Lincolnshire Minerals and Waste Local Plan

Preferred Approach for updating the plan July 2024





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1. Introduction

- 1.1 Minerals are fundamental to our daily lives. They form the basic building blocks for construction materials and are used in countless industrial processes and consumer products. Lincolnshire is an important producer of minerals and is currently the largest producer of sand and gravel in the East Midlands. Limestone, chalk, and hydrocarbons are also extracted in the county.
- 1.2 Waste management facilities are essential to ensure the wastes generated by households, businesses and industry are dealt with in the most efficient and sustainable ways possible. Lincolnshire has a substantial network of waste management facilities which deal with a variety of different waste streams and employ many different processes and technologies.
- 1.3 Lincolnshire County Council is the minerals and waste planning authority for the county, which means it is responsible for preparing a minerals and waste local plan that makes provision for the raw materials and essential infrastructure that is required to underpin sustainable development across the county.

What is the Lincolnshire Minerals and Waste Local Plan?

- 1.4 The Lincolnshire Minerals and Waste Local Plan (LMWLP) is part of the statutory development plan for Lincolnshire and sits alongside other local plans produced by Lincolnshire's district councils that cover matters such as the delivery of housing and employment. The current adopted LMWLP is comprised of two separate documents: a Core Strategy and Development Management Policies (CSDMP) document adopted in 2016, and a Site Locations document (SLD) adopted in 2017.
- 1.5 The CSDMP sets out the key principles to guide the future winning and working of minerals and the form of waste management development in the county up to 2031. It also sets out the development management policies against which planning applications for minerals and waste development will be considered.
- 1.6 The SLD includes specific proposals and policies for the provision of land for mineral and waste development.

Why does the Lincolnshire Minerals and Waste Local Plan need updating?

1.7 The performance of the LMWLP is subject to regular monitoring and the results are published in the county council's Authority Monitoring Reports (AMRs). The council is also required to undertake a more in-depth review of the LMWLP every five years in order to assess whether the policies in the plan are performing effectively or need updating.

- 1.8 Both parts of the current adopted LMWLP (the CSDMP and SLD) were reviewed during 2020, and a detailed report setting out the conclusions of this review was published in February 2021. This is referred to in this document as the LMWLP Review and is available to view on the county council's website.
- 1.9 The LMWLP Review highlighted issues with a number of policies in the LMWLP and concluded that, rather than taking a piecemeal approach seeking to update individual policies, the most appropriate course of action would be to update the LMWLP in its entirety.
- 1.10 In response to the conclusions of the LMWLP Review, the county council has commenced work on a new, updated LMWLP. The new plan, once completed, will eventually replace the existing adopted CSDMP and SLD.
- 1.11 In line with national policy and legislation, it is proposed to produce the new LMWLP as a single document, which will include both strategic and criteria-based policies, along with site allocations where required. The new LMWLP will guide the future winning and working of minerals and the form of waste management development in Lincolnshire up to 2041.

How will the new Lincolnshire Minerals and Waste Local Plan be prepared?

- 1.12 The new LMWLP will go through several stages of public consultation and a formal examination process in order to ensure the views of communities, stakeholders and other interested parties are taken into account during the formulation of the plan, and that it meets all necessary legal and procedural requirements. A timetable for the production of the new LMWLP is set out in the county council's Minerals and Waste Development Scheme (LMWDS), which is available on the council's website, however, there have been delays to this timetable and the LMWDS will be updated in due course.
- 1.13 The key target milestones for the preparation of the new LMWLP are set out below:
 - Consultation on Issues and Options, including a call for sites completed Summer 2022;
 - Consultation on the Preferred Approach LMWLP, including a call for sites Summer 2024;
 - Consultation on the Proposed Submission Draft LMWLP Spring 2025;
 - Submission of Draft LMWLP to the Secretary of State Summer 2025;
 - Examination Hearings Winter 2025/2026; and
 - Adoption Winter 2026.

These milestones may be subject to change and the LMWDS will be updated as work progresses on the new plan.

- 1.14 Details of the methods of consultation and publicity utilised at each key stage of plan preparation are set out in the Statement of Community Involvement (SCI). The SCI is also available on the county council's website.
- 1.15 The SCI sets out how particular effort will be made to identify and engage underrepresented and seldom heard groups in Lincolnshire, including those with the following protected characteristics: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex; sexual orientation. Within a sparsely populated county such as Lincolnshire, it is also important to ensure the involvement of groups, including rural communities suffering from isolation.
- 1.16 The LMWLP will be subject to Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) to ensure the integration of social, environmental, and economic considerations into the preparation of the plan and a Habitats Regulations Assessment of its implications for sites designated as international nature conservation sites, in view of the sites' conservation objectives.
- 1.17 The new LMWLP is also supported by a number of other background documents, including a Local Aggregates Assessment (2023) and Waste Needs Assessment (2021), which set out the evidence base to inform the required provision for minerals and waste development within the LMWLP. These background documents are referred to in more detail in the relevant chapters of this document.
- 1.18 The background documents and technical appraisals supporting the new LMWLP will be updated and added to throughout the plan process.

Issues and Options consultation and 'call for sites'

- 1.19 The Issues and Options consultation document was the first stage in the preparation of the new LMWLP and was consulted upon between 28 June 2022 and 12 August 2022. Building on the conclusions and recommendations of the review of the current LWMLP, it set out the main issues affecting how we plan for minerals and waste in Lincolnshire and explored reasonable options to address them in the new LMWLP.
- 1.20 In parallel with the Issues and Options document, the county council carried out a 'call for sites' where it invited landowners, site operators and their agents to put forward any sites that they wish to be considered for allocation in the new LMWLP for the future winning and working of aggregate minerals. A "Proposed Site Selection Methodology for Updating the Plan" was produced, which is available on the county council's website. This set out how any nominated sites will be assessed.

Preferred Approach

1.21 This Preferred Approach consultation document is the second stage in the preparation of the new LMWLP and is being consulted upon between Tuesday 30 July 2024 and 5pm on Tuesday 24 September 2024, in accordance with Regulation 18 of the

Town and Country Planning (Local Planning) (England) Regulations 2012. This document builds on the consultation responses from the Issues and Options and Call for Sites stage and sets out the preferred approach to planning for minerals and waste in Lincolnshire in the LMWLP. This Preferred Approach consultation document contains a full suite of policies, some of which are carried forward from the adopted LMWLP, some of which are updated policies from the adopted LMWLP and a number of which are new policies. In addition to this, the preferred sites proposed to be allocated for development are included within this Preferred Approach consultation document.

1.22 A summary of the representations received at the Issues and Options stage and the county council's responses to them is set out in a Consultation Statement which accompanies this document and is available on the county council's website. These representations have informed this Preferred Approach consultation document.

How to get involved

- 1.23 We are seeking views on this Preferred Approach consultation document from local communities, stakeholders, and any other interested parties. It is important that you let us know your views at this stage of plan preparation so that we can use them to inform the new LMWLP going forward.
- 1.24 This Preferred Approach document, along with its supporting papers and technical appraisals is available to view and download from the county council's consultation portal: www.letstalk.lincolnshire.gov.uk
- 1.25 You can make comments on this Preferred Approach document and its supporting evidence by completing our online response form at www.letstalk.lincolnshire.gov.uk or by downloading and completing a response form which is available from that website.
- 1.26 At this stage, it is possible to nominate further sites and provide further information in relation to sites which have previously been put forward for nomination, whether they have been included in this Preferred Approach document or not. Site nomination forms are available from www.letstalk.lincolnshire.gov.uk for those landowners, operators and agents that wish to make site submissions.
- 1.27 Downloaded response forms and site nomination forms should be submitted by e-mail to mineralsandwaste@lincolnshire.gov.uk but, if you are unable to respond by e-mail, these can be submitted by post to the following address:

Minerals and Waste Planning Policy Team Planning Services Lincolnshire County Council County Offices Newland Lincoln, LN1 1YL 1.28 The consultation will commence on Tuesday 30 July 2024 and end at 5pm on Tuesday 24 September 2024.

How we will use your information

Lincolnshire County Council will use the information that you supply to inform the preparation of the Lincolnshire Minerals and Waste Local Plan (LMWLP) in accordance with the Planning and Compulsory Purchase Act 2004 (as amended) and the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended). Please note that consultation responses received in relation to the LMWLP and associated documents may be made publicly available and therefore no comments can be treated as anonymous or confidential. Your information is kept only for as long as necessary. To find out more information on how your data is processed and your rights, please see the privacy notice directory which can be accessed via our website (www.lincolnshire.gov.uk/privacy) or made available on request.

What happens next?

1.30 At the end of this Preferred Approach consultation, all comments received will be reviewed by the county council and will be used to help determine the content of the next stage of the new LMWLP. In line with the above timetable, the final draft plan (the "proposed submission" version) will be prepared for formal consultation prior to submission for examination to the Secretary of State.

2. Legislative and policy context

- 2.1 The Planning and Compulsory Purchase Act 2004 (as amended) and the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended) set out the legislative framework for the preparation of local plans. Within this context, national policies and strategies provide guidance on the content of local plans, including how we should plan for minerals and waste development. The plan making system is undergoing significant reforms, introduced by the Levelling-Up and Regeneration Act 2023, which will be taken into account as the plan progresses.
- 2.2 The LMWLP must be consistent with the relevant legislation, national policies, and any other relevant plans and programmes. This chapter identifies some of the key principles that underpin how we are required to plan for minerals and waste development. Further context in relation to specific issues is also provided in the relevant sections of this document.

Sustainable development and climate change

- 2.3 Sustainable development sits at the heart of the planning system. The government's National Planning Policy Framework (NPPF) 2023 sets out (paragraph 7) that the purpose of the planning system is to contribute to the achievement of sustainable development, which is summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs. It goes on to explain (paragraph 8) that achieving sustainable development requires economic, social, and environmental objectives to be pursued in mutually supportive ways.
- 2.4 To this end, the NPPF is based upon a presumption in favour of sustainable development. Amongst other things, this states in subparagraph 11a that all plans should promote a sustainable pattern of development that seeks to: meet the development needs of their area; align growth and infrastructure; improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects.
- 2.5 The need to mitigate and adapt to climate change is a fundamental component of sustainable development and one of the core principles of the NPPF. Paragraph 20d of the NPPF states that strategic policies in local plans should, amongst other matters, make sufficient provision for planning measures to address climate change mitigation and adaptation.
- 2.6 Paragraph 158 of the NPPF states plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. This is set within the context of the government's binding commitments to reduce greenhouse gas emissions as set out in the Climate Change Act 2008. Further information and guidance is set out in the government's online Planning Practice Guidance (PPG).

Minerals context

- 2.7 The NPPF and PPG set out national policy and guidance on the sustainable use of minerals. Paragraph 215 of the NPPF states it is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation.
- 2.8 The NPPF requires Lincolnshire County Council as mineral planning authority to make appropriate provision, through policies in its minerals and waste local plan, for the extraction of mineral resources of local and national importance, whilst taking account of the contribution that can be made by substitute or secondary and recycled materials. Policies are also required to:
 - safeguard mineral resources from being sterilised by non-mineral development
 - protect sites involved in the transport, handling and processing of minerals and other specified activities
 - ensure that mineral operations do not have unacceptable adverse impacts on the natural and historic environment or human health
 - ensure timely and high-quality restoration and aftercare of mineral sites.

The Managed Aggregate Supply System (MASS)

- 2.9 In relation to aggregate minerals specifically, the NPPF requires the county council to plan for a steady and adequate supply of aggregates. This is achieved through the Managed Aggregate Supply System (MASS), which as detailed in the PPG, requires minerals planning authorities which have adequate resources of aggregates to make an appropriate contribution to national as well as local supply. The PPG explains that MASS works through national, sub-national and local partners working together to deliver a steady and adequate supply of aggregates.
- 2.10 The main tool used by the county council in this process is an annual Local Aggregate Assessment (LAA) which is used to assess demand for and supply of aggregates in Lincolnshire, and to inform and monitor the level of provision in the minerals and waste local plan. The county council are also part of the East Midlands Aggregate Working Party (EMAWP) which produces and monitors data on aggregates in the East Midlands and facilitates co-operation between neighbouring authorities and other organisations in relation to aggregate provision.

Waste context

2.11 National policy on planning for waste management is set out in the National Planning Policy for Waste (NPPW) 2014. Additional guidance is also set out in the PPG. The NPPW (paragraph 3) requires waste planning authorities such as Lincolnshire County Council to prepare local plans which identify sufficient

opportunities to meet the identified needs of their area for the management of waste streams.

The waste hierarchy

2.12 The waste hierarchy underpins the NPPW as a key mechanism to deliver sustainable waste management development and is a requirement of the Waste (England and Wales) Regulations 2011. The waste hierarchy ranks different waste management methods, with prevention and re-use at the top, and disposal at the bottom (Figure 1). In preparing the minerals and waste local plan, the county council is required to drive waste management up the waste hierarchy, whilst recognising the need for a mix of types and scale of facilities.

Figure 1: The waste hierarchy



Source: National Planning Policy for Waste (2014) (contains public sector information licensed under the Open Government Licence v3.0)

The proximity principle

2.13 The NPPW (paragraph 4) also requires waste planning authorities to plan for the disposal of waste and the recovery of mixed municipal waste (from households) in line with the 'proximity principle'. The principles of self-sufficiency and proximity are set out in the Waste (England and Wales) Regulations 2011 and require these wastes to be managed in one of the nearest appropriate installations, by the most appropriate technologies, in order to ensure a high level of protection for the environment and human health. The PPG provides further guidance on implementing the principles of self-sufficiency and proximity.

The circular economy

- 2.14 As set out in the Waste Management Plan for England (WMP) 2021, the government's overall approach in relation to resources and waste is to move away from the current linear economic model of 'take, make, use, throw", towards a more circular economy which keeps resources in use for longer, and in turn minimises waste, reduces its impact on the environment, and reduces carbon emissions.
- 2.15 This circular economy approach is embedded in the government's Resources and Waste Strategy for England (RWS) 2018, which works towards a number of goals in the government's 25 Year Environment Plan (2018) and Environmental Improvement Plan (2023). The RWS sets out ambitious commitments, milestones and targets which will have a significant impact on waste generation and the way that it is managed and planned for in the coming years. Key measures proposed in the RWS include targets for increased recycling and reductions in waste being sent to landfill, along with the introduction of deposit return schemes, enhanced separation and collection of waste, and extended producer responsibility for packaging waste.
- 2.16 The Environment Act 2021 provides a legal framework for implementing many of the commitments set out in the RWS and the 25 Year Environment Plan.

Other relevant plans, strategies, and programmes

- 2.17 In addition to national policy and legislation, the LMWLP is produced within the context of many other plans and strategies at national, subnational, and local level, prepared by both statutory and non-statutory organisations. The LMWLP should therefore give due consideration to any plans and strategies that are relevant to the content and scope of the plan, and will refer to these where relevant during the plan-making process.
- 2.18 There are seven districts within Lincolnshire: Boston Borough, City of Lincoln, East Lindsey, North Kesteven, South Holland, South Kesteven and West Lindsey. As part of the two-tier system of local government in Lincolnshire, these district councils are responsible, either individually or in partnership, for the production of local plans for their respective administrative areas covering matters such as the delivery of housing and employment. It is therefore essential that there is consistency between the policies and allocations in the LMWLP and those set out in the emerging and adopted local plans of the districts.
- 2.19 The LMWLP is one of several different plans and strategies that Lincolnshire County Council is responsible for or has a key role in producing. The LMWLP therefore needs to be consistent with and support the aims and delivery of these other plans and strategies. Examples of relevant documents include the county council's Corporate Plan, Green Masterplan, Local Transport Plan, Flood Risk and Water Management Strategy, and the Waste Strategy for Lincolnshire.

Duty to co-operate

2.20 Planning for mineral extraction and the provision of waste management infrastructure are both strategic matters which require cross-boundary co-operation between different minerals and waste planning authorities, between the county and district councils, and with other organisations such as the Environment Agency. The county council has a legal duty to co-operate on an ongoing basis with relevant organisations and is required to document this as part of the plan-making process.

3. Spatial portrait and environmental assets

Spatial portrait

3.1 To help inform the new LMWLP we have developed a "spatial portrait" of Lincolnshire. This sets out the principal physical, economic, social and environmental characteristics of the county and how these are likely to change over the plan period.

Administrative boundaries and neighbours

- 3.2 Lincolnshire is within the East Midlands region, bounded by the Yorkshire and Humber region to the north and the East of England region to the south.

 Nottinghamshire, Leicestershire, Rutland, Northamptonshire, City of Peterborough, Cambridgeshire, Norfolk, North-East Lincolnshire and North Lincolnshire border the county, along with 80km of North Sea coastline to the east.
- 3.3 There are seven districts in Lincolnshire: Boston, City of Lincoln, East Lindsey, North Kesteven, South Holland, South Kesteven and West Lindsey.

Population and settlement character

- 3.4 Lincolnshire is a predominantly rural shire covering an area of 5,921 sq. km with a population of 766,333 dispersed across the county (mid-2020 estimate, Office for National Statistics (ONS)). This is projected to rise to about 844,038 by mid 2041, an increase of approximately 10% (based on the latest ONS Population Projections for Local Authorities). It is the fourth largest county in England, but with a low population density (129 per sq. km). This provides fundamental difficulties concerning the provision of a comprehensive and modern infrastructure network.
- 3.5 The settlement pattern is made up of the Principal Urban Area of Lincoln; the Sub-Regional Centres of Boston, Grantham and Spalding; the main towns of Bourne, Gainsborough, Louth, Skegness, Sleaford and Stamford; and several market towns, smaller villages and hamlets.

Natural Environment

3.6 The countryside and its associated natural environment have long been recognised as one of Lincolnshire's principal assets. In addition to nationally designated areas such as the Lincolnshire Wolds National Landscape, Area of Outstanding Natural Beauty (AONB), the Wash and Gibraltar Point, the county's whole character and distinctiveness is framed by its essentially open, rural and tranquil image. The county falls within seven distinct National Character Areas. The coastal area of Lincolnshire is a defining feature of the county; it has a variety of land-uses linked to agriculture, settlements and tourism, and plays an important role in terms of the natural environment.

- 3.7 There are five Special Areas of Conservation (SACs) in Lincolnshire: Baston Fen, Grimsthorpe, part of the Humber Estuary, the Coast (Saltfleetby—Theddlethorpe Dunes and Gibraltar Point) and part of the Wash (and North Norfolk Coast). The Wash is the largest estuarine system in the UK. Gibraltar Point, Saltfleetby—Theddlethorpe Dunes, the Humber Estuary and the Wash (and North Norfolk Coast) are also Special Protection Areas (SPA) and Ramsar sites.
- 3.8 The county has a large number of sites that have been nationally designated as Sites of Special Scientific Interest (some of which are National Nature Reserves). In addition, local sites have been selected at a local level for their wildlife or geological value with the aim of protecting biodiversity and geodiversity.

Geology

- 3.9 As described in the Geology of Lincolnshire (Lincolnshire Naturalists' Union, 1976), the rocks that outcrop in Lincolnshire are sedimentary in origin. In general, the rock strata are flat or dip gently eastwards. Consequently, a west-east traverse reveals outcrops in order of oldest (Triassic) to youngest (Cretaceous). The present topography reflects the different resistances offered by these rocks to the sculptural forces of nature.
- 3.10 The limestone and ironstone deposits from the middle Jurassic forms one of the most striking landscape features of the county, the Lincoln Cliff which stretches from the north of the county southwards through Lincoln to Grantham where it broadens out to form the South Lincolnshire Uplands. Similarly, the rocks of the Cretaceous period, including sandstone, ironstone, and chalk outcrop in the Lincolnshire Wolds in the north-east of the county.
- 3.11 During the glacial periods, boulder clay and extensive sand and gravel deposits formed. When the ice receded, on the low ground it abandoned most of its transported material so that large tracts of land, the Fens, and Marshlands, were built up. Original glacial drift remains largely undisturbed but further accumulations by river and marine deposits have taken place, including the older river gravels of the earlier drainage system and the newer river gravels associated with existing streams. The most recent drift deposits formations in the county comprise the areas of blown sand in the north.

Water resources and flood risk

- 3.12 Lincolnshire is one of the driest counties in the country and is prone to drought. It is also subject to flood risk from the sea, main rivers and surface and ground water. The coastline of Lincolnshire is subject to significant flood risk from tidal inundation and is protected by a mix of defences. The provision of clean water and effective drainage of the land is critical for agriculture across the county.
- 3.13 Climate change has the potential to increase the frequency of both droughts and flooding, for example, as a result of more extreme weather events and rising sea levels. However, the importance of water management in Lincolnshire and the

county's established expertise in managing flood risk, provides an opportunity to explore innovative approaches to address these matters.

Historic Environment

- 3.14 Lincolnshire is a county rich in heritage assets. The county is interspersed with conservation areas; has a Civil War battlefield at Winceby, near Horncastle; and is home to a varied archaeological heritage, including remains of national and international importance. Lincolnshire has many pleasant and appealing market towns and villages, vernacular cottages, farm buildings and great country houses. Many of these buildings are recognised as significant and are protected as listed buildings. The historic centre of Lincoln is one of the county's greatest attractions.
- 3.15 Lincolnshire's wealth of very important archaeological remains include the flint tools of the early "Palaeolithic" inhabitants, the prehistoric burial mounds of the Wolds, the waterlogged landscapes of the Witham and Trent Valleys. Structures include medieval castles and monasteries, the industrial buildings of Lincolnshire's major towns, and the agri-industrial buildings in the countryside.
- 3.16 There are a large number of nationally important and legally protected Scheduled Monuments, as well as many thousands of locally important archaeological sites covering periods from pre-history to the recently modern period. Lincolnshire retains important examples of the nation's air-warfare heritage dating from the Second World War.
- 3.17 Lincolnshire also has a large number of nationally designated and non-designated parks and gardens. These range from seaside pleasure gardens, to public parks and the designated landscapes around country houses.
- 3.18 Historic landscapes are an important part of Lincolnshire's physical and cultural resource. They contain innumerable visible traces of human interaction with nature over several millennia. They contribute to the identity of the county, provide settings for everyday life, attract tourism and business, and are a source of enjoyment and inspiration.

Land-use and economy

- 3.19 Farming is still a major industry in Lincolnshire, as is manufacturing. The food industry is concentrated in the south of the county. Tourism is significant along the coast, in and around the Lincolnshire Wolds and in the historic settlements.
- 3.20 Lincolnshire contains substantial areas of Best and Most Versatile Agricultural Land (Grades 1, 2 and Subgrade 3A) with a particularly high concentration of the highest grades (Grade 1 and Grade 2) in the south-east of the county. As a result, Lincolnshire is one of the most important counties for food production in England.

3.21 The RAF have a strong presence in Lincolnshire with a number of operational airfields. In addition, the Battle of Britain Memorial Flight and the Red Arrows are based in the county.

Transport

- 3.22 The highway network in Lincolnshire is extensive, totalling over 9,000km of road; however, the county is not well served by major highways as there are no motorways in Lincolnshire and only around 75km of dual carriageway. The A1 trunk road runs down the western boundary of the county and the A46, A57, A52, A15, A16, A17 routes link settlements throughout Lincolnshire. Accessibility is an issue throughout Lincolnshire, but more so in the more rural isolated parts of the county with particular problems in travelling east-west.
- 3.23 Local rail services operate within the county and connect the main towns and villages to the surrounding regions. The East Coast Mainline runs along the western side of the county, through Grantham to London.
- 3.24 There are ports at Boston and Sutton Bridge, with the larger ports of Grimsby and Immingham located just outside the county. The River Trent runs along some of the county's western border and has established routes for waterway traffic.

4. Spatial vision and strategic objectives

Spatial vision

- 4.1 A spatial vision shapes the overall direction of the new LMWLP and sets out a positive framework for the delivery of sustainable minerals and waste development over the plan period. The spatial vision recognises the balance that must be struck in Lincolnshire between making provision for minerals and waste developments to meet future requirements, whilst at the same time ensuring that such developments seek social, environmental and economic gains.
- 4.2 The spatial vision for the new plan is set out below:

"Over the plan period to the end of 2041 Lincolnshire County Council will provide a strategic planning framework which ensures the provision of sufficient minerals and waste infrastructure to support sustainable economic growth, whilst conserving and enhancing the natural, built and historic environment, protecting the health and amenity of local communities, and taking positive action to mitigate and adapt to climate change."

Strategic objectives

- 4.3 To assist in the delivery of the spatial vision and in delivering sustainable development, the identification of strategic objectives provides a framework for the development of policies included in the new LMWLP.
- 4.4 Using the current adopted LMWLP as a starting point and taking into account the relevant legislative and policy context, the strategic objectives for this plan are as follows:
 - Facilitate the sustainable supply of minerals from appropriately located and environmentally acceptable sources, encouraging the use of sustainable modes of transport whilst minimising transportation by road, and promoting the sustainable use of primary minerals by encouraging the production and use of good quality secondary and recycled aggregates.
 - 2. Facilitate the sustainable management of waste by encouraging the movement of waste up the waste hierarchy, supporting the minimisation of waste generation and the need for disposal in line with the circular economy, and ensuring waste management facilities are appropriately located to ensure waste is managed as near as possible to where it is produced, sustainable modes of transport are encouraged, and transportation by road minimised.
 - 3. Provide for a steady and adequate supply of minerals to contribute to local and national requirements and support sustainable economic growth.

- 4. Provide for sufficient waste management capacity to meet future requirements and enable Lincolnshire to be net self-sufficient in terms of managing the amount of waste predicted to arise in the County.
- 5. Ensure minerals and waste developments incorporate measures which actively contribute to the need to mitigate climate change through a reduction in greenhouse gas emissions and provide opportunities for adaptation to the effects of climate change such as flood risk management and habitat resilience.
- 6. Safeguard important mineral resources, minerals sites and associated infrastructure, and waste management facilities from incompatible development where appropriate.
- 7. Minimise the impacts of minerals and waste development on communities and human health in relation to matters such as noise, dust, vibration, odour, light pollution, traffic, access, and visual impact.
- 8. Ensure minerals and waste developments conserve and enhance Lincolnshire's unique natural, built and historic environment, having particular regard to the increased protection afforded to the Lincolnshire Wolds National Landscape, Area of Outstanding Natural Beauty.
- 9. Ensure the restoration of temporary mineral and waste sites at the earliest opportunity and the delivery of high quality after-uses which best meet local circumstances and achieve an appropriate balance of priorities including landscape scale nature conservation and biodiversity net gain, climate change adaptation, public access and recreation, preservation of soils and the best and most versatile agricultural land, and aviation safety.

