Northern Lincolnshire Minerals Assessment

Including Local Aggregates Assessment (2024 Data)

North East Lincolnshire Council

North Lincolnshire Council

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EXECUTIVE SUMMARY

The requirement to produce an annual Local Aggregate Assessment (LAA) was introduced through the publication of the National Planning Policy Framework (NPPF) in March 2012 and is still a requirement set out in the revised NPPF (2023).

The Government issued further guidance on planning for minerals in the National Planning Practice Guidance (NPPG), incorporating previous guidance on the Managed Aggregate Supply System (MASS). This report is the most recent version of the Minerals Assessment (incorporating LAA) that aims to meet the requirements set out in both of these documents. It is based on data covering the calendar years up to 2024.

Sales and land bank information is sourced from annual surveys of primary aggregate producers in the Northern Lincolnshire area (North East Lincolnshire & North Lincolnshire), alongside data from the Yorkshire & Humber Aggregates Working Party Annual Monitoring Reports, planning applications, the Crown Estate, and the Environment Agency.

Land bank information for industrial mineral operations is sourced from engagement with relevant operators, plus planning applications.

Aggregate Sand and Gravel

	Performance in 2024	*In comparison to previous year (2023)*
Land won sand and gravel (sales- million tonnes)	**0.15**	**0.18**
Permitted reserves of sand and gravel (million tonnes)	**0.14** (estimate)	**0.28**
Sand & Gravel landbank (years) against LAA forecast demand (0.18mt/annum)	**0.78**	**1.56**

Aggregate Crushed Rock

	Performance in 2024	*In comparison to previous year (2023)*
Land won crushed rock (sales- million tonnes)	**0.35**	**0.18**
Permitted reserves of crushed rock (million tonnes)	**17.28**	**17.48**
Crushed Rock landbank (years) against LAA forecast demand (0.55mt/annum)	**31.42**	**31.78**

Marine Sand & Gravel

	Performance in 2024	*In comparison to previous year (2023)*
Marine sand and gravel landing on Humber wharves (million tonnes)	**0.23**	 **0.21**
Number of years of primary marine aggregate production permitted under current estimates in Humber marine region	**14**	 **16**

Recycled & Secondary Aggregates

	Performance in 2024	*In comparison to previous year (2023)*
Amount of potential recycled and secondary aggregates received by waste facilities according to the WDI database (million tonnes)	**1.44**	 **0.63**

Non- Aggregates

The needs of non-aggregate mineral operations are dealt with on an individual basis. The operations of concern in northern Lincolnshire are:

- Melton Ross Quarry operated by Singleton Birch extracts chalk used predominantly for industrial operations, including lime. The material and uses it is put to do not fit into a category of operation the NPPF requires a specific landbank for.
- Messingham Quarry activities operated by Sibelco are for silica sand for coloured glass manufacture and foundry sand. The NPPF requires a 10 year landbank for individual silica sand sites. Based on the last 10 years sales average the landbank figure is 2.45 years at 1st January 2025. Sibelco plan to make significant capital investment in their operation, so are working on the basis of requiring at least 15 years landbank where capital investment is required. North Lincolnshire Council will work with them to understand how the Local Plan can facilitate an uplift in permitted reserves to meet the relevant NPPF landbank requirement for silica sand.
- There are two tile works at Barton operated by William Blyth alongside two clay abstraction sites. The NPPF requires least 25 years landbank for brick clay. The operator has informed that as of October 2025 there is around 5-6 years worth of reserves left at their main site at Hoe Hill. Regarding the reserves at Far Ings site, provided the material doesn't differ too much then they would expect there is around 15-20 years supply left on that site. Therefore, together these two sites provide their tile works with a landbank of over around 25 years. North Lincolnshire Council will work the operator to understand how the Local Plan can facilitate any necessary uplift in permitted reserves to meet requirements.
- Low Melwood Quarry, near Epworth is operated by North Lincs Aggregates Limited, but has not been worked for some time and, according to its owners, will only be so as and when any ad hoc demand materialises for the brick clay resources there.
- There was a cement works and associated chalk quarry operated by Cemex at South Ferriby. This was mothballed in 2020 but is still capable of coming back into use.

1. INTRODUCTION

1.1 Minerals make a vital contribution to the local and national economy and play an important part in our everyday lives. They have many uses, including the provision of material for construction and for a wide variety of industrial and commercial purposes. The planning system has to ensure that sites are available to provide sufficient minerals to supply these industries.

1.2 This Minerals Assessment replaces the Humber Area Local Aggregates Assessment June 2023, which covered data up to 2021, in so far as it acts as an evidence base for North and North East Lincolnshire Councils. There are two major changes to the document this year:

- The geographical area covered by this assessment has been reduced so it now covers North and North East Lincolnshire Councils
- Industrial or non-aggregate minerals are also now covered by this assessment

1.3 Aggregate minerals are those which are used primarily to support the construction industry including soft sand, sand and gravel, and crushed rock. Construction projects supported could include road building, house construction, manufacture of concrete and railway ballast.

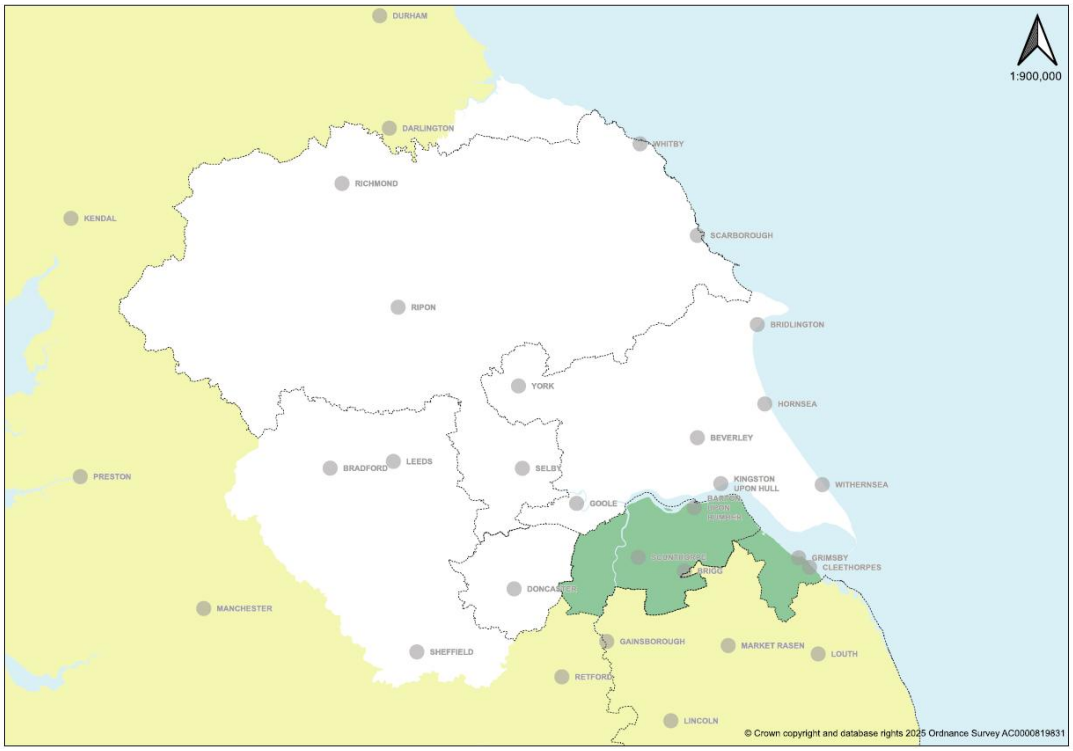
1.4 Industrial or non-aggregate minerals are those which are necessary to support industrial and manufacturing processes and other non-aggregate uses. These include minerals of recognised national importance including: brick clay, silica sand, industrial grade limestone, cement raw materials, gypsum, salt, fluorspar, tungsten, kaolin, ball clay and potash.

1.5 The National Planning Policy Framework (NPPF) requires Minerals Planning Authorities to plan for a steady and adequate supply of aggregate and industrial minerals. It requires Local Aggregate Assessments (LAA) (a key part of this document) to be prepared to forecast future demand, based on a rolling average of 10 years' sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources). The Planning Practice Guidance (PPG) on the Managed Aggregates Supply System (MASS) (March 2014 onwards) and published National and Sub National Guidelines on future provision also need to be taken into account.

1.6 The Localism Act 2011 introduced the Duty to Co-operate[1]. This requires planning authorities and other public sector bodies to work together on matters that are considered to have cross-boundary or cross-organisation implications. Planning for minerals is considered to fall into this bracket. Compliance with this duty is a legal requirement that will be examined by Planning Inspectors in considering local plans. The Government has, however, clearly indicated that the DtC will be abolished very soon.

[1] Localism Act 2011 – section 110

Figure 1: Yorkshire & Humber Aggregates Working Party Area

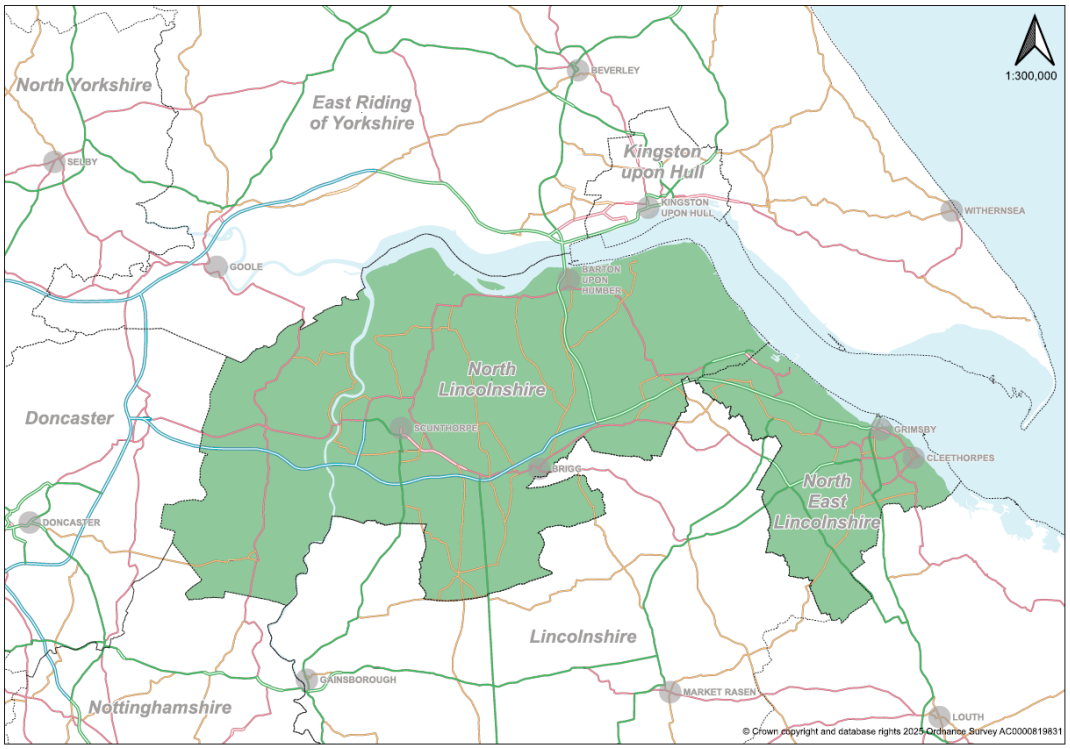


1.7 With this in mind, the members of the Yorkshire and Humber Aggregates Working Party (YHAWP) agreed to co-operate to produce LAAs covering the region. The approach taken to producing this Minerals Assessment, including LAA, reflects the fact that aggregates are a strategic issue that goes beyond Mineral Planning Authority boundaries.

1.8 This document forms part of the evidence base for the Local Plans prepared by North and North East Lincolnshire Councils and monitors aggregate supply and mineral landbanks within the area.

1.9 Throughout this document, the term 'Northern Lincolnshire area' has been used to indicate the area covered by North and North East Lincolnshire Councils.

Figure 2: The Northern Lincolnshire LAA Area



National Planning Policy and Guidance

1.10 Paragraph 226 of the NPPF requires Minerals planning authorities to plan for a steady and adequate supply of aggregates by:

- preparing an annual Local Aggregate Assessment, to forecast future demand, based on a rolling average of 10 years' sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources);
- participating in the operation of an Aggregate Working Party and taking the advice of that party into account when preparing their Local Aggregate Assessment; making provision for the land-won and other elements of their Local Aggregate Assessment
- making provision for the land-won and other elements of their Local Aggregate Assessment in their mineral plans
- taking account of any published National and Sub National Guidelines on future provision which should be used as a guideline when planning for the future demand for and supply of aggregates;
- using landbanks of aggregate minerals reserves principally as an indicator of the security of aggregate minerals supply, and to indicate the additional provision that needs to be made for new aggregate extraction and alternative supplies in mineral plans;
- maintaining landbanks of at least 7 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. The NPPF advises that longer periods may be appropriate to take account of the need to supply a range of types of aggregates, locations of permitted reserves relative to markets, and productive capacity of permitted sites;
- ensuring that large landbanks bound up in very few sites do not stifle competition; and
- calculating and maintaining separate landbanks for any aggregate materials of a specific type or quality which have a distinct and separate market.

1.11 Paragraph 227 of the NPPF states that minerals planning authorities should plan for a steady and adequate supply of industrial minerals by:

- co-operating with neighbouring and more distant authorities to ensure an adequate provision of industrial minerals to support their likely use in industrial and manufacturing processes;
- encouraging safeguarding or stockpiling so that important minerals remain available for use;
- maintaining a stock of permitted reserves to support the level of actual and proposed investment required for new or existing plant, and the maintenance and improvement of existing plant and equipment. In terms of stocks of permitted reserves for Industrial minerals. The NPPF advises these reserves should be at least 10 years for individual silica sand sites; at least 15 years for cement primary (chalk and limestone) and secondary (clay and shale) materials to maintain an existing plant, and for silica sand sites where significant new capital is required; and at least 25 years for brick clay, and for cement primary and secondary materials to support a new kiln.; and
- taking account of the need for provision of brick clay from a number of different sources to enable appropriate blends to be made.

1.12 NPPG states a LAA should contain 3 elements:

- a forecast of the demand for aggregates based on both the rolling average of 10-years sales data and other relevant local information;
- an analysis of all aggregate supply options, as indicated by landbanks, mineral plan allocations and capacity data eg marine licences for marine aggregate extraction, recycled aggregates and the potential throughputs from wharves. This analysis should be informed by planning information, the aggregate industry and other bodies such as local enterprise partnerships; and
- an assessment of the balance between demand and supply, and the economic and environmental opportunities and constraints that might influence the situation. It should conclude if there is a shortage or a surplus of supply and, if the former, how this is being addressed.

1.13 LAAs should consider recycled, secondary, marine and land-won resources.

Development Plans

1.14 North Lincolnshire Council has a strategic minerals policy in its adopted Core Strategy DPD (June 2011) and the saved minerals policies in the North Lincolnshire Local Plan (May 2003). Additionally, work was previously undertaken on drafting a new North Lincolnshire Local Plan 2020-2038, however this was subsequently withdrawn from Examination on 4th October 2024. As such, work has since started on preparing a new Local Plan which will supersede all documents that are part of the current development plan for the area. This will include policies relating to minerals development.

1.15 North East Lincolnshire Council has a Local Plan (2018) encompassing the full range of planning issues facing the Authority's area, including minerals development. This safeguards important mineral deposits and contains a number of policies to address applications for mineral extraction.

