

The Minerals Local Plan for Staffordshire 2015 to 2030



Blank page

The Minerals Local Plan for Staffordshire (2015 to 2030) (Adopted 16 February 2017)

The Minerals Local Plan for Staffordshire (2015 to 2030)

(Adopted 16 February 2017)

Blank page

Foreword

Managing our mineral resources is an important part of supporting Staffordshire's economy and local jobs but we have to carefully balance the need for minerals with the protection of our communities and our environment.

The new Staffordshire Minerals Local Plan provides a clear vision of how we intend to achieve sustainable economic development of minerals in Staffordshire. It covers location, operation and restoration of mineral sites taking us up to 2030. The new Plan is a living document and we will keep it under review to ensure that it takes account of changing circumstances and continues to provide certainty for the minerals industry and local communities.

It is now up to the minerals industry to bring forward sites in the right place and at the right time; to operate the sites to high environmental standards; to engage effectively with the local communities; and, to maximise the opportunities that the sites can bring by restoring them in a way that will enhance Staffordshire's environment.



Mark Winnington Cabinet Member for Economic Growth Blank page

Contents

Forewordi
Contentsv
Chapter 1: Introduction1
What is the purpose of the new Minerals Local Plan for Staffordshire? 1 How did we prepare the new Plan? 3 How have we arranged the new Plan? 3
Chapter 2: Aggregate Minerals5
Where do aggregate minerals occur in Staffordshire? 5 How are Staffordshire's aggregate minerals likely to be developed? 7 When are Staffordshire's aggregate minerals likely to be developed? 8
Chapter 3: Industrial Minerals 11
Where do industrial minerals occur in Staffordshire?
Chapter 4: Hydrocarbons 17
Where do hydrocarbons occur in Staffordshire?17How are Staffordshire's hydrocarbons likely to be developed?18When are Staffordshire's hydrocarbons likely to be developed?18
Chapter 5: Other Minerals
Where do Staffordshire's other minerals occur? 21 How are Staffordshire's other minerals likely to be developed? 23 When are Staffordshire's other minerals likely to be developed? 23
Chapter 6: The Vision, Strategic Objectives and Key Diagram
The Vision
The Strategic Objectives26
Strategic Objective 1 – the provision of minerals to support sustainable economic development
Key Diagram

Chapter 7: The Planning Policies	34
Policy 1: Provision for Sand and Gravel	35
Policy 2: Provision for Industrial Minerals used in the manufacture of cement	39
Policy 3: Safeguarding Minerals of Local and National Importance and Important Infrastructure	42
Policy 4: Minimising the impact of mineral development	45
Policy 5: Planning for Hydrocarbon Extraction	53
Policy 6: Restoration of Mineral Sites	55

Implementation	61
Policy 1: Provision for Sand and Gravel	64
Policy 2: Provision for Industrial Minerals	64
Policy 3: Safeguarding Minerals of Local and National Importance and Important Infrastructure	64
Policy 4: Assessment of Mineral Planning Applications	65
Policy 5: Assessing Planning Applications for Hydrocarbons Development	65
Policy 6: Restoration of Mineral Workings	65

List of Figures

Figure 1: Aggregate minerals in Staffordshire 2013	6
Figure 2: Industrial minerals in Staffordshire 2015	12
Figure 3: Extent of hydrocarbon resources in Staffordshire 2015	20
Figure 4: Other minerals in Staffordshire 2015	22
Figure 5: The Key Diagram	33

List of the Appendices (provided in a separate document)

- Appendix 1: The Policies and Proposals Map and Inset Maps
- Appendix 2: Mineral Sites with Permitted Reserves
- Appendix 3: Lists of Submitted Sand and Gravel Site Options
- Appendix 4: List of Quarries requiring Backfill with Waste
- Appendix 5: Assessment of Landbanks for Industrial Minerals
- Appendix 6: Supporting information for Policy 3 Safeguarding Minerals of Local and National Importance and Important Infrastructure
- Appendix 7: Examples of matters for control by the imposition of planning conditions or to be included in planning obligations

Chapter 1: Introduction

What is the purpose of the new Minerals Local Plan for Staffordshire?

- 1.1 Staffordshire has significant mineral resources and as result of the location of those resources to markets for those minerals, there has been significant quarrying and mining within the county. Quarries in the county have produced two thirds of the sand and gravel sold in the West Midlands and the greatest output of clay and shale compared with any other county in England. In addition, the county has one of only 12 cement kilns in the UK, and is the main source of anhydrite used in the UK cement industry which is produced from Staffordshire's only working mine.
- 1.2 Minerals are essential to support sustainable economic growth including jobs. An industry assessment estimates that each employee in the mineral products industry generates over £110,000 of value added per year which is more than double the national average. The industry nationally generated gross value added of over £4 billion in 2011 amounting to 0.3% of total UK output.
- 1.3 The new Minerals Local Plan is required to take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework¹. This involves meeting objectively assessed needs for minerals and should be based on core planning principles including conservation and enhancement of the natural environment and reducing pollution as well as conserving heritage assets². In preparing the Plan existing strategic environmental initiatives as well as the potential effects of working minerals on local communities, on transport networks and on the environment have been taken into account. Features of Staffordshire that are relevant to the Minerals Local Plan include the following:
 - The Peak District National Park in the north east part of the county which is in the vicinity of Cauldon cement works and the limestone and shale workings;
 - The Cannock Chase Area of Outstanding Natural Beauty where there are two permitted sand and gravel quarries;
 - The National Character Areas promoted by Natural England such as the 'Tame and Trent Valley Washlands', 'Cannock Chase and Cank Wood' and 'White Peak' where there is concentrated mineral working;

¹ Refer to paragraph <u>14</u> of the NPPF

² Refer to paragraph $\frac{17}{17}$ of the NPPF

- The environmental initiative areas supported by the Staffordshire and Stokeon-Trent Local Nature Partnership such as the Central Rivers Initiative which is a partnership involving landowners, local authorities, mineral operators and interested environmental groups to regenerate the Trent and Tame river valleys after mineral working;
- The 66 Sites of Special Scientific Interest based on ecological and/or geological interest, of which 13 are international sites of ecological value (Special Areas of Conservation, Special Protection Areas and Ramsar sites);
- More than 800 Sites of Biological Importance and over 450 Biodiversity Alert Sites; more than 1000 ancient woodland compartments; and almost 70 Regionally Important Geological Sites;
- 4,400 kilometres of public footpaths and bridleways across the county; and
- Over 17,000 known heritage assets across the county. Just over 5,500 of these assets are designated as nationally important. In July 2011 Staffordshire had 5,042 Listed Buildings (419 Grade I and II*); 284 Scheduled Monuments; 15 Registered Parks and Gardens; 2 Registered Battlefields; and 159 Conservation Areas.
- 1.4 The new Minerals Local Plan for Staffordshire* ('the new Plan') identifies suitable land and provides the planning policies that will be used to determine planning applications to develop Staffordshire's minerals resources during the period 2015 to 2030. When adopted, the new Plan will replace the 'saved policies' in the Staffordshire and Stoke-on-Trent Minerals Local Plan 1994 to 2006 ('the old Plan').

* Staffordshire means the area of Staffordshire administered by Staffordshire County Council (the Minerals Planning Authority) but excluding those parts of the county within the Peak District National Park. Unlike our old Plan, our new Plan is not a joint Plan so it does not include the City of Stoke-on-Trent.

How did we prepare the new Plan?

- 1.5 We consulted on an Issues and Options paper in October 2008 and prior to that consultation, invited the industry and landowners to respond to a 'call for sites' in September 2007. In May 2014, we consulted on a first draft of the new Minerals Local Plan that included proposed site allocations. In October 2014, we consulted on additional site options that were submitted as a result of the consultation on the first draft of the Plan. We have also documented the options that we have appraised in drawing up the new Plan and these are set out in a Sustainability Appraisal that is supported by a Strategic Flood Risk Assessment and Habitats Regulations Assessment which we have published alongside the emerging new Plan. These documents were updated as the new Plan progressed to submission.
- 1.6 The final draft of the new Plan was made available for public comment in June and July 2015. In response to the comments received proposed changes were made before the new Plan was submitted to the Secretary of State for Communities and Local Government for examination on 8 January 2016. The examination of the new Plan took place from January 2016 to November 2016 and the Inspector's report was received on 25 November 2016. We approved the adoption of our new Plan on 16 February 2017.

How have we arranged the new Plan?

- 1.7 In preparing the new Plan four important questions have been considered (What? Where? How? and When?)
- 1.8 We began by asking.....*What* mineral resources are likely to be developed in Staffordshire in the period 2015 to 2030?
- 1.9 The answer there are three principal categories of minerals that are likely to be developed in Staffordshire over the next 15 years:
 - **aggregate minerals** (sand and gravel and limestone);
 - **industrial minerals** (cement minerals (limestone, clay and shale and anhydrite) and brick clay); and,
 - hydrocarbons (methane gas).

- 1.10 There are also **other mineral resources** that may be developed in Staffordshire over the next 15 years that require a brief mention:
 - **Sandstone (**building stone and silica sand)
 - Opencast coal

1.11 For each of the three principal categories of minerals resources we then asked:

- Where do these mineral resources occur in Staffordshire?
- **How** are Staffordshire's mineral resources likely to be developed? and,
- When are Staffordshire's mineral resources likely to be developed?
- 1.12 The new Plan has regard to planning policy and guidance published by the Government (currently in the <u>National Planning Policy Framework</u> [abbreviated to NPPF in footnotes] and <u>Planning Practice Guidance</u> [abbreviated to PPG])); and the relevant policies and proposals in the adopted or emerging local plans produced by the Staffordshire District and Borough Councils and neighbouring / nearby planning authorities.
- 1.13 We have therefore arranged the new Plan into chapters that consider the three principal categories of mineral resources in Staffordshire. We then explain our vision and strategic objectives for the new Plan, which then lead onto our detailed planning policies and proposals. The plan concludes with a chapter explaining how we anticipate that the policies will be implemented and monitored. A Policies and Proposals Map is provided alongside this document to indicate the general location of proposed allocations for mineral working together with Inset Maps that show the allocations in more detail.

Chapter 2: Aggregate Minerals

Where do aggregate minerals occur in Staffordshire?

- 2.1 There are two principal sources of aggregate mineral in Staffordshire, sand and gravel, and limestone. A Local Aggregate Assessment (LAA) is published alongside our Annual Monitoring Report. The LAA is an annual assessment of the demand for and supply of aggregates in a mineral planning authority's area.
- 2.2 **Sand and Gravel** resources are widely distributed throughout Staffordshire. In 2013 there were 23 permitted quarries, of which 17 were operational (3 were producing building sands only) and 6 are non-operational of which 3 are 'dormant'. ³
- 2.3 Sand and gravel is mainly used locally (within a 25 mile radius of a site⁴) in the production of concrete, mortar and asphalt and in the manufacture of concrete products which have national markets e.g. concrete roof tiles produced at Burton on Trent and bespoke concrete products such as staircases and flooring slabs at Coltman Precast Concrete, adjacent to Moneymore Quarry, Weeford. Most of the sand and gravel is used to produce concrete although up to 9% of total sales is used to produce mortar/asphalt.
- 2.4 **Limestone** is worked from a single area in the north east of the county and there are 3 limestone quarries with reserves for aggregate use Cauldon Low, Wardlow/ Wredon and Kevin. Currently only Cauldon Low Quarry is operational.
- 2.5 Limestone is currently used locally (within a 25 mile radius of a site) in the production of concrete, asphalt and uncoated road stone.
- 2.6 Provision of aggregate minerals supports markets within the county (including Stoke-on-Trent) and markets outside the county, most significantly within the West Midlands conurbation. Currently, all aggregate minerals are transported to their markets via road transport but there is potential for crushed rock from the Cauldon Low Quarry to re-use a rail line that previously served the quarry.
- 2.7 Figure 1: 'Aggregate minerals in Staffordshire 2013' shows the extent of the aggregate mineral resources and the location of the aggregate mineral sites.

³ Refer to tables 4 and 5 of Local Aggregate Assessment June 2015

⁴ Aggregates Supply in England – Issues for planning (2008) – British Geological Survey (BGS)



Figure 1: Aggregate minerals in Staffordshire 2013

How are Staffordshire's aggregate minerals likely to be developed?

