP/6.2]**, LCT Lincoln Cliff covers the dip slope which is orientated north to south across the landscape, to the north-east and south-east of Lincoln.

Sub-area 6: Lincoln Cliff

- 3.4.14 With reference to **Figure 10-4c: North Kesteven District Landscape Character Sub-Areas [EN010154/APP/6.2]**, sub-area 6: Lincoln Cliff, covers the dip slope in the eastern part of the Study Area.

- 3.4.15 The relevant stated key characteristics of sub-area 6 are:

“The Lincoln Cliff Scarp landscape sub-area follows the limestone escarpment running north-south. The escarpment continues beyond the North Kesteven district both to the north and south;

A dramatic topographical feature in the context of the wider district.

After the physical slope itself, it is the villages, the countryside between the villages, and the considerable and varied treescape that form the key characteristics of the Lincoln Cliff Scarp;

Villages along the scarp are generally located on its crest. Much of the building material is limestone, with some red brick. Large limestone walls curve around the network of winding village lanes and red pantiled roofs stand out against the yellow limestone;

Church towers and spires from the scarp villages are a prominent feature on the skyline along the slope;

Large mansion houses and halls are a striking and consistent feature along the ridge villages, taking advantage of extensive panoramic views over the Witham and Brant Vale;

The scarp itself is often intimate and enclosed in character, mainly influenced by the villages, tighter field pattern extending in linear bands up the slope, boundary integrity and significant tree cover;

The landscape has variety in texture and colour, with the patches of broadleaved woodland playing a major role in the colour variations, alongside glimpses of the yellow limestone of the scarp villages;

Variations in scarp slope direction affords greater visual interest in the form and lines of the landscape, particularly at Wellingore’s ‘buttress’.

The ‘double cliff’ at Leadenham is an important characteristic at the southern end of the landscape, where the escarpment splits and presents a flat intermediate area of land between a lower and upper slope. Whereas many of the ridge line villages sit high on the slope, Leadenham village nestles on the flat terrace between the lower and upper slopes at this point. The upper slope is not clearly apparent from the lower vale, and similarly the lower slope is hidden when this double feature is viewed from the plateau above; and

The northern end of the Lincoln Cliff Scarp varies in character, and represents a contrast to many of the features of the slope generally. Here the slope is a mixture of arable and pasture fields, more open in nature with a considerable reduction in tree cover."

3.4.16 The published study notes of the sub-area that:

"the sub-area is one of the most obviously distinctive within North Kesteven, consisting of the more-or-less unbroken slope or 'cliff' between the lower vale and higher plateau. It is defined by its topographical characteristics and its transitional qualities...; and

Views both towards the cliff and in particular, views out over the vale from the cliff, are of considerable scale. The views from the cliff present possibly the most important vistas within the district. When travelling from the plateau in the west, the treescape and gently convex ridge obscures the view of the lower vale until emerging from the trees and beyond the crest itself. The view then opens up dramatically to reveal the expanse of the low vale."

3.4.17 Stated opportunities for enhancement within sub-area area 6 are:

"Long term planning for the continuation of the trees framing the area's villages is necessary. Ensuring that a continued and mixed age structure prevails in the woodlands by favourable management, and similarly ensuring a continued line of planted village trees, or specimen trees such as cedar, to replace the older ones as they are lost, is an important management and enhancement objective for this sub-area;

Leylandii type hedging should be avoided and where possible removed. But other nonnative species such as cedar, encouraged where appropriate and closely related to the villages themselves;

The retention of this area of considerable landscape importance as a Green Wedge, allowing protection against the pressure from suburban expansion to meet housing demand, should remain a core element of future spatial planning policy;

The addition of prominent telecommunication infrastructure across the Lincoln Cliff is a further pressure that is likely to erode the special character of this sub-area and therefore requires specific and firm policy protection in spatial plans to ensure insensitive development can be resisted in order to protect landscape quality. Careful consideration should be afforded to measures such as 'sky-lining', mast sharing and positioning of infrastructure on existing buildings rather than new masts; and

Distinctive hedgerow patterns should be restored and gaps filled in wherever possible."

LCT: Central Plateau

3.4.18 With reference to **Figure 10-4c: North Kesteven District Landscape Character Sub-Areas [EN010154/APP/6.2]**, LCT: Central Plateau covers a

large tract of more elevated and undulating land to the east and south-east of LCT: Lincoln Cliff.

Sub-area 7: Limestone Heath

3.4.19 With reference to **Figure 10-4c: North Kesteven District Landscape Character Sub-Areas [EN010154/APP/6.2]**, sub-area 7: Limestone Heath covers the eastern part of the Study Area between the top of dipslope and east of the A15.

3.4.20 The relevant stated key characteristics of sub-area 7 are:

"This is a large landscape character sub-area situated in the centre of the District between the ridge of the Lincoln Cliff and the Central Clays and Gravels to the east;

Its position on the upper reaches of the cliff's dipslope gives it a feeling of relative elevation and exposure;

It is predominantly an empty, open landscape with wide views to the skyline in all directions;

The landform is a gently undulating plateau which dips gently towards the east;

Generally the whole area is dry, with no obvious surface drainage as a consequence of the underlying limestone geology;

Scattered woodland copses pepper the whole of the sub-area, which although relatively small are prominent features because of the openness of the landscape;

Roadside hedgerows are often found with mature trees within;

Limestone dry stone walls are apparent along roadside and some field boundaries, but are generally in poor condition;

Fields are very large and rectilinear. Field boundaries are often absent, broken or delineated by a strip of rough grass or remnant hedgerow or wall;

The soil colour is a striking reddish brown colour with visually prominent stone content giving it a rough texture;

Intensive arable agriculture dominates land use with wheat and root crop common;

The central plateau area is generally unsettled except for isolated farmsteads and occasional ribbon development along the A15. Larger settlements are situated on the edge of the sub-area characterised by having historic cores with limestone buildings but often surrounded by significant levels of 20th Century development;

Utility Infrastructure, which although sparse, makes an impact on the landscape including prominent pylons and the main A15 running north to south;

RAF installations have made a significant impact on the landscape sub-area with several large bases and training centres;

Mineral working is a feature of the sub-area with several large limestone quarries;

Pressures for change on the Plateau predominately relate to minerals operations, decline of field boundaries, particularly walls, and intensive agricultural practices; and

Opportunities for landscape strengthening and enhancement mainly lie in field boundary reinstatement, particularly of dry stone walls and for more appropriately designed development on the outskirts of settlements.”