1.16 The current progress for both of the Northern Lincolnshire Mineral Planning Authorities regarding emerging minerals planning policy is as follows:

- North Lincolnshire Council is preparing a new full Local Plan to cover the period 2025 to 2043. This will encompass a full range of planning issues including minerals development. A call for sites, initial engagement, and draft Statement of Community Involvement have been consulted upon and the Council is preparing a full draft regulation 18 Local Plan for Consultation in the Spring. The Plan could be adopted in 2027.
- North East Lincolnshire Council is reviewing its Local Plan and following an initial Regulation 18 consultation on scoping and issues in September 2022, consulted on a Draft Plan with Options in early 2024. As of Summer 2025 the Council's Local Plan review continues, however it will also take into account changes to the revised NPPF and could be adopted by mid 2028.

Spatial Context

1.17 The Northern Lincolnshire area is situated to the south of the Humber Estuary on the east coast of the United Kingdom. North Lincolnshire Council borders City of Doncaster Council (MBC) and Nottinghamshire County Council to the west and south-west respectively. It also borders East Riding of Yorkshire Council and Hull City Council to the north. North East Lincolnshire Council borders Lincolnshire County Council to the south, and East Riding of Yorkshire Council to the north. It is clear that for minerals planning, cross-border working needs to extend beyond the boundaries of the Northern Lincolnshire area. In the preparation of previous versions of the LAA, liaison has taken place with adjoining mineral planning authorities and aggregates working parties.

1.18 As unitary authorities, the two Councils are responsible for all aspects of local government in their area, including planning for minerals. Each Authority must set out a series of planning policies to guide the location of future mineral development and determine planning applications for mineral development.

1.19 Previously both North Lincolnshire Council and North East Lincolnshire Council were members of the Greater Lincolnshire LEP, however on 1st February 2025 the strategic functions of the Greater Lincolnshire LEP transferred to the new Greater Lincolnshire County Combined Authority (GLCCA). A new mayor for the Combined Authority was elected on 1st May 2025.

1.20 A predominately rural area, northern Lincolnshire covers an area stretching from the banks of the Humber Estuary in the north to Kirton in Lindsey in the south, to Grimsby and Cleethorpes in the east and the Isle of Axholme in the west. It contains the major urban areas of Cleethorpes, Grimsby, and Scunthorpe, as well as numerous smaller towns and service centres including Barton upon Humber, Brigg, Epworth and Immingham.

1.21 The whole area has a combined population of 330,445[2] and has around 142,999 households[3]. The population is expected to increase by 2043. This population growth will come hand in hand with further housing employment growth as well as improvements in infrastructure. As such, it is crucial that the area is able to ensure the supply of sufficient aggregate minerals to provide for development and infrastructure.

1.22 The topography of the area reflects its underlying geology. The narrow bands of Jurassic rock in combination with the chalk deposits have formed the upland areas Lincolnshire Wolds and the prominent north-south ridge known as the Lincoln Edge or Cliff. This overlooks the Trent Valley and the Humberhead Levels to the west and the Lincoln Clay Vale (the Ancholme Valley) to the east. The lower slope of the scarp is formed by the Upper Lias, the middle slope comprises Northampton Sand and the Grantham Formation (Lower Estuarine Series), whilst the top of the Lincoln Edge comprises Lincolnshire Limestone. The top forms a plateau which is traversed by the Roman road, Ermine Street. The limestone of the dip slope is locally thin and in places the underlying clays and sands occur near the surface.

1.23 The Lincolnshire Wolds is a belt of dissected chalk uplands up to five miles wide. It slopes gently eastwards towards to Humber Estuary and the Lincolnshire Coast. To the west, it is much steeper overlooking the Ancholme Valley.

Environmental Constraints & Opportunities

1.20 The single most important consideration for minerals planning is the fact that minerals can only ever be worked where they are found. Unlike other forms of development, which can technically occur almost anywhere, minerals planning needs to be focussed on those areas where mineral deposits can be found in quantities that are economically feasible to extract. Despite this, potential allocations for minerals development may be constrained by environmental designations and constraints.

1.21 The key environmental constraints are recognised to be those areas of international or national importance. By category these key designations are:

[2] ONS for 2023
[3] ONS for 2021

Biodiversity and Geodiversity

- Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) designated in accordance with the European Wild Birds and Habitats Directive – *Humber Estuary SPA & SAC, Thorne & Hatfield Moors SPA, Thorne Moors SAC, and Greater Wash SPA*
- Ramsar sites (wetlands of international importance identified in accordance with the Ramsar Convention) – *Humber Estuary, Lower Derwent Valley*
- Sites of Special Scientific Interest (SSSIs)
- National Nature Reserves (NNRs) – *Humberhead Peatlands, & Far Ings*

Cultural Heritage

- Scheduled Monuments

Landscape

- Area of Outstanding Natural Beauty – *Lincolnshire Wolds*
- North Lincolnshire Council have produced a proposal to extend the Lincolnshire Wolds AONB so that it includes a large section of North Lincolnshire. This proposal suggests extending the existing Lincolnshire Wolds AONB northwards, into the area. The proposed variation is to extend the existing boundary to include Kirton-in-Lindsey on the southern border of North Lincolnshire through to the banks of the River Trent taking in Normanby, Burton-upon-Stather and Alkborough. It would also extend eastwards, taking in Barton-upon-Humber and across to New Holland before sweeping round to include Ulceby, Kirmington and parts of Brigg. It is suggested that the existing area, and that of the proposed inclusion area share many geographical and geological features which support the extension.

1.22 In addition to these international and national environmental constraints it should be noted that the winning and working of minerals may be constrained by:

- Other environmental designations and factors relating to biodiversity and geodiversity (the incidence of protected species, local (nature conservation) sites);
- Cultural heritage assets (listed buildings, conservation areas, areas of archaeological importance, landscape character);
- The protection of other resources, such as agricultural land, groundwater;
- flood risk; and
- local amenity including impacts upon residents of settlements and recreational areas from factors such as noise, dust, blasting, vibration, traffic and visual impact..

1.23 Minerals working is often a long term activity, but nevertheless still a temporary use which can provide positive benefits to the local environment through well-conceived restoration and after-use strategies. In particular, the restoration of mineral sites can assist in providing opportunities for:

- Biodiversity net gain through the enhancement and creation of features of nature conservation importance and geodiversity;
- Improving landscape character;
- The creation of community woodlands or forests;
- The provision of recreation facilities, public open space and new public rights of way;
- The mitigation of flood risk through the creation of new flood storage capacity;
- The remediation of contaminated land or pollution; and
- The improvement of areas previously worked.

2. GEOLOGY, AGGREGATE AND NON-AGGREGATE RESOURCES

2.1 As a result of its geology, the Northern Lincolnshire area contains significant deposits of a wide range of minerals, of which the most important are sand and gravel, chalk, brick clay, silica sand and limestone. Peat is also present, and there are also potential resources of oil, gas, ironstone and coal. The British Geological Survey (BGS) provide mineral resource mapping on a county-by-county basis, including for the former Humberside area. This takes the form of a report[4] and accompanying map[5].

Bedrock Geology

2.2 Bedrock geology (see Figure 3) is a main mass of rock that makes up the Earth and is present everywhere, whether exposed in outcrops at the surface or concealed under drift deposits or water. It is this underlying geology that has shaped the area's landscape and has had a significant influence in how it has developed.

2.3 In the Northern Lincolnshire area, exposures of the solid geology occur in the upland areas of the Lincolnshire Wolds and the Lincoln Edge Cliff around the Scunthorpe area. Elsewhere extensive drift deposits predominate. Chalk of the Upper Cretaceous period underlies a significant part of the area. The chalk forms the northern extent of deposits that can be found in an arc running from the North Downs, South Downs and Chiltern Hills of southern England through East Anglia, Lincolnshire and the East Riding of Yorkshire, terminating at Flamborough Head. Within the area workable chalk deposits are found in the Lincolnshire Wolds.

2.4 West of the Lincoln Edge, lie two major areas underlain by much older rocks formed during the Triassic period. In the Trent Valley layers of Quaternary deposits are underlain by a band of Mercia Mudstone. Prominent features in this area include the Isle of Axholme. The other Triassic formation comprises of Sherwood Sandstone. This is found west of the Mercia Mudstone, and forms part of a larger deposit running parallel to, and east of, the Pennines.

2.5 Between the Triassic and Cretaceous formations lie a number of much narrower deposits formed during the Jurassic period. Together, these form a significant band running northwards through North Lincolnshire. As they extend north the bands narrow, with the majority terminating in the vicinity of Market Weighton in East Yorkshire leaving only Lower Lias to continue in a north westerly direction following the western boundary of the Yorkshire Wolds. The other formations located within this band are, west to east, Middle Lias, Upper Lias, a significant band of Inferior Oolitic limestone lying east of Scunthorpe, Great Oolitic limestone and thin wedges of clay formations from the Middle and Upper Jurassic periods. To the north and east of Scunthorpe are outcrops of the Frodingham Ironstone.

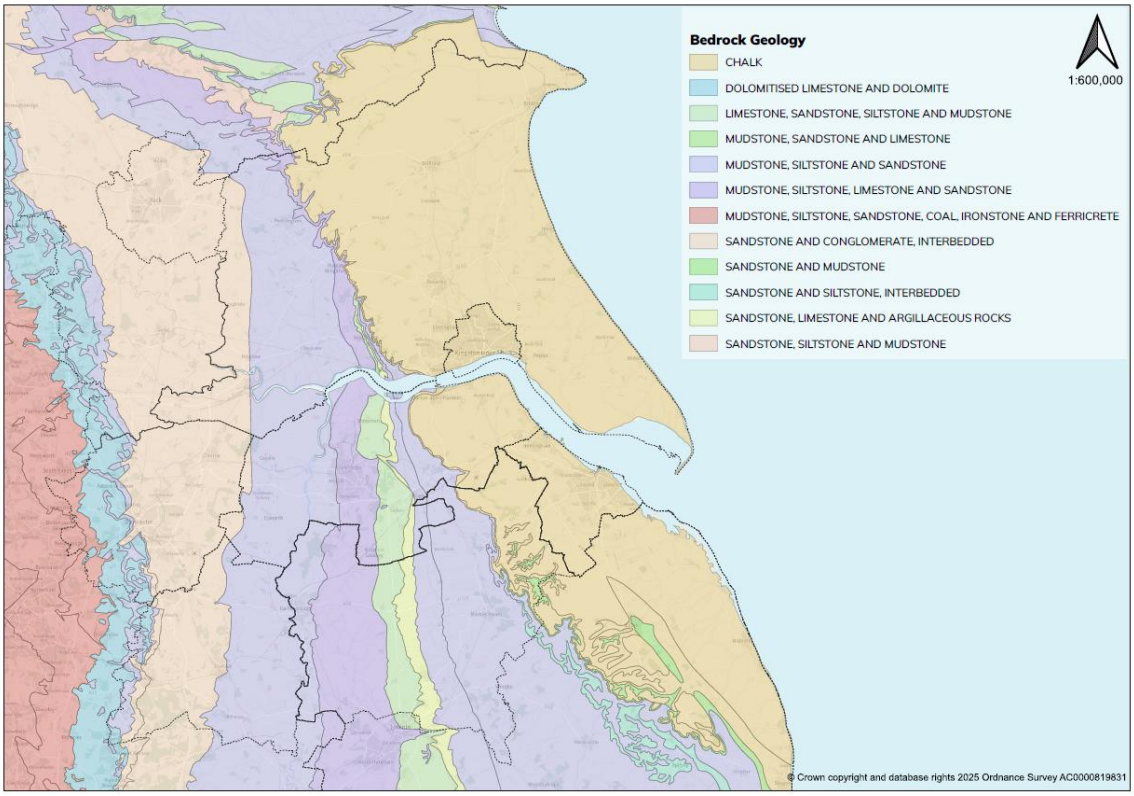
2.6 The Trent Valley mainly comprises a layer of Quaternary deposits underlain by the Mercia Mudstone described previously. Similarly the Lincoln Clay Vale (the Ancholme Valley) has a heavy covering of Quaternary deposits but is itself a product of the erosion of the soft Upper Jurassic Clays.

2.7 The solid geology of the area also includes hydrocarbon deposits, comprising coal, oil and gas. Coal can be found under the western half of the area as extensions of the West and South Yorkshire coalfields. A number of oil and gas wells have been sunk in the area over the last sixty years, with varying degrees of success. Oil is currently extracted at Crosby Warren to the north east of Scunthorpe.

4 Mineral Resource Information in Support of National, Regional & Local Planning – Humberside (compromising East Riding of Yorkshire, North Lincolnshire, North East Lincolnshire & City of Kingston upon Hull) – Commissioned Report (BGS, 2005)

5 Mineral Resource Information in Support of National, Regional & Local Planning – Humberside (compromising East Riding of Yorkshire, North Lincolnshire, North East Lincolnshire & City of Kingston upon Hull) – Mineral Resources Map (BGS, 2005)

Figure 3: Bedrock Geology of the Northern Lincolnshire Area



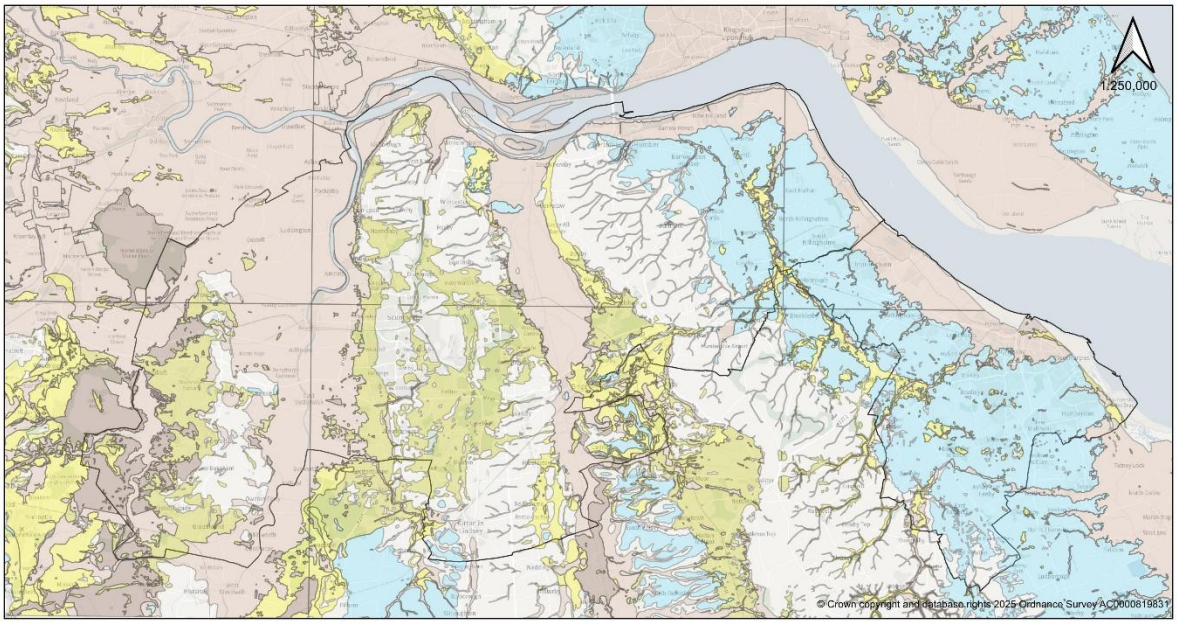
Superficial Geology

2.8 Much of the solid geology of the area is overlain by superficial or drift deposits (see Figure 4) which in some cases reach a depth of 30 metres. These consist mainly of alluvium, peat, blown sands and boulder clay. Alluvium is found in the Trent Valley and along the southern bank of the Humber Estuary between Grimsby and Barton upon Humber.

