RUTLAND
LOCAL PLAN

Minerals and Waste Site Selection Methodology and Assessment

Rutland Local Plan Review

Assessments prepared in 2017 and reviewed in 2020

Rutland
County Council

Contents

1. Introduction

1.1 Rutland County Council is preparing a Review of its Local Plan. This will update the Minerals Core Strategy and Development Control Policies (2010), Core Strategy (2011) and Site Allocations and Policies DPD (2014). The Local Plan Review will extend the plan period to 2036 and allocate sites for new housing, employment and/or other development that may be required to meet requirements over the plan period.

1.2 This assessment has been carried out in order to inform the selection of options in relation to mineral and waste sites in the Council's Local Plan Review. Northamptonshire County Council (NCC) act as an agent on waste and minerals issues for Rutland County Council (RCC) and have provided their expertise in completing the site assessment process.

1.3 The initial site assessment work was completed in 2017 by NCC and has been reviewed in 2020 to check if any updates are required. No updates to the site assessments or conclusions have been considered necessary.

1.4 The purpose of the assessment is to compare the sites on the basis of the evidence available, to highlight any issues or particular concerns and to allow conclusions to be drawn as to the most suitable sites to be allocated.

1.5 This document sets out the national and local policy requirements in chapter 2. Following this, the methodology for the waste and minerals site assessment process is set out in chapter 3, leading on to the full site assessment process which is located in chapter 4.

1.6 The proposed waste and minerals allocations are set out in the conclusion in chapter 5.

2. Requirement for Waste and Mineral Sites

2.1 National policy states that Local Plans should identify suitable areas for future development including minerals and waste.

2.2 The National Planning Practice Guidance (NPPG) confirms that:

'Mineral planning authorities should plan for the steady and adequate supply of minerals in one or more of the following ways (in order of priority):

1. Designating Specific Sites – where viable resources are known to exist, landowners are supportive of minerals development and the proposal is likely to be acceptable in planning terms. Such sites may also include essential operations associated with mineral extraction;
2. Designating Preferred Areas, which are areas of known resources where planning permission might reasonably be anticipated. Such areas may also include essential operations associated with mineral extraction; and/or
3. Designating Areas of Search – areas where knowledge of mineral resources may be less certain but within which planning permission may be granted, particularly if there is a potential shortfall in supply. '[1]

2.3 The National Planning Policy for Waste states that:

'Waste planning authorities should identify, in their Local Plans, sites and/or areas for new or enhanced waste management facilities in appropriate locations. In preparing their plans, waste planning authorities should:

- Identify the broad type or types of waste management facility that would be appropriately located on the allocated site or in the allocated area in line with the waste hierarchy, taking care to avoid stifling innovation (Appendix A);
- Plan for the disposal of waste and the recovery of mixed municipal waste in line with the proximity principle, recognising that new facilities will need to serve catchment areas large enough to secure the economic viability of the plant;
- Consider opportunities for on-site management of waste where it arises;
- Consider a broad range of locations including industrial sites, looking for opportunities to co-locate waste management facilities together and with complementary activities. Where a low carbon energy recovery facility is considered as an appropriate type of development, waste planning authorities should consider the suitable siting of such facilities to enable the utilisation of the heat produced as an energy source in close proximity to suitable potential heat customers;
- Give priority to the re-use of previously developed land, sites identified for employment uses, and redundant agricultural and forestry buildings and their curtilages.'[2]

[1] NPPG - Paragraph: 008 Reference ID: 27-008-20140306 – Revision date: 06 03 2014
[2] National Planning Policy for Waste: www.gov.uk/government/uploads/system/uploads/attachment_data/file/364759/141015_National_Planning_Policy_for_Waste.pdf

2.4 ‘Waste planning authorities should assess the suitability of sites and/or areas for new or enhanced waste management facilities against each of the following criteria:

- The extent to which the site or area will support the other policies set out in this document;
- Physical and environmental constraints on development, including existing and proposed neighbouring land uses, and having regard to the factors in Appendix B to the appropriate level of detail needed to prepare the Local Plan;
- The capacity of existing and potential transport infrastructure to support the sustainable movement of waste, and products arising from resource recovery, seeking when practicable and beneficial to use modes other than road transport; and
- The cumulative impact of existing and proposed waste disposal facilities on the well-being of the local community, including any significant adverse impacts on environmental quality, social cohesion and inclusion or economic potential.’[3]

Local Waste Needs Assessment – September 2018

2.5 The Local Waste Needs Assessment was prepared in September 2018 to support the preparation of the Local Plan. This report concluded that the capacity gap is relatively small for the various waste management streams to be managed over the period to 2036.