3.4.21 The published notes of the sub-area that it is:

“a large landscape character sub-area situated in the centre of the District, characterised by its elevation and openness and large intensively farmed fields.”

3.4.22 The stated opportunities for enhancement within sub-area 7 are:

“Replacement hedgerow planting where these have been lost or degraded;

Reinstatement and repair of the dry stone walls; and

The visual impact of pylons is difficult to counteract at the present time but long-term under-grounding solutions should be investigated in partnership with the electricity distribution companies and National Grid Company.”

3.5 Other Studies

The Historic Character of The County of Lincolnshire, 2011

3.5.1 The Historic Character of The County of Lincolnshire, 2011 (Ref 8) categorises and characterises the landscape of the county with specific reference to its development over time.

3.5.2 The Trent Valley covers the western and central parts of the Study Area, extending to the foot of the dipslope. The study notes:

“The fieldscapes in the area comprise a balanced mix of field types. Close to the historic settlements at the edge of the area, there is some survival of ancient enclosures of the former open field systems. Survival of ancient enclosure is more prevalent north of Lincoln, apart from an extensive area in the vicinity of Haddington and Aubourn. There is also a strong survival of planned enclosure landscapes across the character area, and the modern fields, produced through a process of consolidation in the twentieth century, retain much of the rectilinear character of the underlying planned enclosures. Most of the modern

fields and planned enclosures have a strong east to west orientation, evident from the long boundaries that have survived the process of consolidation...; and

Legibility of the medieval landscape is evident in the survival of the linear settlement pattern and long east-west orientated field and parish boundaries. Some ridge and furrow, visible as extant earthworks and as crop marks on aerial photographs, is present within the ancient enclosures near to settlements.”

- 3.5.3 The Southern Cliff is defined as an area extending to the south of Lincoln and covers the eastern part of the Study Area. The study notes:

“There is a distinctive line of settlements traceable along the Cliff from Lincoln southwards to Grantham. This line appears to follow the curvilinear course of the Cliff, but is not limited to the top of it. It may be that the settlements were established along a spring-line, as can be found at the edge of the Wolds...; and

The rural landscape of the area is today one of mixed farming, with a high proportion of surviving parliamentary planned enclosure to be found throughout. The northern part of the area is largely arable, with large rectilinear fields laid out on the top of the Cliff. The fields here are typically large, with unmaintained hedges that in places have grown into rows of trees.”

Green Infrastructure Study for Central Lincolnshire, 2011

- 3.5.4 The following strategic green corridors, green access links and green infrastructure zones are within the Study Area (Ref 9):
- Strategic Green Corridor 4: Upper Witham Green Corridor;
 - Strategic Green Access Link: Upper Witham Link;
 - Green Infrastructure Zone 23 Southwest Lincoln Fringe Unwooded Vale;
 - Green Infrastructure Zone 24 Stapleford Wooded Vales;
 - Green Infrastructure Zone 25 Wellingore Limestone Heath; and
 - Green Infrastructure Zone 26 Brant Broughton Unwooded Vale.

4. Local Landscape Character Areas

4.1 Overview

- 4.1.1 To provide a finer scale of assessment to the published studies, including in relation to several of the settlements within the Study Area, 16 Local Landscape Character Areas (LLCAs) have been identified.

4.2 LLCA 01: Terrace Sandlands

4.2.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 01 is located within the north-west part of the Study Area. LLCA 01 extends northwards from the A46, across Swinderby, to cover low lying land adjacent to the railway line, including large scale waterbodies in areas of sand and gravel pits and Whisby Nature Park in the northern part of the Study Area. LLCA 01 is within:

- a. Natural England's NCA 48: Trent and Belvoir Vales;
- b. East Midlands Regional Landscape Character Assessment LCT4a: Unwood Vales;
- c. North Kesteven District Landscape Character Assessment sub area 2: Terrace Sandlands; and
- d. Green Infrastructure Zone 23 Southwest Lincoln Fringe Unwooded Vale of Green Infrastructure Study for Central Lincolnshire.

4.2.2 The key characteristics of LLCA 01 are:

- a. Gently falling and undulating landform between 20m AOD and 10m AOD across most of LLCA 01, with localised areas of more elevated land across the northern parts of LLCA 01, between Eagle Hall Wood and the southern edge of Eagle;
- b. Mostly arable land use characterised by generally small to medium scale fields between the A46 and Morton Lane. These fields are separated by hedgerows, often with established trees, with the arable land use resulting in a generally open character;
- c. There are several active quarries in the northern part of LLCA 01, between Morton Lane, Thorpe Lane and Station Road, resulting in a heavily altered and damaged pattern of landform;
- d. These quarries are bordered by large scale waterbodies, as former sand and gravel pits, particularly across Whisby Nature Park. There is a more wooded character to Whisby Nature Park, resulting in a more enclosed character;
- e. Eagle Hall Wood, in the northern part of LLCA 01 is designated as ancient woodland, and along with several smaller woodland blocks which extend southwards towards the railway line reflects the historic landscape pattern;
- f. The railway line crosses from south-west to north-east across LLCA 01, locally reducing the sense of tranquillity and remoteness, as well as forming a physical divide in the field patterns. Other infrastructure within LLCA 01 includes pylons which cross the sand and gravel pits, as well as part of Whisby Nature Park;
- g. There are two listed buildings within the area;
- h. There is a recreational value via several PRoW across LLCA 01, mainly linking the villages. These routes also extend across Whisby Nature Park

which is a visitor attraction, with an ecological value and an increased sense of wildness;

