Minerals Core Strategy

Background Paper:
Guide to the Submission of Strategic Site Proposals
September 2007
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1. Introduction

1.1 The Minerals Core Strategy will define a long term spatial vision for future mineral development in Staffordshire and will indicate where minerals can be extracted to achieve the spatial vision.

1.2 We began the process of preparing our Minerals Core Strategy by publishing an issues and options paper in November 2005. More recently we prepared a preferred options document which was reported to Planning Committee in May 2007. It was our intention to carry out public consultation on this document in June 2007. However, prior to carrying out the consultation, we received advice from the Government Office for the West Midlands (GOWM) including comments from the Planning Inspectorate, which suggested that we needed to develop the spatial dimension to the Core Strategy. The Planning Inspectorate has also recently published some “lessons learnt” so far about the preparation of development plan documents\(^1\). In the light of that advice we now consider it necessary to develop the spatial dimension to the Core Strategy by identifying those potential “strategic sites” that would help to deliver the Core Strategy. The Planning Inspectorate advice is that:

> “Core strategies are where tough decisions need to be made: strategic decisions cannot be left to subsequent DPDs” (Development Plan Documents)\(^2\)

1.3 The aim of this background paper is to guide stakeholders in the process of identifying potential strategic sites that could contribute to the delivery of the Minerals Core Strategy.

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\(^1\) Local Development Frameworks: Lessons Learnt Examining Development Plan Documents – The Planning Inspectorate – June 2007. To view the document click [here](#).

\(^2\) Local Development Frameworks: Lessons Learnt ……..Section 5 DPD Content
2. The strategic issues

2.1 Staffordshire’s minerals resources have been and continue to be significant to the development and economy of the County and beyond. The Minerals Core Strategy needs to identify strategic sites that are likely to be considered essential to the production of important minerals for the next 10 to 20 years. Having received comments on the issues and options and prepared preferred options document, we have identified the following strategic issues for the Minerals Core Strategy.

Sand and Gravel

2.2 With significant sand and gravel resources and having 33 permitted quarries within the County in 2004, the Regional Spatial Strategy for the West Midlands requires that the County Council plans on the basis of providing 6.6 million tonnes of sand & gravel per annum. This represents 65% of the overall West Midlands regional guideline figure of 10.125 million tonnes per annum. The guideline reflects an overall projected demand for sand & gravel as an aggregate material and generally will provide for sand and gravel used directly in construction and in the manufacture of concrete products. It also reflects 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.

2.3 At the end of 2005, there were 95 million tonnes of permitted sand and gravel reserves and figure 1 indicates the location of those sites where the output is currently likely to exceed at least 100,000 tonnes per annum. These sites are significant in terms of the capacity to produce sand & gravel, thereby enabling the significant size of the sub regional apportionment to be met, and are therefore considered to represent strategic sites. Furthermore, to give an indication of the scale of sand & gravel operations in Staffordshire, it is noted that three of the six sites due to cease operations before 2014 are capable of producing more than 500,000 tonnes per annum. Most of the fine aggregate extracted is used as concreting sand but many of the sand and gravel quarries in Staffordshire are able to produce sands that can be used for mortar. There is no separate provision for mortar sands in terms of a landbank policy but the County Council has recently permitted an extension to a quarry on the basis of exceptional circumstances recognising that the quarry produces specialist mortar sand.

To view the following Minerals Core Strategy related documents click [here](#)

- Issues and Options - Report to Planning Committee (13 October 2005)
- Issues and Options - Consultation Document (November 2005)
- Issues and Options - Feedback Report to Planning Committee (13 April 2006)
- Preferred Options - Report to Planning Committee (10 May 2007)
2.4 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 24 million tonnes of additional sand & gravel reserves to maintain the landbank up to the end of 2016 which is the current end date for national guidelines for aggregate production.

[Graph: Projected depletion of permitted reserves based on providing sub-regional apportionment]

2.5 The strategy for identifying the allocations in the current Minerals Local Plan concentrated workings in specified locations by either developing new sites or more particularly extending existing sites where it is environmentally acceptable. The Minerals Local Plan also refers to the following criteria for the location of new sand & gravel workings:

a. No further workings in the Cannock Chase Area of Outstanding Natural Beauty (AONB) beyond those existing permitted areas or those proposed;
b. Continued protection for the Dove Valley west of Hilton;
c. No working west of the A38 between Alrewas and Kings Bromley; and
d. Concentrate working within the wooded areas at Weeford by excluding extensions westwards into the open countryside beyond Moneymore.

