Nottinghamshire County Council

Nottinghamshire Minerals Local Plan

Background Paper

Site Selection Update – Sand and Gravel

May 2014

Background paper – Site Selection Update – Sand and Gravel

This background paper provides an update to the October 2013 site assessment methodology paper in terms of future sand and gravel provision and sets out the methodology for assessing potential sites, the evidence gathered and the outcome of the assessment work identifying those sand and gravel sites that are being taken forward as potential allocations in the Minerals Local Plan additional consultation. The methodology and assessment has been developed in line with information from a wide range of sources.

A range of background papers have been prepared which set out in detail the particular issues faced by each mineral and some other key topic areas as follows:

Background papers – specific minerals

- Aggregates -estimating future requirements to 2030
- Aggregates - sand and gravel. Options for meeting shortfalls
- Aggregates -Sherwood Sandstone. Options for meeting shortfalls
- Aggregates - limestone (crushed rock). Options for future provision
- Alternative aggregates
- Brick clay
- Gypsum
- Building stone
- Industrial dolomite
- Silica sand
- Coal
- Hydrocarbons – oil and gas

Background papers - other issues

- Sand and gravel delivery schedule
- Minerals safeguarding
- Biodiversity
- Landscape character
- Archaeology
- Development management policies

All of these documents are available on the County Council website or by contacting the Planning Policy team.

Introduction

Minerals are an important natural resource and are essential to maintain our way of life from building homes, offices and roads to providing electricity and heat. The Minerals Local Plan identifies adequate reserves through allocations of specific land for a range of minerals that are deliverable, achievable and in the most sustainable and suitable locations to provide a steady and adequate supply of mineral over the plan period.

In geological terms the sand and gravel resource is extensive, located in the Trent and Idle river valleys. Within the Trent Valley, production has historically been concentrated around Nottingham and Newark.

Government guidance through the National Planning Policy Framework (NPPF) states that all sites included in a Local Plan should be realistic, deliverable and achievable.

National and International law requires the County Council to carry out a Sustainability Appraisal (SA) to adequately assess the likely social, economic and environmental effects of the Minerals Local Plan may have. The SA process therefore ensures that all plans and programmes which relate to spatial planning and land use are compatible with the aims of sustainable development.

This background paper sets out the information that has been collected and updated and the methodology adopted to identify and assess all potential sand and gravel sites for inclusion in the Minerals Local Plan. The key stages in the assessment process are listed below:

- Stage 1: Evidence gathering
- Stage 2: Deliverability of sites
- Stage 3: Sustainability appraisal
- Stage 4: Provision of minerals over plan period

This paper builds on information gathered and appraisals undertaken as part of the 2013 Preferred Approach consultation and utilises relevant updated information provided during the consultation period to ensure that the most up to date information is adequately assessed through the Local Plan process.

A summary of the conclusions of the assessments for each site are included in this document.

Stage 1: Evidence gathering

A wide range of information has been gathered (prior to, during and following the 2013 Preferred Approach consultation) as well as wider assessment work undertaken to ensure that a comprehensive assessment of the sand and gravel sites is achieved. The evidence includes:

Site specific information

The site specific information was gathered through a 'Call for Sites' exercise in 2008. The minerals industry and other known landowners were contacted and asked to submit detailed information on any sites that they were considering for future mineral working. This included extensions to existing sites and new sites.

In mid-2012 a re-consultation and further 'call for sites' took place to ensure that the information previously provided was still current and provided the opportunity for any new sites and extensions to be considered. Ongoing dialogue also took place with the minerals industry/landowners to ensure that the information held for existing proposals was still relevant. A wide range of information was requested and covered areas including the location of the site, the amount and quality of the mineral, the length of time that the site would be operational, the expected market of the mineral, details of ownership, possible impacts on agricultural land quality, environmental and cultural designations, residential amenity and water resources and proposed restoration and after-use. The site information request form, the list of sand and gravel sites put forward to date and a map showing the location of all the sand and gravel sites can be found in Appendix 1.

Further site specific information, including new sand and gravel sites, amendments to the boundaries of the potential allocations, detailed restoration proposals and updated delivery information was submitted as part of the Preferred Approach consultation and this information has been utilised to provide an up to date position in terms of Nottinghamshire's future sand and gravel provision throughout the plan period.

Future minerals provision

The County Council is required to produce a Local Aggregates Assessment which identifies future demand for aggregate minerals (sand and gravel, Sherwood Sandstone and Limestone) based on previous 10 year average sales and any relevant local issues. (The full document can be found on the Councils website or by contacting the Planning Policy team). For other minerals, government guidance sets out landbanks of permitted reserves that need to be maintained. These vary on a mineral by mineral basis and are set out in the relevant background papers for each mineral.

Strategic Flood Risk Assessment (SFRA)

A level 1 SFRA for Nottinghamshire was completed in 2010. The assessment ensures that all sources of flooding are identified and reviewed against potential site allocations to allow them to be sequentially tested by the Council to ensure that the highest risk development is located in areas of lowest risk of flooding.

The National Planning Practice Guidance identifies sand and gravel workings (excluding processing) as 'water compatible' and as such are usually appropriate within all flood zones.