- i. There are localised, small-scale settlements within LLCA 01. Swinderby is at the western edge of LLCA 01 and is characterised by a small-scale clustered settlement pattern adjacent to the High Street. Properties are mostly two stories in height, with more valued building materials of stone, or light red brick, dark clay roof tiles and sash windows. There is a high degree of vegetation covering adjacent to the eastern edge of the village, with the setting to the village formed by adjacent arable fields. The southern edge of Eagle is within the northern part of LLCA 01, consisting of contemporary bungalows and two storey residential properties adjacent to the High Street. There is well established vegetation bordering the southern edge of Eagle, with the fields adjacent to the Swinderby Road forming the immediate setting of the village;
- j. In the eastern part of the LLCA 01 there is a greater perception of residential and commercial land uses from within the adjacent LLCA 05, as well as the recreational land uses within the LLCA of Lincoln Golf Centre and Thorpe Park holiday cottages; and
- k. LLCA 01 is generally an area of darker skies, due to the arable land use and limited and localised settlement pattern, which are areas of localised brighter night skies. There is an increase in the overall brightness towards the north-east edge of the LLCA due to the influence of adjacent land uses in LLCA 05.

4.3 LLCA 02: Morton

4.3.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 02 is located within the north-western part of the Study Area, covering a ribbon pattern of individual and intermittent residential properties and farms adjacent to the local road networks and the larger scale Morton Hall Prison.

4.3.2 LLCA 02 is within:

- a. Natural England's NCA 48: Trent and Belvoir Vales;
- b. East Midlands Regional Landscape Character Assessment LCT 4a: Unwooded Vales;
- c. North Kesteven District Landscape Character Assessment sub-area Terrace Sandlands; and
- d. Green Infrastructure Zone 23 Southwest Lincoln Fringe Unwooded Vale of Green Infrastructure Study for Central Lincolnshire.

4.3.3 The key characteristics of LLCA 02:

- a. An area of generally flat landform, situated at around 15m AOD, with the field pattern crossed by numerous drainage ditches. There are several ponds, within the grounds of Morton House and Morton Manor, as well as to the east of Morton Hall Prison;

- b. A dispersed arrangement of individual residential properties adjacent to the local road networks, including Morton Road and Green Lane. These roads are bordered by smaller scale fields which are mainly geometric in form. In combination with the straight alignment of the road networks, there is a perceived ordered and engineered character to the LLCA;
- c. Extensive belts of trees and small woodland blocks adjacent to Morton Road and Green Lane relating to forming a physical and visual screen to the Morton Hall Prison. This vegetation results in a high degree of enclosure from the road network;
- d. The character and perception of the LLCA is heavily influenced by Morton Hall Prison. This is a former prison and a formal arrangement of buildings set within amenity grounds and bordered by buildings and high security fences, in contrast to the more rural character of the wider LLCA;
- e. Recreational value via several PRoW extending eastwards from Green Lane to Morton Manor, Morton Grange and The Avenue (a route between the A46 and Eagle Barnsdale);
- f. Several of the properties within the LLCA are listed buildings; and
- g. The character of the night sky is influenced by Morton Hall Prison, resulting in a localised brighter night sky than in comparison to the remainder of the LLCA.

4.4 LLCA 03: Tunman Hill

4.4.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 03 is located within the northern part of Study Area, covering land mainly to the north of the A46, along with land adjacent to Stone Lane, to the south of the A46. LLCA 03 is characterised by undulating land across a valley side, which is mainly arable land with several intermittent farms.

4.4.2 LLCA 03 is within:

- a. Natural England's NCA 48: Trent and Belvoir Vales;
- b. East Midlands Regional Landscape Character Assessment LCT 4A: Unwooded Vales;
- c. North Kesteven District Landscape Character Assessment sub-area 2: Terrace Sandlands; and
- d. Green Infrastructure Zone 23 Southwest Lincoln Fringe Unwooded Vale of Green Infrastructure Study for Central Lincolnshire.

4.4.3 The key characteristics of LLCA 03 are:

- a. Undulating landform due to forming part of a localised valley side, with relatively elevated land in the north-west part of the LLCA, at around 31m AOD, which falls eastwards to the valley floor at the eastern edge of the LLCA, at around 15m AOD and southwards, to the southern edge of the LLCA at around 20m AOD;

- b. Predominant agricultural land use and scattered farmsteads create a rural character, except for in proximity to the A46 and Fosse Way, where the road networks and associated infrastructure, including lighting columns reduce the sense of rurality. The Cathedral View holiday park is on the north side of the A46, consisting of a dense arrangement of single storey dwellings;
- c. Small to medium scale fields are defined by hedgerows interspersed by hedgerow trees and woodland blocks, which reflect the historic landscape pattern. There are established tree belts parallel to the A46 and the Main Road, which crosses over the A46 in the eastern part of the LLCA;
- d. Tunman Wood and Housham Wood, in the northern part of the LLCA are ancient woodlands;
- e. There is a recreational value, although the PRoW are concentrated in the northern part of the LLCA. Many of the route terminate at field boundaries, with no connectivity with or roads or lanes. There are numerous informal routes across Tunman Wood. There is also a pedestrian path along the southern side of the A46;
- f. There is long distance intervisibility with Lincoln Cathedral and Lincoln Cliff (the dipslope in the eastern part of the Study Area) from more open areas of the LLCA. This is in contrast to the wooded parts of the LLCA, where there is a higher degree of enclosure;
- g. The A46 dual carriageway extends from west to east across the LLCA, forming a physical divide in the landscape pattern. The alignment of the A46 varies between being at the junction with Fosse Lane, to being on a very shallow embankment at the western edge of the LLCA;
- h. Tall engineered features in the LLCA are a communication mast adjacent to the A46 and tall lighting columns along the central reservation of the A46;
- i. There is increased sense of tranquillity and remoteness across the north-west part of the LLCA, due to the arable land use, woodlands and undulating landform, in contrast to no sense of tranquillity or remoteness in proximity to the A46; and
- j. The arable land use results in darker skies across the northern part of the LLCA, with bright skies in proximity to the A46 due to the road lighting and vehicles.