- 2.8 Sand and gravel quarries in Staffordshire are associated with two types of deposits⁵ and the nature of the deposits affects how they are likely to be developed.
- 2.9 **Bedrock deposits:** Staffordshire is one of the few counties in England that has bedrock deposits of sand and gravel and these deposits are a major source of concrete aggregate. They are typically found in the northern, central and south-eastern parts of the county e.g. Croxden Quarry, near Cheadle; Pottal Pool Quarry, near Cannock (within the Cannock Chase Area of Outstanding Natural Beauty); and Moneymore Quarry, Weeford. Other bedrock deposits are worked which produce a building sand only e.g. Cranebrook, near Brownhills.
- 2.10 Bedrock deposits can be deep and so provide greater yields per hectare compared with most superficial deposits. Deep voids can result from the extraction of these deposits but it is still possible to restore the land to a beneficial afteruse without the need for backfilling.
- 2.11 **Superficial deposits:** Significant deposits are associated with river valleys and in Staffordshire, they are typically found along the Trent, Tame and Dove rivers.
- 2.12 The progress of quarrying with these shallow deposits is likely to be relatively quick leaving behind voids which can be allowed to fill with water or partially or fully backfilled as preparation for a beneficial after use.
- 2.13 In the Trent and Tame valleys where sand & gravel has been extracted over many years, partnership working through the Central Rivers Initiative and the wider Trent and Tame Futurescape Project are playing an important role coordinating the restoration and aftercare of the quarries along the river valley areas such as the creation of the National Memorial Arboretum at Alrewas and the award winning wetland reserve at Middleton Hall Quarry near Tamworth, now managed by the RSPB.⁶
- 2.14 The ramifications of policies for waste reduction and the diversion of waste from disposal is affecting the restoration of sand and gravel workings in the river valleys where there is a need to backfill workings. Quarries for all mineral workings where there is a requirement to backfill with imported wastes are listed in the appendices to the Plan and there is significant landfill capacity associated with these sites. The reduction in the amount of backfill available means that it is either taking longer to restore quarries or revised restoration strategies are being developed.

⁵ Provision of Geological Information and a Revision of Mineral Consultation areas for Staffordshire County Council – BGS (2006)

⁶ Refer to <u>http://www.thenma.org.uk/</u> and <u>RSPB – Middleton Lakes</u>

2.15 **Limestone:** The three limestone quarries near Waterhouses in the Staffordshire Moorlands have been operating for many years, are large in scale and found in sensitive ecological and landscape areas. Extraction involves blasting and reinstatement of the quarry voids can involve shaping the quarry faces to re-model the landscape. All three sites have permissions to continue working well beyond the plan period.

When are Staffordshire's <u>aggregate minerals</u> likely to be developed?

- 2.16 National policy requires that we plan for a steady and adequate supply of aggregates.⁷ There are significant permitted reserves of limestone for aggregate use which will be sufficient for the Plan period but we need to plan for additional sand and gravel reserves.
- 2.17 A level of provision needs to be assessed which supports the needs for a range of construction aggregates to meet planned growth for housing and other development; the manufacture of concrete products; and also makes a contribution towards meeting the needs of areas adjoining or near to Staffordshire where there is a shortfall in supply.⁸ The scale of provision needs to be acceptable in terms of the environmental costs associated with quarrying, and should take into account the contribution that secondary and recycled materials would make to the supply of aggregate materials, as well as 'imports' from areas outside Staffordshire.
- 2.18 Production of aggregate minerals has varied significantly over the last 10 years due to the economic circumstances of the construction industry. The downturn in the economy since 2008 has reduced the rate of depletion of permitted reserves and affected the 10 years sales average which, in accordance with Government policy, is used as a basis on which future demand is assessed⁹.

Sand and Gravel

- 2.19 As explained in our latest Local Aggregate Assessment (June 2015), during the period 2004 to 2013 the average sales of sand and gravel were 5.0 million tonnes per annum, within a range from 3.7 million tonnes to 6.8 million tonnes. Based on this 10 year average figure, current permitted reserves would be depleted by 2026. To maintain the capacity to produce at 5.0 million tonnes per annum requires additional reserves to be permitted during the next 10 years.
- 2.20 Interest in developing additional sand and gravel resources in Staffordshire has been shown by quarry operators and landowners and a list of site options for new sand and gravel resources is provided in the appendices. Most of the site

⁷ Refer to paragraph <u>145</u> of the NPPF

⁸ Refer to Local Aggregate Assessment

⁹ Refer to paragraph <u>145</u> of the NPPF

options submitted for consideration involve resources that are available by extending existing quarries but there are other proposals that would require new sites to be established.

2.21 The old Plan favoured an approach based on "*concentrating sand and gravel workings in specified locations by either developing new sites or more particularly extending existing sites where it would be environmentally acceptable*".¹⁰ Having reviewed this approach, in the light of the Government guidance¹¹, the pattern of supply and demand for the next 15 years and the accompanying Sustainability Appraisal, it is reasonable to conclude that this approach can continue but will need to be supplemented by making provision for new sand and gravel sites from 2025 onwards. This has led to the identification of a new area of search (see Policy 1).

Limestone

2.22 Limestone reserves used for crushed rock are more than sufficient to meet the anticipated requirements for crushed rock aggregate over the Plan period.

Cauldon Low

2.23 There are two adjoining quarries at Cauldon Low and the old Plan sought to coordinate working and restoration (Policy 54). This led to a joint study by Bowman Planton Associates.¹² However, a successful outcome was hindered at that time by competing interests. Now that both quarries are controlled by Aggregate Industries, the opportunity to further the aims of policy 54 has taken a significant step forward. We will encourage Aggregate Industries to review whether the benefits of co-ordinated working and restoration which might be obtained at Cauldon Low outweigh the practical difficulties that also exist.

Wardlow / Wredon and Kevin

2.24 JCB has taken a long term interest in the complex of quarries known as Wardlow/ Wredon and Kevin to assist them with the development of new vehicles. As a result, it is anticipated that the permitted minerals will remain as a long term reserve. In the event that the quarries are re-activated then we will also encourage Tarmac, who have retained an option to work the minerals, to consider the benefits of co-ordinated working and restoration here.

¹⁰ Paragraph 8.23 of the Staffordshire and Stoke-on-Trent Minerals Local Plan 1994 - 2006

¹¹ Refer to paragraph <u>010</u> ID: 27-010-20140306 of the PPG.

¹² <u>Cauldon Low Study</u> – Bowman Planton Associates (1998)

Blank page

Chapter 3: Industrial Minerals

Where do industrial minerals occur in Staffordshire?

- 3.1 The geology of Staffordshire provides minerals that support manufacturing industry where the added value of the manufactured products can be several times the cost of the mineral used. For the period of the Plan, there are two key industrial minerals.
- 3.2 **Brick Clay** is used for the manufacture of bricks, tiles and other clay products. There are currently 8 operational clay quarries¹³ supplying five brick and tile works in the county which are located near to Newcastle under Lyme in north Staffordshire, near to Cannock in the south and Tamworth in the south east of the county. There are also works nearby in Walsall and Warwickshire that use Staffordshire clay. The Etruria Formation is the principal brick clay resource in Staffordshire and is recognised nationally as a premium clay resource.
- 3.3 **Cement minerals (limestone, clay, shale)** is used in the manufacture of cement (limestone represents about 80 to 90% of the raw material and clay and shale which represents about 10 to 15% of the raw material). Cauldon Cement Works, near Waterhouses in the Staffordshire Moorlands is one of only 12 cement kiln works nationally.¹⁴
- 3.4 Clay (shale) is also extracted from two other sites in the county for the purposes of cement manufacture. Shale is extracted at Keele and Kingsley quarries to supply Tunstead cement works in Derbyshire but there are no current requirements to identify additional reserves to maintain that supply. The supply and reserves used to support cement manufacture at Tunstead will be monitored and, if necessary, that supply will be subject to review.
- 3.5 **Anhydrite** is used in the manufacture of cement (5% of the raw material). Fauld Mine, near Tutbury in east Staffordshire, is the main supply of anhydrite used by the UK cement industry.
- 3.6 Figure 2: 'Industrial minerals in Staffordshire 2015' shows extent of the key industrial mineral resources and the location of the industrial mineral sites and the works that use the minerals to manufacture bricks tiles and cement.

¹³ Refer to "Minerals sites in Staffordshire December 2013"

¹⁴ Refer to Mineral Planning Factsheet for Cement (2014) - BGS



igure 2: Industrial minerals in Staffordshire 2015

How are Staffordshire's industrial minerals likely to be developed?

Brick Clay

3.7 Clay workings tend to be long term operations and may involve simultaneous workings at different parts of a site to ensure that the correct blend of clays is achieved. Clay working will take place in campaigns rather than on a continuous basis and prior to delivery to the manufacturing plant, there will be a need for the excavated clay to be weathered prior to blending. This requires the creation of stockpiles, often within the quarry, and can involve the blending of material from other sites e.g. other clays and sands.

Cement minerals

3.8 The characteristics of limestone quarrying for cement manufacture are similar to the quarrying of crushed rock for aggregates described in chapter 2.

Anhydrite / gypsum

3.9 As the anhydrite is associated with underground mining, minimising impacts on the surface are the main considerations, e.g. the potential impacts from subsidence and underground blasting.

When are Staffordshire's industrial minerals likely to be developed?

3.10 National policy requires that stocks of permitted reserves are provided to support investment in new and existing plant that utilise industrial minerals.¹⁵

Brick Clays

- 3.11 Permissions were granted in 2012 and 2013 at Knutton and Keele Quarries to secure sufficient reserves to maintain supplies for more than 25 years at the Keele, Chesterton and Parkhouse works. The brick works at Cannock is supplied from Redhurst Quarry at Essington and has sufficient reserves for the next 25 years (refer to appendices). Wilnecote Brickworks at Tamworth is the only works in the county where there is a clay supply of less than 15 years. Permission was granted in 2015 for a modified working scheme at Wilnecote Quarry which would add an additional 2 years supply to the works and the site operator has indicated that additional resources are being investigated for development of the quarry but at this stage there is insufficient information about these resources to justify an allocation for future working.
- 3.12 Clay from the Etruria Formation is also used at works outside Staffordshire and it is known that clay from quarries in south Staffordshire (with long term permissions) is used to supply works in Walsall and Warwickshire and this is

¹⁵ Refer to paragraph <u>146</u> of the NPPF.

likely to continue during the Plan period. There is also a permitted clay site in Stoke-on-Trent. At this stage, there is no need for planned provision for works outside the county and we will continue to liaise with the neighbouring mineral planning authorities in Stoke-on-Trent, Telford, Walsall and Warwickshire to monitor cross border requirements for clay.

- 3.13 National policy requires that a stock of permitted reserves of 25 years is provided for each works using brick clay and our assessment of the requirements of the local works in Staffordshire indicates that there are sufficient reserves except in relation to the Wilnecote works as explained above. Where recent permissions have been granted for clay reserves, permissions have been granted subject to obligations that secure the use of clays to support the manufacture of clay products at local works. The Plan does not include allocations for additional reserves of brick clay.
- 3.14 Due to the location of outcrops of the Etruria Formation on the urban periphery of Newcastle under Lyme, Cheslyn Hay and Tamworth, and the relative scarcity of the resource, there is a need to safeguard clays from sterilisation caused by built development (refer to Policy 3). In addition national policy encourages stockpiling so that important minerals remain available for use, for example, where clays may be extracted ancillary to the extraction of coal.¹⁶
- 3.15 As with aggregate minerals, there is a continuing requirement to ensure that the impacts of quarrying are minimised and an important opportunity that affects long term permissions such as those regulating the development of clay workings is provided under the <u>Environment Act 1995</u> to review mineral planning permissions. Reviews should include an assessment of restoration requirements particularly where backfill with waste material is anticipated.

Cement minerals

- 3.16 For the Cauldon Cement Works, national policy requires that a stock of reserves (or landbank) sufficient for at least 15 years production is maintained.¹⁷ There are sufficient permitted reserves of limestone and shale to meet the requirements of the works up to 2030. However, Aggregate Industries, has indicated that there could be an issue with the quality of the permitted shale reserves and a need to find alternative resources before the end of the Plan period to maintain a 15 year landbank. An area of search was allocated in the old Plan which has been only partly developed following a planning permission issued in 2006. Additional resources could be extracted from within this allocated area.
- 3.17 On the basis that the mineral from Fauld Mine supports manufacturing at several cement works in the UK, a 15 year landbank has been used to plan for the mine's future. There are reserves to maintain current production at the mine

¹⁶ Refer to second bullet point of paragraph <u>146</u> of the NPPF.