2.6 Over the plan period there is a small capacity gap for built facilities for preparing for re-use & recycling and biological treatment for waste arising predominantly from the municipal and commercial & industrial waste streams, estimated at two small-scale facilities. A capacity gap is also identified for advanced treatment of such wastes, however municipal waste contracts reduce the available waste arisings considerably to the point where economic viability of such a facility in the county is unlikely.

2.7 There is also a capacity gap for inert recycling, soil treatment and recovery (deposit to land) for waste arising from the construction, demolition and excavation waste stream, estimated at one small-scale facility. In practice (the former) such facilities are often associated with other mineral or waste management development and are only occasionally located within a building, and the plan sets a preference for inert recovery to facilitate restoration of mineral extraction sites. It is anticipated that this deficit can comfortably be accommodated over the plan period through the creation of new voidspace arising from mineral extraction.

2.8 There is a potential need for non-hazardous disposal and hazardous waste management, however the county is not considered appropriate to accommodate such uses and hazardous waste tends to be managed at a regional or national scale.

[3] National Planning Policy for Waste: www.gov.uk/government/uploads/system/uploads/attachment_data/file/364759/141015_National_Planning_Policy_for_Waste.pdf

2.9 The National Planning Policy Framework (NPPF) states that Mineral Planning Authorities (MPAs) should plan for a steady and adequate supply of minerals of economic importance by identifying in their Local Plans, sites and/or areas for minerals extraction in appropriate locations.

2.10 A landbank provision of at least 10 years for crushed rock and 15 years for cement primary (limestone) and secondary (clay) materials to maintain an existing plant are required. The Government also encourages MPAs to take account of the contribution that secondary and recycled materials can make to the supply of materials in preference to the extraction of primary materials.

2.11 In order to make provision for a steady and adequate supply of aggregates MPAs, in line with government guidance, are required to produce an annual Local Aggregates Assessment (LAA). The LAA requires MPAs to calculate their own aggregate provision rates on the basis of average sales over a 10-year rolling period and other relevant information. In relation to limestone aggregate, it was calculated that a total of 3.42 million tonnes (Mt), equivalent to 0.19 million tonnes per annum (Mtpa) is required to be produced in Rutland over the plan period. This provision rate was calculated on the basis of average aggregate sales over a 10-year rolling period (2004 – 2013) and consideration of local circumstances.

2.12 It was considered unnecessary to factor in any additional growth to the provision rate as the level of construction is not likely to be any greater in the future than experienced previously (including during periods of economic growth).

2.13 It should be noted that there are no sand and gravel quarries in Rutland and no evidence that this material has been worked in the past, as such no provision, spatial strategy or sites and/or areas for sand and gravel need to be identified in the emerging Local Plan Review.

3. Minerals and Waste Site Assessment Methodology

3.1 Sites for waste and minerals have been subject to a separate assessment process to the housing and employment land assessments carried out through the Strategic Housing and Employment Land Availability Assessment (SHELAA) 2019 & Site Allocations Assessment 2019) due to the different nature of the development and the locational policies that apply to these areas.

Site Identification

3.2 A 'Call for Sites' was carried out between September and November 2015. This sought the suggestion of sites for inclusion in the SHELAA. A pro-forma was made available to ensure sufficient information was submitted to enable a consistent assessment of sites to be made. There have been further opportunities to submit sites during consultations as part of the Local Plan review. This included consultations on the Issues and Options (November 2015), Draft Local Plan (July 2017) and Additional Sites and Focused Changes Consultation (August 2018).

Stage 1 – Assessment against minimum site size threshold

3.3 Whilst there is a minimum site size threshold set out in policy regarding housing and employment land sites for assessment, there is no such limitation for other types of development, including for waste and mineral sites. Therefore all sites proposed for waste or mineral development move forward from Stage 1 of the assessment process.