4.5 LLCA 04: Thorpe on the Hill

4.5.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 04 is located within the northern part of the Study Area, covering the village and its immediate setting.

4.5.2 LLCA 04 is within:

- a. Natural England's National Character Assessment NCA 48: Trent and Belvoir Vales;

- b. East Midlands Regional Landscape Character Assessment LCT 4a: Unwooded Vales;
- c. North Kesteven District Landscape Character Assessment sub-area 2: Terrace Sandlands; and
- d. Green Infrastructure Zone 23 Southwest Lincoln Fringe Unwooded Vale of Green Infrastructure Study for Central Lincolnshire.

4.5.3 The key characteristics of LLCA 04 are:

- a. Localised elevated and rising landform between the 15m AOD and 25m AOD contours;
- b. Small scale, nucleated village of Thorpe on the Hill, concentrated across the more elevated landform;
- c. Primarily residential land use with educational land uses in the northern part of the village and several farm buildings bordering the village;
- d. Residential land uses in the eastern and western parts of the village include contemporary development, reflecting the pattern of two storey properties across the remainder of the village;
- e. There are several listed buildings, with the Church of St Michael and All Angels located in the southern part of the village, at the junction of Main Street and Main Road;
- f. Recreational value via several PRow which extend from the village across the surrounding fields;
- g. Detracting features of pylons in LLCA 01, and the A46 and the tall communications mast in the LLCA 03 can be perceived from within the LLCA;
- h. Small-scale geometric fields border the village and form its immediate setting. The fields are divided by established hedgerows with trees. There is also established residential garden vegetation within the LLCA, as well as mature trees within the Church of St Michael and All Angels churchyard;
- i. Brighter skies at night resulting from the residential land uses and local road networks; and
- j. Lower tranquillity and limited sense of remoteness due to the residential land use and perception of development and infrastructure within the wider Study Area.

4.6 LLCA 05: North Hykeham Urban Fringe

4.6.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 05 is located within the north-western part of the Study Area, covering the south-western part of North Hykeham.

4.6.2 The LLCA is within:

- a. Natural England's NCA 48: Trent and Belvoir Vales;

- b. East Midlands Regional Landscape Character Assessment LCT4A: Unwooded Vales;
- c. North Kesteven District Landscape Character Assessment sub-area Lincoln Fringe; and
- d. Green Infrastructure Zone 18 South Lincoln Urban Area of Green Infrastructure Study for Central Lincolnshire.

4.6.3 The key characteristics of LLCA 05 are:

- a. An urban character due to the A1434 and A46 interchange, high density of residential land uses and large-scale employment land uses and overhead pylons;
- b. Recreational value via PRoW across the LLCA;
- c. No tranquillity or remoteness due to the land uses; and
- d. An area of bright skies at night resulting due to lighting from residential areas, the A1434 and A46.

4.7 LLCA 06: Northern Plain of the River Witham

4.7.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 06 is located within the north-west part of the Study Area, covering land between the River Witham and the A46.

4.7.2 LLCA 06 is within:

- a. Natural England's NCA 48;
- b. East Midlands Regional Landscape Character Assessment LCT 4A: Unwooded Vales;
- c. North Kesteven District Landscape Character Assessment sub-area 2: Terrace Sandland (covering the northern part of the LLCA) and sub-area 5: Witham & Brant Vales (covering the remainder of the LLCA); and
- d. Green Infrastructure Zone 23 Southwest Lincoln Fringe Unwooded Vale of Green Infrastructure Study for Central Lincolnshire.

4.7.3 The key characteristics of LLCA 06 are:

- a. Generally low lying and open landscape, situated at around 10m AOD, with the landform falling very gradually southwards towards the River Witham, at around 8m AOD. There is very localised elevation at Beacon Hill, in the centre of the LLCA, situated around 20m AOD. The number of drainage ditches in proximity to the River;
- b. Arable land use characterised by medium to large scale fields which are geometric in form and divided by hedgerows and drainage ditches. There are localised areas of small-scale woodlands, including at South Hykeham Grange and adjacent to the River Witham. There is grass airfield in the northern part of the LLCA, to the west of South Hykeham;

- c. Several farmsteads, along with a small concentration of commercial buildings at the junction of Main Road and the A46. There is also a wind turbine in this part of the LLCA;
- d. Several listed buildings;
- e. Recreational value via PRoW to the south of the A46 and between the River Witham and South Hykeham;
- f. Overhead pylons cross the northern part of the LLC, which in combination with the perception of the A46 limit the tranquillity; tranquillity is higher in the southern part of the LLCA, in proximity to the River Witham;
- g. Arable land use results in darker night skies, although lighting trespass from the A46 and development to the north of the LLCA, within LLCA 05; and
- h. Functional value via the plains.

4.8 LLCA 07: Aubourn

- 4.8.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 07 is located within the central north-west part of the Study Area, covering the village of Aubourn and its immediate setting.
- 4.8.2 LLCA 07 is characterised by a small-scale linear village, situated to the south of the River Witham, and at around 10m AOD.
- 4.8.3 LLCA 07 is within:
 - a. Natural England's NCA 48: Trent and Belvoir Vales;
 - b. East Midlands Regional Landscape Character Assessment LCT 4a: Unwood Vales;
 - c. North Kesteven District Landscape Character Assessment sub-area 5: Witham & Brant Vales; and
 - d. Green Infrastructure Zone 23 Southwest Lincoln Fringe Unwooded Vale of Green Infrastructure Study for Central Lincolnshire.
- 4.8.4 The key characteristics of LLCA 07 are:
 - a. Small scale settlement pattern in the plains of the River Witham;
 - b. Two storey and single storey residential properties. There is a greater density of properties in the western part of the LLCA, in comparison to the eastern part of the LLCA, where the density is lower, particularly in proximity to the Church of St Peter;
 - c. Several commercial and farm buildings interspersed within the residential settlement pattern, with a second church (also St. Peter's) in the south-west part of the LLCA, at the junction of Church Road and Bridge Road. This is also the Aubourn Clock Tower and is a local landmark, due to its height, angled pitch roof across the spire and location at the junction of the local roads;

- d. Recreational value via PRoW extending across the northern and southern parts of the LLCA;
- e. A number of listed buildings;
- f. Residential land uses result in brighter night skies; and
- g. High amounts of vehicles observed during the fieldwork which reduces the sense of tranquillity and there is no sense of remoteness due to the land use.

