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in partnership with



# Nottinghamshire County Minerals Local Plan 2018

# Preliminary Landscape and Visual Assessment of Potential Mineral Sites

### **QUALIFICATIONS & LIMITATIONS**

The report has been prepared by Via East Midlands in Partnership with Nottinghamshire County Council. It is a preliminary site assessment of mineral sites put forward by mineral operatives based on landscape and visual issues. Its purpose is to inform the Sustainability Appraisal of the Mineral Local Plan.

The base information on which the report has been based has been provided by others and has not been verified independently but is assumed to be correct. Furthermore, new and more detailed information, changed practices or new legislation may necessitate revised interpretation of the proposal after the date of its submission.

Via East Midlands Ltd prepared this report for the sole and exclusive use of Nottinghamshire County Council in response to the commission to undertake analysis of potential mineral sites.

Client	Minerals and Waste Team, Place Department, Nottinghamshire County Council
Job Title	Minerals Local Plan Review - Landscape character and visual impact assessment of sites
Job Number/ File Reference	HW00935
Date	May 2018

	Signed	Name	Date
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Note: This sign off includes the appendices at the end of the report and is authorisation of the drawings in Appendix 2.

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Appendix 3: Site assessment methodology

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#### **Executive Summary**

This report has been prepared by Via East Midlands in partnership with Nottinghamshire County Council. It is an assessment of mineral sites, put forward by mineral operatives, based on landscape and visual issues. Its purpose is to inform the Sustainability Appraisal prepared by the county's Minerals and Waste Team which forms part of the evidence base of the New Minerals Local Plan.

The assessment indicated that there are some sand and gravel sites that could be worked and restored without significant adverse impacts to landscape character or visual receptors, subject to appropriate mitigation. These include several smaller sites within the north of the county and a larger site to the south and east of Nottingham. There are also a cluster of sites around the north and north-western edge of Newark along the Trent Valley. Due to these being adjacent or near active sites and former mineral sites the cumulative impacts should be considered,

The most apparent change in landscape character post restoration is the loss of agricultural land to areas of open water and wetland. In many cases restoration on former worked sites has provided biodiversity opportunities enabling a contribution to Local Biodiversity Action Plan (LBAP) targets. Sites that support the actions of the relevant landscape character area policy zones and that offer the potential to create priority habitats, (lowland wet grassland, lowland neutral grassland reedbeds and wet woodland) have been favoured over those that remove landscape elements and that have limited habitat creation potential.

The impact of working sites close or adjacent to existing/former mineral sites may have a cumulative impact on the wider landscape. This is to be assessed following the drafting of the Sustainability Appraisal which will identify the more be allocated for future mineral provision.

#### 1.0 Introduction

The New Minerals Local Plan sets out the overall approach to minerals extraction in Nottinghamshire over the period 2016-2036. Key issues will include estimates of how much mineral needs to be provided to meet expected demand, which sites are suitable to meet this demand and where in broad terms new or extended mineral sites should be located.

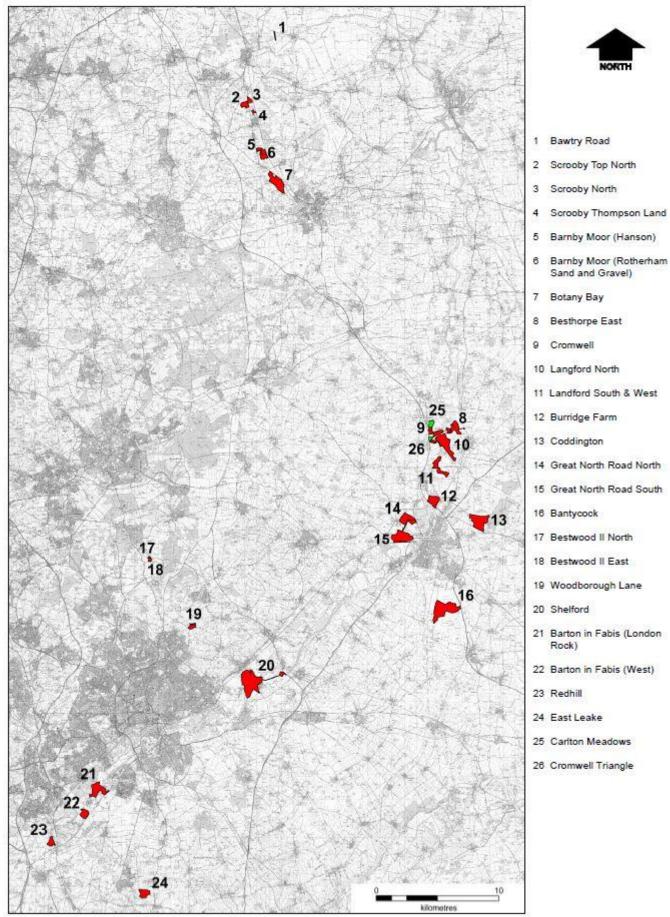
The New Minerals Local Plan will contain a range of planning policies against which minerals development will be assessed. Policies will be set out to minimise adverse environmental impacts and maximise environmental protection whilst providing guidance on information required to support Environmental Assessments and planning applications.