5. Overarching strategic policies

- 5.1 Sustainable development is at the heart of this plan and this is embedded within the overarching strategic policies S1, S2 and S3. These policies set the context for all of the strategic and non-strategic policies within this plan, which must be read as a whole, to achieve sustainability, mitigate climate change and adapt to its effects. All proposals for minerals and waste development will be assessed against the requirements of policies S1 and S2 and must demonstrate how the requirements of these policies are met.
- 5.2 The UK has made specific commitments to reducing emissions of greenhouse gases. In June 2019, the Climate Change Act 2008 was amended setting a new target for reducing these gases by at least 100% from the 1990 baseline by 2050, making the UK a "net zero emitter".
- 5.3 Section 19 (1A) of the Planning and Compulsory Purchase Act 2004 states that development plan documents must (taken as a whole) include policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change.
- 5.4 Revisions to the NPPF have placed more emphasis on the effects of climate change, including requirements on new development for enhanced flood management and the delivery of net gains in biodiversity.
- 5.5 Paragraph 158 of the NPPF states that plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. Policies should support appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.
- Paragraph 159 of the NPPF goes on to state that new development should be planned for in ways that:
 - a) avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; and
 - can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards.

- 5.7 Paragraph 160 of the NPPF states that to help increase the use and supply of renewable and low carbon energy and heat, plans should:
 - a) provide a positive strategy for energy from these sources, that maximises the
 potential for suitable development, while ensuring that adverse impacts are
 addressed satisfactorily (including cumulative landscape and visual impacts);
 - b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and
 - c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for colocating potential heat customers and suppliers.

S1: Sustainable Development and Climate Change

Proposals for minerals and waste development shall demonstrate that the proposal will contribute to the achievement of sustainable development.

Proposals for minerals and waste development shall minimise impacts, reduce vulnerability and provide resilience to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. Proposals shall demonstrate that measures to mitigate the causes of, and adapt to, climate change are embedded within the development for the lifetime of the development, and where applicable, the lifetime of its restoration scheme.

Proposals shall:

- demonstrate how the location, design and operation of the development will minimise distances needed to be travelled by road, maximise the use of the most sustainable transport option, minimise energy consumption, minimise greenhouse gas emissions and make the most efficient and sustainable use of resources;
- (ii) demonstrate how the proposal will make use of renewable energy, incorporate on-site renewable energy generation and facilitate the use of low carbon and carbon capture technologies;
- (iii) provide new and enhanced biodiversity, habitats and green and blue infrastructure and provide new, or enhance existing, connections to ecological networks and green and blue infrastructure.
- As acknowledged in the NPPF, high quality, sustainable design is fundamental to what the planning and development process should achieve and is a key aspect of sustainable development. A sustainable approach to design requires an integrated and holistic approach to new development, considering the impacts of all elements of the proposal at each stage. All new development should be of a high standard of design and opportunities should be sought to utilise the latest and emerging

technologies, to secure the highest quality of development. As technology advances, it can provide benefits for new development in meeting the challenges of climate change and contributing towards the achievement of sustainable development.

S2: Sustainable Design

Proposals for minerals and waste development shall be of high quality and be well designed. Where applicable, planning permission will be granted for minerals and waste development which utilises innovative design solutions and / or emerging technologies, where this will result in high quality, sustainable design.

- 5.9 The NPPF states that local planning authorities should 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.
- 5.10 It should be noted that the Environment Agency needs to be consulted when the recycling of soils and aggregate is being considered, as it may require permitting and some extraction activities may require Mining Waste permits.
- 5.11 The use of secondary and recycled aggregates in construction projects and highways development (sub-base for roads) contributes to more sustainable development. The substitution of part of the primary won aggregate by alternative products lessens the need for quarrying with the associated benefits of reduced social and environmental impacts.
- 5.12 Recycled aggregates can comprise of construction, demolition and excavation wastes, asphalt road planings and used railway ballast. The main source of alternative aggregates in Lincolnshire arises from construction, demolition and excavated waste (often referred to as CD & E waste). 'Secondary aggregates' are by-products of other processes, and will not have been used previously as aggregates. Whilst the bulk of aggregates required for the construction industry are likely to continue to be won from primary resources, the Council recognises that a sustainable minerals supply strategy should make provision for maximising the recovery and use of recycled and secondary materials.

S3: Sustainable Use of Aggregate Resources

Planning permission will be granted for recycling / reprocessing of materials for use as secondary or recycled aggregates provided that proposals accord with all relevant Spatial Strategy and Locational Criteria, Development Management and Restoration Policies set out in the Plan.

6. Providing for minerals

Introduction

- 6.1 Lincolnshire contains a wide variety of mineral resources and is a major minerals producer. Both aggregate and non-aggregate minerals are produced within the county.
- 6.2 Lincolnshire's primary aggregates are derived from sand and gravel, limestone or chalk and are used in the construction industry. Non-aggregate minerals being worked in Lincolnshire include building stone (limestone) and hydrocarbons (oil and gas), but in the past included clay and ironstone. There are also silica sand and coal resources within the county.
- 6.3 Paragraph 215 of the NPPF states that it is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy, and goods that the country needs. It goes on to state that since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation. To meet these aims, paragraph 216 states, amongst other things, that mineral planning authorities should include policies for the extraction and safeguarding of mineral resources of local and national importance in their local plans.
- 6.4 In addition, the NPPF states within paragraph 217 that in considering proposals for mineral extraction, minerals planning authorities should as far as is practical, provide for the maintenance of landbanks of non-energy minerals from outside National Parks, the Broads, Areas of Outstanding Natural Beauty and World Heritage Sites, scheduled monuments and conservation areas.

Aggregates

National considerations for aggregate

- 6.5 Paragraph 219 of the NPPF states that mineral planning authorities should plan for a steady and adequate supply of aggregates and landbanks of at least seven years for sand and gravel and at least 10 years for crushed rock, whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised. Central to this process is the Local Aggregate Assessment (LAA) which assesses future demand for, and supply of, aggregate. This is used to inform the provisions set out in the LMWLP.
- 6.6 The PPG provides clarification on the term "landbanks" (paragraph 083 of the minerals section). In particular, it states that the length of the aggregate landbank is the sum in tonnes of all permitted reserves for which planning permissions are extant, divided by the annual rate of future demand based on the latest annual Local Aggregate Assessment. In calculating landbanks, the term permitted reserves

- includes current non-working sites but excludes those sites where mineral working cannot take place until there has been a review of the planning conditions.
- 6.7 The PPG also states that aggregate landbanks are an essential component of planning decision-making and are the basis on which the level of provision of new areas for aggregate extraction should be calculated when preparing local mineral plans (paragraph 082 of the minerals section).

Sand and gravel

- 6.8 Sand and gravel resources are the most important of the county's aggregate minerals. Over the ten-year period 2013 to 2022, sales from Lincolnshire averaged 2.326 million tonnes (mt) per annum. This represents around a third of sand and gravel sales in the East Midlands making it the largest producer in the region. These resources are used primarily in the construction industry as building sand or in the manufacture of concrete.
- 6.9 The latest LAA (reporting 2022 data), sets the annual provision rate for sand and gravel. After considering all relevant factors, the LAA has based this rate on the average of the sales data for the ten-year period 2013 to 2022. This amounts to 2.326mt per annum. In accordance with the PPG, this figure has been used in Table 1 for calculating the proposed total level of provision that needs to be made in the plan for the years 2023 to 2041. The table also sets out the shortfall between this total provision and the level of permitted reserves at the end of 2022. This shortfall will need to be met during the plan period to 2041.

Table 1: Shortfall in sand and gravel provision for Lincolnshire 2023 – 2041 (inclusive)

Annual provision rate (mt)	Required provision 2023 to 2041 (mt)	Permitted reserves at 31.12.22 (mt)	Shortfall (mt)
2.33	44.27	22.36	21.91

6.10 Table 2 below updates the situation regarding additional permitted reserves between 1 January 2023 and 1 March 2024 in relation to planning permissions which have been granted and those applications which have a Committee resolution to grant planning permission but are awaiting completion of a \$106 Planning Obligation.

Table 2: Planning permissions granted or with a Committee resolution to grant subject to a S106 planning obligation between 01/01/23 and 01/03/24 for sand and gravel

Site Name	Permitted Reserve / Forthcoming Permitted Reserve (Million tonnes)	
Manor Pit, Baston	0.03	

West Deeping Quarry	0.28 (two planning permissions)	
Baston No.2 Quarry	0.25 (pending \$106)	
Total	0.56	
Updated Shortfall	21.35	

Spatial strategy

- 6.11 The NPPF states that provision for land won aggregates in mineral plans should take the form of specific sites, preferred areas and/or areas of search and locational criteria as appropriate. Specific sites will generally be where viable mineral resources are known to exist, where landowners are supportive of mineral development taking place and where the council considers that any planning applications which are made are likely to be acceptable in planning terms. Preferred areas are areas of known resources where planning permission might reasonably be expected. Areas of search are broader areas where knowledge of mineral resources may be less certain but within which planning permission could be granted to meet any shortfall in supply.
- 6.12 Previously, Lincolnshire had been subdivided into three sand and gravel production areas in the current adopted LMWLP known as the Lincoln Trent Valley Production Area, the Central Lincolnshire Production Area, and the South Lincolnshire Production Area. As set out in the LAA, in previous years, the sales and landbank data for each of these production areas has been reported separately. However, since 2021 there has been a reduction in the number of operators in the Central Lincolnshire Production Area and subsequent data from the mineral survey cannot be published for this production area without the consent of the companies operating in this area due to the confidentiality undertaking the county council has agreed with the Industry. That consent has not been forthcoming. As a result, dividing the data between the production areas would no longer comply with the confidentiality undertaking agreed with Industry. The 2022 data is therefore only available to be reported for the county as a whole. This situation undermines the council's ability to monitor and plan for the sub-county production areas.
- 6.13 It is therefore no longer possible to plan for sand and gravel on the basis of three production areas within Lincolnshire and so the spatial strategy for sand and gravel set out in this Preferred Approach document adopts a county-wide approach. A county-wide approach also reflects the changes in the market with sand and gravel extracted in Lincolnshire being transported much further than in previous times, with substantial amounts being exported to counties with their own indigenous resources (as reported in the LAA).
- 6.14 In planning for a steady and adequate supply of sand and gravel, this Preferred Approach document continues the approach of the current adopted LMWLP in seeking to secure the county's future supplies of sand and gravel from extensions to existing operational sites (i.e. Active Mining Sites under the Planning and Compensation Act 1991 or Environment Act 1995) wherever possible, and where this will not have unacceptable impacts on local communities or the environment.

- 6.15 It is proposed to continue with this approach in the new LMWLP for the following reasons:
 - a. it avoids a proliferation of sites and ensures that future extraction is confined to areas where disturbance to the local environment has already taken place;
 - b. it permits the council to exercise greater control over the release of reserves as a new quarry would invariably require the release of substantial reserves to justify expenditure in new plant and equipment; and
 - c. it potentially provides an opportunity for higher overall standards of restoration.
- 6.16 It is, however, recognised that it will not always be possible to extend existing workings where, for example, the deposit in adjacent land is unviable or where environmental factors preclude further working.
- 6.17 Sites already allocated in the SLD, and which have not already secured planning permission, are proposed to be carried forward as allocations this Preferred Approach document except where evidence has emerged that there has been a significant change in circumstances since a site was allocated, for example a site is no longer being promoted by a mineral operator.
- 6.18 The remaining shortfalls in the sand and gravel provision are proposed to be met by the allocation of additional sites which have been selected in accordance with the Proposed Site Selection Methodology for Updating the Plan.
- 6.19 Table 3 below identifies the allocations within the current adopted LMWLP that are proposed to be carried forward.

Table 3: Existing sand and gravel allocations proposed to be carried forward

Site Reference	Site Name	Total Reserves
MS04-LT	Swinderby Airfield	7.0Mt
MS15-CL	Kirkby on Bain	3.1Mt
	Phase 2	
MS27-SL	Baston No. 2	2.5Mt
	Quarry Langtoft	
Total		12.6Mt

6.20 Table 4 below demonstrates that when the existing allocations proposed to be taken forward are deducted from the shortfall for the plan period to 2041, there is a remaining shortfall of 8.75 million tonnes of sand and gravel to be met through the allocation of additional sites.

Table 4: Calculation of sand and gravel provision 2023 – 2041 (inclusive)

Α	Annual Requirement	2.33Mt
В	Total Requirement 2023 - 2041	44.27Mt

С	Permitted Reserves (including	22.92Mt
	those with a Committee resolution	
	to grant planning permission)	
D	Existing Allocations	12.6Mt
E	Shortfall 2023 – 2041 (B – (C + D))	8.75Mt

6.21 Following the detailed site assessment process, the preferred sites that are proposed for allocation at this stage, in order to meet the remaining shortfall, are set out in policy SM1 below. Collectively, this makes provision for a total of 25.075 million tonnes of sand and gravel which exceeds the shortfall of 21.35 million tonnes over the plan period but allows for the maintenance of a spatial distribution of sites across the plan area and provides some flexibility should demand exceed forecast levels.

SM1: Providing for an Adequate Supply of Sand and Gravel

To ensure a steady and adequate supply of sand and gravel for aggregate purposes over the plan period (2023 – 2041, inclusive), provision will be made for the extraction of 44.27 million tonnes of sand and gravel (2.33 million tonnes per annum).

Planning permission will be granted for sand and gravel working from the following allocated sites where the applicant can demonstrate that the proposal is in accordance with the development plan:

Site	Name	Total	Туре
Reference		Reserve	
MS04-LT	Swinderby Airfield, Witham	7.0mt	Existing Allocation
	St Hughs		
MS15-CL	Kirkby on Bain Phase 2,	3.1mt	Existing Allocation
	Tattershall Thorpe		
MS27-SL	Baston No.2 Quarry Phase	2.5mt	Existing Allocation
	2, Langtoft		
SG07	Whisby Quarry Extension	5.975mt	Extension
	(Eagle Hall)		
SG12	Norton Bottoms Quarry	2.5mt	Extension
	Extension, Norton Disney		
SG16	Kettleby Quarry Extension,	2.2mt	Extension
	Bigby		
SG17	Land to the south of the	1.8mt	Replacement
	A1175, West Deeping		

6.22 Development briefs will be prepared to accompany the sites allocated in this policy to provide details of the key issues to be addressed at the planning application stage.

Landbanks

- 6.23 To help ensure that the provision made in the LMWLP gives rise to a steady and adequate supply of sand and gravel throughout the plan period, Policy SM2 seeks to maintain a landbank of permitted reserves of at least seven years based on the council's latest LAA.
- 6.24 Although the county council will be making provision for the release of additional reserves to maintain production levels to the end of the plan period based on average sales over the period 2013 2022, it needs to be recognised that actual production levels may vary significantly from those forecast. The county council will therefore review the situation, including the method for calculating the landbank, each year through its Local Aggregate Assessment. If production levels deviate significantly from the levels forecast, this may trigger a need to review the LMWLP. The county council is committed to a programme of regular reviews of the LMWLP and will bring forward such a review if monitoring shows that provision of a steady and adequate supply of sand and gravel is at risk.

SM2: Landbank of Sand and Gravel

In order to ensure a steady and adequate supply of sand and gravel for aggregate purposes, the County Council will seek to maintain a landbank of permitted reserves of sand and gravel of at least seven years based on the County Council's latest Local Aggregate Assessment.

- 6.25 The county council will seek to maintain the landbank of sand and gravel through granting planning permission for sites allocated in this LMWLP. However, the county council recognises that the seven year landbank is a minimum, not a target, and that in order to maintain the level of output the landbank may on occasions need to significantly exceed this level.
- 6.26 It is possible that a shortfall could develop in the landbank if an application for an allocated site is not forthcoming or is refused. In these circumstances the county council will grant planning permission for unallocated sites in limited circumstances in order to maintain a steady and adequate supply of sand and gravel, by adopting a criteria based policy approach. All such applications should demonstrate that they would not have unacceptable impacts on local communities or the environment. Where a replacement quarry is required, this does not imply that the new quarry would have to be operated by the company whose quarry it will replace.
- 6.27 Irrespective of the size of the landbank, there may be exceptional circumstances over the life of the Plan when an additional quarry is justified, such as when a deposit has special characteristics not found in other deposits worked locally. When such a need is demonstrated, planning permission will be granted provided that the development does not have unacceptable impacts on local communities or the environment.

SM3: Proposals for Sand and Gravel Extraction

Sites allocated in Policy SM1 will be granted planning permission for sand and gravel extraction for aggregate purposes provided that:

- (i) in the case of an extension to an Active Mining Site, extraction would follow on after the cessation of sand and gravel extraction from the existing areas supplying the plant site; and
- (ii) in the case of a new quarry, it is required to replace an existing Active Mining Site that is nearing exhaustion.

The sites allocated in Policy SM1 shall be developed in accordance with the Development Briefs (to be prepared).

For sites not allocated in Policy SM1, planning permission will be granted for sand and gravel extraction for aggregate purposes where the site is required to:

- (iii) meet a proven need that cannot be met from the existing permitted or allocated reserves; or
- (iv) meet a specific shortfall in the landbank and either:
 - a) forms an extension to an existing Active Mining Site; or
 - b) will replace an existing Active Mining Site that is nearing exhaustion; or
- (v) extract sand and gravel for aggregate purposes from land within or immediately adjacent to an existing Active Mining Site which it is demonstrated to the satisfaction of the Mineral Planning Authority would otherwise become sterilised if not worked as part of the existing operations at the site.

In all cases the proposal must accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.

Crushed rock

- 6.28 The principal source of crushed rock aggregate produced in Lincolnshire is the Lincolnshire Limestone. Generally, this aggregate is of relatively low strength with poor resistance to frost damage. It is therefore normally only suitable for use as constructional fill or for sub-base material.
- 6.29 The Lincolnshire Limestone outcrop runs north to south through Lincoln and Grantham, and forms the prominent escarpment of the Lincoln Edge. It is currently worked for aggregates at a number of small to medium-sized quarries, that are fairly evenly distributed along the outcrop between Lincoln and Stamford.
- 6.30 Chalk is also extracted for aggregate purposes but is only suitable for even less demanding applications than Lincolnshire Limestone. Until the 1990s chalk was classified as a secondary aggregate in the national aggregate monitoring surveys due

- to these limitations. Although it has since been reclassified as a primary aggregate, its limitations were still recognised when it was excluded from the county's subregional apportionment of crushed rock aggregate in 2010.
- 6.31 There are currently only two operational chalk quarries in the county, one located within the Lincolnshire Wolds AONB and the other immediately adjacent to the AONB. There has been little data available in recent years on chalk sales, but only relatively small amounts are extracted.
- 6.32 The council is seeking the progressive reduction of mineral production within the Lincolnshire Wolds AONB to help conserve the landscape and scenic beauty of this area in line with the NPPF. As a result, the county's crushed rock provision will continue to be met through Lincolnshire Limestone.
- 6.33 The latest LAA (reporting 2022 data), sets the annual provision rate for crushed rock aggregate. After considering all relevant factors, the LAA has based this rate on the average of the sales data for Lincolnshire Limestone for the three-year period 2019 to 2022. The use of a shorter period (compared with the ten-year average used for sand and gravel) reflects a recent upturn in sales, which averages 1.355mt per annum. In accordance with the PPG, this figure has been used in Table 5 for calculating the proposed total level of provision that needs to be made in the plan for the years 2023 to 2041. The table also sets out the shortfall between this total provision and the level of permitted reserves at the end of 2022. This shortfall needs to be met during the plan period to 2041.

Table 5: Shortfall in crushed rock (Lincolnshire Limestone) provision for Lincolnshire 2023 – 2041 (inclusive)

Annual provision rate (mt)	Required provision 2023 to 2041 (mt)	Permitted reserves at 31.12.22 (mt)	Shortfall (mt)
1.36	25.84	15.65	10.19

6.34 Between 1 January 2023 and 1 March 2024 no planning permissions have been granted for limestone extraction and no applications have a Committee resolution to grant planning permission but are awaiting completion of a S106 Planning Obligation. There is therefore no adjustment necessary to the shortfall.

Spatial strategy

- 6.35 When the 2016 LMWLP was being prepared it was found that the county had sufficient permitted reserves of Lincolnshire Limestone to meet the forecast requirement for limestone aggregate during that plan period.
- 6.36 However, as set out in Table 5 above, there is now a need to make provision for a shortfall of 10.19 million tonnes of limestone for crushed rock aggregate. In common with the approach taken on sand and gravel, this shortfall will be secured

using a site-specific approach from extensions to existing operational sites (Active Mining Sites) wherever possible, and where this will not have unacceptable impacts on local communities or the environment. Under this approach, new quarries would normally only be allowed where they are to replace sites that will become worked out during the plan period.

- 6.37 The allocation of specific sites has taken into account the fact that most limestone quarries also produce limited quantities of non-aggregate material such as agricultural lime. This has been accommodated in the total amount of reserve allocated.
- 6.38 In light of there being no current allocated sites for limestone, the whole shortfall of 10.19 million tonnes is proposed to be met through the allocation of sites selected in accordance with the Proposed Site Selection Methodology for Updating the Plan.
- 6.39 Following the detailed site assessment process, the preferred sites that are proposed for allocation at this stage are set out in policy SM4 below. Collectively, this makes provision for a total of 11.955 million tonnes of limestone which exceeds the shortfall of 10.19 million tonnes over the plan period but allows for the maintenance of a spatial distribution of sites across the plan area and provides some flexibility should demand exceed forecast levels.

SM4: Providing for an Adequate Supply of Limestone

To ensure a steady and adequate supply of limestone for aggregate purposes over the plan period (2023 – 2041, inclusive), provision will be made for the extraction of 25.84 million tonnes of limestone (1.36 million tonnes per annum).

Planning permission will be granted for limestone working from the following allocated sites where the applicant can demonstrate that the proposal is in accordance with the development plan:

Site	Name	Total Reserve	Туре
Reference			
L01	Ladysmith Farm, Harmston	3.83mt	New
L06	Dunston Quarry Extension	0.825mt	Extension
L08	Castle Quarry Extensions (East), Ancaster	0.6mt	Extension
L11	Land to the East of Little Ponton Quarry	4.2mt	Replacement
L12	Extension to Ropsley Quarry	2.5mt	Extension

6.40 Development briefs will be prepared to accompany the sites allocated in this policy to provide details of the key issues to be addressed at the planning application stage.

Landbanks

- 6.41 To help ensure that the provision made in the LMWLP gives rise to a steady and adequate supply of limestone throughout the plan period, Policy SM5 seeks to maintain a landbank of permitted reserves of at least ten years based on the council's latest LAA.
- 6.42 Although the county council will be making provision for the release of additional reserves to maintain production levels to the end of the plan period based on average sales over the period 2019 2022, it needs to be recognised that actual production levels may vary significantly from those forecast. The county council will therefore review the situation, including the method for calculating the landbank, each year through its Local Aggregate Assessment. If production levels deviate significantly from the levels forecast, this may trigger a need to review the LMWLP. The county council is committed to a programme of regular reviews of the LMWLP and will bring forward such a review if monitoring shows that provision of a steady and adequate supply of limestone is at risk.

SM5: Landbank of Limestone

In order to ensure a steady and adequate supply of limestone for aggregate purposes, the County Council will seek to maintain a landbank of permitted reserves of limestone of at least 10 years based on the County Council's latest Local Aggregate Assessment.

- 6.43 The county council will seek to maintain the landbank of limestone through granting planning permission for sites allocated in this LMWLP. However the county council recognises that the 10 year landbank is a minimum, not a target, and that in order to maintain the level of output the landbank may on occasions need to significantly exceed this level.
- 6.44 It is possible that a shortfall could develop in the landbank if an application for an allocated site is not forthcoming or is refused. In these circumstances the county council will grant planning permission for unallocated sites in limited circumstances in order to maintain a steady and adequate supply of limestone, by adopting a criteria based policy approach. All such applications should demonstrate that they would not have unacceptable impacts on local communities or the environment. Where a replacement quarry is required, this does not imply that the new quarry would have to be operated by the company whose quarry it will replace.
- 6.45 Irrespective of the size of the landbank, there may be exceptional circumstances over the life of the Plan when an additional quarry is justified, such as when a deposit has special characteristics not found in other deposits worked locally. When such a need is demonstrated, planning permission will be granted provided that the development does not have unacceptable impacts on local communities or the environment.

SM6: Proposals for Limestone Extraction

Sites allocated in Policy SM4 will be granted planning permission for limestone extraction for aggregate purposes provided that:

- in the case of an extension to an Active Mining Site, extraction would follow on after the cessation of limestone extraction from the existing areas supplying the plant site; and
- (ii) in the case of a new quarry, it is required to replace an existing Active Mining Site that is nearing exhaustion.

The sites allocated in Policy SM4 shall be developed in accordance with the Development Briefs (to be prepared).

For sites not allocated in Policy SM4, planning permission will be granted for limestone extraction for aggregate purposes where the site is required to:

- (iii) meet a proven need that cannot be met from the existing permitted or allocated reserves; or
- (iv) meet a specific shortfall in the landbank and either:
 - forms an extension to an existing Active Mining Site; or
 - b) will replace an existing Active Mining Site that is nearing exhaustion; or
- (v) extract limestone for aggregate purposes from land within or immediately adjacent to an existing Active Mining Site which it is demonstrated to the satisfaction of the Mineral Planning Authority would otherwise become sterilised if not worked as part of the existing operations at the site.

In all cases the proposal must accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.

6.46 Whilst no specific provision is made for chalk extraction, the county council recognises that there may be exceptional circumstances over the life of the plan when the release of additional chalk reserves may be justified. In all cases, a proven need for extensions to existing sites or new extraction sites will need to be demonstrated, particularly given that the county council is seeking the progressive reduction of mineral production in the Lincolnshire Wolds AONB.

SM7: Chalk

Proposals for extensions to existing chalk extraction sites or new chalk extraction sites will be permitted provided that they meet a proven need that cannot be met by existing sites, and accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.