4.9 LLCA 08: Thurlby Fenland

- 4.9.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 08 is located within central part of the Study Area and covers low lying and generally flat arable and fen land from the west of the River Witham to bordering the River Brant. The small-scale village of Thurlby is also within the LLCA.
- 4.9.2 LLCA 08 is a generally flat and low lying area, situated around 10m AOD, extending to the west and east of the River Witham. There is very localised more elevated landform at the western edge of the LLCA (adjacent to LLCA 10) at around 15m AOD. The main land use is arable, interspersed with small woodland blocks and farms. Thurlby is a small-scale village, located on the western bank of the River Witham.
- 4.9.3 LLCA 08 is within:
 - a. Natural England's NCA 48: Trent and Belvoir Vales;
 - b. East Midlands Regional Landscape Character Assessment LCT 4a: Wooded Vales;
 - c. North Kesteven District Landscape Character Assessment sub-area 2: Terrace Sandlands (covering the western edge of the LLCA) and sub-area 5: Witham & Brant Vales; and
 - d. Green Infrastructure Zone 23 Southwest Lincoln Fringe Unwooded Vale of Green Infrastructure Study for Central Lincolnshire.
- 4.9.4 The key characteristics of LLCA 08 are:
 - a. Flat, low lying area dissected by a network of dykes and ditches, highly representative of a fen landscape;
 - b. Primary arable land use, which gives an evident sense of a rural character;
 - c. Medium to small scale fields are bound by frequent small woodlands and hedgerows that create an enclosed and an intimate character across the eastern part of the LLCA, aided by the underlying flat landform;
 - d. In contrast, the more limited extent of vegetation and areas of slightly more elevated landform across the western part of the LLCA reduces the sense of enclosure and results in a greater sense of openness;

- e. Thurlby is a small linear village, concentrated around several of farmsteads, with the Church of St Germain in the northern part of the LLCA;
- f. There are listed buildings and a scheduled monument west of Haddington;
- g. There is a recreational value via PRoW, with several routes across the plains of the River Witham or between Aubourn and Malborough;
- h. Overhead pylons cross the eastern part of the LLCA and locally reduce the perceived rurality and sense of remoteness;
- i. There are long distance views of Lincoln Cliff (the dipslope in the eastern part of the Study Area); and
- j. An area of darker skies due to the land use, with localised brighter skies at Thurlby.

4.10 LLCA 09: Witham St Hughs

4.10.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 09 is located within the western part the Study Area, covering the town of Witham St Hughs and the disused airfield, to the south of the A46.

4.10.2 The eastern part of the LLCA 09 is situated across very gently undulating landform, which rises from 13m AOD up to around 15m AOD along Camp Road, before falling across the modified landform of the disused airfield. A dense layout of mainly two storey residential properties extend across the central and eastern parts of Witham St Hughs, with commercial land use across the northern and western parts of the town, including large scale warehouses.

4.10.3 LLCA 09 is within:

- a. Natural England's NCA 48: Trent and Belvoir Vales;
- b. East Midlands Regional Landscape Character Assessment LCT 4a: Unwooded Vales;
- c. North Kesteven District Landscape Character Assessment sub-area 2: Terrace Sandlands; and
- d. Green Infrastructure Zone 23 Southwest Lincoln Fringe Unwooded Vale of Green Infrastructure Study for Central Lincolnshire.

4.10.4 The key characteristics of LLCA 09 are:

- a. Witham St Hughs is a mixed use medium settlement of residential and employment, along with a disused airfield, located south of the A46 and with development under construction across the northern part of the LLCA, adjacent to the A46;
- b. Witham St Hughs is situated across very gently undulating landform, with small to medium scale arable fields forming the immediate setting to the south of the town;

- c. The eastern part of the disused RAF Swinderby airfield appears in varying condition via areas of excavated land, potentially for future development. There is also on-going quarrying and mineral extraction in the western part of the airfield, at Swinderby Quarry;
- d. No sense of remoteness due to the land use, which similarly substantially lowers any sense of tranquillity;
- e. Recreational value via PRoW in the southern part of the LLCA, between residential land uses and Moor Lane; and
- f. An area of brighter night skies due to the developed land uses and proximity to the A46.

4.11 LLCA 10: Norton Disney Sandlands

- 4.11.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 10 is located within the south-western part of the Study Area, covering woodlands, lakes, quarries, the village of Norton Disney and northern part of the village of Stapleford.
- 4.11.2 LLCA 10 is located across sloping and undulating landform, which is relatively elevated at around 30m AOD in the western part of the LLCA, falling towards the north-eastern and south-eastern edges at around 15m AOD. The central and northern parts of the LLCA are well vegetated via established woodlands, with the southern part of the LLCA being arable and residential, via Norton Disney.
- 4.11.3 LLCA 10 is within:
 - a. Natural England's NCA 48: Trent and Belvoir Vales;
 - b. East Midlands Regional Landscape Character Assessment LCT 4a: Unwooded Vales (covering the northern and southern edges of the LLCA) and 4b: Wooded Vales (covering the remainder of the LLCA);
 - c. North Kesteven District Landscape Character Assessment sub-area 2: Terrace Sandlands and sub-area 5: Witham & Brant Vales; and
 - d. Green Infrastructure Zone 24 Stapleford Wooded Vales of Green Infrastructure Study for Central Lincolnshire.
- 4.11.4 The key characteristics of LLCA 10 are:
 - a. Enclosed and elevated landform to the north and more open and low lying to the south;
 - b. Historic landscape pattern is heavily altered by mineral extraction;
 - c. Active mineral extraction at Norton Bottoms Quarry to the south of Norton Disney;
 - d. Extensive area of former mineral extraction pits, now filled with water to the north of Norton Disney;

