

12 Planning for a Sustainable Supply of Minerals

- 12.1 Minerals play a vital role in society. Aggregates and other types of construction minerals are needed to build homes, factories, offices and transport infrastructure. Other minerals are used in industry, food production and agriculture. Energy minerals like oil and gas provide the country with power and heating. Whilst seeking to deliver development, increase our quality of life, and create sustainable communities, it is essential that we plan appropriately for minerals. Doing so ensures that the need for minerals by society and the economy, together with the impacts of extraction and processing on communities and the environment, are managed in an integrated way.
- 12.2 Minerals are also a finite resource and can only be extracted where they are found. This means it is important to make best use of them and secure their long-term conservation. North Lincolnshire's geology ensures the presence of several different mineral resources in the area. These include sand and gravel, limestone, chalk, silica sand, clay, ironstone and peat as well as hydrocarbon (oil and gas) deposits. We have five quarries extracting either chalk or limestone and four extracting either sand and gravel, or silica sand. Ironstone extraction ceased some time ago, as has peat extraction. There is one operational oil well. The British Geological Survey (BGS) report on mineral resources in former Humberside area and its accompanying map identifies the type and extent of the minerals present in North Lincolnshire.

MINERAL SUPPLY REQUIREMENTS

- 12.3 As highlighted above minerals are essential for society and the wider economy. National policy is clear that there is a need to maintain an adequate and steady supply of minerals, particularly aggregates, to meet local as well as national requirements.

Policy MIN1p: Mineral Supply Requirements

To support a steady and adequate supply of minerals including aggregates and industrial mineral, the Council will seek to make available sufficient land. In doing so the Council will seek to maintain a minimum crushed rock landbank of at least 10 years and a minimum sand and gravel landbank of at least seven years at all times.

Evidence shows that North Lincolnshire should make provision for 2.85 million tonnes of sand and gravel and 5.13 million tonnes of crushed rock over the plan period. This equates to:

- Sand & Gravel – 0.15 million tonnes per annum
- Crushed Rock – 0.27 million tonnes per annum

Appropriate landbanks will also be maintained for silica sand and brick clay, in line with national policy.

Provision will be derived from existing operational sites, additional allocations and new sites that meet the policy requirements for mineral extractions, as well as those of the wider Local Plan.

- 12.4 To identify future requirements and demand for aggregates we have to prepare a Local Aggregate Assessment (LAA) that is updated each year based on annual survey of mineral operators. The Council works with its neighbours in the Humber area to prepare this as a joint piece of work. Future supply and demand is based on a rolling average of 10-year sales data and other local information. It looks at all supply options including the availability of secondary or recycled aggregates as well as imports and exports.
- 12.5 In making this decision the Council must have regard to the annual average sales figure for the last three years with the purpose of identifying the general trend of demand as part of the consideration of whether it might be appropriate to increase supply. Annual figures over the ten year period leading up to the commencement of the plan period (2017 to 2036) and the annual average for ten year and three year periods set out below. The figures shown are for the Humber sub-region, based on the 2018 version of the LAA.

Table 8.1: Aggregate Sales in the Humber Sub-Region (2007 to 2016)

Year	Sand & Gravel Sales (million tonnes)	Crushed Rock Sales (million tonnes)
2007	1.3	0.3
2008	1.1	0.2
2009	1	0.1
2010	0.59	0.2
2011	0.71	0.3
2012	0.56	0.23
2013	0.92	0.21
2014	0.92	0.75
2015	0.92	0.75
2016	0.9	0.85
Ten Year Average (2007 to 2016)	0.89	0.4
Three Year Average (2014 to 2016)	0.91	0.78

- 12.6 Work has been undertaken to apportion these sales to the north and south banks of the Humber – i.e. East Riding of Yorkshire and North Lincolnshire as the only mineral producing areas – as part of evidence based being prepared to support minerals planning in both areas. East Riding of Yorkshire & Hull City Councils have prepared a minerals apportionment paper to support their Joint Minerals Plan and to be read alongside the LAA. This work suggests that East Riding & Hull should plan for 0.81 million tonnes per annum of sand and gravel and 0.13 million tonnes per annum of crushed rock.
- 12.7 This work and LAA therefore gives an indicative apportionment (based on 10 year average sales) to the south bank of the Humber of 0.15 million tonnes per annum of sand and gravel) and 0.27 million tonnes per annum of crushed rock. This would give an overall indicative requirement in North Lincolnshire up to 2036 of 2.85 million tonnes and 5.13 million tonnes, for sand and gravel and crushed rock respectively. A similar apportionment paper has been produced alongside the Local Plan.
- 12.8 It should be noted that sales and reserves information for North Lincolnshire over the last ten years, particularly for sand and gravel, is limited or incomplete due to lack of responses from site operators as well as the need for commercial confidentiality. The council will continue to work with operators to identify more accurate information.