2.9 Several parts of the area are covered by sand and/or gravel deposits. These include blown sand as at Messingham and Manton, river terrace sand and gravel and glacial sand and gravel. Not all of the deposits within the area are economically workable.

2.10 Peat is found in large deposits on the western edges of the area to the west of the River Trent Valley. The main deposits can be found on Crowle Moors and the Isle of Axholme. In all cases these extensive deposits cross the boundaries into East Riding of Yorkshire and City of Doncaster Council areas taking in Thorne Moors and Hatfield Moors.

Figure 4: Superficial Geology of the Northern Lincolnshire Area



Superficial Geology

- CLAY AND SILT
- CLAY, SILT, SAND AND GRAVEL
- DIAMICTON
- DIAMICTON, SAND AND GRAVEL
- PEAT
- SAND
- SAND AND GRAVEL

'Contains British Geological Survey materials © UKRI [2025]'

Aggregate Resources

2.11 Aggregates are derived from a variety of different sources. Primary aggregates are naturally occurring materials extracted from the ground. Examples are sand and gravel, and certain forms of chalk. Aggregates can also be derived from by-product wastes and synthetic materials, and these aggregates are referred to as Secondary Aggregates. Examples are colliery spoil, furnace bottom ash and blast furnace slag. Recycled aggregates are derived from the crushing and other processing of waste materials arising from construction and demolition work. A further source of aggregate that contributes to supply is marine-dredged sand and gravel.

Sand and Gravel

2.12 Historically, sand and gravel has been the most important aggregate resource found in the Northern Lincolnshire area. It is principally used for a variety of building purposes including asphalt, concrete and mortar. Sand and gravel deposits in the area are shown in Figure 4 above. They principally occur in the lower lying ground to east and west of the Lincolnshire Wolds as well as along the Humber Estuary and river valleys.

2.13 There are significant deposits of glaciofluvial sand and gravel in the Habrough and Laceby areas, with smaller areas found around Winterton/Winteringham, Wrawby, Barnetby and Cadney. Glaciolacustrine deposits of sand and gravel occur in the Ancholme Valley. River Terrace and sub-alluvial deposits are found along the valleys of the Rivers Trent and Ancholme, as well as along the Humber Estuary.

2.14 All deposits are of variable quality, but the sand and gravel layers are relatively shallow, so prior extraction can be feasible. This is particularly the case with sand and gravel as the extraction process does not involve blasting, and if required, processing can be carried out away from the extraction site. Most sand and gravel deposits are located away from the larger settlements where future development pressures will be greatest.

2.15 As of 2024 there were two sites extracting sand and gravel aggregate purposes in the Northern Lincolnshire area, all of which are located in the North Lincolnshire Council area. These are at Winteringham and Kettleby. There is a further operation at Westwoodside, which is believed to have now extracted all of its permitted reserves and is therefore now inactive.

Chalk & Limestone

2.16 Crushed rock aggregate in the area is derived from chalk and limestone. Generally, the quality of the chalk deposits for aggregate use is poor. Small quantities are sold for low grade aggregate applications such as fill and sub base roadstone.

2.17 The area also contains Lincolnshire Limestone dating from the Middle Jurassic Period. This bed outcrops in a narrow band in the Scunthorpe area running south into Lincolnshire. It has been historically worked for aggregate limestone, again mainly for lower grade applications.

2.18 The Northern Lincolnshire area has 4 active sites that produce either chalk or limestone for aggregate purposes, all of which are located in North Lincolnshire. These are at Manton, Kirton in Lindsey, Redbourne/Hibaldstow, and Melton Ross (though largely an industrial chalk operation). There is a further operation at South Ferriby which has been mothballed.

Ironstone

2.19 Most of the ironstone used in the steel industry is currently imported but significant deposits exist around Scunthorpe. There is no indication that it will be worked in the short term.

Non-Aggregate Resources

2.20 As set out above, non-aggregate resources are those which are necessary to support industrial and manufacturing processes and other non-aggregate uses. This covers a very wide spectrum of minerals, but the non-aggregate resources within northern Lincolnshire are.

Silica Sand

2.21 Blown sand deposits (silica sand) tend to be found along the lower slopes of major west facing escarpments. In particular, around the Scunthorpe and Messingham areas as well as the Isle of Axholme. The one active silica sand site in North Lincolnshire is near Messingham. Sand here has been used for coloured glass manufacture and for foundry sand. Other markets are for horticultural sand and bagged sand for blocked paving.

Industrial Chalk

2.22 There are small areas of higher purity chalk which can be used for industrial purposes. The Northern Lincolnshire area has one active sites that produces chalk for non-aggregate purposes at Melton Ross. This can be used for a range of specialist industrial uses, including lime production, and chalk whiting for paper and plastics.

Brick Clay

2.23 Brick clay occurs along the estuary frontage and Isle of Axholme. This is a material used predominantly in the manufacture of bricks, roof tiles, clay pipes and decorative pottery. There is one remaining active operation at Barton upon Humber.

Building Stone

2.24 Historically the area has produced building stone for local use. It is therefore important for the upkeep of traditional buildings and other heritage assets, and can be used in new development to reflect the character of its surroundings. There are no currently operational quarries/operations in the area purely for the production of building stone. However, some operations do produce building stone amongst other products.

Peat

2.25 Deposits of peat are located around the west of the Isle of Axholme and around Cadney. The NPPF states that new or extended sites for peat extraction should not be identified. There are no operational peat extraction sites in the area.

3. ASSESSMENT OF AGGREGATE SUPPLY AND DEMAND

3.1 In planning ahead for future aggregates provision, it is essential that there is a good understanding of existing levels of supply and demand. This section provides an overview of existing aggregate sales, extraction operations, reserves and landbanks. It also includes details of aggregate consumption and imports/exports. The information is based on the YHAWP annual survey of mineral operators, planning applications and YHAWP reports as well as national guidelines and other relevant information. A landbank is a number of years' worth of supply of a particular mineral resource based on the amount of permitted resources divided by an annual rate of consumption, such as the 10 year average sales rate.

Sand & Gravel

3.2 Sales of land-won sand and gravel for aggregate purposes in the Northern Lincolnshire area for the ten year period between 2015 and 2024 are shown in Table 1. The 10 year and 3 year average sales for this period are 0.16 million and 0.16 million tonnes respectively.

Table 1: Sand & Gravel Aggregate Sales in the Northern Lincolnshire area 2015 to 2024 (million tonnes)

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	10 year Average	3 year Average
0.10	0.10	0.10	0.30	0.18	0.18	0.15	0.14	0.18	0.15	0.16	0.16

Source: Annual Aggregate Monitoring Surveys

3.3 Aggregate sand and gravel sales have been broadly consistent over the last ten years, averaging around 0.16 million tonnes per annum. Production has stayed at around this level, even during the downturn in construction activity associated with the Covid 19 pandemic.

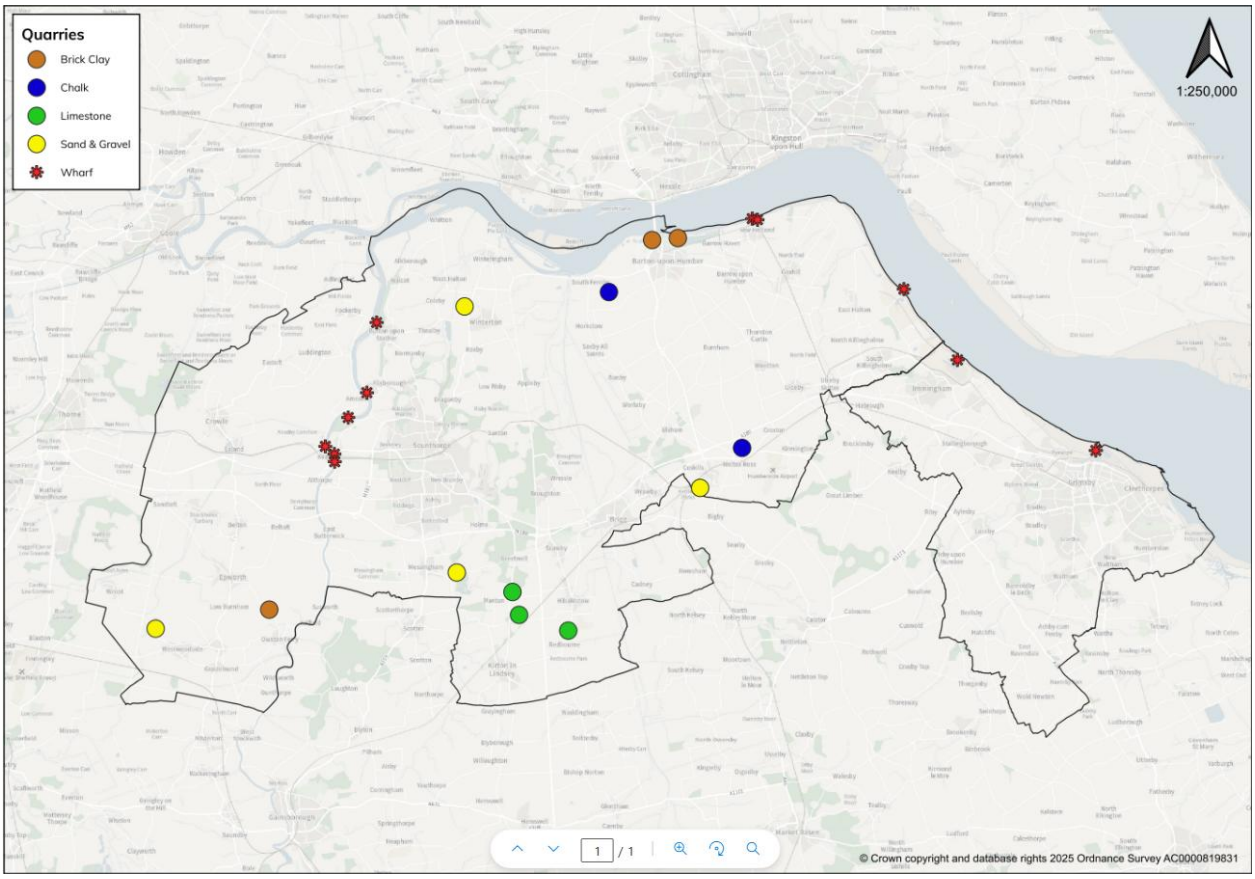
Current Supply

3.4 In 2024, the Northern Lincolnshire area had three active operations producing sand and gravel for aggregate purposes, all located in North Lincolnshire. One further active site in North Lincolnshire produces silica sand for non-aggregate or industrial use. All sand and gravel operations are listed in Table 2 and shown on Figure 5 below.

Table 2: Permitted Sand & Gravel Extraction Sites in the Northern Lincolnshire Area in 2024

Quarry	Mineral Planning Authority	Operator	Status
Cove Farm, Haxey	North Lincolnshire	North Lincs Sand and Gravel	Active
Eastfield Farm, Winterton		A & F Dowson	Active
Kettleby Parks, Barnetby		Breedon Group	Active
Messingham		Sibelco UK (silica sand)	Active

Figure 5: Chalk, Limestone, Sand & Gravel, Brick Clay and wharf sites in the Northern Lincolnshire Area



Landbanks

3.5 Government policy requires the landbank period for aggregate sand and gravel to be at least 7 years. Landbanks are a stock of reserves with planning permission. The estimated permitted reserves of land won aggregate sand and gravel in the Northern Lincolnshire area as of 31st December 2024, amounted to 0.14 million tonnes. This gives a landbank of just 0.88 years (see Table 3) based on the latest ten-year annual sales average, which is well below the 7 year landbank required by the NPPF.

3.6 The sand and gravel aggregate sales and reserves are lower than the previous reporting year, this has resulted in the landbank falling well below 7 years. However, it should be noted the landbank is based on the estimated reserves and not actual reserve figures submitted by the operators, and therefore the actual landbank may be higher than that reported and figures should be treated with some caution.

3.7 This landbank figure excludes silica sand reserves which is classed as an industrial mineral and is the subject of a separate requirement, to provide at least 10 years stocks of permitted reserves at individual silica sand sites.

Table 3: Landbanks for Sand & Gravel in the Northern Lincolnshire Area (2024)	
2024 sand and gravel aggregate sales (Mt)	0.15
Reserves as at 31.12.2024 (Mt)	0.14
Average annual sales (2015 – 2024) (Mt) (10 years)	0.16
Average annual sales (2021 – 2024) (Mt) (3 years)	0.16
Landbank based on 10 year average sales (years)	0.88
Landbank based on 3 year average sales (years)	0.88

Crushed Rock

Sales

3.8 Sales of crushed rock for aggregate purposes in the Northern Lincolnshire area for the ten year period between 2015 and 2024 are shown in Table 4.

Table 4: Crushed Rock Sales in the Northern Lincolnshire area 2015 to 2024 (million tonnes)											
2015	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**10 Year Average**	**3 Year Average**
0.62	0.62	0.59	0.60	0.68	0.68	0.61	0.59	0.18	0.35	0.55	0.37

Source: Yorkshire & Humber Aggregate Working Party – Annual Reports and Annual Aggregate Monitoring Surveys

3.9 These sales figures show that production has averaged 0.55 million tonnes of crushed rock per year over the 10 year period from 2015 to 2024. Over the period sales remained steady to 2022 at around 0.6 million tonnes. Sales have since dipped down to 0.35mt in 2024. This may have been due to one quarry changing ownership and another reducing aggregate production.

Current supply

3.10 In the Northern Lincolnshire area there are currently four active aggregate crushed rock sites, that produce chalk or limestone for aggregate purposes, one of which primarily produces industrial chalk but does have some aggregate production. There is one inactive chalk extraction site. These operations are presented below in Table 5 and Figure 5 above.

Table 5: Permitted Crushed Rock Quarries in the Northern Lincolnshire Area				
Quarry	**Mineral Planning Authority**	**Operator**	**Aggregate**	**Status**
Kirton Lindsey	North Lincolnshire	Fox (Owmby) Limited	Limestone	Active
Manton		Ashcourt Group	Limestone	Active
Melton Ross**		Singleton Birch	Chalk	Active
Slate House Farm		Welton Aggregates	Limestone	Active
South Ferriby		Cemex	Chalk	Inactive

**Primarily industrial chalk quarry, with aggregate production

Landbanks

3.11 Government policy requires the landbank period for aggregate crushed rock to be at least 10 years. The permitted reserves of land won aggregate crushed rock in the Northern Lincolnshire area as of 31st December 2024, amounted to 17.25 million tonnes. This gives a landbank of just 31.36 years (see Table 6) based on the latest ten-year annual sales average. This is well above the landbank required by the NPPF.

Table 6: Landbanks for Crushed Rock in the Northern Lincolnshire Area (2024)	
2024 crushed rock aggregate sales (Mt)	0.35
Reserves as at 31/12/2024 (Mt)	17.25
Average annual sales 2015 – 2024 (Mt) (10 years)	0.55
Average annual sales 2022 – 2024 (Mt) (3 years)	0.37
Landbank based on 10 year average sales (years)	31.36
Landbank based on 3 year average sales (years)	46.62

4. AGGREGATE CONSUMPTION & MOVEMENTS

4.1 Information on consumption and movement of aggregates is set out in the four yearly detailed Annual Monitoring Surveys (AMS)[6] conducted by the Aggregate Working Parties (AWPs) and collated by British Geological Survey (BGS) on behalf of central Government. The most recent survey was carried out in 2023 (published in August 2025). Some information on consumption and aggregate movements was also provided to assist authorities in preparing their LAAs[7]. The previous published surveys were dated 2019 (published August 2021), 2014 (published in November 2016), 2009 (published October 2011) and 2005 (published May 2007). It is important to bear in mind that the four yearly national survey is separate to the annual YHAWP survey. Some data from the two are not directly comparable due to differences between the overall number of responses and different individual operators responding to each.

