

The Great Grid Upgrade

Grimsby to Walpole

Preliminary Environmental Information Report

Volume 3 Part B Section Specific Assessments

Sections 1 to 7

Chapter 7 Geology and Hydrogeology

Appendix 7B Minerals Safeguarding Report

June 2025

nationalgrid

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Grimsby to Walpole

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7B. Minerals Safeguarding Report

7B. Minerals Safeguarding Report

7B.1 Executive Summary

- 7B.1.1 This report forms part of the Preliminary Environmental Information (PEI) Report for the Grimsby to Walpole Project (the Project). This report forms an appendix to **PEI Report Volume 2 Part B Sections 1-7 Chapter 7 Geology and Hydrogeology** and identifies all safeguarded minerals within the draft Order Limits and provides an appraisal of the effects of the Project in the context of relevant mineral safeguarding policy. The Project lies within the jurisdiction of Lincolnshire County Council, Cambridgeshire County Council and Norfolk County Council.
- 7B.1.2 The British Geological Survey (BGS) online geological map indicates that the draft Order Limits of the Project is underlain by six different superficial deposits. The six superficial deposits are Devensian Till, Lacustrine deposits, Alluvium, Devensian Glaciofluvial Sheet/Sand and Gravel, Tidal Flat deposits and Peat. Only two of the superficial deposits are safeguarded by the Mineral Planning Authority (MPA), namely Alluvium and Glaciofluvial (Sand and Gravel).
- 7B.1.3 The BGS online geological map indicates that the bedrock geology underlying the draft Order Limits includes chalk, ironstone, sandstone, mudstone, (geological) clay and limestone. There are no surface or underground mineral excavations within 500 m of the draft Order Limits. The draft Order Limits only intersects a mineral safeguarding area once, to the west of Grimoldby (pylon GL84 to pylon GL86) where there is a mineral safeguarding area of oil extraction designated by Policy M11 Lincolnshire Minerals Local Plan (Ref 1).
- 7B.1.4 According to Lincolnshire County Council, any ironstone deposits in the county are not considered to have any future economic significance as a source of iron, given the decline of the steel industry in the UK and their low-grade quality. Whilst they could be worked as a source of building stone or low-quality aggregate, they are not considered to be of current or future economic importance.
- 7B.1.5 Sandstone is not a safeguarded mineral under Policy M11 Lincolnshire Minerals Local Plan (Ref 1).
- 7B.1.6 The assessment presented in this report shows that the safeguarded minerals are very unlikely to be worked, and consequently that the minerals have no potential economic value. The Project meets the requirement of the mineral safeguarding policies for each county.

7B.2 Introduction

- 7B.2.1 This report forms part of the PEI Report for the Grimsby to Walpole Project (the Project). As such, this is an ongoing assessment and is subject to change due to the ongoing design development of the Project. The report will be amended and updated at Environmental Statement (ES) stage to reflect any refinements to the design of the Project that may occur prior to the Development Consent Order (DCO) application.

- 7B.2.2 This report supports, and forms an appendix to, **PEI Report Volume 2 Part B Sections 1-7 Chapter 7 Geology and Hydrogeology** and should be read in conjunction with that chapter of the PEI Report. The provision of a standalone minerals safeguarding report is consistent with the approach detailed in the Grimsby to Walpole Scoping Report (Ref 2). The Scoping Opinion (Ref 3) noted that, if this approach was adopted, then any likely significant effects on mineral safeguarding should still be assessed within the ES. The outcomes of this report are therefore used to identify any such effects that require assessment.
- 7B.2.3 This report identifies all safeguarded minerals within the draft Order Limits and provides an appraisal of the effects of the Project against relevant minerals policy. The report follows the guidance from the Minerals Local Plan (MLP) for each county that the draft Order Limits enters. For the purpose of this report, the area under consideration is restricted to the draft Order Limits rather than any surrounding land (i.e. the 250 m/500 m Study Area described in **PEI Report Volume 2 Part B Sections 1-7 Chapter 7 Geology and Hydrogeology** is not applied) because the nature of the effects under consideration (sterilisation of safeguarded minerals) does not have the potential to extend to land outside the draft Order Limits.
- 7B.2.4 Mineral Safeguarding Areas are defined in the National Planning Policy Framework (2024) as *'an area designated by Minerals Planning Authorities which covers known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development'*. The Mineral Planning Authorities are Lincolnshire County Council, Cambridgeshire County Council and Norfolk County Council.

7B.3 Project Description

- 7B.3.1 A full description of the Project is provided in **PEI Report Volume 2 Part A Chapter 5 Project Description**. In summary, the Project includes around 140 km of new overhead electricity transmission line and up to six new substations (New Grimsby West Substation; New Lincolnshire Connection Substation A (LCS-A); New Lincolnshire Connection Substation B (LCS-B); New Weston Marsh Substation A, New Weston Marsh Substation B and New Walpole B Substation). The Project has been split into seven Sections within the PEI Report, which are as follows:
- i. Section 1 New Grimsby West Substation;
 - ii. Section 2 New Grimsby West to New Lincolnshire Connection Substation A;
 - iii. Section 3 New Lincolnshire Connection Substations A and B;
 - iv. Section 4 New Lincolnshire Connection Substation B to Refined Weston Marsh Substation Siting Zone;
 - v. Section 5 Refined Weston Marsh Substation Siting Zone;
 - vi. Section 6 Refine Weston Marsh Substation Siting Zone to New Walpole B Substation; and,
 - vii. Section 7 New Walpole B Substation.

7B.4 Geology

- 7B.4.1 Geologically, a distinction is made between “superficial deposits” and “solid geology”. Superficial deposits are generally unconsolidated deposits (such as sand and gravel) which are found at, or close to, the surface. The solid bedrock beneath the superficial deposits is called the “solid geology”.
- 7B.4.2 The superficial geology and solid geology for the Study Area are shown on the following figures:
- i. **PEI Report Volume 2 Part B Section 1 Figure 7.1 Superficial Geology;**
 - ii. **PEI Report Volume 2 Part B Section 1 Figure 7.2 Bedrock Geology;**
 - iii. **PEI Report Volume 2 Part B Section 2 Figure 7.2 Superficial Geology;**
 - iv. **PEI Report Volume 2 Part B Section 2 Figure 7.3 Bedrock Geology;**
 - v. **PEI Report Volume 2 Part B Section 3 Figure 7.1 Superficial Geology;**
 - vi. **PEI Report Volume 2 Part B Section 3 Figure 7.2 Bedrock Geology;**
 - vii. **PEI Report Volume 2 Part B Section 4 Figure 7.2 Superficial Geology;**
 - viii. **PEI Report Volume 2 Part B Section 4 Figure 7.3 Bedrock Geology;**
 - ix. **PEI Report Volume 2 Part B Section 5 Figure 7.1 Superficial Geology;**
 - x. **PEI Report Volume 2 Part B Section 5 Figure 7.2 Bedrock Geology;**
 - xi. **PEI Report Volume 2 Part B Section 6 Figure 7.1 Superficial Geology;**
 - xii. **PEI Report Volume 2 Part B Section 6 Figure 7.2 Bedrock Geology;**
 - xiii. **PEI Report Volume 2 Part B Section 7 Figure 7.1 Superficial Geology; and**
 - xiv. **PEI Report Volume 2 Part B Section 7 Figure 7.2 Bedrock Geology.**
- 7B.4.3 The draft Order Limits measures approximately 140 km in length and runs generally north to south following the shape of the eastern coastline of the United Kingdom, beginning south of Grimsby and ending to the north of Wisbech. The geology of the draft Order Limits can be summarised as being predominantly chalk in the north, then sandstones, mudstones and siltstones moving southwards, with variable superficial deposits present along the entire length of the draft Order Limits.
- 7B.4.4 The BGS online geological map indicates that the draft Order Limits are underlain by six different types of superficial deposits. The six superficial deposits are Devensian Till, Lacustrine deposits, Alluvium, Devensian Glaciofluvial Sheet/Sand and Gravel, Tidal Flat deposits and Peat. However, only two of the superficial deposits are safeguarded by the MPA, namely Alluvium and Devensian Glaciofluvial sheet (Sand and Gravel).
- 7B.4.5 The BGS online geological map indicates that the draft Order Limits of the Project is underlain by 12 different bedrock formations (described further in section 4.3 of this report). There are no surface or underground excavations within 500 m of the draft Order Limits. The draft Order Limits intersects a mineral safeguarding area for Oil extraction, designated by the Lincolnshire Mineral Local Plan, to the west of Grimoldby (pylon GL84 to pylon GL86).

Superficial Geology of Sections of the Draft Order Limits

Section 1

- 7B.4.6 The New Grimsby West Substation Section (Section 1) is underlain by Devensian Till, a small area of Lacustrine deposits to the west and two small areas of Glaciofluvial deposits to the south. Glaciofluvial deposits are safeguarded for their potential to contain commercially viable quantity of sand and gravel.