Stage 2 – Compliance with key locational policies

3.4 The initial phase of the assessment process includes assessing the site in terms of the suitability of its location. If the site is considered to meet locational policies, it progresses to the second stage of the assessment process. The Core Strategy Policies are the starting point for assessing the location of a site and its suitability on this basis. With regard to sites put forward for waste management purposes, Policy CS25 (waste management and disposal) is the relevant initial consideration.

3.5 Sites put forward for minerals extraction and minerals related development will be assessed to determine whether they meet the key policies in the Minerals Core Strategy (MCS) which set out the location of future mineral working. The MCS policies against which sites for minerals extraction and minerals related development will be initially assessed are MCS3 (General Locational Criteria), MCS4 (Ketton Quarry Area of Search), MCS5 (Extensions to Aggregates Sites) and MCS6 (Building and Roofing Stone).

3.6 A breakdown of the key policy considerations are set out in Appendix 1.

Stage 3 – Detailed assessment against environmental, social and economic factors

3.7 All sites that are considered to comply with locational policies move forward to a more detailed assessment in Stage 3 of the assessment process. Each site will be assessed against a range of environmental, social and economic factors and given a colour coded rating according to its suitability against each of these factors. The following factors are assessed for each site:

- Topography
- Agricultural land
- Biodiversity and Geodiversity
- Heritage Assets
- Landscape and townscape
- Loss of recreational or public open space land
- Potential for new green infrastructure
- Water conservation and management/ flood risk
- Contamination
- Environmental quality and human health
- Restoration and after use
- Waste management
- Liveability
- Amenity of existing residents
- Amenity of existing residents and adjacent land uses
- Available, viable and deliverable
- Infrastructure available
- Accessibility and transport
- Impact on the wider road network
- Rights of way
- Potential for decentralised and renewable energy generation
- Need for the development
- Other constraints

3.8 A breakdown of the site assessment factors along with how they relate to the Sustainability Appraisal objectives is provided in Appendix 2.

3.9 A site assessment table will be prepared for each site identifying the following:

a) The factors assessed (identified above);
b) A summary of the site's impact or suitability against each of the factors assessed;
c) A colour coded rating (red/orange/yellow/green) for each of the factors identified according to its impact or suitability of the site.

3.10 The purpose of the colour coding or 'traffic light system' identified in c) above is to allow a visual comparison between the sites in terms of the factors assessed and to highlight any significant constraints.

3.11 An impact risk rating will be carried out for any waste management or minerals related sites in order to identify the potential scale and level of any impact and to allow comparison between the sites.

3.12 The colour coding and impact risk rating criteria are set out in Appendix 3.

Stage 4 – Conclusions and recommended sites

3.13 On the basis of the site assessments outlined above, a comparison matrix will be drawn up showing all the sites in terms of the colour coding identified. This will allow comparison between all of the sites on a visual basis.

3.14 Conclusions will be set out, based on professional judgement, as to the most suitable sites to be allocated having regards to the factors identified in the site assessments, the need for the particular type of development proposed and any other relevant factors.

3.15 The conclusions will set out:

a) The sites recommended as being suitable for inclusion as allocations in the Local Plan Review and the main reasons for the selection of each site;
b) Sites that are not recommended as being suitable for allocating in the Local Plan Review, setting out the main reasons for the exclusion of each site.

Sustainability appraisal process

3.16 The Sustainability Appraisal (SA) process involves assessing the potential sites in terms of their likely impact on the sustainability objectives that have been identified (Appendix 4). This process will help in comparing the potential sites in terms of their potential impact on these objectives.

3.17 The SA will be informed by the site assessment process outlined above, which examines the suitability of each site in terms of a range of environmental, social and economic issues. The links between the plan-making, SA and the site assessment process are illustrated in Appendix 5.

3.18 The findings of the SA together with the site assessment process will help in determining the most appropriate sites for inclusion in the Local Plan Review.

4. Assessment of sites for waste disposal or management

4.1 The following section provides a summary of the findings of the detailed assessments in Appendix 6 showing the main reasons for the selection or exclusion of sites to be allocated for waste or minerals development identified in the Local Plan Review.

4.2 A comparison matrix of the colour coded ratings is provided in Appendix 7.

Sites for waste disposal or management – selected sites

4.3 Sites are identified below to support the delivery of waste related development to meet the requirements of the Local Plan Review for the period to 2036. Further details of the requirements are given in the Local Plan Review Submission Draft Plan.