Non-aggregates

Building stone

- 6.47 Historically, Lincolnshire has produced and used a wide range of indigenous stones for building purposes. As a result, parts of the county have developed their own unique and locally distinctive character reflecting the locally available building materials. English Heritage (now Historic England) published the Lincolnshire Strategic Stone Study in July 2013 which provides a detailed analysis of building stone types within the county.
- 6.48 Specific building stone is needed for repairing historic structures across the county and for maintaining local distinctiveness with appropriate new buildings. Stone selected for the repair of historic buildings and structures must closely match the original stone to avoid differences in appearance. Building stone therefore has an important role to play in the conservation, management, and enhancement of the historic environment, and in tackling heritage at risk.
- 6.49 The only building stone resource that is currently exploited in the county is limestone from the Lincolnshire Limestone Formation. There are three "historic" limestone quarries in the county that exclusively produce building stone. Two of these are located in the adjoining parishes of Wilsford and Heydour and produce Ancaster Stone. The third is located in Holywell, near Stamford, and produces Clipsham Stone.
- 6.50 These quarries are significantly smaller than aggregate quarries in terms of scale of operation and produce much lower levels of noise, dust, and vehicle movements. As a result, they are less likely to have significant impacts on communities and the environment.
- 6.51 Historically, some of the large aggregate quarries in the county have intermittently produced limited quantities of building stone, and in more recent years a few former aggregate quarries have reopened as "building stone quarries". However, in practice these can produce substantial quantities of aggregate. For the avoidance of doubt, proposals which are primarily a means to extract aggregate will be assessed against policy SM6.
- 6.52 This Plan makes provision for building stone through a criteria-based policy which takes into account the specific characteristics of, and demand for, building stone. Development proposals for building stone will be required to demonstrate the specific need for the stone and provide evidence of this specific need. For example, a need for building stone could have been generated as a result of a grant of planning permission for which there is a specific requirement to use building stone, the need for which is secured through the planning permission (through the use of a planning condition or \$106 legal agreement). A further example of a specific need for building stone could be a current, existing contract being in place for the provision of building stone for use in a specified scheme. The use of building stone

proposed to be extracted within the Plan Area should be limited to schemes within Lincolnshire.

SM8: Building Stone

Proposals for the extraction of building stone will be permitted where it can be demonstrated that:

- (i) there is a specific need for the stone; and
- (ii) proposals provide evidence to demonstrate the contribution that the stone proposed to be worked would make to the high quality and local distinctiveness of the built and / or historic environment of Lincolnshire; and
- (iii) the scale of the proposal is consistent with the identified needs for the stone; and
- (iv) the stone cannot be obtained from permitted reserves at existing sites; and
- (v) the proposals accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.

Silica sand

- 6.53 Silica sands are valued for a combination of chemical and physical properties which have made it an essential raw material for many industrial applications including: glass making, foundry casting, ceramics and filtration. Workable deposits of silica sand are, however, sparsely distributed making them a valuable resource recognised by the government as an essential raw material of national importance.
- 6.54 The most extensive windblown deposits of silica sand are located in the north of the county where they extend across the county boundary into North Lincolnshire.

 These are not worked in Lincolnshire but are worked extensively in North Lincolnshire around the Messingham area.
- 6.55 Paragraph 220 of the NPPF states that minerals planning authorities should plan for a steady and adequate supply of industrial minerals, including by maintaining a stock of permitted reserves of at least 10 years for individual silica sand sites, and at least 15 years for silica sand sites where significant new capital is required.

SM9: Silica Sand

Planning permission will be granted for silica sand extraction where required to provide a stock of permitted reserves of at least 10 years for an individual silica sand site (or 15 years where significant new capital is required), provided that proposals accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.

Hydrocarbons (oil and gas)

- 6.56 Oil and gas resources can be broadly split into two categories: conventional and unconventional. "Conventional" is used to describe oil and gas resources ('hydrocarbons') located in relatively porous rock formations such as limestone and sandstone. The extraction methods generally involve drilling a borehole down to the porous rock where the hydrocarbons are located in a reservoir. These resources are then pumped out of the ground using beam pumps (known as 'nodding donkeys') or electric pumps.
- 6.57 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 has a predicted total production of 16.7 million bbl (barrels) of oil. In addition, the county has extensive oil fields around Gainsborough, Corringham and Scampton. Gas has previously been produced from the Saltfleetby field to the east of the county on a significant scale. At the beginning of 2021 there were 37 permitted oil and gas sites across the county.
- 6.58 "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. Technological advancements over the last decade have, however, 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.
- 6.59 The British Geological Survey (BGS) in association with the former Department of Energy and Climate Change (DECC) completed a study in 2013 which estimated the resource (gas-in-place) of shale gas associated with the 'Bowland Shale' in Central Britain. The study area included the northern half of Lincolnshire and identified an area referred to as the 'Gainsborough Trough' as being prospective for shale gas. This area lies to the south and east of Gainsborough and extends into adjoining Nottinghamshire and North Lincolnshire. To date, however, no Shale Gas development has taken place in Lincolnshire. Until exploratory wells are sought and drilled, and the location and extent of any resource determined, the prospect for economic recovery in Lincolnshire is unknown.
- 6.60 There are several bodies responsible for regulating oil and gas development in the county, but the principal ones are:
 - The North Sea Transition Authority (NSTA) which issues Petroleum Exploration and Development Licence's (PEDL) in competitive offerings (licence rounds).
 These grant exclusivity to operators who receive a licence to drill in the licensed area once all other permissions and approvals are in place. NSTA have responsibility for assessing risk and monitoring seismic activity, as well as

granting consent to flare or vent. Under section 4A of the Petroleum Act 1998 (inserted by section 50 of the Infrastructure Act 2015), all well consents issued on or after 6 April 2016 contain a requirement that the Licensee obtain hydraulic fracturing consent (HFC) from the Secretary of State before carrying out any associated hydraulic fracturing as defined in section 4B of that Act.

- The county council as Mineral Planning Authority which grants permission for the location of any acceptable wells and wellpads and imposes conditions to ensure that the impacts on the use of the land are mitigated.
- Environment Agency which is responsible for protecting water resources
 (including groundwater aquifers), ensuring appropriate treatment and disposal of
 mining waste, controlling emissions to air, and ensuring suitable treatment and
 management of any naturally occurring radioactive materials.
- Health and Safety Executive which regulates the safety aspects of all phases of extraction, with responsibility for ensuring the appropriate design and construction of well casings for boreholes.

6.61 Hydrocarbon development has three distinct stages:

- Exploration which involves drilling, is often the most intrusive part of the
 development due to the potential visual, lighting and noise disturbance and
 impacts on local roads. It requires night-time drilling to ensure that the borehole
 does not close up, which would otherwise significantly extend the period the
 drilling rig needs to remain on site.
- 2. Appraisal which is the longer-term testing of an exploratory well to assess the long-term suitability of the site for production purposes.
- 3. Production which generally involves additional facilities such as pipelines, storage facilities and export terminals.

All stages of hydrocarbon development require planning permission and each stage will be assessed on its own merits. There will be no presumption in favour of permission being granted for subsequent stages if an earlier stage has been permitted, nor will possible effects of a later stage not yet applied for constitute grounds for refusal of an earlier stage.

6.62 Paragraph 106 of the minerals section of the PPG requires all mineral planning authorities which are in a Petroleum Licence Area, when they update their local plans, to include the Petroleum Licence Areas on their policies maps and include criteria-based policies for each of the exploration, appraisal and production phases of hydrocarbon extraction. Additionally, paragraph 221(a) of the NPPF sets out that mineral planning authorities should, when planning for on-shore oil and gas development, clearly distinguish between, and plan positively for, the three phases of development (exploration, appraisal and production), whilst ensuring appropriate

- provision is made for monitoring and site restoration. Lincolnshire contains a number of Petroleum Licence Areas and as such, it is a requirement that this plan includes a policy relating to hydrocarbon exploration and extraction.
- 6.63 The PPG states that mineral planning authorities should take account of government energy policy, which makes it clear that energy supplies should come from a variety of sources including onshore oil and gas. Whilst the Climate Change Act 2008 (as amended) sets a goal to achieve net zero greenhouse gas emissions by 2050, from a 1990 baseline, partly secured through a significant reduction in demand for oil, and this is repeated in the government's Net Zero Strategy: Build Back Greener (2021), Overarching National Policy Statement EN-1 (2023) outlines the urgency of the UK continuing to have secure, reliable and diverse supplies of energy during the transition to a low carbon economy. The Energy White Paper (2020) also refers to this transition and acknowledges that the UK's domestic oil and gas industry has a critical role in maintaining the country's energy security during the transition to net zero. This is recognised in the British Energy Security Strategy (2022) which highlights the vulnerability of dependence on oil from international sources and the need to source it domestically during this time. This Strategy states that net zero is "a smooth transition, not an immediate extinction, for oil and gas". Notwithstanding the commitment to net zero, it is therefore necessary for mineral planning authorities to plan for oil and gas in order to comply with national policy and guidance.
- 6.64 On 4 November 2019, following seismic events linked to shale gas exploration in Lancashire, the Secretary of State for Business, Energy and Industrial Strategy issued a ministerial statement announcing a moratorium on fracking. However, this does not override the requirements of the NPPF or the PPG for mineral planning authorities to plan for both types of hydrocarbon development (conventional and unconventional) in their local plans.
- 6.65 Notwithstanding the requirement to plan for oil and gas development, all proposals for such development will be assessed and determined in the context of policies S1 and S2, which require development to be sustainable and address climate change. Policy SM10 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 and Restoration Policies set out in the Plan. Applications for energy mineral development should contain sufficient information to demonstrate that they constitute sustainable development, mitigate the causes of, and adapt to, climate change, 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.

SM10: Energy Minerals

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

Underground gas and carbon storage

- 6.66 A number of underground geological structures are potentially suitable for the storage of gas, these can include depleted oil and gas reservoirs, aquifers, and rock and salt caverns. Each have distinctive characteristics which govern the deliverability and economic viability of different storage types.
- 6.67 Underground gas storage is predominantly associated with the storage and management of natural gas as part of the UK's energy infrastructure. In recent years however, it is becoming increasingly considered alongside emerging technologies involving carbon capture and storage (CCS) as part of the wider transition to a low carbon economy. CCS involves capturing the carbon dioxide produced by power stations and other industrial processes that would otherwise be released to the atmosphere. This carbon dioxide can then be permanently stored in deep geological formations such as those outlined above. CCS therefore has the potential to help mitigate against the impacts of climate change through reducing emissions.
- 6.68 The history of onshore oil and gas development in Lincolnshire suggests that geological circumstances in the county could be suitable for underground gas storage. Although not implemented, planning permission was granted in 2010 for an underground gas storage facility within the Saltfleetby gas field. With regard to CCS, the government's Overarching National Policy Statement for Energy (EN-1) suggests that in the UK, the majority of locations thought to be best suited to storage of carbon dioxide are located offshore.
- 6.69 Like hydrocarbon development, in addition to the need for planning permission and hazardous substances consent (where appropriate), underground gas storage facilities are comprehensively regulated by organisations including the Health and Safety Executive, Environment Agency and North Sea Transition Authority.
- 6.70 Paragraph 221(b) of the NPPF states that minerals planning authorities should encourage underground gas and carbon storage and associated infrastructure if local geological circumstances indicate its feasibility. Paragraph 222 states that, when determining planning applications, minerals planning authorities should ensure that the integrity and safety of underground storage facilities are appropriate, taking into account the maintenance of gas pressure, prevention of leakage of gas and the avoidance of pollution.

- 6.71 The PPG for Minerals notes that mineral planning authorities are responsible for determining underground gas storage proposals within their areas which:
 - have an expected working capacity below 43 million standard cubic metres;
 or
 - b) have an expected maximum flow rate below 4.5 million standard cubic metres per day.

Any applications for storage projects above this size are dealt with under the Planning Act 2008 as Nationally Significant Infrastructure Projects and must be made to the relevant Secretary of State.

SM11: Underground Gas and Carbon Capture Storage

Planning permission will be granted for the development of underground gas and carbon capture storage facilities provided that:

- (i) the suitability of the geology at the site for the proposed use is demonstrated; and
- (ii) the proposals accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.

Other minerals

- 6.72 There are a number of minerals in the county which are not covered by strategic policies in this Plan, which include clay, ironstone and coal.
- 6.73 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 this local industry. By the mid-1970s all but one of the brickworks had closed, and the one remaining site (located in Stamford) was obtaining its supplies of clay from outside the county. The Stamford site subsequently closed around 2003.
- 6.74 The county also contains substantial deposits of ironstone. From the late nineteenth century to the 1970s, it was extensively worked both by underground and opencast methods. As a result, there are substantial areas of land with planning permission for ironstone working in the southwest and north of the county. Most of these permissions, however, are now dormant, and where working is still taking place, this is limited to the overlying limestone.
- 6.75 Due of the decline of the steel industry in the UK and the low-grade nature of the ironstone in Lincolnshire, it is considered unlikely that ironstone working will take place in the foreseeable future, other than potentially as a source of building stone.
- 6.76 Coal is also present in Lincolnshire with a major part of the county underlain by Lower and Middle Coal Measures strata. These coal measures, however, are entirely concealed by a thick Permian and Mesozoic cover and have never been worked.

- With current concerns over the burning of fossil fuels, particularly coal, it is looking increasingly unlikely that they will be worked in the future.
- 6.77 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.

Associated industrial development

- 6.78 In addition to the plant, machinery and buildings directly associated with the working of minerals, mineral operators may seek to undertake certain associated industrial activities at mineral extraction sites. A limited range of industrial development is permitted under the Town and Country Planning (General Permitted Development) (England) Order 2015 (GPDO), which can be carried out without the prior approval of the mineral planning authority. This must be for purposes principally in connection with the winning and working of minerals and may only be carried out on land that is used as a mine. It includes the treatment, storage or removal of minerals and derived wastes. A wider range of development, including secondary industry, is also permitted under the GPDO both at the mine and on ancillary mining land, but this is subject to the prior approval of the mineral planning authority. It includes ready mixed concrete and coating plants.
- 6.79 There may be benefits for certain industrial development utilising minerals from the mine, but falling outside the scope of the GDPO, to be located in close proximity to where the mineral is extracted. This could include, for example, concrete products manufacturing operations. Such operations normally require planning permission from the mineral planning authority.
- 6.80 There can be sustainability benefits of locating certain industrial developments at mineral extraction sites where they would utilise the mineral extracted from the site as the principal feedstock, for example, this could result in a reduction in vehicle movements between the mineral site and any off-site industrial development.
- 6.81 Policy SM12 is a criteria-based policy which makes provision for associated industrial development to be located within or in proximity to active mining sites to be considered acceptable in circumstances where the criteria are met.

SM12: Associated Industrial Development

Planning permission will be granted for ancillary industrial development within or in proximity to mineral sites where it can be demonstrated that:

- (i) the proposed development will utilise minerals derived from the existing Active Mining Site as the principal feedstock in the industrial process proposed; or
- (ii) it will support an existing Active Mining Site; and

(iii) in all cases, there are sustainability benefits of the co-location of the ancillary industrial development and the existing Active Mining Site.

Planning permission for ancillary industrial development within or in close proximity to minerals sites will only be granted on a temporary basis directly linked to the permitted extraction of mineral and / or restoration of the Active Mining Site.

In all cases, the proposals must accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.

Agricultural irrigation reservoirs

- 6.82 Agricultural irrigation reservoirs provide water for the irrigation of crops and can be constructed under agricultural permitted development rights granted by Paragraph 3 and Schedule 2, Part 6, Class A of the Town and Country Planning (General Permitted Development) (England) Order 2015, subject to the limitations and requirements of that Class. This includes a condition that any material excavated during construction must be retained on the agricultural unit. As a result, any proposal to construct an irrigation reservoir which involves the removal of the excavated material off the agricultural unit will require planning permission from the county council as mineral planning authority.
- 6.83 Historically many irrigation reservoirs that were constructed in Lincolnshire were relatively small in scale. These were often excavated into porous stratum allowing them to fill through the seepage of groundwater. In more recent times, however, there has been a move away from "seepage reservoirs" to "storage reservoir", which are sealed from the surrounding groundwater. These reservoirs are used to store water abstracted from nearby water courses during the winter months when water flows are higher, and when the Environment Agency is more likely to allow abstraction.
- As storage reservoirs are not recharged from the groundwater, they tend to be significantly larger than seepage reservoirs to allow them to hold sufficient water to meet the irrigation requirements of the agricultural unit. They also need to hold a surplus to account for evaporation losses and to enable the retention of some water to protect the impermeable seal and any wildlife. Such reservoirs can involve the extraction of very substantial amounts of mineral, in many cases sand and gravel. It is therefore important that these reservoirs are well designed to improve their efficiency and minimise the amount of material that needs to be excavated, particularly where it is proposed to remove this off site.
- 6.85 When considering an application for an irrigation reservoir that involves the removal of the excavated material off the agricultural unit, the county council needs to be satisfied that there is a genuine need for irrigation that can be met by a reservoir,

and that the development is not simply mineral extraction under the guise of agricultural development.

SM13: Irrigation Reservoirs

Planning permission will be granted for new or extensions to existing irrigation reservoirs that involve the extraction and off-site removal of minerals where it can be demonstrated that:

- (i) there is a proven agricultural justification for the reservoir; and
- (ii) the need can be met by an irrigation facility; and
- (iii) an abstraction licence has been granted by the Environment Agency; and
- (iv) the design is fit for purpose; and
- (v) the environmental impacts of removing material off-site would be less than constructing an above ground facility; and
- (vi) the proposals accord with all relevant Development Management Policies set out in the Plan.

Borrow pits

- 6.86 Borrow pits are temporary mineral workings sited in close proximity to major construction projects, particularly new road schemes and flood defence schemes, and are used solely to supply minerals (aggregate or clay) for this purpose. In some cases, the void created by the extraction is backfilled by the disposal of waste materials arising from the project.
- 6.87 They can have advantages over established mineral sites by reducing the impact of concentrated flows of heavy goods traffic on the public highway, and meeting peaks of demand without disrupting supplies elsewhere. They can also assist in the sustainable use of minerals by conserving resources of higher quality at existing mineral sites, thereby reducing the need to make additional provision.
- 6.88 Borrow pit proposals must demonstrate that a balance can be struck between the need for the mineral and the impact on the environment and any local communities, ensuring that adequate mitigation or compensation is provided for the effects of the proposed development. It will also be necessary to demonstrate that, in overall terms, the borrow pit would result in environmental benefits over alternative sources of supply.

SM14: Borrow Pits

Planning permission will be granted for borrow pits to supply materials for major construction projects where:

- (i) there is a need for a particular type of mineral which cannot reasonably be supplied from existing sites, including alternative materials; and
- (ii) the transport of mineral from existing sites to the construction project would be seriously detrimental to the environment and local amenities because of the scale, location and timing of the operations; and

- (iii) in the case of proposals involving the extraction of aggregates, the site lies on or in close proximity to the project; and
- (iv) the mineral can be transported to the point of use without leading to harmful conditions on a public highway; and
- (v) the site can be restored to a satisfactory after-use without the need to import material other than that generated by the construction project itself and which can be brought to the site without leading to harmful conditions on a public highway; and
- (vi) the proposals accord with all relevant Development Management Policies set out in the Plan.

Where planning permission is granted, conditions will be imposed to ensure that operations are time-limited and that all mineral extracted is used only for the specified project.

Safeguarding mineral resources

- 6.89 Mineral resource safeguarding is the process of ensuring that non-minerals development, such as housing, does not needlessly prevent the future extraction of mineral resources of local and national importance, and involves safeguarding areas of land containing such resources.
- 6.90 Safeguarding a mineral resource does not mean that a proposal to extract that resource will be permitted, as the main purpose of the safeguarding is to protect the resource for the long term for future generations. Furthermore, it should 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.
- 6.91 Paragraph 216 of the NPPF states that mineral planning authorities should safeguard mineral resources by defining Mineral Safeguarding Areas (MSAs) and Mineral Consultation Areas (MCAs). They should also 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). If it is necessary for non-minerals development to take place, it states that mineral planning authorities should set out policies to encourage the prior extraction of minerals, where practical and environmentally feasible.
- 6.92 The PPG (paragraph 003 of the mineral section) refers to the British Geological Survey (BGS) publication, 'Mineral safeguarding in England: good practice advice' (2011) for detailed advice on mineral safeguarding. The BGS good practice guide recommends that a good starting point for identifying MSAs is the BGS's mineral resource maps and acknowledges that in the context of the plan making process, geology, unlike many other factors that influence planning, does not change with time. MSAs were identified in the current adopted LMWLP on the basis of the BGS resource maps. With specific reference to sand and gravel, blown sand and limestone, there has been no material change in circumstance to indicate that the

MSAs for these minerals are no longer relevant. As such, policy SM15 safeguards deposits of sand and gravel, blown sand and limestone that are of current or future economic importance, the extent of which is indicated on the Policies Map.

- 6.93 The current adopted LMWLP also safeguards sites for building stone connected to the repair and conservation of Lincoln Cathedral and Lincoln Castle, however, the safeguarding of these sites is not brought forwards in this Plan. The former Cathedral Quarry is now closed and the remaining sites previously identified for safeguarding are all located within built-up areas on sites of designated important open space, local green space, allotments, playing fields or allocations for non-minerals development where there would be a presumption against the loss of the existing or allocated use. There is therefore little scope for minerals development and the continued safeguarding is no longer justified.
- 6.94 There have been no material changes in circumstance which mean that other minerals not previously safeguarded now require safeguarding.
- 6.95 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. To ensure the consistent and effective implementation of the safeguarding of mineral resources, the county council will continue to apply a buffer to MSAs. Having regard to the BGS good practice advice, the current adopted LMWLP adopts a buffer of 250 metres around sand and gravel and blown sand resources and 500 metres around limestone resources to ensure an adequate safeguarding margin. This approach is continued to be applied in this Plan.
- 6.96 In areas with two-tiers of local government such as Lincolnshire, safeguarding of mineral resources can be achieved only through county and district councils cooperating in the exercise of their respective planning powers over land with potential for mineral extraction. This is facilitated by the defined MCAs which provide the mechanism through which district councils must consult the county council before making site allocations in local plans or granting planning permission, on any sites 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. As is the case in the current adopted LMWLP, MCAs have been defined to coincide with the extent of the MSAs.
- 6.97 Whilst the approach to defining the extent of the MSAs and MCAs has been carried forwards in this Plan, the number of exemptions to the safeguarding of mineral resources in policy SM15 is increased to reflect the findings of the council's Annual Monitoring Reports (AMRs) to provide a more practical and efficient approach to safeguarding mineral resources. It is no longer necessary to exclude mineral resources in areas with a population in excess of 1000 and with a minimum area of 20 hectares from the MSAs or MCAs, as is the case in the current adopted LMWLP, as these areas are instead addressed through the exemptions in the policy.

- 6.98 The district councils must consult the county council on all planning applications within MCAs not included in the list of exemptions. The county council may advise that development should not be permitted if it would constrain the potential future extraction of the safeguarded mineral.
- 6.99 The definition of the developed footprint of a settlement, as set out in policy SM15, is taken from the approach adopted in the District, Borough and City local plans to ensure a consistency of approach.

SM15: 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 the Policies Map, will be protected from permanent sterilisation by other development.

Planning permission will be granted for development within a Minerals Safeguarding Area provided that it would not sterilise mineral resources within the Minerals Safeguarding Areas or prevent future minerals extraction on neighbouring land. Where this cannot be demonstrated, the applicant must demonstrate to the Mineral Planning Authority that prior extraction of the mineral would be impracticable; and in any case:

- (i) the development is of a temporary nature and will 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
- (ii) there is an overriding need for the development and the development could not reasonably be sited elsewhere; or
- (iii) the development would have a negligible impact with respect to sterilising the mineral resource.

Applications for non-minerals development in a Minerals Safeguarding Area must be accompanied by a Minerals Resources Assessment, unless demonstrated by the applicant, to the satisfaction of the Mineral Planning Authority, that it is disproportionate* to do so.

Exemptions

This policy does not apply to the following:

- Applications on land allocated in the Development Plan for the proposed non-mineral development purpose;
- b) Applications for minor development** on land within, and immediately adjoining, the developed footprint*** of a settlement;
- c) Applications for householder development;
- d) Applications for alterations, replacements and demolition of existing buildings and for change of use of existing development, unless sensitive uses**** are introduced to the site;

- e) Applications for Advertisement Consent;
- f) Applications for Listed Building Consent;
- g) Applications for reserved matters in relation to an outline consent which has been granted;
- h) Prior Notifications;
- i) Applications for Tree Works;
- j) Applications on land associated with existing for agricultural, forestry, horticultural and equine related uses.
- * whether a Minerals Assessment is disproportionate will be considered on a case by case basis and can take into account the type, scale, nature and location of the proposed development.
- ** minor development in this policy is all development not described as "major development" in Section 2(1) of the Town and Country Planning (Development Management Procedure)(England) Order 2015
- *** Developed footprint of a settlement is defined as the continuous built form of the settlement and excludes:
- individual buildings or groups of dispersed buildings which are clearly detached from the continuous built up area of the settlement;
- gardens, paddocks and other undeveloped land within the curtilage of buildings on the edge of the settlement where land relates more to the surrounding countryside than to the built up area of the settlement;
- agricultural buildings and associated land on the edge of the settlement; and
- outdoor sports and recreation facilities and other formal open spaces on the edge of the settlement.

**** sensitive uses are dwelling houses, residential institutions, retirement homes, hospitals and medical facilities, community facilities, hotels, schools, creche or nursery, places of worship, offices, holiday, recreation, leisure or entertainment facilities, retail of food, drink or goods and some industries such as food processing, hi-tech.

Safeguarding existing minerals sites, mineral allocations and associated infrastructure

6.100 The safeguarding of mineral sites, mineral allocations and associated infrastructure is necessary to protect them from the encroachment of other forms of more sensitive development, such as housing. Such development could either directly or indirectly impact upon the current or future operation of the mineral sites or infrastructure interrupting the supply of minerals and associated products.

- 6.101 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 shown on the Policies Map and will be updated periodically thereafter in monitoring reports to reflect planning permissions granted.
- 6.102 Most of the concrete batching plants and other associated minerals infrastructure are co-located at quarries or producers of recycled aggregates. Policy SM16 safeguards those sites which carry out these activities.
- 6.103 Paragraph 193 of the NPPF establishes the "agent of change" principle. It states that planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant for the proposed new development should be required to provide suitable mitigation before the development has been completed.
- 6.104 In areas with two-tiers of local government such as Lincolnshire, safeguarding of mineral sites, mineral allocations and associated infrastructure can be achieved only through county and district councils co-operating in the exercise of their respective planning powers. 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.
- 6.105 In relation to minerals development, paragraph 216 of the NPPF states that planning policies should 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.
- 6.106 The MCA to be issued by the county council will include the mineral sites and associated infrastructure safeguarded by Policy SM16, including a 250 metre buffer zone around sites as shown on the Policies Map.

SM16: Safeguarding of Existing and Allocated Mineral Sites and Associated Minerals Infrastructure

Existing and allocated 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:

- a) Applications on land allocated in the Development Plan for the proposed non-mineral development purpose;
- b) Applications for householder development;
- Applications for alterations, replacements and demolition of existing buildings and for change of use of existing development, unless sensitive uses* are introduced to the site;
- d) Applications for Advertisement Consent;
- e) Applications for Listed Building Consent;
- Applications for reserved matters in relation to an outline consent which has been granted;
- g) Prior Notifications;
- i) Applications for Tree Works;
- j) Applications on land associated with existing for agricultural, forestry, horticultural and equine related uses.

^{*} sensitive uses are dwelling houses, residential institutions, retirement homes, hospitals and medical facilities, community facilities, hotels, schools, creche or nursery, places of worship, offices, holiday, recreation, leisure or entertainment facilities, retail of food, drink or goods and some industries such as food processing, hi-tech.