Section 2

- 7B.4.7 The New Grimsby West Substation to New Lincolnshire Connection Substation A Section (Section 2) is predominantly underlain by Till. There are Lacustrine and Glaciofluvial deposits near pylons GL7 and G8. There is an outcrop of Alluvium at pylon GL9 to the north east of Laceby. Alluvium is safeguarded for its potential to contain commercially viable quantities of sand and gravel. There is also a small outcrop of Peat near pylon GL9. Peat is not safeguarded. Underlying and near pylons GL18 and GL20 there are two outcrops of Alluvium north east of Glebe Farm Cottage. To the west of pylon GL28 there is an outcrop of Lacustrine deposits north of Brigsley. From pylons GL33 to GL36 there is Alluvium to the west of Bratton House Farm. From pylons GL45 to GL46 there are Tidal Flat deposits and Alluvium south of Holme Farm. North of pylon GL48 there is Alluvium to the west of Fulstow Top. From pylons GL59 to GL60 there is Alluvium west of Covenham St Mary. At pylon GL77 and towards pylon GL78, south of Alvingham, Alluvium is present. Between pylons GL97 and GL99 there is Alluvium present south of Little Carlton. From north of pylon GL110 to south of GL112 there are Glaciofluvial and Alluvium deposits to the south west of Withern.

Section 3

- 7B.4.8 The New Lincolnshire Connection Substations A and B Section (Section 3) is predominantly underlain by Till. From pylons LB6 to LB8 there are superficial deposits of Alluvium and Glaciofluvial deposits to the south west of Saleby. At pylon LB15 there are Tidal Flat deposits north west of Alford.

Section 4

- 7B.4.9 The New Lincolnshire Connection Substation B to Refined Weston Marsh Substation Siting Zone Section (Section 4) is predominantly underlain by Tidal Flat deposits, with smaller areas of Glacial Till. Peat is present between pylons LW78 and LW98.

Section 5

- 7B.4.10 The Refined Weston Marsh Substation Siting Zone Section (Section 5) is underlain entirely by Tidal Flat Deposits.

Section 6 and Section 7

- 7B.4.11 The Refined Weston Marsh Substation Siting Zone to New Walpole B Substation Section (Section 6) and the New Walpole B Substation Section (Section 7) are completely underlain by Tidal Flat Deposits.

Bedrock Geology of the Draft Order Limits

- 7B.4.12 The BGS online mapping indicates that the draft Order Limits are underlain by 12 different bedrock formations.

Section 1

- 7B.4.13 Section 1 is predominantly underlain by the Burnham Chalk Formation. This is described by the BGS as being white thinly bedded chalk with common tabular and discontinuous flint bands, and to contain sporadic marl seams. A small area in the north east is listed as being underlain by the Flamborough Chalk Formation, which is described by the BGS as being white, well-bedded, flint-free chalk with common marl seams (typically about one per metre), common stylolitic surfaces and pyrite nodules.

Section 2

- 7B.4.14 The draft Order Limits between pylons GL4 and GL53 is underlain by the Burnham Chalk Formation. From the west of Fulstow (GL53) to west of South Cockerington (GL80), the draft Order Limits is underlain by the Welton Chalk Formation which is described by the BGS as comprising marly, thin bedded, locally shell-rich chalk in the basal few metres, passing upwards into hard, massive, bedded chalk with sporadically developed, sometimes common, nodular flints and common, regularly developed marl seams. From pylon GL80 to west of Little Capton (pylon GL95), the draft Order Limits is underlain by the Ferriby Chalk Formation. This is described by the BGS as comprising grey, soft, marly, flint-free chalk, typically weathering buff in exposures. It locally includes pinkish bands, some harder gritty shell-debris-rich beds, and thin discrete marl seams. A small area of the draft Order Limits to the west of pylon G87 is underlain by the Ferriby Chalk Formation and Hunstanton Formation. The Ferriby Chalk Formation is described by the BGS as comprising grey, soft, marly, flint-free chalk, typically weathering buff in exposures; locally includes pinkish bands; some harder, gritty, shell-debris-rich beds, and thin discrete marl seams. The Hunstanton Formation is described by the BGS as rubbly to massive chalks with marl bands; typically pink to brick-red (due to disseminated haematite), but locally the upper part is grey due to secondary alteration of the iron minerals. The lower part of the formation is commonly weakly sandy. From pylon GL95 to GL112, south west of Withern, the draft Order Limits is again underlain by Welton Chalk Formation. The draft Order Limits is then again underlain by the Ferriby Chalk Formation from pylon GL112 to the end of the Section, west of Galley Hill Farm.

Section 3

- 7B.4.15 From the west of Saleby (pylon GL119) to west of pylon LB9, the draft Order Limits is underlain by the Ferriby Chalk Formation. From the south of Saleby (pylon LB9) to the east of Bilsby (pylon LW5) the draft Order Limits is underlain by the Welton Chalk Formation (see description above).

Section 4 and Section 5

- 7B.4.16 From the north east of Bilsby (pylon LW5) to the east of Farlesthorpe (pylon LW12), the draft Order Limits is underlain by the Welton Chalk Formation (see description above). From Farlesthorpe (pylon LW12) to east of Sloothby (LW25), the west of the draft Order Limits is underlain by the Ferriby Chalk Formation and the east of the draft Order Limits is underlain by the Welton Chalk Formation. From Sloothby (LW25)

to Ashington End (pylon LW33), the draft Order Limits is entirely underlain by the Ferriby Chalk Formation.

- 7B.4.17 From the vicinity of Ashington End (pylon LW33) to east of Willow Lodge (pylon LW39), the draft Order Limits is underlain by the Carstone Formation Sandstone, which is described by the BGS as comprising a greenish-brown (rusty when weathered), thick-bedded, cross-bedded, oolitic ferruginous sandstone. The formation is medium to coarse grained and pebbly in part, especially at the base where it becomes a conglomerate. Pebbles in the formation comprise quartz, quartzite, pyritised sandstone, ironstone, grey siltstone and rolled ammonites. Some beds are silty and/or contain clay wisps. Glauconite may be present in variable amounts.
- 7B.4.18 From the area of pylon LW39 to the south west of Burgh Le Marsh (pylon LW57), the draft Order Limits is predominantly underlain by the Claxby Ironstone Formation, Tealby Formation and Roach Formation (Undifferentiated) Interbedded Mudstone and Limestone, with some areas in the east underlain by the Carstone Formation. The Claxby Ironstone Formation is described by the BGS as comprising pale grey to dark brown, ferruginous oolitic, silty clay with varying concentrations of oolitic ironstone and pink or cream, calcareous, siltstone bands at some levels. Chert and quartz grit are found at some horizons. The Tealby Formation is described by the BGS as comprising brown and grey clays, ooidal and glauconitic in part, with a sandy limestone in the middle part of the formation. The Roach Formation is described by the BGS as comprising sandy, bioturbated, ooidal-mudstones and very fine-grained, very clayey, bioturbated, partly ooidal sands. Calcite-cemented ooidal ironstones occur locally.
- 7B.4.19 From the south west of Burgh Le Marsh (pylon LW57) to the south of Firsby (pylon LW62), the draft Order Limits is underlain by the Spilsby Sandstone Formation, which is described by the BGS as comprising coarse-grained, pebbly, glauconitic sands and sandstones with calcareous "doggers" and sporadic phosphatic nodules towards the top.
- 7B.4.20 From the south of Firsby (pylon LW62) to north of west of Frithville (pylon LW132) the draft Order Limits is underlain by the Kimmeridge Clay Formation, which is described by the BGS as comprising mudstones (calcareous or kerogen-rich or silty or sandy); thin siltstone and cementstone beds, and (locally) sands and silts.
- 7B.4.21 From the west of Frithville (pylon LW132) to the south west of Kirton End (pylon LW165), the draft Order Limits is underlain by the Ampthill Clay Formation, which comprises mudstone. The mudstone is described by the BGS as mainly smooth or slightly silty, pale to medium grey with argillaceous limestone (cementstone) nodules, and contains some rhythmic alternations of dark grey mudstone in the lower part. The topmost beds are typically pale grey marls with cementstone.
- 7B.4.22 From the south west of Kirton End (pylon LW165) to the west of Burtoft (pylon LW181), the draft Order Limits is underlain by the West Walton Formation, which is described by the BGS as comprising calcareous mudstone, silty mudstone and siltstone, with subordinate fine-grained sandstones and argillaceous limestone (cementstone) or siltstone nodules. Typically, it contains rhythmic alternations of dark grey, silty mudstone (rich in fine-grained shell and plant material) with pale grey mudstone, ooidal (and in some cases coralline) marls and limestones.
- 7B.4.23 From the west of Burtoft (pylon LW181) to the Refined Weston Marsh Substation Siting Zone, the draft Order Limits is underlain by the Oxford Clay Formation, which

is described by the BGS as comprising silicate-mudstone, grey, generally smooth to slightly silty, with sporadic beds of argillaceous limestone nodules.