- 12.9 The NPPF sets out clear policy requirements in relation to a number of minerals. It requires the maintenance of landbanks of at least 7 years for sand and gravel, 10 years for crushed rock, 10 years for silica sand sites (more in some circumstances) and 25 years for clay. It also requires us to consider how to meet the demand for minerals for the repair of historic assets. Landbanks are the stock of planning permissions for mineral extraction over a specified period of time. Information about landbanks in North Lincolnshire, in particular for sand and gravel, is limited. These will be monitored through the LAA and annual surveys undertaken on behalf of the Yorkshire & Humber Aggregates Working Party (YHAWP).
- 12.10 Existing reserves (as of 2016) for sand and gravel are 1.3 million tonnes (based on operator and planning application information) and 6.5 million tonnes for crushed rock. Based on the indicative apportionments, outlined above this would identify landbanks of 8.6 years and 32.5 years respectively, meeting the government requirements. It should be noted that this might change as sites are developed out or planning permissions expire.

Alternatives Considered – Minerals Supply Requirements

No alternative options were considered. National planning policy requires those authorities with aggregate minerals to play their role in maintaining a steady and adequate supply to local, regional and national requirements, and make provision in their Local Plans. No policy option is not considered a reasonable alternative.

Monitoring

Indicator	Target
The annual production rate of aggregates.	Sand and gravel production of 0.15 million tonnes per annum and crushed rock production of 0.27 million tonnes per annum.
Sand and gravel, and crushed rock landbanks.	Maintain a seven year landbank for sand and gravel, and a ten year landbank for crushed rock.

MINERAL SAFEGUARDING

12.11 Minerals can only be worked where they are found. This means that it is important to make sure that key mineral resources are safeguarded from development that may result in their sterilisation, thus preventing their extraction. National policy requires mineral planning authorities to safeguard mineral resources via Mineral Safeguarding Areas (MSAs) and that known locally and nationally important resources are not sterilised by non-mineral development. It must be stressed that there is no presumption that resources defined within MSAs will be worked. MSAs are tools to alert prospective developers to the presence of a mineral resource.

Policy MIN2p: Mineral Safeguarding

To ensure the long-term conservation of nationally and locally important minerals in North Lincolnshire, Mineral Safeguarding Areas (MSAs) are defined to prevent their sterilisation by non-minerals development. The following minerals are considered to be important:

- Chalk
- Lincolnshire Limestone
- Sand & Gravel
- Silica Sand
- Brick Clay
- Ironstone [awaiting information from British Steel]

Buffer areas of 250m & 500m will be established in order to maintain proximal safeguarding around sand and gravel, and crushed rock resources.

Planning permission will only be granted for incompatible non-mineral development within a Minerals Safeguarding Area, as defined on the Policies Map, where it is demonstrated that either:

1. The mineral is not of economic value or potential value, or does not exist; or
2. That extraction of the mineral would not be physically viable or practicable; or
3. The mineral can be extracted satisfactorily, having regard to Policy MIN3p, prior to the non-minerals development taking place without adversely affecting the viability or deliverability of the non-minerals development; or
4. The incompatible development is of a temporary nature that can be completed and the site returned to a condition that would not prevent future mineral extraction; or
5. Material considerations indicate that the need for the development overrides the presumption for mineral safeguarding such that sterilisation of the mineral can be permitted following the exploration of opportunities for prior extraction; or
6. It constitutes development that is exempt from the mineral safeguarding policy (see the list of exempt criteria in Appendix 8.2).

Where non-minerals development is proposed in an MSA, the applicant should supply a minerals assessment based on the requirements set out in Appendix 8.3.

Prior extraction of safeguarded minerals will be supported in MSAs where it is necessary for non-mineral development to take place, subject to meeting the requirements of policy MIN3p, and other policies within the Plan.

Mineral sites (excluding dormant sites) and associated infrastructure that supports the supply of minerals in North Lincolnshire 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.