Consumption

4.2 Table 7 shows data for the Humber area (the Combined area of North Lincolnshire, North East Lincolnshire, Hull City and East Riding of Yorkshire Councils)- the smallest geography over which the data reports consumption and imports.

4.3 The 2009 AMS showed that the Humber area consumed 743,000 tonnes of sand and gravel (549,000 tonnes of land-won sand and gravel; 194,000 tonnes of marine dredged sand and gravel) and 789,000 tonnes of crushed rock. This was a reduction from the levels set out in the 2005 AMS which showed that consumption of sand and gravel was 1,683,000 tonnes (1,385,000 tonnes of land won; 298,000 tonnes marine dredged) and 857,000 tonnes of crushed rock. The 2014 AMS shows that 424,000 tonnes of sand and gravel (land-won and marine-dredged combined) and 724,000 tonnes of crushed rock were consumed in the area. For 2019 the AMS showed that the Humber area consumed 408,000 tonnes of sand and gravel and 979,000 tonnes of crushed rock were consumed in the area. 366,000 tones of sand and gravel was consumed in 2023 (169,000 tonnes marine and 226,000 tonnes land won) alongside 586,000 tonnes of crushed rock.

4.4 All five AMSs showed that a percentage of the aggregates consumed in the Humber area derive from imports from other areas (see Table 7). The Humber area has become less reliant on land-won sand and gravel imports from other areas. By contrast, it remains highly reliant on crushed rock imports to provide for its needs, with around three quarters of its crushed rock consumption provided for via imports.

Table 7: Proportion of Primary Aggregate Consumption Met By Land-Won Imports (Tonnes)

		Imports	Consumption	% of Consumption Met by Imports
Sand & Gravel	**2005**	908,000	1,683,000	54%
	2009	287,000	743,000	39%
	2014	305,000	424,000	72%
	2019	50,000	408,000	12%
	2023	21,000	366,000	6%
Crushed Rock	**2005**	594,000	857,000	69%
	2009	592,000	789,000	75%

[6] https://www.gov.uk/government/collections/minerals

[7] This takes the form of table that categorises for each destination sub-region the percentage of its total consumption received from other or "source" Mineral Planning Authorities. This is expressed as a percentage ranges in order to maintain commercial confidentiality.

	2014	700,000	724,000	97%
	2019	851,000	979,000	87%
	2023	451,000	586,000	77%

Source: Collated Aggregate Mineral Survey for England & Wales (2005, 2009, 2014, 2019 & 2023)

4.5 Information from the 2014, 2019 and 2023 AMS regarding movement of aggregates between different sub-regions have been issued to assist in preparing LAAs. Table 8 (below) shows the origins of the imported aggregates consumed in the Humber area (again, the smallest geography over which information is available). Much of this is from neighbouring MPA areas or the wider Yorkshire & Humber Region, however some aggregate is imported from further afield, including outside of England and Wales. This may reflect existing commercial contracts, the need for materials that are not available in the Humber or overseas imports. Most of the Humber area's consumption in relation to sand and gravel comes from East Riding of Yorkshire within the Humber. Most of the Humber's consumption in relation to crushed rock comes from the Yorkshire Dales National Park. It is noted the crushed rock produced in Kirklees (and West Yorkshire in general) is derived from building stone extraction and that it is of a low grade.

Table 8: Source of Imported Primary Land Won Aggregates Consumed in the Humber Area (2014/2019/2023)

Source Areas	% of Humber Consumption 2014	% of Humber Consumption 2019	% of Humber Consumption 2023
Sand & Gravel			
East Riding of Yorkshire	20% to 30%	80% to 90%	80% to 90%
Lincolnshire	1% to 10%	1% to 10%	1% to 10%
North Yorkshire	20% to 30%	1% to 10%	1% to 10%
Durham		Less than 1%	1% to 10%
Nottinghamshire	30% to 40%	1% to 10%	Less than 1%
Central Bedfordshire			Less than 1%
North Lincolnshire			Less than 1%
Scotland			Less than 1%
Doncaster	Less than 1%	Less than 1%	
Sunderland	Less than 1%	Less than 1%	
Cambridgeshire		Less than 1%	
Tonnage consumed	**424,000 tonnes**	**408,000 tonnes**	**226,000 tonnes**
Crushed Rock			
Yorkshire Dales National Park	30% to 40%	40% to 50%	40% to 50%
North Yorkshire	10% to 20%	10% to 20%	10% to 20%
North Lincolnshire		1% to 10%	10% to 20%
East Riding of Yorkshire	1% to 10%	1% to 10%	1% to 10%
Derbyshire	1% to 10%	10% to 20%	1% to 10%
Doncaster	1% to 10%	1% to 10%	1% to 10%
Leicestershire	Less than 1%	10% to 20%	Less than 1%
Peak District National Park	Less than 1%	Less than 1%	Less than 1%

Shropshire	Less than 1%	Less than 1%	Less than 1%
Northumberland	Less than 1%		Less than 1%
Northumberland National Park	Less than 1%		Less than 1%
Kirklees		Less than 1%	
Powys	Less than 1%	Less than 1%	
Durham	Less than 1%	Less than 1%	
Leeds	Less than 1%		
Cumbria	Less than 1%		
Outside England and Wales	30% to 40%		
Tonnage consumed	**724,000 tonnes**	**979,000 tonnes**	**586,000 tonnes**

Source: Collated Aggregate Mineral Survey for England & Wales (2014, 2019 and 2023)

4.6 Sticking with the Humber geography, but showing Northern Lincolnshire figures, where possible. As well as being consumers, the area provided a percentage of sand and gravel, and crushed rock consumed in other areas (see Table 9, below). Mostly these are neighbouring areas or sub-regions. The exception to this is Derbyshire, Shropshire and Scotland.

Table 9: Consumption of Primary Land Won Aggregates Exported from the Humber Area

Source	Destination Areas	% of Destination Area's Total Consumption 2014	% of Destination Area's Total Consumption 2019	% of Destination Area's Total Consumption 2023
Sand & Gravel				
East Riding of Yorkshire	Humber (North and NE Lincs, Hull and ERY Councils)	20% to 30%	80% to 90%	80% to 90%
	South Yorkshire	20% to 30%	10% to 20%	20% to 30%
	West Yorkshire	20% to 30%	10% to 20%	20% to 30%
	North Yorkshire, and North York Moors and Yorkshire Dales National Parks	1% to 10%	1% to 10%	1% to 10%
	Shropshire & Telford and Wreking		Less than 1%	
	Nottinghamshire		Less than 1%	
	Derbyshire and Peak District NP		Less than 1%	
	Lincolnshire		Less than 1%	
	Scotland		1% to 10%	
	Unknown but in E Midlands		Less than 1%	
	Unknown but in Y & H	10% to 20%		
North Lincolnshire	Unknown Destination	Less than 1%	Less than 1%	10% to 20%
	Lincolnshire	1% to 10%		1% to 10%

	Humber (North and NE Lincs, Hull ERY Councils)			Less than 1%
	Derbyshire and Peak District NP	Less than 1%		
Crushed Rock				
East Riding of Yorkshire	Humber		1% to 10%	1% to 10%
	North Yorkshire			Less than 1%
	Unknown Destination		1% to 10%	
	Unknown but somewhere in the East of England	60% to 70%		
North Lincolnshire	Humber	1% to 10%	1% to 10%	10% to 20%
	Lincolnshire	1% to 10%	1% to 10%	1% to 10%
	South Yorkshire			Less than 1%
	Nottinghamshire	1% to 10%		

Source: Collated Aggregate Mineral Survey for England & Wales (2014, 2019 and 2023)

Imports & Exports

4.7 As highlighted previously, aggregates are imported to and exported from the Humber area. The 2005, 2009, 2014, 2019 and 2023 AMS includes information and analysis of the movements (imports and exports) of aggregates (see Table 10, below).

Table 10: Aggregate Imports & Exports

		Imports	Exports (or unallocated destination)	Balance
Sand & Gravel	**2005**	908,000	607,000	+301,000
	2009	287,000	500,000	-213,000
	2014	305,000	520,000	-215,000
	2019	50,000	214,000	-164,000
	2023	21,000	470,000	-449,000
Crushed Rock	**2005**	594,000	106,000	+488,000
	2009	592,000	(info not available)	+592,000
	2014	700,000	(info not available)	+700,000
	2019	851,000	126,000	+725,000
	2023	451,000	95,000	+356,000
Total	**2005**	1,502,000	713,000	+789,000
	2009	879,000	500,000	+379,000
	2014	1,005,000	520,000	+485,000
	2019	901,000	340,000	+505,000
	2023	472,000	565,000	-93,000

Source: Collation of the Results of the 2005, 2009, 2014, 2019 and 2023 Aggregate Minerals Surveys for England and Wales (DCLG, BGS & Welsh Assembly Government). Note: In the balance column, a "-" prefix

indicates a net export, and a "+" prefix indicates a net import.

4.8 Based on recent information, the Humber area has consistently been a net importer of aggregates over the 2005, 2009, 2014 and 2019 national survey years. However, the 2023 survey year has broken that trend with the Humber becoming a net exporter of aggregate from its area. It would appear that this has been driven primarily by a reduction in sand and gravel aggregate imports.

4.9 Annual surveys undertaken over recent years suggest that aggregates from Northern Lincolnshire have been exported to neighbouring areas including Lincolnshire, Nottinghamshire and South Yorkshire. See table 9 above.

4.10 As part of ongoing plan making processes and revisions to the LAA, dialogue with other MPAs has been taking place about what these trends in imports/exports for the Humber and Northern Lincolnshire area mean in terms of demand forecasting and assessment of future supply options.

Recycled & Secondary Aggregates

4.11 Recycled and secondary aggregates are materials which (after some form of processing or treatment) can potentially be used to substitute for primary or land-won aggregate. It can provide a more sustainable source of aggregate for development and help to reduce the need for primary aggregate extraction. They may be derived from processing of construction, demolition and excavation waste (CDE) (recycled aggregate) or may be by-products of mineral extraction or processing, or industrial processes (secondary aggregate). In 2021, total recycled and secondary sources of aggregates are estimated to have accounted for 28% (69.6 million tonnes) of total aggregates supply in Great Britain, maintaining a leading position internationally in the use of recycled and secondary aggregates[8]. This indicates the use of these materials in Britain is potentially reaching full potential. It is the highest in Europe and has been levelling off following a peak around 2009. Despite the significant financial advantages of recycling waste into aggregates, the unavailability of further sources of unprocessed raw materials is hampering further increases in market share.

4.12 In practice, despite encouragement for further increases, there is little further progress that can be made in replacing primary aggregate with secondary and recycled materials without major investment in the few remaining significant sources of secondary aggregates in North Wales and Cornwall, which in any event would not affect the Northern Lincolnshire area. Consequently, there is little more local authorities can do in a practical sense as a strategy to increase the use of recycled and secondary aggregates.

4.13 The main source of recycled aggregate tends to be Construction, Demolition and Excavation (CDE) waste, which is thought to arise across the Northern Lincolnshire area. It can include soils, concrete, stone, brick, spent railway ballast and asphalt/asphalt planings (from road resurfacing). Secondary aggregates are usually by-products of other industrial processes that have not been used in construction. They include both natural and manufactured materials such as; china clay, slate, flue ash and metallurgic slag.

4.14 Information on recycled and secondary aggregate production is variable and not considered to be completely reliable. Therefore, it is difficult to accurately assess the role that they play in aggregate supply and demand. For example, in many cases CDE waste is processed on redevelopment sites 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.

4.15 The Environment Agency's Waste Data Interrogator (WDI) can be used to examine the amount of inert construction and demolition, and household industrial and commercial waste received at permitted waste facilities[9], Table 11 (below) sets this out. It does not necessarily represent the total amount of CDE waste arising in the area or the available resource or the amount used.

[8] Mineral Products Association (2023)- https://mineralproducts.org/MPA/media/root/Publications/2023/Contribution_of_Recycled_and_Secondary_Materials_to_Total_Aggs_Supply_in_GB_2021_Estimates.pdf

[9] Sites where permits are in place issued by the Environment Agency

4.16 Across Northern Lincolnshire, the amount of potential recycled and secondary aggregates received by waste facilities according to the WDI database has been at around the 2 million tonnes mark in the years 2020 and 2021. Tonnages dipped to below 1 million tonnes in 2022 and 2023, before rising to around 1.5 million tonnes in 2024- the latest year for which data is available.

Table 11: Construction & Demolition Waste (tonnes)				
North Lincolnshire				
2020	**2021**	**2022**	**2023**	**2024**
1,716,869	1,831,519	751,701	466,136	1,120,932
North East Lincolnshire				
2020	**2021**	**2022**	**2023**	**2024**
376,853	230,581	78,234	161,231	319,727
Northern Lincolnshire Total				
2,093,722	2,062,100	**829,935**	**627,367**	**1,440,659**

Source: Waste Data Interrogator (2020, 2021, 2022, 2023, 2024)

4.17 The most recent national studies on secondary and recycled aggregates were undertaken by DCLG in 2005 (published 2007)[10].

4.18 The first of these studies estimated that East Riding, North Lincolnshire and North East Lincolnshire produced over 1.7 million tonnes of CDE waste. It was estimated that 774,327 tonnes of recycled graded and ungraded aggregate was produced in the area. This represented around 45% of all construction, demolition and excavation waste arisings.

Table 12: Sub-Regional Estimates of CDE waste Recycled by Crushers and/or Screens, Used/Disposed of at Landfills, and Spread on Paragraph 9a(1) And 19a(2) Registered Exempt Sites In 2005 (Tonnes)				
East Riding, North Lincolnshire & North East Lincolnshire				
Adjusted estimate of population of recycling crushers			18	
Estimated production of recycled graded aggregate (tonnes)			407,072	
Estimated production of recycled ungraded aggregate (tonnes)			367,255	
Estimated production of recycled soil (excl topsoil) (tonnes)			71,243	
Estimated tonnage of unprocessed CDEW entering licensed landfills, and its use/fate				
	Engineering	**Capping**	**Waste**	**Total**
Clean hard C&D Waste	18,379	3	15,171	33,552
Contaminated hard C&D waste	180	0	1,681	1,861
Clean excavation waste	60,416	132,083	360,410	552,908
Contaminated excavation waste	1,915	0	24,950	26,864
Clean “mixed” CDEW	8,143	400	87,315	95,858
Contaminated “mixed” CDEW	29	0	10,031	10,060
Other	7,302	278	28,863	36,443
Total	96,363	132,763	528,420	757,547

[10] Survey of Arisings and Use of Alternatives to Primary Aggregates in England, 2005; Construction, Demolition and Excavation Waste (DCLG, 2007) & Survey of Arisings and Use of Alternatives to Primary Aggregates in England, 2005; Other Materials (DCLG, 2007)

Estimated weight of waste materials (mainly excavation waste) used on Paragraph 9A(1) and 19A(2) registered exempt sites (tonnes)	151,618
Total estimated arisings of CDEW in 2005 (tonnes)	**1,735,735**

Source: Reproduced from Survey of Arisings and Use of Alternatives to Primary Aggregates in England, 2005; Construction, Demolition and Excavation Waste (DCLG, 2007)

4.19 The second study contained data on the quantity of secondary aggregates generated from various industrial and other processes. It included regional and sub-regional data on secondary aggregate generation. Table 13 (below) shows the secondary aggregates arising in the Humber area.