The full SFRA can be found on the Councils website.

Habitats Regulation Assessment (HRA)

The HRA considers the potential impacts that minerals related development can have and also sets out assumed avoidance and mitigation measures. A preliminary screen report was published in July 2011 and further screening of the potential sites was undertaken subsequently. This document recommends specific policy wording to ensure that the potential impacts of future minerals workings on the European Habitat sites is considered as part of any planning application.

Strategic Transport Assessment (TA)

A Strategic Transport Assessment has been prepared with the Highways Authority to ascertain any potential issues that may exist in relation to each proposed extension and potential new site. The assessment concludes that each proposed allocation could be suitable subject to appropriate mitigation measures being undertaken and that there would be no unacceptable impacts on the existing highway network.

Feedback from key internal and external consultees?

Comments from key internal consultees such as highways, ecology and landscape and external consultees such as the Environment Agency, Highways Agency and Natural England were sought on each of the sites put forward for consideration.

Stage 2: Deliverability of sites

Government guidance through the National Planning Policy Framework (NPPF) states that sites included in a Local Plan should be realistic, deliverable and achievable. It is therefore important to ensure that those sites that are not considered to be deliverable are filtered out of the process at an early stage. The sites that were classed as not being deliverable were those submitted for consideration by landowners but didn't have an operator in

place to work the mineral and those put forward by the industry that would not be worked until after the end plan period (2030). This stage resulted in the removal of 5 sand and gravel sites from the initial list. Appendix 2 identifies those sites that were removed at this stage and provides the reasoning.

Stage 3: Sustainability Appraisal (SA)

National and International law requires the County Council to carry out a Sustainability Appraisal (SA) to adequately assess the likely social, economic and environmental effects of the Minerals Local Plan may have. The remaining sand and gravel sites, following the completion of Stage 2, have been appraised through the Sustainability Appraisal (SA) process which assesses the sites against a range of social, economic and environmental factors. The SA document relating to the additional consultation for sand and gravel provision can be found on the Councils website

The SA utilised evidence that was gathered from the industry, key internal and external consultees and other assessment work undertaken. Individual site summaries have been produced along with a numerical value that identifies the impact of the sites in the short term (whilst the site is in operation), long term (once the site is restored) and an overall score.

A summary of the outcomes from the SA is included in Appendix 3.

Stage 4: Provision over the plan period

The Minerals Local Plan needs to ensure that a steady and adequate supply of minerals can be provided over the plan period. Forecast demand for sand and gravel is based on the 10 year average figure set out in the Local Aggregates Assessment (LAA) which will be met through existing permitted reserves and new sites.

A background paper containing the delivery schedule for sand and gravel sites has been developed to take into account existing permitted reserves and when these would be exhausted. The delivery schedule can be found on the Councils website.

The schedule also identifies which of the potential sand and gravel sites could best provide suitable reserves over the plan period. The work considered both extensions to existing sites and new sites however extensions to existing sites were generally favoured in sustainability terms where there were no significant environmental issues.

Conclusions of submitted sand and gravel sites

PA01: Barnby Moor, Near Retford

The site is located approximately 1km north of Barnby Moor village and around 2.5km to the south of the village of Ranskill in Bassetlaw District. The site covers an area of 43.7ha and is expected to be operational in 2018 as a replacement to the permitted Newington Quarry. Mineral from the site would be processed off site at the operators existing site at Auckley and has an estimated life of 6 years with an output of 220,000 tonnes per annum.

The Sustainability Appraisal concludes that the site scores positively in terms of its contribution to the economic aspects of sustainability and very negatively with regard to impact and risk of flooding . The impact on biodiversity would be negative with the impact on the landscape and high quality agricultural land being very negative in the short- and long-term. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic but there is scope for mitigation. The site has been re-assessed flowing the revisions to the boundary but the impacts on the SA objectives of the amendments to this site were not considered significant enough to alter the SA scores. The overall score is -15.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA02: Bawtry Road extension, Near Misson

This site is a northern extension to the existing permitted. The extension will be commenced in approximately 2017 once existing permitted reserves have been worked. Output is planned at 40,000 tonnes per annum and will continue to use the existing plant site and access. Reserves are expected to last beyond the plan period.

The Sustainability Appraisal concludes that the site scores positively in terms of its contribution to the economic aspects of sustainability. However site scores negatively with regard to impact and risk of flooding . The impact on biodiversity , loss of high quality agricultural land and water quality would be and landscape would be affected very negatively as it is in moderate condition with high sensitivity, but there would be some scope for mitigation through an appropriate restoration scheme. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic but there is scope for mitigation. The overall score is -13.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA06: Botany Bay, Near Retford

The site is located 3km northwest of Retford and 1km south of Barnby Moor. The allocation is expected to be operational in 2019 and act as a replacement to the Mission – Finningley quarry (SGc), although it could come forward earlier if demand increases. The site has a planned output of 200,000 tonnes per annum and extraction of the site is expected to last for12 years until 2030.