- 12.12 Mineral Safeguard Areas (MSAs) have been defined for North Lincolnshire's key mineral resources to ensure that they are not sterilised by non-mineral development, covering sand and gravel, chalk, limestone, silica sand, brick clay and ironstone. They are essential for the construction sector as well as the production of industrial products. Silica sand which is used in the glass, ceramics and foundry sector, for example, is classed as being of national importance, due to limited number of areas where it is found. North Lincolnshire is one of eighteen areas of the UK where it is extracted.
- 12.13 North Lincolnshire's Minerals Safeguarding Areas (MSAs) have been developed in accordance with guidance and using mineral resource mapping information produced by the British Geological Survey (BGS). In some cases, they cover extensive areas of North Lincolnshire, and ensure that the mineral safeguarding is considered appropriately in the Local Plan and in determining planning applications. Where proposals for development in MSAs are put forward, they should be accompanied by a mineral resource assessment (see Appendix 8.3), unless it constitutes an exempt use (see Appendix 8.2).
- 12.14 Prior extraction of safeguarded minerals will be encouraged in MSAs where it is necessary for non-mineral development to occur. However, this is dependent upon whether it can be done without unacceptable adverse impacts on the environment and amenity of local communities and achievable within an acceptable timescale. Where planning permission is granted planning conditions or obligations will be imposed to ensure that the mineral resource can be adequately worked and the site restored to a satisfactory after-use should the following development be delayed or not implemented.
- 12.15 The NPPF also includes a requirement to safeguard existing, planned and potential mineral infrastructure. This can include rail heads, wharfs, depots, coating and batching plants. In the case of North Lincolnshire there are no specific rail heads or wharves that handle minerals. However, there are a number of port and wharf facilities along the Rivers Humber and Trent that have the potential to be used for landing marine aggregates, if required. Policy EC6p seeks to safeguard these facilities as part of the area's transport strategic infrastructure. There are a number of concrete batching plants in the area, particularly in the Scunthorpe and Bottesford Urban Area, as well as an asphalt plant. Cemex operate a cement manufacturing facility at South Ferriby, whilst Singleton Birch have a lime manufacturing plant at Melton Ross. There are also several facilities for the production of recycled aggregates associated with the area's three limestone quarries as well as at Elsham Wold (Stoneledge).

Alternatives Considered – Mineral Safeguarding

Safeguarding of mineral resources as well as supporting mineral infrastructure is a requirement of national policy. This policy seeks to interpret this requirement at the North Lincolnshire level to prevent sterilisation of important mineral resources in the area. It also provides a clear framework for developers and decision makers that should be considered when dealing with proposals for non-mineral development in Mineral Safeguarding Areas.

Monitoring

Indicator	Target
Number of eligible schemes, within the Minerals Safeguarding Area, that are supported by a mineral assessment.	100% of eligible scheme are supported by a mineral assessment.

MINERAL EXTRACTION

12.16 As well as ensuring a steady and adequate supply of minerals, their efficient use, and safeguarding key resources and infrastructure, it is essential that the impacts of all types of minerals development including extraction and processing on their surroundings are managed appropriately. The Local Plan will need to include policies to manage the impact of all forms of development, including minerals, on the wider environment and communities. The Government's Planning Practice Guidance sets out some of the environmental considerations that need to be taken into account when assessing proposals for minerals extraction. Examples include noise, dust, air quality, lighting, traffic landscape and flood risk.

Policy MIN3p: Mineral Extraction

Development for mineral extraction must demonstrate the extent, quality, significance and need for the resources to be extracted and must ensure that:

1. The natural and historic environment, highway safety and human health is conserved, managed and enhanced as appropriate;
2. Residential amenity and human health is protected from issues including noise, vibration and air quality;
3. Workings will not increase the potential of flood risks or surface water flooding;
4. Essential infrastructure is protected; and
5. The transportation of minerals makes use of sustainable modes of transport, wherever possible.

Where the above cannot be ensured, the benefits of mineral extraction must outweigh any likely harm and significant justification and mitigation must be provided.