- e. Dense vegetation surrounds the areas of former mineral extraction pits, including Norton Big Wood and Hawdins Wood which are ancient woodlands;
- f. There is a recreational value via campsites in the northern part of the LLCA, but a limited number of PRoW, mainly located to the south of Newark Road and Norton Disney;
- g. Numerous farmsteads interspersed across the woodlands and fields area;
- h. Norton Disney is a small-scale ribbon settlement, adjacent to Newark Road and Butt Lane. Stapleford is a small-scale hamlet, clustered around Main Street;
- i. There are several listed buildings;
- j. Higher sense of remoteness and tranquillity within the woodlands, which reduces across the northern and southern parts of the LLCA, due to the land uses; and
- k. The character of the night sky is darker across the central and southern parts of the LLCA, due to the woodlands and arable land use, whilst brighter in proximity to the A46 and Witham St Hughs, which is adjacent to the north-eastern edge of the LLCA.

4.12 LLCA 11: Bassingham

4.12.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 11 is located within the south-eastern part of the Study Area and covers the village of Bassingham. The western edge of the LLCA is defined by the River Witham.

4.12.2 LLCA 11 is characterised as a concentrated residential settlement pattern, with properties clustered between the local road networks or across the plains of the River Witham. Properties are mainly two storeys in height, with red brick facades. Contemporary development extends across the southern and northern parts of the LLCA, with the historic evolution of the LLCA centred around the plains of the River Witham and the church of St Michael and All Angels. There is a high degree of vegetation cover across the western part of the LLCA, including within the plains of the River Witham, whilst the eastern part of the LLCA is less well vegetated.

4.12.3 LLCA 11 is within:

- a. Natural England's NCA 48: Trent and Belvoir Vales;
- b. East Midlands Regional Landscape Character Assessment LCT 4a: Unwooded Vales;
- c. North Kesteven District Landscape Character Assessment sub-area 5: Witham & Brant Vales; and
- d. Green Infrastructure Zone 23 Southwest Lincoln Fringe Unwooded Vale of Green Infrastructure Study for Central Lincolnshire.

4.12.4 The key characteristics of LLCA 11 are:

- a. Medium scale settlement with a clustered pattern;
- b. Flat and low lying landform at around 10m AOD, within the plains of the River Witham;
- c. The River Witham defines the western edge of the village;
- d. Primary residential land use, characterised by mainly two storey properties;
- e. Well vegetated boundaries and vegetation cover across the western part of the LLCA, within the plains of the River Witham;
- f. Some listed buildings, focused within the Conservation Area, including the Church of St Michael and All Angels, which has a visual relationship with the opposite side of the river bank;
- g. Recreational value via PRoW within the LLCA and extending from the LLCA across or adjacent to the River Witham;
- h. Area of brighter skies at night due to residential sources of lighting; and
- i. Is an area of lower tranquillity and no remoteness due to land use.

4.13 LLCA 12: Bassingham Fenland

4.13.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 12 is located within the southern part of the Study Area, covering land to the south of LLCA 11: Bassingham, between the River Witham and River Brant.

4.13.2 LLCA 12 is characterised as a low lying area. The landform is very gently undulating, rising very gradually from the northern edge of the LLCA, at around 12m AOD, to a localised ridge at around 15m AOD in the southern part of the LLCA, to the north of Carlton-le-Moorland. The landform then falls eastwards, across the remainder of the LLCA, to around 10m AOD at the River Brant. The land use is agricultural, characterised by generally medium scale fields. Carlton-le-Moorland is the main settlement, characterised by a nucleated settlement pattern.

4.13.3 LLCA 12 is within:

- a. Natural England's NCA 48: Trent and Belvoir Vales;
- b. East Midlands Regional Landscape Character Assessment LCT 4a: Unwooded Vales;
- c. North Kesteven District Landscape Character Assessment sub-area 5: Witham & Brant Vales; and
- d. Green Infrastructure Zone 23 Southwest Lincoln Fringe Unwooded Vale of Green Infrastructure Study for Central Lincolnshire.

4.13.4 The key characteristics of LLCA 12 are:

- a. Generally flat, low lying area dissected by a network of dykes and ditches characteristic of fenland, with the River Witham and River Brant forming the eastern and western boundaries of the LLCA;
- b. A sparse character, due to the land use, representative of fenland;
- c. Individual farmsteads are located across the LLCA;
- d. Carlton-le-Moorland is a small, nucleated settlement in the southern part of the LLCA;
- e. Recreational value via PRow which are mainly located around Carlton-le-Moorland;
- f. Long distance views of Lincoln Cliff (the dipslope in the eastern part of the Study Area) from PRow and local roads;
- g. An area of darker night skies due to the rural land use, except for at Carlton-le-Moorland; and
- h. Higher levels of tranquillity and remoteness away from Carlton-le-Moorland, due to the rural land use and sparseness.

4.14 LLCA 13: Low Fields South

4.14.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 13 is located within the south-eastern part of the Study Area and covers land between the River Brant and the foot of the dipslope.

4.14.2 LLCA 13 is characterised by gently sloping landform, which rises from the River Brant, at around 10m AOD, in the western part of the LLCA, to around 40m AOD, at the eastern edge of the LCA. The land use is predominantly arable, with several large-scale barns, Somerton Castle and local lanes.

4.14.3 LLCA 13 is within:

- a. Natural England's NCA 48: Trent and Belvoir Vales;
- b. East Midlands Regional Landscape Character Assessment LCT 4a Unwooded Vales;
- c. North Kesteven District Landscape Character Assessment sub-area 5: Witham & Brant Vales; and
- d. Green Infrastructure Zone 26 Brant Broughton Unwooded Vale of Green Infrastructure Study for Central Lincolnshire.