¹⁷ Refer to third bullet point of paragraph 146 of the NPPF.

permitted until 2024 but additional resources will need to be developed towards the end of the Plan period to maintain the mine's landbank. Resources are available within an unimplemented part of an area of search allocated in the old Plan and in view of increasing knowledge of the resource within that area, a revised allocation in the Newchurch area has been identified (refer to Policy 2).

3.18 All of these sites have long term planning permissions and so there will be an opportunity to periodically review working and restoration. We will review planning conditions to ensure that sites continue to operate to high environmental standards and can achieve high standards of restoration and aftercare. For example, many of the older planning permissions for the clay quarries currently rely on waste to backfill the site¹⁸.

¹⁸ Refer to paragraph.5.27 of the <u>Staffordshire and Stoke-on-Trent Joint Waste Local Plan 2010 -</u> 2026

Blank page

Chapter 4: Hydrocarbons

Where do hydrocarbons occur in Staffordshire?

- 4.1 Historically, energy was derived from the Staffordshire coalfields but recent interest in energy minerals relates to developing hydrocarbon resources and in particular, gas. There are three potential sources of gas in Staffordshire.
- 4.2 **Conventional gas**: This is a term that relates to gas trapped in geological structures and reservoir rocks. Currently, a site at Three Nooks Farm, Horton near Biddulph has been appraised and permission granted to produce electricity from the gas¹⁹.
- 4.3 **Coal Mine Methane (CMM) or Abandoned Mine Methane (AMM)** refers to draining methane gas from active or disused underground coal mine workings. In Staffordshire, a site near Barlaston in Stafford Borough is being used to generate electricity from methane derived from abandoned mine workings associated with the former Florence Colliery (in Stoke-on-Trent)²⁰.
- 4.4 **Coal Bed Methane (CBM)** is contained within unworked coal seams and its extraction is feasible at depths of 200 1500m. There has been recent interest in CBM at sites across Staffordshire but mainly in relation to the resource associated with the North Staffordshire coalfield. Several permissions granted for exploration and appraisal, however, have not been implemented but there is a valid permission for further exploration on at Keele University²¹.
- 4.5 Hydrocarbon extraction can only take place in areas where the Oil and Gas Authority have issued a licence under the Petroleum Act 1998. The current extent of Petroleum Licence Areas in Staffordshire is shown on figure 3 with an indication of the extent of the coal resource suitable for CBM development. The locations of current permitted gas production sites are also shown and details of recent applications for exploration, appraisal and production of hydrocarbons are available on the County Council's website²².
- 4.6 With regard to current national interest in the development of gas resources associated with shale rocks, a recent study by the BGS included the northern part of Staffordshire within that study.²³ Given that knowledge about the shale resource is limited and that there is a need for more exploration to understand the extent and viability of the gas resource within impermeable shales, the

¹⁹ Refer to permission <u>SM.14/11/161 M</u>

²⁰ Refer to permission S.06/25/401 M

²¹ Refer to permission N.12/10/299 M

²² Refer to "<u>Summary of recent Coal Bed Methane (CBM), Coal Mine Methane (CMM) and natural</u> <u>Gas sites in Staffordshire</u>"

²³ Bowland Shale Gas Study (2013) – British Geological Survey

study indicates that other parts of England are likely to be of more immediate interest for development than resources found in Staffordshire.

4.7 Figure 3: 'Extent of hydrocarbon resources in Staffordshire 2015' shows the coal resource area, the gas exploration licence areas and the location of the permitted sites for gas production.

How are Staffordshire's hydrocarbons likely to be developed?

- 4.8 National planning guidance explains the phases of development for onshore hydrocarbon resources which include exploration, appraisal and then production of the resource.²⁴ The different phases involve varying levels of activity at the surface which will include use of rigs to drill the well bore and if a viable resource is found, a production site may require occupation of the land for up to 20 years, possibly more. Ancillary infrastructure may also be installed to generate electricity or pipelines installed to transport the gas away from the production site.
- 4.9 In relation to the development of gas resources and in particular shale gas, much attention has been focussed on a process known as hydraulic fracturing, commonly known as "fracking", which is a technique used to open up fractures within rock to release trapped gas or oil. In the fracturing process, water is pumped under extremely high pressure into a borehole and the water is usually mixed with sand to keep the fractures open (and the oil or gas flowing). Chemicals are also added (around 0.25% of the liquid used) which are required for various purposes, including providing lubrication and purification. There are no current proposals to use hydraulic fracturing techniques in Staffordshire but this technique would be used to improve gas recovery from the exploitation of coal bed methane.

When are Staffordshire's <u>hydrocarbons</u> likely to be developed?

4.10 National guidance indicates the need for further exploratory drilling to establish whether unconventional hydrocarbons (e.g. CBM and shale gas) are a viable national energy resource.²⁵ Over the Plan period there is anticipated to be further drilling activity to confirm the extent and viability of the gas resource in Staffordshire but it is not possible at this stage to identify potential production sites. For the early stages of developing unconventional hydrocarbons, it is important that the Plan is able to define criteria for the appropriate location of sites used for exploration, appraisal and eventually production taking into account that planning applications for exploratory development should be considered on their own merits.²⁶ Furthermore, it is important to recognise that planning control is one of several regulatory regimes associated with the

²⁴ Refer to paragraphs 091 ref: ID: 27-091-201403006 to 103 ref: ID: 27-103-20140306 of the PPG.

²⁵ Refer to <u>paragraph 091</u> ref: ID: 27-091-20140306 of the PPG.

²⁶ Refer to <u>paragraph 120</u> ref: ID: 27-120-201403006 of the PPG.

development of hydrocarbons and national guidance sets out how these regimes should work together.²⁷

²⁷ Refer to <u>paragraphs 109</u> ref: ID: 27-109-20140306 to 112 ref: ID: 27-112-20140306 of the PPG.



Figure 3: Extent of hydrocarbon resources in Staffordshire 2015

Chapter 5: Other Minerals

5.1 The previous chapters have described the three principal categories of minerals in Staffordshire. This chapter briefly describes the other minerals that are likely to be developed over the Plan period.

Where do Staffordshire's other minerals occur?

- 5.2 **Sandstones** with a high proportion of silica have been used in glass making, ceramics, foundries and horticulture. The scale of production is now relatively small compared with other minerals as there is no longer any production of silica sand for industrial manufacturing following the cessation of quarrying at Moneystone Quarry.
- 5.3 Silica sand is only produced at Hurst Quarry, north of Biddulph and the sand from this quarry is used as a horticultural product rather than as industrial sand.
- 5.4 **Building stones** are used as a traditional building material and are found widely across the county but are now only worked from four quarries in and around Hollington to the south-east of Cheadle and from a site at Horton near Biddulph²⁸.
- 5.5 Given the extent of permissions and the scale of quarry operations at the remaining sandstone and building stone quarries, it is considered that there is no need to make further provision for sandstones and building stones during the Plan period.
- 5.6 **Surface coal** extraction was last carried out within the county in 2001 but there are remaining shallow coal resources that could be worked together with associated minerals such as fireclays. Options for future surface coal extraction were identified by UK Coal in 2008, but the Company went into administration in 2014 and withdrew a planning application for the Great Oak site in January 2015.
- 5.7 Figure 4 shows the extent of the other minerals and the location of the sandstone and building stone sites.

²⁸ Refer to <u>Mineral sites in Staffordshire</u> December 2013



Figure 4: Other minerals in Staffordshire 2015

How are Staffordshire's other minerals likely to be developed?

- 5.8 **Sandstones** at Hurst Quarry are currently being worked under a permission that expires in 2036 and so there will be opportunities to review the working and restoration during the Plan period.
- 5.9 **Building stones** are worked on an intermittent basis within five relatively small quarries, the majority of which have long term permissions. Restoration of these quarries is based on low level restoration and the placement of quarry wastes within the voids to mitigate the impact of quarry faces. There will also be opportunities to review the working and restoration of these sites during the Plan period. The characteristics of developing building stone quarries are explained in a statement produced by an industry trade organisation.²⁹
- 5.10 **Surface coal** extraction is normally carried out on a large scale and involves intensive operations over a relatively short period of time. There is no need to make specific provision for surface coal mining in the Plan. In the event that any proposals come forward as a planning application then they would be considered having regard to the relevant Development Plan policies and the National Planning Policy Framework³⁰.

When are Staffordshire's other minerals likely to be developed?

- 5.11 As there are long term permissions for the sandstone and building stone quarries there is no need to make further provision for these minerals during the Plan period.
- 5.12 In relation to surface coal resources, there are no options under consideration.

²⁹ Refer to "<u>Dimension Stone – an essential UK industry</u>" – Mineral Products Association (2015)

³⁰ Including paragraph <u>149</u> of the NPPF.

Blank page

Chapter 6: The Vision, Strategic Objectives and Key Diagram

6.1 Based on **what** we know, **where** our mineral resources are, and **how** and **when** they are likely to be worked, we have a clear vision and strategic objectives for the Plan that underpin our planning policies in chapter 7. A key diagram illustrates the spatial elements of our vision. Our monitoring of the Plan, explained in chapter 8, will test whether our vision is being achieved and contributing to the achievement of sustainable development.

The Vision

By 2030 Staffordshire will be producing minerals to support sustainable economic development from sites that are:

- located where their impact on local communities and the environment has been minimised or mitigated;
- operating to high environmental standards; and,
- later restored and subject to aftercare to enhance local amenity and the environment.
- 6.2 Our vision anticipates the continued provision of the economic minerals as described in the previous chapters.
- 6.3 Our vision recognises the challenges we face to balance the need for minerals against the impact that mineral working can have on local communities and the environment.
- 6.4 Our vision also recognises that mineral development can present opportunities to enhance local amenity and the environment and we wish to maximise those opportunities.

The Strategic Objectives

6.5 To achieve our Vision we have identified the following strategic objectives for the Plan.

Strategic Objective 1 - the provision of minerals to support sustainable economic development.
To support sustainable economic development, the provision of minerals will:
aim to achieve an acceptable balance between the steady and adequate supply of minerals and the impact of mineral operations on local communities and the environment;
so far as is practicable, take account of the contribution that substitute or secondary and recycled material can make as an alternative to primary minerals; and

- ensure that important economic mineral resources are not needlessly sterilised.
- 6.6 This objective is consistent with the Government's National Planning Policy Framework which requires us to plan for a steady and adequate supply of aggregate and industrial minerals to support sustainable economic growth but at the same time we recognises the importance of minimising the impact on local communities and the need to ensure that economically recoverable mineral resources are not needlessly sterilised.³¹ This approach is also consistent with the County Council's Strategic Plan for growth in Staffordshire's economy and the desired outcome for the people of Staffordshire to "be able to access more good jobs and feel the benefits of economic growth".³²
- 6.7 The following examples illustrate some of the ways in which this objective has already been achieved:
 - Proposals for working additional resources should be prepared by developers in liaison with the local communities taking into account their views in developing working and restoration plans. For example, Aggregate Industries carried out public consultation with the local

³¹Refer to paragraphs <u>142</u> and <u>143</u> of the NPPF

³² Refer to the Staffordshire County Council's <u>Strategic Plan (2014 – 2018)</u>

community in 2011 prior to submitting an application for a large extension to Newbold Quarry.³³

- The recently adopted Waste Local Plan provides for additional recycling capacity of construction, demolition and excavation wastes. During the Plan period, more options should be pursued to derive aggregates from waste to supplement the supply from quarries. For example, permission was recently granted for a large scale aggregate recycling operation at the Hollybush Recycling Centre.³⁴
- We are working with district councils, developers and the minerals industry to ensure that economically recoverable mineral resources are not needlessly sterilised. We have recently advised East Staffordshire Borough Council in relation to an application for major development on mineral bearing land to the north of Newbold Quarry which provides for use of in-situ mineral within the construction scheme.³⁵

Strategic Objective 2 – acceptable locations for mineral sites

To locate mineral sites where adverse impacts are avoided or minimised on local communities and the environment and any benefits are maximised.