- 12.17 This policy sets out the Council's approach for dealing with planning applications for mineral extraction and the key criteria that will be considered, alongside all other relevant policies of this plan.
- 12.18 Proposals for mineral extraction (including extensions to existing sites), will be required to robustly justify the requirement for extraction, specifically in relation to the need for the site to maintain supply in line with the latest Local Aggregate Assessment and the maintenance of the aggregates landbank.
- 12.19 The possibility of significant environmental and social effects associated must be fully understood before consideration can be given as to whether the development is acceptable.
- 12.20 The applicant will be expected to provide detailed information of the likely significant effect of the development on human beings, flora, fauna, soil, water, air, climate, landscape, material assets and cultural and historical heritage. Potential cumulative impacts must also be considered.

Alternatives Considered – Mineral Extraction

This policy seeks to ensure that impacts of mineral extraction on the wider environment North Lincolnshire are given due consideration by developers and decision makers. The no policy is not considered a reasonable alternative.

Monitoring

Indicator	Target
Percentage of approved proposals that comply with the principles of the policy.	100% of approvals that comply with the policy principles.

RECYCLED & SECONDARY AGGREGATES

- 12.21 As minerals are a finite resource, it is important to ensure that they are used in a way that is appropriate, efficient and sustainable. This can be done by encouraging the re-use and recycling of suitable materials to help reduce the amount of primary mineral extraction. This is supported by national policy and guidance. In doing so, the contribution that secondary and recycled minerals can make to the overall supply should be taken into account.

Policy MIN4p: Recycled & Secondary Aggregates

The use of recycled and secondary aggregates will be supported in order to reduce the reliance on primary aggregates and contribute towards sustainable development. Proposals for facilities for secondary and recycled aggregates will be permitted where it can be demonstrated that potentially adverse impacts are able to be avoided and/or minimised to acceptable levels and that the proposal is compliant with relevant Local Plan policies.

Preference will be given towards sites at the following locations:

1. Mineral extraction sites with existing processing plants;
2. On-site as an ancillary activity to construction or demolition projects;
3. Committed waste management facilities or within suitable areas for waste management where the proposed use accords with the type of waste use either existing at that location, or is complementary to the current economic role, status and uses of the employment area (where applicable);
4. Existing industrial areas or on land that is permitted or allocated for general employment development.

For sites where the primary use is temporary (e.g. mineral extraction and where associated with construction or demolition projects), permission will be granted for a period not exceeding the permitted life of the primary use.

Specifically regarding proposals on mineral extraction sites, permission will only be granted where there is no conflict with the approved restoration scheme.

Development of temporary facilities for the recovery and recycling of inert materials, including inert wastes, must demonstrate that the materials will be recycled and reused (as far as practicable) on-site.

12.22 Recycled and secondary minerals are those that, after processing or treatment, can potentially be used to substitute for primary or land-won aggregate and provide a more sustainable source of aggregate for construction. They may be derived from processing of construction, demolition and extraction waste (CDE) (recycled aggregate) or may be by-products of mineral extraction or processing, or industrial processes (secondary aggregate).

12.23 Nationally, 74 million tonnes of recycled and secondary material was produced in 2017, representing 30% of the British aggregates market⁽³⁴⁾. The Government's National & Regional Guidelines for Aggregate Provision (2005 to 2020), assume that recycled and secondary aggregates will form a proportion of England's aggregate supply. In respect of the Yorkshire & Humber region, they are expected to contribute 133,000 tonnes out of a total requirement for aggregates of 431,000 tonnes, between 2005 and 2020.

- 12.24 Information on the amount of available recycled and secondary aggregates being produced in the area is variable and not considered to be completely reliable. It is therefore difficult to accurately assess the role that they play in aggregate supply and demand. In many cases CDE waste is processed on site using mobile plant and then either reused on site or taken direct to other construction sites for use. Collecting information from these sites is extremely difficult because of their temporary nature. However, the Local Aggregate Assessment will monitor production levels. In 2013, the estimated level of recycled and secondary aggregate production/sales in North Lincolnshire was over 50,000 tonnes. However, this may not generally be accurate.
- 12.25 There a number of sites where the production of recycled and secondary aggregates take place in North Lincolnshire. Some associated with existing quarries, whilst others located in employment areas.

Alternatives Considered – Recycled and Secondary Aggregates

No alternative options considered. This policy seeks to site such workings ensure that impacts of working recycled and secondary aggregates on the wider environment North Lincolnshire are given due consideration by developers and decision makers. It also promotes the re-use of waste materials in accordance with the waste hierarchy as set out by the national planning policy for waste. The no policy option is not considered a reasonable alternative.