7. Providing for waste

Introduction

- 7.1 As Waste Planning Authority (WPA), Lincolnshire County Council is required to prepare a local plan which identifies sufficient opportunities to meet the identified needs of the area for the management of waste.
- 7.2 Paragraph 1 of the NPPW states that positive planning plays a pivotal role in delivering this country's waste ambitions through a number of factors, the first of which is the delivery of sustainable development and resource efficiency by driving waste management up the waste hierarchy. The waste hierarchy ranks waste management options according to what is best for the environment and it gives top priority to preventing waste in the first place. When waste is created, priority is given to re-use, then recycling, then recovery and disposal of waste is the last option, as set out in Figure 1 in Chapter 2 of this Plan.
- 7.3 The Government's policy papers Waste Prevention Programme for England:
 Maximising Resources, Minimising Waste (2023) and Our Waste, Our Resources: A
 Strategy for England (2018) emphasise the importance of driving waste up the waste
 hierarchy and this is acknowledged in the 2023 Environmental Improvement Plan, in
 the commitment to maximising resources and minimising waste.
- 7.4 The starting point for any proposal for waste management is the delivery of sustainable development and the implementation of the waste hierarchy.

SW1: Waste Hierarchy

Proposals for new and extended waste management facilities must demonstrate that the development will contribute to moving waste up the waste hierarchy.

7.5 Within Lincolnshire, the principal waste streams are Local Authority Collected Waste, Commercial and Industrial Waste, Construction, Demolition and Excavation Waste, Agricultural Waste and Hazardous Waste.

Box 1: Definitions of different waste types

Local Authority Collected Waste (LACW)

Most of this type of waste is generated by householders, whether it is collected from the kerbside or taken to recycling points such as Household Waste Recycling Centres. It also includes small quantities of commercial waste which is collected from small businesses by the local authority, as well as non-household waste such as road and pavement sweepings and gully-emptying wastes. Waste collection is largely undertaken by the Waste Collection Authorities' own operatives, but recovery and disposal activities are controlled by the county Waste Disposal Authority in conjunction with third party waste management companies.

Commercial & Industrial Waste (C&I Waste)

These wastes are collected, managed and disposed by private waste companies serving businesses of all sizes across all industry sectors. A large proportion of *Commercial* waste is a mix of plastics, paper, card, glass and food waste collected from offices, shops, food outlets, etc. as well as waste metals (equipment, vehicles, machinery) and smaller quantities of chemicals, timber and other waste. The *Industrial* part of the stream comprises a similar range of materials but in different proportions, with larger quantities of chemicals, metals, textiles, and a variety of processing and packaging wastes, but with mixed office wastes also.

Construction, Demolition and Excavation Waste (CD& E Waste)

These wastes come from a wide range of new build and regeneration projects as well as road schemes and railway maintenance. Construction & Demolition wastes include structural and groundworks waste (bricks, asphalt, concrete, insulation material) and fittings (wood, plastic, glass, metal). Excavation waste is primarily soil and stones. Most of the waste is chemically inert but can contain hazardous components. CD&E wastes tend to be recycled or re-used at or close to where they are created.

Agricultural Waste

Agricultural waste is mostly animal slurry and vegetable matter but many farms also produce 'non-natural' wastes, such as scrap metals, batteries, oils, tyres, rubber, glass, plastic and veterinary pharmaceuticals. Virtually all of these wastes are normally managed on the agricultural holdings where they are created.

Hazardous Waste

The term hazardous waste has traditionally been used to describe materials such as asbestos, oils, solvents and healthcare wastes. However, broadening of this definition means it now includes everyday items such as fluorescent tubes, televisions, computer monitors (known as Waste Electronic and Electrical Equipment (WEEE)) and scrap cars. All of the above waste streams contain variable, but generally small, quantities of hazardous wastes.

- 7.6 Periodically the county council commissions a Waste Needs Assessment (WNA) to establish the future waste management requirements for each waste stream in the county. This includes an assessment of whether existing waste management capacity will be sufficient to meet these needs or whether the county council should plan for additional capacity. The WNA therefore forms a key component of the evidence base that underpins the LMWLP.
- 7.7 This latest WNA was published in June 2021 and covers a forecast period to the end of 2045 (four years beyond the proposed plan period). The WNA 2021 is based on a robust analysis of the best available data and is made up of several reports that focus on individual waste streams, along with an overview report.

Waste arisings

- 7.8 The WNA 2021 has found that a total of just over 2 million tonnes of waste arose within Lincolnshire in 2019 (the latest data available). This was made up of the following principal waste streams (figures have been rounded):
 - c360,000 tonnes of Local Authority Collected Waste (LACW)
 - c730,000 tonnes of Commercial and Industrial Waste (C&I)
 - c900,000 tonnes of Construction, Demolition and Excavation Waste (CD&E)
 - c125,000 tonnes of Hazardous waste.

Future requirements

- 7.9 In order to determine future waste management requirements up to 2045, the WNA 2021 generates a number of forecasts of future waste arisings for the different waste streams, taking into account factors such as population growth and economic activity. The WNA 2021 also identifies targets for the management of waste, such as recycling rates, to ensure waste is managed in accordance with the waste hierarchy and any associated government targets and local aspirations. The key forecasts, assumptions and targets used for each waste stream are summarised below. Further detailed information is provided in the WNA 2021.
- 7.10 It should be noted that there are slight inconsistencies between some of the figures quoted in the documents forming the WNA 2021; however these minor variations do not materially affect the outcomes and conclusions of the WNA 2021.

Local Authority Collected Waste (LACW)

- 7.11 The WNA 2021 considers a number of different forecast scenarios for LACW. An annual growth rate per head of 0% multiplied by predicted population growth was selected, which is consistent with the approach taken in the current Joint Municipal Waste Management Strategy (JMWMS) for Lincolnshire and represents a maximum growth scenario. Taking into account the targets set out in the JMWMS, and the national Resource and Waste Strategy, the WNA 2021 applies a target of 55% recycling by 2025, and 65% by 2035. As minimal landfill levels are already being achieved, it is projected that the current rate of 5% is maintained over the forecast period.
- 7.12 Table 6 below sets out the projected future requirements for LACW at key milestone years when applying the selected forecasts and management targets to 2018/19 baseline arisings. Overall, LACW arisings are projected to increase to 404,062 tonnes by 2045, whilst the proportion of waste going to 'other recovery' (primarily energy from waste) is projected to reduce, reflecting increased recycling.

Table 6: Forecast future arisings and management profile for LACW at key milestone years (tonnes)

Year	Forecast arisings	Recycling or composting	Other recovery	Remainder to landfill
2018/19	359,911	156,662	187,946	15,303
2024/25	374,213	205,817	149,685	18,711
2029/30	383,750	230,250	134,312	19,187
2034/35	391,021	254,164	117,306	19,551
2039/40	397,499	258,374	119,250	19,875
2044/45	404,062	262,640	121,218	20,203

Source: WNA 2021

Commercial and Industrial Waste (C&I)

- 7.13 In line with PPG, the WNA 2021 applies a positive growth rate when forecasting future C&I arisings. A conservative growth rate of 0.275% has been modelled to account for factors such as the move towards a more circular economy, and the approach of the 'Waste Prevention Programme for England'. In terms of future waste management targets, when considering the UK's commitment to a circular economy, it is proposed that recycling and composting will increase over the forecast period, from a baseline of 54%, to 75% by 2040 and then remain at 75% to 2045. 'Other recovery' and landfill are both proposed to gradually reduce to a low of 2.5% by 2040 and remain at that level until 2045. The proposed targets are more ambitious than those proposed for LACW due to the differing composition of C&I waste.
- 7.14 Table 7 below sets out the projected future requirements for C&I waste at key milestone years when applying the selected forecasts and management targets to 2019 baseline arisings. Overall C&I waste arisings are projected to increase to c782,000 tonnes by 2045.

Table 7: Forecast future arisings and management profile for C&I waste at key milestone years (tonnes)

Year	Forecast arisings	Recycling or organic treatment	Other recovery	Remainder to landfill	Treatment to sewer
2019	c730,000	395,000	77,700	103,300	152,100
2025	c740,000	444,000	51,800	88,800	155,400
2030	c750,000	487,650	37,512	75,023	150,046

Year	Forecast arisings	Recycling or organic treatment	Other recovery	Remainder to landfill	Treatment to sewer
2035	c760,500	532,423	30,424	38,030	159,727
2040	c771,000	578,340	19,278	19,278	154,224
2045	c782,000	586,336	19,545	19,545	156,356

Source: WNA 2021

Construction, Demolition and Excavation Waste (CD&E)

- 7.15 In line with PPG and having regard to the drive for waste minimisation and on-site management in parallel with projected growth in house building, the WNA 2021 proposes a static growth rate for CD&E waste. It is assumed that arisings in Lincolnshire will remain the same for the duration of the forecast period. In setting targets for future waste management, it is proposed that recycling and reuse will increase over the forecast period, from a baseline of 41%, to 65% by 2045, whilst 'other recovery' (including inert landfill and recovery to land) is anticipated to remain constant at around 30%. This leads to a combined total of 95% recycling and recovery by 2045 which is considered to be the maximum achievable.
- 7.16 Table 8 below sets out the projected future requirements for CD&E waste at key milestone years when applying the selected forecasts and management targets to 2019 baseline arisings.

Table 8: Forecast future arisings and management profile for CD&E waste at key milestone years (tonnes)

Year	Forecast arisings	Materials recycling	Recycled aggregate	Other recovery	Remainder to non-inert landfill
2020	c900,000	90,500	286,000	311,200	231,800
2025	c900,000	90,100	315,350	270,300	225,000
2030	c900,000	90,100	360,400	270,300	180,200
2035	c900,000	90,100	405,450	270,300	135,150
2040	c900,000	90,100	450,500	270,300	90,100
2045	c900,000	90,100	495,550	270,300	45,000

Source: WNA 2021

Hazardous Waste

- 7.17 Hazardous wastes are usually only created in relatively small quantities and this factor combined with the need for specialist facilities means it is unlikely that it will be economically viable to provide a full range of treatment or disposal facilities within a single WPA area. When forecasting future requirements, the WNA 2021 therefore focusses on total projected arisings but does not apply targets to specific management methods.
- 7.18 The WNA 2021 projects forward using a revised baseline arisings value of 51,600 tonnes for hazardous waste to account for issues, including double counting and permitting exemptions where identification of additional waste capacity is not required.
- 7.19 Based on an analysis of recent, and likely future trends in hazardous waste arisings, the WNA 2021 applies a zero-growth forecast to 2030, with a fall of 0.5% per annum from 2031 to 2040, and then a fall of 1.5% in the final five years to 2045.
- 7.20 Table 9 below sets out the projected future requirements for hazardous waste at key milestone years when applying the selected forecasts to 2019 baseline arisings.
 Overall hazardous waste arisings are projected to fall to around 45,250 tonnes by 2045.

Table 9: Forecast future arisings for Hazardous Waste at key milestone years

Year	Forecast arisings (tonnes)		
2019	50,191		
2025	50,191		
2031	49,989		
2035	48,996		
2040	48,028		
2045	45,250		

Source: WNA 2021

Other Waste

7.21 In line with PPG, the WNA 2021 also considers other waste streams including Wastewater, Agricultural Waste and Low Level Radioactive Waste when seeking to determine future waste management requirements for Lincolnshire. When considering the nature of these other wastes and the way that they are currently managed, the WNA 2021 does not identify any specific, separate management requirements for these waste streams, and concludes that there is no need for further assessment of these other waste streams. This Plan does not therefore make specific provision for these waste streams.

Capacity assessment

- 7.22 Once future requirements are determined, the WNA 2021 assesses the current capacity of existing waste management facilities within Lincolnshire to determine whether sufficient capacity exists to meet the requirements, or if there are likely to be any shortfalls or 'gaps' in capacity during the forecast period for which provision will need to be made.
- 7.23 Whilst future requirements have been determined in relation to specific waste streams, the assessment of capacity instead focuses on waste management method, since a single waste management facility may manage a mix of wastes from a number of different waste streams. The only exception to this approach is hazardous waste, for the reasons already set out.
- 7.24 The outcome of the capacity analysis includes two main components: an assessment of 'built waste management capacity' which considers the operational capacity of waste management facilities (tonnes per annum), and 'permanent deposit to land capacity' (available void space at landfill and recovery to land operations).
- 7.25 Table 10 below summarises the predicted capacity gaps and surpluses for built waste management facilities at key milestone years during the forecast period to 2045.

 Positive figures identify a surplus of capacity. Negative figures would indicate a capacity gap, but none were identified.

Table 10: Forecast built waste management capacity gaps and surpluses (tonnes)

Capacity type	Gap 2025	Gap 2030	Gap 2035	Gap 2040	Gap 2045
Recycling and composting	+845,000	+777,000	+708,000	+658,000	+646,000
Energy recovery	+119,500	+149,000	+173,000	+182,500	+180,000
Aggregate recycling	+427,500	+382,000	+337,000	+292,000	+247,000
Hazardous waste	+15,500	+15,500	+15,500	+15,500	+15,500

Source: WNA 2021

- 7.26 In relation to permanent deposit to land, the WNA 2021 identifies existing void space capacity in Lincolnshire of at least 3.15 million m³ at inert landfill sites and recovery to land operations, and at least 9.14 million m³ at non-inert landfill sites.
- 7.27 Over the forecast period to 2045, the total cumulative permanent deposit to land requirement for inert waste is 4.5 million m³. The identified void space available at dedicated inert landfill and recovery sites is therefore approximately 1.35 million m³

less than this requirement. However, the WNA 2021 acknowledges that capacity will also be provided at non-inert landfill sites which require inert waste for operational use and restoration material. Allowing for 15% of the available non-inert void space for operational and restoration purposes would provide a further 1.37 million m³ of inert waste management capacity, leaving no shortfall over the forecast period.

- 7.28 The total cumulative permanent deposit to land requirement for non-inert waste over the forecast period to 2045 is just under 6 million m³. There is therefore sufficient capacity in Lincolnshire's non-inert landfill sites to accommodate future requirements for non-inert waste, even when it is assumed that 1.37 million m³ of the available void is used for inert waste for operational and restoration purposes.
- 7.29 The WNA 2021 has therefore found that there appears to be sufficient existing consented capacity to meet predicted waste management requirements for Lincolnshire through to 2045 (beyond the proposed plan period), with surpluses identified in built waste management capacity, and sufficient combined void space available across consented recovery sites, inert and non-inert landfill sites. Further detailed information is provided in the WNA 2021.

Duty to cooperate

- 7.30 In assessing future waste management requirements and existing capacity, the county council is seeking to plan for sufficient waste management capacity to accommodate the amount of waste predicted to arise within Lincolnshire.
- 7.31 It is however acknowledged that waste movements occur between local authority boundaries due to factors such as commercial influences, proximity of facilities to arisings, and larger catchment areas associated with specialist facilities (including hazardous waste). Planning for waste management is therefore a strategic matter which requires cross-boundary co-operation between waste planning authorities and other organisations in line with the duty to cooperate.
- 7.32 The county council has, and will continue to cooperate with other waste planning authorities where significant movements of waste are identified, in order to ensure any implications for waste management requirements are identified. To date, no issues have been identified that affect the conclusions of the WNA 2021.

Spatial Strategy

7.33 As set out in detail above, the WNA 2021 has demonstrated that there are no predicted waste management capacity gaps up to 2045. There is therefore no need for specific provision to be made in this LMWLP for the proposed plan period to 2041. However, when considering the ongoing evolution of waste management technologies, cross boundary movements, and the fact that waste needs may change over time, it is considered that it is still necessary for this Plan to provide a suitable policy framework to guide and assess any future waste management proposals that may come forward during the plan period.

- 7.34 The current adopted LMWLP allocated sites and areas for waste management. However, in practice these had very limited benefit in supporting the delivery of waste management facilities. In light of this, and there being no predicted waste management capacity gaps during the plan period, no specific allocations are proposed to be made in this Plan and a criteria-based policy approach is proposed to be adopted.
- 7.35 In keeping with the requirements of the NPPW and communities taking responsibility for their waste, the spatial strategy is focussing new waste facilities in appropriate locations in the main urban areas and centres of population, as defined in the settlement hierarchies of District Local Plans. This approach focusses on existing centres of population, employment and services that have been deemed most sustainable and are the focus for future growth in housing and employment. They present the most sustainable locations for waste management facilities as key sources of current and future household and C&I waste arisings whilst also containing land potentially suitable for waste facilities, and being well connected to principal transport networks. Adopting a strategy based on main urban areas and existing centres of population adheres to the proximity principle.
- 7.36 It is acknowledged that Lincolnshire is a large rural county with small settlements scattered across its extensive countryside and to restrict all new waste facilities to the main urban areas would not allow all waste to be treated in close proximity to its production. However, facilities in such locations will only be acceptable in very limited circumstances.
- 7.37 There are certain types of waste management facilities which, due to their characteristics and operational requirements, are dealt with as exceptions to the spatial strategy and locational criteria. For example, there are facilities which by their nature may be best placed outside areas of high population due to their potential amenity impacts (in the main, odour), such as facilities for the open windrow composting of green waste, anaerobic digestion, and the treatment of sewage.

SW2: Spatial Strategy and Locational Criteria for Waste Management Facilities Planning permission will be granted for new and extended waste management facilities on land within, and immediately adjoining, the developed footprint* of the settlements identified below, provided that they would utilise sustainable modes of transport or have suitable access to the strategic transport network and be located on:

- (i) previously developed and / or contaminated land; or
- (ii) existing or allocated industrial / employment land and buildings; or
- (iii) land already in waste management use.

Planning permission will only be granted for new and extended waste management facilities on land outside that which is within and immediately adjoining the developed footprint* of the settlements identified below where:

- (iv) at least one of the above locational criteria are met or they would be located in redundant agricultural and forestry buildings and their curtilage;
 and
- (v) they would utilise sustainable modes of transport or where there is no scope for non-road based forms of transport, the proposals would have direct access to an A class road; and
- (vi) the applicant has provided evidence that clearly demonstrates a proven overriding need to locate the development outside of the settlements identified, and that there would be clear sustainability benefits in doing so.

All proposals for new and extended waste management facilities must demonstrate that the development would be well located to the arisings of the waste proposed to be managed. All proposals must accord with all relevant Development Management Policies set out in the Plan.

The settlements considered suitable for new and extended waste management facilities are: Lincoln, Boston, Grantham, Spalding, Bourne, Gainsborough, Louth, Skegness, Sleaford, Stamford, Caistor, Market Rasen, the Deepings, Alford, Coningsby/Tattershall, Horncastle, Mablethorpe/Sutton/Trusthorpe, Spilsby, Crowland, Donington, Holbeach, Kirton, Long Sutton, Sutterton, Sutton Bridge, Swineshead.

Exceptions:

There are certain types of waste management facilities which, due to their characteristics and operational requirements, are dealt with as exceptions to the spatial strategy and locational criteria. These are listed below and are subject to their own specific policies in this plan.

- a) facilities for the biological treatment of waste (Policy SW3)
- b) water recycling centres (Policy SW4)
- c) deposit of waste to land (Policy SW5)
- d) recycling of inert waste within existing Active Mining Sites (Policy SW6)
- * Developed footprint of a settlement is defined as the continuous built form of the settlement and excludes:
- individual buildings or groups of dispersed buildings which are clearly detached from the continuous built up area of the settlement;
- gardens, paddocks and other undeveloped land within the curtilage of buildings on the edge of the settlement where land relates more to the surrounding countryside than to the built up area of the settlement;
- agricultural buildings and associated land on the edge of the settlement;
- outdoor sports and recreation facilities and other formal open spaces on the edge of the settlement.

Biological Treatment of Waste

- 7.38 Biological treatment of biodegradable organic waste is the process by which microorganisms are used to convert waste organic matter into, amongst other things, a liquid and/or solid to be used as a soil conditioner. Composting is undertaken in the presence of oxygen, producing the by-products of carbon dioxide and water vapour and the soil conditioner. Frequently, these take place in the open air on concrete pads and are typically located in rural or urban fringe sites. Waste taken to these sites is mainly that collected at civic amenity sites and source-segregated kerbside collected garden waste.
- 7.39 Anaerobic digestion differs from composting by virtue that it is the biological treatment of biodegradable organic waste in the absence of oxygen. By its nature this has to be done in a controlled environment, i.e. a sealed vessel. Anaerobic digestion results in the generation of:
 - Biogas, which is rich in methane and can be used to generate heat and/or renewable electricity, vehicle fuel or for grid injection;
 - Fibre, (or digestate) which is nutrient rich and can potentially be used as a soil conditioner; and
 - Liquor, which can potentially be used as a liquid fertiliser.
- 7.40 Both forms of biological treatment present a realistic opportunity for the discharge of malodours and for this reason they are best located away from any sensitive receptors through provision of a 'stand-off' to ensure amenity is not harmed. However, such facilities are built to a variety of sizes and technologies that to specify an absolute distance would not be suitable and an appropriate distance has to be judged on a case-by-case basis. Thus, siting these operations away from the main urban areas and centres of population can be acceptable but in order to adhere to the proximity principle, they are nevertheless required to be located either in proximity to the waste arisings themselves or in a location which facilitates the sustainable distribution of the end product of these processes.
- 7.41 Where operations include the spreading of compost or other residues over land, the material spread must meet the recognised quality standards to be no longer regarded as waste (BSI PAS 100 for compost and BSI PAS 110 for digestate from anaerobic digesters).

SW3: Biological Treatment of Waste

Planning permission will be granted for anaerobic digestion, open air composting, and other forms of biological treatment of waste provided that the proposal would:

 be well located to the arisings of the waste proposed to be managed or be well located for the sustainable distribution of both energy and fertiliser products; and

- (ii) be located at a suitable "stand-off" distance from any sensitive receptors; and
- (iii) be located on either:
 - a) land which constitutes previously developed and / or contaminated land, existing or planned industrial / employment land, or redundant agricultural and forestry buildings and their curtilages; or
 - b) land associated with an existing agricultural, livestock, food processing or waste management use where it has been demonstrated that there are close links with that use; and
- (iv) utilise sustainable modes of transport or have suitable access to the strategic transport network; and
- (v) accord with all relevant Development Management Policies set out in the Plan.

In relation to anaerobic digestion, proposals shall demonstrate that the biogas generated will be recovered effectively for use as an energy source using best practice techniques.

Water Recycling Centres

- 7.42 Water Recycling Centres (WRCs) are a vital element of the County's infrastructure ensuring waste water is effectively treated to protect human health and water quality. Responsibility for the treatment and disposal of waste water lies with the statutory undertakers. The majority of Lincolnshire's network of WRCs are operated by Anglian Water Services, with a small number of facilities in the north-west of the county operated by Severn Trent Water. Additional capacity is likely to be delivered as and when demand requires through enhancements to existing sites, but there may still be circumstances where new facilities are required. Given the sparsely populated and rural nature of the county, there may also be a need for smaller scale local package treatment plants to replace septic tanks in some locations.
- 7.43 By their very nature, WRCs need to be in close proximity to a suitable watercourse to accept their discharge and, therefore, may be located upon land subject to flooding. In these cases, the development may be an acceptable land use in a floodplain but this would have to be tested, applying, as applicable, the sequential and exception tests as set out in NPPG. The development would also need to ensure there would not be an unacceptable increase in the risk of flooding to other areas.
- 7.44 The treatment of waste water can be an odorous process caused by periods of septicity. For this reason, new WRCs will need to be located a sufficient distance from existing residential homes and sensitive places of work (such as offices) to ensure that the users of these buildings are not subject to nuisance and a decline in their amenity. Also, an appropriate distance between WRCs and sensitive receptors would ensure that additional constraints are not imposed on the operation of the waste water works. WRCs are built to such a variety of sizes and technologies that to

specify an absolute distance would not be suitable and an appropriate distance has to be judged on a case-by-case basis.

SW4: Water Recycling Centres

Proposals for new water recycling centres, including the improvement or extension of existing facilities, will be permitted provided that it can be demonstrated that:

- (i) there is a suitable watercourse to accept discharged treated water and there would be no unacceptable increase in the risk of flooding to other areas; and
- (ii) there would be no deterioration in the ecological status of the affected watercourse; and
- (iii) the proposals would be located at a suitable "stand-off" distance from any sensitive receptors; and
- (iv) the proposals accord with all relevant Development Management Policies set out in the Plan.

Deposit of Waste to Land

- 7.45 Lincolnshire has a significant number of sites with planning permission for non-inert and/or inert landfill as set out in the WNA (2021), which are predominantly connected with the restoration of former mineral extraction sites. Most of these planning permissions were granted at a time when landfill was the principal means of dealing with waste generated in the county.
- 7.46 The opening of the Energy from Waste Plant at North Hykeham in 2013 has diverted most of the county's Local Authority Collected Waste away from the landfill sites. As a result, some of these landfill sites are now inactive.
- 7.47 The NPPW states that in preparing waste local plans, waste planning authorities should, amongst other things, drive waste management up the waste hierarchy, recognising the need for a mix of types and scale of facilities, and that adequate provision must be made for waste disposal in line with the proximity principle.
- The NPPW states that it should be read in conjunction with a number of other documents, including the Waste Management Plan for England (2021). The Waste Management Plan for England states that landfill should usually be the last resort for waste, particularly biodegradable waste. It goes on to state that the landfill tax is one of the key drivers to divert waste from landfill to ensure that the 2020 target (of no more than 10.16 million tonnes of biodegradable municipal waste to landfill) and the 2035 target (of no more than 10% of municipal waste to landfill) are both met. The plan states that this does not mean that all wastes will be diverted from landfill, and that there are some wastes for which landfill remains the best, or least worst, option. It recognises that there is an ongoing role for landfill in managing waste, particularly for inert waste that cannot be prevented, recovered or recycled, but that its use should be minimised as much as possible. It also states that the disposal of

inert waste in or on land, i.e. landfill, remains a valid way of restoring quarries and worn out mineral workings where this is a planning requirement.

- 7.49 In light of this, and that the WNA does not identify any capacity needs in relation to the deposit of waste to land, any such proposals need to clearly demonstrate that they are fully justified in accordance with the criteria set out in policy SW5.
- 7.50 Any proposal for the deposit of waste to land would be expected to be operated to the highest standards and the Council would also seek a high level of restoration which would, once completed, improve the local landscape and character of the area. This may include the return of land to a use of scarcity but of high value to the area in order to ensure that appropriate habitats are restored in the appropriate place, ensuring that there is a net gain for biodiversity from the proposal. The deposit of waste to land also provides the opportunity to improve the local public rights of way network. Any proposal for the deposit of waste to land would also need to demonstrate that it would not cause a significant delay to the restoration of already permitted waste disposal sites, in particular mineral extraction sites which require infilling to achieve their final reclamation.