The Sustainability Appraisal concludes that the site scores positively in terms of its contribution to the economic aspects of sustainability with the impact on biodiversity being, however in the long-term the proposals for would result in a slightly positive impact. The impact on the landscape is very negative in the short- and long-term and the loss of high quality agricultural land results in a very negative impact. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic but there is scope for mitigation. The overall score is -10.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA31: Scrooby A (north), Near Retford

This is a northern extension to a permitted sand and gravel site. The site is expected to commence extraction in 2018 and last 8 years until the end of 2025. Output is planned at 80,000 tonnes per annum and would utilise the existing processing plant.

The Sustainability Appraisal concludes that the site's impact on the economic aspects of sustainability is slightly positive. The impact on the landscape is very negative, both in the short and long-term and the loss of some high quality agricultural land results in a negative impact .The impact on water quality could be negative, as the site lies within Source Protection Zone 3, but there is scope for mitigation. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic but there is scope for mitigation. The overall score is -13.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA32: Scrooby B (south), Near Retford

This is a southern extension to a permitted sand and gravel site. The site will replace the Scrooby north (above) in 2026. Output is planned at 80,000 tonnes per annum and is expected to last 8 years (beyond the plan period).

The Sustainability Appraisal concludes that the impact on the economic aspects of sustainability is slightly positive however the impact on the landscape is very negative, both in the short and long-term. The loss of some high quality agricultural land results in a negative impact and the impact on water quality could also be negative. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic but there is scope for mitigation. The overall score is -13.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA35: Sturton Le Steeple, Near Retford

This is an extension to the existing permitted Sturton Le Steeple quarry to the east of Sturton Le Steeple village. The site has an expected life of 6 years and extraction would follow on from the permitted quarry commencing in approximately 2035. Output is planned to remain at 500,000 tonnes per annum in-line with the existing permitted quarry. It is likely that the existing plant site and access to the public highway would be maintained.

The Sustainability Appraisal concludes that the site scores positively in terms of its contribution to the economic aspects of sustainability but scores very negatively with regard to impact and risk of flooding. There would be a positive impact in terms of sustainable patterns of movement and use of sustainable modes of transport because some of the sand and gravel would be transported from the site by barge. The impact on the historic environment would be negative and the impact on the landscape is very negative, both in the short and long-term. The overall score is -8.

Extraction of this site is not proposed within the Local Plan period and is therefore not deliverable. As such the County Council are not proposing to allocate this site.

PA38: Finningley

This is an extension to a permitted site located to the south east of Finningley village. The quarry serves the South Yorkshire and North Nottinghamshire markets. Reserves on the permitted site are expected to be worked out by the end of 2015 and as such a planning application for the site which covers land within Nottinghamshire and Doncaster has recently been submitted but has yet to be determined. The extraction in Nottinghamshire would take place in 2014 and 2015 before moving over to Doncaster between 2016 and 2017,

returning to Nottinghamshire for a further year (2018). Output is expected to be around 500,000 tonnes per annum in 2014 and 2015, falling to 160,000 in 2018.

The Sustainability Appraisal concludes that the site's impact on the economic aspects of sustainability is slightly positive. Landscape would be affected very negatively, but there would be some scope for mitigation through an appropriate restoration scheme. The site scores very negatively with regard to impact and risk of flooding and the loss of some high quality agricultural land would result in a negative impact in the short-term but it would be restored back to high quality agricultural land. The impact on water quality could be very negative, as the site lies within Source Protection Zone 2, but there is scope for mitigation. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic but there is scope for mitigation and in the long-term it is proposed that restoration could include public recreation areas which would have a slightly positive impact. The overall score is -10.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA03: Besthorpe East, Near Newark

This site is an extension to a permitted quarry which has reserves until the end of 2017. The site has an expected life of 10 years and extraction would follow on from the permitted quarry commencing in 2018. Output is planned at 200,000 tonnes per annum and is expected to last until 2027.

The Sustainability Appraisal concludes that the site does not score *very* positively in terms of any of the sustainability objectives but the impact on the economic aspects of sustainability is positive. The only sustainability objective against which this site scores *very* negatively is on minimising the impact and risk of flooding. Biodiversity would be negatively affected however in the long-term the proposed restoration is likely to have a positive impact especially through linking to the current restoration for nature conservation at Besthorpe Quarry. There would be a positive impact in terms of sustainable patterns of movement and use of sustainable modes of transport because half of the sand and gravel would be transported from the site by barge, however there would be a negative impact with the loss of some high quality agricultural land for which mitigation is unlikely as the restoration proposals do not include farmland. The overall score is -5.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA04: Besthorpe South, Near Newark

This is a southern extension to a permitted sand and gravel site. The site will replace the Besthorpe East (above) in 2028 maintaining the output at 200,000 and would extend beyond the plan period.

The Sustainability Appraisal concludes that the site scores very positively in terms of its contribution to the economic aspects of sustainability but scores very negatively with regard to impact and risk of flooding. There is a negative impact on the historic environment and although there is a slightly negative impact on biodiversity during the operational period it is likely that the proposed restoration, linking in with areas currently being restored for nature conservation, would have a positive impact. The loss of some high quality agricultural land, which would not be restored, would have a negative effect both in the short- and long-term. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic but there is scope for mitigation. The sites overall score is -6.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA10: Coddington, Near Newark

This site is located to the north east of Coddington, 6km east of Newark. The site is expected to be operational by 2023 and provide a replacement to the proposed Barnby Moor quarry (PA01 above). The site has an estimated life of 20 years (beyond the plan period) and an output of 500,000 tonnes per annum. The quarry would serve the South Yorkshire and Nottinghamshire markets.