- 6.8 The Government's National Planning Policy Framework requires that planners should conserve and enhance the natural and historic environment and establish a policy framework so that Local Planning Authorities can protect valued landscapes, prevent unacceptable levels of soil and water pollution, and halt the overall decline in biodiversity as well as, conserve heritage assets.³⁶ This objective seeks to ensure that risks from pollution and other impacts are minimised by managing the development of mineral sites in appropriate locations.
- 6.9 By way of an example, the quarry operators have worked with us, Natural England and other key stakeholders to minimise the impact of working the limestone quarry at Cauldon on a Site of Scientific Interest and the visual impact on the nearby Peak District National Park and to enhance local biodiversity at the landscape scale.³⁷

³³ Refer to application reference ES.12/03/501 MW

³⁴ Refer to planning permission ref: <u>SS.08/21/619 W</u> dated 12 September 2013

³⁵ Refer to application <u>ES.2012/01467 MCA</u>. ³⁶ Refer to paragraphs <u>109</u> and <u>126</u> of the NPPF.

³⁷ Refer to application IDO/SM/9/111 MW D3

Strategic Objective 3 – operating to high environmental standards

To ensure that mineral sites operate to high environmental standards by avoiding, reducing or mitigating as far as possible the adverse impacts on local communities and the environment close to mineral operations and along the routes used to transport minerals.

- 6.10 The Government's National Planning Policy Framework requires that there should be no unacceptable adverse impacts on human health and that new development is in an appropriate location³⁸.
- 6.11 When preparing proposals for extensions to existing sites or for new sites, mineral developers will be expected to:
 - assess the environmental effects of the development, including the measures to protect and enhance the natural, historic and built environment;
 - liaise with the local community at an early stage;
 - design proposals to avoid, reduce or mitigate the potential adverse impacts – for example by:
 - o screening the development to minimise the visual impact;
 - providing a safe access onto the public highway and ensure that HCV traffic follows appropriate routes;
 - phasing mineral working and restoration in order to minimise the period over which the land is in use;
 - o managing water resources to reduce the risk of flooding;
 - to protect surface and ground waters and to contribute to Water Framework Directive objectives;
 - efficiently working the mineral to minimise energy use;
 - surveying for habitats and species of principal importance and avoiding or mitigating impacts;
 - carrying out desk based archaeology assessments and field based evaluations.
 - demonstrate how they will operate to high environmental standards for example by:

³⁸ Refer to paragraph <u>120</u> of the NPPF
- monitoring their own operations to ensure compliance with the planning permission and other permits / regulations
- o maintaining close liaison with the local community;
- reporting on progress and reviewing working, restoration and aftercare schemes.

Strategic Objective 4 – restoration that enhances local amenity and the environment

To ensure that Staffordshire's mineral sites are restored and managed in a way that enhances local amenity and the environment by:

- Restoring mineral sites at the earliest opportunity;
- Achieving high quality restoration and aftercare;
- Contributing to national and local environmental and amenity initiatives including:
 - measures to manage flood risk to deliver flood risk management benefits wherever possible;
 - measures to manage water supply, demand and quality
 - adapting restoration and aftercare to the effects of climate change on communities, biodiversity and landscape;
 - the provision of new sport and recreation facilities;
 - measures to protect and enhance the historic environment;
 - Local Plan strategies, policies and proposals, and local partnerships
- Regularly reviewing restoration plans / strategies so that new opportunities to enhance the restoration and aftercare can be maximised.
- 6.12 The Government's National Planning Policy Framework recognises that mineral sites should be restored at the earliest opportunity to high standards; and that development, including mineral development, should contribute to international, national and local environmental initiatives³⁹ e.g. the Water Framework Directive, flood mitigation; Staffordshire Biodiversity Action Plan, the Central Rivers Initiative (CRI) and District Local Plans⁴⁰. The duration of many mineral permissions means that it is important to regularly review restoration plans / strategies so that new circumstances and opportunities or new restoration

³⁹ Refer to letter dated 19 March 2015 from the <u>Staffordshire and Stoke-on-Trent Local Nature</u> <u>Partnership</u>

⁴⁰ Refer to paragraphs $\underline{9}$, <u>100</u>, <u>109</u> and <u>143</u> of the NPPF.

techniques can be considered. Therefore, in order to achieve this strategic objective to maximise the opportunities to enhance local amenity and the environment, the County Council will continue to work in partnership with operators, other planning authorities and stakeholders.

- 6.13 The following examples illustrate some of the ways in which this objective has already been achieved:
 - At Croxden Quarry, phased working and restoration means that large parts of the site have already been restored to heathland and conservation woodland before the site's mineral extraction has ceased. Large areas of the site are now subject to extended aftercare where a nature conservation afteruse has been established. :
 - In recognition of the high standards of restoration and aftercare, a number of sites in Staffordshire have received awards. For example, Alrewas Quarry was awarded the Mineral Product Association's leading restoration award in 2009 for restoration work associated with the development of the National Memorial Arboretum. This site is one of a number of mineral sites within the Trent and Tame valleys, centred on the National Memorial Arboretum that has been guided by a strategy developed under the umbrella of the Central Rivers Initiative (CRI).⁴¹ The CRI is a partnership project involving guarry operators, the County and District Councils, national and local environmental groups as well as landowners and the local communities. This joined up approach has led to the creation of local ecological networks as part of proposals for "green infrastructure" that are promoted in District Local Plan policies.⁴² Mineral working in this area also provides opportunities to contribute to the National Forest Strategy which is supported by Local Plan policy.⁴³
 - East Staffordshire Borough Council in partnership with Sport England has adopted an Outdoor Sports Delivery and Investment Plan⁴⁴, setting out a strategy for delivering additional provision of outdoor sports facilities within the Borough. Two additional multi sports 'Hub' sites in the Borough have been identified, the first in Burton-on-Trent on land proposed to be developed as the new Burton Rugby Club site which is adjacent to Newbold Quarry and the second, at Uttoxeter Quarry. At Uttoxeter Quarry land has been already worked and restored to facilitate the creation of sports pitches.
 - At Cauldon Cement Works Quarry restored benches and non-operational land are being restored to create species-rich wildflower grassland

 ⁴¹ Refer to <u>http://www.centralrivers.org.uk/</u>
⁴² Refer to detailed policy 10 of the <u>East Staffordshire Local Plan</u> (adopted October 2015).

⁴³ Refer to the National Forest Strategy; strategic policy 24 of the East Staffordshire Local Plan; and core policy 13 of the Lichfield Local Plan 2015

Refer to strategic policy 32 of the East Staffordshire Local Plan.

characteristic of the surrounding Peak District fringe landscape using local seed sources as well as delivering early benefits to minimise visual impact. The work, carried out in partnership with Natural England and Staffordshire Wildlife Trust, includes trials of restoration techniques which will inform future work and provide a useful information resource for the minerals extraction industry, land managers and other sectors.

- Rugeley Quarry was, in 2011, the first ever winner of the Natural England Biodiversity Award, awarded by the Mineral Products Association for work in restoring 80 hectares of high quality wildlife habitat to lowland dry heathland and invertebrate habitats, contributing to the conservation of, and complimenting the Cannock Chase Area of Outstanding Natural Beauty and the Special Area of Conservation.
- Middleton Lakes, near Tamworth is a RSPB reserve which was opened in 2011 and is created from the restoration of a former sand and gravel quarry along the River Tame. The site received a national restoration award in 2015 and is now regionally important for overwintering wildfowl. The former workings included widening and braiding the river along a 1km section and as well as providing biodiversity benefits the works along the river will assist in managing flood waters.
- At Knutton Quarry, the permission⁴⁵ runs to 2042 and so a regular review of the restoration strategy was secured using a legal agreement. The quarry liaison committee will be actively involved in the review process. Other similar examples include the recent permissions at Keele Quarry, Kevin Quarry, Wardlow/Wredon Quarry and the extension to Newbold Quarry.

⁴⁵ Refer to permission <u>N.05/20/214 M</u>

Key Diagram

- 6.14 Our key diagram illustrates the broad locations for the following strategic developments:⁴⁶
 - the sites that will continue to produce mineral during the plan period; ⁴⁷
 - the proposed extensions to sand and gravel sites;
 - the proposed area of search for a new sand and gravel site(s); and
 - the proposed areas of search for extensions to shale and anhydrite sites.;

⁴⁶ Refer to paragraph <u>157</u> of the NPPF.

⁴⁷ This relates to all mineral sites with permitted reserves except those sites that are classified as statutorily dormant. Refer to our Local Aggregate Assessment for details of dormant sand and gravel sites.



© Crown Copyright and database rights 2015. Ordnance Survey 100019422. Produced by Staffordshire County Council, 2015. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form'.

Staffordshire County Council

Figure 5: The Key Diagram

Chapter 7: The Planning Policies

- 7.1 The Planning Policies in this Chapter underpin our Vision and Strategic Objectives described in Chapter 6 and will be used to help in determining planning applications for mineral development.
- 7.2 It is important to have in mind the following points when reading the policies:
 - The policies are not listed in any order of priority;
 - The policies should not be read in isolation;
 - Where a policy contains a list of criteria, the criteria are not in any order of importance or priority, unless the policy specifically says so;
 - New development will be assessed against all relevant policies in the Minerals Local Plan and any other relevant development plan policies and material considerations;⁴⁸
 - The Government's National Planning Policy Framework is a material consideration but is not repeated here. The Framework constitutes the Government's view of what sustainable development means in practice for the planning system and central to the Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan making and decision taking⁴⁹.

⁴⁸ Section <u>38 (6)</u> of the Planning and Compulsory Purchase Act 2004

⁴⁹ Refer to paragraph <u>14</u> of the NPPF

Policy 1: Provision for Sand and Gravel

Extensions to sand and gravel sites

- 1.1 Provision will be made to maintain at least a 7 year landbank of permitted reserves based on production capacity of 5.0 million tonnes of sand and gravel per annum. This production capacity will be provided initially from existing permitted reserves and by granting planning permissions to extend the following sand and gravel sites:
 - a) Captains Barn Farm (Inset Map 1)
 - b) Croxden (Inset Map 2)
 - c) Uttoxeter (Inset Map 3)
 - d) Newbold (Inset Map 4)
 - e) Barton (Inset Map 5)
 - f) Alrewas (Inset Map 6)
 - g) Calf Heath (Four Ashes) (Inset Map 7)
 - h) Saredon (Inset Map 8)
 - i) Cranebrook (Inset Map 9)
 - j) Hints / Hopwas (Inset Map 10)
 - k) Weeford (Moneymore) (Inset Map 11)

(The allocated extension sites listed above are shown on the Policies and Proposals Map and accompanying Inset Maps included in appendix 1.)

- **1.2** Any proposals to develop the allocated extension sites will only be supported where it has been demonstrated that they accord with the Plan policies, including Policy 4 and address the development considerations listed in appendix 1.
- **1.3** Planning permission to extend a site will normally be conditioned so that the extension area can only be worked following cessation of mineral working within the existing site unless it has been demonstrated that there are operational reasons why this is not practicable.

	Policy 1: Provision of sand and gravel (continued)							
	Proposals for new sand and gravel sites within the area of search							
	1.4	Pro A38 sup or a the	posals for new sites within the area of search to the west of the shown on the Policies and Proposals Map will only be ported where it has been demonstrated that permitted reserves allocated extensions to existing sites listed above cannot meet required level of provision stated in paragraph 1.1.					
	1.5 Any proposals to develop new sites within the area of search to the west of the A38 will only be supported where it has been demonstrated that they accord with the Plan policies, including Policy 4 and address the development considerations listed in appendix 1.							
Proposals for any other sand and gravel sites (extensions / new sites)								
1.6 Proposals for any other sand and gravel sites (extensions / n sites) will only be supported where it has been demonstrated								
		a)	the permitted reserves, the allocated extensions to existing sites listed above or mineral resources from within the area of search would not meet the required level of provision stated in paragraph 1.1; or,					
		b)	the proposals would secure significant material planning benefits that outweigh any material planning objections.					

Reasons for the Policy

- 7.3 Chapter 2 described the 'where', 'how' and 'when' for the development of Staffordshire's aggregate minerals, including the type of aggregate minerals; the distribution of aggregate sites and pattern of supply; the opportunities for co-ordinated restoration of sites; issues with the availability of backfill to restore sites and the effect on timely restoration; the scale of provision of aggregate minerals and the need to meet a shortfall of sand and gravel reserves; and the review of the strategy for identifying additional resources.
- 7.4 Our Vision and Strategic Objective 1, recognise the importance of aggregate minerals to support sustainable economic development taking into account the need to achieve an acceptable balance between the supply of minerals and the impact of mineral operations on local communities and the environment.

