Consultation on Issues and Options (2)

September 2008
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What is the purpose of the Minerals Core Strategy?

1.1 The Minerals Core Strategy is a development plan document that will explain our aims in planning for future mineral development and in particular, will indicate the key areas where minerals are to be extracted.

Which parts of Staffordshire will be relevant to the Minerals Core Strategy?

1.2 The Strategy will apply to the whole of Staffordshire except those parts of the county within both the Peak District National Park and the administrative area of Stoke-on-Trent City Council.

What is the purpose of this consultation document?

1.3 The document provides an opportunity to consider issues and options for the Minerals Core Strategy. In response to advice from the Government Office for the West Midlands and new national planning policy, it is now considered appropriate to prepare the Minerals Core Strategy by also identifying potential “strategic sites”. Options for strategic sites have been submitted by the minerals industry and landowners and this document includes questions to find out what are the opportunities and constraints associated with those site options.

How you can contribute?

1.4 We want to receive your comments in relation to the questions raised in the document. If you wish to comment on:

- **Key characteristics** of the county’s current minerals industry refer to “Minerals Development in Staffordshire – a Spatial Portrait”
- **Priority issues** to be tackled by the Minerals Core Strategy refer to “Challenges and Priority Issues”
- **Outcomes** to be achieved in planning for minerals over the next 15 years refer to “Defining a Spatial Vision” and “Identifying Strategic Objectives”
- **Strategic site options** refer to “Options for a Spatial Strategy”.

1.5 Details of the site options are available via our website www.staffordshire.gov.uk/mcs or available via libraries and council offices.

1.6 We would be pleased to receive your responses to the questions set out in this document before **Monday 24 November 2008**.

1.7 If you are responding via the postal system, please send your response to the following address: Planning Development Control Team, Development Services, Staffordshire County Council, Riverway, Stafford, ST16 3TJ.
2.1 Staffordshire is predominantly a rural area but three quarters of its population live in urban areas. The main urban centres include Stafford, Newcastle under Lyme, Biddulph, Leek, Burton on Trent, Lichfield, Tamworth, and Cannock. The population of the county is 822,800 (based on 2006 estimates) not including Stoke-on-Trent.

2.2 The county is within the north eastern part of the West Midlands region and is bounded by Cheshire to the north west; the Peak District National Park to the north east; Shropshire and Telford & Wrekin to the west; Derbyshire to the east; and the West Midlands conurbation to the south. The south east of the county is also bounded by Leicestershire and Warwickshire and to the south west by Worcestershire. In terms of minerals planning, the County Council is responsible for mineral planning within the major part of the county but within Stoke on Trent mineral development is separately administered by Stoke-on-Trent City Council.

What are the significant economic minerals?

2.3 The mineral resources in Staffordshire reflect the complex geological history of the area over the last 340 million years. These events have produced a wide range of rock types of potential economic interest, mainly sedimentary, either exposed at the surface or found at relatively shallow depth beneath a cover of younger sedimentary rocks. Historically, rocks of carboniferous age, particularly the Coal Measures and the outcrops of Carboniferous limestone, were of major economic importance but during the last 20 years, production of minerals used as construction materials have become more significant.

Table 1 Comparison of minerals produced in Staffordshire with production in the West Midlands and in England

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Staffordshire production (tonnes)</th>
<th>Regional Production (tonnes)</th>
<th>% of regional supply</th>
<th>National Production (tonnes)</th>
<th>% of national supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand and Gravel</td>
<td>5,834,000</td>
<td>9,396,000</td>
<td>62.1</td>
<td>80,242,000</td>
<td>7.3</td>
</tr>
<tr>
<td>Brick Clay</td>
<td>558,000</td>
<td>1,467,000</td>
<td>38.0</td>
<td>6,515,000</td>
<td>8.6</td>
</tr>
<tr>
<td>Cement shale</td>
<td>292,000</td>
<td>292,000</td>
<td>100.0</td>
<td>2,002,000</td>
<td>14.6</td>
</tr>
</tbody>
</table>
2.4 Figure 1 and Table 1 show that sand & gravel is the most significant mineral extracted in terms of the quantity produced. Sand & gravel is an aggregate mineral and the principal uses of sand & gravel are for producing concrete, mortar and asphalt. Sand & gravel resources in Staffordshire are derived from two broad categories as follows:

- Superficial deposits that include river gravels and glaciofluvial deposits; and
- Bedrock deposits comprising conglomerates within the Triassic Sherwood Sandstone Group, formerly known as the Bunter Pebble Beds.

2.5 Limestone is an important source of crushed rock aggregate and is used in producing concrete, asphalt and uncoated road stone. Limestone is also an essential raw material for cement manufacture (80 to 90% of the raw mix).

2.6 Clay (including shale) is extracted for the manufacture of bricks, tiles and other clay products. The Carboniferous Etruria Formation is the principal brick clay resource in Staffordshire and is recognised nationally as a premium clay resource. Clay and shale is also used in cement making (comprising 10 to 15% of the raw mix) and as an engineering material e.g. for lining landfill sites.

2.7 In addition to limestone and shale, anhydrite is another mineral extracted for cement making. One mine in Staffordshire produces half of the anhydrite used in the UK cement industry.
2.8 Capacity to produce cement clinker from the Cauldon cement works at Waterhouses in the Staffordshire Moorlands based on local resources of clay & shale, is 8.1% of national capacity for 2006 (Source: BGS Mineral Planning Factsheet 2008).

2.9 In addition to the cement minerals, another industrial mineral worked in Staffordshire is silica sand. These are sands with a high proportion of silica and unlike aggregate sands are valued for their chemical as well as their physical properties. Currently, these sands are extracted from the Rough Rock Sandstone and produce sand that is used for glass making, ceramics and chemical manufacture, and is also used for horticultural applications.

2.10 Sandstones are also extracted in Staffordshire for use as a traditional building material. The scale of production is relatively small compared with the other minerals worked in Staffordshire but the production of building stone has both a local and national market. Local stone masons are responsible for building restoration work on many important historical buildings throughout the country.

2.11 There are significant areas within Staffordshire licensed by the Government where developers have an interest to exploit oil and gas resources. In particular, licences are held by energy developers with an interest to exploit methane gas found within coal seams.

2.12 There has been a long history of coal mining in Staffordshire and although coal is not currently mined, significant coal resources remain, particularly shallow resources that could be exploited by surface extraction or opencast methods.

Where are minerals extracted?

2.13 There are 29 operational or non operational quarries permitted to extract sand & gravel in Staffordshire. Figure 2 shows the location of these quarries across the County.

2.14 The effect of geology means that sand & gravel quarries working in the northern part of the County are mainly associated with working bedrock. Other main areas for working bedrock deposits are within the Cannock Chase Area of Outstanding Natural Beauty and in the Hints/ Weeford area within the southern part of Lichfield District. Elsewhere there are significant quarries working river gravel deposits along the Trent and Tame valleys.

2.15 Figure 2 also shows the location of 4 quarries permitted to extract limestone as crushed rock. These are situated in the north eastern part of Staffordshire in close proximity to that part of Staffordshire within the Peak District National Park. Currently, there is only one operational quarry but there are significant reserves of limestone available in all 4 quarries.
2.16 Figure 3 shows the location of Cauldon Cement Works which has the benefit of adjacent limestone and shale reserves that are used for cement making. Anhydrite is extracted from the only operational underground mine in Staffordshire where current reserves are brought to the surface at Fauld.
2.17 Figure 3 also shows the distribution of the permitted clay and shale quarries. The main working areas are associated with the outcrops of the Etruria Formation within Newcastle Borough, to the south of Cannock and at Tamworth. There are also permitted reserves available near Wombourne crossing the county boundary into Dudley.

Figure 3 Location of limestone, shale and clay quarries
2.18 Building stones are potentially found widely across the county but are now mainly worked from reserves in and around Hollington village. Sandstones producing silica sands are now only worked from two sites in the county. The major site is at Moneystone Quarry in the Staffordshire Moorlands although production is anticipated to cease at this site within the next year. Silica sands are also produced at Hurst Quarry, north of Biddulph.

2.19 Figure 4 shows the extent of the coalfield within Staffordshire together with the extent of petroleum exploration and development licences issued by the Government for the development of oil or gas. The plan also shows an area derived from a map produced by the former Department of Trade & Industry indicating that part of the local coalfield where there is “good coal bed methane potential”.

Where are the markets for the minerals?

2.20 Located near the geographical centre of the country, Staffordshire has good transport links to the north and south, and improving links to the east and west. Most minerals are moved to their markets in bulk but in many cases due to their comparatively low value, transport costs can restrict economic distances to market.

2.21 Aggregate minerals: Economic haulage distances for aggregate minerals by road are relatively short (the average distance for transporting sand & gravel is 25 miles) and therefore, markets for aggregate materials are likely to be local supporting construction activities in the North Staffordshire and the West Midlands conurbations. Data collected for the most recent national Aggregate Minerals Survey in 2005 indicates that 46% of sand & gravel produced in Staffordshire was consumed in Staffordshire or Shropshire; 39% in the West Midlands and 10% in the East Midlands. This survey also indicated that 78% of sand & gravel produced in Staffordshire is used for concrete making and this production will help to support a local network of ready mix concrete plants and concrete product factories. Figure 5 gives an indication of the distribution of such plant and factories.