This report outlines the methodology and results of a preliminary landscape and visual impact appraisal of the sites put forward for consideration by the Minerals Planning authority in preparation of the New Minerals Local Plan.

#### 2.0 Proposed Sites

There are 26 sites assessed of which were 21 were sand and gravel sites, three sandstone, one gypsum and one clay. The location of the sites is shown on Figure 1 and are set out in Table 1 below:

Ref:MineralMineral Operator1Bawtry RoadOwner operator3Scrooby NorthRotherham Sand and Gravel4Scrooby Thompson LandRotherham Sand and Gravel5Barnby Moor (Hanson)Hanson6Barnby Moor (Rotherham Sand and Gravel)Hanson7Botany BayTarmac8Besthorpe EastTarmac9CromwellCemex10Langford NorthTarmac11Langford South and WestTarmac12Burridge FarmTarmac13CoddingtonHanson	
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12Burridge FarmTarmac13CoddingtonHanson	
13 Coddington Hanson	
14 Great North Road North Tarmac	
15 Great North Road South Tarmac	
20 Shelford Brett Aggregates	
21 Barton in Fabis (London Rock) London Rock	
22 Barton in Fabis (West) Cemex	
23 Redhill No operator	
24 East Leake Cemex	
25 Carlton Meadows	
26 Cromwell Triangle	
Sandstone	
2 Scrooby Top north Rotherham Sand and Gravel	
17 Bestwood II North Tarmac	
18 Bestwood II East Tarmac	
Gypsum	
16 Bantycock British Gypsum	
Clay	
19 Woodborough Lane Ibstock	





#### 3.0 Methodology

This assessment was carried out by chartered Landscape Architects (Landscape Institute). It is based on both a desk top study and an on-site assessment of the proposed mineral extraction area.

For each site a 2.5km buffer of the site boundary was defined around the study area and this was included in the analysis of the site where there were visibility and wider setting issues.

The national character area profiles (Natural England) and the local landscape character documents were used to give the baseline landscape character of the study area. As most of the sites are sand and gravel sites located in the Trent Washlands character area this character area was reviewed to ensure that the findings still reflected current land uses.

#### Stage 1 Site assessment - Desk study

The desk study included:

- 1. a review of local heritage, ecological, landscape and rights of way designations within the study area
- 2. the mapping of policy zones within the study area using Map Info Pro 2016 using the landscape character information contained within the following landscape assessment documents:
- Bassetlaw Landscape Character Assessment 2009
- Greater Nottingham Landscape Character Assessment 2009
- Newark and Sherwood Landscape Character Assessment 2009
- 3. The mapping (Map Info Pro 2016) of a **zone of theoretical visibility** (ZTV map) for both the existing site, and a proposed scenario that included 4m high mounds located on the highest point of the site. Lidar surface data was used with an assumed eye level of 1.6 metres above ground level was to show the worst-case scenario. Later field study allowed screening elements such as existing vegetation and buildings, walls and fences to be included when assessing the visual sensitivity of the site.
- 4. Overview of factors effecting the recognition of landscape and visual value such as any cultural or recreational associations.

#### Stage 2 Site assessment - Field work

Field work included:

1. A site visit to photograph and record key views of the site and to assess the existing landscape and potential change brought about by mineral extraction.

Following this the site assessment sheet was completed using a scoring system to allow comparison between sites particularly the sand and gravel sites. These are located across the county primarily focussed within the **Trent and Belvoir Vales**, national character area profile 48 (Natural England 2013) and the Trent Washlands character area (Bassetlaw Landscape Character Assessment 2009, Greater Nottingham Landscape Character Assessment 2009, Newark and Sherwood Landscape Character Assessment 2013).

A scoring system was used to understand the clusters of sites around Newark, Nottingham and north of the county.

Details of the scoring methodology are set out within Appendix 3.

The site assessment sheet was competed using the methodology contained within the Guidelines for Landscape and Visual Impact Assessment 3<sup>rd</sup> Edition (Landscape Institute and Institute of Environmental Management and Assessment 2013, GLVIA3). This landscape and visual assessment is compatible with other assessments carried out for Gedling and Rushcliffe Borough councils, also to inform site allocation process. Due to the large scale of many of the sites and the different stages (operational period and post restoration) with associated lengthy timescales the impacts on the wider study area were also considered. The amount of change brought about by mineral extraction and the compatibility with the actions of various policy zones both during working phases and during the restoration phase were used as a broad guide in the assessment of the sites.

A detailed methodology is provided in Appendix 3.

#### **Limitations**

The baseline assessment was carried out in May 2018 and reflects the on-site conditions present at that time. The assessment is a broad overview and detailed site analysis of specific development proposals would be required for a landscape and visual impact assessment. Cumulative impacts on landscape character and visual receptors has not been considered either with other developments within the area or other proposed mineral extraction sites put forward as part of this review.