2.6 The above “locational approach” is under review and you may wish to comment on the continuing relevance of these criteria in terms of guiding the identification of sand & gravel resources. The Government in Minerals Policy Statement 1 continues to acknowledge the benefits of extensions to existing sites rather than new sites (refer to paragraph 15 of MPS1) and this supports the basis of the approach.
Limestone for aggregate use

2.7 In the Staffordshire Moorlands, limestone is quarried for aggregate use (refer to figure 1) and the extent of permitted reserves is more than adequate to meet the requirements of the sub regional apportionment for crushed rock which is currently 1.395 million tonnes per annum. On the basis of maintaining a 10 year landbank of permitted reserves, there is no need to plan for additional reserves of limestone for aggregate use. There are permitted reserves underlying a biological Site of Special Scientific Interest within Cauldon Low Quarry, however, and an issue for development of that quarry is developing options that could safeguard the SSSI or at least achieve the best options for mitigation of the loss of parts of the SSSI.

Etruria Marl (premium clay for brick and tile making)

2.8 Premium clay resources from the Etruria Formation are extracted within Staffordshire for the manufacture of bricks and tiles at seven factories. Figure 1 shows the location of those factories and currently, there are three quarries worked in Staffordshire to supply those factories. There is now a national policy requirement to provide for 25 years of production for each factory and it has been assessed that 4 of the 7 factories will need additional reserves to provide for a 25 year landbank. Available clay resources from the Etruria Formation are diminishing and it is not known by the Mineral Planning Authority whether there are sufficient resources to maintain a 25 year landbank for each factory. In accordance with national policy, a significant issue is to safeguard remaining clay resources within the Etruria Formation from other non mineral development and to consider opportunities for long term stockpiling of clays that could otherwise be sterilised.

Limestone and shale for cement manufacture

2.9 Production of cement from the Cauldon cement works (refer to Figure 2) at Waterhouses in the Staffordshire Moorlands equates to some 8% of UK production. Production of cement 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. The operator’s concern, however, is that permission to work the limestone is subject to approval of phased working schemes and there is a currently a requirement to agree a longer term working scheme involving permitted reserves affecting land which forms the Cauldon Dales Site of Special Scientific Interest. 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 could involve the release of additional land underlain by suitable limestone reserves.
**Anhydrite and gypsum**

2.10 Anhydrite and gypsum are both found at Fauld Mine in East Staffordshire (refer to figure 2) but currently, only anhydrite is extracted and is used in the manufacture of cement. Fauld Mine produces half of the anhydrite used in the UK cement industry and is therefore a “strategic site”. During the next 10 years, it is anticipated that on the basis of maintaining current production levels at the mine, additional reserves of anhydrite will need to be permitted.

**Silica Sand**

2.11 Moneystone Quarry in the Staffordshire Moorlands (refer to figure 2) supplies approximately 9% of national production of industrial (silica) sands and is therefore a “strategic site”. Principally the quarry specialises in the production of high grade sands for container glass and ceramic manufacture throughout the UK. According to a recent planning application current reserves are only anticipated to maintain production for about 2 years and current local policy requires that a 10 year landbank policy is maintained for the Moneystone Plant.

**Building stone**

2.12 Building stone extracted mainly at Hollington in the Staffordshire Moorlands (refer to figure 2) has both a local and national market. Local stone masons are responsible for restoration work on many important historical buildings throughout the country. Of the five permitted quarries, two quarries have permissions that will expire within the next 10 years. Furthermore, in the light of new national policy, there is a need to highlight quarries of importance to the built heritage, particularly where the quarries are now disused but have the potential to provide stone for repair of historic buildings. The safeguarding of historic quarries will eventually need to be considered as well as an approach for enabling small scale workings of “historic” quarries.

**Coal**

2.13 There has been a long history of coal mining in Staffordshire and although coal is not currently mined, significant coal resources remain, particularly resources that could be exploited by opencast methods. There are also areas within Staffordshire licensed by the Government where developers have an interest to exploit oil and gas resources. In particular, some licences are held with an interest to exploit methane gas found within coal seams. Figure 2 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.
2.14 It will be necessary to implement new national planning policy for onshore oil and gas which also reflects the Government’s energy policy aiming to encourage the development of clean coal technologies. Within Staffordshire, it is anticipated that some of the licence areas will be further investigated for their gas potential over the next 10 years and that this could lead to the development of production sites.

2.15 In the 2006 Energy Review, it was stated that “the Government believes that it is right to make the best use of UK energy resources, including coal reserves, where it is economically viable and environmentally acceptable to do so…” In terms of exploiting the shallow coal resource, the Minerals Local Plan adopted an approach of identifying environmental constraints within four shallow coalfield areas. This approach would be likely to continue if there is no evidence to indicate interest on the part of industry to justify the allocation of land for future coal working. Another issue is whether local mineral safeguarding policy should be extended to relate to shallow coal resources.