2.22 Clay: The significant market for clay is the production of bricks and roof tiles. The West Midlands region produced 22% of the national brick production in 2005, and 23 % in 2006 and 2007. Figure 5 shows the location of the significant factories in Staffordshire and indicates that they are generally situated locally to the mineral resources that support the manufacturing of products. Some clay is produced that it is used by factories outside the county and conversely, brick producers have indicated that clay from outside Staffordshire is used. In particular, relatively small quantities of fireclay (buff coloured clay associated with coal seams) are brought into the county from a site in Shropshire.
2.23 Cement minerals: Limestone and shale at Cauldon are used at the adjacent cement works. The cement produced at this site is sold within the Midland and Northern region. Shale extracted at Keele Quarry is currently used for cement manufacture at the Tunstead Cement Works in Derbyshire. Anhydrite extracted at Fauld Mine is supplied to cement works in the Midlands.
2.24 Silica sands: Sands from Moneystone Quarry are used in the manufacture of clear glass and production of this glass sand is of national significance. As a consequence of the process for producing glass sands a range of other products are also derived from the sandstone including silica flours; specialist fillers and cristobalite.
2.25 Coal: Previously coal worked in Staffordshire has been supplied to power stations at Rugeley and at Ironbridge in Shropshire. There are currently no mines (underground or opencast) in the county producing coal.

*How are the minerals transported to markets?*

2.26 Most of the minerals produced in Staffordshire are currently transported by road. In the recent past, however, minerals have been transported by rail and there remain potential rail connections adjacent to quarries at Cauldon Lowe; Moneystone Quarry; and Alrewas Quarry. There are also permitted reserves and other resources situated in close proximity to the former Silverdale Colliery branch line.

*How are sites reclaimed following mineral working?*

2.27 There are two main ways to reclaim surface mineral workings:

- Backfill the quarry void with wastes derived from mineral working or brought onto the site from elsewhere; and/ or
- Restore to levels lower than original ground levels.

2.28 Where the nature of the geology and the proximity of the ground water are not constraints, mineral sites provide an opportunity for the disposal of wastes. In Staffordshire, 23 of the permitted clay quarries are already permitted for the disposal of wastes. Backfilling with non-hazardous materials/ wastes at former sand & gravel workings has also been the means of reclaiming “best and most versatile” agricultural land where it has been necessary to reinstate to ground levels above the water table. For example, areas of former sand & gravel workings in the Trent Valley have been reclaimed using ash arising from nearby power stations and inert wastes from construction and demolition sites.

2.29 Alternatively, along the river valleys where sand & gravel has been extracted, reinstatement has involved the creation of areas of open water. At Middleton Hall Quarry near Tamworth former sand & gravel workings have been handed over recently to the RSPB to create one of the most important wetland habitats in the Midlands. Elsewhere, deep sand & gravel workings in the Sherwood Sandstone deposits have been reclaimed at lower levels by ensuring that the slopes of the excavation are restored at gradients to allow for appropriate afteruse and to create new landscapes. At Croxden Quarry, near Cheadle deep excavations are being reclaimed for the creation of heathland, woodland and conservation grassland.

2.30 Mineral workings often occur within concentrated areas. For example, there are extensive sand & gravel workings within the Trent and Tame valleys and as a consequence, the County Council in partnership with a number of other public and private organisations have developed the Central Rivers Initiative which provides a regeneration concept with the National Memorial Arboretum at its core. Another opportunity for the development of a restoration strategy is associated with the limestone quarries in the Staffordshire Moorlands and part of this area has been subject to a study to assess potential reclamation opportunities.
2.31 Within Staffordshire, there are large areas of land designated as Green Belt to prevent urban sprawl and to safeguard the countryside. Within the Green Belt, there is a national policy requirement for mineral sites to operate at high environmental standards and to be well restored. This designation affects the majority of the permitted mineral sites in the county as 44 out of 64 permitted mineral sites are within these two Green Belt areas.

Question 1

Are there any other key characteristics of the minerals industry or the environment that are relevant to understanding what are the key issues for minerals development in Staffordshire?
3.1 There are many issues that relate to the development of mines and quarries but it is necessary for the Strategy to focus on those issues that are most significant and require a local Strategy to tackle them.

3.2 Based on national and regional planning policy; our Sustainable Community Strategy; local monitoring of mineral development as reported in our Annual Monitoring Reports; and feedback received in respect of a previous consultation on issues and options for the Strategy in 2005, the following issues are proposed as the most significant to the preparation of a Minerals Core Strategy for Staffordshire:

Ensuring an adequate supply of sand and gravel

3.3 The Regional Spatial Strategy for the West Midlands requires that the County Council plans on the basis of providing 6.6 million tonnes per annum (Mtpa) of sand & gravel. This figure is referred to as the sub regional apportionment and represents 65% of the overall West Midlands regional guideline target of 10.125 million tonnes per annum. The guideline is based on national forecasts made by national Government for demand of sand & gravel as an aggregate material and also takes into account that demand for aggregate materials will also be met by using recycled wastes and other alternative materials. The national guideline figures currently assume that 23% of total aggregate demand will be met from alternative sources.

3.4 At the end of 2006, there were 83.4 million tonnes of permitted sand and gravel reserves remaining (not including reserves within dormant sites). Despite the quantity of permitted reserves, there is anticipated to be a need to identify additional sand and gravel reserves during the next 15 years for the following reasons:

- Based on producing 6.602Mtpa, current reserves would be depleted in 2019 if all reserves were available to be worked over that period;
- National planning policy proposes that a landbank of permitted sand & gravel reserves is maintained equivalent at any one time to providing 7 years of production at the sub regional apportionment (i.e. 7 x 6.602 = 46.2 million tonnes). In 2012, it is anticipated that sand & gravel reserves would fall below the 7 year landbank requirement;
- Capacity to produce the sub regional apportionment of 6.602Mtpa requires that there are sufficient quarries with the capacity to produce sand & gravel. Based on an assessment of the planning permissions for sand & gravel working, there is a significant reduction in productive capacity after 2013 due to the expiry of planning permissions at 4 major quarries. This will affect the ability to meet the sub regional apportionment.

Question 2

Are there any specialist and distinct markets for sand & gravel where separate provision for the maintenance of supply is necessary?
Maintaining supplies of clay for brick and tile works

3.5 There is now a national planning policy requirement to provide a stock of permitted reserves of clay for each new or existing brick or tile works and it is recommended that this should be sufficient to provide for 25 years of production at the works. On this basis, it has been assessed that 4 of the 6 existing works will need additional reserves to provide for a 25 year landbank.

3.6 Monitoring by the County Council indicates that since 1997 total production of clay in the County has been between 800,000 and 900,000 tonnes per annum but the figure for 2004 shows an increase to 980,000 tonnes. The Practice Guide to MPS1 explains that demand for bricks (noting that 95% of extracted brick clay is used in the manufacture of bricks) has been fairly stable and this is generally reflected by local data for Staffordshire brick clay production.

3.7 Unlike the planning for aggregates, there are no national forecasts to assist in planning for future demand for brick clay and therefore, recent levels of production are the best indicator of demand. Potential increases in the level of house building in the medium to long term could be anticipated to increase the level of demand for bricks and tiles but there is no evidence to assess the size of any local increase in the demand for clay.

Question 3

Is there any other manufacturing capacity within the county where there is or will be a need to maintain a supply of clay?

Question 4

Is there any evidence that should be used to forecast future demand for clay?

Maintaining supplies of minerals for cement manufacture

3.8 Production of cement from the Cauldon cement works is dependent on the extraction of limestone and shale that are both available from “strategic” mineral workings adjacent to the works. There are sufficient reserves of shale to maintain current levels of production to 2029 and limestone reserves currently exceed 100 million tonnes.

3.9 The operator’s concern, however, is that planning permission to work the limestone is subject to the approval of a working scheme and currently there is a requirement to agree a longer term working scheme involving land which forms the
Cauldon Dales Site of Special Scientific Interest (SSSI). There are also hydrological implications for longer term working involving underground cave systems which connect with the Manifold Valley. Options to find alternatives to working the SSSI are being considered and this could involve the release of additional land to enable the relinquishment of reserves within and adjoining the SSSI.

3.10 Since 1999 the operator of Cauldon cement works has invested £20 million on environmental improvements to the plant and the operator has suggested that the significant investment necessary to maintain a cement works justifies a stock of permissions for shale and limestone reserves for the works equivalent to 25 years production. Currently, national planning policy for cement minerals states that: “The size of the cement industry’s landbank should be linked to the scale of investment envisaged at a site…MPAs should normally aim to maintain cement plant with a stock of permitted reserves of at least 15 years.”

3.11 Fauld Mine produces half of the anhydrite used in the UK cement industry and is therefore a “strategic site”. The mine operators have indicated that the commercial planning of the mine is based on providing 20 years of future reserves in view of the high level of capital investment associated with developing the mine. Currently, local planning policy plans on the basis of maintaining a landbank equivalent to 15 years of production at the mine.

3.12 During the next 15 years, it is anticipated that on the basis of maintaining current production levels at the mine, additional reserves of anhydrite need to be identified.

**Anticipating development of coal resources**

3.13 There has been no coal production within the county since 2001 but there are remaining resources that could be exploited to meet the needs for energy. Nationally coal consumption increased to 68.2 million tonnes in 2006 which was the highest consumption for 10 years. In 2006, generation of electricity used 57.7 million tonnes of coal accounting for 38.1% of total electricity generation, whereas gas accounted for 36.8%. UK coal production was 18.6 million tonnes in 2006 and net imports of coal were 73% of consumption (the chief sources of imported coal being Russia & South Africa).

3.14 National Government has not set a target for electricity supply from coal but in its 2006 Energy Review recognised the importance of indigenous energy resources including coal. Furthermore, national minerals planning policy aims to source mineral supplies indigenously, to avoid exporting potential environmental damage, whilst recognising the role primary market conditions play. Specific national planning policy relating to coal mining is still to be found in Mineral Planning Guidance 3 which was published in 1999. In this guidance, the Government believes that there should be a presumption against development of coal unless proposals meet the five tests set out in the guidance.
Currently, any proposal for opencast coal extraction in Staffordshire would be determined on the basis of national & regional policies and would be guided by local constraint mapping included in the Minerals Local Plan. The issue for the Strategy is whether there is likely to be increased interest in developing coal resources to justify a more focussed approach over and above that provided by present constraint mapping.