Section 6 and Section 7

- 7B.4.24 From the Refined Weston Marsh Substation Siting Zone to the west of Weston (pylon SW6), the draft Order Limits is underlain by the Oxford Clay Formation (see description above). From the west of Weston (pylon SW7) to Grangehill Farm (pylon SW51), the draft Order Limits is underlain by the West Walton Formation (see description above).
- 7B.4.25 From the Grangehill Farm (pylon SW51) to the New Walpole B Substation, the draft Order Limits is underlain by the Ampthill Clay Formation, which comprises mudstone. The mudstone is mainly smooth or slightly silty, pale to medium grey with argillaceous limestone (cementstone) nodules, and contains some rhythmic alternations of dark grey mudstone in the lower part. The topmost beds are typically pale grey marls with cementstone.

7B.5 Mineral Planning Policy

National Policy

- 7B.5.1 The three relevant National Policy Statements (NPS) for the Project are the Overarching NPS for Energy (EN-1) (Ref 4), the NPS for Renewable Energy (EN-3) (Ref 5), and the NPS for Electricity Networks Infrastructure (Ref 6).
- 7B.5.2 Of these, only EN-1 states that applicants should ‘safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place’ (paragraph 5.11.19), and that ‘where a proposed development has an impact upon a Mineral Safeguarding Area (MSA), the Secretary of State should ensure that appropriate mitigation measures have been put in place to safeguard mineral resources’ (paragraph 5.11.28).
- 7B.5.3 Although the relevant NPS provide the primary policy against which the Project should be assessed, regional and local policy documents may also be considered important and relevant to decision-making.
- 7B.5.4 The National Planning Policy Framework (NPPF) contains content that is relevant to minerals, which is summarised below:
- i. Paragraph 222 notes that minerals are a finite resource and that best use needs to be made of them to ensure their long term conservation.
 - ii. Paragraph 223 states that ‘planning policies should:
 - provide for the extraction of mineral resources of local and national importance, but not identify new sites or extensions to existing sites for peat extraction;
 - so far as practicable, take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials, before considering extraction of primary materials, whilst aiming to source minerals supplies indigenously;

- *safeguard mineral resources by defining Mineral Safeguarding Areas and Mineral Consultation Areas; and adopt appropriate policies so that known locations of specific minerals resources of local and national importance are not sterilised by non-mineral development where this should be avoided (whilst not creating a presumption that the resources defined will be worked);*
 - *set out policies to encourage the prior extraction of minerals, where practical and environmentally feasible, if it is necessary for non-mineral development to take place;*
 - *safeguard existing, planned and potential sites for: the bulk transport, handling and processing of minerals; the manufacture of concrete and concrete products; and the handling, processing and distribution of substitute, recycled and secondary aggregate material;*
 - *set out criteria or requirements to ensure that permitted and proposed operations do not have unacceptable adverse impacts on the natural and historic environment or human health, taking into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality;*
 - *when developing noise limits, recognise that some noisy short-term activities, which may otherwise be regarded as unacceptable, are unavoidable to facilitate minerals extraction; and*
 - *ensure that worked land is reclaimed at the earliest opportunity, taking account of aviation safety, and that high quality restoration and aftercare of mineral sites takes place.'*
- iii. Paragraph 224 relates to the determination of applications, noting that '*great weight should be given to the benefits of mineral extraction*'.
 - iv. Paragraph 225 states that '*local planning authorities should not normally permit other development proposals in Mineral Safeguarding Areas if it might constrain potential future use for mineral working*'.
 - v. Paragraphs 226 and 227 explain that Minerals Planning Authorities should plan for steady and adequate supply of aggregates and industrial minerals.
 - vi. Paragraph 228 explains how Minerals Planning Authorities should plan for onshore oil, gas and coal exploration and extraction, noting the need to consider the three phases of development (exploration, appraisal and production) and site restoration.
 - vii. Paragraph: 002 Reference ID: 27-002-20140306 of Minerals Planning Practice Guidance (Ref 7) states that '*since minerals are a non-renewable resource, minerals safeguarding is the process of ensuring that non-minerals development does not needlessly prevent the future extraction of mineral resources, of local and national importance*'.

Local Policy

- 7B.5.5 In the terms of mineral planning, the Project lies within the responsibility of Lincolnshire County Council, Cambridgeshire County Council and Norfolk County Council. Due to the absence of any safeguarded minerals within the parts of the draft

Order Limits that fall within Norfolk County Council, local policy for Norfolk is not discussed.

- 7B.5.6 A copy of the mineral safeguarding policy for Lincolnshire is attached at Annex A and a copy of the mineral safeguarding policy for Cambridgeshire is attached at Annex B. Details and commentary on this policy are provided as follow.

Lincolnshire County Council Minerals Safeguarding Policy M11: Safeguarding of Mineral Resources

- 7B.5.7 Policy M11 of Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies (Ref 1) explains that sand and gravel, blown sand and limestone resources that are considered to be of current or future economic importance within the Minerals Safeguarding Areas shown in Annex A, together with potential sources of dimension stone for use in building and restoration projects connected to Lincoln Cathedral/Lincoln Castle within the areas shown in Annex A, and chalk resources included in Annex A, will be protected from permanent sterilisation by other development.
- 7B.5.8 Policy M11 states that: *'Applications for non-minerals development in a mineral safeguarding area must be accompanied by a Minerals Assessment. Planning permission will be granted for development within a Minerals Safeguarding Area if it would not sterilise mineral resources within the Mineral Safeguarding Areas or prevent future minerals extraction on neighbouring land. Where this is not the case, planning permission will be granted when:*
- viii. *the applicant can demonstrate to the Mineral Planning Authority that prior extraction of the mineral would be impracticable, and that the development could not reasonably be sited elsewhere; or the incompatible development is of a temporary nature and can be completed and the site restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed; or there is an overriding need for the development to meet local economic needs, and the development could not reasonably be sited elsewhere; or the development is of a minor nature which would have a negligible impact with respect to sterilising the mineral resource; or the development is, or forms part of, an allocation in the Development Plan'.*
- 7B.5.9 According to Lincolnshire County Council, any ironstone deposits in the county are not considered to have any future economic significance as a source of iron, given the decline of the steel industry in the UK and their low-grade quality. Whilst they could be worked as a source of building stone or low-quality aggregate, they are not considered to be of current or future economic importance.
- 7B.5.10 Sandstone is not a safeguarded mineral designated by the planning policies of Lincolnshire County Council Policy M11.

Policy M12: Safeguarding of Existing Mineral Sites and Associated Minerals Infrastructure

- 7B.5.11 Policy M12 of Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies (Ref 1) states that: *'Mineral sites (excluding dormant sites) and associated infrastructure that supports the supply of minerals in the County will be safeguarded against development that would unnecessarily sterilise the sites and infrastructure or prejudice or jeopardise their use by creating incompatible land uses nearby'.*

Cambridgeshire County Council: Policy 5 Mineral Safeguarding Areas (MSAs)

7B.5.12 Mineral Safeguarding Areas (MSAs) are identified on the Policies Map for mineral resources of local and/or national importance. Policy 5 of Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036 (Ref 8) specifies that: *'The Mineral Planning Authority must be consulted on all development proposals in these areas except:*

- ix. development that falls within a settlement boundary;*
- x. development which is consistent with an allocation in the Development Plan for the area;*
- xi. minor householder development within the immediate curtilage of an existing residential building;*
- xii. demolition or replacement of residential buildings;*
- xiii. temporary structures;*
- xiv. advertisements;*
- xv. listed building consent; and*
- xvi. works to trees or removal of hedgerows. Development within MSAs which is not covered by the above exceptions will only be permitted where it has been demonstrated that:*
- xvii. the mineral can be extracted where practicable prior to development taking place; or*
- xviii. the mineral concerned is demonstrated to not be of current or future value; or*
- xix. the development will not prejudice future extraction of the mineral; or*
- xx. there is an overriding need for the development (where prior extraction is not feasible)**.*

**a 'settlement boundary' is that which is defined on the relevant Policies Map for the area (e.g. a village envelope or urban area boundary). If no such boundary is identified on the Policies Map, it will constitute the edge of the built form of the settlement or, should an edge be defined in words (rather than map form) in a Local or Neighbourhood Plan, then that definition will be used for that local area. ** within (I), 'overriding need' will need to be judged in the planning balance when any planning application is assessed, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy. That judgement should also consider the cost of, and scope for, developing outside the MSA, or meeting the need for it in some other way. By 'not feasible' in (I), this could include viability reasons'.*

Commentary/additional information in relation to local policy

7B.5.13 A Mineral Safeguarding Area is not a proposed area of extraction and does not mean that proposals will be permitted within the area. The main purpose of the MSA is to protect a mineral resource for the long term for future generations. It should also be borne in mind that just because there may be no economic need for the minerals now that may not be the case in the future.