Safeguarding potential railways associated with strategic sites

2.16 Most of the minerals produced in Staffordshire or their associated products are 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. National policy is to promote and enable the haulage of minerals by rail or inland waterways to reduce the environmental impact of their transportation. In particular, national policy also requires the safeguarding of rail links where there is potential to move minerals by rail.
3. Developing the spatial vision

3.1 The Minerals Core Strategy must provide a “spatial vision” about where minerals are to be produced in Staffordshire over the next 10 to 20 years.

3.2 To provide clarity in terms of which parts of Staffordshire could be affected by the Minerals Core Strategy as well as to test whether the Strategy is deliverable, we are inviting the minerals industry, land owners and any other interested parties (‘developers’) to submit details about potential strategic sites to us for our consideration. Any submissions will need to address the strategic issues identified in the previous section of this paper and fulfil some or all of the broad objectives as set out below.

**Broad objectives**

3.3 The earlier issues and options consultation paper has helped us to develop the following set of broad objectives for the spatial vision:

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1.</td>
<td>Strategic sites will be identified and safeguarded to meet the local, regional and national needs of sustainable communities;</td>
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<tr>
<td>2.</td>
<td>In concentrated or established areas of quarrying, sites should not give rise to unacceptable adverse cumulative impacts on local communities and users of the road network;</td>
</tr>
<tr>
<td>3.</td>
<td>High operational standards will be required at sites in order to minimise disturbance to local amenity and the environment;</td>
</tr>
<tr>
<td>4.</td>
<td>All opportunities will be taken to contribute to biodiversity and geodiversity aims, improving our understanding of the historic environment, and to improving access to the countryside; and</td>
</tr>
<tr>
<td>5.</td>
<td>All sites should be subject to high quality standards of restoration and aftercare that secure benefits in terms of improving the condition of the land and its value to the locality.</td>
</tr>
</tbody>
</table>
**List of Requirements**

3.4 Under each of the broad objectives identified above, we have drawn up a list of requirements for information that developers will need to address when submitting their proposals for our consideration.

<table>
<thead>
<tr>
<th>Objective 1: Strategic sites will be identified and safeguarded to meet the local, regional and national needs of sustainable communities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information should be provided in respect of the following:</td>
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<td>1.15</td>
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</tbody>
</table>
Objective 2: In concentrated or established areas of quarrying, sites should not give rise to unacceptable adverse cumulative impacts on local communities and users of the road network.

Information should be provided in respect of the following:

2.1 Is the site within any of the following areas of concentrated working and if so, does the option provide an opportunity to positively address any potentially unacceptable adverse impacts upon people, transportation systems or the environment that are associated with those areas?

<table>
<thead>
<tr>
<th>Area</th>
<th>Mineral</th>
<th>Issues for future planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Trent Valley between Croxall and Burton</td>
<td>Sand &amp; gravel</td>
<td>To contribute to the restoration strategy this is proposed through the Central Rivers Initiative and to the aims of the National Forest Strategy, OnTrent and the Staffordshire Biodiversity Action Plan.</td>
</tr>
<tr>
<td>South east of Cheadle</td>
<td>Sand and Gravel</td>
<td>To mitigate the impacts of traffic; to mitigate the impact on landscape from previous workings; to contribute to schemes for the creation of woodland, heath and grasslands as well as initiatives for public access to the countryside; and to safeguard water resources.</td>
</tr>
<tr>
<td>Cauldon Low</td>
<td>Limestone for crushed rock and cement manufacture</td>
<td>To address issues as identified under Policy 54 of the Minerals Local Plan as well as avoid risks in terms of impacts on the Peak Dales Special Area of Conservation; to safeguard Sites of Special Scientific Interest within areas currently permitted for mineral working or at least mitigate the loss of these sites; and To take a strategic approach to the maintenance and enhancement of the extent and quality of priority grassland habitats in line with UK and Staffordshire Biodiversity Action Plan and RSS Biodiversity Enhancement Area objectives</td>
</tr>
<tr>
<td>Cheslyn Hay and Essington</td>
<td>Clay</td>
<td>Mitigate the visual impact of mineral workings and improve the quality of landscape; and reclaim land to contribute to the aims of the Forest of Mercia and Staffordshire Biodiversity Action Plan.</td>
</tr>
<tr>
<td>Bradwell Wood/ High Carr, Newcastle-under-Lyme</td>
<td>Clay</td>
<td>Mitigate the visual impact of mineral workings and improve the quality of landscape; reclaim land for the benefit of the Newcastle Community Woodland Zone; and enhance the ecological network around the Bradwell Woods Site of Biological Importance with special regard to the significant local population of great crested newts.</td>
</tr>
</tbody>
</table>

2.2 Does the proposed site result in simultaneous operations within a mineral resource area? If so, can working and restoration of the site be managed to avoid any cumulative adverse environmental impact?
2.3 Are there opportunities for use of alternative modes of mineral transportation?
2.4 Does the site have the benefit of good connections to the strategic highway network as indicated on figure 1?