SW5: Deposit of Waste to Land

Planning permission will only be granted for the recovery of inert waste in the restoration of minerals sites where it is demonstrated to the satisfaction of the Waste Planning Authority that:

- (i) the sustainable use of inert waste would result in substantial improvements to the overall restoration scheme in terms of biodiversity gains and / or long term improvements to the local landscape and character of the area compared with the best scenario without using waste; and
- (ii) the restoration scheme has been designed to minimise the amount of inert waste required; and
- (iii) the use of inert waste would not cause a significant delay to the restoration of the minerals site; and
- (iv) the quantity of inert waste required to deliver the restoration scheme is available and would not cause a significant delay to the restoration of existing sites reliant upon the use of inert wastes.

In all other circumstances, planning permission will only be granted for the disposal of waste to land, new landfills or extensions to existing landfills (inert, non-hazardous and hazardous) where it is demonstrated to the satisfaction of the Waste Planning Authority that:

- (v) the current capacity is insufficient to manage that waste arising in Lincolnshire, which requires disposal to landfill in the County; and
- (vi) there is a long term improvement to the local landscape and character of the area, with enhanced public access where appropriate; and
- (vii) the development would not cause a significant delay to the restoration of existing sites reliant upon the use of inert wastes.

In all cases, it must be demonstrated that:

- (viii) there is no acceptable form of waste management further up the waste hierarchy that can be made available to meet the need; and
- (ix) the proposals accord with all relevant Development Management and Restoration Policies set out in the Plan.

Recycling of Inert Waste Within Existing Active Mining Sites

- 7.51 In those circumstances in which an existing active mining site has planning permission for the use of inert waste in the restoration of the site, there can be opportunities to use the site for inert waste recycling prior to the completion of the restoration of the site. This has the potential to offer sustainability benefits such as reducing the number of HGV movements through the backfilling of HGVs, the colocation of processing facilities and ensuring recyclable waste is moved higher up the waste hierarchy.
- 7.52 It is, however, imperative that the waste operation does not delay the restoration of the mining site and that any such permitted waste operation is only granted planning permission for a limited time period, which is directly linked to the life of the existing active mining site. Any new or extended recycling operations must not cause or significantly increase the environmental impact of the site, for example, in terms of noise, dust, vibration, traffic disturbance, visual impact or cumulative impacts.

SW6: Recycling Of Inert Waste Within Existing Active Mining Sites

Planning permission will be granted for new and extended waste management facilities for the recycling of inert waste within existing Active Mining Sites provided that:

- (i) the Active Mining Site has planning permission for the use of inert waste in the restoration of the site; and
- (ii) the use of the Active Mining Site for the recycling of inert waste would not cause a delay to the restoration of the site; and
- (iii) the co-location of the waste management facilities for the recycling of inert waste at the Active Mining Site would have demonstrable sustainability benefits; and
- (iv) the proposals accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.

Planning permission for new and extended waste management facilities within existing Active Mining Sites will only be granted on a temporary basis directly linked to the permitted extraction of mineral and / or restoration of the Active Mining Site.

Safeguarding waste management sites

- 7.53 Waste management sites are an important element of a community's infrastructure, ensuring that waste is dealt with at appropriate locations and that communities take responsibility for their own waste. Because of this, the council considers it essential that those waste management sites should be protected. Such protection should be twofold: firstly, to ensure that a site permitted with a waste use is not redeveloped to another use (thereby retaining capacity); and secondly that there remains a sufficient distance between the waste facility and other forms of development or sensitive land uses (for example, housing). The latter requirement is to make certain that non-waste developments are not permitted within the vicinity of a waste management facility if it would either prevent or prejudice the effective use of that facility.
- 7.54 The PPG (paragraph 010 of the waste section) states that "non-waste" planning authorities must have regard to national planning policy for waste and are expected to help deliver the Waste Hierarchy.
- 7.55 In two-tier planning areas such as Lincolnshire, the safeguarding of waste sites can only be achieved through county and district councils co-operating in the exercise of their respective planning powers. In order to achieve this, the district councils, as local planning authorities, are expected to consult the county council on all applications they receive within an existing waste management site. The county council will then assess whether the proposed development would have an unacceptable impact on waste management capacity and may advise that development should not be permitted.
- 7.56 In relation to applications for development beyond the boundaries of existing waste management sites which have the potential to have impacts on the continued operation of the waste management site, the district councils, as local planning authorities, should assess these applications themselves in consultation with their Environmental Health Officers. In these cases, the 'agent of change' principle set out in paragraph 193 of the NPPF is relevant. This states that existing businesses and community facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Accordingly, the assessment by the district council must take into account the nature of the waste management activities and the sensitivity of the proposed development to those activities and ensure that the proposed development does not prejudice the implementation of the waste hierarchy and / or the efficient operation of existing facilities. Such applications must be determined in accordance with policy SW7 and the requirements of the NPPF and NPPW.
- 7.57 The sites and facilities to be safeguarded are shown on the Policies Map and will be updated periodically thereafter in monitoring reports to reflect planning permissions granted.

SW7: Safeguarding Waste Management Sites

Waste management facilities will be safeguarded from re-development to a non-waste use and / or the encroachment of incompatible development unless:

- (i) alternative provision in the vicinity can be made in accordance with the Development Plan; or
- (ii) it can be demonstrated that there is no longer a need for a waste facility at that location.

8. Development Management policies

8.1 This section sets out the development management policies of the Minerals and Waste Local Plan. The policies within this section aim to establish detailed criteria against which minerals and waste development proposals will be assessed, within the context of strategic policies S1, S2 and S3.

The Development Management Process

- 8.2 Development management is the process of determining planning applications for mineral and waste developments. Planning applications should contain the justification for the development, details of how the operations will be managed, and any measures proposed to reduce or remove adverse effects. The County Planning Authority will consider all the community, economic and environmental issues that are relevant to each planning decision.
- 8.3 Sufficient information must be provided with planning applications so that the likely effects of the development, together with proposals for appropriate control or mitigation can be considered. In some cases detailed assessments of particular issues may be required.
- Applicants are encouraged to discuss their proposals with the County Planning Authority before submitting a planning application. Early discussion will help to identify potential impacts from proposals, and possible measures to avoid or minimise them. Applicants will also be advised if their proposals are unlikely to be acceptable. The County Planning Authority may suggest that applicants seek advice from statutory or other bodies about the need to carry out detailed assessment work. Pre-application consultation with such bodies together with the local community and local interest groups will help to establish potential impacts of a proposed development and improve the quality of decisions on planning applications. The Statement of Community Involvement provides information on how consultation on planning applications will be carried out.
- 8.5 If planning permission is granted, conditions will usually be attached to regulate the operation of the development. These can be used to agree the specific details about parts of the proposal (such as a landscape scheme) or to ensure that the effects on local communities or the environment are reduced (such as control of working hours).
- 8.6 The county council will also seek to conclude legal agreements, known as planning obligations, where appropriate to achieve suitable control over and to mitigate and/or compensate for the effects of minerals and waste development where such objectives cannot be achieved by planning conditions. Matters to be covered by such planning obligations may include:
 - highways and access improvements;
 - traffic management measures including the regulation of lorry traffic;

- long-term site management provision to establish beneficial after-use;
- improvement of the rights of way network;
- financial guarantees to ensure restoration is undertaken;
- measures for environmental, recreational/sport, economic and community gain in mitigation or compensation for the effects of mineral development.
- 8.7 The Community Infrastructure Levy is a levy that district authorities can choose to charge on new developments to fund local infrastructure. It applies to most new buildings that people normally use, with charges based on the size and type of new development. It cannot be charged on structures and buildings that people only enter for the purpose of inspecting or maintaining fixed plant or machinery.

Environmental Impact Assessment

- 8.8 Environmental Impact Assessment (EIA) is often required for major developments that are likely to have significant impacts on the environment. Most proposals for large scale mineral extraction and waste developments are likely to fall within this category. An EIA will identify the likelihood of significant impacts occurring as a result of a development, how these could be mitigated, and alternative ways in which the development could be carried out.
- 8.9 All mineral and waste planning applications that meet the appropriate thresholds and criteria set out in the EIA Regulations (2017) will be screened to determine whether or not they require an EIA. The screening process determines whether the proposal is likely to have significant environmental effects. If requested, the county council will provide a scoping opinion which sets out the issues which the assessment should address. An Environmental Statement must accompany a planning application for EIA development.

Review of Mineral Permissions

- 8.10 Mineral planning permissions are subject to review in accordance with the legislative requirements of the Planning and Compensation Act 1991 and the Environment Act 1995. Such reviews provide an opportunity for the county council to ensure mineral sites continue to work under modern conditions which reflect sustainability aspirations and offer appropriate environmental protection.
- 8.11 Subject to certain legal provisions, the review determination process is conducted in a similar way to the processing of a planning application, and may be subject to EIA in the same way as a planning application. However, review submissions cannot be refused, and compensation liabilities can arise if working rights are unreasonably affected. Applicants submitting review schemes should have regard to the requirements of policies contained in this document, and ensure that all the environmental issues are satisfactorily addressed.

Material Considerations

- 8.12 Every planning application for development is decided on its merits, and should be determined in accordance with the development plan unless material considerations indicate otherwise. When planning applications are determined, all the relevant policies in the development plan will be taken into account, and used as the basis for decision-making.
- 8.13 Material considerations include issues such as the impacts on local communities, national planning policy/guidance, and the need for the development. There are no firm rules about the range and type of material considerations, or about the weight that should be attached to them in individual decisions. This is because:
 - material considerations are subject to change in the light of government guidance and court judgements;
 - the development plan cannot explain which considerations will be material to a particular planning decision because the circumstances of each application will be different; and
 - the weight given to material considerations when making decisions on planning applications will be affected by individual circumstances.

Monitoring and Enforcement

8.14 The effective monitoring of operational sites is very important. Requirements for the monitoring of impacts such as noise and dust may be imposed through planning conditions. However, there is an important role for the county council as an independent regulator, which can help to increase confidence among local communities. The county council also works closely with the Environment Agency in monitoring and enforcing waste sites. Efficient and effective monitoring and enforcement can often identify potential problems early, before they are perceptible to local residents, and ensure that they are resolved satisfactorily.

CONTROLLING IMPACTS ON THE LOCAL ENVIRONMENT AND COMMUNITIES

Protection of residential amenity

8.15 Minerals extraction and waste management facilities by their nature are likely to have some negative effects on local communities. Minerals can only be worked where they exist and this can lead to the development of quarries in close proximity to communities. The Council's waste strategy is to locate most waste sites near to concentrations of population to maximise sustainability potential. It will consequently be necessary to overcome impacts through appropriate mitigation measures to avoid a negative effect on the local communities in question. To ensure such impacts are avoided, it may be necessary to impose suitable planning conditions to secure good working practices, as discussed in more detail in this section. Such conditions could include (but would not be limited to) hours of working, appropriate sheeting of vehicles and wheel cleaning.

- 8.16 The NPPF states that local planning authorities should ensure, in granting planning permission for mineral development, that there are no unacceptable adverse impacts on human health. The NPPW paragraph 7 states that, in considering planning applications for waste management facilities, waste planning authorities should consider the likely impact on the local environment and on amenity. The county council must therefore ensure that an acceptable balance is maintained between meeting identified mineral and waste needs and protecting the local environment and amenity of residents living close to mineral or waste operations.
- 8.17 Proposals, which may give rise to pollution and health issues, should be submitted with details of these issues, and where applicable the relevant health and pollution control authorities will be consulted. Likewise, amenity issues will be addressed in consultation with the local authority environmental health officer and other appropriate advisers.
- 8.18 Pollution control authorities such as the Environment Agency and local Environmental Health authorities are responsible for regulating polluting activities. However, pollution and health issues are a legitimate planning consideration, which can be taken into account when considering applications.
- 8.19 Possible impacts include noise (refer to PPG paragraphs: 019-021 for noise standards) and vibrations from quarry/waste traffic, processing plant and site activity; visual intrusion; dust during dry periods; debris on the roads and litter; odour; run-off from sites to protected waters; and the impact of Heavy Goods Vehicles. Such impacts can cause understandable concern from communities living near these types of development. It is important to ensure that these impacts are kept to an absolute minimum.
- 8.20 It is possible for quarry operators and waste facilities to take measures that can make living near a quarry/waste site acceptable to local residents. By landscaping to create bunds and using natural vegetation for screening, taking into account local landscape character, the visual impact and potential noise nuisance caused by the site can be reduced to acceptable levels. It is however acknowledged that some noisy short term activities, which may otherwise be regarded as unacceptable are unavoidable to facilitate minerals extraction (NPPF paragraph 216). There are also various controls that can be used to manage dust, litter and odour problems. Wheel washing and sheeting of lorries can prevent debris from being deposited on the road network.
- 8.21 Other important factors that can influence the acceptability of a site to local residents is the sequence of mineral working, and the choice of route, location and suitability of access arrangements for vehicles entering and leaving the site.
- 8.22 In relation to minerals development, the NPPF states that local planning authorities should ensure that any unavoidable noise, dust and particle emissions and any blasting vibrations are controlled, mitigated or removed at source, and establish appropriate noise limits for extraction in proximity to noise sensitive properties.

However, in accordance with Policy DM1, where adverse effects cannot be adequately controlled or prevented, planning permission will be refused.

- 8.23 The PPG states that in some circumstances, new or extended permissions for minerals extraction close to residential property may not provide adequate protection. In such cases, the guidance indicates that it may be justified to consider adequate separation distances. Any such distance should be effective but reasonable, taking into account:
 - the nature of the mineral extraction activity (including its duration);
 - the need to avoid undue sterilisation of mineral resources, location and topography;
 - the characteristics of the various environmental effects likely to arise; and
 - the various amelioration measures that can be applied.

The Guidance states that working in proximity to residential property may be necessary where there are clear, specific achievable objectives such as the removal of instability and preparing land for subsequent development. Such working should be for a limited and specified period, without scope for extension.

- 8.24 The NPPW does not give precise guidance on separation distances, but does give advice on site requirements related to waste sites. In such cases, it advises that waste planning authorities should consider:
 - the likely impact on the local environment and on amenity;
 - the physical and environmental constraints on development, including existing and proposed neighbouring land uses;
 - the cumulative effect of previous waste disposal facilities on the well-being of the local community, including any significant adverse impacts on environmental quality, social cohesion and inclusion or economic potential.

In addition, paragraph 7 of the NPPW sets out the considerations waste planning authorities need to take account of when determining planning applications. This includes consideration of the consistency of the application with the Local Plan, delivery of the waste hierarchy, the impact on the local environment and amenity, the design of the facility in order for it to contribute positively to the character of the area in which it is to be located and the achievement of restoration that offers a beneficial after use whilst delivering high environmental standards.

- 8.25 Other land uses apart from residential areas may also be affected by mineral and waste operations such as hospitals, schools, farms, and other places of employment. In such cases, it may also be appropriate to consider the use of separation distances depending on the sensitivity of the use or facility affected.
- 8.26 Government Circular 1/2003 (updated December 2016) identifies mineral extraction (especially where water areas form part of the restoration proposals) together with facilities for the handling, compaction, treatment and disposal of household or

commercial wastes, and sewage disposal and treatment plant as development which attracts a variety of bird species and can create a bird hazard, including bird flight lines across aircraft flight paths.

8.27 This is a particularly important issue for minerals and waste sites in proximity to RAF and civilian aerodromes located within or close to the County. It may be possible to overcome bird strike issues through the design of the development. In the event however that, following consultation with the appropriate authorities, the nature of the proposal is considered to give rise to new or increased risks to aerodromes and associated uses, planning permission should not be granted.

DM1: Quality of Life and Amenity

Planning permission will be granted for minerals and waste development provided that it does not generate unacceptable adverse impacts arising from:

- (i) noise;
- (ii) dust;
- (iii) vibration;
- (iv) odour;
- (v) litter;
- (vi) emissions;
- (vii) the migration of contamination;
- (viii) illumination;
- (ix) visual intrusion;
- (x) run off to protected waters;
- (xi) traffic;
- (xii) tip- and quarry- slope stability;
- (xiii) differential settlement of quarry backfill; or
- (xiv) mining subsidence

to occupants of nearby dwellings and other sensitive receptors.

Proposals shall be designed to ensure that they do not adversely affect the operational integrity or safety of aviation facilities.

Where unacceptable impacts are identified, which cannot be addressed through appropriate mitigation measures, planning permission will be refused.

Biodiversity and Geodiversity

8.28 Sustainable development is the key principle of the NPPF and part of this is to minimise the impacts on biodiversity and provide net gains in biodiversity, as well as protecting and enhancing geodiversity. The Government is committed to halting the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. The provision of net gains in

biodiversity through the protection, restoration, creation, and recovery of habitats and species, and, where possible, enhancement of geodiversity, will be sought as part of proposals for minerals and waste development.

- 8.29 The NPPF states that local planning authorities should set criteria based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged. Distinctions should be made between the hierarchy of international, national and locally designated sites, so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks.
- 8.30 The county council is required by law (Regulations 63 to 64 of the Conservation of Habitats and Species Regulations 2017 (as amended)) to undertake an Appropriate Assessment prior to determining a planning application which is:
 - likely to have a significant effect on a European site or European offshore marine site (either alone or in combination with other projects); and
 - is not directly connected with or necessary to the management of that site.

If an Appropriate Assessment is required, the presumption in favour of sustainable development, set out in paragraph 11 of the NPPF, does not apply. In Lincolnshire, European sites include Special Areas of Conservation and Special Protection Areas. It is UK policy that the Government also applies the above procedures in respect of Ramsar sites, even though these sites are not European sites as a matter of law, rather they are *international* wetland sites declared under the Ramsar Convention. The following wildlife sites are also given the same protection as European sites: potential Special Protection Areas, possible Special Areas of Conservation, proposed Ramsar sites and sites identified or required as compensatory measures for adverse effects on European sites.

- 8.31 Applicants will be required to supply sufficient information to enable the county council to undertake an Appropriate Assessment. The HRA related to this plan provides guidance as to when the need for project level assessments are likely to be triggered in respect of proposals for minerals and waste developments. The accompanying HRA also provides advice on site specific considerations for proposals in proximity to European sites and requirements for project level HRA.
- 8.32 Development will be permitted if an Appropriate Assessment indicates the proposal(s) will not adversely affect the integrity of the site. Where development will adversely affect the integrity of the site, it will only be permitted if:
 - there are no alternative solutions;
 - it is to be carried out for imperative reasons of overriding public interest as set out in Regulation 64 of the Conservation of Habitats and Species Regulations 2017 (as amended); and that
 - appropriate compensatory measures can be secured (in accordance with Regulation 68).

Where the requirements of Regulations 64 and 68 are satisfied, planning permission will be granted subject to planning conditions and/or legal agreements to protect biodiversity interests of the designated site (including providing necessary mitigation and/or compensation). Otherwise, where the requirements of Regulations 64 and 68 are not met, planning permission will be refused.

- 8.33 Sites of Special Scientific Interest provide statutory protection for some of the best examples of the UK's flora, fauna or geological or physiographical features. As such, they are of national importance. The NPPF states that proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest should not normally be permitted. Exceptions should only be made where the benefit of the development in that location clearly outweighs both the impacts on the features of that site and on the wider national network of Sites of Special Scientific Interest.
- 8.34 Local Wildlife Sites are non-statutory areas of importance for nature conservation that complement nationally and internationally designated sites. Proposals for minerals and waste development may lead to loss, degradation or fragmentation of important areas that are rich in biodiversity. The NPPF states that, when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity. It states that if significant harm resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused. Minerals and waste development will therefore only be permitted if due regard has been given to the likely effects of the proposed development on Local Wildlife Sites or sites meeting Local Wildlife Site criteria.
- 8.35 The NPPF also states that planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and geological features, including fossils unless there are wholly exceptional reasons and a suitable compensation strategy exists.
- 8.36 In the absence of alternatives, the local planning authority will ensure that, before development commences, adequate mitigation measures are put in place to protect the natural environment. Where a planning decision would result in significant harm to biodiversity interests which cannot be prevented or adequately mitigated against, appropriate compensation measures will be sought. If significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission will be refused.
- 8.37 The county council recognises that there is also the opportunity for minerals and waste development to impact positively on the natural environment. The Environment Act (2021) requires that a minimum of 10% biodiversity net gain must be secured in relation to all planning permissions granted for the development of land in England. The Environment Act also requires that a biodiversity gain plan must be approved prior to the commencement of development and the resultant habitat must be secured for at least 30 years through the use of planning conditions, planning obligations or conservation covenants. Biodiversity net gain will be required

for all development proposals and will particularly be secured through the restoration of sites in line with Policies SR2 to SR4.

- 8.38 Lincolnshire County Council is responsible for the production of a Local Nature Recovery Strategy for Greater Lincolnshire. The Local Nature Recovery Strategy will set priorities for nature recovery and propose actions to deliver these priorities. The Local Nature Recovery Strategy will be a material consideration in the determination of planning applications and will provide evidence of priority locations for the provision of green infrastructure, habitat creation and enhancement through biodiversity net gain. Development proposals should adhere to the principles and priorities set out in the Local Nature Recovery Strategy.
- 8.39 The NPPF states that, to minimise impacts on geodiversity, planning policies should aim to prevent harm to geological conservation interests. Proposals for minerals and waste development may lead to loss or degradation of important local areas that are rich in geo-diversity. Minerals and waste development will therefore only be permitted if due regard has been given to the likely effects of the proposed development on Local Geological Sites or sites meeting Local Geological Site criteria.
- 8.40 In the absence of alternatives, and if significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission will be refused.
- 8.41 The county council recognises, however, that there is also the opportunity for such minerals and waste development to impact positively on geodiversity and opportunities for geodiversity enhancement through the restoration of sites will be sought in all cases in line with Policies SR2 to SR4.

DM2: Biodiversity and Geodiversity

Proposals for minerals and waste development shall protect and enhance biodiversity and features of geodiversity value. Proposals shall deliver a net gain in biodiversity.

Proposals for minerals and waste development will be granted planning permission provided it is demonstrated that:

- (i) in relation to areas or sites of international biodiversity importance the proposal can be delivered without adverse effects on the integrity of any such area or site demonstrated by the undertaking of an appropriate assessment of the implications of the proposal, alone or in-combination with other plans or projects;
- (ii) in relation to areas or sites of national biodiversity or geodiversity importance sites are protected from adverse effects, except where:
 - a) the proposal cannot reasonably be located on an alternative site to avoid harm; and

- b) the benefit of the development would clearly outweigh the impacts that the proposal would have on the key features of the site; and
- the harmful aspects can be satisfactorily mitigated or, as a last resort, compensated by measures that provide a net gain in biodiversity / geodiversity; and
- d) in the case of a Site of Special Scientific Interest, there would be no broader impacts on the national network of Sites of Special Scientific Interest;
- (iii) in relation to areas or sites of local biodiversity or geodiversity importance, including sites meeting local designation criteria and undesignated priority habitats sites are protected from adverse effects, except where:
 - e) the benefits of the development outweigh the likely impact; and
 - the harmful aspects can be satisfactorily mitigated or, as a last resort, compensated by measures that provide a net gain in biodiversity / geodiversity;
- (iv) in relation to irreplaceable habitats the habitat is protected from loss or deterioration, except where there are wholly exceptional reasons and suitable compensation is secured, otherwise planning permission will be refused;
- (v) in relation to species and habitats identified in the Local Nature Recovery Strategy the development will contribute positively to the enhancement of the natural environment.

Where appropriate, proposals shall include provision for the management of features of the landscape which are essential for the migration, dispersal and genetic exchange of wild species.

Flood Risk and Water Resources

- 8.42 The NPPF states that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere. It states that Local Plans should be supported by Strategic Flood Risk Assessment and develop policies to manage flood risk from all sources, taking account of advice from the Environment Agency and other relevant flood risk management bodies, such as lead local flood authorities and internal drainage boards; and that Local Plans should apply a sequential, risk-based approach to the location of development to avoid where possible flood risk to people and property and manage any residual risk, taking account of the impacts of climate change. The whole county of Lincolnshire is covered by the Joint Lincolnshire Flood Risk and Drainage Management Strategy which is a statutory document and deals with all sources of flooding.
- 8.43 Rivers and floodplains are very important features within the overall water environment. To prevent an increase in flood risk, it will be necessary to maintain the capacity of the floodplain and the free flow of floodwater. Mineral working in

floodplain areas can however have both beneficial and detrimental effects. For instance, although there may be some flood risk during operations, subsequent restoration and use of the land may help to provide flood alleviation. Therefore both short and long term impacts will be considered in determination of applications.

- 8.44 Proposals should include appropriate measures to minimise any increase in flood risk. Increased risks of flooding associated with mineral workings and waste management developments can be avoided through a number of measures, which include:
 - locating all buildings on land at a lower risk of flooding within the site;
 - locating site bunds, ancillary structures and stockpiles of materials so as not to prevent flood water flowing through the site or prevent water flowing on the functional floodplain;
 - ensuring that de-watering and surface water disposal will not increase the risk of flooding;
 - providing additional flood water storage areas, reducing flood risk in the surrounding area;
 - providing Sustainable Drainage Systems (SuDS) features in open spaces such as basins, ponds, wetlands with linking swales and control structures, which also have the potential to link with Biodiversity targets and habitat linkages.
- In accordance with the requirements of the PPG, applications for planning permission, for proposals with an area greater than 1 hectare, or within flood risk zones 2, 3a and 3b, shall be accompanied by a Flood Risk Assessment. Flood Risk Assessments shall be considered as part of determination of the application and where relevant the advice of the Environment Agency will be sought and its views will be given due weight. Failure to submit a Flood Risk Assessment, where one is required, will usually result in the application not being validated.
- 8.46 Lincolnshire County Council, as Lead Local Flood Authority, has responsibility for assessing risk of flooding associated with surface water (pluvial) for all Major Planning Applications (including minerals and waste developments) and the Environment Agency assesses risk of flooding associated with rivers (fluvial) and the sea (tidal) within flood risk zones 2, 3a and 3b. Internal Drainage Boards have permissive powers to manage water levels within their respective drainage districts. Flood Risk Assessments will need to be produced in line with the NPPF and the relevant organisation will need to consider them accordingly.
- 8.47 A sequential risk-based approach to determining the suitability of land for development in flood risk areas should be applied as indicated in the PPG with the aim of locating new development in areas with the lowest probability of flooding (flood Zone 1). Where flood risk is identified, proposals will only be approved in exceptional circumstances where the Exception Test in the PPG is met.
- 8.48 The flood risk vulnerability of mineral and waste management sites as indicated in the PPG will be taken into account in determining planning applications for

development outside Flood Zone 1. Where it is considered acceptable for development to take place within a flood risk area, any buildings should be designed to be flood resilient in order to reduce the consequences of flooding and facilitate recovery from the effects of flooding.