In 2002, proposals for the production of coal bed methane at a site west of Newcastle under Lyme were dismissed by the First Secretary of State. There remains interest, however, in exploiting the local coal resource by drilling to release the methane captured within coal seams and recently planning permission has been granted for drilling investigations of coal seams near Loggerheads, Newcastle under Lyme and at Fradley, near Lichfield. In 2006 national planning policy advised that MPAs should identify principal constraints likely to affect any proposed coal bed methane production and processing areas. At this stage, the question is whether the degree of knowledge of the coal bed methane resource is sufficient to justify mapping environmental constraints that could affect potential development of production and processing sites.

**Question 5**

Do you consider that there is a need for a local strategy for opencast coal extraction?

**Question 6**

Do you consider that there is a need for mapping environmental constraints in relation to areas where there is a potential coal bed methane resource?

**Safeguarding minerals from built development**

One of the key sustainable development objectives for minerals planning is to safeguard mineral resources as far as possible and this objective is to be implemented through the definition of mineral safeguarding areas (MSAs) to alert prospective developers of non-mineral development to the existence of valuable mineral resources. The purpose of a MSA is to ensure that economic mineral resources are adequately and effectively considered in land use planning decisions for non mineral development. There is no presumption that any areas within a MSA will be worked within the plan period.
3.18 Guidance provided by the BGS suggests that it is important to safeguard all economic minerals although it could be considered that it is most important to safeguard those resources where there is a significant risk of sterilisation. Due to its scarcity and proximity to existing urban areas, remaining clay resources within the Etruria Formation are considered to be a mineral at significant risk from sterilisation. For example, in 2007, permission was granted to excavate 500,000 tonnes of clay from a site in Newcastle under Lyme prior to its development as a premium employment sites. The Coal Authority has also suggested that there is a need to safeguard shallow coal resources from sterilisation by built development. To assist in this process the Coal Authority is working with the British Geological Society with the aim of issuing national Coal Resource Maps to MPAs to assist them in defining safeguarding areas for coal.

3.19 Recent national planning policy also highlights the need to safeguard building stones particularly where the stone matches those required for the repair of historic buildings. Building stones are worked in the Staffordshire Moorlands and it is known that there is an issue with identifying white sandstone resources which is used by masons on building restoration projects across the country.

Question 7

Are there particular mineral resource areas where there is greater need for safeguarding?

Meeting the challenge of Climate Change

3.20 The County Council sets out in its Sustainable Community Strategy as part of its vision a need to respond to the threat of climate change. In terms of our planning for minerals supply, there are a number of aspects that should be considered in meeting the local challenge and these include:

- Taking into account the benefit of local supplies of minerals by reducing the impact of transporting minerals over long distances by road and thereby reducing carbon emissions;
- Planning for the supply of minerals that meet the standards for low carbon buildings;
- Enabling energy efficient schemes for winning and working minerals;
- Ensuring that mineral workings do not increase the risk of flooding and where practicable, increase flood storage capacity;
- Provide opportunities for the provision of winter water storage in reclaiming quarries; and
- Ensure that reclamation schemes take into account the effects of climate change and where appropriate, provide opportunities for the creation of habitat for species forced to migrate.
3.21 Carbon reduction measures are a key aspect and operational emissions at aggregate sites account for an estimated 800,000 tonnes of carbon emissions (more than 0.5% of total UK emissions). More needs to be done in terms of reducing the carbon footprint of quarries and to take advantage of the opportunities they offer. Over the next few years more options will emerge to improve carbon management and the Strategy will need to encourage the implementation of these management options.

Question 8

Are there any other ways in which planning for minerals could contribute to meeting the climate change challenge?

Improving standards of mineral operations

3.22 National policy encourages mineral operators to adopt sound working practices to prevent where feasible or if not, to minimise environmental impacts to acceptable levels. The challenge is to find ways in which environmental performance associated with mineral operations can be improved.

3.23 National policy encourages mineral operators to develop environmental management systems which will be an aid to good operational practice when well implemented. Many of the quarries in Staffordshire are subject to conditions where environmental impacts are monitored by the operator and when this is combined with a system for environmental reporting, it can provide a useful basis for liaison with local communities and the regulatory authorities.

3.24 In addition to “self monitoring”, the MPA will monitor and if necessary, enforce planning controls. Since April 2006 the MPA is able to charge site operators a fee for monitoring mineral and landfill sites. Monitoring visits are conducted in accordance with the County Council’s Statement of Monitoring and Enforcement Policy (December 2003).

3.25 Another function of the MPA is to carry out statutory reviews of planning permissions relating to mineral operations every 15 years (also referred to as periodic review). Issues relating to environmental performance and reclamation are addressed under these reviews by imposing new conditions attached to the planning permissions. The table in Appendix 2 lists those existing sites that are likely to be subject to statutory review over the next 15 years.

3.26 Currently the County Council has a Code of Practice that was adopted in 1999 to guide prospective developers and operators on the standards of operation and reclamation expected to be achieved. The Code provides local guidance in respect of the following aspects:
3.27 The Code is in need of updating and needs to be reviewed so that it focuses on issues that are locally significant.

**Question 9**

Are there environmental impacts/ issues that you consider need to be addressed by local guidance?

**Question 10**

Are there any environmental impacts/ issues that you consider need to be addressed when the opportunity arises to review planning permissions associated with existing mineral sites?

**Minimising the need for extracting minerals**

3.28 A key national objective for minerals planning is to ensure the efficient use of minerals and recycling of suitable materials, thereby minimising the requirement for extracting additional minerals from quarries and mines. Current national guidelines for the provision of aggregate minerals are based on the assumption that recycled wastes and other alternative materials will meet 23% of demand for aggregates over the period up to the end of 2016. In the West Midlands region, the guidelines assume that 88 million tonnes of aggregate will be derived from alternative sources which equates to 5.5 million tonnes per annum. Furthermore, the Government in its “Waste...
Strategy 2007 is considering a target to halve the amount of construction, demolition and excavation waste going to landfill by 2012 as a result of waste reduction, re-use and recycling.

3.29 There is no local target for Staffordshire in terms of producing aggregate from alternative sources but Policy M3 of the Regional Spatial Strategy requires that local policies should identify sites for recycling plants producing aggregates; and also encourage the reuse and recycling of in situ materials in construction projects.

3.30 At a local level, the County Council is required to monitor the production of aggregate from alternative sources but this has proved to be difficult because it is appears that the major proportion of wastes recycled for aggregate use are derived from construction or demolition projects. On this basis, it will be the District Councils through their planning for built development that will be able to encourage the reuse of building materials and use of recycled materials.

3.31 Within the county, there were 15 permitted waste facilities in 2007 with the capacity to recycle construction & demolition wastes and capable of producing aggregate. Three of those 15 sites were associated with quarries but only one of those 3 sites was operational. It is likely that the most appropriate sites to recycle construction & demolition wastes are to be found near to where the waste is generated and where it can be re-used. The issue of finding suitable sites, therefore, is an issue that should be addressed in preparing our Waste Core Strategy which aims to ensure that there are sufficient opportunities for the provision of waste management facilities in appropriate locations for all types of waste.

3.32 Mineral operations will often result in the production of waste. Mineral wastes are often used in the restoration of quarry workings as a material to backfill workings but sometimes markets for the potential use of mineral wastes can be identified. Similarly, secondary materials that are the wastes or byproducts of industrial processes, for example ash from power stations, can be used as an alternative to aggregate minerals.

**Question 11**

Are there any opportunities where deposits of mineral wastes or secondary materials could be used as an acceptable substitute to the extraction of primary minerals?
4.1 The vision should be developed to identify how places in the county should change over the next 10 to 15 years as a result of managing the development of mineral resources. Defining the vision should be based on the strategy achieving the following:

- Contributes to the achievement of sustainable development. This is a legal requirement and the sustainability of the Strategy will be tested by carrying out a sustainability appraisal during the preparation of the Strategy;
- Consistent with national policy unless there is a local justification for variation. General national planning policy is now found in planning policy statements and national policy specific to minerals is found in minerals policy statements;
- In general conformity with the Regional Spatial Strategy (RSS). The aim of the minerals policies in the RSS is to encourage the prudent use of available mineral resources and to maintain an appropriate on-going supply. Presently, the Regional Planning Body responsible for producing the RSS is at the early stages of reviewing its minerals policies and there will be a requirement to consider how mineral needs are likely to be met up to 2026.
- Integrates with other strategies and plans. In particular, it should have regard to the community’s views as set out in the Sustainable Community Strategy. Relevant objectives in the Local Transport Plan 2006 -2011 should be also taken into account.

4.2 The key characteristics and significant issues associated with minerals development that have been identified in the previous sections of this document can be broadly categorised in terms of three main themes which are listed as follows:

- Meeting local, regional and national needs;
- Minimising the environmental impacts of mineral operations; and
- Enhancing the local environment including biodiversity.

4.3 Based on these three themes, Figure 6 sets out proposed outcomes that could be developed into defining what we want to achieve and where, through our Strategy.
Figure 6 Outcomes for the vision

Question 12

Do you agree with the list of outcomes identified on Figure 6?

Question 13

Do you consider that additional outcomes should be added to the vision?
5.1 The next step is to identify the objectives for the Strategy that will explain how the vision can be achieved. The following objectives are suggested:

**Meeting local, regional and national needs for minerals**

**Objective 1**

To secure an adequate and steady supply of sand & gravel based on providing the sub regional apportionment of 6.602 million tonnes per annum up to the end of 2026; and to maintain a stock of permitted reserves equivalent to 7 years production of the sub regional apportionment up to the end of 2019.

**Objective 2**

To maintain an adequate and steady supply of crushed rock derived from limestone reserves based on providing the sub regional apportionment of 1.395 million tonnes per annum up to the end of 2026.