Table 1 - Sites for waste disposal or management – selected sites

Site Ref	Location	Use	Main reasons for selection
W1 (SHELAA/COT/07)	Cottesmore	Preliminary treatment facility	The majority of the site is an allocation in the adopted plan. It supports the delivery of the indicative waste management capacity for preliminary treatment/AD and conforms with the spatial strategy for waste management. The site is well located, with few constraints on the site or sensitive receptors nearby. In principle any impacts upon biodiversity, the local landscape, amenity and heritage assets could be adequately mitigated.
W2 (SHELAA/GRE/06)	Greetham	Preliminary treatment facility	The site is an allocation in the adopted plan. It supports the delivery of the indicative waste management capacity for preliminary treatment and conforms with the spatial strategy for waste management. The site is well located, with few constraints on the site or sensitive receptors nearby. In principle any impacts upon biodiversity, amenity, the local landscape and heritage assets could be adequately mitigated.
W3 (SHELAA/KET/13)	Ketton	Inert disposal	The site is an allocation in the adopted plan. The allocation would facilitate restoration of the existing quarry and is in line with the spatial strategy for waste related development. The previously worked nature of the site, the established site accesses and planning conditions relating to restoration, ecological management, noise, dust and vibration, demonstrates that it is likely that any impacts of the proposed allocation could be adequately managed and mitigated.

4.4 No further sites for other uses have been identified for waste related development beyond those identified in Table 1 above as there is no need to allocate further sites for other purposes to meet the requirements of the Local Plan Review.

Sites for waste disposal or management – excluded sites

4.5 No sites that were submitted for consideration were excluded from the selection process.

Sites for minerals development - selected sites

4.6 Sites below are identified to help provide for the County's limestone aggregate and building stone requirements of the Local Plan Review for the period to 2036. Further details of the requirements are given in the Local Plan Review Submission Draft Plan.

4.7 No further sites for other uses have been identified for minerals related development beyond those identified in Table 2 below as there is no need to allocate further sites for other purposes to meet the requirements of the Local Plan Review.

Table 2 - Sites for minerals development – selected sites

Site Ref	Location	Use	Main reasons for selection
M4a (SHELAA/GRE/07)	Greetham Quarry	Extraction of crushed rock (limestone)	The allocation is an extension to an existing quarry and is located within the Areas for Future Mineral Extraction. It would contribute towards meetings a deliverable supply of limestone aggregate and building stone over the plan period. The site is well located with few constraints on the site and a limited number of sensitive receptors nearby. It is considered that in principle any impacts upon the locality, including biodiversity, amenity, the local landscape and heritage assets could be adequately mitigated and managed.
M5a (SHELAA/STR/03)	Hooby Lane Quarry	Extraction of building stone	The allocation is opposite an existing quarry operated by the promoter within the Areas for Future Mineral Extraction. It would contribute towards meetings a deliverable supply of building stone over the plan period. The site is well located with few constraints on the site and with few sensitive receptors nearby. It is considered that in principle any impacts upon the locality including biodiversity, amenity, the local landscape and heritage assets could be adequately mitigated and managed.

Sites for minerals development – excluded sites

4.8 No sites that were submitted for consideration were excluded from the selection process.

5. Conclusions

5.1 The site appraisal process has assessed all the sites that have been identified or put forward to the Council in relation to waste and mineral development use type.

5.2 Sites have been assessed in terms of a range of environmental, social and economic factors in order to allow comparison between them in terms of their capacity to accommodate the future development that will be required. Economic factors include evidence of the owner wanting to release site for development.

5.3 The findings of the Site Appraisal process have influenced the Council's decisions on the sites to be allocated.

5.4 Sites for waste management submitted for assessment were limited to the three sites allocated in the current adopted plan; no other sites were identified. These three sites, identified in table 3 below were assessed as being appropriate and are subsequently proposed as site-specific allocations.

Table 3 - Site Specific Waste Allocations	
Site Reference	**Site Address**
SHELAA/COT/07	Land at Railway Sidings, Burley Road, Cottesmore
SHELAA/GRE/06	Wood Lane, Greetham
SHELAA/KET/13	Ketco Avenue, Ketton

5.5 Sites for minerals development submitted for assessment were limited to two sites. No other sites have been identified. These two sites, identified in table 4 below were assessed as being appropriate and are subsequently proposed as site-specific allocations.