- 8.49 Applications for minerals and waste development should address the likely effects of proposed development on surface water and groundwater, in terms of changes to flow (including groundwater flow), water table, water temperature and quality. Consideration will be given to impacts on water quality as a result of disturbance to the banks or beds of a river and environmental impacts as a result of activities such as dewatering. Proposals should include appropriate measures to minimise any detrimental impacts on the availability and quality of water resources.
- 8.50 Although the Environment Agency is responsible for pollution control through its various permitting regimes, it is still important to consider the impact on water resources as far as it might affect land use and planning generally. The extent of this assessment will depend on the nature of the development and its location. Proposals for mineral extractions are likely to require a Hydrological/Hydrogeological Assessment(s), in order to satisfy the concerns of the Environment Agency.
- 8.51 The NPPF and PPG promote Sustainable Drainage Systems (SuDS) as the principle means for development proposals to address surface water. SuDS are designed to control surface water run off close to where it falls and mimic natural drainage as closely as possible. The guidance notes that whether SuDS should be considered depends on the proposed development and its location. For major development SuDS should be provided unless demonstrated to be inappropriate, however it is acknowledged that they may not be practicable for some forms of development, for example, mineral extraction. Local Planning Authorities are responsible for approving SuDS designs, in consultation with the Lead Local Flood Authority and other relevant flood risk management bodies, with future maintenance monitored through planning enforcement procedures.
- 8.52 The sustainable management of surface water and land drainage should be considered at an early stage to manage/mitigate associated flood risk from surface water runoff, improve water quality and minimise environmental impact. In the interests of improving sustainability and conserving water resources, applicants will be expected to demonstrate that the need to conserve water resources has been taken into account and that appropriate water efficiency and sustainability measures have been included. Consent will also be needed under the Land Drainage Act 1991 if a development involves the building of a culvert or structure (such as a weir) which is likely to affect flow in an ordinary watercourse.

DM3: Flood Risk and Water Resources

Planning permission will be granted for minerals and waste development provided that it can be demonstrated that the development will:

- not increase the risk of flooding both to the site of the proposal and the surrounding area, taking into account all potential sources of flooding and increased risks from climate change induced flooding;
- (ii) be designed to avoid, and wherever possible, reduce the risk of flooding onand off-site both during and following completion of operations, including through the use of opportunities to incorporate natural flood management techniques;
- (iii) not have an unacceptable impact on surface or ground waters;
- (iv) conserve water resources, ensure water is used efficiently and, wherever possible, improve water quality; and
- (v) utilise sustainable drainage systems, unless there is clear evidence that this would be inappropriate.

Historic Environment

- 8.53 The NPPF defines a heritage asset as a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage assets are an irreplaceable resource and should be conserved in a manner appropriate to their significance. These assets include both designated and non-designated assets. Designated heritage assets have statutory protection and are assessed at the highest significance, they include scheduled monuments, protected wreck sites, battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites. Non-designated assets are usually recorded in the County Historic Environment Record (HER) along with designated assets, these are generally of regional and local importance but may have an equal significance to designated assets. The significance of a heritage asset derives not only from its physical presence, but also from its setting.
- 8.54 Lincolnshire's identity and sense of place is closely linked with its rich heritage, it is a unique resource that contributes to the character of the county and can be vulnerable to damage from development. Historic assets can be harmed or lost through alteration or destruction of the asset itself or its setting and weight will be given to its conservation. Conflicts may arise between protecting our heritage and meeting the need for minerals or providing important waste facilities. Proposals for minerals and waste development should therefore include appropriate measures to minimise the impact of development on Lincolnshire's heritage, historic environment and archaeology.
- 8.55 By addressing heritage considerations before planning applications are submitted, there is greater scope to avoid or minimise any potential adverse impacts. The Council will advise on the need for applicants to discuss their proposals with in-house

specialist officers and bodies such as Historic England. Local history groups and societies can also be a source of useful information. The County Historic Environment Record (HER) holds information on known heritage assets, and should help in the prediction of the likelihood of encountering currently unknown heritage assets of historic and archaeological interest.

- 8.56 Where development proposals have the potential to affect heritage assets including features of historic or archaeological importance (whether known or unknown), they should be accompanied by an assessment of the significance and setting of the assets and the potential impact of the development proposal on those assets. Such an assessment should be proportionate to the significance of the asset and include consultation of the HER, and where appropriate, the results of field evaluation. More detailed evaluation could be required dependent on site specific details.
- 8.57 Details of any proposed mitigation measures should also be provided, along with provision for the recording and archiving of information in relation to any heritage assets to be lost. Where the potential exists for unknown assets to be encountered in the course of the development, provision must be made for monitoring and recording. The Lincolnshire Archaeological Handbook provides more detailed guidance to developers and is freely available from the Lincolnshire County Council website.
- 8.58 The NPPF states that, when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. It states that substantial harm to or loss of designated heritage assets of the highest significance should be wholly exceptional. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, the NPPF states that local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss.

DM4: Historic Environment

Proposals that have the potential to affect heritage assets including features of historic or archaeological importance (whether known or unknown) should be accompanied by an assessment of the significance of the assets and the potential impact of the development proposal on those assets and their settings.

Planning permission will be granted for minerals and waste development where heritage assets, and their settings, are conserved and, where possible enhanced.

Where any impact on heritage assets is identified, the assessment should provide details of the proposed mitigation measures that would be implemented. These should include details of any conservation of assets and also of any further

investigation and recording of heritage assets to be lost and provision for the results to be made publicly available.

Where adverse impacts are identified planning permission will only be granted for minerals and waste development provided that:

- (i) the proposal cannot reasonably be located on an alternative site to avoid harm; and
- (ii) the harmful aspects can be satisfactorily mitigated; or
- (iii) there are exceptional overriding reasons which outweigh the need to safeguard the significance of heritage assets which would be harmed.

Lincolnshire Wolds National Landscape, an Area of Outstanding Natural Beauty

- 8.59 In November 2023, in response to the Landscapes Review, Areas of Outstanding Natural Beauty became National Landscapes. The 2023 Environmental Improvement Plan highlights the importance of National Landscapes in enhancing the beauty, heritage and engagement with the natural environment and states that National Landscapes play an important role in the objective of tackling nature recovery. The Lincolnshire Wolds Area of Outstanding Natural Beauty has become a National Landscape.
- 8.60 The NPPF states that great weight should be given to conserving landscape and scenic beauty in Areas of Outstanding Natural Beauty (AONB), which have the highest status of protection in relation to landscape and scenic beauty. The conservation of wildlife and cultural heritage are important considerations in all these areas.
- 8.61 The main purpose of AONB designation is the conservation and enhancement of the natural beauty of the area landscape, flora and fauna, geographical interests and heritage, including archaeology and settlement character. The attractive landscape and character of the Lincolnshire Wolds has been recognised by Central Government through its designation as an AONB in 1973. The key characteristics of the Wolds include its unique physiography (geology and topography); its scenic, working landscape based upon the area's use for agriculture; major archaeological resources; and its cultural associations. As highlighted in the statutory Lincolnshire Wolds AONB Management Plan (2018 2023), the overarching goal is to ensure that the Wolds retains its unique landscape and undeniable special character, whilst maintaining and supporting its communities. The Council will expect development proposals within, or within the setting of, a protected landscape to carry out a Landscape and Visual Impact Assessment (LVIA).

DM5: Lincolnshire Wolds National Landscape, Area of Outstanding Natural Beauty

Planning permission will only be granted for minerals and waste development within or affecting the character or setting of the Lincolnshire Wolds National

Landscape, an Area of Outstanding Natural Beauty (AONB) in exceptional circumstances where it can be demonstrated that:

- (i) there is a proven public interest; and
- (ii) there is a lack of alternative sites not affecting the AONB to serve the market need; and
- (iii) the impact on the special qualities of the AONB can be satisfactorily mitigated.

Landscape

- 8.62 The NPPF states that planning should recognise the intrinsic character and beauty of the countryside. It states that planning policies and decisions should aim to ensure that developments are visually attractive as a result of good architecture and appropriate landscaping.
- 8.63 Applicants should therefore consider the potential visual impact of their proposals and design accordingly; this may include appropriate design in keeping with the locality or prior landscaping and planting work. Applicants will be expected to show how their proposals will appropriately address impacts on landscape and the built environment. This would normally be undertaken through a study and evaluation of local landscape character, including the character of the built environment, and an assessment of how the proposal will impact on it, with reference to any relevant landscape character assessment or design guide. Alternatively, it could be carried out through a local assessment using a suitable methodology, appropriate to the scale of the development proposed. Landscape and visual impact assessment should follow the appropriate industry guidelines, currently Guidelines for Landscape and Visual Impact Assessment, 3rd Edition.
- 8.64 Provided that the proposal meets the requirements of other policies in this plan, the county council will endeavour to agree appropriate design, screening and other mitigation measures to allow the development to go ahead. Long term maintenance of landscaping will be required and may be linked to maintenance requirements in relation to the delivery of Biodiversity Net Gain.

DM6: Landscape Character

Planning permission will be granted for minerals and waste development where proposals demonstrate that they are designed to protect, and where possible enhance, the character, quality and distinctiveness of the built environment and landscape setting in which they are to be located, taking account of valued landscapes, local setting, and any distinctive features and / or important views.

Proposals shall incorporate appropriate landscaping, planting and screening measures as part of their overall design in order to mitigate any adverse impacts on landscape and / or the built environment.

Proposals that would result in residual adverse impacts on landscape and / or the built environment will only be approved if the impacts are acceptable when weighed against the benefits of the scheme.

Agricultural Land and Soils

- 8.65 Proposals for minerals and waste development should take into account their impact on soil resources, agricultural land quality and farming, and other established rural land uses. This assessment should be informed by a soil and land quality survey and a soil handling and replacement strategy, where appropriate.
- 8.66 Soil is a finite resource which takes many years to develop but which can be quickly lost or degraded. Good soil management and conservation are therefore critical to sustainable land management practices in minerals and waste development. The NPPF states that soils should be protected and enhanced.
- 8.67 Where soil is not required for restoration purposes on the site, other options for the sustainable use of the soil include using it for restoring other nearby sites (subject to planning permission for the areas involved) or storing the soil "permanently" on site in appropriately designed bunds potentially allowing its use at a later date if the need arises.
- 8.68 Biodiversity-led restoration also provides an opportunity to protect soils, enabling habitat creation in addition to soil conservation for future agricultural needs.
- 8.69 The NPPF states that local planning authorities should take into account the economic and other benefits of the best and most versatile agricultural land. Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of higher quality. In addition, it states that local planning authorities should put in place policies to ensure that the reclamation of mineral sites safeguard the long term potential of best and most versatile agricultural land.
- 8.70 The Agricultural Land Classification (ALC) system classifies land into five grades with Grade 3 subdivided into 3a and 3b. Best and most versatile agricultural land is defined as Grades 1, 2 and 3a. Lincolnshire has a high proportion of best and most versatile agricultural land, which is the basis for its prosperous agricultural industry. As a result, it will not always be practicable to locate development on lower quality agricultural land, particularly minerals development that can only take place where the minerals are found. For mineral sites containing "significant" areas of best and most versatile agricultural land, the long term potential of this agricultural land should still be safeguarded. This can be achieved by restoring the land back to agriculture using, if appropriate, the low level restoration techniques outlined in Chapter 9. Alternatively, such techniques could also be used for providing opportunities for nature conservation after-uses, whilst at the same time protecting the potential of the best and most versatile agricultural land. For example, wet

grassland could be created by managing the water levels to allow for both livestock grazing and to encourage birds. Such land could then be re-drained for arable use, should the need arise in the future. In considering whether a site contains "significant" areas of best and most versatile agricultural land, the county council will have regard to the amount of land involved, what proportion of the overall site this constitutes and how this land is distributed within the site.

DM7: Soils and Best and Most Versatile Agricultural Land

Proposals for minerals and waste development should protect and, wherever possible, enhance soils and secure sustainable soil management.

Proposals for minerals and waste development that include significant areas of best and most versatile agricultural land will only be permitted where it can be demonstrated that:

- (i) no reasonable alternative exists; and
- (ii) for minerals sites, the site will be restored to an after-use that safeguards the long-term potential of the best and most versatile agricultural land.

Transport

- 8.71 The NPPF states that plans and decisions should consider whether opportunities for sustainable transport modes have been taken up depending on the nature and location of the site and should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. It states that planning strategies should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods. This reflects one of the objectives of the Lincolnshire Local Transport Plan.
- 8.72 Policy S1 sets out the requirement for all minerals and waste development to demonstrate how the distances needed to be travelled by road have been minimised and that opportunities to use the most sustainable transport options have been maximised, in achieving sustainable development.
- 8.73 The majority of minerals and waste produced in Lincolnshire is transported over relatively short distances. Minerals are a high bulk, low profit commodity which generally restricts their use to locally based markets accessed by road based transport. The transportation of aggregates by rail and water is generally only economic over longer distances and is dependent on network capacity and adequate loading and reception facilities. Whilst waste is managed locally wherever possible, in some cases, for example due to need for specialist treatment or the nature of commercial contracts, some waste can be transported a long way out of the County.
- 8.74 There are currently limited facilities for rail freight in the county and the River Trent is currently the only navigable waterway that is used in any major way to transport freight by water, although none of this is currently loaded or off-loaded in

Lincolnshire. The only aggregates terminal in Lincolnshire was at the Port of Boston but this is no longer in operation. Boston and the Humber ports could however be a potential destination for onward shipping for certain waste arisings.

- 8.75 Road haulage will therefore remain the predominant mode of transport for minerals and waste for the foreseeable future.
- 8.76 The location of mineral extraction areas, unlike waste sites, are determined by the existence of the resource and thereby restricted as to achieving more sustainable transport options. However, the Council will:
 - consider favourably sites with good access to the county's Strategic Road Network;
 - encourage more use of the rail network in the county;
 - encourage the use of facilities/potential of waterborne transport on the River
 Trent:
 - encourage the use of conveyors to reduce the impacts of road haulage.
- 8.77 To maximise the opportunities for improving the sustainability of the transport of waste in Lincolnshire, the Plan seeks to focus new waste facilities on existing centres of population, employment and services, as defined in the settlement hierarchies of the District Local Plans.
- 8.78 The NPPF states that plans and decisions should take account of whether safe and suitable access to a site can be achieved for all people; and improvements can be undertaken within the transport network that cost-effectively limit the significant impacts of the development. It states that development should only be prevented or refused on highways grounds where there are unacceptable highway safety impacts or the residual cumulative impacts of development on the road network are severe.
- 8.79 The transportation of most minerals and waste by road is a major challenge in Lincolnshire. The highway network in Lincolnshire is extensive, but there are no motorways and only 75km of dual carriageway. The A1 trunk road runs down the western boundary of the county and the A46, A57, A158, A15, A16, A17 routes link settlements throughout Lincolnshire. Accessibility is an issue throughout Lincolnshire, but more so in the more rural isolated parts of the County. There are particular problems in travelling east/west.
- 8.80 It is important to ensure that the effects of traffic generated by minerals and waste developments are minimised, particularly in relation to effects on local communities, the environment and the local road network. The county council will seek mitigation measures to control the impact of road haulage by controlling the operation of sites through routing agreements, output limits and hours of operation.
- 8.81 On a site by site basis reducing the impacts of transporting materials by road on local communities can be achieved by:

- the use of conveyor belt systems which provide the inter-site movement of material within or to other nearby sites for further processing. This system reduces the level of HGVs on the local road network;
- internal haul roads on sites also reduce the use of local roads by HGVs;
- the use of voluntary site transport plans in consultation with local communities, relating to issues such as routing, hours of movement and considerate driving can help reduce the worst impacts of road freight.
- 8.82 The NPPF states that all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Unless the number of lorry movements is insignificant, all planning applications should therefore be accompanied by a transport impact assessment (usually as part of the Environmental Statement) and a site transport plan.
- 8.83 The level of traffic which is considered to be significant will depend on the characteristics of the site including the integrity of the local highway network, proximity to sensitive properties and, if applicable, current HGV movements from the site. The County Planning Authority will advise applicants of the need to discuss proposals with the Highways Authority and of any specific access issues to be considered as part of their application.

DM8: Transport by Road

Planning permission will be granted for minerals and waste development involving transport by road where:

- (i) the highway network is of, or will be made up to, an appropriate standard for use by the traffic generated by the development; and
- (ii) arrangements for site access and the traffic generated by the development would not have an unacceptable impact on highway safety, free flow of traffic, residential amenity or the environment; and
- (iii) a suitable travel plan is in place.

Cumulative Impacts

- 8.84 The NPPF states that, in preparing Local Plans and when determining planning applications, local planning authorities should take into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality.
- 8.85 It is important to consider the suitability of granting permission for sites which would be in close proximity to other minerals or waste sites. Proposals for simultaneous and/or successive operations at a number of sites in a wider area of commercially-viable deposits may impact on the amenity of communities and localities over an extended period, depending on the nature, age and size of the site(s). Such cumulative impacts can occur in a number of ways:

- the cumulative impact of a number of separate effects from a single site;
- the cumulative effects from two or more active sites, including sites being restored or used for waste disposal;
- the combined effect on the landscape and ecology from the working, re-working and restoration of a number of sites; or
- the cumulative impact on the quality of life of local communities from a relatively unbroken sequence of working and restoration.
- 8.86 Adverse cumulative impacts could include increased levels of noise, vibration, dust and artificial lighting. The highway network could also be affected by increased HGV movements with additional hazards related to road safety.
- 8.87 In Lincolnshire, there are parts of the county where there has been a gradual build-up of sites in close proximity to other mineral sites. The cumulative impacts on amenity to local communities in these areas and on the existing landscape will need careful consideration when considering future developments.

DM9: Cumulative Impacts

Planning permission will be granted for minerals and waste developments where the cumulative impact would not result in significant adverse impacts on the environment of an area or on the amenity of a local community, either in relation to the collective effect of different impacts of an individual proposal, or in relation to the effects of a number of developments occurring either concurrently or successively.

9. Restoration and after-use of mineral sites and landfill sites

- 9.1 Both the extraction of minerals and the landfilling of waste are forms of transient development that can take place over many years. It is therefore important that proper provision is made for the restoration of such sites and that, wherever possible, this is undertaken on a phased basis.
- 9.2 Restoration is secured through planning conditions, which are imposed when planning applications are determined. Conditions can also be imposed to require aftercare measures to be carried out for a period of up to five years following the completion of restoration of each phase of working. For the longer-term management, a legal agreement (S106 planning obligation) is required.
- 9.3 Mineral planning permissions are subject to the requirements of Section 96 and Schedule 14 of the Environment Act 1995. This means that the planning conditions can be reviewed by the county council periodically, including the restoration and aftercare conditions.
- 9.4 It is vital to ensure that the restoration and future use of sites is addressed at the outset of preparing planning applications. It is also important to acknowledge that the way land is restored and its subsequent management offer the means to enhance the character of land taken for mineral working or waste operations, so that a valuable asset can be passed on to future generations. To do this effectively will involve collaboration between key interest groups including mineral operators, land owners, local authorities, local communities, statutory agencies and nongovernment organisations.
- 9.5 The restoration of mineral workings and landfill operations should be completed at the earliest opportunity to ensure that dereliction of the land does not occur and where appropriate, progressive restoration will be required in order to minimise any blight on the landscape.
- 9.6 It is essential that proposals for mineral extraction and landfill establish an appropriate after-use to ensure that resources are secured for the after-use to be successfully implemented once restoration is complete. All after-uses will be considered in the light of realistic assumptions about the availability and acceptability of restoration materials, particularly inert waste.
- 9.7 Schemes that are designed to develop as an appropriate habitat for the prevailing conditions, and demonstrated to be both technically and economically feasible, will be supported. On large sites, a mix of compatible uses may provide the best balance for the future, for example low intensity agricultural use, tourism, sport and nature conservation. All development will be required to deliver biodiversity net gains in accordance with the Environment Act 2021.
- 9.8 However, restoration schemes should also contain a degree of flexibility so they can be amended in the future if circumstances change. The aim should be to achieve

phased restoration to minimise the area of land disturbed and the total period of mineral working and landfill operations. Phased restoration also helps to gauge the initial success of the restoration scheme by observing which aspects have worked well, as well as identifying which aspects have been less successful.

9.9 It is also important that agreed sustainable and beneficial after-uses are managed and maintained following restoration. Where appropriate, aftercare schemes and/or long-term management and maintenance agreements will need to be secured. In relation to biodiversity net gain, the management and maintenance will be required for a period of at least 30 years, in accordance with the Environment Act 2021. The management and maintenance of other types of after-uses may be required for a period of 10 years (or longer) depending on the site and could include matters such as maintenance of public rights of way, public access or long term pumping.

SR1: Restoration and Aftercare

Proposals must demonstrate that the restoration of mineral and landfill sites will be of high quality and carried out at the earliest opportunity.

Proposals for mineral extraction or landfill shall be accompanied by detailed proposals for restoration, including an appropriate after-use of the site. All proposals shall demonstrate that:

- (i) restoration will be undertaken using best practice to secure a high standard of restoration and aftercare; and
- (ii) restoration will be completed within a reasonable timescale and is progressive, confirmed through the submission of a restoration phasing scheme which commits to the restoration of available parts of the site as early as possible and to the restoration of the whole site within an agreed timeframe; and
- (iii) the restoration is appropriate for the natural and historic landscape and geological and wildlife interest of the area, incorporating measures to create, protect, restore and enhance geodiversity and biodiversity conservation features and the historic landscape, that are practical, of a high quality and appropriate to the area and secure their long term safeguarding and maintenance, confirmed through the submission of a detailed final restoration scheme; and
- (iv) there is an aftercare management programme, appropriate to the objectives of the site, to ensure that the restoration of the site is established successfully.

Afteruse

9.10 The NPPF states that local planning authorities should put in place policies to ensure 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, including for agriculture (safeguarding the long term potential of best and most

- versatile agricultural land and conserving soil resources), geodiversity, biodiversity, native woodland, the historic environment and recreation.
- 9.11 It is particularly important that temporary development sites such as quarries and landfill sites are properly restored and the types of restoration measures taken are appropriate. Sites should be restored in a way that is sympathetic to the character of the area and that will positively enhance the site and contribute to the landscape in which it is set. In this context, restoration proposals should have regard to the Lincolnshire Historical Landscape Character assessment, which is housed in the County Historic Environment Record, and any relevant local landscape character assessment. Sites should also, where appropriate, be in line with the strategic aim of an area (for example to create a Country Park in the Witham Valley or to restore fenland in South Lincolnshire).
- 9.12 Restoration can provide significant opportunities to secure a net-gain in biodiversity, facilitate adaptation to climate change and address past losses. Lincolnshire County Council is responsible for the production of a Local Nature Recovery Strategy for Greater Lincolnshire. This will include a description of the opportunities for recovering or enhancing biodiversity, in terms of habitats and species, set priorities for nature recovery and provide a set of actions to deliver these priorities across Greater Lincolnshire. Restoration proposals should adhere to the principles and priorities set out in the forthcoming Local Nature Recovery Strategy. The Local Nature Recovery Strategy will be informed by Biodiversity Opportunity Mapping. The Greater Lincolnshire Nature Partnership has produced Biodiversity Opportunity Mapping on behalf of all district authorities in Lincolnshire. This identifies the existing ecological network and where the best opportunities exist for improvement, for example through management or habitat creation, with respect to the extent of the habitat in the network, the condition and distinctiveness of a habitat and the overall connectivity of the network.
- 9.13 The NPPF highlights the importance of providing net gains in biodiversity, including through the conservation, restoration and enhancement of ecological networks that are more resilient to current and future pressures. The restoration of mineral sites offers significant opportunities for habitat creation, such as fenland, wetlands, lowland dry acid grassland heathland and wet woodland. Biodiversity Opportunity Mapping identifies specific opportunities for creating and restoring priority habitats and therefore provides important information which can be utilised in the development of restoration schemes. The county council will therefore expect all restoration schemes to contribute to the forthcoming Local Nature Recovery Strategy objectives using relevant opportunity mapping and priority habitat targets to inform restoration proposals, and where possible deliver a net-gain in biodiversity through the landscape-scale creation of priority habitat, thereby contributing to the establishment of a coherent and resilient ecological network. Where restoration could assist or achieve in the creation of priority habitats, and/or Greater Lincolnshire Local Nature Recovery Strategy targets, thereby improving overall biodiversity levels in the county, the relevant biodiversity after use should be incorporated within the restoration scheme.