5.2 These objectives would ensure that local needs for aggregates cover the time horizon of the Regional Spatial Strategy (RSS) and provide a Strategy for 15 years from the anticipated date of adoption of the Strategy in 2011. The sub regional apportionments are defined by Policy M2 of the RSS but there are proposals to review the minerals policies within the RSS as well as national guidelines for the provision of aggregates. In the meantime, it is intended to carry forward the current sub regional apportionments to 2026. It is anticipated that there will be a need to review forecasts for future provision before 2026 and, therefore, the intention is to plan for maintaining the 7 year landbank for sand & gravel on the basis of the current apportionment up to 2019. The issue of maintaining an appropriate size of landbank for crushed rock should not be an issue because of the large amount of reserves already permitted.
Objective 3

To secure provision of a stock of permitted reserves of clay for each of the manufacturing plant listed below based on meeting current clay requirements for a period of 25 years commencing from the beginning of 2008

- Parkhouse Works, Newcastle-under-Lyme,
- Chesterton Works, Newcastle-under-Lyme,
- Wilnecote Works, Tamworth,
- Keele Works, Newcastle-under-Lyme,
- Lodge Lane Works, Cannock,
- Fir Street, Sedgley,
- Warstones Road Works, Cheslyn Hay (permitted but not yet constructed)

5.3 This objective would implement the requirements of national policy found in Annex 2 to Mineral Planning Statement 1. The objective should also conform to Policy M1 of the RSS requiring appropriate provision for the supply of regionally significant minerals. In addition, our Sustainable Community Strategy seeks to promote economic growth and to encourage investment into the higher value sectors. Premium clay resources should be developed where it supports higher value added enterprise.

Objective 4

To secure provision of permitted reserves of shale and limestone for the manufacture of cement at Cauldon based on meeting current production levels needs up to the end of 2026 and to maintain a stock of permitted reserves equivalent to 15 years of current production levels up to at least 2021.

Objective 5

To secure provision of permitted reserves of anhydrite to maintain production at Fauld Mine at current production levels up to the end of 2026 and to maintain a stock of permitted reserves equivalent to 15 years of current production levels up to at least 2021.

5.4 These objectives for minerals used in cement manufacture ensure that reserves are provided to cover the time horizon of the RSS up to 2026 and provide a Strategy for 15 years from the anticipated date of adoption of the Strategy in 2011. National policy in Minerals Planning Guidance 10 states that MPAs should normally aim to
maintain cement plant with a stock of permitted reserves of at least 15 years. It is also advised in MPG10 that sufficient land be identified to maintain this landbank throughout, and at the end of, the plan period. The aim would be to maintain the landbank up to 2011 (ensuring a stock of reserves equivalent to 25 years of production) but to encourage a review of provision 10 years after the adoption of the Strategy.

**Objective 6**
To guide development of shallow coal resources by mapping relevant environmental constraints within the Potteries, Cheadle and Cannock coalfields.

5.5 Recognition of the importance of energy minerals is highlighted by Policy M4 of the RSS. This objective is considered consistent with national policy in MPG3 in terms of producing constraint maps and is considered to be the appropriate response in view of the level of interest in potential future working.

**Objective 7**
To safeguard minerals within important resource areas including coal from sterilisation by built development.

5.6 National planning policy in Mineral Planning Statement 1 introduces the requirement for MPAs to define minerals safeguarding areas. Annexes to MPS1 also highlight the need to specifically safeguard brick clays and building stones. This objective would aim to improve the safeguarding process for minerals to be used in conjunction with the eight Districts in the county that are planning for built development.

Minimising the environmental impacts of mineral operations

**Objective 8**
To avoid and/ or minimise environmental impacts from mineral operations particularly where there are areas of concentrated mineral working using local guidance where necessary.

5.7 There is a need to review national planning policy for controlling and mitigating the environmental effects of minerals extraction as provided in Minerals Planning Statement 2. This objective also aims to improve current guidance to assist when
the MPA decides planning applications or reviews planning permissions relating to mining sites under the Environment Act 1995. It should also reflect national policy to maintain high environmental standards of operation in the Green Belt.

### Objective 9
To help reduce carbon emissions associated with mineral operations.

5.8 The need to meet the challenges of climate change is raised in national planning policy and is a priority in the County Council’s draft Sustainable Community Strategy. The issue of climate change needs to be specifically targeted given the urgency for action to be taken.

### Objective 10
To safeguard opportunities for the use of rail and waterway haulage.

### Objective 11
To encourage effective liaison with local communities through site liaison groups and the use of Mineral Site Transport Plans.

5.9 Both these transport objectives relate to national minerals policy in MPS1 and address an impact associated with mineral development that has potentially a wider impact on local communities.
Objective 12

To contribute to local environmental initiatives either during the development of mineral working or when reclaiming mineral workings. In particular, the following initiatives are recognised:

- National Forest
- Newcastle Community Woodland Zone
- Central Rivers Initiative which is part of the larger On Trent Initiative
- Staffordshire Washlands
- Biodiversity Enhancement Areas as defined in the RSS e.g. Weavers Hill Project
- Staffordshire Biodiversity Action Plan
- Staffordshire Geodiversity Plan
- Cannock Chase AONB Management Plan
- The Green Arc Partnership
- Three Dales Project

5.10 This objective would implement national planning policy at a local level in terms of giving more direction on the appropriate potential afteruse for reclaiming mineral workings.

Objective 13

To secure well restored quarries particularly where minerals are developed within the Green Belt around the North Staffordshire and West Midlands conurbations.

5.11 This objective reflects national policy found in PPG2 and MPS1 and is a significant issue for development in Staffordshire where approximately 90,000 hectares of land is designated Green Belt (surrounding the North Staffordshire Conurbation – 27,919 hectares; West Midlands Conurbation – 54,3897 hectares and 39 hectares near Burton-on-Trent).

5.12 Within the Green Belt reclamation of quarries should reinstate afteruses consistent with Green Belt objectives.

Objective 14

To adapt mineral development to the effects of climate change particularly in terms sustainable drainage and flood mitigation.
5.13 In addition to proposed objective 9 above, as a response to meeting the challenges of climate change, there may be opportunities through reclaiming mineral workings particularly where mineral resources can contribute to flood alleviation.

**Question 14**

*Do you agree with the list of objectives listed above e.g. those objectives relating to the size of provision for minerals?*

**Question 15**

*Do you consider that additional objectives should be defined for the Strategy?*
6.1 National policy requires that the Strategy should show how the objectives will be delivered, provide clear spatial choices about where developments should go in broad terms and allocate strategic sites for development. In general terms, national policy describes a strategic site as “central to the achievement of the Strategy”.

6.2 To assist in identifying the range of spatial choices, the minerals industry and landowners have been requested to submit proposals for strategic site options. Figure 7 provides a location plan for all the options that have been submitted for consideration so far.

6.3 Profiles providing details of each site and a location plan are available via our website www.staffordshire.gov.uk/mcs or can be found as background documents to this consultation document referred to as “Profiles for Site Options to Minerals Core Strategy”.

6.4 The site options help to understand the implications of strategic choices to be made in preparing a Strategy. They also provide an opportunity to test whether the Strategy is deliverable.

6.5 The main principles of the Strategy for minerals can be shown on a diagram but the detail of potential strategic sites will be shown on Ordnance Survey plans. The main principles of the Strategy to be shown on a key diagram (refer to figure 8) are as follows:

- The context for the location of Staffordshire within the West Midlands and other regions;
- The location of the two main conurbations;
- The location of local regeneration and growth areas as identified in the RSS;
- Significant areas of constraint in terms of the adjoining Peak District National Park and Cannock Chase Area of Outstanding Natural Beauty (part of which is also designated as a Special Area of Conservation);
- Existing broad strategic locations of mineral production for aggregates, brick clay, and cement minerals;
- Indication of the general anticipated main supply movements of minerals;
- Key environmental initiative projects where minerals development could contribute.
Figure 7 Strategic Site Options

Staffordshire Minerals Core Strategy - Submitted Strategic Site Proposals (May 2008)

Options for a Spatial Strategy

Staffordshire County Council - Minerals Core Strategy Issues & Options 2 - September 2008
Figure 8 Key Diagram

Staffordshire Minerals Core Strategy - Key Diagram

Staffordshire County Council - Minerals Core Strategy Issues & Options 2 - September 2008
Sand and gravel

How much development is intended?

6.6 During the next 10 years there is anticipated to be a need to identify additional sand and gravel reserves. Based on maintaining a landbank of permitted reserves equivalent to 7 years of production at an output of 6.602Mtpa as shown on the graph below, it is assessed that there would be a need to plan for the release of 49 million tonnes of additional sand & gravel reserves to maintain the landbank up to the end of 2019.