- 7B.5.14 The BGS publication 'Mineral safeguarding in England: good practice advice' (Ref 9) recommends that a good starting point for identifying MSAs is the BGS's mineral resources maps. It suggests that modifications to the resource extent are most likely to result from the provision of additional or more detailed geological information obtained through consultation. The BGS good practice advice states that MSAs that are not considered of any great national or regional importance and that occur extensively over the area of a MPA could be reduced in size.
- 7B.5.15 Lincolnshire County Council has concluded that deposits of sand and gravel, limestone and blown sand in Lincolnshire are of current or future economic importance.
- 7B.5.16 The County Council does not consider that chalk is an economically important mineral in Lincolnshire and that, given its widespread occurrence, it does not need to be safeguarded, with the exception of permitted chalk workings.
- 7B.5.17 Lincolnshire County Council does not propose to define MSAs for hydrocarbons as prospects can only be identified after extensive exploration activity. In any event, oil and gas deposits are found at much greater depths than other minerals exploited within the county and are therefore less threatened by surface development.

7B.6 Compliance with Adopted Safeguarding Policy

Superficial geology

- 7B.6.1 This section identifies each superficial deposit that is a safeguarded mineral resource and discusses how the Project complies with the adopted safeguarding policy.

Glaciofluvial (sand and gravel)

- 7B.6.2 One of the safeguarded minerals within the draft Order Limits is the Glaciofluvial deposits of sand and gravel. All of the deposits are less than 1 ha in size and the quantity of sand and gravel present in each of these deposits is considered too small to be commercially viable as a standalone mineral extraction site. Without the Project it would still be highly unlikely that within these areas the mineral resource would be worked.

Alluvium (sand and gravel)

- 7B.6.3 Alluvium is also a safeguarded mineral resource under the planning policies of the council districts and wider Lincolnshire Local Plan. The draft Order Limits is shown to be underlain by Alluvium in various locations along the planned route of overhead lines. Although Alluvium does contain sand and gravel, it also contains high quantities of silt and clays (contaminants) and therefore it is highly unlikely that the Alluvium would be worked as a commercial mineral.

Solid geology

- 7B.6.4 This section identifies each geological formation that is a safeguarded mineral resource and discusses how the Project complies with the adopted safeguarding policy. Approximately 95 per cent of the draft Order Limits is within Lincolnshire County Council.

Limestone

- 7B.6.5 Limestone is a safeguarded mineral under Policy M11. However, the only limestone recorded within the draft Order Limits is the Claxby Ironstone Formation, which includes limestone and mudstone (interbedded). As the unit is interbedded with mudstone (contaminant) it is highly unlikely that this stratum would ever be worked economically for aggregate. Therefore, the Project conforms to Policy M11 with respect to the safeguarding of limestone.

Oil

- 7B.6.6 Mineral planning policy M12 of the Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies (Ref 1) safeguards mineral workings. There are areas of safeguarded Oil workings that fall within the draft Order Limits to the west of Grimoldby (from pylon GL84 to pylon GL86), where there is a mineral safeguarding area designated by policies M12 and M11.
- 7B.6.7 Although the draft Order Limits intersects the mineral safeguarding area, it does not intersect the actual workings. As it is the workings that are safeguarded and not the mineral deposit itself (Oil), then it is considered that the Project is compatible with Policy M12.

7B.7 Conclusion

- 7B.7.1 The draft Order Limits predominantly lies within Lincolnshire County Council. The County has mineral safeguarding areas designated by Policy M11 and M12 (Annex A). The safeguarded areas for sand and gravel deposits do not intersect the draft Order Limits. The safeguarded areas for limestone do not intersect the draft Order Limits. The only safeguarded area within the draft Order Limits is an area of Oil extraction west of Grimoldby.
- 7B.7.2 Where the draft Order Limits intersects glaciofluvial sand and gravel deposits, it is highly unlikely that the minerals would ever be worked in these areas because they are small deposits, typically less than 1 ha in size. The draft Order Limits also intersects Alluvium in some cases. However, the high quantities of silt and clays (contaminants) typically associated with this material means that it is highly unlikely that the Alluvium would be worked as a commercial mineral (i.e. for the purpose of sand and gravel extraction).
- 7B.7.3 Mineral planning policy M12 of the Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies (Ref 1) safeguards mineral workings. The mineral planning policy shows areas of safeguarded Oil workings that fall within the draft Order Limits. Although the draft Order Limits intersects the associated mineral safeguarded area, it does not intersect the actual mineral workings. As it is the workings that are safeguarded and not the mineral deposit itself (in this case Oil), then it is considered that the Project is compatible with Policy M12.
- 7B.7.4 This Minerals Safeguarding Report supports the PEI Report for the Project. An updated Minerals Safeguarding Report will be provided at Environmental Statement (ES) stage to reflect any refinements to the design of the Project that may occur prior to the DCO application.

References

- Ref 1 Lincolnshire County Council, (2016). Lincolnshire Minerals and Waste Local Plan – Core Strategy and Development Management Policies [online]. Available at: <https://www.lincolnshire.gov.uk/directory-record/61697/minerals-and-waste-local-plan-core-strategy-and-development-management-policies> [Accessed 11 April 2025].
- Ref 2 Planning Inspectorate (2024) Grimsby to Walpole, Volume 1 – Environmental Impact Assessment Scoping Report. [online]. Available at: <https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN020036-000004-EN020036%20-%20Scoping%20Report%20Volume%201%20Main%20Report.pdf> [Accessed 14 March 2025].
- Ref 3 The Planning Inspectorate (2024). Scoping Opinion: Proposed Grimsby to Walpole Project [online]. Available at: <https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN020036-000109-Scoping%20Opinion%202017%20EIA%20Regs.pdf> [Accessed 13 March 2025].
- Ref 4 Department for Energy Security and Net Zero, (2023). Overarching National Policy Statement for Energy (EN-1) [online]. Available at: <https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1> [Accessed 12 March 2025].
- Ref 5 Department for Energy Security and Net Zero, (2023). National Policy Statement for Renewable Energy Infrastructure (EN-3) [online]. Available at: <https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3> [Accessed 14 March 2025].
- Ref 6 Department for Energy Security and Net Zero, (2023). National Policy Statement for Electricity Networks Infrastructure (EN-5) [online]. Available at: <https://www.gov.uk/government/publications/national-policy-statement-for-electricity-networks-infrastructure-en-5> [Accessed 19 March 2025].
- Ref 7 Gov.uk, (2024). *Minerals Planning Practice Guidance* [online]. Available at <https://www.gov.uk/guidance/minerals> [Accessed 10 April 2025].
- Ref 8 Cambridgeshire County Council and Peterborough City Council, (2021). Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036 [online]. Available at: <https://www.cambridgeshire.gov.uk/business/planning-and-development/planning-policy/adopted-minerals-and-waste-plan> [Accessed 13 March 2025].
- Ref 9 British Geological Society, (2011). Mineral safeguarding in England: good practice advice [online]. Available at: <https://www.bgs.ac.uk/mineralsuk/download/mineral-safeguarding-in-england-good-practice-advice/> [Accessed 10 April 2025].

