

Joint West Sussex Minerals Local Plan

Background Paper 3: Site Assessment and Identification Methodology

June 2014



Working in Partnership



Purpose

This Joint Minerals Local Plan Background Paper is one in a series which supports the development of the Joint West Sussex and South Downs National Park Minerals Local Plan (the Joint Minerals Local Plan). Under the provisions of Section 28 of the Planning and Compulsory Purchase Act 2004 and the Duty to Co-operate, the Joint Minerals Local Plan, prepared jointly by West Sussex County Council (WSCC) and the South Downs National Park Authority (SDNPA), will help decide how and where minerals should be dealt in West Sussex in the future.

This paper presents the site assessment methodology which will be used in order to select mineral sites for inclusion in the Joint Minerals Local Plan. The allocation of sites is crucial in order to ensure that a steady and adequate supply of minerals is achieved.

Background Papers are being used to identify baseline data and inform discussions with the community and key stakeholders. The Papers are intended to 'set the scene' and present the evidence as it stands at this stage, to enable the Authorities to work effectively with stakeholders to:

- Check information to ensure the Authorities knowledge and understanding of minerals issues is up-to-date and robust;
- Identify potential issues, problems or concerns relating to the production of minerals in West Sussex.

Information gathered in response to the Background Papers will assist the progress of the Joint Minerals Local Plan to the next stage. You are invited to comment on the Papers or provide further related information.

More information about the Plan can be found on the Council's website: www.westsussex.gov.uk/mwdf. If you require clarification on any of the content within this paper please contact us at: mwdf@westsussex.gov.uk.

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1. Introduction

- 1.1 This Background Paper explains how potential mineral sites will be identified and assessed, which will lead to the allocation of suitable mineral sites in the Joint Minerals Local Plan. The methodology provides the steps to be carried out to gather robust evidence to inform the selection of sites. It is important that the principles established by the methodology accord with the requirements of the National Planning Policy Framework (NPPF). The Paper addresses the following issues:
- The work which has previously been undertaken by West Sussex County Council on site selection;
 - The steps that will be taken for the site search, initial assessment and selection for mineral sites.
- 1.2 As mineral planning authorities, we are required to plan for a steady and adequate supply of minerals to meet future demand for minerals in the Plan area. The types and amounts of minerals that need to be planned for are discussed in **Background Paper 2: Minerals in West Sussex**. To meet the future need for some minerals, such as sand and gravel, the Joint Minerals Local Plan will need to include suitable sites to allocate for extraction. To do this we must identify and assess potential mineral sites and, from a list of potential options, select the sites most suitable for allocation in the Plan.
- 1.3 Potential sites will be subject to public consultation which will ensure effective community engagement by providing stakeholders with the opportunity to check that the information used in the assessments is correct. Sites coming forward should be reasonable (realistic and genuinely implementable), subject to community engagement and sustainability appraisal¹. Before a list of sites is developed, a wide range of information submitted from operators as well as from other agencies (e.g. Environment Agency, Natural England) will need to be appraised.
- 1.4 The outcomes from the site search and assessment will be recorded in a '**Mineral Sites Study**' paper. This will be a 'live' paper with new versions being produced when required to ensure that any additional information about sites can be incorporated and taken into account.

¹ Planning Advisory Service (2008) Local Development Frameworks: Options Generation and Appraisal.

- 1.5 The 'Mineral Sites Study' will be an evidence paper and will not decide where minerals should be located or decide what specific mineral sites should be allocated. This will be done through the plan making process. It will identify sites which have the potential to be developed for minerals, because they are considered to be suitable and available for development, and considered to be viable. The fact that a site has been included in the Minerals Sites Study does not mean that it will be allocated in the Joint Minerals Local Plan or that it will be granted planning permission.