Table 13: Arisings and Use of Alternatives To Primary Aggregates In 2005 (million tonnes)

	Total Arisings (Mt)	Not Relevant (Mt)	Aggregate Use (Mt)	Other Use (Mt)	Potentially Available (Mt)	Stockpiles (Mt)
Incinerator Bottom Ash: Waste to Energy Plants	0.01	0	0.01	0	0	0
Slag: Blast Furnace (Iron)	1	0	0.25	0.75	-	0
Slag: Basic Oxygen Furnace (Steel)	0.25	0	0.13	0	0.12	-
Waste (Container) Glass	0.03	-	-	-	-	-

Source: Survey of Arisings and Use of Alternatives to Primary Aggregates in England, 2005; Other Materials (DCLG, 2007)

4.20 The blast furnace slag and basic oxygen furnace slag are by-products of the iron and steel industries. The 2005 survey highlighted that Scunthorpe was the sole source of both of these by-products in the Yorkshire & Humber region, producing 1 million tonnes and 0.25 million tonnes of each respectively. Only part of the total arising was used for aggregate purposes.

4.21 The National and Regional Guidelines for Aggregates Provision in England (2005-2020) also includes an assumption about the amount of recycled and secondary aggregate that should be provided in the Yorkshire and Humber region. It assumes that 133 million tonnes (31%) of the overall 431 million tonnes construction aggregates required in the region will be sourced from recycled or secondary aggregate.

4.22 As part of its annual aggregates monitoring, the YHAWP (through the Humber mineral planning authorities) survey known producers of secondary and recycled aggregates with the aim of understanding the level of secondary and recycled aggregates produced, and how this relates to overall supply. However, the response rate and quality of data received was poor in northern Lincolnshire. As a result this survey is no longer undertaken or used in the northern Lincolnshire area.

Marine Aggregates

4.23 The use of marine aggregates for construction is a long-standing practice in the United Kingdom and an important part of the aggregates supply chain. Marine aggregates, in the form of sand and gravel are dredged in a number of places around the UK coastline including off the Humber Estuary, and the north eastern and eastern coasts of England as well as the English Channel, Bristol Channel and Irish Sea. Nationally, around 12.29 million tonnes of marine dredged primary sand and gravel aggregates were landed at English ports and wharves during 2024[11].

4.24 The sand and gravel extracted from the seabed can be used for construction, reclamation fill or beach nourishment projects. In the construction industry its use can range from concrete making to road sub-base and fill, whilst for reclamation fill sediment is used to infill areas in ports and harbours. It can also be

[11] Marine Aggregates – Summary of Statistics 2024, The Crown Estate

used to reclaim land from the sea before engineering works take place. For beach nourishment sediment is placed on beaches for coastal protection or amenity and economic enhancement.

4.25 Marine aggregate extraction is governed by the U.K. Marine Policy Statement (MPS) (March 2011) and the adopted East Inshore and East Offshore Marine Plans (April 2014). The MPS provides the framework for preparing Marine Plans and taking decisions affecting the marine environment. It contributes to the achievement of sustainable development in the United Kingdom marine area. The Marine Plans, prepared by the Marine Management Organisation (MMO) aim to manage and balance the many activities, resources and assets in the marine environment.

4.26 The **resources** located off the Humber Estuary are thought to be extensive. Crown Estate information[12] produced in 2024 shows that there are currently 10 licensed dredging areas in the North Sea in the Humber region, from which 6.88 million tonnes of sand and gravel can be extracted per year. The resources found in this area range from fine sands to coarse gravels.

4.27 The most up to date dredging data available was collated by the Crown Estate in 2023 and published in 2024.[13] This report states that during 2023, 3.47 million tonnes (mt) of construction aggregate were **dredged** from a permitted licensed tonnage of 6.88 mt in the Humber marine region. In addition, 0.64 mt were **dredged** for beach nourishment.

4.28 In the Humber marine region, **landings** of marine dredged sand and gravel took place at ports/wharves in 2024 on the River Humber (231,907 tonnes), River Tees (630,841 tonnes) and River Tyne (284,415tonnes) as well as at Blyth (Northumberland) (47,205 tonnes).[14]

4.29 In a similar vein to recycled and secondary aggregates, the National and Regional Guidelines for Aggregates Provision in England (2005-2020) also includes an assumption about the amount of marine dredged aggregate that should be provided in the Yorkshire and Humber region. It assumes that 5 million tonnes (1%) of the overall 431 million tonnes construction aggregates required in the region will be sourced from marine dredged aggregate.

4.30 The majority of landings that took place on the Humber were at the relocated Humber Sand and Gravel facility at King George Dock in Hull. Stema Shipping brings imports of crushed rock aggregates from their coastal quarries in Norway, and sand from Denmark to Queen Elizabeth Dock (not monitored in the figures above). The landing facility at King George Dock, can take bigger vessels than the previous facility at Alexandra Dock and is large enough to land 2 million tonnes per year. It also has the advantage of being connected to the rail network, which has the potential of improved distribution to the wider region.

4.31 There are other opportunities for landing marine dredged aggregates within the Humber area. ABP also owns the port of Goole, whilst there are wharves on the River Trent near Scunthorpe which can be accessed by similar sized vessels to Goole. The River Trent wharves and New Holland Pier are equipped to handle mineral imports. However, it is difficult to ascertain the amount of minerals landed at these locations due to a low response rate to the annual aggregates survey. It is likely that they only handle them on an "as and when" basis. From previous surveys, we know aggregates are landed, or have been in the recent past at:

- Humber Bulk Terminal, Old Ferry Terminal, New Holland
- RMS Trent Ports (Flixborough Wharf), Trent Port House, Stather Road, Flixborough
- ABP Grimsby Docks, Lockhill Road, Grimsby

4.32 The port of Immingham doesn't currently handle marine dredged aggregates on a regular basis, other than specific project related short term campaigns, however the capacity is available should there be a future requirement.

[12] Annual Review 2024 Marine Aggregates, The Crown Estate
[13] The area involved- 26th annual report, The Crown Estate/MPA.
[14] Marine Aggregates – Summary of Statistics 2024, The Crown Estate

4.33 A marine aggregates study was completed by the West Yorkshire Combined Authority in December 2022. The study's primary purpose was to identify potential site opportunities, land requirements and note the Town Planning requirements within West Yorkshire to facilitate the significant increase in the supply and delivery of marine aggregate into West Yorkshire for the next 10 years. Its analysis has identified a number of new wharf and rail sites worth taking forward for more detailed study. These are all in West Yorkshire. However, should these be brought forward then it might result in an increase in aggregate traffic sailing through the area's waterways including the Humber, Ouse, and Aire.

4.34 Existing planning policy in the Northern Lincolnshire area broadly supports the envisaged increase in marine won aggregates, however it does not identify or safeguard present or future sites for the handling of marine aggregate. Safeguarding of the capacity for handling imported and marine aggregates at existing wharves is part of government policy in the NPPF. The emerging North Lincolnshire Local Plan is likely to support proposals for new or extended port, wharf and jetty facilities on the Rivers Humber and Trent. It is also likely to safeguard existing wharf and jetty facilities on the Rivers Humber and Trent for cargo handling facilities.

4.35 Marine aggregates are increasingly being seen as an important part of the overall aggregates supply and as an alternative to primary land-won aggregates. The YHAWP commissioned a Marine Aggregates Study[15] to assess the potential deliverability of a substantially greater supply of marine aggregate into the Yorkshire and Humber region, in substitution for an element of supply currently provided by land-won resources.

4.36 This need arises as a result of:

- the increasing potential for shortfalls in the medium/long term availability of indigenous concreting sand and gravel in the region;
- the need for more evidence on the scope of any potential for increased supply of marine aggregate, as a possible alternative source;
- the need to help inform statutory planning processes, safeguard wharves and investment in infrastructure.

4.37 The final study report was issued in January 2014. It found there was a very large marine aggregate resource of the required quality, and sufficient fleet capacity to land it. No fundamental barriers to the granting of additional licensed capacity were identified. Many wharves are available in the Humber area with the potential to land marine aggregates. However, limitations apply restricting the size of dredger that could berth, and the amount of land immediately available lying adjacent to the berths, to develop the necessary infrastructure to facilitate processing and/or onward transport at the scale proposed by the study.

4.38 Only a limited amount of infrastructure utilised for or with the potential to be utilised for the transport of marine aggregates is safeguarded. Stakeholders considered the move towards a greater utilisation of marine aggregates will most likely take place beyond 5 years and thereafter increase with time. Economically, operators did not think the marine option was viable at this point of time but the viability gap against land won aggregate was narrowing. The study noted that the Humber Bridge toll creates separate aggregate markets north and south of the Humber, due to the cost of a lorry making a round trip across the bridge. For example, it is not cost effective to take marine material across the bridge (or around) but this would be circumvented if there was somewhere to land marine material on the south side. With the reduction in bridge tolls since the study was completed, this may be something that needs to be monitored.

4.39 The appointed consultants made recommendations for further work that include MPAs reviewing Local Plans to consider the requirements of the NPPF for safeguarding aggregate infrastructure and a formal regional Local Authority group to collaborate on cross boundary aggregate issues (which may fall within the scope of reference for the YHAWP).

[15] Marine Aggregates Study – Final Report (January 2014), URS

4.40 The landings of marine sand and gravel over on Humber wharves over the past 10 years are shown in the table below.

Table 14: Total Marine sand and gravel landing on Humber wharves										
Year	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Tonnage	25,561	117,417	154,159	140,304	148,597	192,430	290,341	330,575	213,715	231,907

Minerals Specific Infrastructure

4.41 In order to ensure the effective supply of aggregates, a good network of supporting infrastructure needs to be in place. This includes 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. The NPPF requires mineral planning authorities as part of their Local Plans to safeguard these facilities, where they exist or are planned. It also allows for the safeguarding of sites with potential to accommodate them[16].

4.42 In the Northern Lincolnshire area, there are a number of facilities which support the supply of aggregates into the local market including asphalt plants and concrete plants. Most facilities are situated at or adjacent to existing mineral extraction sites or within industrial estates/complexes.

Table 15: Minerals Infrastructure
Asphalt Plants • Grimsby, Gilbey Road (Breedon) • Santon, Dawes Lane (Scunthorpe) (Tarmac) – also processes slag for use as dry stone and cement replacer
Concrete Plants • Elsham Wold Industrial Estate (Breedon Group) • Grimsby - Gilbey Road (Breedon Group) • Immingham - Europa Way (Cemex); • Immingham - Manby Road (Tarmac); • Scunthorpe - East Common Lane (Cemex);
Cement Works • South Ferriby- Sluice Road (Cemex) - Currently Closed
Recycled Aggregate Processing Plants • Manton- Manton Quarry, B1398 (Ashcourt) • Scunthorpe - Colin Road (R & E Aggregates)- Currently Closed • Scunthorpe - Colin Road (Over Hall Aggregates) • Scunthorpe - Hoylake Road (SPB Ltd) • Hibaldstow – Redbourne Road (Welton Aggregates) • Kirton Lindsey- Gainsthorpe Road East (Fow (Owmby)) • Grimsby- Moody Lane (H. Cope and Sons)
Processing/Manufacturing Plants • Melton Ross- Chalkhill Lane (Singleton Birch)

Source: Company Websites/Internet searches

4.43 As mentioned in the section on marine aggregates, the area has a number of ports and wharves along the Humber Estuary as well as on the Rivers Trent that could offer potential to land or tranship marine won and imported aggregates- see Figure 5.

[16] National Planning Policy Framework (December 2023) – paragraph 216(e).

5. FUTURE AGGREGATE SUPPLY AND DEMAND

5.1 Planning for future supply of aggregates has traditionally been a top down activity, managed by Government through the Managed Aggregate Supply System (MASS), and the production of national and regional guidelines for aggregate supply. Changes to the planning system then re-focussed aggregate supply to a more bottom up approach. However, the main principles of MASS are retained along with national and regional guidelines on aggregates provision in England. They recognise that aggregates are a national strategic resource but consider that the need to ensure a steady and adequate supply of aggregate minerals should be devolved to the local level. This is still set out in the revised NPPF (2024).

Managed Aggregate Supply System (MASS)

5.2 MASS recognises that most of the aggregate supply is extracted on land and as such there is often a geographical imbalance between where minerals occur and where they are needed. The concept behind MASS is that those areas which have adequate aggregate resources make an appropriate contribution to national as well as local supply, while making due allowance for the need to reduce environmental damage to an acceptable level. However, resource-poor areas are expected to make some contribution to meeting local and national needs where that can be done sustainably.

5.3 Given that quarries take many years to plan and bring into production, MASS has provided the mechanism to deliver long term planning for the supply of aggregates, based on sound evidence. It has also served to proactively manage the rate of primary extraction, by placing added emphasis on the need to meet demand from other sources – including secondary and recycled materials and marine dredged aggregates.

5.4 MASS works through national, sub-national and local partners working together to deliver a steady and adequate supply of aggregates, at the following levels:

- locally, mineral planning authorities are expected to prepare LAAs (the aggregates section of this document), to assess the demand for and supply of aggregates;
- sub-nationally, mineral planning authorities belong to and are supported by Aggregate Working Parties, who produce fit-for-purpose and comprehensive data on aggregates covering specific geographical areas; and
- nationally, the National Aggregate Co-ordinating Group monitors the overall provision of aggregates in England.

5.5 A key additional tool which underpins the working of the MASS is the aggregate landbank, a monitoring tool which is the main basis for the Mineral Planning Authority to consider whether to review the local plan.

National and Regional Guidelines

5.6 As part of MASS, guidelines for aggregates supply in England were published by DCLG in October 2012 and over recent years have provided a basis for the identification of future requirements for aggregate minerals at the national and regional levels.

5.7 The most recent guidelines were published in June 2009 and cover the period from 2005 to 2020 and are considered to be out of date. They replaced the previous version issued in 2003, which covered the period 2001-2016. The 2003 figures provided the basis for the last set of sub-regional apportionments contained in the former Yorkshire & Humber Regional Spatial Strategy. However, 2009 figures were not apportioned to each sub-region.

5.8 The advent of the NPPF and Localism Act means individual MPAs are now left to determine their own sub-regional aggregates apportionments by assessing their aggregate needs, in cooperation with the YHAWP members and other relevant MPAs and Aggregate Working Parties, in line with National Policy.

National Planning Policy Framework (NPPF) and Guidance on Aggregates Demand Assessment

5.9 The NPPF requires each MPA to plan for a steady and adequate supply of aggregates calculate their aggregate supply requirements on the basis of average aggregate sales over a ten year rolling period and

other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources). It still requires that account be taken of any published National and Sub National Guidelines on future provision which should be used as a guideline when planning for the future demand for and supply of aggregates.

5.10 North East Lincolnshire Council has not previously planned to extract a specific amount of primary aggregate as no operational quarries currently exist in the area. In addition, several 'call for sites' exercises during production of the current North East Lincolnshire Local Plan (2018) and its emerging replacement has not resulted in any operator interest in extracting primary resources in the Authority. A requirement (or 'apportionment') of primary aggregates for sand and gravel and crushed rock still needs to be set for the Northern Lincolnshire Area. Just that in practical terms, it is the North Lincolnshire Local Plan, which will need to plan for it given it has the existing primary aggregate operations and operator interest.

5.11 There are a number of factors to look at in setting primary aggregate requirements for the area. Whichever approach is adopted should be in line with national policy and guidance, be relatively straightforward to calculate and result in a forecast supply that is realistic which in turn is capable of being monitored through further iterations of this Minerals Assessment and Local Plan monitoring.