Figure 9 Projected depletion of permitted reserves based on providing sub-regional apportionment

6.7 To meet that requirement 24 sites as listed below have been submitted for consideration amounting to an estimated 153 million tonnes of sand & gravel. Please click on the site names to find out more information about each site.
## Table 2

<table>
<thead>
<tr>
<th>Site</th>
<th>Parish</th>
<th>Potential extension to existing quarry (Yes/ No)</th>
<th>Site Area (hectares)</th>
<th>Indicated resources (million tonnes)</th>
<th>Anticipated duration of mineral operations (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Newbold SW</strong></td>
<td>Dunstall</td>
<td>Yes</td>
<td>160</td>
<td>13.50</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Barton under Needwood</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Newbold NE</strong></td>
<td>Tatenhill</td>
<td>Yes</td>
<td>43</td>
<td>4.50</td>
<td>6</td>
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<tr>
<td><strong>Uttoxeter (Dove Extension)</strong></td>
<td>Uttoxeter Rural Uttoxeter</td>
<td>Yes</td>
<td>87</td>
<td>3.20</td>
<td>8</td>
</tr>
<tr>
<td><strong>Bancroft Farm, Kings Bromley</strong></td>
<td>Hamstall Ridware</td>
<td>No</td>
<td>88</td>
<td>10.00</td>
<td>20</td>
</tr>
<tr>
<td><strong>Weavers Hill</strong></td>
<td>Gnosall</td>
<td>Yes</td>
<td>14</td>
<td>0.70</td>
<td>14 – 15</td>
</tr>
<tr>
<td><strong>Bucks Head Farm</strong></td>
<td>Hints</td>
<td>Yes</td>
<td>105</td>
<td>23.40</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Weeford</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Moddershall Grange</strong></td>
<td>Stone Rural Fulford</td>
<td>No</td>
<td>96</td>
<td>17.00</td>
<td>23 - 24</td>
</tr>
<tr>
<td><strong>Wychnor Estate</strong></td>
<td>Alrewas &amp; Fradley</td>
<td>No</td>
<td>56</td>
<td>5.75</td>
<td>12</td>
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<tr>
<td><strong>Keele Factory</strong></td>
<td>Madeley</td>
<td>No</td>
<td>26</td>
<td>1.40</td>
<td>10</td>
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<tr>
<td><strong>Weeford (Camp)</strong></td>
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<td>52</td>
<td>5.50</td>
<td>?</td>
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<tr>
<td><strong>Barton (Wychnor)</strong></td>
<td>Wychnor Barton under Needwood</td>
<td>Yes</td>
<td>87</td>
<td>7.0</td>
<td>?</td>
</tr>
</tbody>
</table>
### Options for a Spatial Strategy

#### Site Details

<table>
<thead>
<tr>
<th>Site</th>
<th>Parish</th>
<th>Potential extension to existing quarry (Yes/ No)</th>
<th>Site Area (hectares)</th>
<th>Indicated resources (million tonnes)</th>
<th>Anticipated duration of mineral operations (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Captain's Barn Farm</td>
<td>Caverswall</td>
<td>Yes</td>
<td>20</td>
<td>2.00</td>
<td>15 - 20</td>
</tr>
<tr>
<td>Alrewas South</td>
<td>Alrewas &amp; Fradley</td>
<td>Yes</td>
<td>146</td>
<td>7.00</td>
<td>14</td>
</tr>
<tr>
<td>Netherset Hey</td>
<td>Madeley</td>
<td>No</td>
<td>50</td>
<td>17.50</td>
<td>20</td>
</tr>
<tr>
<td>Saredon/Great Saredon Farm</td>
<td>Saredon</td>
<td>Yes</td>
<td>8</td>
<td>1.50</td>
<td>15</td>
</tr>
<tr>
<td>Croxden (North &amp; South)</td>
<td>Checkley/Cheadle</td>
<td>Yes</td>
<td>49</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Shireoak</td>
<td>Shenstone</td>
<td>Yes</td>
<td>8</td>
<td>2.50</td>
<td>10</td>
</tr>
<tr>
<td>Fisherwick</td>
<td>Fisherwick</td>
<td>No</td>
<td>108</td>
<td>5.00</td>
<td>14 - 15</td>
</tr>
<tr>
<td>Beech</td>
<td>Swynnton</td>
<td>No</td>
<td>27</td>
<td>5.00</td>
<td>20</td>
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<tr>
<td>Hints</td>
<td>Hints/Swinfen &amp; Packington</td>
<td>Yes</td>
<td>8</td>
<td>0.70</td>
<td>0.75</td>
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<tr>
<td>Lodge Farm, Weston</td>
<td>Blymilk &amp; Weston under Lizard</td>
<td>No</td>
<td>17</td>
<td>1.00</td>
<td>20</td>
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<tr>
<td>Craniebrook</td>
<td>Hammerwich</td>
<td>Yes</td>
<td>?</td>
<td>1.35</td>
<td>?</td>
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<tr>
<td>Mile Flat</td>
<td>Kinver</td>
<td>No</td>
<td>?</td>
<td>2.70</td>
<td>15-20</td>
</tr>
<tr>
<td>Folly Wood</td>
<td>Loggerheads</td>
<td>No</td>
<td>50</td>
<td>2.5</td>
<td>12 to 15</td>
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<tr>
<td>Elmhurst Farm</td>
<td>Biddulph</td>
<td>Yes</td>
<td>6</td>
<td>2.00</td>
<td>20</td>
</tr>
<tr>
<td>Hurst Quarry</td>
<td>Biddulph</td>
<td>Yes</td>
<td>6</td>
<td>2.75</td>
<td>?</td>
</tr>
</tbody>
</table>
6.8 Clearly there are choices to be made and key principles need to be decided upon as to where the sand & gravel resources can be worked. Taking into account proposed objectives for the Strategy, we would be pleased to receive your comments in respect of the following questions:

**Question 16**

*Should new sites be identified within current areas worked for sand & gravel?*

6.9 The strategy for identifying sand & gravel sites in the current Minerals Local Plan aims to concentrate workings in specified locations by either developing new sites or more particularly extending existing sites where it is environmentally acceptable. For example, a key resource area is the area to the east of the A38 within the Trent and Tame river valleys and three of the site options are proposed in this area (Barton, Alrewas South, & Fisherwick).

**Question 17**

*Should preference be given to extending existing sites?*

6.10 National policy requires Mineral Planning Authorities to consider the benefits, in terms of reduced environmental disturbance and more efficient use of mineral resources including full recovery of minerals, of extensions to existing mineral workings rather than new sites. 14 of the 24 site options are extensions to existing sites.

**Question 18**

*Should the current general pattern of supply be maintained by replacing exhausted quarries with reserves found within the same locality?*

6.11 In the northern part of the county, for example, production at Croxden Quarry is due to cease in 2013. In addition, workings at Uttoxeter Quarry are permitted to 2012. The loss of productive capacity from these two quarries would amount to approximately 40% of the capacity that might be lost over the next 10 years. Site options have been submitted for extending both these quarries but there are 6 other options north of Stafford (Folly Wood, Netherset Hey, Keele Factory, Captains Barn Farm, Beech, and Moddershall Grange).
6.12 Another area to consider is the south western part of the county south of Codsall, where the number of permitted sand & gravel workings has declined. Within 10 years, the remaining two operational quarries will cease working and only one site option (Mile Flat) in this area has been submitted for consideration.

6.13 A significant factor to consider relates to economic haulage distances which for sand & gravel can be within the range of 20 to 25 miles. National policy also requires MPAs to take account of the benefit of local supply, including the associated reduction in carbon emissions.

**Question 19**

*Are there any anticipated local market needs where there might be benefits in identifying new sources of supply?*

6.14 The review of the RSS is currently proposing significant growth in housing within Staffordshire and this could create additional demand for aggregate minerals in specific areas such as Stafford and Burton-on-Trent. Another potential effect on the market is when major engineering works are undertaken such as the M6 Toll Road or the modernisation of the West Coast rail line.

**Question 20**

*Are there significant opportunities that should be taken into account in assessing any of the strategic sites options for sand & gravel?*

6.15 Referring to the proposed objectives, significant opportunities are identified as follows:

- Using rail transport for haulage of minerals (refer to Netherset Hey option);
- Provision of additional flood storage;
- Contributes to Green Belt objectives; and
- Contributes to environmental initiatives in terms of landscape enhancement, biodiversity, geo diversity, access to the countryside.

**Question 21**

*Are there any constraints that you consider significantly affect the potential to develop any of the strategic sites for sand & gravel?*
6.16 The sustainability appraisal will test options in terms of environmental, social and economic impacts and separate documents for that appraisal will be produced. Concerns about the potential impacts associated with the site options should be indicated particularly where it is considered that there would be a problem in achieving the objectives of the Strategy.

**Question 22**

*Should there be a threshold on the size of sand & gravel sites that should be identified by the Strategy? If so, what threshold(s) should be applied?*

6.17 In general terms, as stated above, a strategic site is “central to the achievement of the Strategy”. In the background paper produced by the County Council in September 2007 to guide developers in the submission of site options, an explanation of strategic issues suggested that a strategic sand & gravel site is where output is likely to exceed 100,000 tonnes per annum. This threshold was suggested on the basis of identifying those sites significant in providing the capacity to meet the requirements of the sub regional apportionment for Staffordshire of 6.602 million tonnes per annum.

6.18 Most of the site options would exceed the suggested threshold apart from the Captains Barn Farm, Weavers Hill, Lodge Farm and Cranebrook site options. Three of these sites, however, are promoted on the basis that they would produce mortar sands only and can be viably operated at a lesser scale of impact and one site provides a dedicated supply to a local concrete products factory.

**Question 23**

*Should the Strategy set out circumstances to enable the release of additional sand & gravel resources not allocated in the Strategy?*

6.19 Currently, Policy 38 of the Minerals Local Plan provides flexibility for non allocated sites to come forward in exceptional circumstances. Examples of exceptional circumstances are provided in support of Policy 38 and these include providing for co-ordinated working and restoration schemes; limited small scale extensions; amortisation of investment in brick or tile manufacturing plant; and where there is a need to supply minerals to meet a specialised demand. The effect of this policy has been monitored through Annual Monitoring Reports and since the adoption of the Minerals Local Plan in 1999, there have been 13 sand & gravel planning permissions.
permitted on the basis of exceptional circumstances. Most of the exceptional circumstances have been based on small scale extensions or as a result of achieving benefits through co-ordinated working and restoration schemes.

**Limestone for crushed rock**

6.20 There are sufficient permitted reserves to meet the requirements of the proposed objective for crushed rock so there is no anticipated requirement to release additional reserves on grounds of need. During the next 10 years, however, there will be opportunities to statutorily review planning permissions at Cauldon, Wardlow, Wredon and Kevin Quarries in the north eastern part of the county and an issue that may arise is whether additional reserves should be released in order to mitigate environmental impacts resulting from old permissions. For example, there may be opportunities for working limestone between quarries including the limestone quarry supplying Cauldon Cement Works, to achieve an improved restored landform. Currently, this issue is addressed by Policy 54 of the Minerals Local Plan.