2. Background

- 2.1 In 2005, West Sussex County Council undertook some initial work on mineral sites as part of the work on the Minerals Development Plan Paper: Issues and Options (November, 2005). Due to changes to the planning system announced in June 2008, it was then proposed to include strategic mineral site allocations as part of the preparation of the Core Strategy rather than in a separate Development Plan Document (DPD) because sites are considered to be of strategic importance in the County. The site assessment work carried out for the Core Strategy was set out in a series of Background Papers, which were made available on the WSCC website and subject to consultation in 2008/09.
- 2.2 In May 2011, the County Council agreed to prepare a new Joint Minerals Local Plan (MLP) for West Sussex in partnership with the South Downs National Park Authority. As the Plan will include strategic allocations for mineral sites a new site identification and assessment process must be undertaken.
- 2.3 The identification and assessment process outlined, within this Paper, builds on the previous work which was undertaken. As circumstances may have changed since 2008, it is necessary to update this work and provide an opportunity for further sites to be considered. Sites that were assessed in 2009 will be re-evaluated as part of this process, along with any new sites proposed. Therefore some sites will have been assessed in much greater detail than other sites. Where detailed information is known from previous assessment, it will be updated and used.

3. National and Local requirements

- 3.1 Minerals are essential to the nation's prosperity and quality of life. It is important that there is an adequate and steady supply of material to provide the infrastructure, buildings and goods that society, industry and the

economy needs. It is also important that this provision is made in accordance with the principles of sustainable development.

- 3.2 Paragraph 143 of the NPPF requires that Local Plans should allocate sites to promote development and flexible use of land. Specifically in relation to planning for aggregate minerals, the NPPF states that Mineral Planning Authorities should plan for a steady and adequate supply of minerals and make provision for aggregates in the form of specific sites, preferred areas and/or areas of search and locational criteria as appropriate.
- 3.3 Government guidance on the supply of aggregates set out within the National Planning Practice Guidance states that provision for land won aggregates extraction should take the form of specific site allocations, wherever possible, but the identification of preferred areas and/or areas of search may be appropriate. National Park Authorities are not expected to designate Preferred Areas or Areas of Search given their overarching responsibilities for managing National Parks.

Specific Sites	Sites with existing and viable mineral resources and with a clearly defined boundary where development is acceptable in principle.
Preferred Areas	Clearly defined areas of known resources, but are subject to a lesser degree of precision with regard to the definition of the actual site, which may be suitable in principle for development. Preferred Areas may need to be subject to a more detailed evaluation to identify the extent of the development area with more precision.
Areas of Search	Likely to be more geographically extensive areas, generally defined with a lesser degree of precision than Preferred Areas and are likely to be characterised by less robust information about the extent and viability of the potential resource. They are intended to direct potential developers to areas where suitable sites may be located and where support in principle, subject to identification of a suitable site, is likely to be provided by the planning authority.

- 3.4 The local requirements for aggregates and other minerals are set out in Background Paper 2: Minerals in West Sussex.

4. Site Selection Method

- 4.1 This methodology seeks to support the identification and assessment of locations for future mineral extraction in the Plan area.
- 4.2 If necessary, outside the South Downs National Park, a variant of this methodology will also be used for the identification and assessment of broader Areas of Search. For the purposes of this paper, broader areas of search are referred to as "Areas" and Specific Sites and Preferred Areas are referred to as "Sites".

Step 1: The Baseline, Site Nominations and Initial Search – spring 2014

- 4.3 Documents such as Background Paper 1: Setting the Context: Spatial Portrait, and Background Paper 2: Minerals in West Sussex, and the West Sussex Local Aggregate Assessment will be used provide an adequate picture of mineral production at the current time. Both documents present baseline information on reserves, current sites, existing allocations, constraints and market areas.
- 4.4 The information set out in the baseline documents will be used, together with the site proformas produced in 2009, in order to identify an initial list of sites.
- 4.5 The initial stage of mineral site selection is to identify areas where mineral sites could be located. This is done by asking for sites to be put forward by landowners, agencies and minerals operators for consideration through a "Call for Sites". The industry and landowners are well placed to suggest sites for consideration because they will have local knowledge about the quality and viability of the mineral and can provide information about the likelihood of deliverability of sites. This process was undertaken from Friday 14 March to Friday 11 April 2014, and sites nominated have been added to the list generated in Step 1, for further assessment.
- 4.6 In addition to asking for sites to be nominated, we will also be examining the areas where we know minerals occur based on geological information (the resource area). This will help to identify where likely minerals sites could be located and will also ensure that sites coming forward can deliver quality aggregates. A desk-top exercise to identify possible sites will be undertaken, and such sites will be added to the list generated in Step 1.