7.5 Policy 1 aims to achieve this acceptable balance by setting an appropriate level of provision for sand and gravel over the next 15 years and identifying suitable areas for sand and gravel working to meet the anticipated shortfall.

The Level of Provision

- 7.6 Policy 1.1 provides for at least a 7 year landbank of permitted reserves based on a production capacity of 5.0 million tonnes per annum over the Plan period which is the 10 year sales average based on the most up to date survey information available i.e. data for the period 2004 – 2013. The 10 year rolling supply has been considered in the context of other relevant information in our latest Local Aggregate Assessment (June 2015) and is considered to be a sound basis on which to plan for sand and gravel provision. No separate provision is made for building sands (as distinct from concreting sands) as it is considered to be impractical to plan for this specific product. Policy 1.6 provides an opportunity for the needs of specific products such as building sands to be considered.
- 7.7 We are satisfied that this level of provision will achieve an acceptable balance between the sustainable economic development of sand and gravel resources and the impacts of sand and gravel working on local communities and the environment (refer to Strategic Objective 1)
- 7.8 Based on maintaining provision of 5.0 million tonnes per annum, it is anticipated that at least an additional 22 million tonnes of reserves will be required during the Plan period and we are confident that this level of provision is deliverable from the allocated extensions and area of search which were put forward by mineral operators and have been subject to our Sustainability Appraisal. To ensure a steady and adequate supply we will monitor Policy 1 as described in Chapter 8, Table 1. For example, as part of the annual Local Aggregates Assessment we will monitor the Plan to confirm that there is at least a 7 year landbank of sand and gravel reserves.

The extensions and area of search

- 7.9 As explained in Chapter 2, there is no reason to indicate that the existing pattern of supply and demand for sand and gravel will change in Staffordshire over the next 15 years and there is no reason to change the strategy in our old Plan that favoured extensions to existing sites until 2025, when a new site(s) would be needed. The extension sites and area of search to the west of the A38 will maintain the pattern of supply.
- 7.10 We have identified potential constraints and opportunities that should be taken into account when developing proposals for the allocated extensions or within the area of search. These development considerations are set out alongside the relevant Inset Maps.

Proposals for any other sand and gravel sites (extensions / new sites)

- 7.11 Policy 1 takes a sequential approach whereby the provision should first be met from the allocated extensions, then from the area of search and thereafter from other sites (either extensions to existing sites or new sites). However as with the old Plan (Policy 38), this Plan anticipates that there may be circumstances when sites not allocated in the Plan will be permitted to secure significant material planning benefits that outweigh any material planning objections. The material planning benefits could include proposals that:
 - a) secure significant benefits from co-ordinated and comprehensive working and restoration;
 - b) relinquish permitted reserves in more sensitive areas;
 - c) demonstrate a particular need for the sand and gravel that cannot reasonably be met from elsewhere;
 - d) work the sand and gravel prior to other development taking place; and,
 - e) are required as part of a major infrastructure project.

Policy 2: Provision for Industrial Minerals used in the manufacture of cement

- 2.1 During the Plan period provision will be made to maintain at least 15 years of permitted reserves of:
 - a) limestone and shale for use at Cauldon Cement Works; and,
 - b) anhydrite and gypsum from Fauld Mine.
- 2.2 This will be achieved from existing permitted reserves and by granting planning permission to extend the existing sites within the areas of search at New House Farm and Newchurch shown on the Policies and Proposals Map and Inset Maps 12 and 13.
- 2.3 Any proposals will only be supported where it has been demonstrated that they accord with the plan policies, including Policy 4.
- 2.4 Planning permission will normally be conditioned so that the extension area can only be worked following cessation of mineral working within the existing site unless it has been demonstrated that there are operational reasons why this is not practicable.

Reasons for the Policy

- 7.12 Chapter 3 described the 'where', 'how' and 'when' for the development of Staffordshire's industrial minerals, including the type of industrial minerals that will be worked over the next 15 years; the location of sites and where the minerals are used in local manufacturing; the need for additional shale and anhydrite / gypsum resources to be identified; the need for safeguarding resources from non-mineral development; and opportunities to improve standards of operation through the review of working and restoration schemes.
- 7.13 Our Vision and Strategic Objective 1, recognise the importance of industrial minerals to support sustainable economic development taking into account the need to achieve an acceptable balance between the supply of minerals and the impact of mineral operations on local communities and the environment.
- 7.14 Policy 2 aims to achieve this balance for industrial minerals used in the manufacture of cement where there is a need to meet a potential shortfall of shale and anhydrite / gypsum over the Plan period.

The Level of Provision

7.15 The NPPF defines either at least a 15 or 25 year stock of permitted reserves of industrial minerals to support plant used to manufacture of cement.⁵⁰ To ensure a steady and adequate supply we will monitor Policy 2 as described in Chapter 8, Table 1. For example, as part of our Annual Monitoring Report we will monitor the Plan to confirm that there are at least 15 years of permitted reserves for cement minerals.

Cauldon Cement Works

7.16 There is a sufficient permitted reserve of limestone based on maintaining a 15 vears landbank⁵¹ (refer to appendices) but towards the end of the Plan period there is anticipated to be an issue in securing additional shale resources to provide a sufficient landbank beyond 2030 particularly if existing permitted reserves are adversely affected by their sulphur content,. In the old Plan, as explained in chapter 3, a 15 year landbank was provided and an area of search at New House Farm was allocated. No reasons have been put forward to change our approach to the level of provision or to allocating what remains of the area of search having already granted planning permission for part of the allocation in 2006.52

Fauld Mine

7.17 On the basis that the mine is producing anhydrite and gypsum for cement manufacture, provision for the mine will continue to be assessed on the basis of a 15 years landbank. Reserves are permitted up to 2028 so that towards the end of the Plan period there is likely to be a requirement to identify additional anhydrite resources to maintain the mine's production. Again, no reasons have been put forward to change our approach to the level of provision or to allocating what remains of the area of search having already granted planning permission for part of the allocation in 2010.53

New House Farm Area of Search

7.18 The old Plan identified an area of search at New House Farm for shale resources and a planning permission was subsequently granted to work the shale from within that area. ⁵⁴ Policy 2 and Inset Map 12 identifies the remaining part of this allocation.

⁵⁰ Refer to paragraph <u>146</u> of the NPPF.

⁵¹ Refer to report to Planning Committee dated 2 August 2012 for submission of details relating to a revised working scheme at limestone guarry at Cauldon Cement Works (ref: IDO/SM/9/111 MW D3)

⁵² Refer to planning permission SM.04/06/111 M dated 26 May 2006

⁵³ Refer to planning permission to extract 6 million tonnes of gypsum and anhydrite from beneath land in the vicinity of Newchurch and Hoar Cross (<u>ES.10/04/504 M</u>) ⁵⁴ Refer to <u>Proposal 4 – Cauldon Shale Quarry (New House Farm) - Inset Map 11 of the old MLP</u>.

Newchurch Area of Search

- 7.19 The old Plan identified an area of search at Newchurch and a planning permission was subsequently granted to work the mineral from within that area but this has only been partly implemented.⁵⁵ Policy 2 and Inset Map 13 identify that part of the previously allocated area that is considered by the mine operator to be viable for future working.
- 7.20 We have identified potential constraints and opportunities that should be taken into account when developing proposals within the areas of search. The development considerations within the areas of search are set out alongside Inset Maps 12 and 13.

⁵⁵ Refer to <u>Proposal 1 – Fauld Mine (Newchurch) – Inset Map 5 of the old MLP</u>.



Policy 3: Safeguarding Minerals of Local and National Importance and Important Infrastructure (continued)

3.4 Within a Mineral Safeguarding Area, where important minerals do exist and the above criteria have not been met, the non-mineral development except for those types of development set out in appendix 6, should not be permitted unless the development includes provision for the extraction of the mineral prior to the development being implemented.

Safeguarding important mineral infrastructure sites

- 3.5 Where there are mineral infrastructure sites used for mineral processing, handling, and transportation, except for those types of development set out in appendix 6, non-mineral development should not be permitted unless it has been demonstrated that:
 - a) the non-mineral development would not unduly restrict the use of the mineral infrastructure site; or
 - b) the material planning benefits of the non-mineral development would outweigh the material planning benefits of the mineral infrastructure site; or,
 - c) the mineral infrastructure can be relocated; or
 - d) alternative capacity can be provided elsewhere.

Reasons for the Policy

- 7.21 National policy requires that mineral safeguarding areas are designated which "cover known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development"⁵⁶ and also requires local planning authorities to safeguard mineral infrastructure used for processing, handling and transporting minerals.⁵⁷ In accordance with our Vision and Strategic Objective 1, Policy 3 aims to achieve an acceptable balance between non-mineral development and safeguarding Staffordshire's important minerals and mineral infrastructure sites.
- 7.22 Policy 3 aims to safeguard a range of mineral resources that are considered to be of economic importance within the foreseeable future but not limited to the timeframe of the Plan and takes into account a review of mineral resources in

⁵⁶ Refer to <u>Annex 2: glossary of the NPPF</u>

⁵⁷ Refer to bullet point 4 of paragraph <u>143</u> of the NPPF.

the county produced by the British Geological Survey (BGS) in 2006⁵⁸. As explained in the BGS report, each mineral resource area is protected by a buffer zone which has been determined through consultation with the minerals industry and is used to define the MSA. MSAs are also defined where resources are found within urban areas but some types of applications will be exempt from the requirements of this policy (refer to appendix 6⁵⁹). This will reduce the number of applications that need to be referred to the Mineral Planning Authority when District Planning Authorities are assessing proposals for non-mineral development within a MSA.

- 7.23 Where mineral resources are affected by non-mineral development and there is a requirement for extraction of the mineral prior to non-mineral development taking place, proposals for prior extraction will be considered against the policies of this Plan. For example, mineral extraction could take place prior to or as part of construction works.
- 7.24 Policy 3 also aims to safeguard: mineral sites and mineral site allocations (Policy 3.2 (b)); and, mineral infrastructure sites used for mineral processing, handling, and transportation (Policy 3.5); from non-mineral development which would unduly restrict the use of those sites. To assist developers and district planning authorities in applying this policy relevant sites permitted by the County Council, together with a 250 metre consultation zone drawn around each site, will be made publically available via our internet based mapping service and the data will be shared with the district planning authorities for their use. We will also expect the district planning authorities to apply this policy to mineral infrastructure sites that they permit in their areas e.g. stand-alone concrete batching plants and coating plants.⁶⁰ In relation to the disused railway that connects with the Cauldon quarries, the district local plan safeguards the route and supports the reuse for commercial purposes.⁶¹

 ⁵⁸ "Provision of Geological Information and a Revision of Mineral Consultation Areas for Staffordshire County Council" (2006) – British Geological Survey
⁵⁹ Refer to paragraph 5.2.7 of <u>"Mineral Safeguarding in England: good practice advice" (2011)</u> BGS

 ⁵⁹ Refer to paragraph 5.2.7 of <u>"Mineral Safeguarding in England: good practice advice" (2011)</u> BGS
⁶⁰ Refer to paragraph <u>006</u> Reference ID: 27-006-20140306 of the PPG

⁶¹ Refer to Policy T2 of the <u>Staffordshire Moorlands Core Strategy – March 2014</u>

Policy 4: Minimising the impact of mineral development

The environmental considerations

- 4.1 In assessing the impact of proposals for mineral development on people, local communities and the environment, where relevant, the following environmental considerations will be taken in to account:
 - a) Noise;
 - b) Air quality;
 - c) Visual amenity, including the effects of light pollution;
 - d) Vibration from blasting operations;
 - e) Traffic on the highway network;
 - f) Public rights of way and public open space;
 - g) Green Belt;
 - h) The countryside;
 - i) Landscape, having regard to the relative importance of the Cannock Chase Area of Outstanding Natural Beauty, the Peak District National Park together with their settings, and any locally designated areas; and having regard to the County Council's landscape character assessment 'Planning for Landscape Change'; to ensure that proposals protect and enhance valued landscapes and are informed by and sympathetic to landscape character.
 - j) Natural environment, having regard to maintaining the integrity of international sites and the relative importance of national and locally designated sites, habitats and species of principal importance for biodiversity and features of geodiversity interest; and having regard to the national biodiversity strategy and the Staffordshire Biodiversity Action Plan, ecological networks, green infrastructure and the Staffordshire Geodiversity Action Plan; to ensure that proposals conserve and enhance the natural environment and where possible enhancement of ecological networks and green infrastructure;

Policy 4: Minimising the impact of mineral development (continued)

	k)	Historic environment, having regard to the relative importance of designated and non-designated heritage assets and their settings, the potential for previously unrecorded archaeological remains; and having regard to the Staffordshire Historic Environment Record, the Staffordshire Historic Landscape Characterisation and the Aggregates and Archaeology in Staffordshire to ensure that the proposals protect and conserve the historic environment;					
	I)	Agricultural land, having regard to safeguarding the long term potential of best and most versatile agricultural land and conserving soil resources as well as preventing soil pollution;					
	m)	Stability of land, including tips, quarry slopes, backfilled land and mining subsidence;					
	n)	Water environment, having regard to the flow and quantity of surface and ground water, managing flood risk and water quality; and having regard to the ability of impacted watercourses to meet the required ecological status under the relevant River Basin Management Plan; to ensure that proposals avoid increasing vulnerability to impacts arising from climate change and prevent contributing to unacceptable risks from water pollution.					
	o) Land contamination; and,						
	p) C	umulative effects from a single site, or from a series of sites in a locality.					
4.2	Where unacceptable adverse effects cannot be avoided, adequate mitigation should be demonstrated. As a last resort, where unacceptable adverse effects cannot be avoided or adequately mitigated, compensatory measures will be taken into account.						
<u>Ove</u>	rall a	essessment					
4.3	Having assessed the impacts of the proposals for mineral development and the mitigation and/ or compensatory measures, permission will only be granted where it has been demonstrated that there are no unacceptable adverse impacts on human health, general amenity and the natural and historic environment, or the						

Policy 4: Minimising the impact of mineral development (continued)

Liaison with the local communities

4.4 Mineral operators will be encouraged to liaise with local communities when preparing new proposals and throughout the period of working and restoration of mineral sites.