Ten year annual sales average and approaches to Identifying Future Requirement

5.12 The NPPF requires that a forecast of future demand is based on a rolling average of 10 years' sales data and other relevant local information. The ten-year annual average sales is therefore the starting point before factoring other information, which gives this approach considerable weight. This approach has some drawbacks, however. It can be viewed as backward looking and does not anticipate any changes in the patterns of aggregates supply as a result of future economic trends. It does not take account of any emerging environmental issues or constraints. The main advantage is its simplicity and transparency, alongside support in principle by national planning policy and guidance. As noted above the current ten-year (2015 to 2024) average annual sales rate is:

- 0.16 million tonnes for aggregate sand and gravel
- 0.55 million tonnes for aggregate crushed rock

Other Factors to Take Into Account:

5.13 As well as the ten-year average sales based aggregate provision figures, national policy and guidance advises mineral planning authorities to consider other relevant factors that could influence the level of demand for aggregates. These include requirements from neighbouring areas, population and housing growth, and other proposed major development or infrastructure projects.

Average annual sales over the last 3 year period

5.14 PPG advises that Mineral Planning Authorities should look at average sales over the last 3 years in particular to identify the general trend of demand as part of the consideration of whether it might be appropriate to increase supply. As noted above the current three-year (2022 to 2024) average annual sales rate is:

- 0.16 million tonnes for aggregate sand and gravel
- 0.37 million tonnes for aggregate crushed rock

5.15 For both sand and gravel and crushed rock the three year average sales are the same or lower than the 10-year average, respectively. These figures do not suggest it is appropriate to increase supply.

National and Sub National Guidelines on future aggregates provision

5.16 The NPPF requires account to be taken of any published National and Sub National Guidelines on future provision which should be used as a guideline when planning for the future demand for and supply of aggregates. The last guidelines for aggregates provision in England were published in 2009 and cover the period 2005-2020. They only split the aggregate figure down to the regional level, the Yorkshire and Humber Aggregate Working Party has not split these down to the Local Authority level, and the figures are out of date. It is not therefore considered appropriate to factor these into any assessment of aggregate needs.

Cross Boundary Aggregate Movements

5.17 Minerals need to be moved around the country to meet requirements in areas where supply is limited or constrained.

5.18 In Yorkshire and Humber, there are concerns about the long-term supply of concreting sand in the South and West Yorkshire, in particular in the Doncaster and Leeds/Bradford areas. As a result, it is possible that increasing amounts of sand and gravel will have to be imported into these areas from other parts of the region or elsewhere. If the demand and supply to West and South Yorkshire increases, then the forecast demand in future northern Lincolnshire LAAs (particularly for sand and gravel) may need to be revisited. This could potentially have an impact on the level of sand and gravel that will need to be extracted in the area, above and beyond what is already exported.

5.19 In order to plan appropriately to meet requirements of the authorities concerned, discussions take place to ascertain the level of demand for aggregates in their areas and the likely amount needed from the Northern Lincolnshire area as well as when this supply would be needed. A review of current and emerging information relating to linkages between Northern Lincolnshire (or the Humber where this is not possible) and its neighbouring LAA areas has been undertaken to gain an understanding of any cross-boundary requirements.

Doncaster & Rotherham LAA Area

5.20 The latest LAA (2025) notes that to deliver Local Plan proposals South Yorkshire will be dependent not just on its own resources, but those of other areas too, including sand and gravel imports from Nottinghamshire, Lincolnshire and the East Riding. Northern Lincolnshire is not mentioned.

5.21 AMS2023 shows that none of South Yorkshire's sand and gravel consumption came from northern Lincolnshire in 2023. AMS2023 shows that none of the sand and gravel consumed within the Humber area was from Doncaster. However, some of this information related to estimates due to non-survey returns from some operators.

5.22 In terms of crushed rock, AMS2023 shows that less than 1% of South Yorkshire's crushed rock consumption was met from the northern Lincolnshire area, amounting to less than 24,340 tonnes. 1% to 10% of the Humber area's consumption of crushed rock (the figures do not break down to the northern Lincolnshire area), amounting to between 5,860 to 58,600 tonnes, was supplied from City of Doncaster Council's area.

Nottingham & Nottinghamshire LAA Area

5.23 The latest LAA (2024) reports that the 64,000 tonnes of sand and gravel from the Nottinghamshire area was exported to the Humber area in 2018 according to the East Midlands Aggregate Working Party survey- this is trending downwards from surveys in 2009 and 2014. It states that the 'AM2019 source of primary aggregates by sub-region percent categories' document indicates that the main 'elsewhere' region sand and gravel (amounting to 315,000 tonnes exported from Nottinghamshire) was distributed to South Yorkshire and the Humber.

5.24 AMS2023 records that none of Nottinghamshire's primary land won sand and gravel supply came from northern Lincolnshire. It shows that less than 1% of the primary land won sand and gravel consumed within the Humber area was from Nottinghamshire in 2023, amounting to less than 2,260 tonnes.

5.25 AM2023 shows that none of the crushed rock consumed within Nottinghamshire was sourced from the northern Lincolnshire area. None of the crushed rock consumed within the Humber area was sourced from Nottinghamshire either.

Lincolnshire LAA Area

5.26 The draft LAA (2025) notes that 0.4% of its sand and gravel sales were sold to the Humber area in 2019. It notes that 1-10% of Lincolnshire's consumption of crushed rock was met by imports from North Lincolnshire.

5.27 AM2023 shows that less than 1% to 10% of Lincolnshire's sand and gravel consumption amounting to between 14,000 and 140,000 tonnes came from the northern Lincolnshire in 2023. Between 1% and 10% of the land won primary aggregate sand and gravel consumed within the Humber area was from Lincolnshire in 2023. This amounts to between 2,260 and 22,600800 tonnes.

5.28 AM2023 shows that 1% to 10% of Lincolnshire's crushed rock consumption, amounting to 13,230 to 132,300 tonnes came from the northern Lincolnshire in 2023. None of the crushed rock consumed within the Humber area was sourced from Lincolnshire.

East Yorkshire and Hull LAA Area

5.29 This area was formerly part of the Humber LAA area, alongside northern Lincolnshire. Due to the:

- largely separate aggregate markets that exist north and south of the River Humber;
- Different Mayoral Combined Authority Geographies;
- To enable us to be more agile in updating North Lincs' Evidence Base and combine it with demand forecasts normally carried out as part of aggregate apportionment background papers; and
- So that LAA data is more meaningful in informing Local Plans and DM Decisions

It was decided to produce this separate document for northern Lincolnshire. An LAA specifically for the East Riding and Hull geography is yet to be produced.

5.30 AM2023 shows that less than 1% of the Humber's sand and gravel consumption, amounting to less than 2,260 tonnes came from the northern Lincolnshire area in 2023. The figures do not show where in the Humber area material from northern Lincolnshire is consumed. 80% to 90% of the Humber area's sand and gravel consumption was sourced from East Yorkshire, amounting to between 180,800 and 203,400 tonnes. Again, the figures do not show where in the Humber the material is consumed. Research conducted in 2024 showed there are limited movements of aggregate across the Humber Bridge. It is therefore a fair assumption that aggregates extracted in either North Lincolnshire or East Yorkshire but consumed within the Humber remain South or North of the Humber, respectively.

Population Forecasts

5.31 Current (from Nomis on 22 October 2025) population projections state a current (2025) population for North Lincolnshire of 171,028 and a future population of 170,642 by 2043. The projections for North East Lincolnshire are 158,102 and 155,668 by 2043. On the face of it, these projections suggest that the population of the area is likely to go down. In reality, the authorities are planning for annual housing targets of around 622 and 644 for NE Lincs and NE Lincs respectively. Therefore, it is very unlikely the population will decrease as suggested by the projections. A disclaimer on the ONS website does explain that the population projections are not forecasts and take no account of local development aims, policies on growth, capacity to accommodate population change, or economic factors that could affect the population in the future. As with the national population projections, they also do not try to predict any potential demographic consequences of future political or economic changes. There is already a margin of error in the underlying input data used in the projections, for example, estimates of the current population and past migration flows. In addition, assumptions about the future cannot be certain, as patterns of births, deaths, and migration are always liable to change and can be influenced by many factors. As a result of this, actual future population size can deviate from that which is projected.

5.32 Given the above, it is difficult to justify the use of population projections for informing future aggregate provision requirements.

The proportion of aggregates likely to be used in housebuilding

5.33 Future house building is likely to require a significant amount of aggregates over the lifetime of the two northern Lincolnshire Authorities' plans. As both adopted Local Plans are over five years old, each Authority is required to plan to meet their housing need according to the Governments standard method. This means planning for around 622 homes per annum in North East Lincolnshire and 644 homes per annum in North Lincolnshire. This entails delivering a total of around 22,770 homes in northern Lincolnshire between now and 2043.

5.34 As set out above. Historically, sand and gravel has been the most important aggregate resource found in the Northern Lincolnshire area. It is principally used for a variety of building purposes including asphalt, concrete and mortar. Generally, the quality of the area's chalk deposits for aggregate use is poor. Small quantities are sold for low grade aggregate applications such as fill and sub-base roadstone. The area's Lincolnshire Limestone has been historically worked for aggregate limestone, again mainly for lower grade applications.

5.35 In order to establish how important aggregates from northern Lincolnshire are for housebuilding, the two graphs below plot housing delivery in northern Lincolnshire against sales of primary sand and gravel aggregate and crushed rock aggregate from northern Lincolnshire over a ten year period.

Figure 6: Sand and Gravel Aggregate Sales vs Housing Delivery over time

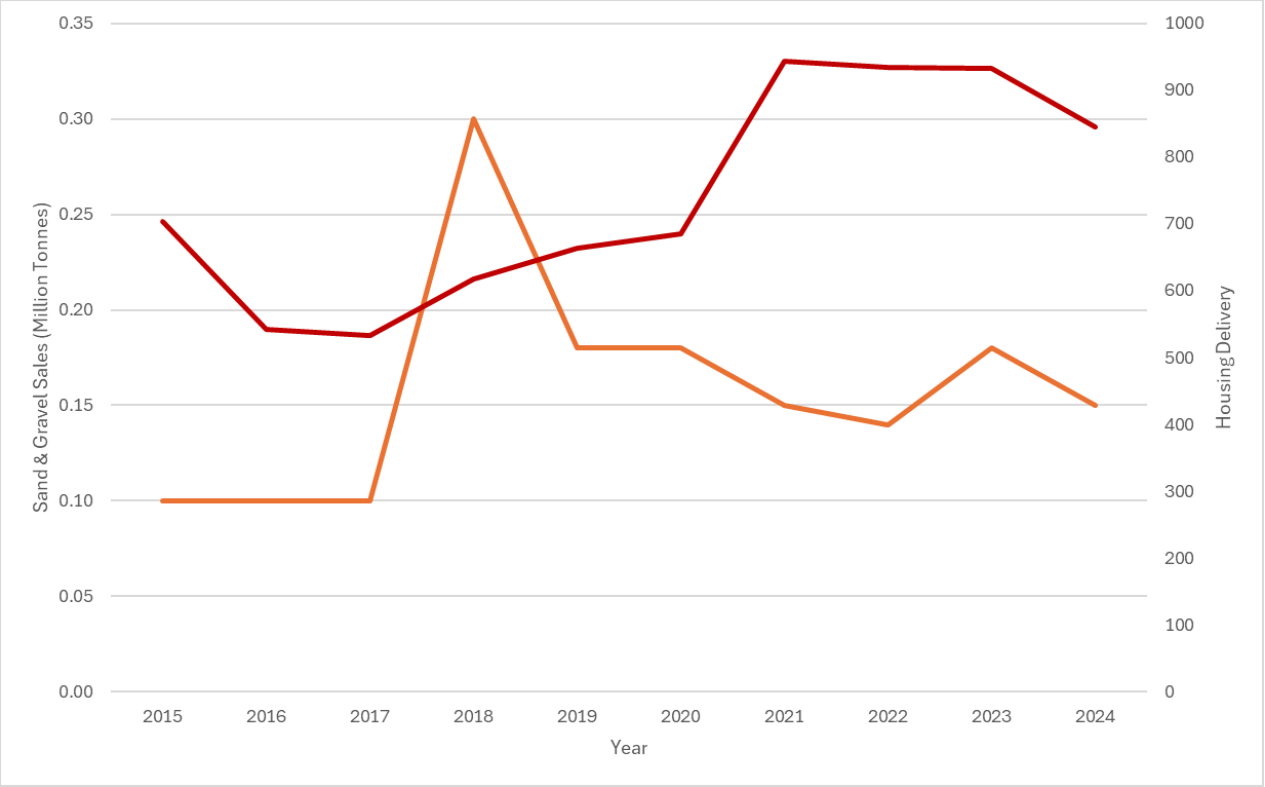
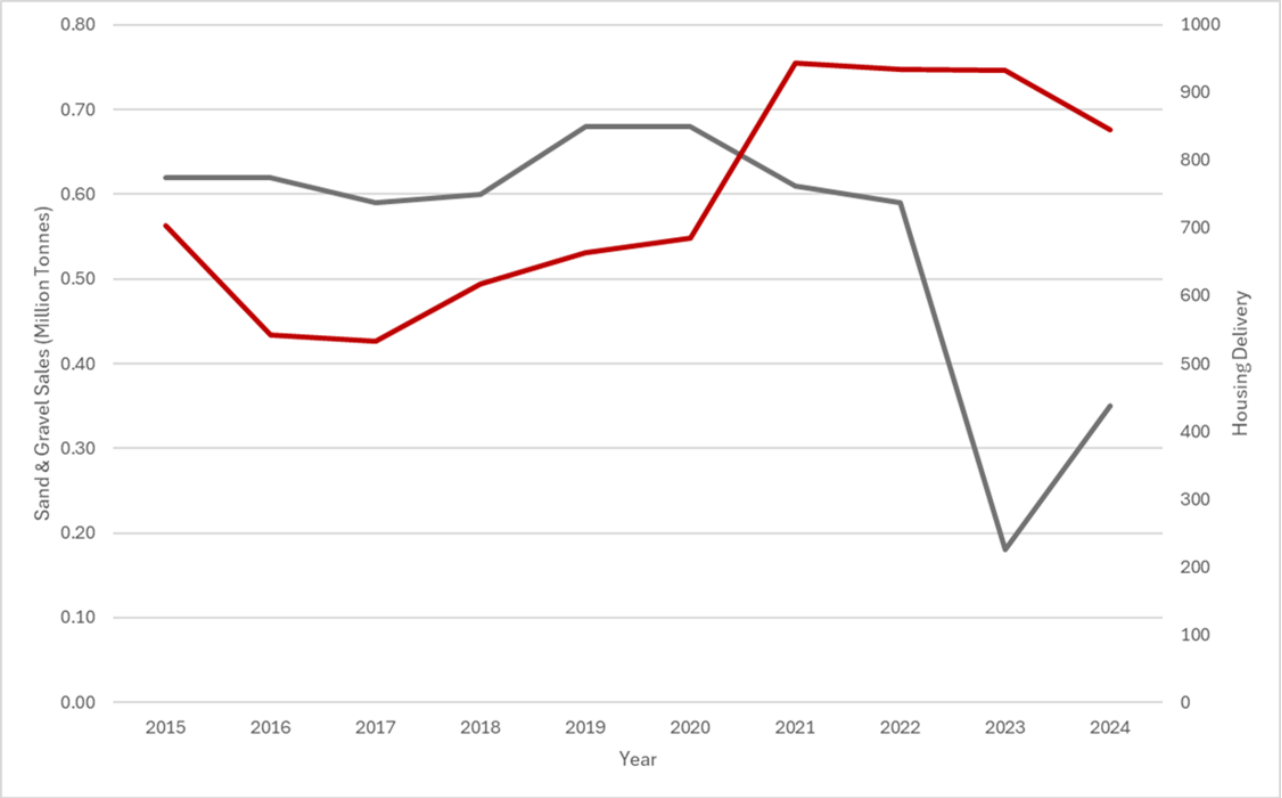


Figure 7: Crushed Rock Aggregate Sales vs Housing Delivery over time



5.36 The graphs above do not appear to show any discernible relationship between aggregate sales and delivery of housing in northern Lincolnshire. There certainly is not a trend of more housing equalling a need for more aggregates in a northern Lincolnshire context. It would therefore be difficult to justify the use of future housing requirements for informing aggregate provision requirements.