- 4.7 All sites identified through step 1 will progress to further assessment.
- 4.8 We have also encouraged nominations for sites for the extraction of other minerals such as clay or stone, and also for railheads or wharves, which will also be assessed.

Step 2: Initial Assessment and Appraisal of sites – summer 2014

- 4.9 The initial assessment of potential mineral sites will involve a desk-top study to assess their potential suitability. Information for mapping and relevant policies will be obtained from GIS systems, county and district planning documents.
- 4.10 A proforma will be developed for each site considered. As the sites progress through the stages of assessment, the proforma will be updated accordingly.
- 4.11 This initial assessment will determine if there are 'showstoppers' which mean that a site should not be considered further. For example, if a site has an exclusionary constraint (e.g. sites of international importance for nature) or is not deliverable (e.g. restrictive covenants on the land).
- 4.12 The outcome from this stage will be two lists, one of rejected sites and one of potential sites.
- 4.13 The initial assessment of individual sites will also involve consultation with internal and external consultees who will provide specialist advice on particular issues. The following consultees will be contacted for their advice once the desk-top assessment of sites has been carried out by officers and draft proformas developed for each site:

Internal (WSCC/ SDNPA as appropriate):

- Ecologist
- Public Rights of Way Officer and South Downs Way Officer
- Landscape Officers
- Aviation Officer
- Air Quality Officer
- Highways and Transport
- Archaeologist
- Drainage and Flood Risk Team
- Planning Policy Teams
- SDNPA Strategy Leads
- SDNPA Area Rangers for sites within the SDNP

External:

- Environment Agency
- Highways Agency
- Natural England
- English Heritage
- Utility Companies
- District and Borough Councils
- Health and Safety Executive
- Sussex Wildlife Trust
- Local Nature Partnership
- Forestry Commission

- 4.14 The sites will be appraised using set considerations and constraints. The information which will inform the assessment of sites is listed in table 1 overleaf.
- 4.15 A traffic light system will be used to assess sites against the criteria referred to in Table 1. Criteria showing in red will rule a site out, amber indicates issues that may be mitigated against or require further investigation while green indicates no issues.
- 4.16 A 'high level' Transport Assessment was carried out on previously identified sites in February 2011. Where sites were considered in this assessment, the results will be checked and updated where necessary. New sites will be assessed as needed.

Table 1: Key Information and Criteria

	Considerations	Constraints	Source of information
Landscape Designations /Visual Impact	<ul style="list-style-type: none"> Consider the potential impact on designated landscapes –There are two AONBs within West Sussex; Chichester Harbour and the High Weald. The South Downs National Park covers almost the whole of the chalk outcrop, almost half the Folkstone Beds, and part of the gravel reserve north of Chichester Potential for enhancement 	<ul style="list-style-type: none"> The significance of any landscape and visual impact is dependent on a number of site specific issues, such as the proximity to sensitive viewpoints, presence of screening features, direct effects on landscape fabric, proximity to landscape designations and the existing landform. 	<ul style="list-style-type: none"> GIS The South Downs Integrated Landscape Character Assessment (2005)(updated 2011) Consultation with landscape specialists Consultation with ecological specialists
Nature conservation and geodiversity	<ul style="list-style-type: none"> Consider proximity to sites of international/national importance for nature conservation and potential for adverse effects. Consider location of Regionally Important Geological and Geomorphological Sites (RIGS) Potential for enhancement 	<ul style="list-style-type: none"> International sites are afforded the highest level of protection. These include Ramsar sites, Special Protection Areas (SPA) and Special Areas of Conservation (SAC). Mineral development should not take place where it would adversely affect a site of European Importance. The likelihood of any adverse impact on National Nature Reserves (NNR) will also be considered. Many Sites of Special Scientific Interest (SSSI) are also designated as sites of international importance and there are numerous sites distributed throughout the county. Minerals development should not occur on land within or outside SSSIs if it is likely to have an adverse effect on the SSSI. 	<ul style="list-style-type: none"> GIS Consultation with ecological and geological specialists
Historic environment	<ul style="list-style-type: none"> Consider proximity to a Registered Historic Park or Garden. 	<ul style="list-style-type: none"> Presumption in favour of the preservation of: 	<ul style="list-style-type: none"> Consultation with specialists of