**Question 24**

*Should the Strategy provide an opportunity for the release of additional resources of limestone situated between existing quarries? If so, what criteria should be used to allow for additional resources to be released?*

6.21 Currently, Policy 54 sets criteria relating to restored landform; transportation of materials by rail; reducing the impacts of road haulage; securing long term management of ecological sites including Sites of Special Scientific Interest; reducing impacts on local communities; and providing increased public access.

**Sandstone for silica sand**

6.22 Extraction of the Rough Rock Sandstone to produce sand is permitted to continue at Hurst Quarry near Biddulph until 2036. Currently, the sand is worked to produce a horticultural product (non aggregate use) but a proposed option for land adjacent to Hurst Quarry has been submitted by both the operator of the quarry and the landowner.

**Question 25**

*Should the Strategy address future working of the Rough Rock Sandstone at Biddulph? If so, what issues need to be addressed in planning for future working in this area?*
The planning permission for Hurst Quarry is subject to review in 2014 so there will be an opportunity to review the working of remaining reserves at Hurst. The proposed site option has the potential to be worked in conjunction with the existing quarry with the opportunity of providing an alternative access to the quarry. The landowner’s agent suggests that the site could be also worked as a separate quarry providing sand for concrete making.
Clay

How much development is intended?

6.24 The proposed objective is to maintain supply at six operational manufacturing works and at one works yet to be constructed. There are no projections of future demand so it is intended to assess the requirement for clay on the basis of levels of clay use as indicated by the clay product manufacturers in 2007. The table below summarises the supply issues for each works:

Table 3

<table>
<thead>
<tr>
<th>Name of works</th>
<th>Manufacturer</th>
<th>Source of supply (Name of quarry)</th>
<th>Category of supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parkhouse</td>
<td>Ibstock</td>
<td>Knutton</td>
<td>3</td>
</tr>
<tr>
<td>Chesterton</td>
<td>Ibstock</td>
<td>Knutton</td>
<td>3</td>
</tr>
<tr>
<td>Keele</td>
<td>Marley Eternit</td>
<td>Knutton</td>
<td>3</td>
</tr>
<tr>
<td>Wilnecote</td>
<td>Hanson</td>
<td>Wilnecote</td>
<td>3</td>
</tr>
<tr>
<td>Lodge Lane</td>
<td>Ibstock</td>
<td>Redhurst &amp; Essinton</td>
<td>1</td>
</tr>
<tr>
<td>Fir Street, Sedgley</td>
<td>Wienerberger</td>
<td>Oak Farm, Dudley</td>
<td>1</td>
</tr>
<tr>
<td>Warstones Road</td>
<td>Wienerberger</td>
<td>Warstones Road</td>
<td>1</td>
</tr>
</tbody>
</table>

Key to categories

1 = 25+ years supply available

2 = 15 – 24 years supply

3 = less than 15 years supply

6.25 Four works have supply issues that need to be addressed by the Strategy and in respect of each works the operator have submitted site options for future supply as set out as follows. Please click on the site names to find out more information about each site.
Table 4

<table>
<thead>
<tr>
<th>Name of Works</th>
<th>Site option proposed by manufacturer</th>
<th>Potential alternative local options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parkhouse</td>
<td>Knutton (deepening), Gorsty North and Keele</td>
<td>High Carr, Bradwell Wood, Gamewood and Netherset Hey</td>
</tr>
<tr>
<td>Chesterton</td>
<td>Knutton (deepening), Gorsty North and Keele</td>
<td>High Carr, Bradwell Wood, Gamewood and Netherset Hey</td>
</tr>
<tr>
<td>Keele</td>
<td>Keele Factory</td>
<td>Keele, Netherset Hey and Gorsty Bank</td>
</tr>
<tr>
<td>Wilnecote</td>
<td>Wilnecote</td>
<td>None</td>
</tr>
</tbody>
</table>

Note that potential alternatives have not been proposed to specifically supply the works as listed; and that Gorsty North as proposed by Ibstock is also proposed by the landowner Silverdale Park Limited as Gorsty Bank to be worked independently from Knutton Quarry.

6.26 In view of the objective relevant to brick clays, we would be pleased to receive comments in relation to the following:

**Question 26**

*Are there any other issues of supply that should be taken into account by the Strategy?*

6.27 There are clay workings within the county where the clay is used to supply manufacturing plant outside the county. For example, clay produced at Cheslyn Hay Quarry is used for the manufacture of roof tiles at Bedworth in Warwickshire. Referring to the site options for clay, the Poplars site is proposed on the basis that it is anticipated to supply a works in Walsall operated by Wienerberger. National planning policy advises that planning authorities should liaise in planning for appropriate sources of provision where the sources of clay are located in a MPA area other than that where the works is located.

6.28 National policy recognises that certain fireclays associated with coal are premium clays valued by the brick industry for their technical and cream/buff colour characteristics. Generally, there is now an issue with the availability of fireclays due to diminishing opencast coal extraction but locally it is understood that supplies of fireclay have been derived from a site in Shropshire. Two options relating opencast coal extraction (Great Oak & Yorks Bridge) provide an opportunity to also extract...
fireclays. National policy for brick clays requires that MPAs should encourage coal producers to make the best possible use of fireclay reserves including finding a market for any fireclay associated with the coal that is being extracted.

**Question 27**

*Is there a need to provide sites for stocking clays and other materials for brick or tile making?*

**6.29** Where materials are needed to blend clays from different sources or to allow for the recovery of clays prior to other development taking place, there may be a need to find environmentally acceptable sites to store clay and other materials until they are needed. For example, a site at Bradwell, Newcastle has been permitted to store clays to be extracted in developing land for employment use at Chatterley Valley.

**Question 28**

*Are there significant opportunities that should be taken into account in assessing any of the strategic sites options for clay?*

**6.30** Referring to the proposed objectives, potential significant opportunities are identified as follows:

- Using rail transport for haulage of minerals/clay products;
- Provision of additional flood storage;
- Contributes to Green Belt objectives; and
- Contributes to environmental initiatives in terms of landscape enhancement, biodiversity, geodiversity, access to the countryside.

**Question 29**

*Are there any constraints that you consider significantly affect the potential to develop any of the strategic sites options for clay?*

**6.31** A particular issue is that all of the proposed site options are within the Green Belt and therefore, there is a requirement for high environmental standards of operation and for the sites to be well restored. Many of the current planning permissions for clay working allow for reinstatement of sites using wastes brought
onto the site to backfill the resulting void. Alternatively, sites can be restored at lower levels which may restrict the quantities of clay that can be recovered but will allow for the site to be reinstated earlier.

**Question 30**

*Are there issues that the Strategy should address in terms of reviewing planning permissions relating to operations at clay quarries?*

**Minerals for cement manufacture**

6.32 Planning permission was granted in 2006 for an extension to the shale quarry at Cauldon cement works which provides for a continuation of shale working up to 2030. In order to meet the proposed objective for maintenance of supply, however, additional reserves may need to be identified to maintain a 15 year landbank up to 2021. No options have been submitted for future shale working but potential resources are available within an area of search “saved” as an allocation from the Minerals Local Plan.

**Question 31**

*Should the Strategy include the area of search for shale reserves at Cauldon as already identified by Proposal 4 in the Minerals Local Plan?*

6.33 At Fauld Mine, remaining reserves of anhydrite are anticipated to provide for continued working until 2013. To provide for continued working beyond 2013, the mine operator has submitted a site option that could potentially provide a further 20 years of production.

**Question 32**

*Are there any constraints that significantly affect the potential to develop the site option for Fauld Mine?*

**Coal**

6.34 Two site options (Great Oak and Yorks Bridge) have been submitted for opencast coal extraction and they relate to different coalfield areas. There is no evidence, however, to suggest a need for a forward programme of sites.
Question 33

Should the Strategy only identify environmental constraints affecting the two coalfields affected by the proposed site options?

Question 34

What environmental constraints should be included on the mapping of the coalfields?

Question 35

Are there significant opportunities that should be taken into account in assessing strategic sites for coal?

6.35 Referring to the proposed objectives, potential significant opportunities are identified as follows:

- Contributes to Green Belt objectives; and
- Contributes to environmental initiatives in terms of landscape enhancement, biodiversity, geo diversity, access to the countryside.

Question 36

Are there any constraints that significantly affect the potential to develop the site options for coal?

Safeguarding minerals

6.36 In preparing mineral safeguard area maps in accordance with national policy, we would be pleased to receive comments in respect of the following:
Question 37

Do you consider that mapping should be provided for the following minerals?

- Sand & gravel
- Limestone
- Brick clay
- Gypsum and anhydrite
- Coal and associated fireclays
- Shale used for cement manufacture
- Building stone

If yes, what should the mapping be based upon?

6.37 For example, the list below provides a list of issues for mapping resources in Staffordshire:

- Mineral resource mapping from the BGS;
- Deletion of sand & gravel deposits where alluvium filled channels are less than 25m wide and fluviglacial deposits are less than 10 hectares;
- Inclusion of resources from the Hopedale and Ecton limestones as well as the Kevin and Milldale limestones;
- Inclusion of shale resources within 5 km of the limestone resource at Cauldon cement works;
- Inclusion of silica sand deposits from the entire Rough Rock Formation at outcrop i.e. including outcrops less than 25 ha.;
- Inclusion of brick clays from the whole of the Etruria Formation outcrop, regardless of the depth of cover (where there is potentially down dip continuation of the resource, a 100m buffer to the outcrop area has been added);
- Inclusion of fireclays where they are coincident with principal primary and secondary coal resources; and
- Inclusion of building stone resources from the Hollington Formation.

Question 38

Do you consider that the buffer zones as set out in the table below are appropriate?