4.14.4 The key characteristic of LLCA 13 are:

- a. Low lying landscape, partly within the eastern plains of the River Brant with the landform increasing in elevation towards the Lincoln Cliff (the dipslope) to the east;
- b. Open, large-scale fields dissected by a network of ditches;

- c. Shelterbelts, low hedgerows and riparian vegetation form field boundaries;
- d. There is evidence of historic field boundary loss, particularly in the east of the LLCA;
- e. Large scale agricultural buildings with tall buildings and silos;
- f. A network of straight lanes resulting in a geometric and engineered character to the landscape;
- g. Somerton Castle and outbuildings are a Grade I Listed building and Scheduled Monument;
- h. PRow across eastern part of the LLCA provide a recreational value;
- i. Overhead electrical pylons cross the northern part of the LLCA and there is a dismantled railway line along the eastern edge of the LLCA;
- j. Vegetation along the dismantled railway line is notable in comparison to the wider vegetation patterns due to its height and alignment;
- k. Darker character to the night skies due to the land use; and
- l. Higher tranquillity and increased sense of remoteness.

4.15 LLCA 14 Low Fields North

4.15.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 14 is located within the eastern part of the Study Area, covering land between the River Brant and the base of the dipslope.

4.15.2 LLCA 14 is characterised by generally medium scale fields, situated across low lying land, which rises very gradually, from around 10m AOD in the western part of the LLCA, to 20m AOD in the eastern part of the LLCA. There are several farms interspersed across the fields, but few lanes and roads.

4.15.3 LLCA 14 is within:

- a. Natural England's NCA 48: Trent and Belvoir Vales;
- b. East Midlands Regional Landscape Character Assessment LCT 4a: Unwooded Vales;
- c. North Kesteven District Landscape Character Assessment sub-area 5: Witham & Brant Vales; and
- d. Green Infrastructure Zone 23 Southwest Lincoln Fringe Unwooded Vale of Green Infrastructure Study for Central Lincolnshire.

4.15.4 The key characteristics of LLCA 14 are:

- a. Gently sloping land, from the low lying River Brant plains in the east to the foot of the dipslope in the east, at Lincoln Cliff;
- b. Open, agricultural land with a strong rural character;

- c. Shelterbelts, hedgerows and ditches with some riparian vegetation along them form field boundary vegetation. Brant Plantation is a narrow woodland adjacent to part of the River Brant;
- d. Small to medium scale fields with regular boundaries resulting in an ordered and engineered character;
- e. There is widespread evidence of historic field boundary loss, particularly in the east of the LLCA;
- f. A few scattered farmsteads and few roads or lanes;
- g. Recreational value via a route between Broughton Lane and the base of the dipslope;
- h. Overhead pylons cross the southern part of the LLCA;
- i. Darker night skies due to the land use; and
- j. Higher tranquillity and sense of remoteness.

4.16 LLCA 15: Lincoln Cliff

4.16.1 With reference to **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 15 is located in the eastern part of the Study Area, covering the dipslope.

4.16.2 LLCA 15 consists of rising landform, from around 25m AOD at the base of the dipslope to around 80m AOD at the top of the slope. The land use is mainly arable, along with the villages of Coleby, Boothby Graffoe and Navenby. The LLCA is an Area of Great Landscape Value as defined by the Central Lincolnshire Local Plan.

4.16.3 LLCA 15 is within:

- a. Natural England's NCA 47: The Southern Lincolnshire Edge;
- b. East Midlands Regional Landscape Character Assessment LCT 6a: Limestone Scarps and Dipslopes;
- c. Kesteven District Landscape Character Assessment sub-area 7: Lincoln Cliff; and
- d. Green Infrastructure Zone 25 Wellingore Limestone Heath of Green Infrastructure Study for Central Lincolnshire.

4.16.4 The key characteristics of LLCA 15 are:

- a. A notable limestone escarpment extending north-south across the eastern part of the Study Area, elevated in relation to the low lying land to the west;
- b. The land use beyond the settlements is predominantly arable and pasture;
- c. Small to medium scale fields separated by hedgerows;
- d. There are a number of historic settlements, including Coleby, Boothby Graffoe and Navenby;

- e. A large proportion of the buildings are listed and protected by conservation areas, with church spires and mansion houses as distinctive landscape features;
- f. Recreational value via PRow, including the Viking Way Long Distance Route which follows the top of the dipslope;
- g. Panoramic views westwards;
- h. Overhead pylons cross the LLCA, between Coleby and Boothby Graffoe;
- i. Skies are generally darker due to the rural land use, with brighter areas relating to the settlements; and
- j. An area of higher tranquillity away from the settlements.

4.17 LLCA 16: Limestone Heath

4.17.1 With reference **Figure 10-5: Local Landscape Character Areas [EN010154/APP/6.2]**, LLCA 16 is located within the eastern part of the Study Area, covering elevated land adjacent to the A607.

4.17.2 LLCA 16 is situated around 80m AOD, with the landform falling gradually eastwards from the A607 towards the A15. It is mainly rural land use, characterised by medium scale geometric fields.

4.17.3 LLCA 16 is within:

- a. Natural England's NCA 47: Southern Lincolnshire Edge;
- b. East Midlands Regional Landscape Character Assessment LCT 6a: Limestone Scarps and Dipslopes;
- c. Kesteven District Landscape Character Assessment sub-area 7: Limestone Heath; and
- d. Green Infrastructure Zone 25 Wellingore Limestone Heath of Green Infrastructure Study for Central Lincolnshire.

4.17.4 The key characteristics of LLCA 16 are:

- a. Open, elevated land, which gently falls eastwards from the A15;
- b. Rural landscape character is influenced by, A15, A607 and overhead pylons.
- c. Medium scale fields with straight boundaries marked in places by low hedgerows;
- d. Avenues of trees, mainly along the roads;
- e. Limited woodland cover;
- f. Prevalent scattered farmsteads;
- g. Listed buildings;
- h. Recreational value via PRow connecting Navenby and Temple High Grange Farm;

- i. Dark skies at night away from Navenby and Harmston; and
- j. Limited perception of tranquillity and remoteness due to varying land uses.