The likely draw on aggregates from other major construction and infrastructure projects

5.37 The Northern Lincolnshire area will see a number of major developments and one-off infrastructure projects over the coming years, all of which will have an important role in helping to support the local economy and housing growth. These have the potential to increase demand for aggregates.

5.38 **Able Humber Port** – this major project will involve the development of 245ha of land on the South Humber Gateway for the manufacturing and assembly of off-shore wind turbines with extensive areas of storage for the component parts of off-shore wind turbines. It will involve the construction of a 1.3km long quay that will extend into the Humber Estuary to allow operators to load turbines onto ships to be taken to their destinations off the East Coast. This project is the largest of its type in the country and will be a major job creator.

5.39 The 1.3km quay will be constructed from a steel pile wall. The space between this wall and the existing flood defences will be filled with sea or estuary dredged material to bring the levels up to the proposed finished level of the quay. The upper sections of fill, approximately 1 metre, will comprise imported stone that will provide a drained heavy duty pavement suitable for operation plan which will include tracked cranes and self-propelled mobile transporters. For the manufacturing area of the site, it is expected that 2 million m^3 of fill will need to be imported onto the site over a period of around two years. Ground raising and levelling will take place. Details of where this would come from and the type of material area are not available[17].

[17] Able Marine Energy Park (AMEP) – Local Impact Report, NLC (2012): Section 2.9 - http://infrastructure.planningportal.gov.uk/wp-content/ipc/uploads/projects/TR030001/2.%20PostSubmission/Representations/LIR%20and%20SoCG/LIR-001%20Local%20Impact%20Report%20by%20North%20Lincolnshire%20Council.pdf

5.40 **Able Energy Park** – this project, which has received planning consent, involves the development of 454ha of land for facilities to support the growth of the South Humber Gateway. It includes the creation of transport depots, warehousing, and external storage areas, together with offices, a business park and a motel. There will be road and rail links to Immingham Port and the Humber Sea Terminal, and a large part of the site will also provide landscaping and provision of areas for wildlife and ecology.

5.41 **Stallingborough Enterprise Zone** – A 64ha employment site, allocated for E(g) , B2 and B8 uses, located just off the A180 Stallingborough interchange and being brought forward for development through the SHIIP programme.

5.42 **Lincolnshire Lakes** – this development is one the area's largest regeneration projects. The vision is to create six high quality, sustainable village communities containing a total of 6,000 new homes on land between the western edge of Scunthorpe and the River Trent, set within an attractive waterside environment with major opportunities for leisure, sport and recreation. It will also provide an ideal setting for new businesses with the creation of new high quality employment space within a business park. All new development will meet the highest environmental standards.

5.43 Using the BGS "rule of thumb", building the 6,000 new homes would require a total of 360,000 tonnes of aggregates. If infrastructure is included this could mean 2.4 million tonnes being needed. It has not been possible break these tonnages down into sand and gravel, and crushed rock requirements.

5.44 **Grimsby West** – this development is a significant strategic housing site located to the west of the Grimsby urban area, providing in excess of 3,300 homes, 2 local centres and a through school.

5.45 It is very difficult to determine whether or not such large projects, would have a significant additional draw on aggregates within the area as materials may be sourced from neighbouring areas or from elsewhere. There isn't a significantly greater number of major construction and infrastructure projects projected to occur in future compared to the past and such projects have not historically caused any significant peaks in demand for aggregates within the northern Lincolnshire area.

Secondary and recycled aggregates

5.46 As set out above. In 2021, total recycled and secondary sources of aggregates are estimated to have accounted for 28% (69.6 million tonnes) of total aggregates supply in Great Britain, maintaining a leading position internationally in the use of recycled and secondary aggregates. This indicates the use of these materials in Britain is potentially reaching full potential. It is the highest in Europe and has been levelling off following a peak around 2009. Despite the significant financial advantages of recycling waste into aggregates, the unavailability of further sources of unprocessed raw materials is hampering further increases in market share.

5.47 There is therefore little further progress that can be made in replacing primary aggregate with secondary and recycled materials without major investment in the few remaining significant sources of secondary aggregates in North Wales and Cornwall, which in any event would not affect the northern Lincolnshire area.

Marine sources of aggregate

5.48 The findings of the Crown Estate Annual Review 2024 shows that 6.88 million tonnes of marine sand and gravel can be extracted from 10 licenses annually in the Humber marine region. Current estimates suggest there are 14 years of primary marine aggregate production permitted in areas of the North Sea off the Humber. The Crown Estate Summary of statistics shows that 231,907 tonnes of sand and gravel was landed on the Humber wharves in 2024. As noted above, the majority of landings take place on the relocated Humber Sand and Gravel facility at King George Dock in Hull.

5.49 There are largely separate aggregate markets north and south of the River Humber. The Marine Aggregates Study, Jan 2014 by URS, states the market area served from the Port of Hull is generally no greater than 25 miles. Beyond this distance transport costs make prices uncompetitive. Toll prices for

HGVs on the Humber bridge are stated as being a significant barrier to wider distribution to the south and constrain the distance lorries carrying marine aggregate can travel to compete with land won sources.

5.50 Engagement with quarry operators on both sides of the Humber in 2024 established that just 12,000 tonnes of sand and gravel moves between northern Lincolnshire and East Riding annually (from the seven operators that responded). This amounts to just 1.6% of total Humber land-won aggregate sand and gravel sales in 2022. In terms of crushed rock, it was established (from the six operators that responded) that just 20,000 tonnes moves between northern Lincolnshire and East Riding annually. This amounts to just 1.9% of total Humber land-won aggregate crushed rock sales in 2022.

5.51 During the 2014 Study, stakeholders considered the move towards a greater utilisation of marine aggregates will most likely take place beyond 5 years and thereafter increase with time. Economically, operators did not think the marine option was viable at this point of time but the viability gap against land won aggregate was narrowing. Looking at table 14 above, there was some evidence that marine sand and gravel production was increasing, however this reached a peak in 2022 and has since dropped back down to around 100,000 tonnes below this level.

5.52 Due to the location of Humber landings of marine sand and gravel on the north bank and the relatively separate aggregate markets for sand and gravel north and south of the Humber, it would not be realistic to expect marine aggregates to meet any increased needs within northern Lincolnshire into the future.

Future Requirements to meet forecast demand in Northern Lincolnshire

5.53 Other than considering past sales data, there is no robust and accepted methodology for directly linking demand for aggregates (both crushed rock and sand and gravel), with housebuilding or the economy of the area as a means of projecting aggregate demand into the future. Potential sources of supply and linkages between supply and demand have been discussed and discounted in this section. Whilst this method of projecting demand into the future accepts that the area will rely on imports to meet demand, this would be the geological and commercial reality, no matter what method is used. This is because some of the aggregates the area needs do not naturally occur within northern Lincolnshire.

5.54 The preferred approach for aggregate sand and gravel is to take the annual average sales rate over the previous 10 year period as set out in table 1 of 0.16 million tonnes per annum as a starting point. There is not a discernible trend in primary sand and gravel aggregate sales over this period, either up or down.

5.55 In line with PPG, regard has been had to average sales over the last 3 years in particular to identify the general trend of demand as part of the consideration of whether it might be appropriate to increase supply. This average is 0.16mt- the same as the 10 year average, indicating it is not appropriate to increase supply. Given the very modest current landbank of 0.88 years against 10 year average sales, it is considered appropriate to plan for a small uplift in demand of 10% through the Local Plan in order to ensure the forecast remains robust and to ensure delivery as part of implementing the Managed Aggregate Supply System.

5.56 The preferred approach for aggregate crushed rock is to take the annual average sales rate over the previous 10 year period as set out in table 4 of 0.55 million tonnes per annum as a starting point. Following annual sales remaining consistently around 0.60 million tonnes per annum, sales then dipped to 0.18mt and 0.35mt in 2023 and 2024 respectively. With respect to average sales over the last 3 years. This is lower than the 10 year average at 0.37mt, indicating it is not appropriate to increase supply. Unlike sand and gravel it is **not** considered appropriate to plan for a small uplift in demand through the Local Plan. This also takes into consideration the current crushed rock landbank of 31.36 years against the 10 year average sales. This is over three times the 10 year NPPF landbank requirement for crushed rock.

5.57 As set out above. In practical terms, it is the North Lincolnshire Local Plan, which will need to plan for the above requirements, given it has the existing primary aggregate operations as well as ongoing operator interest. As a result, the aggregates provision (forecast demand) it will need to plan for are:

- Sand and Gravel - 0.18 million tonnes per annum
- Crushed Rock - 0.55 million tonnes per annum

5.58 Based on this 'annual forecast demand' according to PPG paragraph: 083 Reference ID: 27-083-20140306, the current aggregate landbanks stand at:

- Sand and Gravel – 0.78 years
- Crushed Rock – 31.36 years

5.59 The landbank for sand and gravel is low due to suitable proposals not coming forward for sand and gravel extraction to replenish the landbank. North Lincs Sand and Gravel's operation at Westwoodside has also now been worked out and the company is now focussed on a new operation across the boundary in the City of Doncaster.

6. FUTURE NON-AGGREGATE SUPPLY AND DEMAND

6.1 The NPPF requires that a steady and adequate supply of industrial minerals is planned for by maintaining a stock of permitted reserves to support the level of actual and proposed investment required for new or existing plant, and the maintenance and improvement of existing plant and equipment. A footnote confirms that reserves should be at least 10 years for individual silica sand sites; at least 15 years for cement primary (chalk and limestone) and secondary (clay and shale) materials to maintain an existing plant, and for silica sand sites where significant new capital is required; and at least 25 years for brick clay, and for cement primary and secondary materials to support a new kiln.

6.2 NPPG confirms that the required stock of permitted reserves for industrial minerals should be calculated when a planning application is submitted to extract the mineral (through either a site extension or a new site) or when new capital investment is proposed. It confirms the overall amount required should be directly linked to the scale of capital investment to construct and operate the required facility (such as a cement plant or brick factory).

6.3 Despite the above, during the previous examination of the North Lincolnshire Local Plan, the Inspector posed a question as to 'where is the strategy for silica sand and brick clay including supply requirement and their landbank figures?'. This section looks to establish landbanks against any policy requirements to address this question, should it be raised again in future.

6.4 The non-aggregate operations in northern Lincolnshire are:

- Melton Ross Quarry operated by Singleton Birch extracts chalk used predominantly for industrial operations, including lime. The material and uses it is put to do not fit into a category of operation the NPPF requires a specific landbank for. This has been confirmed by the operator who stated that Melton Ross site is a chalk quarry and lime kilns. We currently have around 25 years of reserves covered by planning permissions, with further land bank available beyond this. However, it looks like you only need to provide for minerals into sand, cement and brick manufacturing which would exclude us.
- Messingham Quarry activities operated by Sibelco are for silica sand for coloured glass manufacture and foundry sand. The NPPF requires a 10 year landbank for individual silica sand sites. Based on the sales and reserves reported through the annual aggregates survey it had a landbank of around 3.92 years for the site at the end of 2023. Clearly, exact details of sales and reserves are commercially confidential and cannot be stated for individual operators. The landbank above falls below the 10 years advised for individual silica sand sites in the NPPF. Sibelco was contacted to gain a more up to date position on the landbank. They stated that based on the last 10 years sales average the landbank figure is 2.45 years at 1st January 2025. Sibelco plan to make significant capital investment in their operation and so are working on the basis requiring at least 15 years landbank where capital investment is required. North Lincolnshire Council will work with them to understand how the Local Plan can facilitate an uplift in permitted reserves to meet the relevant NPPF landbank requirement for silica sand.
- There are two tile works at Barton operated by William Blyth alongside two clay abstraction sites. The NPPF requires least 25 years landbank for brick clay. The operator has informed that as of October 2025 there is around 5-6 years worth of reserves left at their main site at Hoe Hill. Regarding the reserves at Far Ings site, provided the material doesn't differ too much then they would expect there is around 15-20 years supply left on that site. Therefore, together these two sites provide their tile works with a landbank of over around 25 years. North Lincolnshire Council will work the operator to understand how the Local Plan can facilitate any necessary uplift in permitted reserves to meet requirements. Including an NPPF requirement for at least 25 years landbank for brick clay to support a new kiln, if needed.
- Low Melwood Quarry, near Epworth is operated by North Lincs Aggregates Limited, but has not been worked for some time and, according to its owners, will only be so as and when any ad hoc demand materialises for the brick clay resources there.
- There was a cement works and associated chalk quarry operated by Cemex at South Ferriby. This was mothballed in 2020 but is still capable of coming back into use.

7 CONCLUSION

7.1 It is essential that a steady and adequate supply of aggregates is maintained to support growth and development in the northern Lincolnshire area. In accordance with national policy and guidance on aggregate supply and planning to meet future demand, a rolling average of 10 years' sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources) has been used to determine what amount of aggregate to plan for through the North Lincolnshire Local Plan. This determined that **0.18 million tonnes of aggregate sand and gravel and 0.55 million tonnes of aggregate crushed rock need to be planned for per annum**.

7.2 Whatever method of projecting aggregate demand into the future is used. There has to be an acceptance the area will always partly rely on imports to meet demand, which reflects the geological and commercial reality. This is because some of the aggregates the area needs do not naturally occur within northern Lincolnshire.

7.3 Based on the annual rate of future demand established above, the landbank at the end of 2024 for **sand and gravel is 0.78 years**- 6.22 years below the NPPF requirement of 7 years. For **crushed rock it is 31.42 years**- 11.42 years above the NPPF requirement of 10 years.

7.4 With respect to aggregate sand and gravel, para 226(e) of the NPPF is triggered. This means that there is a risk to the security of supply due to the low landbank level. It indicates the **additional provision that needs to be made for new extraction and alternative supplies in the Local Plan.** This low landbank is an indicator that suitable applications for sand and gravel should be permitted as a matter of importance to ensure the steady and adequate supply of aggregates.