6.38 The application of a buffer zone around the mineral resource area is to ensure that the resource is not potentially constrained by nearby built development where there would be a need to protect amenity.
### Table 5

<table>
<thead>
<tr>
<th>Rock type and extraction method</th>
<th>Resource</th>
<th>Buffer zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard rock (requires blasting)</td>
<td>Limestone</td>
<td>500m</td>
</tr>
<tr>
<td>Soft rock (requires no blasting)</td>
<td>Sand &amp; gravel; silica sand; shale; building stone</td>
<td>250m</td>
</tr>
<tr>
<td>Clay</td>
<td>Etruria Marl</td>
<td>50m</td>
</tr>
<tr>
<td>Underground minerals</td>
<td>Gypsum/ anhydrite</td>
<td>0m</td>
</tr>
</tbody>
</table>

#### 6.39
Current mineral consultation area mapping shall be reviewed to take into account new mineral safeguarding area mapping. The District Planning Authorities will be advised to consult the MPA where built development is proposed within mineral consultation areas.

**Question 39**

*To focus consultations on those areas where mineral sterilisation is potentially an issue, should the following areas are be deleted from the Mineral Safeguarding Areas to define revised mineral consultation areas?*

- All settlements above 20 hectares in extent; and
- Current and previously mineral working areas.

**Question 40**

*Do you agree with the following approach to safeguarding minerals where non-mineral development is proposed within a mineral consultation area?*

- No development shall take place until the applicant has produced evidence to demonstrate that the mineral is of no economic value (guidance should be provided to assist);
- Where an important mineral resource exists, the developer should be required to extract the mineral before non mineral development takes place where practicable and without unacceptable adverse impacts;
- Where an important mineral resource exists, non mineral development may be acceptable where that development is temporary and does not permanently sterilise the mineral*
Minimising environmental impacts

6.40 A broad assessment of the potential significant environmental impacts associated with the site options will be necessary to assist in making decisions on preferred site options. This will mean assessing the impacts on sensitive locations where people live and work as well as features within the environment that are important to local ecology, landscape, culture, water & soil resources, air quality and transport systems. In particular, it is important to focus on those impacts that would affect climate change issues in terms of reducing carbon emissions and adapting the effects of climate change. The assessment of significant environmental impacts will be a major part of the sustainability appraisal that is a process that will be carried out at the same time as developing options for the Strategy. Achieving the objective of minimising environmental impacts will be assisted by the feedback given in response to the above questions relating to the site options. This feedback will be used to appraise significant impacts for the sites and may also highlight impacts affecting areas of potential future development where there is a need for further guidance.

Enhancing the local environment

6.41 Objectives to enhance the environment both during and after the completion of mineral working will be important considerations to assessing site options together with the objectives for minimising environmental impacts. In consideration of the site options available there may also be a need to provide local area based policy and guidance to achieve those objectives of the Strategy relating to the after use of mineral workings.

Question 41

Do you consider that there is a need to provide area based policy or guidance for reinstatement of areas of concentrated mineral working? If so, which areas do you consider need to be addressed?
What is the next significant stage in the process of preparing the Minerals Core Strategy?

7.1 We will report on the feedback from consultation on issues and options for the Core Strategy and we will use that feedback to assess the options to then select preferred options. Next year, we intend to consult on a document that will explain the preferred options that have been selected by the County Council together with a report that will explain how the options have been assessed in terms of meeting sustainable development objectives. This will provide an opportunity to comment on the selection of options including sites. This feedback will then assist the County Council in preparing a final draft of the Minerals Core Strategy to be eventually submitted to the Secretary of State following formal consultation.

How will the site options be assessed in selecting preferred options?

7.2 The Minerals Core Strategy must undergo a process of Strategic Environmental Assessment / Sustainability Appraisal (SEA/SA). This is designed to predict the sustainability impacts of the possible options, to inform the choice of preferred options, and to propose any mitigation required to minimise adverse effects. The “SEA/SA Objectives” that the options will be assessed against are listed in .

7.3 The County Council must also carry out a Habitats Regulations Assessment (HRA) to ensure that there is no risk of the Minerals Core Strategy causing or contributing to any adverse effects on any site identified as being of European significance for nature conservation. This is a rigorous test, and plans that pose a risk can only be accepted in the most exceptional of cases.

7.4 A third legal requirement is for all plans to be assessed for their impact on flood risk. The aim of this Strategic Flood Risk Assessment is to ensure that no new development will lead to increased flood risk for existing properties etc. Minerals-related developments are classified as low-risk or water compatible, so this process should not greatly constrain options, indeed the SFRA may serve to highlight benefits certain proposals may be able to offer in terms of flood storage capacity to alleviate flooding further downstream.

7.5 The processes above will all be carried out and documented separately. The SEA/SA Scoping Report and Sustainability Report, the Habitats Regulations Assessment and any Appropriate Assessments, and the Strategic Flood Risk Scoping Report and Assessments will be made available on our website, and will be open for consultation.

7.6 The findings of the processes above will have a strong influence on the choice of preferred options. In addition, however, it will be also necessary to test options for the Strategy in terms of the following questions:

- Do the options conform to national and regional policy?
• Would they contribute to strategic objectives for the delivery of the Core Strategy’s vision?
• Could they be realistically delivered within the next 10 to 15 Years?

7.7 Feedback received from the consultation on this document will assist in testing the options against these questions and further assessment will be carried out before preferred options are selected.

Where can I find out more information about the site options?

7.8 We have asked developers to provide more information about the key aspects for developing their proposed site options. This will help with the assessment of sites and prior to selecting preferred options, we intend to review the profiles for each site option and ensure that all those interested in the preparation of the Minerals Core Strategy are aware of up to date details of the sites. If you wish to be kept informed of progress with the Strategy, please ensure that we have your latest contact details.
- **Development Plan Document (DPD):** These will contain policies and proposals. They are subject to independent examination and there will be a right for those making representations to be heard at an independent examination. A development plan document forms part of the development plan.

- **Examination:** This is an important stage in the preparation of a development plan document and is carried out by an independent person (the planning inspector) appointed by the Secretary of State. The inspector’s role is to consider the development plan document as a whole and to determine its soundness. The inspector will consider all the representations made on the submitted development plan document. The procedure for consideration of representations may involve written procedures, informal hearings and formal hearings.

- **Local Development Document (LDD):** The collective term for development plan documents, supplementary planning documents and statement of community involvement.

- **Local Development Framework (LDF):** These will be a ‘portfolio’ of local development documents which collectively deliver the spatial planning strategy for the local planning authority’s area. A LDF will be produced by either a District Council or Unitary Authority whereas the mineral and waste development framework for Staffordshire will be produced by the County Council. The LDF should include a core strategy; site specific proposals; area action plans (where needed); a local development scheme; a statement of community involvement; proposals map; and an annual monitoring report.

- **Minerals and Waste Development Framework:** This will consist of a portfolio of mineral or waste local development documents.

- **Minerals and Waste Development Scheme:** This is a project plan providing a timetable for the preparation of mineral and waste development local documents.

- **Minerals Local Plan (MLP):** Current mineral policies and proposals for Staffordshire are found in the Staffordshire and Stoke-on-Trent Minerals Local Plan 1994 – 2006 (refer also to the Structure Plan). The MLP was ‘saved’ for three years from 28 September 2004 but a number of the policies in the MLP have been saved beyond 2007 (refer to www.staffordshire.gov.uk/planning).

- **Mineral Policy Statements (MPS):** Contain national planning policy for mineral development and supporting material e.g. good practice guides. They replace guidance currently found in Mineral Planning Guidance (MPGs).

- **Planning Policy Statements (PPS):** Contain national planning policy and supporting material e.g. good practice guides. They replace guidance currently found in Planning Policy Guidance (PPG’s).

- **Regional Spatial Strategy (RSS):** The RSS set out the policies in relation to the development and use of land in the region and establishes broad locations.
and criteria for development. Policies address subjects such as housing, transport, economic development, the environment, mineral supply and waste management.

- **Site Specific allocations and policies:** Where land is allocated for mineral or waste development, this should be made in a site allocation development plan document or area action plan.

- **Scoping Report:** This sets out the framework that will be used to sustainably appraise policies proposals or guidance.

- **Spatial Planning:** Spatial planning goes beyond traditional land use planning and seeks to integrate policies for the development and use of land with other policies and programmes which influence the nature of places and how they function.

- **Spatial Vision:** A brief description of how the area will be changed by future planning.

- **Statement of Community Involvement (SCI):** This development document sets out the standards which the planning authority will be required to achieve in relation to involving the community in the preparation, alteration and continuing review of all mineral and waste development documents. The SCI will not be a DPD but will be subject to independent examination.

- **Structure Plan:** The Staffordshire and Stoke-on-Trent Structure Plan 1996–2011 provided the strategic context for local plans within Staffordshire including the MLP & WLP. The Structure Plan was ‘saved’ for three years from 28 September 2004 but some of the minerals and waste policies have been saved beyond 2007 (refer to www.staffordshire.gov.uk/planning).

- **Supplementary Planning Document (SPD):** These will provide guidance to supplement the policies and proposals in the development plan documents. They will not form part of the development plan or be subject to independent examination but will be a material consideration in making planning decisions.

- **Supplementary Planning Guidance (SPG):** These documents currently provide guidance to support policies and proposals found in Local Plans and Structure Plans. These documents will be replaced by Supplementary Planning Documents.

- **Sustainability Appraisal:** The purpose of sustainability appraisal is to appraise the social, environmental and economic effects of policies so that decisions can be made that accord with the objectives of sustainable development. The appraisal process incorporates the requirements of Strategic Environmental Assessment.