	Considerations	Constraints	Source of information
	<ul style="list-style-type: none"> Consider proximity to historic site/building/monument with a nationally recognised designation 	<ul style="list-style-type: none"> listed buildings and their setting nationally important archaeological remains in situ and their settings the preservation of nationally important archaeological remains if mineral proposals would cause damage or have a significant impact on them. Proposals for minerals development should not affect the character or appearance of conservation areas. Although historic parks and gardens have no statutory controls, they should be protected. The effect of a proposed development on a registered park or garden or its setting will be considered. 	<p>archaeology and the historic environment</p>
Water environment (including flooding)	<ul style="list-style-type: none"> Consider proximity to Source Protection Zones or major/minor aquifers. Consider proximity to vulnerable water bodies. Areas subject to flooding need close consideration – dependent on type of development. Mineral extraction can provide opportunities for flood water and general water storage. 	<ul style="list-style-type: none"> The NPPF technical guidance on flooding states that mineral working and processing is classed as a less vulnerable development (except for sand gravel which is considered water compatible) in terms of flood risk vulnerability. Mineral extraction development needs to take account of the presence of Source Protection Zones the major aquifer that coincides with the chalk of the South Downs. 	<ul style="list-style-type: none"> GIS Consultation with Environment Agency Strategic Flood Risk Assessment (SFRA)
Air quality	<ul style="list-style-type: none"> Adverse emissions can be a concern at some facilities (dealt with at planning application stage if necessary through use of controls). 	<ul style="list-style-type: none"> The impact of development on air quality is likely to be particularly important where proposed development 	<ul style="list-style-type: none"> Officer assessment

	Considerations	Constraints	Source of information
	<ul style="list-style-type: none"> Consider proximity to sensitive human receptors. Proximity to Air Quality Management Areas 	is within or close to an Air Quality Management Area (AQMA), where the proposed development could affect air quality such that it may cause an AQMA to be designated.	
Soil quality	<ul style="list-style-type: none"> Consider proximity or location of best and most versatile agricultural land Consider location of sensitive land and soils Potential of enhancement 	<ul style="list-style-type: none"> The presence of the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification), should be taken into account. Where significant development of agricultural land is unavoidable, poorer quality land (grades 3b, 4 and 5) should be used in preference to that of a higher quality. Much of the land within the gravel resource area is of higher agricultural grades, therefore although there will be a preference for finding sites on the lowest grade agricultural land, sites on the highest agricultural land may be unavoidable. 	<ul style="list-style-type: none"> Consultation with landscape specialists Officer assessment
Public Rights of Way (PRoW)	<ul style="list-style-type: none"> Consider the presence of public rights of way Potential for enhancement 	<ul style="list-style-type: none"> The significance of any impact is dependent upon the location of public rights of way and areas used for recreation. This is particularly important with the South Downs National Park in relation to the second purpose 'to promote opportunities for the understanding and enjoyment of the special qualities'. 	<ul style="list-style-type: none"> Consultation with PRoW Team and SDNPA Rangers
Transport (including access)	<ul style="list-style-type: none"> The Advisory Lorry Route (ALR) is defined in the West Sussex Transport Plan 2011- 2026. The ALR is divided into the 'Strategic Lorry Route' (SLR), which are the preferred routes for 	<ul style="list-style-type: none"> Minerals have to be worked where they occur therefore will not always be close to the ALR, although access to the ALR is desirable. The challenge is to avoid 	<ul style="list-style-type: none"> Consultation with transport specialists Traffic studies were relevant