Higher environmental standards

4.5 Mineral operators will be encouraged to introduce higher environmental standards of working, restoration and aftercare.

Ancillary development

4.6 Proposals for ancillary development within or near to a mineral site will be assessed in accordance with this policy and where planning permission is granted, it will be limited to the duration of the mineral site.

Reasons for the Policy

7.25 Policy 4 contributes to that part of the Vision that envisages that all mineral operations are operating to high environmental standards and in accordance with Strategic Objective 2 operations are carried out either to prevent or reduce as far as possible adverse impacts. Mineral development (including the winning and working of minerals and the restoration and aftercare of sites) will have adverse impacts on the environment, some of which may be long term, but these impacts can be mitigated through careful location and management of site operations.

The environmental considerations

7.26 In accordance with national policy, Policy 4 sets out environmental considerations to assess the impacts associated with mineral development on people, local communities and the natural and historic environment when determining planning applications. The assessment will need to consider the relevant impacts of the proposals and consider whether any adverse impacts can be avoided or mitigated. ⁶² The standards to be applied in assessing impacts and the effectiveness of mitigation measures are based on national

⁶² Accepting that it is not the role of the planning system to assess the control of processes where these are subject to approval under pollution control regimes.

guidance and best practice. ⁶³ In support of the environmental considerations listed under this policy, the following guidance will be taken into account.

- 7.27 **Noise:** National guidance indicates that in support of mineral development proposals a noise impact assessment should be provided together with proposals to mitigate the noise. ⁶⁴ Where permission can be granted there will be a need to establish noise limits at noise sensitive properties and the guidance indicates the limits for short term noisy activities such as soil stripping. National policy also requires that areas of tranquillity should be protected from adverse noise impacts.⁶⁵
- 7.28 **Dust:** National guidance sets out the key stages for dust assessment including fine particulates (PM₁₀).⁶⁶ Particular attention to air quality management will be required where proposals affect an Air Quality Management Area (AQMA).
- 7.29 **Blast Vibration:** Where blasting is necessary, an assessment will be required of associated ground vibration and whether acceptable limits for vibration can be achieved. ⁶⁷
- 7.30 **Visual amenity:** National guidance suggests that a landscape strategy should accompany applications for mineral development which would include proposals for visual screening and for the sensitive layout of the site.⁶⁸ National policy also requires good design to limit the impact of light pollution.⁶⁹
- 7.31 Traffic: National policy requires that any development that generates significant traffic movements should be accompanied by a Transport Assessment (TA) or Transport Statement (TS) and national guidance sets out the details required in a TA.⁷⁰
- 7.32 **Public rights of way and open space:** National policy requires that public rights of way should be protected and enhanced and existing open space should not be built upon. ⁷¹ There may be a requirement to seek an Order to divert or extinguish a right of way to enable mineral operations to take place but in mitigation there may be opportunities to enhance public rights of way as well as to reinstate open space. ⁷²
- 7.33 **Green Belt:** National policy requires the protection of Green Belt but recognises that mineral extraction need not be inappropriate in the Green Belt

⁶³ Refer to paragraphs <u>011 to 018</u> ref: 27-011-20140306 to ref: ID 27-018-20140306 of the PPG

⁶⁴ Refer to paragraphs 019 ref: ID 27-019-20140306 to 022 ref: ID: 27-022-201403006 of the PPG.

 $^{^{65}}$ Refer to paragraph <u>123</u> of the NPPF.

⁶⁶ Refer to paragraphs <u>023</u> ref: ID: 27-023-20140306 to 032 ref: ID: 27-032-20140306 of the PPG.

⁶⁷ Refer to former guidance in Annex M to MPG14.

 $^{^{68}}$ Refer to paragraph $\underline{059}$ ref; ID: 27-059-20140306 of the PPG.

 $^{^{69}}$ Refer to paragraph <u>125</u> of the NPPF.

⁷⁰ Refer to paragraphs <u>013</u> ref: ID: 42-013-20140306 to <u>015</u> ref: ID: 42-015-20140306 of the PPG.

⁷¹ Refer to paragraphs $\overline{74}$ and $\overline{75}$ of the NPPF

⁷² Refer to Staffordshire County Council's <u>Rights of Way Improvement Plan</u>

provided that the mineral extraction preserves the openness of the Green Belt and does not conflict with the purposes of including land in the Green Belt. ⁷³

- 7.34 **The countryside:** National policy recognises the intrinsic character and beauty of the countryside and so there will be a need to assess proposals in terms of the overall impact on landscape, the natural and historic environment, and rural communities.⁷⁴
- 7.35 **Landscape**: National policy recognises the importance of protecting and enhancing valued landscapes.⁷⁵ The Plan area includes the nationally designated protected landscapes comprising part of the Peak District National Park and the whole of Cannock Chase Area of Outstanding Natural Beauty. At a national level National Character Area Profiles produced by Natural England provide information on landscape character⁷⁶ and contain Statements of Environmental Opportunity providing guidance at a national character area scale. Staffordshire County Council has produced a county-wide landscape character assessment and guidance.⁷⁷.
- 7.36 Natural environment, including sites, habitats and species of importance for biodiversity and geodiversity: National policy recognises the importance of minimising the impacts on biodiversity, providing net gains in biodiversity, protecting ecological networks and geological conservation interests and requires a distinction to be made between the relative importance of designated sites.^{78 79} Developers will need to demonstrate that they have carried out ecological surveys (including surveys for species and habitats of principal importance where appropriate) or geological surveys to enable a proper assessment of the potential impact on biodiversity or geodiversity on and off site to be carried out. Where necessary, developers will also need to show how they propose to protect, mitigate and / or enhance the biodiversity or geodiversity interest.⁸⁰ The Staffordshire Ecological Record holds data on designated sites, protected species, habitats and species of principal importance and those of conservation concern which should be used to inform impact assessment.⁸¹ Developers will be encouraged to work in partnership with GeoConservation Staffordshire which oversees the Staffordshire Geodiversity Action Plan.⁸²
- 7.37 **Historic environment:** National policy recognises the importance of minimising the impacts on designated and non-designated heritage assets, their settings

⁷³ Refer to paragraph $\underline{90}$ of the NPPF.

⁷⁴ Refer to paragraph $\overline{17}$ of the NPPF

⁷⁵ Refer to paragraphs 109 and 115 of the NPPF.

⁷⁶ Refer to National Character Area profiles: data for local decision making

⁷⁷ Refer to '<u>Planning for Landscape Change</u>' produced by Staffordshire County Council (2000)

⁷⁸ Refer to paragraphs <u>109</u> and <u>113</u> of the NPPF. Paragraph 113 also refers to Circular 06/2005.

⁷⁹ Refer to <u>Biodiversity 2020: A strategy for England's wildlife and ecosystem services</u>

⁸⁰ Refer to paragraph <u>118</u> of the NPPF and paragraph <u>018</u> of the PPG.

⁸¹ Refer to <u>http://www.staffs-ecology.org.uk</u>

⁸² Refer to http://srigs.staffs-ecology.org.uk/SGAP

and historic landscape character and requires a distinction to be made between the relative significance of the heritage assets.⁸³ Policy 4 requires developers to provide an appropriate level of assessment, evaluation, mitigation and where warranted, preservation in situ, interpretation or enhancement_of the heritage asset.⁸⁴ The Staffordshire Historic Environment Record provides information on all recorded designated and non-designated heritage assets. This combined with the <u>Staffordshire Historic Landscape Characterisation</u> (HLC) can inform the potential for the presence of previously recorded archaeological remains. The HLC describes the historic character of the landscape and how it has developed over time. The publication 'Aggregates and Archaeology in <u>Staffordshire</u>' sets out approaches to mitigation for the variety of aggregate resources found across the county.

- 7.38 **Agricultural land:** National policy requires that the long term potential of best and most versatile agricultural land should be safeguarded in the restoration of mineral workings. National guidance also recognises that the handling and storage of soils is a key aspect of a restoration strategy.⁸⁵
- 7.39 **Stability of land**: National guidance is provided in relation to slope stability and although quarry ground stability is subject to separate regulation, it is important to ensure that restoration proposals incorporate appropriate assurances of the stability of final landform. In relation to underground mining, proper assessment should be provided to understand the impact of mining and the effect of any ground subsidence.⁸⁶
- 7.40 **Water environment**: In relation to flood risk, national policy and guidance sets out the requirements for assessing flood risk setting out a sequential, risk-based approach to the location of development. ⁸⁷ In most cases, a site specific flood risk assessment will be required for mineral proposals. In relation to avoiding pollution and over abstraction, hydrological and hydrogeological assessment will be required which could involve carrying out ground or surface water monitoring. It will be also necessary to meet the aims of the Water Framework Directive and ensure that there is no overall reduction in water quality or adverse impact on the ecological status of water courses and water bodies and that there is no impact on the ability to meet ecological status objectives found in the relevant River Basin Management Plan.
- 7.41 **Land contamination:** National policy indicates that where a site is affected by contamination responsibility for securing a safe development rests with the developer and/or landowner. Where there is a risk of land contamination adequate site investigation information, prepared by a competent person, should be presented. ⁸⁸

⁸³ Refer to section $\underline{12}$ of the NPPF.

⁸⁴ Refer to <u>"Mineral Extraction and Archaeology: A Practice Guide"</u> (Heritage England)

⁸⁵ Refer to paragraphs 025 ref: ID: 8-025-20140306 and 038 ref: ID: 27-038-20140306 of the PPG

⁸⁶ Refer to paragraph 033 ref: ID: 27-033-20140306 of the PPG

⁸⁷ Refer to section 10 of the NPPF.

⁸⁸ Refer to paragraph <u>121</u> of the NPPF.

7.42 **Cumulative effects:** National policy recognises that it is important to take account of the cumulative effects of mineral development⁸⁹. When assessing proposals account will be taken of the multiple impacts of the development and the impacts of concurrent and / or consecutive working in an area. For example, the potential environmental effects on the landscape, the highway network and the water environment, which should be addressed as part of the Environmental Impact Assessment. Also, in accordance with Policy 6.2 (a), it will be important to minimise the amount of land disturbed at any one time by phased working and restoration. Cumulative effects can be negative but also positive, for example the combined effect of a series of sites bringing about landscape –scale benefits in the Central Rivers Initiative area.

Liaison with the local communities

7.43 There are currently 17 site liaison committees in Staffordshire which provide a forum for site issues to be discussed. National policy encourages pre-application discussion and proactive working. ⁹⁰ Policy 4 aims to encourage mineral operators to establish and maintain good liaison with local communities.