Table 4 - Site Specific Minerals Allocations	
Site Reference	**Site Address**
SHELAA/GRE/07	Greetham Quarry, Stretton Road, Greetham
SHELAA/STR/03	Hooby Lane, Stretton

Appendix 1 – Breakdown of key policy considerations from Methodology - Stage 2

Category	Criteria	Related SA objective
Stage 2: Initial assessment against key policy considerations		
Key policy considerations	*For waste and minerals related sites only:* Compliance with key locational policies in the Minerals Core Strategy & Development Control Policies (MCS) DPD 1. MCS Policy 3 (General Locational Criteria) 2. MCS Policy 4 (Ketton Quarry Area of Search) 3. MCS Policy 5 (Extensions to Aggregates Sites) 4. MCS Policy 6 (Building and Roofing Stone)	

Appendix 2 – Breakdown of site assessment factors from Methodology - Stage 3

Category	Criteria	Related SA objective
Stage 3: Detailed assessment against environmental, social and economic factors		
Environmental		
Topography	Whether land flat, sloping etc.	
Agricultural land	• Greenfield or brown field site • Agricultural land quality Impact on agricultural activities	To protect the natural resources of the region – including water, air and soil.
Biodiversity and Geodiversity	• Impact on biodiversity and geodiversity, in particular on locally, nationally and internationally designated sites • Impact on trees and hedgerows	To increase biodiversity and geodiversity.
Heritage Assets	Impact on designated and locally important heritage assets and their setting including: • Scheduled Ancient Monuments • Registered Parks and Gardens • Conservation areas • Listed buildings • Archaeological sites •	Provide opportunities for people to value and enjoy Rutland's heritage and participate in cultural and recreational activities, whilst preserving and enhancing the environment. Conserve or enhance the historic environment, heritage assets and their settings.
Landscape and townscape	• Impact on landscape and townscape character • Impact in relation to scale and character of existing community • Impact on historic landscape character	Conserve or enhance the historic environment, heritage assets and their settings. Protect and enhance the character, diversity and local distinctiveness of the natural environment and rural landscape of Rutland.
Loss of recreational or public open space land	Impact on recreational opportunities and open spaces	Provide opportunities for people to value and enjoy Rutland's heritage and participate in cultural and recreational activities, whilst preserving and enhancing the environment.
Potential for new green infrastructure	Potential for site to provide new green infrastructure including: • The wider green infrastructure network Links between existing green infrastructure	To provide opportunities for people to value and enjoy Rutland's heritage and participate in cultural and recreational activities, whilst preserving and enhancing the environment. Increase biodiversity and geodiversity. Protect and enhance the character, diversity and local

		distinctiveness of the natural environment and rural landscape of Rutland.
Water conservation and management/ flood risk	Susceptibility to, and impact on, flood risk. Impact on water resources (including groundwater). Sites will be subject to the sequential test and where necessary the exception test.	Protect the natural resources of the region – including water, air and soil. Reduce the risk and impact of flooding.
Contamination	Whether site contaminated.	Protect the natural resources of the region – including water, air and soil.
Environmental quality and human health	Impacts in terms of: • Air quality (including dust) and pollution • Noise and vibration • Odours • Bio aerosols • Vermin and birds • Litter • Bird strike hazard • Potential for residual environmental nuisance • Potential for cumulative impacts	Improve access to health and social care provision and maintain good health standards. Protect the natural resources of the region – including water, air and soil.
Restoration and after use	Potential for beneficial restoration and after use	Protect the natural resources of the region – including water, air and soil. Progressively restore mineral development land, seeking to maximise beneficial opportunities.
Waste management	• Enable communities to take more responsibility for their own waste • Contribution towards sustainable waste management and a reduction in reliance on land filling • Co-location of facilities together and with complementary activities	Minimise waste, increase recycling and promote sustainable waste management.
Minerals related development	• Mineral type, quality and yield • Provision of a sufficient supply of minerals to support growth	Facilitate the delivery of a steady and adequate supply of minerals to support sustainable growth and safeguard mineral resources and related development from sterilisation and incompatible forms of development.