	Considerations	Constraints	Source of information
	<p>movements crossing the County and those movements starting and ending should use them in preference to local lorry routes where possible. The ALR also includes 'Local Lorry Route' (LLR) which should only be used for the start or final leg of a journey or between built up areas of West Sussex.</p>	<p>the use of unsustainable roads by locating mineral sites close to the ALR and to minimise the environmental and amenity impact of the transportation of minerals.</p> <ul style="list-style-type: none"> Distance to market (demand for aggregate) 	
Services and utilities	<ul style="list-style-type: none"> Water, Gas, Electricity, Telecommunications 	<ul style="list-style-type: none"> Sites which have utilities passing underneath may not be showstoppers but will be a consideration in terms of the costs and benefits of dealing with them. It is important for sites to have access to services and utilities to ensure the efficient running of mineral sites. Extensions to existing sites can utilise existing infrastructure and minimise environmental disturbance and may often be more sustainable. However, in some instances, new sites may be more sustainable. Therefore, it is important that they have suitable access to services and utilities to enable the site to be operated efficiently and is deliverable. 	<ul style="list-style-type: none"> Officer assessment
Public amenity	<ul style="list-style-type: none"> The National Planning Policy Framework (NPPF) states that the adverse impact of minerals workings on neighbouring communities should be minimised. Consider proximity of local communities whose amenity may be impacted by development. 	<ul style="list-style-type: none"> Noise, dust, smell, light, vibration, air quality, impact on residents and neighbouring uses, impact on wider areas (users of the countryside) 	<ul style="list-style-type: none"> Officer assessment
Cumulative impact	<ul style="list-style-type: none"> The NPPF states that policies and proposals should take account of existing activity and impacts, the duration and nature of proposals 		<ul style="list-style-type: none"> Officer assessment

	Considerations	Constraints	Source of information
	for new or further workings, and the extent of impacts that a particular site, locality, community, environment or wider areas of mineral working can reasonably be expected to tolerate over a particular or proposed period.		
Airport Safeguarding Zone	<ul style="list-style-type: none"> Many types of development can attract to birds, including large flat-roofed structures, landfill sites, gravel pit restoration schemes and nature reserves 	<ul style="list-style-type: none"> Mineral development sites should not have an adverse impact on the operational integrity or aviation facilities of the airport safeguarded areas of Gatwick, Shoreham or Goodwood Airports. The relevant managing bodies will need to be consulted if a sites lies within 13km radius of an airport. It may be possible to incorporate mitigation measures to overcome aviation objections. 	<ul style="list-style-type: none"> Officer assessment
Site specific information	<ul style="list-style-type: none"> Minerals type/quantity Total reserve (tonnes) Marketable reserve (tonnes) Estimated annual yield (tonnes) Suggested working arrangements Suggested after-use Landownership Developer/Operator 	<ul style="list-style-type: none"> It also important that sites allocated within the Joint Minerals Local Plan deliverable. Therefore additional information about the sites is required to determine whether a site can be delivered during the plan period. Sites which cannot be demonstrated will come forward should be excluded. If the relevant information is not forthcoming, the Authorities will not be able to consider such sites as allocations as it would not be a 'sound' approach to progress a site without technical justification. 	<ul style="list-style-type: none"> Officer assessment

- 4.17 The outcome of the site assessment will be a list of **'acceptable in principle'** site proposals which will then be subject to a more detailed appraisal (see **step 3**).
- 4.18 The list of site proposals, with detailed proformas for each site, will be published for comment in the **'Mineral Sites Study (version 1)'** document; providing an opportunity for communities, stakeholders and the industry to 'fact check' the information. The fact that a site has been included in the Mineral Sites Study does not mean that it will be allocated in the Joint Minerals Local Plan or that it will be granted planning permission.

Step 3: Detailed site assessments – summer 2014

- 4.19 The next step will be to carry out detailed site assessments. This will provide the necessary information to enable the selection of 'preferred sites' when the study has been completed. The following outlines the additional assessments that will be carried out.
- 4.20 The Sustainability Appraisal (SA) (which will incorporate a Strategic Environmental Assessment) will consider the likely social, economic and environmental implications of the sites being assessed. The SA is an on-going process which will continue throughout the plan preparation period and will help with the selection of the most sustainable sites.
- 4.21 The purpose of the Habitat Regulations Assessment (HRA) is to assess the impacts of plans and proposals on the integrity of 'European Sites' which are of European or global significance for the habits or species or contained within them (e.g. Special Areas for Conservation, Ramsar sites). If the Assessment reveals any significant negative effects, mitigation measures and/or alternative options should be examined to avoid any potential damaging effects.
- 4.22 The Landscape Sensitivity and Capacity Study update will:
- Provide an assessment of the landscape and the potential for it to accommodate mineral workings and
 - Provide guidance on the extent to which each site might be able to accommodate mineral development without having a significant detrimental impact on the character of the area taking into account current practices of design and mitigation.