### 4.0 Results

The sites and 2.5km wide study areas were assessed and the individual site summary sheets are contained within Appendix 1. The landscape character and visual impact summaries for each site are within Appendix 2. The scores for each site during operation and post restoration are set out in the tables below.

Table 2: Summar	v scores for sand	and gravel sites
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Ref	Site name	Extension /new	Landscape Sensitivity (Op)	Visual Sensitivity (Op)	Combined score (Op)	Landscape Sensitivity (PR)	Visual Sensitivity (PR)	Combined score (PR)
1	Bawtry Road	Extension	28	19	47	26	16	42
3	Scrooby North	New	30	21	51	28	19	47
4	Scrooby, Thompson Land	New	28	38	66	22	26	48
5	Barnby Moor	New	30	28	58	28	22	50
6	Barnby Moor	New	30	38	68	28	22	50
7	Botany Bay	New	38	44	82	32	28	60
8	Besthorpe east	Extension	27	31	58	31	31	62
9	Cromwell	New	34	38	72	29	34	63
10	Langford North	Extension	37	34	71	37	34	71
11	Langford south &west	Extension	37	25	62	37	25	62
12	Burridge Farm	New	31	36	67	23	25	48
13	Coddington	New	37	34	71	33	27	60
14	Great North Road north	New	34	43	77	30	34	64
15	Great North Road south	New	39	46	85	35	37	72
20	Shelford	New	43	46	89	43	46	89
22	Barton in Fabis (west)	New	31	46	77	31	30	61
22	Barton in Fabis	New	46	50	96	46	50	96

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23	Redhill	New	25	31	56	30	31	61
24	East Leake	Extension	31	22	53	29	22	51
25	Carlton Meadows	New	45	47	92	41	38	79
26	Cromwell Triangle		27	21	48	23	21	44

#### Table 3: Summary scores for sandstone / clay / gypsum sites

Ref	Site name	Extension /new	Landscape Sensitivity (Op)	Visual Sensitivity (Op)	Combined score (Op)	Landscape Sensitivity (PR)	Visual Sensitivity (PR)	Combined score (PR)	
	Sandstone								
2	Scrooby Top North	Extension	31	31	62	29	19	48	
17	Bestwood II North	Extension	44	28	72	44	28	72	
18	Bestwood II East	Extension	44	34	78	44	34	78	
				Clay					
19	Woodborough Lane	Extension	35	34	69	29	34	63	
Gypsum									
16	Bantycock	New	37	36	73	31	25	56	

#### 5.0 Discussion

The assessment indicated that, in the medium term, there are sand and gravel sites that could be worked and restored without significant adverse impacts to landscape character or visual receptors, subject to appropriate mitigation, throughout the county. The smaller sites lie within the north of the county with larger new sites to the south and east of Nottingham. There are a cluster of sites around the north and north-western edge of Newark along the Trent Valley. Due to these being adjacent or near active sites and former mineral sites the cumulative impacts should be considered.

The most apparent change in landscape character post restoration is the loss of agricultural land to areas of open water and wetland. In many cases restoration has provided biodiversity opportunities enabling a contribution to Local Biodiversity Action Plan (LBAP) targets. Sites that support the actions of the relevant landscape character area policy zone and that offer the potential to create priority habitats, (lowland wet grassland, lowland neutral grassland reedbeds and wet woodland) should be favoured over those that remove landscape elements and that have limited restoration potential.

Constraints to development include areas of heritage statutory and non-statutory designations and their setting. This may include landscapes which contain as yet undiscovered areas of

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archaeological resource. As sites are worked areas of traditional alluvial flood meadow may become locally rarer and therefore their local significance may increase. These sites may support lowland wet grassland and unimproved neutral grassland both of which are already less prevalent in the county and under threat from agricultural improvements (Nottinghamshire Minerals Local Plan Background Paper Biodiversity 2016).

Over the long term continued working of sites within the Trent Valley will impact on the character of the landscape particularly the river meadowlands landscape type. A strategic approach to managing change and development within the Trent Valley should be considered to ensure a co-ordinated response to deliver environmental social and economic benefits to the wider area.

#### 6.0 References

Bassetlaw Landscape Character Assessment 2009

Bassetlaw District Local Development Framework Core Strategy and development management policies - 2011

Greater Nottingham Landscape Character Assessment 2009

Broxtowe Borough, Gedling Borough Council, Nottingham City - Adopted Aligned Core Strategy September 2014

Newark and Sherwood Landscape Character Assessment 2013

Newark and Sherwood Local Development Framework Core Strategy Development Plan Document Newark and Sherwood District Council Adopted March 2011

Newark and Sherwood Allocations & Development Management Development Plan Document Adopted July 2013

Guidelines for Landscape and Visual Impact Assessment 2013 3<sup>rd</sup> Edition (Landscape Institute and Institute of Environmental Management and Assessment 2013, GLVIA3.)

Nottinghamshire Minerals Local Plan Background Paper Biodiversity, Nottinghamshire County Council January 2016

National Landscape Character Assessment Natural England September 2013