		Progressively restore mineral development land, seeking to maximise beneficial opportunities.
Social		
Liveability	Factors that might affect "liveability": e.g. proximity to: • noisy industry • busy roads, electricity pylons	Help achieve housing stock that meets the housing needs of Rutland. Improve access to health and social care provision and maintain good health standards
Amenity of existing residents and adjacent land uses	Impact on neighbouring communities and adjacent land uses	
Economic		
Available, viable and deliverable	• Whether ownership is known • Whether owner wishes to develop the site • Whether any existing operational land use will cease • Whether is an attractive site likely to come forward	
Infrastructure available	Availability of • Electricity • Gas • Water • Drainage • Sewerage Broadband	Promote the infrastructure necessary to support economic growth and attract a range of business types.
Accessibility and transport	• Safe and effective access to and from the site • Opportunities for walking and cycling • Opportunities to incorporate sustainable transport options • Conflicts with non-industrial traffic on access routes used by heavy commercial vehicles	Reduce the adverse effects of traffic and improve transport infrastructure. Improve access to health and social care provision and maintain good health standards
Impact on wider road network	• Capacity of transport infrastructure to accommodate type and level of traffic resulting from the proposal • Potential impact on existing road network	Reduce the adverse effects of traffic and improve transport infrastructure.
Rights of way	Impact on public footpaths and bridleways	Provide opportunities for people to value and enjoy Rutland's heritage and participate in cultural and recreational activities, whilst preserving and enhancing the environment.
Potential for decentralised and	• Potential to reduce greenhouse gas emissions	Minimise energy usage and promote the use of renewable

renewable energy generation	• Opportunities for renewable energy generation	energy sources. Reduce emissions of greenhouse gases that cause climate change and adapt to its effects.
Need for the development	Need for • employment opportunities • affordable housing • waste management facilities • rural diversification • retail development • minerals	Create high quality employment opportunities for all. Encourage sustainable business formation and development in urban and rural areas. Help achieve housing stock that meets the housing needs of Rutland.
Other constraints		

Appendix 3 – Colour coding and Impact Risk Rating Criteria

Scale of impact

Scale	Definition
Negligible	So small or unimportant that it may safely be neglected or disregarded.
Minor	Beneficial impact resulting in slight increase in quality or character enhancement.
	Slight adverse impact highly likely to be ameliorated by mitigation measures with remaining residual impacts being negligible (or within acceptable limits). Identified constraints are acceptable.
Moderate	Beneficial impact resulting in an increase in quality or character enhancement.
	Adverse impact resulting in harm. It is possible that implementation of avoidance and/or mitigation measures will reduce impacts to an acceptable level. Identified constraints are significant.
Major	Beneficial impact resulting in extensive and significant increase in quality or character enhancement.
	Adverse impact resulting in significant harm. The implementation of avoidance and/or mitigation measures is unlikely to reduce impacts to an acceptable level. Identified constraints are unlikely to be overcome.