- 4.23 Where sites were included in the Landscape Sensitivity and Capacity Study carried out in 2011, the previous findings will be checked to make sure that they are up to date.
- 4.24 The Ecosystems Services Assessment looks in more detail at each site to see what a site could deliver in the longer-term. This includes the three main ecosystem services that sites can provide through effective operation and appropriate restoration:
- **'Regulating Services'** (e.g. climate regulation, air quality regulation, water quality regulation, soil erosion and flood regulation);
 - **'Provisioning service'** (e.g. water supplies, geodiversity, natural biodiversity, mineral resources); and
 - **'Cultural Services'** (e.g. quality of life (aesthetic value, sense of place, tranquillity), amenity (outdoor recreation, tourism opportunities) and life-long learning (education, training and research)).
- 4.25 The aim of the additional consideration of Ecosystem Services is to provide background evidence and allow early consideration of issues which inform appropriate restoration schemes for mineral sites in the Plan Area. The use of this method ensures that an appropriate long-term site restoration vision for each preferred site can be established at the earliest stage possible. Such an approach would also allow for a restoration vision for the life of the Plan and beyond.
- 4.26 A Transport Assessment will provide a more detailed assessment of each individual site and include a comprehensive review of the associated traffic impacts, access implications and routing strategies as well as giving consideration to initial comments received to date by key players/consultees such as the Highways Agency (HA).
- 4.27 The Strategic Flood Risk Assessment (SFRA) provides information about flood risk to inform decisions about site selection. In allocating land for development, local planning authorities should apply the Sequential Test to demonstrate that there are no reasonably available sites in areas with a lower probability of flooding that would be appropriate to the type of development or land use proposed. The SFRA provides the evidence to inform the Sequential Test. Some sites will have been considered in the SFRA document produced in 2010, an update of this work will be commissioned and any new sites included in the document.

- 4.28 The outcomes for the detailed assessment will be published and available for comment in the '**Minerals Sites Study (Version 2)**'. The informal stakeholder engagement will enable us to obtain any further relevant information about sites to inform which sites should be selected and taken forward as Preferred Sites.
- 4.29 This stage will also provide an indication of whether enough suitable deliverable sites are available to meet the apportionment. If suitable sites cannot be found in locations that accord with the strategies then this will impact on which strategic objectives are delivered.

Step 4: Selection of Preferred Sites – spring 2015

- 4.30 If a site is acceptable in principle and there are no overriding issues raised following the informal engagement exercise, it may, if needed, become a '*preferred site*' and be included in the Draft Joint Minerals Local Plan.
- 4.31 When selected, the Preferred Sites will then be taken forward to an informal consultation period (Regulation 18) in the Draft Joint Minerals Local Plan, before the Proposed Submission Joint Minerals Local Plan is produced. After the consultation period, comments received will be taken into consideration and, if necessary amendments will be made to the plan before formal public engagement of the plan proposed to be submitted for examination.

Appendix A: Glossary

Acronym/Term		Explanation
ALR	Advisory Lorry Route	Advisory lorry routes are strategic and local roads recommended for use by lorries and heavy goods vehicles in West Sussex. Most are dual carriageways or modern single carriageways. Their use is supported within the West Sussex Local Transport Plan. More information about the ALR and a map of the route is available online .
	Aggregates	Sand, gravel and crushed rock (known as primary aggregates), mineral waste such as colliery spoil, industry wastes and recycled materials (known as secondary aggregates), and such material as construction and demolition waste (recycled aggregates). Aggregates are used in the construction industry to produce concrete, mortar, asphalt, etc.
AONB	Area of Outstanding Natural Beauty	An area designated by the Countryside Agency under Section 87 and 88 of the National Parks and Access to the Countryside Act 1949. The primary objective is conservation of the natural beauty of the landscape. West Sussex has two Areas: Chichester Harbour and High Weald.
	Ancient Woodland	Areas that had continuous woodland cover since at least 1600 and have been cleared only for underwood or timber production.
	Biodiversity	Shorter term for 'biological diversity' which applies to all terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part.
	Conservation Areas	An area, as defined in the Planning (Listed Building and Conservation Areas) Act 1990, designated as being of special architectural or historical interest and therefore protected from any alterations which would destroy its character.
	Ecosystems Services	An ecosystems services approach provides a framework for looking at whole ecosystems in decision making, and for valuing the ecosystem services they provide, to ensure that society can maintain a healthy and resilient natural environment now and for future generations.