The Sustainability Appraisal concludes that the site scores very positively in terms of its contribution to the economic aspects of sustainability. But scores very negatively with regard to impact and risk of flooding as part of it is within Flood Zone 3. There is a negative impact on biodiversity, landscape and high quality agricultural land. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic but there is scope for mitigation. The overall score is -9.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA11: Cromwell

This is a southern extension to an existing permitted site, east of Cromwell Village alongside the A1. This extension would commence once the existing

site is worked out at the end of 2026. Output is planned at 200,000 tonnes per annum and has an expected life of 14 years.

The Sustainability Appraisal concludes that the site scores only slightly positively against some sustainability objectives (sustainable patterns of movement, efficient use of land and resources, and long-term for biodiversity). There is a negative impact on the historic environment and scores very negatively on minimising the impact and risk of flooding because it is located in Zone 3. There is also a very negative impact resulting from the loss of high quality agricultural land. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic but there is scope for mitigation. The overall score is -11.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA08: Burridge Farm, Near Newark

This is a new site that would act as a satellite extension to Langford Lowfields quarry. The site lies within a meander of the River Trent and is bounded by the river on its northern and eastern boundaries. The A1, which is situated on an embankment, forms the sites southern boundary. North Muskham lies to the north west, Winthorpe to the east, Newark to the south and South Muskham to the west. Due to limited access the mineral would be transported by barge up the river to the operators existing processing plant at Langford Lowfields quarry. Output from the site would be 250,000 tonnes per annum and would be worked over a 14 year period, once reserves at Langford Lowfields quarry are exhausted.

The Sustainability Appraisal concludes that the site scores positively in terms of its contribution to the economic aspects of sustainability but very negatively with regard to impact and risk of flooding as it is within Flood Zone 3. Although there is a negative impact on biodiversity during the operational period it is likely that the proposed restoration, which would maximise BAP priority habitats for the area, would have a positive impact. There is a negative impact on the historic environment and the loss of some high quality agricultural land, which would not be restored, would have a negative effect both in the short- and long-term. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic but there is scope for mitigation. The overall score for this site is -9.

Extraction of this site is not proposed within the Local Plan period and is therefore not deliverable. As such the County Council are not proposing to allocate this site.

PA17: Flash Farm, Near Newark

This site is located to the north west of Averham, 5km from Newark and is expected to be operational in 2016. The site has an estimated life of 13 years and an output of 250,000 tonnes per annum. Given its location the quarry would be able to serve a wide range of markets.

The Sustainability Appraisal concludes that the site scores positively in terms of its contribution to the economic aspects of sustainability but scores very negatively with regard to impact and risk of flooding as part of it is within Flood Zone 3, however the precise nature of the impact would have to be ascertained through a flood risk assessment. Landscape would be affected negatively as would the loss of high quality agricultural land. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic but there is scope for mitigation. Although the site boundaries have been revised to draw the site away from Aveham, it still remains the case that although the site boundary is now further away from Aveham, the setting of Aveham and Kelham conservation areas could still be affected. The overall score for this site is -9.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA19: Girton West, Near Newark

This is a small western extension to the existing permitted Girton Quarry located 8km north of Collingham and 16km from Newark. The allocation would work the last remaining reserves at the quarry for approximately 2 years at a rate of 150,000 tonnes per annum. The existing processing plant and access to the public highway would continue to be used.

The Sustainability Appraisal concludes that the site's impact on the economic aspects of sustainability is slightly positive. It scores very negatively with regards to impact and risk of flooding and the loss of high quality agricultural land. The overall score is -3.

Extraction of this site is not proposed within the Local Plan period and is therefore not deliverable. As such the County Council are not proposing to allocate this site.

PA21: Home Farm, Near Newark

This site is located approximately 1.5km north-west of Newark. The site is divided into a northern area and a southern area by the A617 Newark to Mansfield road, which bisects the site. The River Trent forms the western boundary to both parts of the site. The northern area is bounded by the Great North Road in the east, the southern boundary is bounded by the Nottingham to Lincoln railway line and the Old Trent Dyke in the south-east. The closest

settlements are Kelham and Averham to the west of the site. Output from the site would be 500,000 tonnes per annum and would be worked over a period of approximately 16 years. Original information stated this would not be worked within the plan period however more recent information states that the site could be operational by 2023.

The Sustainability Appraisal concludes that the site scores very positively in terms of its contribution to the economic aspects of sustainability however it scores very negatively when considering the impact and risk of flooding. There is a negative impact on the historic environment and the impact on some high quality agricultural land. The overall score is -6.

Given the number of sites in the control of this operator, which are permitted but are not currently extracting sand and gravel the County Council does not consider that the site is realistically deliverable within the plan period and as such the County Council are not proposing to allocate this site.