**Objective 3: High operational standards will be required at sites in order to minimise disturbance to local amenity and the environment.**

Information should be provided in respect of the following:

3.1 Does the site enable the continuation of production at an existing quarry? If so, are operations subject to liaison arrangements with the local community involving monitoring systems based on audited environmental reporting by the operator? In addition, has a mineral site transport plan been developed in consultation with the local community?

3.2 Is advanced landscaping possible to mitigate any visual impact of the proposed site?

3.3 Does the proposed site fulfil the requirements of Policy NC2 of the Structure Plan, informed by the Supplementary Planning Guidance “Planning for Landscape Change”, in contributing to the appropriate landscape policy objective for the area?

3.4 How will the site be developed to mitigate the impacts of climate change and meet the requirements to conserve energy?

3.5 Does the development of the site include proposals for sustainable drainage?

3.6 Does the development of the site require abstraction of water from local river or groundwater sources?

3.7 Does the development of the site affect the integrity of underground utility apparatus?

3.8 Are there any sensitive properties (e.g. residential dwellings) within the “zones of analysis” (i.e. an within which there will be analysis of environmental impacts such as noise, dust and vibration but this does not preclude analysis beyond these areas) as defined in the table below? If so, how many properties?

<table>
<thead>
<tr>
<th>Rock type</th>
<th>Resource</th>
<th>Zone of analysis (measured from the outer limit of the operational area of the quarry)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard rock (requires blasting)</td>
<td>Limestone; coal</td>
<td>500 m</td>
</tr>
<tr>
<td>Soft rock</td>
<td>Sand &amp; gravel; silica sand; shale; clay</td>
<td>250 m</td>
</tr>
<tr>
<td>Sandstone</td>
<td>Building stones</td>
<td>50 m</td>
</tr>
<tr>
<td>Underground minerals</td>
<td>Gypsum/ anhydrite</td>
<td>0 m</td>
</tr>
</tbody>
</table>
Objective 4: All opportunities will be taken to contribute to biodiversity and geo-diversity aims, improving our understanding of the historic environment and to improving access to the countryside.

Information should be provided in respect of the following:

4.1 Does development of the site provide opportunities to contribute to local biodiversity or geo-diversity action plans or other strategic or local conservation initiatives during operation of the quarry?
4.2 Where a proposed site is likely to affect a site of ecological value, what are the risks to that site from mineral operations and is there scope for mitigation?
4.3 Does the development of the site provide opportunities to replace and create additional public access to the countryside in terms of providing permissive rights of way or access to open land/ water areas?
4.4 Does the development of the site allow opportunities to enhance or improve understanding of local cultural assets e.g. safeguarding industrial heritage features or increasing awareness through archaeological investigations or improving appreciation through educational initiatives?

Objective 5: All sites should be subject to high quality standards of restoration and aftercare that secure benefits in terms of improving the condition of the land and its value to the locality.

Information should be provided in respect of the following:

5.1 Is the proposed reclamation of the site appropriate to surrounding land use and character, as informed by the Supplementary Planning Guidance document “Planning for Landscape Change”?
5.2 Does the proposed reclamation of the site consider impacts resulting from climate change e.g. provide for sustainable drainage and water supply and establishment of sustainable vegetation?
5.3 Does the reclamation of the site achieve objectives that have been agreed with the local community?
5.4 Does the reclamation of the site overcome any existing problems of land contamination or instability?
5.5 Does the reclamation of the site provide a landform with stable slopes capable of sustainable use; sustainable drainage; and the provision of adequate soil cover?
5.6 Where the site affects “best and most versatile” agricultural land, is it achievable to preserve the long term potential of the land as a high quality agricultural resource?
5.7 Does the development of the site ensure that land is reclaimed at the earliest opportunity e.g. involve progressive reclamation of the working area where feasible?
5.8 Does the reclamation of the site have potential to positively contribute to the achievement of targets set out in the Biodiversity Action Plan and/ or local
biodiversity enhancement initiatives or targets e.g. Biodiversity Enhancement Areas?