- 9.14 It is important that planning policies seek to enlarge or link together existing habitats, thus helping to offset the effects of habitat fragmentation. Biodiversity Opportunity Mapping is based on this principle and the county council will therefore encourage larger blocks of habitat creation, as they deliver greater ecological benefits. The restoration of minerals sites provide significant opportunities to deliver large scale habitat creation and potentially contribute to a prosperous green investment economy. Existing landscape-scale initiatives such as the Witham Valley Country Park, Trent Vale / Trent Valley "Futurescape" and South Lincolnshire Fenlands Partnership can also assist in this process.
- 9.15 Restoration can provide opportunities to secure a net gain in accessible **geodiversity** and address past losses. The Lincolnshire Geodiversity Strategy (2022 2026) highlights the opportunities for the better understanding of geodiversity which can be gleaned through mineral extraction and for restoration plans to include the retention of quarry faces. Where restoration could assist or achieve in the creation of geodiversity features, and/or Lincolnshire Geodiversity Strategy (2022 2026) targets the relevant after use should be incorporated within the restoration scheme.
- 9.16 Restoration schemes need to be resilient to future **climate change** impacts. Habitat creation can act as a living carbon sink and well-designed schemes, in appropriate locations, may also offer benefits in terms of provision of climate change mitigation measures such as greater flood storage capacity allied to recreational or biodiversity after-uses. Furthermore, the restoration of mineral sites to the forthcoming Local Nature Recovery Strategy habitats can help wildlife adapt to climate change, creating 'stepping stones' and increasing the permeability of the landscape enabling climate change induced range shifts.
- 9.17 Sand and gravel extraction in Lincolnshire causes the greatest loss of land; although generally shallow it often extends below the water table and would therefore normally fill with water. This creates challenges when restoration to **agriculture** is considered, particularly as over 70% of agricultural land in Lincolnshire is classified as best and most versatile, i.e. Grade 1 or 2 or 3a, and when there is pressure to restore land back to agricultural use in order to safeguard food supplies. Low level restoration techniques have been developed however which involve sealing the floor and sides of the excavation with an impermeable material to prevent the entry of ground water and replacing soils together with a suitable drainage system. The only water then entering the site is rainwater which is regulated by pumping when necessary.
- 9.18 Whilst best and most versatile agricultural land should be safeguarded and soils on all sites should be protected (in line with Policy DM7) this will not necessarily require sites to be restored to agriculture. Other uses, some in combination, could be considered in order to provide a net-gain in biodiversity. This could involve restoration of wildlife habitats that may have declined as a consequence of development at the site or within the local area, strengthening regional and functional ecological and green infrastructure networks, as identified through

- Biodiversity Opportunity Mapping and the forthcoming Local Nature Recovery Strategy.
- 9.19 Afforestation can make a potentially significant contribution to the achievement of carbon sequestration targets but only 4% of Lincolnshire is covered by woodland, making it one of the least wooded counties in Britain. The best suited areas for woodland creation within the county are probably the sand and gravel lowlands closely followed by the clay lowlands. Sand and gravel extraction areas have a specific type of soil and tend to be less fertile and more suitable to tree growth. The Trent Valley and Bain Valley are therefore the most suitable areas for woodland creation, particularly wet woodland. The silt fens, however, contain more fertile soils such that a balance between biodiversity and agricultural restoration will have to be met.
- 9.20 There is a significant opportunity for the restoration and creation of wet woodland through the restoration of mineral sites. New wet woodland planting will therefore be encouraged where appropriate, which will make a potential contribution to carbon sequestration. Furthermore, restoration to wet woodland, along with other priority habitats, will safeguard high grade soils from further drainage and wind-blown erosion so that should there be a need in the future for the land to be converted back to agriculture the soils will remain in situ.
- 9.21 The restoration of worked-out sites can also provide opportunities to add to the County's Green Infrastructure. In 2023 Natural England launched the Green Infrastructure Framework to support the recovery of nature and to enhance, develop and provide a multi-functional network of green and blue spaces, parks, rivers and other corridors, along with outdoor sports provision, within and around settlements that connect them to each other and the wider countryside, improving access, environmental quality and biodiversity. The Witham Valley Country Park, located to the south west of Lincoln, is an example of a location that is constantly evolving as mineral sites are restored.
- 9.22 A significant amount of restoration schemes in the county have resulted in large areas of standing water, particularly in the sand and gravel production areas, where there is a high water table. Strategically, this type of restoration may be reaching saturation point whereby the characteristics of parts of the county have been irreversibly changed, often to the detriment of that particular area.
- 9.23 The high amount of RAF activity within the County also provides a potential conflict with extensive and sometimes numerous water bodies owing to increased bird activity and therefore the potential of bird strike on aircraft. Proposals for the creation of large open water bodies will therefore need to be closely scrutinised. A change in restoration to habitats such as reedbed and wet woodland can help alleviate the problem of bird strike, creating less open water while forming a barrier between any open water and potential grazing sources, making it less attractive to geese.

SR2: After-use

The proposed after-use of minerals and landfill sites shall be designed in a way that is not detrimental to the local economy and conserves and enhances the landscape character and the natural and, where applicable, historic environment of the area in which the site is located.

After-uses shall enhance and secure a measurable net gain in biodiversity and geological conservation interests, conserve soil resources, safeguard the potential of the best and most versatile agricultural land, and include measures for climate change adaptation and mitigation. Such after-uses could include: agriculture, nature conservation, flood storage capacity, leisure, recreation / sport, and woodland.

Where appropriate, the proposed restoration should provide improvements for public access to the countryside including access links to surrounding green and blue infrastructure.

Restoration proposals shall be designed to ensure that they do not give rise to new or increased hazards to aviation.

Restoration of sand and gravel operations

- 9.24 Proposals for extraction within the **Trent Valley** to the north of Lincoln should be restored sensitively in line with the broader habitat-scale aspirations for the Trent Valley. Priority habitats for mineral restoration in this area include reedbeds, wet woodland and wet grassland. Further detail on habitat creation opportunities will be identified in the forthcoming Local Nature Recovery Strategy, informed by Biodiversity Opportunity Mapping.
- 9.25 The development of the **Witham Valley Country Park** is a partnership initiative to provide linked accessible greenspace from the centre of Lincoln City to the surrounding countryside, enriching the natural environment. The Country Park lies within the Trent Valley to the south west of Lincoln. Proposals for sand and gravel extraction within this area should include restoration proposals to create priority habitats including wet woodland, reedbeds, heathland and acid grassland. Restoration of minerals sites should also be planned as part of a strategy linked to the development of the Country Park as well as providing accessible natural greenspace and contributing to green infrastructure and the enhanced provision of leisure and recreation facilities.
- 9.26 Sand and gravel operations within **Central Lincolnshire** provide opportunities to create priority habitats to compliment habitats existing in the wider Bain Valley area such as heathland, acid grassland and wet woodland. The creation of such habitats would also help meet the aim of the Lincolnshire Wildlife Trust's Living Landscape project in the Kirkby Moor and Bain Valley area, which aims to create an extensive

area of new wildlife habitat to expand, buffer and link existing habitats of national importance.

- 9.27 Within **South Lincolnshire**, the South Lincolnshire Fenlands Project is seeking to recreate sustainable wetland areas between Bourne and Market Deeping adjacent and linked to the internationally important nature reserves in Baston and Thurlby Fens and within the wider fenland locality. Proposed habitat restoration will include areas of wet grasslands, utilised for grazing and hay production, reedbeds, fenland, wet woodlands and open water.
- 9.28 Fens, as part of larger wetland habitats, are of immense conservation value, supporting rare plants and animals. Fens are also important carbon dioxide sinks and banks, because of the way they capture and store organic material (carbon) derived from atmospheric gases. Fen habitat was once extensive in Lincolnshire but is now rare. Sand and gravel operations within the South Lincolnshire Fenland Partnership area provide opportunities to create wet fenland habitat or enhance existing wetland habitats, which would help meet the project's targets.

SR3: Restoration of Sand and Gravel Operations

Restoration proposals for sand and gravel operations (other than those involving best and most versatile agricultural land that would be restored back to agricultural land of a comparable quality) shall have regard to the landscape objectives of the area in which the site is located and shall reflect the following priorities:

- (i) Trent Valley (north of Lincoln): creation of reedbed, wet woodland and lowland wet grassland habitats;
- (ii) Trent Valley (south west of Lincoln within the Witham Valley Country Park): creation of habitats (including wet woodland, reedbed, acid grassland and heathland) to enhance local nature conservation and biodiversity value; provision of improved public access including links to surrounding green and blue infrastructure; and the development of additional recreational / sport facilities;
- (iii) Central Lincolnshire (Tattershall Thorpe): creation of wet woodland, heathland and acid grassland habitats, together with reedbed in areas of high water table;
- (iv) South Lincolnshire (West Deeping / Langtoft): creation of wet fenland habitat or enhancement of existing wetland habitats.

Restoration of limestone/chalk workings

9.29 Calcareous grasslands in Lincolnshire are found on the lime-rich soils of the chalk Wolds and of the Jurassic limestone uplands. The thin lime-rich soils found here can support a very high biodiversity if limestone grassland can be conserved. It has been estimated that more than 55% of chalk grassland and more than 35% of limestone grassland was lost from Lincolnshire between 1940 and 1995. Limestone grassland

now only occupies a tiny proportion (0.05%) of this area where it was once a characteristic part of the landscape. The little that remains of this habitat is among the most fragmented of its kind in the country.

9.30 Extensive areas of well-managed flower-rich calcareous grassland should be recreated in appropriate areas, linking and buffering existing fragmented sites.

Limestone and chalk operations provide opportunities to create limestone grassland habitat and to expose features of geological interest, as well as providing accessible natural greenspace and contributing to green infrastructure. Any restoration proposals would however need to address the requirements of Policy DM7.

SR4: Restoration of Limestone and Chalk Workings

Restoration proposals for limestone and chalk operations should be sympathetic to the surrounding landscape and prioritise the creation of calcareous grassland habitat, except on best and most versatile agricultural land that would be restored back to agricultural land of a comparable quality. Restoration should also seek to retain suitable exposures for geological educational use where appropriate.

10. Monitoring and implementation

Monitoring

- 10.1 Developing a monitoring system is a key means of assessing the effectiveness of this plan and whether the spatial vision, and objectives are being delivered. It will determine:
 - whether policies and related targets or milestones have been met or progress is being made towards meeting them or, where they are not being met or on track to being achieved, the reasons why;
 - what impact the policies are having in respect of national and local policy targets and any other targets identified in the plan;
 - whether the policies need adjusting or replacing because they are not working as intended;
 - if policies or proposals need changing, the actions needed to achieve this.
- 10.2 In order to monitor the effectiveness of the plan, it is necessary to compile performance targets linked to output indicators, which provide a benchmark for measuring policy implementation. These are set out in Table 11 below. The monitoring framework also includes provision to monitor the Sustainability Appraisal (SA) Objectives and these are also included in Table 11. The Council's Annual Monitoring Report (AMR) will report on the effectiveness of the policies and identify any changes needed if a policy is not working or the targets are not being met. Therefore, the monitoring will assist the county council in ascertaining if there is any need to review the Plan.
- 10.3 The provisions in Table 11 are directed at measuring the success of the various policies in the Plan. In addition, and to assist in this task, in relation to waste the county council will routinely monitor matters such as existing stock and changes in stock and capacities; waste arisings; and the amounts of waste recycled, recovered or going for disposal. In relation to minerals, the county council will monitor the number and nature of applications that involve the extraction of mineral types which are not covered by specific policies in this Plan. The information from this monitoring will help to inform the decisions on when to review the Plan, and the matters that need to be covered.

Implementation

- 10.4 Lincolnshire County Council as mineral and waste planning authority will take the lead role in the implementation of the objectives and the policies of this plan in a variety of ways, including:
 - determine planning applications in accordance with the Development Plan, government policy and guidance and other material considerations;
 - attach conditions to planning permissions;
 - seek legal agreements with developers where appropriate;

- enforce breaches of planning control as necessary;
- maintain a dialogue with the minerals and waste management industry and local communities through participation in local liaison committees and other means;
- liaise and co-operate with other departments within the Council and bodies such as District Councils, Parish Councils, adjoining mineral and waste planning authorities, the Environment Agency, Natural England, Historic England, Health and Safety Executive (HSE), Department for Environment Food and Rural Affairs (DEFRA), National Highways, and interest groups; and
- work with the minerals and waste management industry and others to identify and develop suitable initiatives and sites.

Table 11: Policy Related Indicators and Targets

Policy	Plan Objective	SA Objective	Indicator	Target
S1: Sustainable Development and Climate Change	1, 2, 5, 8, 9	1, 2, 6, 7, 10	Percentage of relevant planning applications determined in accordance with Policy S1.	100%
S2: Sustainable Design	1, 2, 5, 8, 9	1, 2, 6, 7, 10	Percentage of relevant planning applications determined in accordance with Policy S2.	100%
S3: Sustainable Use of Aggregate Resources	1	12	Percentage of relevant planning applications determined in accordance with Policy S3.	100%
SM1: Providing for an Adequate Supply of Sand and Gravel	1, 3	11	Percentage of relevant planning applications determined in accordance with Policy SM1.	100%
SM2: Landbank of Sand and Gravel	1, 3	11	Level of landbank for sand and gravel.	Minimum landbank of 7 years calculated in

Policy	Plan Objective	SA Objective	Indicator	Target
				accordance with the latest LAA.
SM3: Proposals for Sand and Gravel Extraction	1	11	Percentage of relevant planning applications determined in accordance with Policy SM3.	100%
SM4: Providing an Adequate Supply of Limestone	1, 3	11	Percentage of relevant planning applications determined in accordance with Policy SM4.	100%
SM5: Landbank of Limestone	1, 3	11	Level of landbank for limestone.	Minimum landbank of 10 years calculated in accordance with the latest LAA.
SM6: Proposals for Limestone Extraction	1	11	Percentage of relevant planning applications determined in accordance with Policy SM6.	100%
SM7: Chalk	1	11	Percentage of relevant planning applications determined in accordance with Policy SM7.	100%
SM8: Building Stone	1	11	Percentage of relevant planning applications	100%

Policy	Plan Objective	SA Objective	Indicator	Target
			determined in accordance with Policy SM8.	
SM9: Silica Sand	1	11	Percentage of relevant planning applications determined in accordance with Policy SM9.	100%
SM10: Energy Minerals	1	11	Percentage of relevant planning applications determined in accordance with Policy SM10.	100%
SM11: Underground Gas and Carbon Capture Storage	1	11	Percentage of relevant planning applications determined in accordance with Policy SM11.	100%
SM12: Associated Industrial Development	1	17	Percentage of relevant planning applications determined in accordance with Policy SM12.	100%
SM13: Irrigation Reservoirs	1	17	Percentage of relevant planning applications determined in accordance with Policy SM13.	100%
SM14: Borrow Pits	1, 3, 9	10, 11, 13, 17	Percentage of relevant	100%

Policy	Plan Objective	SA Objective	Indicator	Target
			planning	
			applications	
			determined in	
			accordance	
			with Policy	
			SM14.	
SM15:	6	11	Number of	Zero
Safeguarding			planning	
of Mineral			applications	
Resources			that are	
			granted	
			planning	
			permission	
			where the	
			County Council	
			has expressed	
			the view that	
			the proposals	
			would be	
			contrary to	
			Policy SM15.	
SM16:	6	11	Number of	Zero
Safeguarding			planning	
of Existing			applications	
and Allocated			that are	
Mineral Sites			granted	
and			planning	
Associated			permission	
Minerals			where the	
Infrastructure			County Council	
			has expressed	
			the view that	
			the proposals	
			would be	
			contrary to	
			Policy SM15.	
SW1: Waste	2	14	Percentage of	100%
Hierarchy			relevant	
			planning	
			applications	
			determined in	
			accordance	
			with Policy	
			SW1.	
SW2: Spatial	2, 4	10, 15	Percentage of	100%
Strategy and	-		relevant	

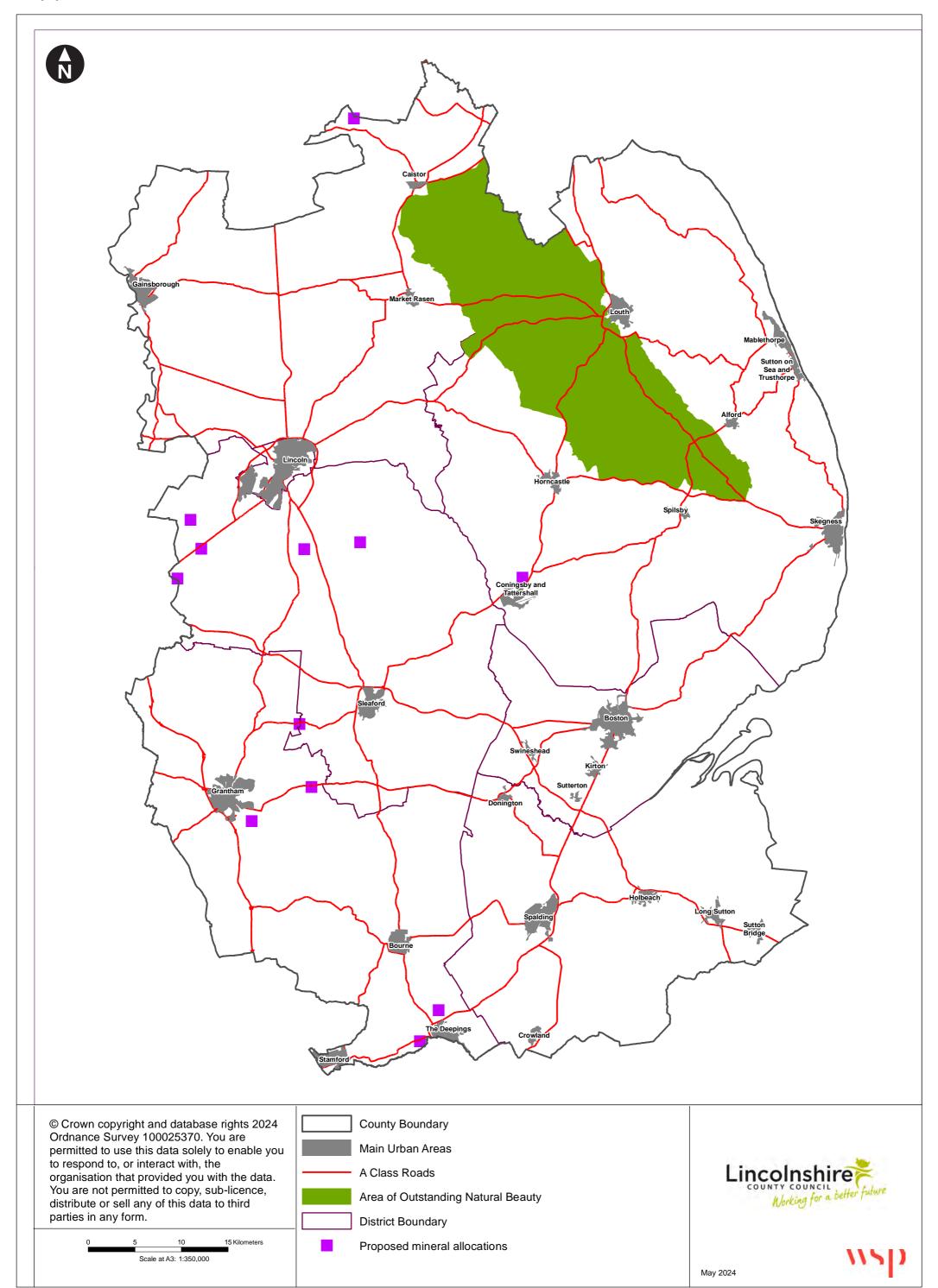
Policy	Plan Objective	SA Objective	Indicator	Target
Locational Criteria for Waste Management Facilities			planning applications determined in accordance with Policy SW2.	
SW3: Biological Treatment of Waste	2	10, 15	Percentage of relevant planning applications determined in accordance with Policy SW3.	100%
SW4: Water Recycling Centres	2	10, 15	Percentage of relevant planning applications determined in accordance with Policy SW4.	100%
SW5: Deposit of Waste to Land	2	10, 14, 15	Percentage of relevant planning applications determined in accordance with Policy SW5.	100%
SW6: Recycling of Inert Waste Within Existing Active Mining Sites	2	10	Percentage of relevant planning applications determined in accordance with Policy SW6.	100%
SW7: Safeguarding Waste Management Sites	6	15, 17	Number of planning applications that are granted planning permission where the	Zero

Policy	Plan Objective	SA Objective	Indicator	Target
			County Council	
			has expressed	
			the view that	
			the proposals	
			would be	
			contrary to	
5144 6 111	_		Policy SW7.	4000/
DM1: Quality	7	5, 8, 9	Percentage of	100%
of Life and			relevant	
Amenity			planning applications	
			determined in	
			accordance	
			with Policy	
			DM1.	
DM2:	5, 8	1	Percentage of	100%
Biodiversity	,		relevant	
and			planning	
Geodiversity			applications	
			determined in	
			accordance	
			with Policy	
			DM2.	
DM3: Flood	5, 8	4, 7	Percentage of	100%
Risk and			relevant	
Water			planning	
Resources			applications determined in	
			accordance	
			with Policy	
			DM3.	
DM4: Historic	8	3	Percentage of	100%
Environment			relevant	
			planning	
			applications	
			determined in	
			accordance	
			with Policy	
			DM4.	
DM5:	8	2	Percentage of	100%
Lincolnshire			relevant	
Wolds			planning	
National			applications	
Landscape, Area of			determined in	
			accordance	
Outstanding		<u> </u>		

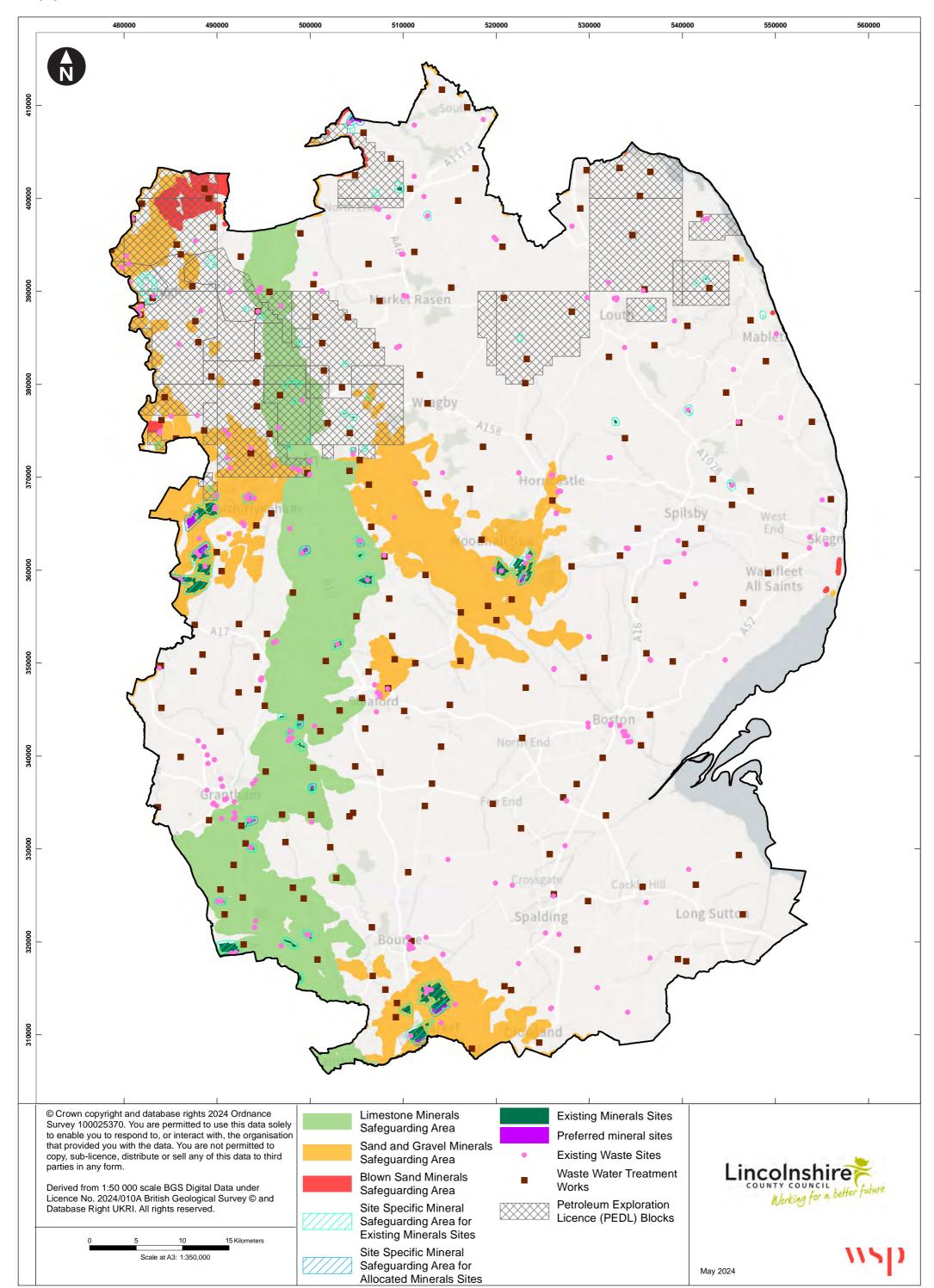
Policy	Plan Objective	SA Objective	Indicator	Target
Natural			with Policy	
Beauty			DM5.	
DM6: Landscape Character	8	2	Percentage of relevant planning applications determined in accordance with Policy DM6.	100%
DM7: Soils and Best and Most Versatile Agricultural Land	8	16	Percentage of relevant planning applications determined in accordance with Policy DM7.	100%
DM8: Transport by Road	1, 2, 7	8, 9, 10	Percentage of relevant planning applications determined in accordance with Policy DM8.	100%
DM9: Cumulative Impacts	7, 8	8, 9	Percentage of relevant planning applications determined in accordance with Policy DM9.	100%
SR1: Restoration and Aftercare	9	13	Percentage of relevant planning applications determined in accordance with Policy SR1.	100%
SR2: After- Use	9	13	Percentage of relevant planning applications	100%

Policy	Plan Objective	SA Objective	Indicator	Target
			determined in accordance with Policy SR2.	
SR3: Restoration of Sand and Gravel Operations	8, 9	1, 2, 13, 16, 17	Percentage of relevant planning applications determined in accordance with Policy SR3.	100%
SR4: Restoration of Limestone and Chalk Workings	8, 9	1, 2, 13, 16	Percentage of relevant planning applications determined in accordance with Policy SR4.	100%