Higher environmental standards

7.44 For longer term permissions, there is an opportunity to review planning permissions every 15 years under the Environment Act 1995 but having carried out reviews of all operational mineral sites subject to old mineral permissions, recent legislation now provides an opportunity for the Mineral Planning Authority to define appropriate timescales for these subsequent periodic reviews subject to those reviews not being undertaken more frequently than every 15 years. This means that reviews can be deferred where it is determined that existing planning controls are effective in managing the mineral operations.⁹¹ Alternatively, the policy also encourages proposals where environmental improvements can be secured by consolidating existing mineral permissions and by co-ordinating working and restoration; or by developing proposals to work mineral resources in less sensitive areas and relinquishing permitted reserves in more sensitive areas.

Ancillary development

7.45 In addition to processing planning applications for the winning and working of minerals, the Mineral Planning Authority will also determine applications for ancillary development at or near to a mineral site. Any proposals will be regarded as ancillary development were the principal purpose of the ancillary development would be any purpose in connection with the operation of the

⁸⁹ Refer to paragraph <u>120</u>, <u>143</u> and <u>144</u> of the NPPF

⁹⁰ Refer to paragraphs <u>187</u> to <u>189</u> of the NPPF.

⁹¹ Growth and Infrastructure Act 2013

mineral site; the treatment, preparation for sale, consumption or utilisation of minerals won or brought to the surface at that mineral site, or the storage or removal from the mineral site of such minerals, their products or waste materials derived from them.⁹² Policy 4 requires that ancillary development should be limited to the duration of the mineral site and that the impacts of proposed development will be assessed in accordance with Policy 4.

⁹² Refer to <u>Part 17 of the Town and Country Planning (General Permitted Development) (England)</u> <u>Order 2015</u>

Policy 5: Planning for Hydrocarbon Extraction

Exploration and appraisal

- 5.1 Proposals for the exploration and appraisal of hydrocarbons will only be supported where it has been demonstrated that well sites and associated facilities are sited in the least sensitive location from which the target reservoir can be accessed and they accord with the plan policies, including Policy 4.
- 5.2 Where proposals for exploration and appraisal are permitted, there will be no presumption that long term production from those wells will be permitted.

Production

5.3 Proposals for the production of hydrocarbons will only be supported where it has been demonstrated that the further works and the surface facilities are justified as being required to manage the output from the well(s), including facilities for the utilisation of energy, where relevant, and that they are sited in the least sensitive location from which the target reservoir can be accessed. Proposals will also need to accord with the plan policies, including Policy 4. Proposals should also be supported by a full appraisal programme for the hydrocarbon resource.

Overall assessment

5.4 Having assessed the impacts of the proposals for the exploration, appraisal and production of hydrocarbons, permission will only be granted where it has been demonstrated that there are no unacceptable adverse impacts on human health, general amenity and the natural and historic environment, or the material planning benefits of the proposals outweigh the material planning objections. All proposals should include restoration and aftercare measures for each of the stages of development.

Reasons for the Policy

7.46 Chapter 4 described the 'where', 'how' and 'when' for the development of Staffordshire's hydrocarbons, including the type of hydrocarbons, the current sites and licensed areas, the staged nature of development, the various regulatory regimes that control development and the lack of current knowledge about the potential of the resource.

- 7.47 Our Vision and Strategic Objectives 2 and 3 support the sustainable development of hydrocarbons in locations where the impacts have been minimised or mitigated and sites are operating to high environmental standards.
- 7.48 National policy and guidance requires us to make a clear distinction between the three phases of development (exploration, appraisal and production)⁹³ and national guidance supports the identification of criteria to assist with the location and assessment of well sites within areas licensed for hydrocarbon development.⁹⁴
- 7.49 Policy 5 sets out how we would assess proposals at these three distinct stages within the licensed areas.

⁹³ Refer to paragraph <u>147</u> of the NPPF and <u>paragraphs 91 to 103</u> (ID: 27-091-20140306) to (27-103-20140306) of the PPG.

⁹⁴ Refer to paragraph <u>106</u> ID: 27-106-20140306 of the PPG.

Policy 6: Restoration of Mineral Sites

Restoration requirements

- 6.1 Proposals for the restoration of mineral sites will only be supported where it has been demonstrated that they accord with the plan policies, including Policy 4.
- 6.2 Proposals for the restoration of mineral sites, including the review of restoration strategies/ plans will only be supported where it has been demonstrated that the proposals are sufficiently comprehensive, detailed, practicable and achievable within the proposed timescales and where relevant, that:
 - a) the land affected at any one time would be minimised by including phased working and restoration;
 - b) the amount of imported backfill would be the minimum necessary to achieve the satisfactory restoration of the site;
 - c) sufficient backfill materials are likely to be available to restore the site within an acceptable timescale;
 - the long term potential of best and most versatile agricultural land would be safeguarded and the soil resources would be conserved;
 - e) the flood risk would not be increased and opportunities to reduce flooding would be maximised;
 - f) the restoration enhances the natural environment and net gains in biodiversity would be achieved by contributing to the delivery of local ecological networks; by preserving, restoring, re-creating and joining up habitats of principal importance and enhancing ecological networks; by protecting and supporting populations of species of principal importance; and, by contributing to the national Biodiversity Strategy, the Staffordshire Biodiversity Action Plan and relevant landscapescale initiatives.
 - g) the restoration enhances valued landscapes, the setting of heritage assets and is informed by and sympathetic to landscape character (including heritage assets and the historic landscape character);

Policy 6: Restoration of Mineral Sites (continued)

- h) the aftercare provision would be sufficient to secure high quality and sustainable restoration of the site; and,
- i) opportunities to increase the provision of public access, public open space, recreational and sporting facilities would be maximised, particularly where the proposals would contribute towards development plan policies and proposals, or other local initiatives;
- j) proposals support the Water Framework Directive objectives by improving river geomorphology and wetland habitat complexity.

Regular review of the restoration strategies / plans

6.3 Developers will be required to regularly review their restoration strategy / plan at least every 10 years to ensure that it is up to date having regard to Policy 6.2 above.

Financial Guarantees

- 6.4 In exceptional circumstances, developers will be required to demonstrate that adequate financial provision has been made to fulfil the restoration and aftercare requirements when proposals are submitted:
 - a) for a new mineral site; or,
 - b) to change the working, restoration and aftercare of an existing site, particularly when the proposals involve a change to the ownership or control of the site, or part thereof.

Adequate financial provision will also include the security of a Restoration Guarantee Bond or other financial guarantee to cover all or part of the restoration and aftercare costs.

Overall assessment

- 6.5 Having assessed the restoration proposals, permission will only be granted where it has been demonstrated that:
 - a) the restoration proposals are sufficiently comprehensive, detailed, practicable and achievable within the proposed timescales; and,
 - b) the material planning benefits of the restoration proposals outweigh the material planning objections.

Reasons for the Policy

- 7.50 Chapters 2 and 3 highlight issues relating to the availability of backfill and the importance of securing up to date restoration strategies / plans and the opportunities this can present to enhance local amenity and the environment.
- 7.51 Our Vision, and Strategic Objectives 3 and 4, recognise that an important aspect of sustainable development of minerals requires high quality restoration and aftercare, sites to be restored at the earliest opportunity, restoration strategies / plans to sites to be regularly reviewed and opportunities to enhance local amenity and the environment are maximised.
- 7.52 National policy and guidance requires that land is reclaimed at the earliest opportunity and that high quality restoration and aftercare takes place.⁹⁵
- 7.53 Policy 6 sets out how we would assess restoration proposals for new sites or revised restoration strategies / plans for existing sites.

Restoration requirements

7.54 In assessing the impact of restoration proposals it will be necessary to have regard to Policy 4 and then Policy 6 requires that the proposals are sufficiently comprehensive, detailed, practicable and achievable within the proposed timescales. For short term proposals more detail is likely to be required, whereas for long term proposals a restoration strategy may be sufficient to demonstrate that the proposals are practically achievable. In such circumstances a detailed restoration and aftercare scheme would be required at a later stage.⁹⁶ A holistic approach to restoration is encouraged as this can create biodiversity and geodiversity benefits and strengthen landscape character (including historic landscape character) recognising the potential to deliver wider benefits of ecosystem services such as food and water, regulation of floods, carbon capture and storage, and potential indirect benefits such as health, and well-being.⁹⁷ Proposals should consider restoration achieved on earlier phases of the guarry and guarries nearby to ensure the resulting mix of after uses, habitats, agricultural land and public access is appropriate and has taken account of the wider context. Policy 6 sets out a number of important requirements that may need to be addressed in developing a restoration strategy/ plan.

⁹⁵ Refer to paragraph <u>143</u> of the NPPF

⁹⁶ Refer to paragraph <u>040 ref. ID: 27-040-20140306 of the PPG</u>.

⁹⁷ Refer to paragraph 109 of the NPPF and "Introducing an Ecosystem Approach to Quarry Restoration" – Cranfield University (2013)

- 7.55 *Phased working and restoration*: National policy requires the amount of land disturbed by mineral workings to be kept to a minimum and sites to be restored at the earliest opportunity.⁹⁸
- 7.56 Restoration using backfill: Our adopted Waste Local Plan highlighted the potential shortfall of suitable backfill to restore mineral sites and the need to review restoration requirements in order to minimise reliance on backfill and achieve timely restoration.⁹⁹ In some cases, it may be necessary to backfill mineral workings to achieve a landform that is suitable for a beneficial after use.¹⁰⁰ In order to test the practicality and achievability of the restoration proposals, it will be important for developers to demonstrate that they can complete the backfilling within the proposed timescales.¹⁰¹
- 7.57 *Agricultural land*: National policy requires that best and most versatile agricultural land is safeguarded and that soil resources are conserved.¹⁰² The careful handling and replacement of soil resources is a key part of most restoration schemes but the level of detail required to support a planning application will depend on the circumstances of the site including the expected duration of operations on the site.¹⁰³ Relevant guidance includes the "Good practice guide for handling soils" produced in April 2000 on behalf of Government.¹⁰⁴
- 7.58 *Flood risk*: National policy highlights the need to take opportunities to reduce the causes and impacts of flooding through new development¹⁰⁵. Water compatible development within the functional floodplain includes sand and gravel workings and opportunities to improve connectivity between the river and floodplain which increases space for flood water can also lead to the improvement of wetland habitats.¹⁰⁶
- 7.59 *Enhancing biodiversity*: National policy requires working and restoration proposals to demonstrate a landscape scale approach by indicating how they have been designed to respond to the local and wider landscape, habitats and ecological networks, including restoration plans for nearby mineral sites and how they will provide net gains in biodiversity.¹⁰⁷ To maximise these opportunities, developers should prepare working and restoration strategies / plans in consultation with local communities and environmental groups and in accordance with other local plans and strategies¹⁰⁸. For example, along the Trent Valley proposals should involve consultation with the county, district and

¹⁰⁵ Refer to paragraph <u>100</u> of the NPPF.

¹⁰⁷ Refer to paragraph $\frac{117}{117}$ of the NPPF.

 ⁹⁸ Refer to paragraph <u>143</u> of the NPPF and paragraph <u>042</u> ref.ID:27-042-20140306 of the PPG
⁹⁹ Refer to paragraph <u>5.27</u> of the Waste Local Plan.

¹⁰⁰ Refer to paragraph <u>001</u> ID reference 27-001-20140306 of the PPG

¹⁰¹ Refer to Policy 1.6 of the Staffordshire and Stoke-on-Trent Joint Waste Local Plan 2010-2026

¹⁰² Refer to paragraph <u>143</u> of the NPPF

¹⁰³ Refer to paragraph 040 reference 27-040-20140306 of the PPG

¹⁰⁴ Refer to <u>Defra guidance</u> found on the National Archives webpages

¹⁰⁶ Refer to paragraph 066 reference ID 7-066-20140306 of the PPG

¹⁰⁸ For example, refer to the Staffordshire Biodiversity Action Plan - Ecosystem Action Plans

parish councils, the Central Rivers Initiative and the National Forest.¹⁰⁹ Restoration opportunities will coincide with the environmental initiatives and proposals set out in other plans and strategies which are highlighted as part of the development considerations for allocated sites.