Monitoring

Indicator	Target
Number of approved proposals that comply with the policy criteria	100% of approvals that comply with the policy criteria
Permitted capacity recycled and secondary aggregate production (million tonnes per annum)	30% of the total aggregates production is formed by recycled and secondary aggregates

ENERGY MINERALS

- 12.26 Oil and gas (also known as 'hydrocarbons') are primary sources of energy and have a vital role in the UK economy. Government policy is to ensure that the country has a secure and diverse supply of energy sources, including the use of indigenous hydrocarbons from conventional and unconventional sources. The majority of oil and gas in the UK originates off-shore, for example in the North Sea, however some does come from on-shore extraction.

Policy MIN5p: Energy Minerals (Oil & Gas/Hydrocarbons)

Proposals for the exploration, appraisal and development of conventional and unconventional hydrocarbons will be supported where they are consistent with the following principles:

1. This takes place within areas covered by Petroleum Exploration & Development Licences (PEDLs) and hydrocarbon extraction sites, as shown on the Policies Map.
2. Support will only be given to applications for energy minerals that significantly benefit the local economy and any cumulative and adverse impacts on the local environment or residential amenity can be avoided or mitigated to the satisfaction of the Mineral Planning Authority. Adequate separation should be maintained between residential buildings and other sensitive receptors.
3. Proposals should include:
 - a. A detailed scheme of working
 - b. A plan showing the locations where surface work and underground operations will occur
 - c. A plan showing the proximity of other oil or gas fields
 - d. At the appraisal or production stage a completed appraisal of the hydrocarbon resource field
 - e. At the production stage a comprehensive scheme for the full development of the hydrocarbon resource within an agreed timescale; and
 - f. At the production stage the use of existing facilities for the development of any additional fields discovered unless the applicant satisfies the Council that this would not be technically feasible and any adverse impacts can be mitigated.

12.27 Conventional oil and gas refers to oil and gas resources which are found in relatively porous sandstone or limestone rock formations. These resources are located both off-shore and onshore. Extraction methods generally involve drilling a borehole down to the porous rock where oil or gas has formed in a reservoir. Because the oil and gas resources can flow relatively freely within the porous rock all that's needed is for the gas or oil to be pumped out of the ground using beam pumps ('nodding donkeys') or electric pumps.

12.28 Unconventional gas and oil resources are found in fine-grained sedimentary rocks known as shales. Shale rocks are very common. Shale gas and oil is trapped in the rock at depths between 1,500 and 4,200 metres below the surface. It cannot be recovered using conventional oil and gas extraction techniques, hence the use of 'hydraulic fracturing'.

12.29 The on-shore oil and gas industry is well established in the United Kingdom. There are 120 on-shore sites with 250 operating wells producing conventional oil and gas across the country. In North Lincolnshire, reserves of conventional oil have been discovered at Crosby Warren to the north east of Scunthorpe as well as in the Broughton and Brigg areas. The only area that has been worked is at Crosby Warren, where oil has been produced since the mid 1980's. Other exploratory wells have been drilled since the mid 1940's, looking for conventional oil and gas as well as coalbed methane. These wells are now mostly plugged and abandoned. In the case of the coalbed methane wells, there has been no further activity since exploration took place.

- 12.30 The British Geological Survey (BGS) has estimated that the UK has more shale gas than previously expected (1,300 trillion cubic feet of shale gas in the north of England and the Midlands). A BGS study, published in 2013, examined a large area of the Bowland shales of northern England, stretching from Merseyside in the west to the Humber in east, and Loughborough in the south to Pickering in the north, and its potential for shale gas to be present.
- 12.31 The study suggests that the geology beneath part of North Lincolnshire may contain commercially viable shale gas resources. However, the exact extent of any resource and whether it is economically and commercially viable to extract is not clear. To date there have not been proposals to explore for or extract shale gas in North Lincolnshire.
- 12.32 National energy policy is that oil and gas makes an essential contribution to the country's prosperity and quality of life. While renewable energy must form an increasing part of the national energy picture, oil and gas remain key elements of the energy system for years to come. There is also a commitment to maximising indigenous resources, subject to safety and environmental considerations.
- 12.33 The NPPF states that for oil and gas including unconventional hydrocarbons, minerals planning authorities should develop criteria based policies that clearly distinguish between the three phases of development (exploration, appraisal and production) and to address constraints that apply within licensed areas. All three stages require planning permission, and there is no presumption in favour of permission being granted at subsequent stages.
- 12.34 The three phases are:
- Exploration: this phase seeks to acquire geological data to establish whether hydrocarbons are present. This may involve drilling and, in the case of shale gas, fracking.
 - Appraisal: this is where the operator needs further information about the extent of reserves and its characteristics to establish whether it can be economically exploited. It includes hydraulic fracturing and is usually a relatively short-term activity, typically between six months and two years.
 - Production: This is the longer-term process of extracting the oil and gas and will involve associated infrastructure such as pipelines, processing facilities and storage tanks.
- 12.35 It should be noted that the planning system for oil and gas development operates alongside other regulatory regimes. This includes:

- The Oil and Gas Authority (OGA) issue Petroleum Exploration and Development Licenses (PEDLs) under powers granted by the Petroleum Act 1998. The current licensed areas in North Lincolnshire are shown on the Policies Map. PEDLs allow companies to pursue a range of oil and gas exploration activities, subject to necessary drilling/development consents and planning permission. The OGA are also responsible for assessing risk and monitoring of seismic activity, as well as granting consent for flaring or venting;
- The Environment Agency (EA) is responsible for protecting water resources (including groundwater aquifers), ensuring appropriate treatment and disposal of mining waste, emissions to air, and suitable treatment and managing any naturally occurring radioactive materials;
- The Health and Safety Executive (HSE) regulates the safety aspects of all phases of extraction, in particular responsibility for ensuring the appropriate design and construction of a well casing for any borehole.

12.36 The Council is responsible for granting permission for the location of any wells and well pads, and will impose conditions to ensure that the impact on the land is acceptable.

12.37 A hydrological assessment will be required in support of any planning application and water availability may be a limiting factor in any proposal.

Alternatives Considered – Energy Minerals (Oil & Gas/Hydrocarbons)

No alternative options considered. This policy seeks to ensure that impacts of energy mineral extraction on the wider environment of North Lincolnshire are given due consideration by developers and decision makers. It also provides a clear framework for developers and decision makers that should be considered when dealing with proposals for energy mineral extraction. The no policy option is not considered a reasonable alternative.

Monitoring

Indicator	Target
Number of planning permissions granted for the production of hydrocarbons	100% of approvals comply with the policy criteria

MINERALS SITE ALLOCATIONS

12.38 In order to deliver the requirements for minerals outlined in policy MIN1p, it will be important to identify appropriate sites, areas of search or preferred areas within the Local Plan. There are number of existing mineral extraction sites in North Lincolnshire that will continue to make a contribution to supply over the coming years, however additional sites will be required.

Policy MIN6p: Mineral Sites

Provision to meet the mineral requirements in North Lincolnshire to 2036 will come from sites with planning permission and the following allocations:

Sites with Planning Permission/Operational Sites

- MIN6-1p: Cove Farm, Westwoodside (Sand)
- MIN6-2p: Kettleby Parks Quarry (Sand & Gravel)
- MIN6-3p: Melton Ross Quarry (Chalk)
- MIN6-4p: South Ferriby Quarry (Chalk & Shale Clay)
- MIN6-5p: Hibaldstow Quarry (Limestone)
- MIN6-6p: Manton Quarry (Limestone)
- MIN6-7p: Kirton Quarry (Limestone)
- MIN6-8p: Barton East (Clay)
- MIN6-9p: Messingham Quarry (Silica Sand)
- MIN6-10p: Eastfield Farm (Silica Sand)
- MIN6-11p: Crosby Warren (Oil)
- MIN6-12p: Low Melwood Quarry (Clay)
- MIN6-13p: Land north of Brigg Road, Messingham (Silica Sand)
- MIN6-14p: Hibaldstow Quarry (Extension) (Limestone)

All relevant constraints and issues have been identified and mitigation put in place through existing planning permissions. It is expected all sites will conform to the planning permission, associated conditions, and agreed restoration and aftercare plans.

New Sites/Areas of Search

- MIN6-15p: Cove Farm, Westwoodside (Extension) (Sand) (Area of Search)
- MIN6-16p: Land at Holme Lane (Silica Sand) (New Site)
- MIN6-17p: Eastfield Farm, Winteringham (Silica Sand) (New Site)
- MIN6-18p: Land South of Composition Lane, Winteringham (Silica Sand) (Area of Search)

Where proposals come forward for mineral extraction on the above sites, applications should be supported by a range of assessments that address potential environmental impacts including air quality, biodiversity, drainage, dust, ecology, flood risk, heritage/archaeology, hydrology, landscape/visual impact, noise and transport/highways. In some cases an Environmental Statement may be required. All proposals should include a restoration plan (as required in policy MIN8).