Annex A Mineral Safeguarding Policy for Lincolnshire

ENERGY MINERALS

- 5.58 The Government's energy policy is to have a secure and diverse supply of energy sources. The Government does not consider it appropriate for planning policy to set targets for or limits on different technologies. Oil and gas are important mineral resources and primary sources of energy in the United Kingdom. Oil products provide around 33% of the primary energy used. Significant reductions in demand are not expected over the next 10-15 years because the transport sector, the main consumer of oil, will continue to be heavily dependent on it over this period.
- 5.59 Oil and Gas resources can be broadly split into two categories: Conventional and Unconventional. 'Conventional' oil and gas refers to oil and gas resources ('hydrocarbons') which are located in relatively porous rock formations such as limestone and sandstone. Conventional extraction methods generally involve drilling a borehole down to the porous rock where oil or gas has formed in a reservoir. The oil and gas resources are then pumped out of the ground using beam pumps (known as 'nodding donkeys') or electric pumps.
- 5.60 Lincolnshire has a long history associated with the production of conventional oil and gas going back to the 1940s, and large parts of the County are licensed for production. Welton oilfield is the second largest on-shore field in the UK after Wytch Farm in Dorset. It started oil production in 1984 and to date peak production has reached 0.16mt per annum. Gas has also been previously produced from the Saltfleetby field, to the east of the county, on a significant scale. Currently permitted oil and gas sites are listed in Appendix 2 and shown on Figures 6-12 in Appendix 3.
- 5.61 "Unconventional" oil and gas resources require methods for extraction which are not normally necessary in the conventional extraction of hydrocarbons. Such resources are generally obtained from less porous rock formations that were previously considered too impermeable ('tight') to allow economic recovery, however technological advancements over the last decade have made them economically viable. Examples of unconventional hydrocarbons include Coal Bed Methane (CBM) and Shale Gas. Methods involved in the extraction of unconventional hydrocarbons can include hydraulic fracturing.
- 5.62 The deep coal reserves in Lincolnshire have the potential for Coal Bed Methane (CBM) extraction. CBM development provides an opportunity to extract methane from deep coal seams as part of the Government's strategy for clean coal technology. In recent years some interest has been shown in assessing the prospect of CBM in Lincolnshire, with exploration activities previously undertaken in an area to the north of Lincoln. However, at present no subsequent proposals or planning applications for production of CBM within Lincolnshire have come forward.
- 5.63 Shale Gas is a natural gas produced from shale rock, and is most commonly associated with the process of hydraulic fracturing in order to enable the gas to be extracted from the Shale rock. As unconventional

hydrocarbons have become more economically viable in recent years, a number of studies have been undertaken to assess the potential for Shale Gas recovery across the UK. The British Geological Survey (BGS) has undertaken research in association with the Department of Energy and Climate Change (DECC), and in 2013 completed a study which estimates the resource (gas-in-place) of shale gas associated with the 'Bowland Shale' in Central Britain. The Infrastructure Act 2015 defines associated hydraulic fracturing as hydraulic fracturing of shale or strata encased in shale which:

- Is carried out in connection with the use of the relevant well to search or bore for or get petroleum;
- Involves, or is expected to involve the injection of more than 1,000 cubic metres of fluid at each stage, or expected stage of the hydraulic fracturing or more than 10,000 cubic metres of fluid in total.

- 5.64 Pursuant to Section 50, subsection 4a of the Infrastructure Act, hydraulic fracturing cannot take place within 'protected ground water source areas' or 'other protected areas'. Associated Regulations will define a protected ground source area as any land at a depth of less than 1,200 metres beneath a relevant surface area and in relation to 'other protected areas' these are a National Park; the Broads; an Area of Outstanding Natural Beauty; and a World Heritage Site.
- 5.65 The BGS study area includes the northern half of Lincolnshire, and identifies an area referred to as the 'Gainsborough Trough' as being prospective for shale gas. This area lies partly within Lincolnshire, to the south and east of Gainsborough, and extends westwards into adjoining Nottinghamshire and North Lincolnshire. Whilst interest has been shown in the above area, Shale Gas development does not currently take place in Lincolnshire, and until any exploratory wells are sought and drilled, the location and extent of any resource, and prospect for economic recovery in Lincolnshire is unknown.
- 5.66 Another emerging new technology is Underground Coal Gasification (UCG), the in situ conversion of deep coal resources into gases after ignition under pressure. This technology is still experimental and no such schemes are currently in operation within the County.
- 5.67 The regulatory process of obtaining consent to drill a well is the same whether the well is targeting conventional or unconventional hydrocarbons. The Department of Energy and Climate Change (DECC) issue Petroleum Exploration and Development Licence's (PEDL) in competitive offerings (licence rounds) which grant exclusivity to operators who receive a licence in the area. PEDL licences do not give consent for drilling or any other operations. An operator must seek Planning Permission from the Minerals Planning Authority. An operator can only seek planning permission in areas covered by a licence. The operator must also negotiate access with affected landowners.
- 5.68 The operator must also obtain a Permit from the Environment Agency (EA) but this is usually sought after planning permission is obtained. The

Health and Safety Executive (HSE) are also involved in regulating well design and operation. The EA and HSE's regulatory roles in relation to conventional and unconventional hydrocarbon development are wide ranging and include for example the protection of surface water, and ground water (and its supply), from any negative impacts through comprehensive monitoring of well operations. Any induced seismicity would also be addressed although there are no documented cases of fracturing operations causing subsidence or tremors large enough to cause damage at the surface.

- 5.69 Conventional and unconventional hydrocarbon development has several different stages including the exploration of oil and gas prospects, appraisal of any oil and gas reserves found, and production and distribution. All stages require planning permission. There will be no presumption in favour of permission being granted for subsequent stages if an earlier stage be permitted, nor will possible effects of a later stage not yet applied for constitute grounds for refusal of an earlier stage.
- 5.70 Exploration activities involve drilling which is often the most intrusive part of the development through visual, lighting and noise disturbance and impacts on local roads. There will be a need for night time drilling to ensure the borehole does not close up during any break in drilling which would significantly extend the period the drilling rig remained on site. The limited duration of exploratory operations will be reflected in the nature of any planning permission that may be granted. Appraisal takes the form of longer-term testing of an exploratory well. The long-term suitability of the site of appraisal wells will be taken into account since such wells may subsequently be required for production purposes. The production phase generally involves additional facilities such as pipelines, storage facilities and export terminals.
- 5.71 Policy M9 is a criteria-based policy which seeks to ensure that activities related to the exploration, appraisal and production of conventional and unconventional hydrocarbons take place in an environmentally acceptable manner, in accordance with all relevant Development Management Policies set out in the Plan. Applications for energy mineral development should contain sufficient information to adequately assess the impact of the proposal on the local community and the environment, and include detailed field development plans at the production stage. Conditions and legal agreements, if necessary will be attached to planning permissions to ensure that operations do not have an unacceptable impact on local residents or the environment. Permission for wells will be conditioned for the life of the well.

Policy M9: Energy Minerals

Planning permission will be granted for exploration, appraisal and/or production of conventional and unconventional hydrocarbons provided that proposals accord with all relevant Development Management Policies set out in the Plan.

Underground Gas Storage

- 5.72 The NPPF states that minerals planning authorities should encourage underground gas and carbon storage and associated infrastructure if local geological circumstances indicate its feasibility.
- 5.73 The most important type of gas storage is in underground reservoirs. There are three principal types — depleted gas reservoirs, aquifer reservoirs and salt cavern reservoirs. Each of these types possesses distinct physical and economic characteristics which govern the suitability of a particular type of storage type for a given application.
- 5.74 The hazards and risk associated with the storage of natural gas relate to many areas such as systems integrity, health and safety and environmental effects, economic risks and risks related to public perception and trust. The main hazard associated with underground gas storage is the leakage of gas through the surrounding strata and reaching ground surface, where it could represent a significant health and safety risk. Such developments are also comprehensively regulated by DECC, the HSE and EA.
- 5.75 In Lincolnshire, planning permission was granted in 2010 for an underground gas storage facility within the Saltfleetby gas field. The facility would provide up to 800 million cubic metres of storage and boost the UK's storage capacity by 15%.

Policy M10: Underground Gas Storage

Planning permission will be granted for the development of underground gas storage facilities provided that proposals accord with all relevant Development Management Policies set out in the Plan.

OTHER MINERALS

- 5.76 Lincolnshire has a long history of **clay** working. However, competition from the major brick-working areas of South Humberside and Peterborough led to the decline of these local industries and in 1945 only a handful of active clay workings survived. The last workings closed in the mid-1970s with the one remaining brickworks at that time obtaining its supplies from outside the County. That brickworks, located in Stamford, closed around 2003.
- 5.77 Lincolnshire contains substantial deposits of **ironstone**. From the late nineteenth century to the 1970s, it was extensively worked both by underground and opencast methods. There are substantial areas of land with planning permission for ironstone working in the south west and north of the county but these areas are all dormant except for one site at South Witham which is worked exclusively for the overlying limestone. Because of the decline of the steel industry in the UK and the low grade quality of the ironstone in Lincolnshire, it is considered unlikely that ironstone working will take place in the foreseeable future, other than as a source of building stone.
- 5.78 A major part of the county is underlain by Lower and Middle **Coal** Measures strata entirely concealed by a thick Permian and Mesozoic cover. These coal measures have never been worked, although the Witham Prospect area, to the south west of Lincoln, may be classed as a valuable resource in the future.
- 5.79 Proposals for these minerals together with any other minerals not currently worked in Lincolnshire will be considered on their merits, judged against the policies in the Development Management and Restoration sections.