5.9 Does the reclamation of the site have potential to positively contribute to flood alleviation, sustainable drainage or to water supply?

5.10 Does the site involve working below the water table? If so, is water based reclamation appropriate in terms of contributing to local environmental initiatives, biodiversity targets or open space/recreation objectives?

5.11 Alternatively, can the site be reclaimed at lower levels than the original landform without the need for backfilling with wastes (other than wastes derived from the mineral operation)? If so, is there an opportunity to contribute to environmental initiatives based on establishing woodland, heath or grasslands which will achieve ecological or recreational benefits?

5.12 Would the site provide opportunities to retain geological features for future educational use?

5.13 Does the development of the site include provision of long term aftercare management to achieve ecological benefits?
4. Invitation to submit proposals

4.1 We invite ‘developers’ to consider the strategic issues, broad objectives and the list of requirements and to submit strategic sites to us for consideration as part of the development of the Minerals Core Strategy. We would be pleased if proposed sites could be submitted before 21 December 2007 together with supporting information to meet the list of requirements. If problems encountered in compiling the required supporting information, developers should discuss these problems with us.

4.2 In addition to this background paper, developers are encouraged to consider a list of references (refer to appendix 1) that should assist in responding to some of the questions listed in the previous section.

4.3 Sites submitted for consideration will be tested in terms of:

i. How well the sites would deliver the plan objectives as broadly indicated in this paper;

ii. The sustainability appraisal which will assess important issues such as safeguarding sites of ecological value and the protection of landscape character;

iii. Whether the site can be realistically developed within the required timescale;

iv. Conformity to national and regional planning policy; and

The intention is to publish a list of the sites submitted for consideration in January 2008. We will then carry out an initial assessment (based on i to iv above) of the sites prior to reporting site options to the Planning Committee in April 2008. A public consultation exercise on site options will then take place to inform on the selection of preferred options.

4.4 The Planning Inspectorate has advised that it is important for developers to recognise the importance of promoting sites at an early stage in order that they can be properly appraised and to provide an opportunity other stakeholders including local communities to be consulted. At the same time the Planning Inspectorate advises that the onus is on consultees to seek to engage early and effectively in order to influence the outcome. We therefore look forward to receiving proposals which we hope will help us to shape the Staffordshire Minerals Core Strategy.
Appendix 1: List of Useful references

General:

Staffordshire Planning Portal for information about local planning policy – refer to the Portal A to Z at www.staffordshire.gov.uk/planning

‘More contacts and useful links’ page on the Staffordshire Planning Portal e.g. DCLG, Defra, BGS, Good Quarry, After Minerals, Environment Agency at http://www.staffordshire.gov.uk/environment/developmentcontrol/planning/whatWeDo/moreContacts.htm

‘e-land’ Staffordshire County Council’s Environment and Countryside Unit web site for information about landscape, biodiversity, archaeology, historic built environment and rights of way at http://www.staffordshire.gov.uk/environment/e-land


Using alternatives in making plans – PAS regional LDF events, Spring 2007: report from the workshop sessions on creating and testing alternatives (Planning Advisory Service - June 2007) http://www.pas.gov.uk/pas/aio/42167

Environmental schemes and designations: – refer to the MAGIC website http://www.magic.gov.uk/projectsummary.htm

Sustainability Appraisal:
Scoping report for the Minerals Core Strategy (July 2005)

Geo - diversity:

Biodiversity:
International and national designated areas http://www.naturalengland.org.uk/conservation/designated-areas/default.htm

Landscape:
Refer to Supplementary Planning Guidance “Planning for Landscape Change” http://www.staffordshire.gov.uk/environment/e-land/naturalenvironment/landscape/NaturalEnvironmentLandscapeCharacterTypes.htm

Rights of Way:
Refer to draft Rights of Way Improvement Plan

**Environmental Initiatives:**
‘e-land’ Staffordshire County Council’s Environment and Countryside Unit web site and click on “projects & partners” link at
http://www.staffordshire.gov.uk/environment/e-land/Countryside/ProjectsPartners/

and also via the “projects and issues” link to the Staffordshire Wildlife Trust web site
http://www.staffordshirewildlife.org.uk/projects.asp?ses=&pl=false

**Flood risk:**
Flood maps produced by the Environment Agency
http://maps.environment-agency.gov.uk/wiyby/mapController

**Best Practice:**
The University of Leeds Good Quarry web site at http://www.goodquarry.com

RSPB web site After Minerals web site at http://www.afterminerals.com

Planning4Minerals at www.planning4minerals.org.uk
Figure 1 Key Diagram Showing Strategic Mineral Sites 2007
For more information please contact:

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