- 7.60 *Landscape character:* National policy seeks to enhance valued landscapes¹¹⁰ and mineral working and restoration schemes should be informed by the landscape character, ensuring that the schemes fit into and connects with the surrounding landscape. National Character Area Profiles provide a high level understanding of character, while the Staffordshire Landscape Character Assessment provides more detail on Landscape Character Types. An important component of this is the historic character of the landscape and the heritage features within it. For example, where heritage assets have been removed as part of a scheme (i.e. historic hedgerows), these could be replaced along similar alignments with appropriate species; where woodland has been removed in the past, an assessment of historic landscape character might enhance a scheme by informing the reintroduction of historic woodland planting.
- 7.61 *Extended Aftercare*: Legislation requires a period of 5 years aftercare to rehabilitate mineral sites. However in some cases, in order to achieve a beneficial after-use it may be necessary to secure an extended period of aftercare through a legal agreement.
- 7.62 *Public access and recreation:* Restoration proposals should contribute, where appropriate, to enhancing local amenity through the provision of public rights of way, public open space and, recreational or sporting facilities¹¹¹. Appropriate opportunities can be identified within District Local Plans and associated assessments for open space, sports and recreation facilities and through discussions with national and local amenity, recreation and sporting organisations.
- 7.63 *Supporting the objectives of the Water Framework Directive:* Restoration proposals should contribute, where appropriate, to the objectives of the Water Framework Directive. For example, applicants should demonstrate that there would be no overall reduction in water quality or adverse impact on the ecological status of water courses and water bodies and that there would be no impact on the ability to meet ecological status objectives found in the relevant River Basin Management Plan.¹¹²

Regular review of the restoration strategies / plans

¹⁰⁹ Refer to the "<u>Bigger and Better</u>" produced by the RSPB that promotes wetland habitats through minerals site restoration.

¹¹⁰ Refer to paragraph <u>109</u> of the NPPF.

¹¹¹ Refer to paragraphs $\overline{73}$ and $\overline{75}$ of the NPPF

¹¹² Refer to the Humber, North West and Severn river basin district <u>River Basin Management Plans</u> <u>2015</u>.

7.64 As part of the sustainable economic development of minerals, it is important that every mineral site has an approved restoration strategy / plan. As explained in paragraph 7.54, mineral development can be long term and it is sometimes the case that broad restoration strategies / plans are approved initially with detailed plans / schemes drawn up nearer the time when restoration and aftercare is due to take place. In such circumstances, it would be important that the restoration strategy / plan is kept under review to ensure that it remains up to date and opportunities to enhance local amenity and the environment are maximised. Where working and restoration is up to date, it is reasonable to anticipate that the review will be a more straight forward process. Mineral operators are encouraged to involve the site liaison committee in the review of the strategies / plans. The review process has been achieved by agreement with developers through a Section 106 Legal Agreement.

Financial Guarantees

7.65 National policy requires that financial guarantees are only provided in exceptional circumstances and the accompanying guidance explains when guarantees may be required.¹¹³ Large mineral operators tend to be members of trade associations such as the Mineral Products Association who have their own Restoration Guarantee Fund (although this is limited to £1 million).¹¹⁴ However recent experience resulting from the globalisation of the minerals industry indicates that many large mineral operators are concentrating their resources on larger sites. They are also selling or transferring smaller sites to smaller operators towards the end of the extraction phase or during the restoration phase. For these reasons it is important to ensure that all developers / land owners have adequate financial provision to fulfil the final restoration and aftercare requirements. It is also important to ensure that there is an adequate financial guarantee in the event that the developer / landowner is unable to fulfil the final restoration and aftercare requirements. This can be through membership of a trade association with an adequate Restoration Guarantee Fund or by providing an equivalent guarantee bond and be secured as part of a Section 106 Legal Agreement.

¹¹³ Refer to paragraph <u>144</u> of the NPPF and paragraph <u>048</u> ref: ID: 27-048-20140306 of the PPG ¹¹⁴ Refer to "The MPA Restoration Guarantee Fund ... An industry pledge" (2015)

Chapter 8: Implementation and Monitoring of the Plan

Implementation

- 8.1 Staffordshire County Council as the Mineral Planning Authority will take a lead role in the implementation of the objectives and the policies of this development plan document in a variety of ways, including:
 - determining planning applications in accordance with the Development Plan, Government policy and guidance and other material considerations;
 - imposing conditions on planning permissions (refer to appendix 7);
 - negotiating legal agreements with developers where appropriate (refer to appendix 7);
 - enforcing breaches of planning control as necessary (refer to the <u>Staffordshire Local Monitoring and Enforcement Plan</u>);
 - maintaining a dialogue with the minerals industry and local communities through participation in local liaison committees and other means;
 - liaising with other Mineral Planning Authorities on strategic mineral issues of common interest as well as other bodies such as the Environment Agency, Natural England and Heritage England;
 - responding to the District or Borough Councils in relation to proposals for development that could affect mineral safeguarding areas and mineral infrastructure sites;
 - working with the minerals industry and others to identify and develop suitable environmental initiatives; and,
 - issuing advice or supplementary planning documents if appropriate.
- 8.2 Delivery of the Plan's objectives and policies is also dependent on the minerals industry submitting timely planning applications for additional reserves that accord with the Plan. It will be also necessary to ensure that developers:
 - prepare proposals that have carefully considered the environmental impacts of the development;
 - establish good liaison with the local community;
 - consider opportunities to review their operations in order to raise environmental standards;
 - prepare restoration proposals that take account of the environmental considerations in Policy 4 and the restoration requirements in Policy 6; and,

- regularly review their restoration proposals and demonstrate that they have taken account of the financial implications.
- 8.3 It will also require consultees to advise us on the potential impacts of mineral development and consequent mitigation measures.

Monitoring

8.4 Developing a monitoring framework is essential to assessing the delivery of the Plan's objectives and the effectiveness of the Plan. The table below lists indicators and targets that will be used to monitor the Plan and the Annual Monitoring Report will present relevant data.

Table 1: Policy Monitoring Framework

Policy	Key Outcomes	Performance Indicator	Monitoring method	Target	Trigger Point	Corrective
Policy 1: Provision for Sand and Gravel Relates to Strategic Objective 1	Strategic Objective 1 recognises the importance of aggregate minerals to support sustainable economic development taking into account the need to achieve an acceptable balance_between the steady and adequate supply of minerals and the impact of mineral operations on local communities and the environment.	Sales of sand and gravel comparing with rolling 10 and 3 years sales averages Reserves of sand and gravel Sales of and capacity to produce recycled/ secondary aggregates End use of sand and gravel sales including building sands as a proportion of overall supply Permissions within allocated sites/ areas or outside allocated areas. Maintain co-operation on cross	Data derived from annual surveys on behalf of Aggregate Working Party which is then presented in Annual Monitoring Report and Local Aggregate Assessment Compare sales trends with other relevant data including sales of/ capacities for producing recycled aggregate. Applications submitted. Attendance at WMAWP meetings/ RTAB meetings.	Sales of sand and gravel to meet planned level of provision. Maintain at least a 7 year landbank of sand and gravel reserves based on meeting level of provision. All sites to be located in line with location criteria set out in Policy 1 unless meeting the criteria of Policy 1.6 100% attendance of AWP/ RTAB meetings.	10 year sales average exceeds planned level of provision. Landbank falls below 7 years for more than two consecutive years.	action Review level of provision that can be sustainably produced and the reserves required to maintain any new level of provision.
Policy 2: Provision for Industrial Minerals Relates to Strategic Objective 1	Strategic Objective 1 recognises the importance of industrial minerals to support sustainable economic development taking into account the need to achieve an acceptable balance between the steady and adequate supply of minerals and the impact of mineral operations on local communities and the environment	border issues for aggregate supply. Sales/ Reserves of: limestone and shale for the Cauldon cement works; gypsum and anhydrite at Fauld Mine; and Permissions within area of search/ or outside allocated areas for: Shale at Cauldon; and Anhydrite/ gypsum at Fauld Mine Clay supply/ reserves used at clay product works listed in appendix 5, to works outside county and supply from outside county to works in Staffordshire; and Sales/ reserves of shale/ marl at Kingsley / Keele Quarries to supply Tunstead Cement works in Derbyshire.	Data derived from planning applications and reported in Annual Monitoring Report Surveys to be arranged with clay industry co-operation and co- operation with relevant planning authorities.	Maintain at least 15 years of permitted reserves for cement minerals. All sites to be located in line with location criteria set out in Policy 2 100% of extension areas conditioned to only be worked following cessation of working within existing site. Maintain at least 25 years of permitted reserves for clay product works listed in appendix 5.	Landbank for Cauldon and Fauld_falls below 15 years of permitted reserves for more than two consecutive years Landbank for clay product works falls below 25 years for more than three consecutive years	Review provisions of resources that can be allocated for the continuation of cement/ mine production. Review provision of resources that can be allocated for the supply of works
Policy 3: Safeguarding Minerals of Local and National Importance and	Strategic Objective 1, aims to achieve an acceptable balance between non-mineral development and safeguarding Staffordshire's important minerals and mineral infrastructure sites.	Extent of MSAs sterilised by non- mineral development granted permission Number of mineral infrastructure sites adversely affected by non- mineral development.	Consultations from District/ Borough Councils Applications will be monitored in Annual Monitoring Report Update MSA and list of mineral infrastructure sites on annual	No sterilisation of mineral resource contrary to requirements of policy. No loss of Minerals Infrastructure sites contrary to policy.	More than one proposal is approved (within the plan period) that does not meet criteria and result in sterilisation.	Review criteria for safeguarding minerals and mineral site infrastructure sites. Update MSA
The Minerals Local Plan for Staffordshire (2015 to 2030) (Adopted 16 February 2017)

Policy	Key Outcomes	Performance Indicator	Monitoring method	Target	Trigger Point	Corrective action
Important Infrastructure Relates to Strategic Objective 1			basis and provide to District planning authorities.	MSAs consistent with adjoining authorities MSAs.	More than one approved proposal (within the plan period) results in a loss of a Mineral Infrastructure site.	mapping and list of mineral site infrastructure sites.
Policy 4: Assessment of Mineral Planning Applications Relates to Strategic Objectives 2 and 3	Strategic Objective 3 aims to ensure that all mineral operations are operating to high environmental standards and in accordance with Strategic Objective 2 operations are carried out either to prevent or reduce as far as possible adverse impacts.	Approved proposals meet environmental criteria Number of applications refused due to adverse amenity or environmental effects. Sites affecting designated ecological/ cultural sites Loss of habitat	Recorded from applications submitted Guidance on environmental standards	100% of applications are in line with environmental criteria except where the material planning benefits of the proposals outweigh the material planning objections.	Any application permitted that does not meet the environmental criteria set out in Policy 4. Guidance on environmental standards is out of date	Ensure that any applications permitted not in line with the environmental criteria are under special circumstances and are appropriately mitigated and monitored. Update environmental standards
Policy 5: Assessing Planning Applications for Hydrocarbons Development Relates to Strategic Objectives 2 and 3	Strategic Objectives 2 and 3 support the sustainable development of hydrocarbons in locations where the impacts have been minimised or mitigated and sites are operating to high environmental standards.	Approved proposals meet criteria	Applications submitted Annual Monitoring Report	100% of proposals in line with plan policies including Policy 4	Any application submitted not in line with the criteria laid out in Policy 5	Ensure that any applications permitted not in line with the criteria are under special circumstances and are appropriately mitigated and monitored.
Policy 6: Restoration of Mineral Workings Relates to Strategic Objective 3 and 4	Strategic Objectives 3 and 4, recognise that an important aspect of sustainable development of minerals requires high quality restoration and aftercare, sites to be restored at the earliest opportunity, restoration strategies / plans to sites to be regularly reviewed and opportunities to enhance local amenity and the environment are maximised.	Approved proposals meet policy objectives and criteria Sites not subject to restoration strategy/ plan Amount of land restored for habitat creation	Planning applications/ submissions for restoration and aftercare details Annual Monitoring Report	100% of approvals meet criteria All operational sites to be subject to restoration strategy/ plan Proposals deliver net gain in biodiversity	More than one proposal is approved (within the plan period) that does not meet policy objectives and criteria Operational site without restoration strategy/ plan that has not been considered within last 10 years. Net loss in biodiversity	Ensure that any applications permitted not in line with the environmental criteria are under special circumstances and are appropriately mitigated and monitored.



For more information please contact: Planning, Policy and Development Control Staffordshire County Council No.1 Staffordshire Place Stafford ST16 2LP E-mail: planning@staffordshire.gov.uk

Postal Address:

Planning, Policy and Development Staffordshire County Council 2 Staffordshire Place Tipping Street Stafford ST16 2DH

If you would like this publication in another language or format please contact us on 01785 277278 or by emailing tim.billings@staffordshire.gov.uk