- **Waste Local Plan (WLP):** Current waste management policies for Staffordshire are found in the Staffordshire and Stoke-on-Trent Waste Local Plan 1998 – 2011.
(refer also to the Structure Plan). The WLP was ‘saved’ for three years from 28 September 2004 and a number of policies in the WLP have been saved beyond 2007 (refer to www.staffordshire.gov.uk/planning)
### Appendix 2: List of Mining Sites subject to periodic review

Table 6

<table>
<thead>
<tr>
<th>Site</th>
<th>Mineral Type</th>
<th>Date of periodic review</th>
<th>Cessation date for mineral working</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staffordshire Moorlands</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Redstone</td>
<td>Building stone</td>
<td>16 September 2020</td>
<td>2035</td>
</tr>
<tr>
<td>Wardlow &amp; Wredon</td>
<td>Limestone</td>
<td>30 September 2010</td>
<td>2015</td>
</tr>
<tr>
<td>Cliff Wood/ Hollins Farm</td>
<td>Building stone</td>
<td>23 June 2009</td>
<td>2009</td>
</tr>
<tr>
<td>Kingsley</td>
<td>Clay</td>
<td>2 March 2010</td>
<td>2042</td>
</tr>
<tr>
<td>Broadmoreside</td>
<td>Building stone</td>
<td>2 July 2011</td>
<td>2013</td>
</tr>
<tr>
<td>Croxden</td>
<td>Sand &amp; Gravel</td>
<td>9 October 2011</td>
<td>2013</td>
</tr>
<tr>
<td>Cauldon Low</td>
<td>Limestone</td>
<td>10 April 2012</td>
<td>2042</td>
</tr>
<tr>
<td>Moneystone</td>
<td>Silica Sand</td>
<td>22 May 2013</td>
<td>2014</td>
</tr>
<tr>
<td>Tearne</td>
<td>Building Stone</td>
<td>27 August 2013</td>
<td>2042</td>
</tr>
<tr>
<td>Cauldon Cement</td>
<td>Limestone/ shale</td>
<td>21 December 2013</td>
<td>2042</td>
</tr>
<tr>
<td>Hurst</td>
<td>Silica sand</td>
<td>29 March 2014</td>
<td>2036</td>
</tr>
<tr>
<td>Freehay &amp; Mobberley</td>
<td>Sand &amp; Gravel</td>
<td>29 March 2015</td>
<td>2025</td>
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<tr>
<td>Pitclays/ Richmore Hill</td>
<td>Silica Sand</td>
<td>Dormant</td>
<td>2042</td>
</tr>
<tr>
<td>Captains Barn Farm</td>
<td>Sand &amp; Gravel</td>
<td>26 May 2019</td>
<td>2026</td>
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<tr>
<td><strong>Newcastle under Lyme</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Bradwell East</td>
<td>Clay</td>
<td>25 January 2011</td>
<td>2019</td>
</tr>
<tr>
<td>Knutton</td>
<td>Clay</td>
<td>21 July 2009</td>
<td>?</td>
</tr>
<tr>
<td>Lordsley/ Trentham</td>
<td>Sand &amp; Gravel</td>
<td>28 February 2010</td>
<td>2042</td>
</tr>
<tr>
<td>Chatterley</td>
<td>Clay</td>
<td>9 February 2013</td>
<td>2030</td>
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<tr>
<td>Walleys</td>
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<td>15 July 2013</td>
<td>2042</td>
</tr>
<tr>
<td>High Carr</td>
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<td>2009</td>
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<tr>
<td>Apedale South</td>
<td>Clay</td>
<td></td>
<td>2042</td>
</tr>
<tr>
<td>Rufus/ Bradwell Wood</td>
<td>Clay</td>
<td>Dormant</td>
<td>2042</td>
</tr>
<tr>
<td>Keele</td>
<td>Clay</td>
<td></td>
<td>2042</td>
</tr>
</tbody>
</table>
## Appendix 2: List of Mining Sites subject to periodic review

<table>
<thead>
<tr>
<th>Site</th>
<th>Mineral Type</th>
<th>Date of periodic review</th>
<th>Cessation date for mineral working</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stafford</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weavers Hill</td>
<td>Sand &amp; Gravel</td>
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<td>?</td>
</tr>
<tr>
<td><strong>East Staffordshire</strong></td>
<td></td>
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<tr>
<td>Newbold</td>
<td>Sand &amp; Gravel</td>
<td>01 April 2019</td>
<td>2015</td>
</tr>
<tr>
<td>Fauld</td>
<td>Anhydrite/ Gypsum</td>
<td>19 September 2016</td>
<td>2018</td>
</tr>
<tr>
<td>Great Gate</td>
<td>Building Stone</td>
<td>27 August 2013</td>
<td>2042</td>
</tr>
<tr>
<td>Leasowes Farm/ Uttoxeter</td>
<td>Sand &amp; Gravel</td>
<td>5 June 2015</td>
<td>2013</td>
</tr>
<tr>
<td>Tucklesholme</td>
<td>Sand &amp; Gravel</td>
<td>See Newbold</td>
<td>2015</td>
</tr>
<tr>
<td>Kevin</td>
<td>Limestone</td>
<td>31 July 2016</td>
<td>2028</td>
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<tr>
<td>Barton</td>
<td>Sand &amp; Gravel</td>
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<td>2030</td>
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<tr>
<td><strong>South Staffordshire</strong></td>
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</tr>
<tr>
<td>Shoal Hill/ Huntington</td>
<td>Sand &amp; Gravel</td>
<td>20 March 2018</td>
<td>2008</td>
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<tr>
<td>Warstones</td>
<td>Clay</td>
<td>22 November 2010</td>
<td>?</td>
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<tr>
<td>Hinksford Lane North</td>
<td>Sand &amp; Gravel</td>
<td></td>
<td>2042</td>
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<tr>
<td>Four Ashes/ Calf Heath</td>
<td>Sand &amp; Gravel</td>
<td>28 November 2011</td>
<td>8 yrs from start or 11/09</td>
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<td>Saredon</td>
<td>Sand &amp; Gravel</td>
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<td>Redhurst &amp; Essington</td>
<td>Clay</td>
<td>26 February 2013</td>
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<td>Hollybank</td>
<td>Clay</td>
<td>1 June 2013</td>
<td>2030</td>
</tr>
<tr>
<td>Cheslyn Hay/ Rosemary Works</td>
<td>Clay</td>
<td>28 July 2013</td>
<td>2042</td>
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<td>Enville Road</td>
<td>Sand &amp; Gravel</td>
<td>19 October 2013</td>
<td>2013</td>
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<tr>
<td>Himley Wood South</td>
<td>Clay</td>
<td>29 July 2014</td>
<td>?</td>
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<tr>
<td>Seisdon &amp; Trysull</td>
<td>Sand &amp; Gravel</td>
<td>19 April 2015</td>
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<td>Upper Whittimere</td>
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<td>Pottal Pool</td>
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<td>2034</td>
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<tr>
<td>Site</td>
<td>Mineral Type</td>
<td>Date of periodic review</td>
<td>Cessation date for mineral working</td>
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<tr>
<td>Himley Road North</td>
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<td>1 January 2031</td>
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<td>Clay</td>
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<td>2042</td>
</tr>
<tr>
<td>Whittington Hall Lane</td>
<td>Sand &amp; Gravel</td>
<td>Dormant</td>
<td>2042</td>
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<tr>
<td>Fir Street, Sedgley</td>
<td>Clay</td>
<td>Dormant</td>
<td>2042</td>
</tr>
<tr>
<td>Himley Road South</td>
<td>Sand &amp; Gravel</td>
<td>Dormant</td>
<td>2042</td>
</tr>
<tr>
<td>Hiilton Park</td>
<td>Sand &amp; Gravel</td>
<td>Dormant</td>
<td>2042</td>
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**Cannock Chase**

<table>
<thead>
<tr>
<th>Site</th>
<th>Mineral Type</th>
<th>Date of periodic review</th>
<th>Cessation date for mineral working</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rugeley</td>
<td>Sand &amp; Gravel</td>
<td>23 June 2021</td>
<td>2031</td>
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<tr>
<td>Poplars Landfill</td>
<td>Sand &amp; Gravel</td>
<td>29 April 2014</td>
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**Lichfield**

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<th>Site</th>
<th>Mineral Type</th>
<th>Date of periodic review</th>
<th>Cessation date for mineral working</th>
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<tr>
<td>Weeford</td>
<td>Sand &amp; Gravel</td>
<td>5 May 2007</td>
<td>2042</td>
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<td>26 August 2009</td>
<td>2025</td>
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<tr>
<td>Manor Park</td>
<td>Sand &amp; Gravel</td>
<td>22 Dec 2009</td>
<td>2014</td>
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<tr>
<td>Alrewas &amp; Whitemoor Haye</td>
<td>Sand &amp; Gravel</td>
<td>4 March 2012</td>
<td>2011</td>
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<tr>
<td>Anglesey</td>
<td>Sand &amp; Gravel</td>
<td>27 October 2012</td>
<td>2015</td>
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<td>Cranebrook</td>
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<td>2023</td>
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<td>Wharf Lane</td>
<td>Sand &amp; Gravel</td>
<td>29 May 2013</td>
<td>2015</td>
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<td>Shire Oak</td>
<td>Sand &amp; Gravel</td>
<td>10 October 2011</td>
<td>2013</td>
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<tr>
<td>Elford</td>
<td>Sand &amp; Gravel</td>
<td>27 February 2023</td>
<td>2010</td>
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<tr>
<td>Hints</td>
<td>Sand &amp; Gravel</td>
<td>27 April 2020</td>
<td>2013</td>
</tr>
<tr>
<td>Packington Hill</td>
<td>Sand &amp; Gravel</td>
<td>27 April 2020</td>
<td>2013</td>
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**Tamworth**

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<th>Mineral Type</th>
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<tr>
<td>Wilnecote</td>
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<td>2035</td>
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### Table 7

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For more information please contact:

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Development and Waste Management Unit
Development Services Directorate
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Stafford. ST16 3TJ

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If you would like this document in another language or format (e.g. large text), please contact us on 01785 (27) 7275 or email mat.griffin@staffordshire.gov.uk