7.5 The needs of non-aggregate mineral operations are dealt with on an individual basis. The operations of concern in northern Lincolnshire are:

- Melton Ross Quarry operated by Singleton Birch extracts chalk used predominantly for industrial operations, including lime. The material and uses it is put to do not fit into a category of operation the NPPF requires a specific landbank for.
- Messingham Quarry activities operated by Sibelco are for silica sand for coloured glass manufacture and foundry sand. The NPPF requires a 10 year landbank for individual silica sand sites. Based on the sales and reserves reported through the annual aggregates survey it had a landbank of around 3.92 years for the site at the end of 2023. The landbank falls below that advised by the NPPF. Sibelco was contacted to gain a more up to date position on the landbank. They stated that based on the last 10 years sales average the landbank figure is 2.45 years at 1st January 2025. Sibelco plan to make significant capital investment in their operation and so are working on the basis requiring at least 15 years landbank where capital investment is required. North Lincolnshire Council will work with them to understand how the Local Plan can facilitate an uplift in permitted reserves to meet the relevant NPPF landbank requirement for silica sand.
- North Lincolnshire Council will work with them to understand how the Local Plan can facilitate an uplift in permitted reserves to meet the NPPF 10 year landbank requirement.
- There are two tile works at Barton operated by William Blyth alongside two clay abstraction sites. As of 2023, reserves at each were: Hoe Hill- the site where clay is currently extracted, has 5-6 years of landbank and Far Ings circa 15-20 years provided the material doesn't differ too much. Far Ings has not been worked for a long time. Together, these two sites provide tile works with a landbank of over around 25 years. North Lincolnshire Council will work the operator to understand how the Local Plan can facilitate any necessary uplift in permitted reserves to meet any requirements. Including an NPPF requirement for at least 25 years landbank for brick clay to support a new kiln, if needed.
- Low Melwood Quarry, near Epworth is operated by North Lincs Aggregates Limited, but has not been worked for some time and, according to its owners, will only be so as and when any ad hoc demand materialises for the brick clay resources there.
- There was a cement works and associated chalk quarry operated by Cemex at South Ferriby. This was mothballed in 2020 but is still capable of coming back into use.

Monitoring and Reviewing the Minerals Assessment

7.6 The LAA which forms part of this document should be undertaken on an annual basis. As such the contents of this document will be kept under review. This will be done as part of the annual monitoring process for the YHAWP and existing and emerging Local Plans for the area.

7.7 Aggregates sales, uses and reserves data will be collected by each MPA in order to feed into subsequent LAAs. Landbanks will be monitored to check the requirements of the NPPF and local aggregate needs are being met.

Consideration by the Yorkshire and Humber Aggregates Working Party

7.8 This document was sent out to consultation with the Yorkshire and Humber Aggregate Working Party (YHAWP) on 5th November, 2025 to 28th November, 2025. Six responses were received, which are detailed in appendix 1. The document was 'ratified' by the YHAWP on 19th December, 2025.

9. GLOSSARY

Aggregate – Sand and gravel, crushed rock and other bulk materials used in the construction industry for purposes such as the making of concrete, mortar, asphalt or for roadstone, drainage or bulk filling.

Aggregate Working Party (AWP) – The AWP is a technical working group with membership drawn from mineral planning authorities, the minerals industry and the Department for Levelling Up, Housing and Communities (DLUHC). The Humber authorities are members of the Yorkshire & Humber AWP.

Alluvium - Loose, unconsolidated soil or sediments, eroded, deposited, and reshaped by water in some form in a non-marine setting. Alluvium is typically made up of a variety of materials, including fine particles of silt and clay and larger particles of sand and gravel. When this loose alluvial material is deposited or cemented into a lithological unit, or lithified, it would be called an alluvial deposit.

Basic Oxygen Slag – By-product of the steel making industry from works using basic oxygen furnaces.

Bedrock Geology (formerly known as 'solid' geology by BGS) - Is a term used for the main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water. The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 2.6 million years ago.

Blast Furnace Slag – By-product of the iron making industry, where blast furnaces are used to make iron.

Blown Sands - Loose sand covering other mineral deposits which has been deposited as a result of wind.

Boulder Clay - A deposit of clay, often full of boulders, which is formed in and beneath glaciers and ice-sheets wherever they are found, but is in a special sense the typical deposit of the Glacial Period in northern Europe and North America. Boulder clay is variously known as till or ground moraine.

Brick Clay - Term used to describe clay and shale used in the manufacture of structural clay products such as bricks, pavers, clay tiles for roofing and cladding and vitrified clay pipes.

British Geological Survey (BGS) – Founded in 1835, the BGS is the world's oldest national geological survey and the United Kingdom's centre for earth science information and expertise. The BGS is responsible for advising the UK government on all aspects of geoscience as well as providing impartial geological advice to industry, academia and the public.

Chalk - A soft, white, porous sedimentary rock, a form of limestone composed of the mineral calcite. Occurs extensively in southern and eastern England, and is a key component in the manufacture of cement and lime.

Colliery Spoil - Waste material from the coal mining industry, previously deposited in spoil heaps at colliery sites.

Construction, Demolition & Excavation Waste (CDEW) - Waste generated during construction and demolition processes which includes masonry, wood and rubble. CDEW is by far the largest waste stream by weight, although significant proportions are currently recycled. This can be used as a secondary aggregate.

Cretaceous - The geological period and system dating from 145.5 to 65.5 million years ago.

Crown Estate – Are responsible for managing a wide ranging property portfolio on behalf of the Crown, including much of the seabed around the United Kingdom. They are responsible for licensing areas for dredging of marine aggregates.

Crushed Rock – Hard rock, such as limestone, which has been quarried, fragmented and graded for use as aggregate.

Department for Housing, Communities & Local Government (DHCLG) – The government department responsible for local government, housing, planning, regeneration, social exclusion and neighbourhood renewal. It works with other government departments, local councils, businesses, the voluntary sector, and communities

themselves, to help create sustainable communities. DCLG data sets are referenced throughout this document, but the department has now been renamed and known as the Department for Levelling Up, Housing and Communities (since September 2021).

Duty to Co-operate – Local Planning Authorities are expected to address strategic issues in conjunction with neighbouring authorities (who are considering the same issues). It is a requirement of the Localism Act 2011.

Electric Arc Furnace Slag – A by-product of the steel making industry from works using electric arc furnaces.

Furnace Bottom Ash – The 'coarse' ash fraction produced in the furnaces of coal fired power stations when pulverised coal is fed into the boilers and burnt at high temperatures and pressures. Used in road construction.

Glacial Sand & Gravel – Sand and gravel deposited by glaciers or ice sheets when they have retreated.

Ironstone - Fine-grained, heavy and compact sedimentary rock. Its main components are the carbonate or oxide of iron, clay and/or sand. Traditionally the source of iron ore for the British iron industry resulting in the establishment of the iron and steel industries in Scunthorpe. Outcrops of Frodingham Ironstone occur to the east of Scunthorpe.

Jurassic - The geological period and system dating from 196.6 to 145.5 million years ago.

Landbank – A landbank is the sum in tonnes of all permitted reserves for which valid planning permissions are extant, this includes non-working sites but excludes dormant sites and "inactive sites", divided by the annual rate of future demand based on the latest LAA. They are a monitoring tool to provide MPA's with early warning of possible disruption to the provision of an adequate and steady supply of land-won aggregate in their area.

Lias; Upper, Middle & Lower - The Lias Group (or Lias) is a lithostratigraphic unit (a sequence of rock strata) found in a large area of western Europe, including the British Isles, the North Sea, the low countries and northern Germany. It consists of marine limestones, shales, marls and clays often divided into Lower, Middle and Upper subgroups. Within the Humber area, it consists mainly of limestone.

Licensed Dredging Area – Areas allocated under the sea where dredging is allowed to take place with the permission of the Marine Management Organisation.

Limestone - A sedimentary rock composed largely of the minerals calcite and/or aragonite, which are different crystal forms of calcium carbonate. Used in the construction of buildings as well as the production of lime, mortar and cement.

Local Aggregate Assessment (LAA) – A report prepared by one or several Minerals Planning Authority(ities) which assesses the demand for and supply of aggregates now and in the future.

Managed Aggregate Supply System (MASS) – The system used by Government to ensure that there is a steady and adequate supply of aggregate minerals to meet national and local requirements.

Marine Dredged Sand & Gravel – Sand and gravel dredged from the sea.

Mercia Mudstones - Formerly known as Keuper Marl: Characterised by a sequence of brown, red-brown, calcareous clays and mudstones, with occasional beds of impersistent green siltstone and fine-grained sandstone.

Minerals Planning Authority (MPA) – The Local Authority responsible for the control of mineral extraction and waste management development, through forward planning, determining planning applications, monitoring and enforcement.

National Planning Policy Framework (NPPF) – Introduced in March 2012, revised in July 2018 and again in June 2019, July 2021 and finally in December 2023, the NPPF is a result of the Government's wish to streamline and simplify the planning system in England. It sets out the Government's planning policies for England and how

these are expected to be applied. It replaced Planning Policy Statements, Planning Policy Guidance, Minerals Policy Statements, Minerals Policy Guidance and a number of other Circulars and Letters to Chief Planning Officers. It is a material consideration in determining planning applications and must be taken into account when preparing local and neighbourhood plans.

Oolitic; Inferior & Greater – Groups of rocks dating from the middle Jurassic period consisting mainly of limestone. A band of these run north to south through the Humber area, adjacent to the Yorkshire Wolds and Lincolnshire Wolds from Market Weighton in the north to the boundary with Lincolnshire.

Peat - Made up of partially decaying vegetation, plant matter, trees and occasionally animal remains. It forms in wetland bog or marshland areas where decay is inhibited by the acidic and anaerobic conditions. It is soft in character and any water can be forced out when put under pressure. It is used primarily in horticulture to improve soils, and can also be used as fuel.

Pulverised Fuel Ash (PFA) - A by-product of pulverised fuel (typically coal) fired power stations. The fuel is pulverised into a fine powder, mixed with heated air and burned. The resultant ash is used as engineering fill and as a component for concrete.

Quaternary - The most recent of the three periods of the Cenozoic Era in the geologic time scale. This period runs for around 2.6 million years ago to the present.

Recycled Aggregate – Can be sourced from construction and demolition waste, highway maintenance waste and excavation and utility operations and then be reused as aggregate.

Regional Spatial Strategy (RSS) – A regional level of strategic planning with which local authority plans were required to be broadly consistent. The RSS for the Yorkshire and Humber region was revoked by the Government in February 2013.

Sand & Gravel – Rock which nature has already broken into fragments mostly by weathering and by erosion during the ice age.

Secondary Aggregate – Derived from a range of materials which may be used as aggregate, including blast furnace slag.

Sherwood Sandstone - The Sherwood Sandstone Group is a Triassic lithostratigraphic group (a sequence of rock strata) which is widespread in Britain, especially in the English Midlands. The name is derived from Sherwood Forest in Nottinghamshire which is underlain by rocks of this age. It runs southwards from north-east England, through the Vale of York into Nottinghamshire.

Silica Sand - Silica sand is a mineral of national importance as it contains a high proportion of silica in the form of quartz and relatively low levels of impurities compared with sands used as construction aggregates. It is used mainly as raw material for the glass and foundry casting industries but can have a wide range of other uses including ceramics and chemicals manufacture, firing and drying.

Sub-Regional Apportionment – The splitting of regional supply guidelines for aggregate minerals between local planning authorities or sub-regions.

Superficial Deposits - Formerly known as 'drift' deposits, these are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 2.6 million years from the present. They rest on older deposits or rocks referred to as bedrock.

Triassic – The geological period and system that dating from about 250 to 200 million years ago.

Yorkshire and Humber Aggregate Working Party (YHAWP) - The YHAWP was established to collect data and monitor the production and supply of aggregate minerals for each of the sub regions within the Yorkshire and the Humber, as well as the reserves of aggregate minerals covered by valid planning permissions and provide technical advice on the supply of and demand for aggregates from their areas. The Aggregate Working Party is

not a policymaking body but is responsible for data collection to facilitate planning by Mineral Planning Authorities (MPAs), national government agencies and the aggregate minerals industry, and to inform the general reader. Funding for the secretariat is provided by the Department for Levelling Up, Housing and Communities (DLUHC) but the members of the Aggregates Working Party provide their time on a voluntary basis.

Yorkshire & Humber Plan – See Regional Spatial Strategy (RSS)**.**

APPENDIX 1: YHAWP Consultation responses to a draft version of this LAA, the Councils' response, and any amendments to the document as a result.

Consultation took place with the Yorkshire and Humber Aggregate Working Party on 5th November, 2025 to 28th November, 2025. Four responses were received, which are detailed below. The document was 'ratified' by the YHAWP on 19th December, 2025.

Respondent	Comments Summary	Councils' Response and Amendments
Helen McCluskie, City of Doncaster Council	Correct name of 'City of Doncaster Council' needs to be used where relevant. Agree with table 8, table 9, and paras 5.18, 5.20 and 5.22. With reference to para 5.21, is it worth caveating this information relating to Doncaster, as I had to estimate quite a few of our sites data as we had no responses from the smaller operators.	Noted and name amended where appropriate. Noted. Caveat now included at this paragraph.
Verbal Comment at YHAWP meeting of 12/11/25	Would be good to have a commentary as to reason why there is such a low landbank of aggregate sand and gravel.	Para 5.59 explains 'The landbank for sand and gravel is low due to suitable proposals not coming forward for sand and gravel extraction to replenish the landbank. North Lincs Sand and Gravel's operation at Westwoodside has also now been worked out and the company is now focussed on a new operation across the boundary in the City of Doncaster.'
Morgan Stringer, Wakefield Council	In the context of the draft West Yorkshire Local Aggregate Assessment 2024, it is apparent that there is minimal movement of aggregates between the 2 areas. It is noted that both reports highlight the future importance for marine won aggregates and associated transportation infrastructure. Therefore, Wakefield is supportive of ongoing consideration of this matter through the Y&H Aggregate Working Party and duty to cooperate.	Noted.
Chris Herbert, Mineral Products Association	Further comment on why the sand and gravel landbank is so low would be helpful, for example is it lack of resource/lack of applications or lack of approvals? Para 3.3 – should the figure be 0.16Mt Para 3.9 – is there a reason for the dip – did a site close? Para 4.4 and Table 7 – There are some big drops over time in imports and consumption here, particularly with sand and gravel – again is there any explanation behind this?	See above. Para 5.59 now explains. Amended to 0.16m Para 3.9 amended to say, 'This may have been due to one quarry changing ownership and another reducing aggregate production.' I'm afraid not without carrying out another detailed piece to investigate. The information is from The BGS' National Surveys commissioned by Government

		and the Surveys do not explain this trend.
	Table 8 and para 4.5 – East Riding for sand and gravel and Yorkshire Dales NP for crushed rock appear to be the two significant areas based on their percentages – text should identify this.	The text now identifies this.
	Para 5.53 – this section should make the point that this level of provision will mean that the area will remain reliant on imports to meet demand – links to the point above.	The point has now been made that 'Whatever method of projecting aggregate demand into the future is used. There has to be an acceptance the area will always partly rely on imports to meet demand, which reflects the geological and commercial reality. This is because some of the aggregates the area needs do not naturally occur within northern Lincolnshire.'
Richard Leonard, Lincolnshire County Council	I can confirm that we have no specific comments to make on the document, other than to note the situation in terms of your sand and gravel landbank and the need for additional provision, and that you are in the process of updating your local plan (including undertaking a call for sites) to seek to identify provision to this end.	Comments noted.
Nick Reeves, Kirklees Council (late comment)	Regarding Table 8 in the LAA - having checked the results of the 2019 Aggregate Minerals Survey we agree that the figure in Table 8 for crushed rock produced in Kirklees but then consumed in the Humber sub-region is correct. We have also checked the 2023 Aggregate Minerals Survey and again, it is correct that none of the crushed rock produced in Kirklees was consumed in the Humber sub-region. The 2019 figure would appear to be a one-off and the small amount of sales could be explained by information in the LAAs for West Yorkshire and the emerging Kirklees Minerals Evidence Base which state that the crushed rock produced in Kirklees (and West Yorkshire in general) is derived from building stone extraction and that it is of a low grade.	Comments noted. Para 4.5 now notes the low grade and origin of Kirklees (and wider West Yorkshire) crushed rock.