KEY DIAGRAM

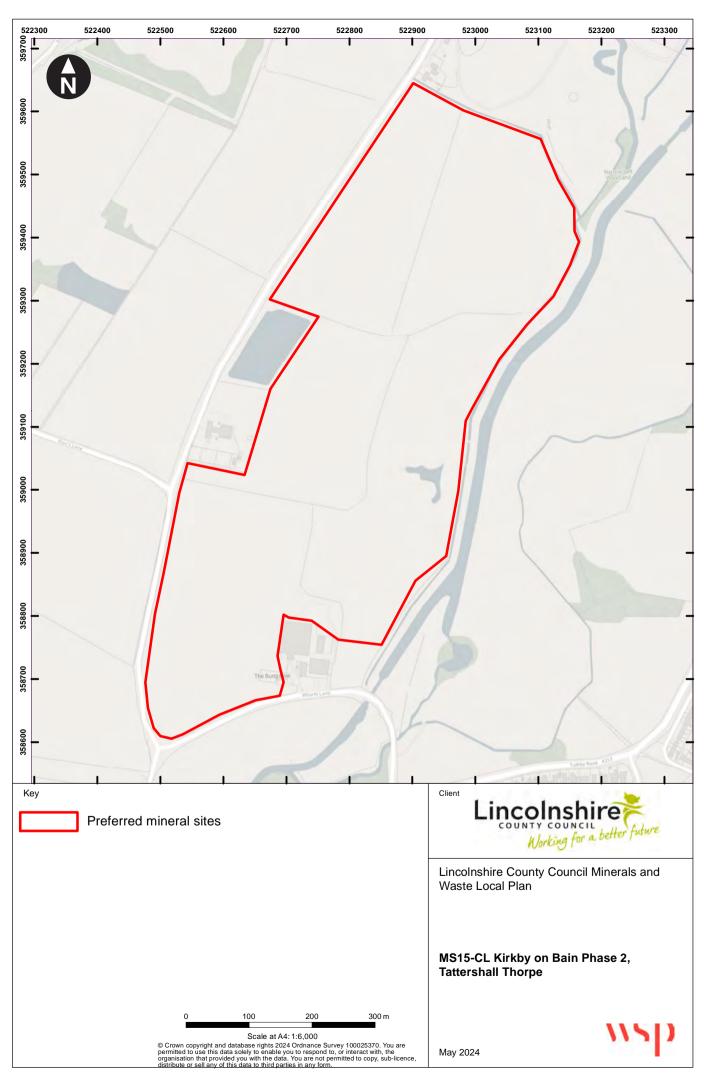


POLICIES MAP

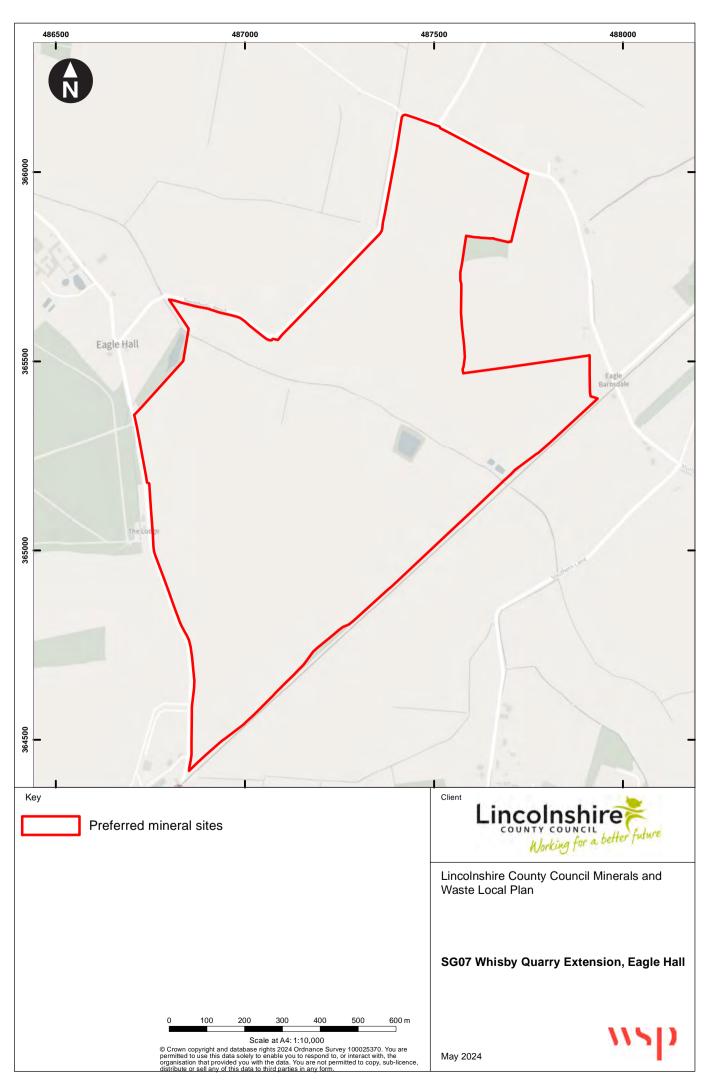


Appendix 3 INSET MAPS OF PREFERRED MINERAL ALLOCATIONS

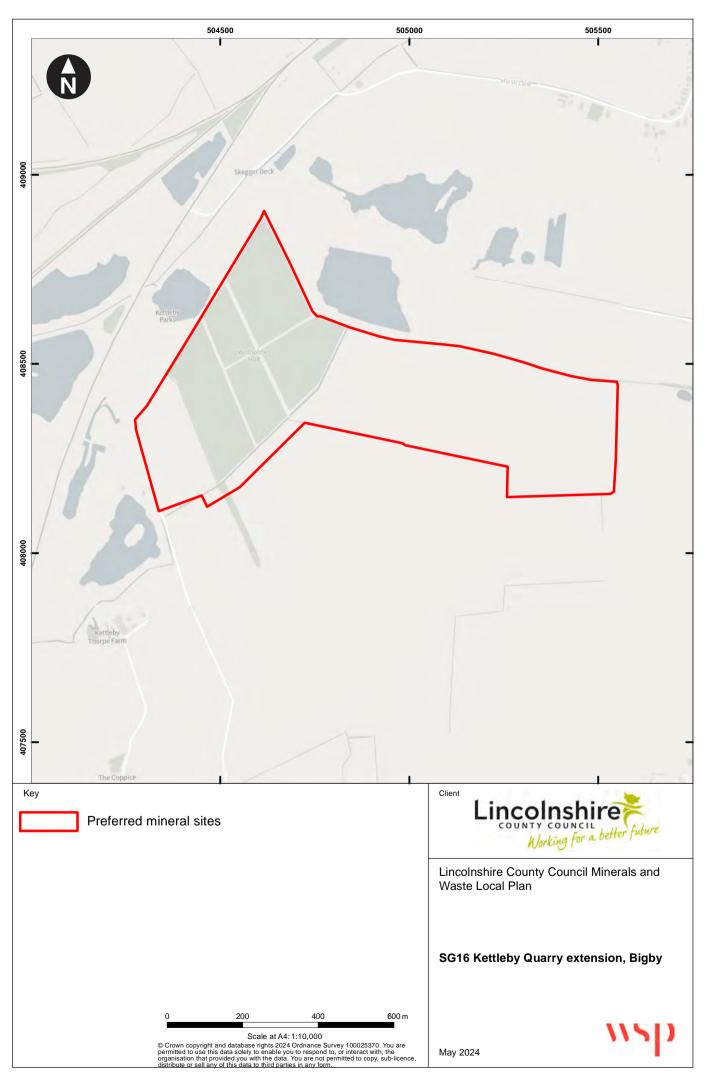


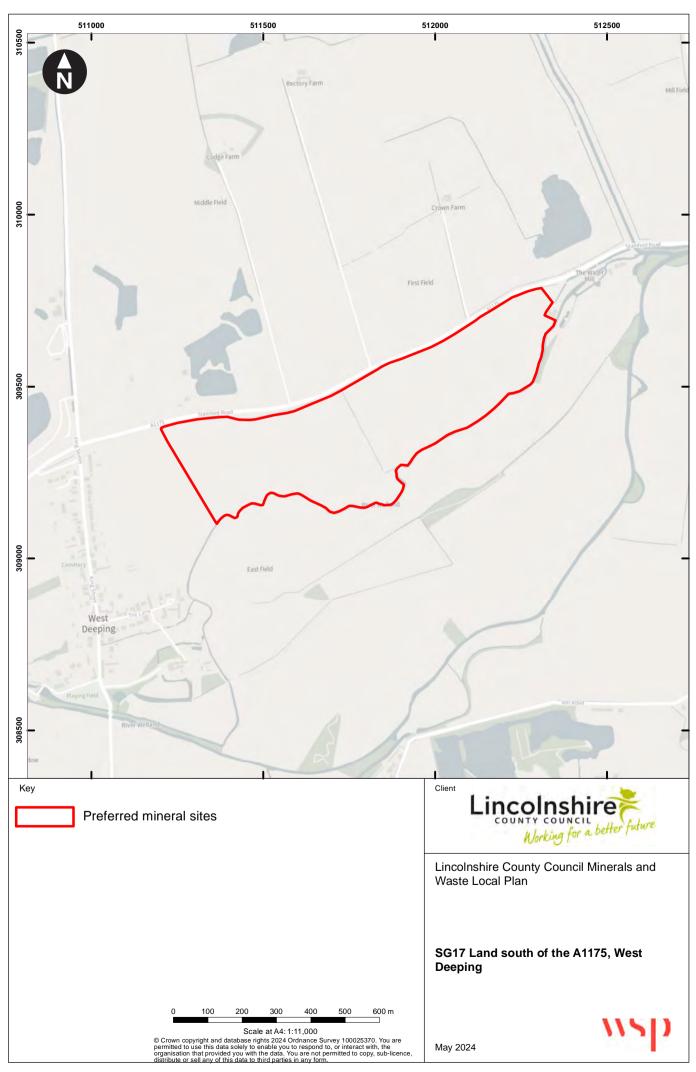


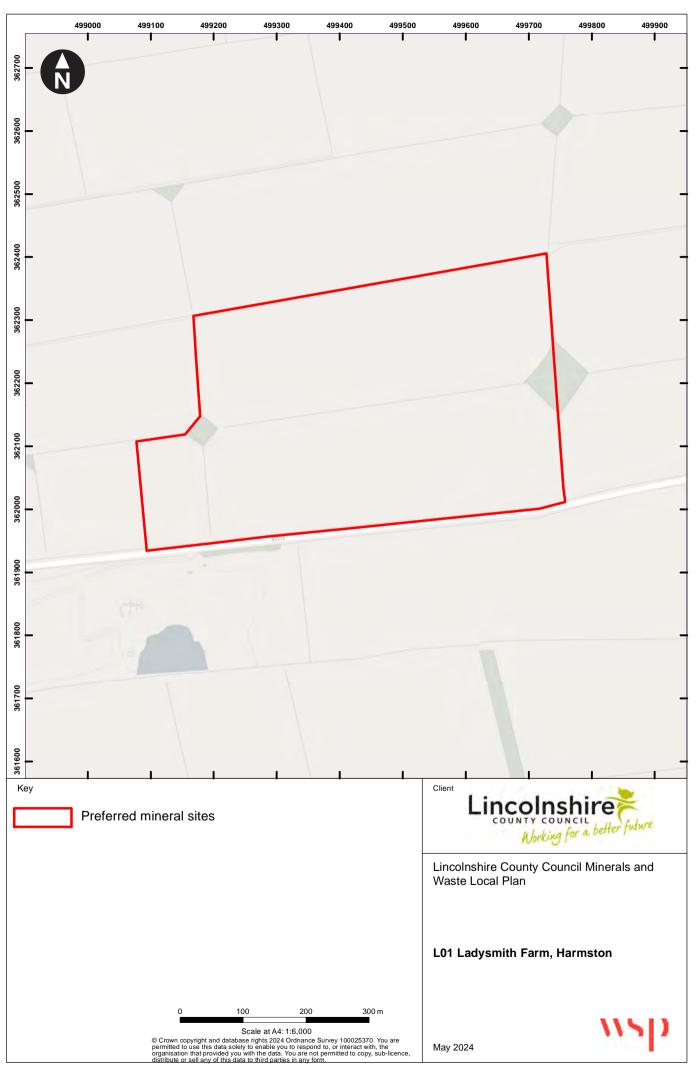


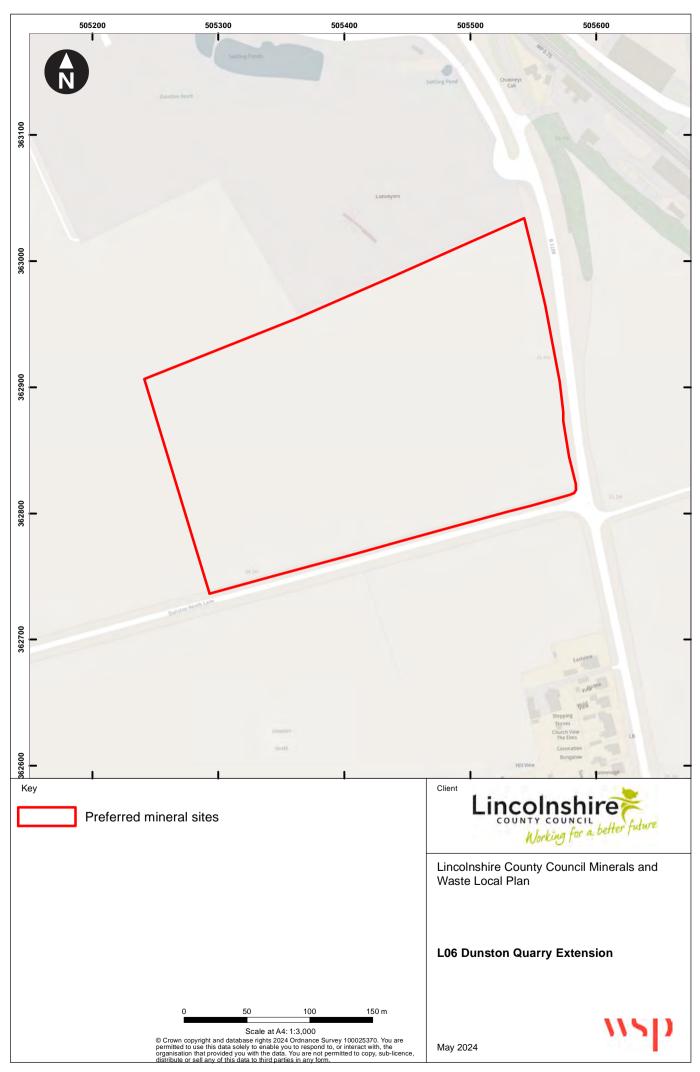




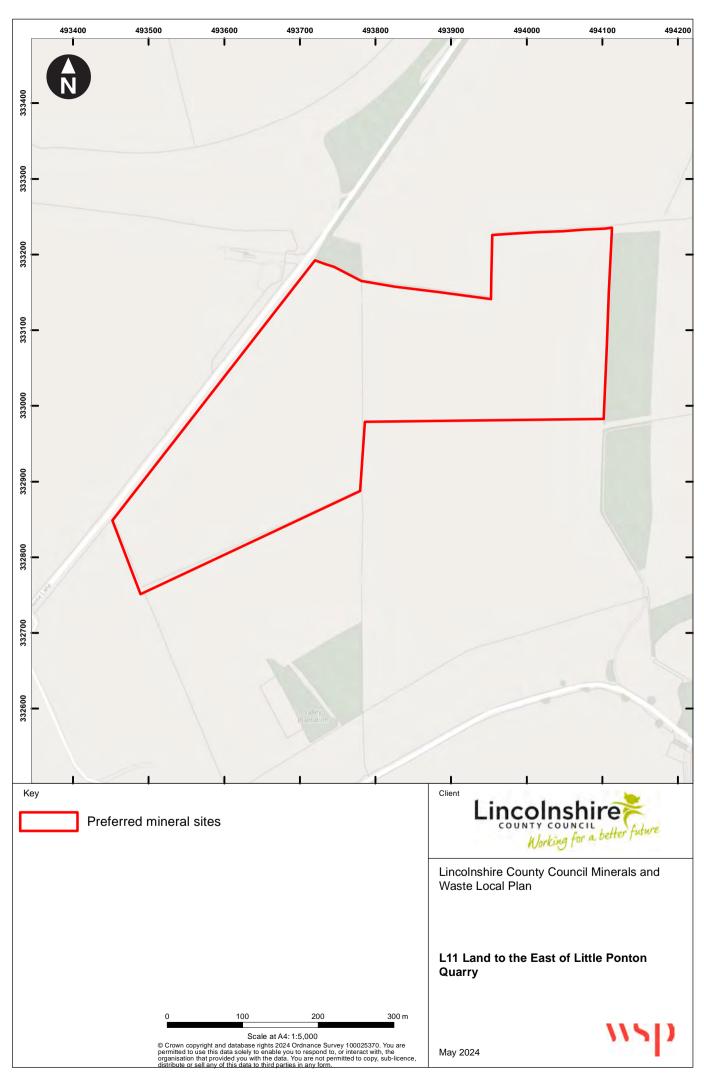














Appendix 4: Glossary of Terms

Active Mining Site: Mineral workings that are classified as active under the Planning and Compensation Act 1991 or the Environment Act 1995.

Aftercare: An agreed programme of work designed to bring a restored mineral or waste site to a satisfactory standard for agriculture, amenity or nature conservation use. Normally imposed in the form of a planning condition once a site has been granted permission to operate.

After-use: The use to which a mineral or waste site is put to on completion of restoration and any aftercare provisions e.g. agriculture, forestry, amenity (including nature conservation). Planning permission will be required to develop more formal uses of land (e.g. change of use of land to create a leisure facility).

Aggregates: Materials used in construction work or as fill consisting of rock crushed by nature (sands and gravels) or crushed by humans (quarried rock, such as limestone which is then crushed on site).

Alternative (Secondary) Aggregates: The re-use of construction materials e.g. from demolition or road maintenance or the use or reprocessing of waste materials from other industries such as power station ash or colliery spoil, to replace primary aggregates.

Ancient Woodland: An area of woodland which has had a continuous history of tree cover since at least 1600.

Apportionment: The County's share of Regional aggregate provision.

Appropriate Assessment: A process required by the Conservation of Habitats and Species Regulations 2017 to avoid adverse effects of plans, programmes and projects on internationally designated nature conservation sites and thereby maintain the integrity of the network and its features. To comply with the Regulations, Lincolnshire County Council has carried out an Appropriate Assessment screening exercise.

Area of Outstanding Natural Beauty (AONB): AONB is a statutory designation in recognition of their national importance and to ensure that their character and qualities are protected for all to enjoy. The legal framework for Areas of Outstanding Natural Beauty is provided by the Countryside and Rights of Way Act 2000. AONBs became National Landscapes in 2023.

Area of Search: An extensive area of land believed to contain significant, but generally unproven mineral resources within which the Mineral Planning Authority would have no objection in principle to mineral working, on at least part of the site subject to satisfactory proposals to protect the range of interests of acknowledged importance within and adjoining the area (see also "Preferred Areas").

Biodiversity: Summarises the phrase biological diversity – the variety of life on earth around us (mammals, birds, reptiles, amphibians, fish, invertebrates, plants, fungi and microorganisms) and the systems that support that variety.

Biodiversity Opportunity Mapping (BOM): Collation and assessment of existing data to provide guidance on the most suitable areas for landscape-scale biodiversity enhancement.

Biodiversity 2020: The national (England) strategy for the conservation of biodiversity 2011-2020.

Borrow pit: A temporary mineral working to supply material for a specific construction project.

Coal Bed Methane: Clean coal technology and a potential long-term source of indigenous natural gas which can be extracted from underground coal seams.

C&I Waste (*Commercial and Industrial Waste*): Definition provided at beginning of Chapter 6 – Waste.

C&D Waste (*Construction and Demolition Waste*): Definition provided at beginning of Chapter 6 – Waste.

Contaminated Land: Land which appears to the county council to be in such a condition, by reasons of substances in, on or under the land, that significant harm is being caused or there is a significant possibility of such harm being caused; or significant pollution of controlled waters is being caused or there is a significant possibility of such pollution being caused, as defined in the Environmental Protection Act 1990 (as amended).

Core Strategy: Sets out the key elements of the planning framework for the area, including a long term spatial vision, the spatial objectives, and the strategic policies to deliver that vision. All other Development Plan Documents in the Local Development Framework (LDF) must be in conformity with the Core Strategy.

Development Plan: Sets out policies and proposals for the development and use of land within the area of the application.

Development Management Policies: A suite of criteria-based policies which are required to ensure that all development within the area meets the vision and strategy set out in the core strategy.

Dormant Mineral Sites: Mineral Sites and Old Mining Permissions that are classified as dormant under the Environment Act 1995 or the Planning and Compensation Act 1991 respectively.

Geodiversity: Summarises the phase geological diversity - the variety of rocks, minerals, fossils, soils and landscapes, together with the natural processes which form them. It is the link between geology, landscape, biodiversity and people.

Green infrastructure: a strategically planned and delivered network of high quality green spaces and other environmental features. It should be a multifunctional resource capable of delivering a wide range of environmental and quality of life benefits for local communities. Green Infrastructure includes parks, open spaces, playing fields, woodlands, allotments and private gardens.

Groundwater: Water associated with soils or rocks below the ground surface, usually taken to mean water in the saturated zone, below the water table.

Hydraulic Fracturing ('Fracking'): Hydraulic fracturing - or, as it is commonly known, fracking - is a process used to extract natural gas from rock (including shale). In simple terms, the technique involves pumping water into the ground at high pressure to make narrow fractures in the rock. The water contains sand and chemicals to help stimulate the gas. The process of fracking allows the gas or oil that's trapped inside the rock to be released so it can be recovered on the surface. The Department of Energy and Climate Change (DECC) and numerous independent organisations have published papers which provide guidance about shale oil and gas and 'fracking'.

Inert Waste: waste that is biologically, chemically and physically unreactive with the environment.

Landbank: A stock of planning permissions (permitted reserves) for the winning and working of minerals generally expressed in 'years worth of supply'.

Local Aggregate Assessment: A Local Aggregate Assessment is an annual assessment of the demand for and supply of aggregates in a mineral planning authority's area.

LACW (Local Authority Collected Waste): Definition provided at beginning of Chapter 6 – Waste.

Local Development Document: Local Development Documents are statutory documents prepared under the Planning and Compulsory Purchase Act 2004, which set out the spatial planning strategy and policies for an area. They have the weight of development plan and are subject to community involvement, public consultation and independent examination.

Local Development Scheme (LDS): Describes the Local Plan documents which the authority intends to prepare and the timetable for their preparation.

Local Geological Sites: Geological or geomorphological sites that are considered worthy of protection for their educational, research, historical or aesthetic importance. One of a number of designations under the umbrella term Local Sites.

Local Nature Recovery Strategy (LNRS): A strategy which sets priorities for nature recovery and proposes actions to deliver these priorities.

Local Nature Reserves (LNR): Sites for people and wildlife offering special opportunities to study or learn about nature or simply to enjoy it. They are declared by principal authorities

under Section 21 of the National Parks and Access to the Countryside Act 1949, and amended by Schedule 11 of the Natural Environment and Rural Communities Act 2006.

Local Plan: A document which provides a written statement of the policies for delivering the spatial strategy and vision for an authority area, supported by a reasoned justification.

Local Wildlife Sites (LWS): Local Wildlife Sites are usually selected within a local authority area and support both locally and nationally threatened wildlife. Many sites will contain habitats and species that are national or local priorities.

Localism Act 2011: Is an Act of Parliament that changes the powers of local government in England. The aim of the act is to facilitate the devolution of decision-making powers from central government control to individuals and communities.

Marine Protected Area (MPA): zones of the seas and coasts where wildlife is protected from damage and disturbance. The Government is committed to establishing a well-managed ecologically coherent network of MPAs in our seas.

Mineral Planning Authority (MPA): The Local Planning Authority responsible for overseeing all aspects of mineral operations. In the case of the County of Lincolnshire, these powers rest with Lincolnshire County Council.

Municipal Waste: See definition of Local Authority Collected Waste (LACW) provided at beginning of Chapter 6 – Waste.

National Character Area (NCA): subdivide England into 159 areas of similar landscape character. Each NCA has a unique identity resulting from the interaction of wildlife, landforms, geology, land use and human impact.

National Nature Reserve (NNR): NNRs are the finest sites in England for wildlife and / or geology. They are a selection of the very best parts of England's Sites of Special Scientific Interest and many also have international nature conservation designations.

National Planning Policy Framework (NPPF): The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied.

Non-Inert Waste: waste not classified as inert and thus in some manner will react with the environment. Also known as 'Active Waste'.

Permitted Reserves: Mineral reserves for which planning permission has been granted (usually expressed in million tonnes). The MPA will not release details of reserves for individual quarries or quarry operators to ensure 'commercial confidentiality'.

Planning and Compulsory Purchase Act 2004: The legislation that introduced the new development planning system. The Act commenced in September 2004.

Preferred Areas: An area of known mineral resource, proven by survey information, where planning permission might reasonably be anticipated, subject to all other considerations being met.

Primary Aggregate: Naturally occurring deposits of minerals that come in the form of crushed rocks, sand and gravel which can be found along river beds, on the ocean floor and in most natural environments which are extracted specifically for use as aggregate and used for the first time.

Priority habitat/species: Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 details the list of habitats and species which are of principal importance for the conservation of biodiversity in England.

Ramsar sites: wetlands of international importance, designated under the Ramsar Convention.

Recycled Aggregates: Aggregates produced from recycled construction and demolition wastes such as crushed concrete, road planings etc.

Regionally Important Geological and Geomorphological Site (RIGS/RIGGS): Established in 1990 by the Nature Conservancy Council (NCC), RIGSs were the predecessor to Local Geological Sites. One of a number of designations under the umbrella term Local Sites.

Reserves: Mineral deposits which have been tested to establish the quality and quantity of material present which could be economically and technically exploited. Permitted reserves are those with benefit of planning permission for extraction.

Restoration: Process of returning a site to its former or a new use following mineral extraction or landfilling. Involves reinstatement of land by contouring and the spreading of soils or soil making materials.

Secondary (Alternative) Aggregates: Aggregates derived from by-products of the extractive industry, e.g. china/ball clay waste, colliery spoil, blast furnace slag, pulverised fuel ash, etc.

Sensitive Receptors: Land uses that are sensitive to the impacts of Minerals and Waste development. These include, but are not limited to, residential and commercial properties, places of employment, schools, and leisure activities (whether passive or active).

Site of Nature Conservation Importance (SNCI): Sites referred to in a Local Plan, selected as being of importance for nature conservation on the basis of local knowledge and were the predecessor of Local Wildlife Sites. One of a number of designations under the umbrella term Local Sites.

Sites of Special Scientific Interest (SSSIs): the national suite of sites providing statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features. These sites are also used to underpin other national and international nature

conservation designations. Currently designated under the Wildlife and Countryside Act 1981.

Special Area of Conservation (SAC): An area which has been given special protection under the European Union's Habitat's Directive. SACs provide increased protection to a variety of wild animals, plants and habitats and are a vital part of global efforts to conserve the world's biodiversity.

Special Protection Area (SPA): A Special Protection Area (SPA) is an area of land, water or sea which has been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within the European Union. SPAs are European designated sites, classified under the European Wild Birds Directive which affords them enhanced protection.

Statement of Community Involvement (SCI): Statement of the local authority's proposed standards and approach to involving the local community and stakeholders in the preparation, alteration and review of all local plan documents and development control decisions.

Sterilisation: Where minerals cannot be extracted because of surface level development.

Strategic Environmental Assessment (SEA): A formal environmental assessment of certain plans and programmes which are likely to have significant effects on the environment, including those in the field of planning and land use required by the Environmental Assessment of Plans and Programmes Regulations 2004. Local authorities are advised to take an integrated approach towards Sustainability Appraisal and Strategic Environmental Assessment to avoid unnecessary duplication and confusion. Together they will play an important part in testing the soundness of the local plan, ensuring that it contributes towards sustainable development.

Sustainability Appraisal (SA): Local Planning Authorities are bound by legislation (Planning and Compulsory Purchase Act 2004) to appraise the degree to which their plans and policies contribute to the achievement of sustainable development. The process of Sustainability Appraisal is similar to Strategic Environmental Assessment but is broader in context, examining the effects of plans and policies on a range of social, economic and environmental factors. To comply with Government policy, Lincolnshire County Council is producing a Sustainability Appraisal that incorporates a Strategic Environmental Assessment of its local plan.

Sustainable Development: Resolution 24/187 of the United Nations General Assembly defined sustainable development as meeting the needs of the present without compromising the ability of future generations to meet their own needs. The UK Sustainable Development Strategy *Securing the Future* set out five 'guiding principles' of sustainable development: living within the planet's environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; promoting good governance; and using sound science responsibly. The NPPF, taken as a whole, constitutes the Government's

view of what sustainable development in England means in practice for the planning system.

Waste Planning Authority (WPA): The Local Planning Authority responsible for land-use planning control for waste management. In the case of the County of Lincolnshire, these powers rest with Lincolnshire County Council.