MINERAL SAFEGUARDING

Safeguarding Mineral Resources

- 5.80 The NPPF states that, in preparing Local Plans, local planning authorities should:
- define Minerals Safeguarding Areas and adopt appropriate policies in order that known locations of specific minerals resources of local and national importance are not needlessly sterilised by non-mineral development, whilst not creating a presumption that resources defined will be worked; and define Minerals Consultation Areas based on these Minerals Safeguarding Areas;
 - set out policies to encourage the prior extraction of minerals, where practicable and environmentally feasible, if it is necessary for non-mineral development to take place.
- 5.81 A Mineral Safeguarding Area is not a proposed area of extraction and does not mean that proposals will be permitted within the area. The main purpose of the MSA is to protect a mineral resource for the long term for future generations. It should also be borne in mind that just because there may be no economic need for the minerals now that may not be the case in the future.
- 5.82 The British Geological Survey (BGS) publication, 'Mineral safeguarding in England: good practice advice' (2011), recommends that a good starting point for identifying MSAs is the BGS's mineral resources maps. It suggests that modifications to the resource extent are most likely to result from the provision of additional or more detailed geological information obtained through consultation. The BGS good practice advice states that MSAs that are not considered of any great national or regional importance and that occur extensively over the area of a MPA could be reduced in size.
- 5.83 A combination of expert geological opinion and knowledge on the extent of mineral resources together with consultation with the minerals industry has provided the County Council with broad geological resource information for minerals within Lincolnshire. Information contained on the Minerals Resources map published by the BGS in the 'Mineral Resource Information in Support of National, Regional and Local Planning: Lincolnshire' report (2002) has been supplemented by work carried out by the BGS for the County Council in 2010 to assess which sand and gravel deposits are of economic importance and where they are located.
- 5.84 The County Council has concluded that deposits of sand and gravel, limestone and blown sand in Lincolnshire are of current or future economic importance. The broad extent of these deposits is indicated on Figure 1.
- 5.85 The County Council does not have sufficient detailed knowledge of the nature and extent of suitable building stone resources to identify potentially workable materials. The quality of stone and suitability for working as building stone is very variable. It would therefore be difficult to

identify potentially workable building stone resources for safeguarding except on a detailed site specific basis.

- 5.86 It is, however, proposed to safeguard potential sources of building stone for the repair and conservation of Lincoln Cathedral and Lincoln Castle, due to their importance not just as historic buildings but also as a major tourist attraction and symbol of Lincoln and indeed the County. The location of these potential sources is indicated on Figure 2.
- 5.87 The County Council does not consider that chalk is an economically important mineral in Lincolnshire and that, given its widespread occurrence, it does not need to be safeguarded, with the exception of permitted chalk workings as shown in Figure 3. Chalk is not a nationally important resource, and it is not a scarce mineral. The majority of the chalk resource in Lincolnshire also lies within the Lincolnshire Wolds Area of Outstanding Natural Beauty.
- 5.88 Ironstone deposits in the county are not considered to have any future economic significance as a source of iron, given the decline of the steel industry in the UK and their low grade quality. Whilst they could be worked as a source of building stone or low quality aggregate, they are not considered to be of current or future economic importance.
- 5.89 It is not proposed to define MSAs for hydrocarbons as prospects can only be identified after extensive exploration activity. In any event, oil and gas deposits are found at much greater depths than other minerals exploited within the County and are therefore less threatened by surface development.
- 5.90 Incompatible development close to a MSA may lead to sterilisation of part of the resource. The BGS good practice advice suggests that it may therefore often be appropriate to extend the MSA beyond the resource boundary to take account of such risks, the extent of which will vary between minerals and the likely method of extraction. The County Council proposes to extend the boundary of MSAs beyond the area of the resource to prevent residential development encroaching on a mineral extraction to the extent that the amenity of residents could be affected by noise, visual intrusion or blast vibration. The resource areas shown on Figure 1 include a buffer zone of 250m around sand and gravel and blown sand resources and 500m around limestone resources to ensure an adequate safeguarding margin.
- 5.91 The BGS guidance advises that, in urban areas, MPAs should define MSAs to highlight the potential for extracting minerals beneath large regeneration projects and brownfield sites. In Lincolnshire, however, such opportunities are probably limited to small scale building stone operations to provide stone for Lincoln Cathedral/ Lincoln Castle. Other mineral resources that are present do not generally lend themselves to prior extraction in built-up areas because of the nature of their extraction methods, and the possibility of such circumstances arising seems too slim to warrant safeguarding. The resource areas shown on Figure 1 consequently exclude mineral deposits within settlements with a

population in excess of 1000 and a minimum area of 20 hectares, however in such cases a 250m buffer extending into the urban area has been retained in order to avoid sterilisation by proximal development at the urban edge.

- 5.92 In two-tier planning areas such as Lincolnshire, safeguarding of mineral resources can be achieved only through county and district councils co-operating in the exercise of their respective planning powers over land with potential for mineral extraction. This can be facilitated by defining Minerals Consultation Areas (MCA). This will provide the mechanism for district councils to consult the County Council before granting planning permission, on any planning applications they receive for non-mineral developments which fall within the boundary of a MCA, and which would be likely to affect the winning and working of minerals.
- 5.93 The County has therefore defined Minerals Consultation Areas (MCA) to coincide with the extent of the resources within the Mineral Safeguarding Areas. The MCA will also cover the safeguarding of mineral sites and associated infrastructure (Policy M12). District Councils within the County will be supplied with a copy of the MCA along with the development criteria that the County Council wish to be consulted on. It will be the responsibility of the District Councils to ensure that the MCA is used when considering planning applications or future developments and that the County Council is consulted on developments located within the MCA.
- 5.94 Within a Minerals Safeguarding Area, except for the exemptions set out in policy M11, applications for non-minerals development should be accompanied by a Minerals Assessment in accordance with the latest guidance from the British Geological Survey (currently set out in Mineral Safeguarding in England: Good Practice Advice, reference OR/11/046). This should provide an appropriate assessment of the minerals resource including an estimate of the economic value, its potential for use in the forthcoming development and an assessment of whether it is feasible and viable to extract the mineral resource ahead of development to prevent unnecessary sterilisation. Where prior extraction can be undertaken, the assessment should also include an explanation of how this will be carried out as part of the overall scheme.
- 5.95 Following the assessment of the mineral resource, the Mineral Planning Authority will make a judgement about the likelihood of the mineral being worked in an environmentally acceptable manner and may advise the District Council that any development on or near mineral reserves should not proceed before the mineral is extracted, or that steps are taken to avoid sterilisation of the deposit.
- 5.96 Some minor development is unlikely to sterilise mineral reserves, such as small extensions to existing buildings or sites. However, this will depend on the location of the development and the type and extent of the mineral concerned. For instance a building proposed in the middle of a small building stone resource could lead to sterilisation.

Policy M11: Safeguarding of Mineral Resources

Sand and gravel, blown sand and limestone resources that are considered to be of current or future economic importance within the Minerals Safeguarding Areas shown on Figure 1, together with potential sources of dimension stone for use in building and restoration projects connected to Lincoln Cathedral/Lincoln Castle within the areas shown on Figure 2, and chalk resources included on Figure 3, will be protected from permanent sterilisation by other development.

Applications for non-minerals development in a minerals safeguarding area must be accompanied by a Minerals Assessment. Planning permission will be granted for development within a Minerals Safeguarding Area provided that it would not sterilise mineral resources within the Mineral Safeguarding Areas or prevent future minerals extraction on neighbouring land. Where this is not the case, planning permission will be granted when:

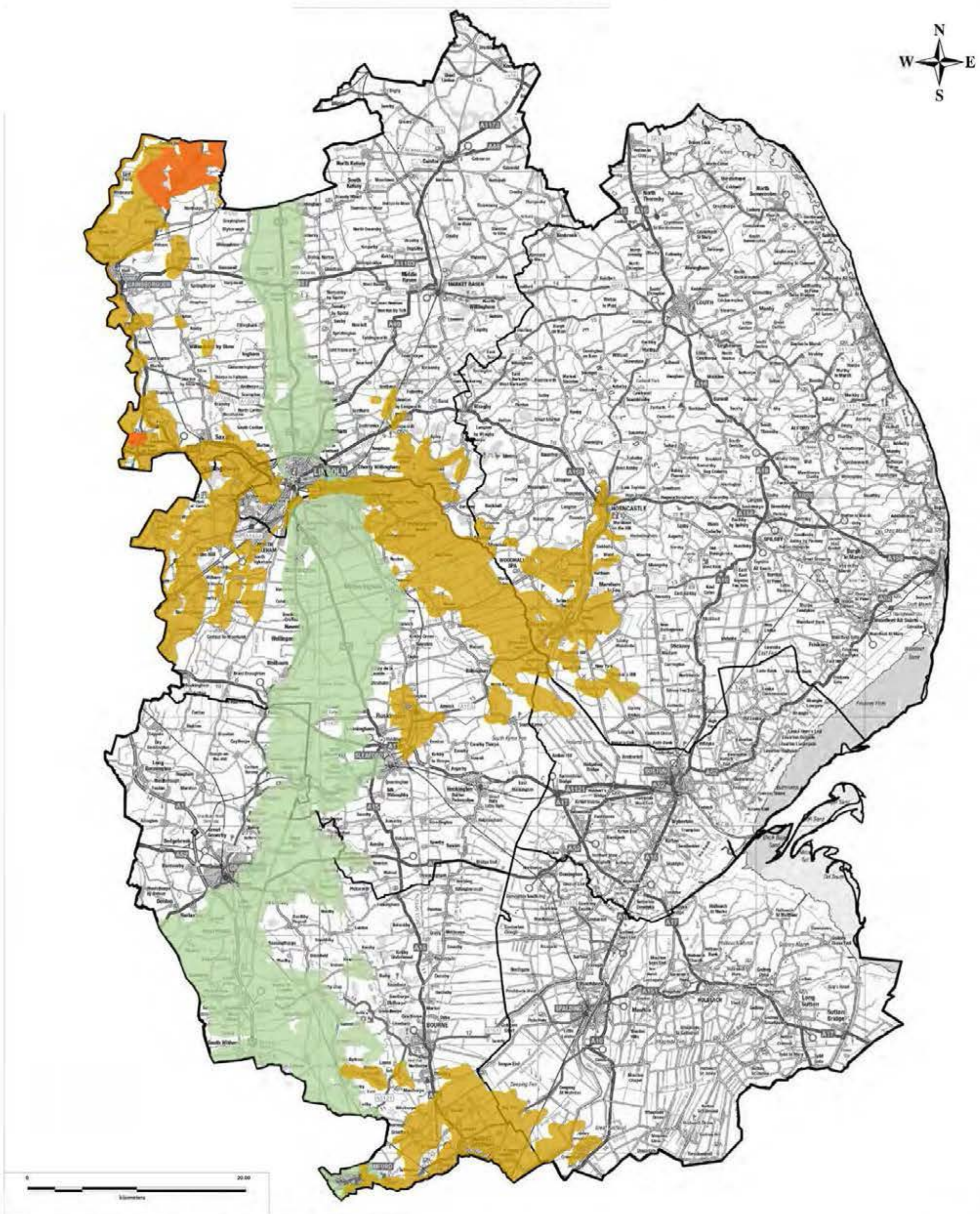
- the applicant can demonstrate to the Mineral Planning Authority that prior extraction of the mineral would be impracticable, and that the development could not reasonably be sited elsewhere; or
- the incompatible development is of a temporary nature and can be completed and the site restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed; or
- there is an overriding need for the development to meet local economic needs, and the development could not reasonably be sited elsewhere; or
- the development is of a minor nature which would have a negligible impact with respect to sterilising the mineral resource; or
- the development is, or forms part of, an allocation in the Development Plan.

Exemptions

This policy does not apply to the following:

- *Applications for householder development*
- *Applications for alterations to existing buildings and for change of use of existing development, unless intensifying activity on site*
- *Applications for Advertisement Consent*
- *Applications for Listed Building Consent*
- *Applications for reserved matters including subsequent applications after outline consent has been granted*
- *Prior Notifications (telecommunications; forestry; agriculture; demolition)*
- *Certificates of Lawfulness of Existing or Proposed Use or Development (CLEUDs and CLOPUDs)*
- *Applications for Tree Works*

Figure 1: Lincolnshire Minerals Safeguarding Areas Map



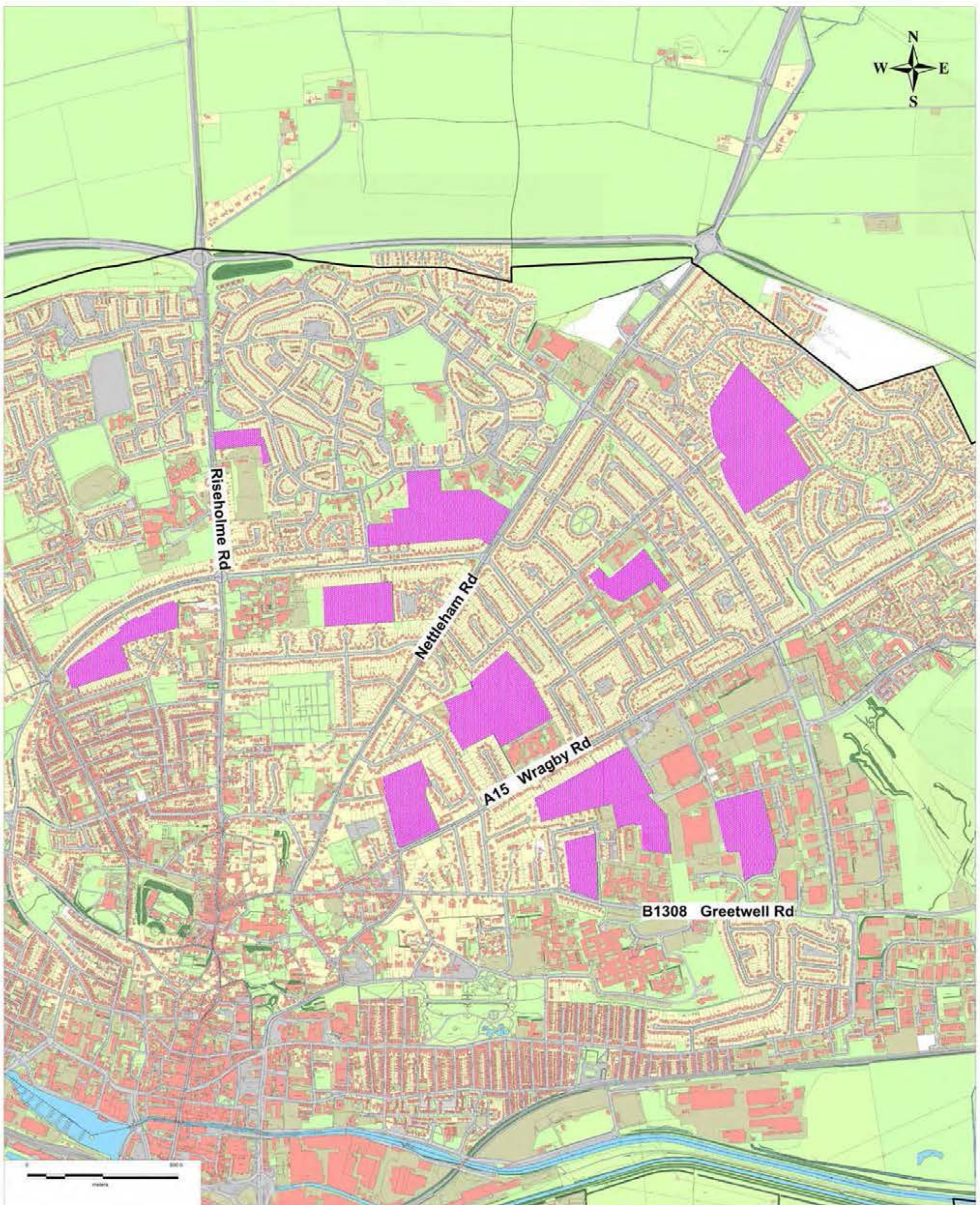
Lincolnshire County Council

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Key

- Limestone Mineral Safeguarding Area
- Sand & Gravel Minerals Safeguarding Area
- Wind Blown Sand Minerals Safeguarding Area

Figure 2 Lincoln Stone Minerals Safeguarding Areas Inset Map



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Key

 Lincoln Stone Minerals Safeguarding Area

Safeguarding of Existing Mineral Sites and Associated Minerals Infrastructure

- 5.97 The NPPF states that, in preparing Local Plans, local planning authorities should safeguard:
- existing, planned and potential rail heads, rail links to quarries, wharfage and associated storage, handling and processing facilities for the bulk transport by rail, sea or inland waterways of minerals, including recycled, secondary and marine-dredged materials; and
 - existing, planned and potential sites for concrete batching, the manufacture of coated materials, other concrete products and the handling, processing and distribution of substitute, recycled and secondary aggregate material
- 5.98 The future use of mineral sites and associated infrastructure could be constrained if sensitive developments such as housing are permitted nearby. In order to ensure that the supply of minerals is not interrupted, the County Council therefore considers that mineral sites and their associated infrastructure should be safeguarded. This includes aggregates recycling sites; sand and gravel quarries; limestone extraction quarries; chalk extraction quarries; and energy mineral development sites. The sites and facilities to be safeguarded are listed in Appendix 2 and shown on figures 6-12 in Appendix 3.
- 5.99 Most of the concrete batching plants and other associated minerals infrastructure are co-located at quarries or producers of recycled aggregates. The safeguarded list will indicate those sites which carry out these activities.
- 5.100 The MCA to be issued by the County Council (see paragraph 5.93 above) will include the mineral sites and associated infrastructure safeguarded by Policy M12, including a 250 metre buffer zone around sites as shown in Figure 3. Local planning authorities will be expected to consult the County Council on proposals for non-minerals development which could affect the use of such sites and facilities. The County Council may advise that development should not be permitted if it would constrain the effective operation of existing sites, or future use of land or associated infrastructure identified for mineral use.