PA23: Langford North, Near Newark

This is a northern extension to an existing permitted site located between Langford and Collingham (north of Newark). This extension has an expected life of 6 years and is planned to be worked between 2025 and 2030 (once the other extensions (below) are worked out. Output is planned at 500,000 tonnes per annum.

The Sustainability Appraisal concludes that the site scores positively in terms of its contribution to the economic aspects of sustainability but scores very negatively with regard to impact and risk of flooding . Although there is a slightly negative impact on biodiversity during the operational period it is likely that the proposed restoration for nature conservation, linking in with the developing Langford Lowfields Reserve, would have a very positive impact. There is a negative impact on the historic environment and high quality agricultural land. The overall score is -4.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA24: Langford South, Near Newark

This is a southern extension to an existing permitted site located between Langford and Collingham (north of Newark). This extension has an expected life of 8 years and extraction will follow on from the existing permitted quarry until the end of 2022. Output is planned at 500,000 tonnes per annum.

The Sustainability Appraisal concludes that the site scores very positively in terms of its contribution to the economic aspects of sustainability but the site scores very negatively with regard to impact and risk of flooding. Although there is a slightly negative impact on biodiversity during the operational period

it is likely that the proposed restoration for nature conservation in association with the developing Langford Lowfields Reserve would have a very positive impact. There would also be a negative impact on the historic environment and some high quality agricultural land. The impacts on the SA objectives of the amendments to this site were not considered significant enough to alter the SA score which is -3.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA25: Langford West, Near Newark

This is a western extension to an existing permitted site located between Langford and Collingham (north of Newark). This extension has an expected life of 3 years and extraction will follow on from the southern extension (above) until 2025. Output is planned at 500,000 tonnes per annum.

The Sustainability Appraisal concludes that the site scores positively in terms of its contribution to the economic aspects of sustainability but scores very negatively with regard to impact and risk of flooding as it is within Flood Zone 3. Although there is a slightly negative impact on biodiversity during the operational period it is likely that the proposed restoration for nature conservation, linking in with the developing Langford Lowfields Reserve, would have a very positive impact. The impact on the landscape is very negative in the short and long-term and the loss of some high quality agricultural land, which would not be restored, would have a negative effect both in the short- and long-term. The overall score is -8.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA26: Little Carlton, Near Newark

This site is located to the west of Little Carlton and to the south of Bathley. The site is bounded to the north by Hopyard Lane and an unnamed track, to the east by Bathley Lane, scattered settlements and Little Cartlon, to the south by the A616 and agricultural land to the west. Output from the site would be 250,000 tonnes per annum and would be worked over a 15 year period. If the site was allocated it could be operational within 2-3 years of the plan being adopted.

The Sustainability Appraisal concludes that the site scores positively in terms of its contribution to the economic aspects of sustainability. There is a very negative impact on the historic environment, both in the short and long term. Landscape would be affected very negatively and the loss of high quality agricultural land results in a very negative impact. The overall score is -15.

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The site is considered to be deliverable within the plan period, however, due to the very negative score resulting from the Sustainability Appraisal the County Council are not proposing to allocate this site.

PA27: Manor Farm, Near Newark

This site is located to the north of Spalford and South Clifton to the west. The site is bounded to the north by Moor Lane, to the east by agricultural land and Wigsley Wood, Sand Lane and Spalford to the south and the A1133 and agricultural land to the west. The site contains approximately 7 million tonnes of sand and gravel although no details have been submitted regarding annual outputs or the expected life due to the lack of a minerals operator to work the site.

The Sustainability Appraisal concludes that the site scores very positively in terms of its contribution to the economic aspects of sustainability but scores very negatively with regards to impact and risk of flooding. The impact on biodiversity and the historic environment scores negatively. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic but there is scope for mitigation. The overall score is -4.

There is no operator in place to work the mineral on this site and it is therefore not deliverable. As such the County Council are not proposing to allocate this site.

PA07: Bulcote Farm, Near Nottingham

This site is located to the east of Burton Joyce and Bulcote village and Lowdham and Gunthorpe to the east. The site is bounded to the north by the Nottingham to Lincoln railway line, agricultural fields and previously worked areas to the east, the River Trent to the south and agricultural land and an area known as Bulcote Farm to the west. Output from the site would be 450,000 tonnes and would be worked over a period of 17 years. No start date has been given due to the lack of a minerals operator to work the site.

The Sustainability Appraisal concludes that the site scores very positively in terms of its contribution to the economic aspects of sustainability but site scores very negatively with regard to impact and risk of flooding as it is largely within Flood Zone 3. Given the very large size of this site and its close proximity to settlements it also scores very negatively in respect of human health and quality of life, although there is scope for mitigation. There is a negative impact on biodiversity, historic environment and landscape. The overall score is -8.

There is no operator in place to work the mineral on this site and it is therefore not deliverable. As such the County Council are not proposing to allocate this site.

PA16: Elms Farm (East Leake North)

This is a northern extension to an existing permitted site located 1km to the south of East Leake. This extension has an expected life of 4 years and extraction will follow on from the eastern extension (below). Output is planned at 180,000 tonnes per annum.