All above the sites will be identified on the Policies Map.

- 12.39 The sites/areas of search listed above, will ensure that North Lincolnshire continues to ensure a steady and adequate supply of minerals in line with national policy. As mentioned a number of existing operational and permitted sites will continue during the lifetime of the Local Plan, until extraction ceases and they are restored for a beneficial afteruse. These sites benefit from planning permissions and should continue to be operated in line with the conditions attached to them.

- 12.40 The new sites listed above consist of those considered suitable, when assessed through the Call for Sites processes (2017 & 2018). In the case of the Cove Farm extension site, it was granted planning permission in 2009, with a condition requiring extraction to commence by 1st November 2015. This was subsequently amended in 2013 to push back commencement to 1st November 2018, however this has not occurred. Based on the planning permissions, it was felt appropriate to identify it as an Area of Search.
- 12.41 All proposals that come forward on the new site allocations will be accompanied by a range of assessments to address key environmental impacts. Any prospective applicant should discuss the exact type and nature of assessments with the Council when putting together their proposals.
- 12.42 North Lincolnshire has a number of historic stonepits identified in the Historic England (previously English Heritage) Strategic Stone Study.

Alternatives Considered – Minerals Allocations

No alternative options considered. National planning policy requires those authorities with aggregate minerals to play their role in maintaining a steady and adequate supply. The policy will also ensure the impacts of mineral extraction on the wider environment of North Lincolnshire are given due consideration by developers and decision makers and provides a clear framework for developers and decision makers that should be considered when dealing with proposals for mineral extraction. The no policy option is not considered a reasonable alternative.

Allocate alternative sites:

Alternative sites have been considered for allocation for mineral extraction. However, the alternative sites submitted have significant environmental constraints and are not considered to be a satisfactory alternative.

Monitoring

Indicator	Target
Number of approvals for mineral extraction	Sand and gravel production of 0.15 million tonnes per annum and crushed rock production of 0.27 million tonnes per annum. Maintain a seven year landbank for sand and gravel, and a ten year landbank for crushed rock.

BORROW PITS

- 12.43 'Borrow pits' are temporary mineral workings opened locally to supply material for a specific construction project. This would normally be a large project where a substantial amount of aggregate needs to be supplied over a relatively short period. Examples are road building schemes or the construction of a reservoir, although their use in association with smaller projects is not unknown.

Policy MIN7p: Borrow Pits & Ancillary Extraction

Permission will be granted for the development of borrow pits and extraction occurring as an ancillary activity where it can be demonstrated that one of the following applies:

1. The borrow pit is in close proximity to the construction project it is intended to supply, and that extraction of minerals from the borrow pit constitutes the most appropriate supply option with regard to the type and quality of the mineral and proximity to other mineral extraction sites. The estimated size of the resource, and proposed extractive operations, is commensurate to the estimated needs of the associated construction or engineering works.
2. The extraction of the mineral can be clearly demonstrated to be ancillary to the proposed development. The estimated size of the resource, and proposed extractive operations, is proportionate to the primary use.
3. The proposal is for the prior extraction of minerals within a Mineral Safeguarding Area.

In addition to the above, the proposal will need to demonstrate that inert waste arising from the associated works or extraction is used in restoration works where appropriate and that the proposed development is compliant with relevant local plan policies.

12.44 In considering proposals for borrow pits, the MPA will need to be satisfied that it represents the most suitable source of material to meet the specific demand involved, and that both working and restoration can be achieved without unacceptable environmental impacts. Restoration and aftercare proposals will be expected to be to as high a standard as for other mineral workings.

12.45 In most cases it is preferable to open up a borrow pit close to the project site to ensure the availability of the necessary supplies and to avoid the need to import material by lorry from further afield. It also provides an opportunity to release otherwise unviable deposits. These considerations are particularly important in the Plan area where operational quarries may not be available in the immediate locality of a specific construction project.

Alternatives Considered – Borrow Pits & Ancillary Extraction

No alternative options considered. The policy will provide developers and decision makers with a clear framework for consideration and will ensure the impacts of borrow pits and ancillary extraction, including any waste generation, are given due consideration with regard to the wider environment. No policy option is not considered a reasonable alternative.