HRA	Habitats Regulation Assessment	Statutory requirement for Planning Authorities to assess the potential effects of land-use plans on designated European Sites in Great Britain. The Habitats Regulations Assessment is intended to assess the potential effects of a development plan on one or more European Sites (collectively termed 'Natura 2000' sites). The Natura 2000 sites comprise Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). SPAs area classified under the European Council Directive on the conservation of wild birds (79/409/EEC; Birds Directive) for the protection of wild birds and their habitats (including particularly rare and vulnerable species listed in Annex 1 of the Birds Directive, and migratory species).
	Landbank	The landbank is a stock of planning permissions for mineral extraction and it is used to secure and maintain an adequate supply of minerals. The length of the landbank is calculated by dividing the total reserve remaining on sites with planning permission by the annual requirement (based on the apportionment).
	Listed Building	A building officially listed as being of special architectural or historic interest as defined in the Planning (Listed Building and Conservation Areas) Act 1990.
MCA	Minerals Consultation Area	A mechanism that aims to ensure that in two-tier authority areas consultation takes place between county and district planning authorities when mineral interests could be compromised by non-mineral development.
MSA	Mineral Safeguarding Areas	Areas of known mineral resources that are of sufficient economic or conservation value to warrant protection for generations to come.
MPA	Mineral Planning Authority	A local authority with responsibility for processing mineral applications. West Sussex County Council and the South Downs National Park Authority are both Mineral Planning Authorities.
Mt		Million Tonnes
mtpa		Million Tonnes per Annum
	National Park	A National Park must be an extensive tract of

		countryside, that because of its natural beauty and the opportunities it affords for open air recreation, Natural England considers it especially desirable that legal measures are taken to safeguard it under the provisions of the National Parks and Access to the Countryside Act of 1949.
	Primary Aggregates	Virgin materials such as sand and gravel which are extracted from the ground.
	Protected Species	Individual wildlife species which have statutory protection under a range of legislation provisions (e.g. the Wildlife and Countryside Act 1982, the Conservation (Natural Habitats, &c) Regulations 1994, Protection of Badgers Act 1992).
	Recycled Aggregates	Aggregate which has been extracted from the ground (as primary aggregate), but which has subsequently been used and recovered for re-use. It comprises material derived from construction and demolition waste
Ramsar site		Sites designated under the European Ramsar Convention to protect wetlands that are of international importance, particularly wildfowl habitats.
RIGS	Regionally Important Geological and Geomorphological Sites	A non-statutory regionally important geological or geomorphological site, designated by locally developed criteria.
	Restoration	The process of returning a site to its former use, or restoring it to a condition that will support an agreed after-use, such as agriculture and forestry.
SAM	Scheduled Ancient Monuments	A nationally important archaeological site included in the Schedule of Ancient Monuments maintained by the Secretary of State under the Ancient Monuments and Archaeological Areas Act 1979.
	Secondary Aggregates	Secondary aggregates can be a lower grade virgin material such as chalk, or previously used aggregate or used materials which were not previously aggregates, for example shredded tyres.
SSSI	Sites of Special	A site statutorily notified under the Wildlife and

	Scientific Interest	Countryside Act 1981 as being of special nature conservation interest. SSSI include wildlife habitats, geological features and landforms.
SPA	Special Protection Areas	A site of importance for rare and vulnerable birds under the EU Directive on the Conservation of Wild Birds.
SAC	Special Areas of Conservation	A site of international importance designated under the EU Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora.
SFRA	Strategic Flood Risk Assessment	A study carried out by local planning authorities in consultation with the Environment Agency. The SFRA provides information on the areas that may flood and the impacts of climate change.
SA	Sustainability Appraisal	A single appraisal tool which provides for the systematic identification and evaluation of the economic, social and environmental impacts of a proposal.
	Sharp sand and gravel	Course sand and gravel suitable for use in making concrete.
	Silica Sand	Also known as industrial sand, contains a high proportion of silica in the form of quartz. It is produced from unconsolidated sands and crushed sandstones and is used for applications other than as construction aggregate.
	Soft Sand	Fine sand suitable for use in such products as mortar, asphalt and plaster.
NNR	National Nature Reserves	A site of national nature conservation importance managed by English Nature and established under the Wildlife and Countryside Act 1981.

Appendix B: References

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