Policy M12: Safeguarding of Existing Mineral Sites and Associated Minerals Infrastructure

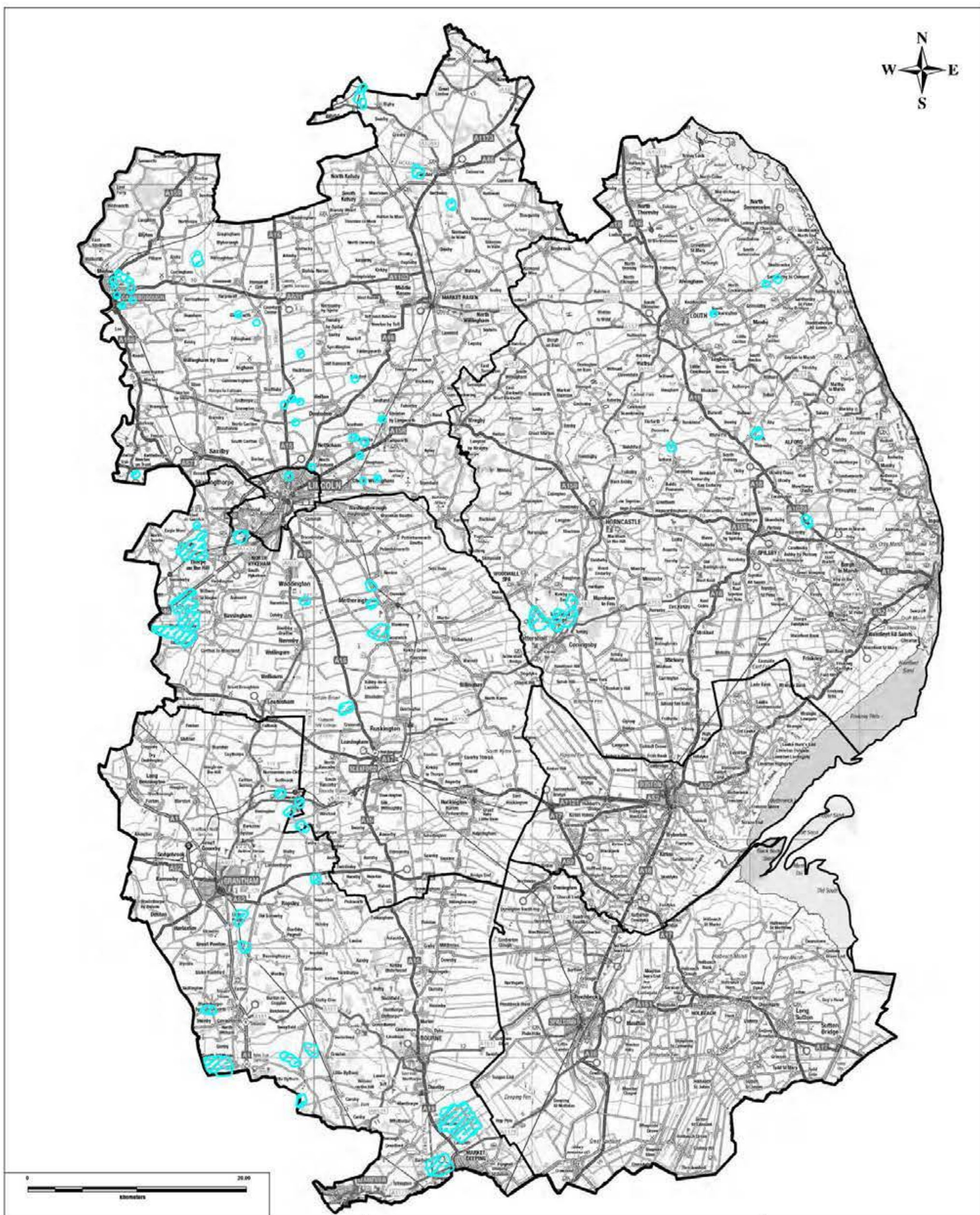
Mineral sites (excluding dormant sites) and associated infrastructure that supports the supply of minerals in the County will be safeguarded against development that would unnecessarily sterilise the sites and infrastructure or prejudice or jeopardise their use by creating incompatible land uses nearby.

Exemptions

This policy does not apply to the following:

- *Applications for householder development*
- *Applications for alterations to existing buildings and for change of use of existing development, unless intensifying activity on site*
- *Applications for Advertisement Consent*
- *Applications for Listed Building Consent*
- *Applications for reserved matters including subsequent applications after outline consent has been granted*
- *Prior Notifications (telecommunications; forestry; agriculture; demolition)*
- *Certificates of Lawfulness of Existing or Proposed Use or Development (CLEUDs and CLOPUDs)*
- *Applications for Tree Works*

Figure 3 Lincolnshire Site Specific Minerals Safeguarding Areas Map



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Key



Site Specific Minerals Safeguarding Area

Lincolnshire
COUNTY COUNCIL
Working for a better future

Annex B Mineral Safeguarding Policy for Cambridgeshire

4. MINERALS DEVELOPMENT SPECIFIC POLICY

MINERAL SAFEGUARDING AREAS (MSAS)

- 4.1 Mineral Safeguarding Areas (MSAs) are identified in order that known locations of specific mineral resources of local and/or national importance are not needlessly sterilised by non-mineral development. The purpose of MSAs is to make sure that mineral resources are adequately taken into account in all land use planning decisions. They do not automatically preclude other forms of development taking place, but flag up the presence of important mineral so that it is considered, and not unknowingly or needlessly sterilised.
- 4.2 MSAs are identified on the Policies Map. They constitute the extent of known reserves plus a 250m buffer. During the preparation of this Plan, more detail was set out on their identification in a document entitled 'Methodology for Identifying MSAs (January 2019)'.
- 4.3 In applying the policy below, applicants and decision makers may also find useful the Minerals Safeguarding Practice Guidance (April 2019), produced by the Mineral Products Association and Planning Officers' Society.

POLICY 5: MINERAL SAFEGUARDING AREAS (MSAS)

Mineral Safeguarding Areas (MSAs) are identified on the Policies Map for mineral resources of local and/or national importance. The Mineral Planning Authority must be consulted on all development proposals in these areas except:

- (a) development that falls within a settlement boundary*;
- (b) development which is consistent with an allocation in the Development Plan for the area;
- (c) minor householder development within the immediate curtilage of an existing residential building;
- (d) demolition or replacement of residential buildings;
- (e) temporary structures;
- (f) advertisements;
- (g) listed building consent; and
- (h) works to trees or removal of hedgerows.

Development within MSAs which is not covered by the above exceptions will only be permitted where it has been demonstrated that:

- (i) the mineral can be extracted where practicable prior to development taking place; or
- (j) the mineral concerned is demonstrated to not be of current or future value; or
- (k) the development will not prejudice future extraction of the mineral; or
- (l) there is an overriding need for the development (where prior extraction is not feasible)**.

*a 'settlement boundary' is that which is defined on the relevant Policies Map for the area (e.g. a village envelope or urban area boundary). If no such boundary is identified on the Policies Map, it will constitute the edge of the built form of the settlement or, should an edge be defined in words (rather than map form) in a Local or Neighbourhood Plan, then that definition will be used for that local area.

** within (l), 'overriding need' will need to be judged in the planning balance when any planning application is assessed, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy. That judgement should also consider the cost of, and scope for, developing outside the MSA, or meeting the need for it in some other way. By 'not feasible' in (l), this could include viability reasons.

MINERAL DEVELOPMENT AREAS (MDAS) AND MINERAL ALLOCATION AREAS (MAAS)

- 4.4 Mineral Development Areas (MDAs) are specific sites identified on the Policies Map. They consist of existing operational sites and committed sites (i.e. sites with planning permission but which are not yet operational or are dormant). Areas not yet consented but allocated in this Plan for the future extraction of mineral are identified as Mineral Allocation Areas (MAAs). These sites also include existing, planned and potential sites for:
- concrete batching, the manufacture of other coated materials, other concrete products; and
 - the handling, processing and distribution of substitute, recycled and secondary aggregate material.
- 4.5 Please note that Policy 16: Consultation Areas (CAs), which should be read in conjunction with the Policy below, also covers proposals which fall within a MDA or MAA as well as within 250m of their boundaries. The following policy focuses only on development within MDAs and MAAs themselves.

National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com