The Sustainability Appraisal concludes that the site does not score very positively in terms of any of the sustainability objectives but the impact on the economic aspects of sustainability is positive. However, it does score very negatively, both in the short-and long-term, with regards to landscape . The overall score is -6.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA16: Rempstone Estate (East Leake East)

This is an eastern extension to an existing permitted site located 1km to the south of East Leake. This extension has an expected life of 13 years and extraction will follow on from the permitted site with an output of 180,000 tonnes per annum.

The Sustainability Appraisal concludes that the site does not score very positively in terms of any of the sustainability objectives but the impact on the economic aspects of sustainability is positive. However, it does score very negatively, both in the short-and long-term, with regard to Landscape. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic but there is scope for mitigation. The overall score is -8.

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

PA40: Shelford East, Near Nottingham

This is a new site that is located approximately 9km east north east of Nottingham. It is bounded by the River Trent and Shelford Manor to the north, the A6097 to the east, Shelford Village to the west and agricultural land rising up to an escarpment to the south. Output from the site would be 300,000 tonnes per annum and would be worked over a period of approximately 12 years. The operator has stated that if allocated, the site could be operational within 1-2 years of the plan being adopted.

The Sustainability Appraisal concludes that the site scores positively in terms of its contribution to the economic aspects of sustainability but there are negative impacts in terms of biodiversity and historic environment. Revisions to the site boundary and further submitted information following the Preferred Approach consultation means that the overall SA score has improved slightly but still has a very negative impact overall (-17).

Through consultation with the Highways Authority, issues regarding the potential lorry movements to and from the site were raised and therefore the access arrangements are considered to be unsuitable. Even though the Sustainability Appraisal highlights a much improved score for this site the issues regarding poor access cannot be easily overcome and as such the County Council are not proposing to allocate this site.

PA41: Shelford West, Near Nottingham

This is a new site that is located approximately 9 km east north east of Nottingham. It is bounded by the River Trent to the north and the west, the village of Shelford to the east and agricultural land rising up to an escarpment to the south. Output from the site would be 300,000 tonnes per annum and would be worked over a period of approximately 20 years. The operator has stated that if allocated, the site could be operational within 1-2 years of the plan being adopted.

The Sustainability Appraisal concludes that the site scores positively in terms of its contribution to the economic aspects of sustainability but there are negative impacts in terms of biodiversity and historic environment. Revisions to the site boundary and further submitted information following the Preferred Approach consultation means that the overall SA score for this site has considerably improved (-9).

Through consultation with the Highways Authority, issues regarding the potential lorry movements to and from the site were raised and therefore the access arrangements are considered to be unsuitable. Even though the Sustainability Appraisal highlights a much improved score for this site the issues regarding poor access cannot be easily overcome and as such the County Council are not proposing to allocate this site.

PA46: Barton in Fabis, Near Nottingham

This site is located to the east of Barton in Fabis, 6km from Nottingham with direct access onto the A453. It is expected to be operational in 2017 with an estimated life of 13 years and an output of 200,000 tonnes per annum. Given its location the quarry would be able to serve the Nottingham market.

The Sustainability Appraisal concludes that the site scores positively in terms of its contribution to the economic aspects of sustainability but there are negative impacts in terms of biodiversity, historic environment, landscape, agricultural land and flood risk. As is the case for most mineral sites, surrounding settlements could be negatively affected by noise, dust and traffic

but there is scope for mitigation. Overall this site scores negatively during the operational period but the negative impacts become much reduced in the long-term (-12).

Taking into account the results of the Sustainability Appraisal, comments from key stakeholders and considerations with regards to the County Council's requirements and the sites deliverability it is proposed that this site is allocated within the Minerals Local Plan.

Appendix 1

Call for Sites

Site information request form

The information required must be capable of demonstrating that the potential allocation is deliverable and can be worked and reclaimed in an environmentally acceptable way. This should be based on a concept working and reclamation scheme (or schemes) that illustrate how the site would most likely be worked. The level of detail required is not that needed to support a detailed planning application or an Environmental Impact Assessment.

The information we require is as follows:

1. **Location** - An Ordnance Survey based plan to an appropriate scale showing:

    - The proposed boundary of the site
    - The extent of excavations
    - Proposed access to the site
    - Possible location/s of processing plant
    - Phasing

2. **Reserve data** - with supporting evidence (e.g. borehole data).

    - Quantity and quality of recoverable reserves
    - Levels of likely overburden
    - Maximum/minimum depth of economic deposits
    - Planned annual rate of extraction

3. **Life of operations**

    - Expected life of site
    - Proposed start date

4. **Role of site/markets**

    - Is this a new Greenfield site or an extension? If a green field site is it replacing an existing mineral working within or outside the County?
    - What is your planned market area i.e. main destinations/economic limits?
    - Is this an optimum location in terms of serving the markets? If so why?

5. **Availability of mineral**

    - Do you have the legal and surface or underground rights to work all of the mineral including access to a public highway or any other transport route?

6. **Agricultural land quality**

    - A map showing agricultural land quality. If the best and most versatile land is present how much if any is likely to be permanently lost?

7. **Environmental and cultural designations.** How do you propose to deal with any environmental constraints on the site such as:

    - Rights of way
    - Archaeology
    - Ecology

8. **Residential amenity.** How do you propose to deal with any impacts from the site on residential amenity?