Monitoring

Indicator	Target
Approved proposals that comply with the policy criteria.	100% of approvals comply with the policy criteria

RESTORATION & AFTERCARE

12.46 Minerals extraction, and some types of waste development, is a temporary use of land, albeit one that can last for a number of years. National policy seeks to ensure that the Local Plan sets out policies to encourage the reclamation of former minerals workings at the earliest opportunity and that high quality restoration and aftercare of mineral sites takes place⁽³⁵⁾. A number of former mineral sites in North Lincolnshire have been restored for agricultural use whilst others have been re-used for habitat creation and nature conservation purposes as well as for leisure and recreation uses.

Policy MIN8p: Restoration, Aftercare & Afteruse of Mineral Extraction Sites

1. Proposals for minerals extraction and temporary waste management facilities will be granted where provision has been made for high standards and quality of restoration and aftercare of the site in timely manner, alongside delivery of a beneficial afteruse.
2. Restoration plans should be submitted with the planning application which reflect the proposed after-use. These should reflect the requirements set out in Appendix 8.4.
3. As part of the process of considering proposals for mineral development, biodiversity, environmental, landscape and other public benefits (including potential recreation use) will be sought through:
 - a. The progressive working and phased restoration of the site;
 - b. The after-care and after-use of extraction sites;
 - c. The environmental conservation and enhancement of the wider surrounding area to which the proposed extraction relates; and
 - d. The promotion of recreational opportunities within the area.
4. Proposals for restoration should seek to make a positive contribution to:
 - a. Landscape character and quality that is in keeping with the character and setting of the local area;
 - b. Air, soil and water quality;
 - c. Flood water management;
 - d. Biodiversity and wildlife conservation;
 - e. The promotion of recreational facilities.
5. Where appropriate, bonds or legal agreements will be sought to secure the satisfactory restoration of the minerals site in a timescale appropriate to the development.

12.47 Restoration, aftercare and after-use should occur promptly when mineral extraction ceases. Therefore, it is essential for restoration and future use of sites to be considered as part of the planning application stage. All restoration should be appropriate for the site and be sympathetic to the character of the area.

- 12.48 Responsibility for restoration and aftercare of mineral extraction sites lies with the operator, and/or the landowner. The nature of restoration activity depends on the choice of after-use. This will be influenced by a range of factors including:
- the aspirations of the landowner(s) and the local community;
 - the site characteristics and its surroundings;
 - any strategies for the area (e.g. biodiversity action plan priorities);
 - the nature, scale and duration of the proposed development; and
 - the availability and quality of soil resources/restoration materials.
- 12.49 Sites should be restored to at least the quality equivalent to that prior to development. However, restoration and after uses represent an opportunity to enhance the quality of the landscape and local environment for benefit of the community. Schemes could, for example, include measures to improve biodiversity interest in line with the priorities of the Greater Lincolnshire Biodiversity Action Plan. They could also contribute towards a Green Infrastructure Network in the area, or managing the impacts of climate change.
- 12.50 Aviation safety needs to be taken into account as part any restoration process. Where this involves the creation of water bodies or wetland habitats or have the potential to attract a larger number of birds, it may present a hazard to aircraft within a statutory bird strike safeguarding zone or, in the case of other aerodromes, where operators have produced a non-official safeguarding map.
- 12.51 The NPPF and Planning Practice Guidance, highlight that financial guarantees to cover restoration and aftercare should only be required in exceptional circumstances.
- 12.52 Restoration, aftercare and after-use will be secured through the use of planning conditions. Appendix 8.4 sets out what should be included in a Restoration Plan.

Alternatives Considered – Restoration & Aftercare

No alternative options considered. This policy seeks to ensure that mineral workings in North Lincolnshire are restored for beneficial after uses when extraction ceases. The no policy option is not considered a reasonable alternative.

Monitoring

Indicator	Target
The number of approved schemes for mineral extraction sites with restoration plans	100% of approvals comply with the policy principles for the restoration, aftercare and afteruse of mineral extraction sites.

FOOTNOTES

- [34] **Figure 3.1b - Aggregate Supply Mix in Great Britain (2017), Profile of the UK Mineral Products Industry: 2018 Edition, Mineral Products Association**
- [35] National Planning Policy Framework (NPPF) (February 2019) - paragraphs 204(h) and 205(e)