5. Summary of Landscape Receptors

- 5.1.1 From the above landscape baseline review, **Table 1** sets out the identified landscape receptors within the Study Area in relation to the published studies or fieldwork identification.
- 5.1.2 The landscape receptor's sensitivity set out in **Table 2** is derived from an assessment of landscape value and landscape susceptibility, which is set out in full for each landscape receptor in **Appendix 10-E: Landscape Assessment [EN010154/APP/6.3]**.

Table 1: Landscape Receptor Summary

National Area	Character	Regional Character Area	District Character Area	Local Landscape Character Area (LLCA)
NCA 47: Southern Lincolnshire Edge		LCG 6: Limestone Farmlands LCT 6a: Limestone Scarps and Dipslopes	LCT: Lincoln Cliff Sub-area 6. Lincoln Cliff LCT: Central Plateau Sub-area 7. Limestone Heath	LLCA 15: Lincoln Cliff LLCA 16: Limestone Heath
NCA 48: Trent and Belvoir Vales		LCG 4: Lowland Vales LCT 4a: Unwooded Vales LCT 4b: Wooded Vales	LCT: Trent & Witham Vales Sub-areas: 2. Terrace Sandlands	LLCA 01: Terrace Sandlands LLCA 02: Morton LLCA 03: Tunman Hill LLCA 04: Thorpe Hill LLCA 06: Northern Plain of the River Witham (northern part of the LLCA) LLCA 08 Thurlby Fenland (western part of the LLCA) LLCA 09: Witham St Hughs LLCA 10: Norton Disney Sandlands (covering the northern and central parts of the LLCA)
			Sub-area 4. Lincoln Fringe	LLCA 05: North Hykeham Urban Fringe
			Sub-area 5. Witham & Brant Vales	LLCA 06: Northern Plain of the River Witham (central and southern parts of the LLCA) LLCA 07: Aubourn LLCA 08: Thurlby Fenland LLCA 10: Norton Disney Sandlands (covering southern parts of the LLCA) LLCA 11: Bassingham LLCA 12: Bassingham Fen

National Area	Character	Regional Character	District Character Area	Local Landscape Character Area (LLCA)
				LLCA 13: Low Fields South LLCA 14: Low Fields North

Table 2: Landscape Receptor's Sensitivity

Landscape Receptor	Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The Principal Site	Medium	Medium	Medium
The Cable Corridor	High	High	High
National Landscape Character			
NCA 47: Southern Lincolnshire Edge	High	Medium	Medium-high
NCA 48: Trent and Belvoir Vales	Medium	Medium	Medium
LCG 4: Lowland Vales	Medium	Medium	Medium
LCT 4a: Unwooded Vales	Low	Medium	Low-medium
LCT 4b: Wooded Vales	Medium	Medium	Medium
LCG 6: Limestone Farmlands	High	High	High
LCT 6a: Limestone Scarps and Dipslopes	High	High	High
District Landscape Character			
LCT: Lincoln Cliff	High	High	High

Landscape Receptor	Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Sub-area 6. Lincoln Cliff	High	High	High
LCT: Central Plateau	Medium	Medium	Medium
Sub-area 7. Limestone Heath	Low	Medium	Low-medium
LCT: Trent & Witham Vales	Medium	Low	Low-medium
Sub-area: 2. Terrace Sandlands	Medium	Low	Low-medium
Sub-area 4. Lincoln Fringe	Low	Low	Low
Sub-area 5. Witham & Brant Vales	Medium	Medium	Medium
Local Landscape Character Areas (LLCA)			
LLCA 01: Terrace Sandlands	Medium	Low	Low-medium
LLCA 02: Morton	Low	Low	Low
LLCA 03: Tunman Hill	Medium	High	Medium-high
LLCA 04: Thorpe on the Hill	Medium	Medium	Medium
LLCA 05: North Hykeham Urban Fringe	Low	Low	Low
LLCA 06: Northern Plain of the River Witham	Low	Low	Low
LLCA 07: Aubourn	High	Medium	Medium-high
LLCA 08: Thurlby Fenland	High	Medium	Medium-high
LLCA 9: Witham St Hughs	Low	Low	Low
LLCA 10: Norton Disney Sandlands	Medium	High	Medium-high

Landscape Receptor	Landscape Value	Landscape Susceptibility	Landscape Sensitivity
LLCA 11: Bassingham	Medium	Medium	Medium
LLCA 12: Bassingham Fenlands	High	Medium	Medium-high
LLCA 13: Low Fields South	High	High	High
LLCA 14: Low Fields North	High	High	High
LLCA 15: Lincoln Cliff	High	High	High
LLCA 16: Limestone Heath	Medium	Low	Low-medium

6. References

- Ref 1 Landscape Institute and the Institute of Environmental Management and Assessment (2013). Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3).
- Ref 2 North Kesteven District Council (2023). Central Lincolnshire Local Plan. Available at: <https://www.n-kesteven.gov.uk/sites/default/files/2023-04/Local%20Plan%20for%20adoption%20Approved%20by%20Committee.pdf>
- Ref 3 Campaign for the Protection of Rural England, Light Pollution and Dark Skies. Available at: <https://www.nightblight.cpre.org.uk/maps/>
- Ref 4 Natural England, NCA 47. Available at: <https://nationalcharacterareas.co.uk/southern-lincolnshire-edge/>
- Ref 5 Natural England, NCA 48. Available at: <https://nationalcharacterareas.co.uk/trent-and-belvoir-vales/>
- Ref 6 Natural England, East Midlands Regional Landscape Character Assessment (naturalengland.org.uk)
- Ref 7 North Kesteven District Council (2023). Landscape Character Assessment. https://www.n-kesteven.gov.uk/sites/default/files/2023-01/north_kesteven_landscape_character_assessment_report.pdf
- Ref 8 English Heritage (2011) https://southeastlincslocalplan.org/media/24551/The-Historic-Character-of-the-County-of-Lincolnshire/pdf/The_Historic_Landscape_Characterisation_Project_for_Lincolnshire_Report_September_2011.pdf?m=1708810756297
- Ref 9 North Kesteven District Council (2011). Green Infrastructure Study for Central Lincolnshire.