9. **Water resources**

    - Will mineral extraction affect any aquifers or floodplains? If so, have you done any preliminary assessments of impacts and how these could be dealt with?

10. **Reclamation and after-use**

    - Proposed reclamation schemes - What opportunities for environmental benefits do you see arising from the scheme? This could include contributing towards local biodiversity action plan (LBAP) targets, providing public recreation areas or reclaiming derelict/degraded land.
    - If the reclamation of the site depends on importing fill please indicate type of waste, main sources and timescales.

    Other

    - Please provide information on any other significant planning and environmental issues that you consider apply to this site.

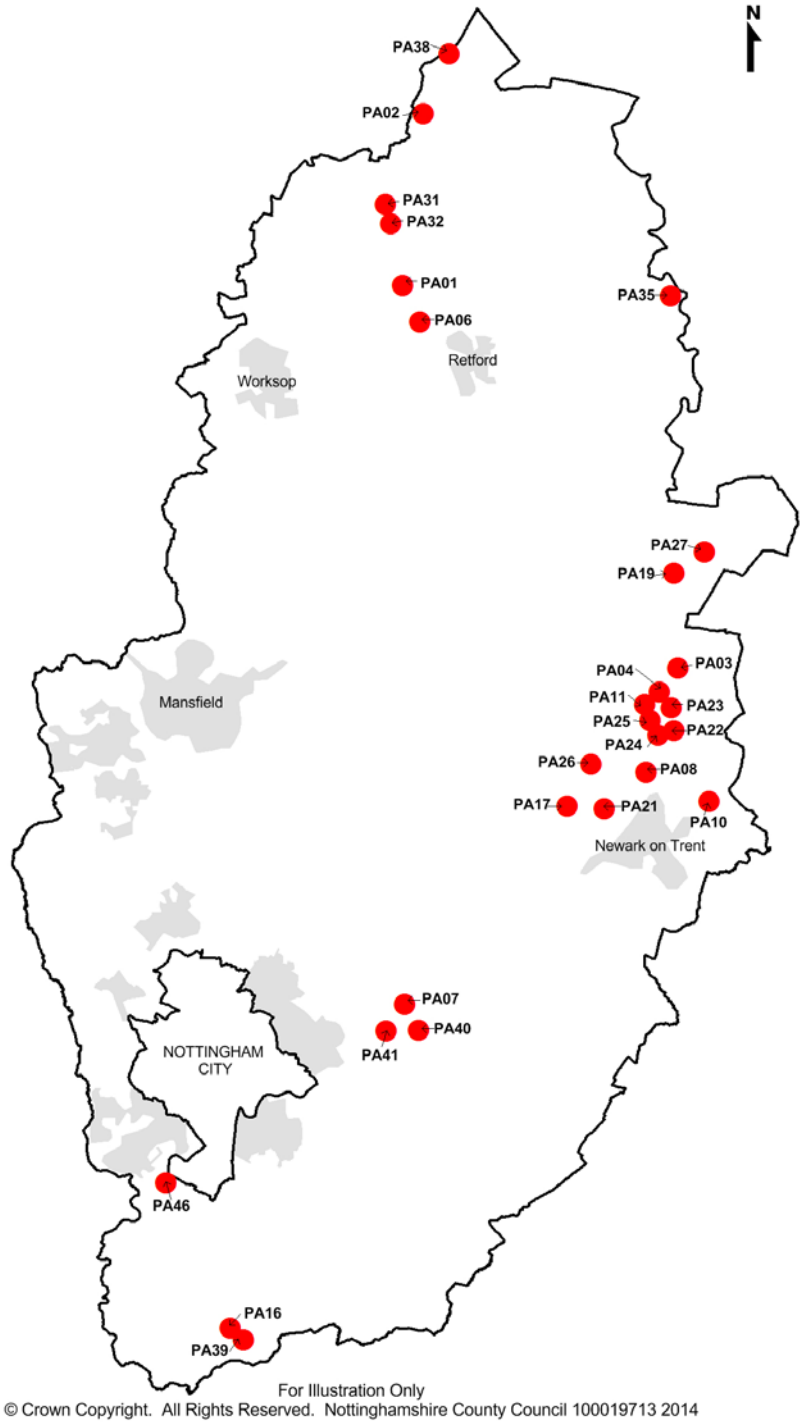
Please note all information provided will be publicly available.

Sites put forward under the call for sites process and during Preferred Approach consultation

Code	Operator	Site name	Mineral	Reason for withdrawal - 2012 call for sites
PA01	Hanson	Barnby Moor	S&G – Idle Valley	
PA02	Misson Sand and Gravel	Bawtry Road	S&G – Idle Valley	
PA06	Lafarge Tarmac	Botany Bay	S&G – Idle Valley	
PA31	Rotherham Sand and Gravel	Scrooby A	S&G – Idle Valley	
PA32	Rotherham Sand and Gravel	Scrooby B	S&G – Idle Valley	
PA35	Lafarge Tarmac	Sturton Le Steeple	S&G – Idle Valley	
PA38	Lafarge Tarmac	Finningley	S&G – Idle Valley	
PA03	Lafarge Tarmac	Besthorpe East	S&G – Newark	
PA04	Lafarge Tarmac	Besthorpe South	S&G – Newark	
PA10	Hanson	Coddington	S&G – Newark	
PA11	Cemex	Cromwell	S&G – Newark	
PA08	Lafarge Tarmac	Burridge Farm	S&G – Newark	
PA17	Mick George Ltd	Flash Farm	S&G – Newark	
~~PA18~~	~~Ennstone~~	~~Foxholes Farm~~	~~S&G – Newark~~	Withdrawn by proposer

PA19	Lafarge Tarmac	Girton West	S&G – Newark	
PA21	Lafarge Tarmac	Home Farm	S&G – Newark	
~~PA22~~	~~Lafarge Tarmac~~	~~Langford East~~	~~S&G – Newark~~	Withdrawn by proposer
PA23	Lafarge Tarmac	Langford North	S&G – Newark	
PA24	Lafarge Tarmac	Langford South	S&G – Newark	
PA25	Lafarge Tarmac	Langford West	S&G – Newark	
PA26	Aggregate Industries	Little Carlton	S&G – Newark	
PA27	Landowner	Manor Farm	S&G – Newark	
PA07	Seven Trent	Bulcote Farm	S&G - Nottingham	
~~PA13~~	~~Cemex~~	~~East Leake A~~	~~S&G - Nottingham~~	Withdrawn - Planning application submitted 2012
~~PA14~~	~~Cemex~~	~~East Leake B~~	~~S&G - Nottingham~~	PA14 and PA15 combined to form PA39 Rempstone Estate
~~PA15~~	~~Cemex~~	~~East Leake C - Rempstone~~	~~S&G - Nottingham~~	PA14 and PA15 combined to form PA39 Rempstone Estate
PA16	Landowner/Cemex	East Leake D – Elms Farm	S&G - Nottingham	
~~PA34~~	~~Brett Aggregates~~	~~Shelford~~	~~S&G - Nottingham~~	Site split into PA40 Shelford Eastern & PA41 Shelford Western
PA39	Cemex	Rempstone Estate	S&G - Nottingham	
PA40	Brett Aggregates	Shelford Eastern	S&G - Nottingham	
PA41	Brett Aggregates	Shelford Western	S&G - Nottingham	
PA46	London Rock	Barton-in-Fabis	S&G - Nottingham	

Map showing sand and gravel sites put forward through the call for sites and consultation period



Appendix 2

Undeliverable sand and gravel sites

Code	Operator	Site name	Mineral	Reason for removal
PA07	N/A	Bulcote Farm	S&G - Nottingham	No operator in place to work the mineral
PA08	Lafarge Tarmac	Burridge Farm	S&G – Newark	Extraction not proposed to commence within plan period
PA19	Lafarge Tarmac	Girton West	S&G – Newark	Extraction not proposed to commence within plan period
PA27	N/A	Manor Farm	S&G – Newark	No operator in place to work the mineral
PA35	Lafarge Tarmac	Sturton Le Steeple	S&G – Idle Valley	Extraction not proposed to commence within plan period

Appendix 3

Scoring outcome of the Sustainability Appraisal for sand and gravel sites

Site	Appraisal			Amendments as a result of preferred approach consultation
	Operational	Long-term	Total	
NORTH				
PA35: Sturton le Steeple	-5	-3	-8	
PA06: Botany Bay	-8	-2	-10	
PA38: Finningley extension	-12	+2	-10	
PA02: Bawtry Road north	-11	-2	-13	
PA31: Scrooby north	-9	-4	-13	
PA32: Scrooby south	-9	-4	-13	
PA01: Barnby Moor	-13	-2	-15	Site boundary amended by operator, now further from the village.
NEWARK				
PA19: Girton West	-4	+1	-3	
PA24: Langford South	-5	+2	-3	Allocation reduced in size to exclude the Scheduled Ancient Monument
PA23: Langford North	-7	+3	-4	
PA03: Besthorpe East	-5	0	-5	
PA04: Besthorpe South	-6	0	-6	
PA21: Home Farm	-7	+1	-6	1. Deliverability of the site questioned. 2. Effectively two sites linked
PA25: Langford West	-8	0	-8	Site originally discounted due to lack of need. Restoration supported by RSPB who are involved in the existing quarry
PA08: Burridge Farm	-9	0	-9	

PA10: Coddington	-6	-3	-9	
PA17: Flash Farm	-10	+1	-9	Site originally rejected due to lack of operator, operator is now in place
PA11: Cromwell south	-12	+1	-11	
PA26: Little Carlton	-10	-5	-15	
SOUTH				
PA16: East Leake north (Elms Farm)	-2	-4	-6	
PA39: East Leake east (Rempstone Estate)	-6	-2	-8	
PA41: Shelford West	-9	0	-9	Extraction area reduced. Improved SA score however road access to the site remains poor
PA46: Barton-In-Fabis	-10	-2	-12	Direct access to the A453
PA40: Shelford East	-14	-3	-17	Extraction area reduced. Improved SA score however road access to the site remains poor