Impact risk rating

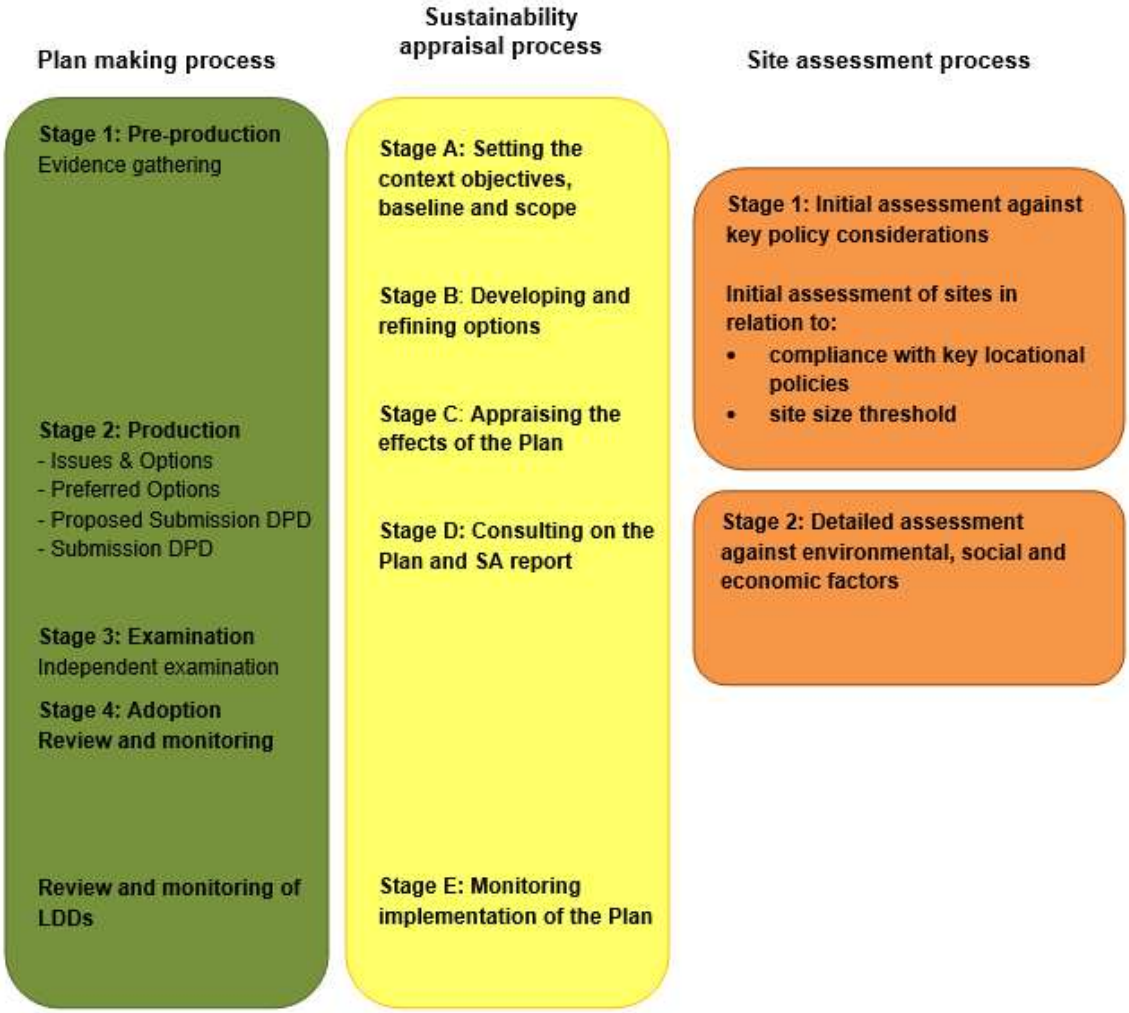
	Scale of impact				
Level of impact	**Negligible**	**Minor**	**Moderate**	**Major**	
National	Negligible	Moderate	High	Very high	Adverse
County or sub-regional	Negligible	Low	Moderate	High	
Local	Negligible	Low	Low	Moderate	
Local	Negligible	Low	Low	Moderate	Beneficial
County or sub-regional	Negligible	Low	Moderate	High	
National	Negligible	Moderate	High	Very high	

Note: Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments, should be considered at the 'national' level for the purpose of the impact risk rating (NPPF para 139).

Appendix 4 – Sustainability Appraisal Objectives

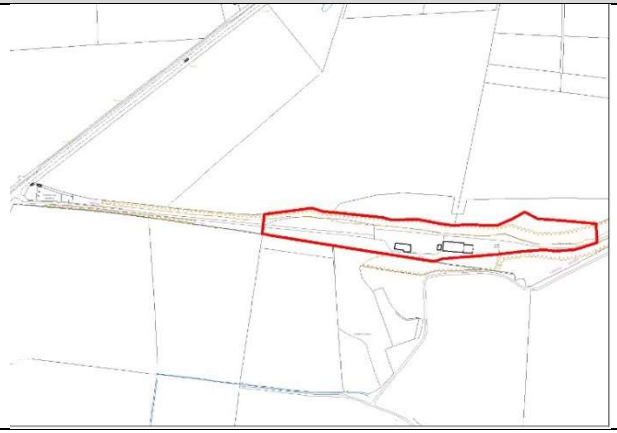
Rutland Local Plan Review Sustainability Appraisal Objectives
Economic
Create high quality employment opportunities for all.
Encourage sustainable business formation and development in urban and rural areas.
Promote the infrastructure necessary to support economic growth and attract a range of business types.
Facilitate the delivery of a steady and adequate supply of minerals to support sustainable growth and safeguard mineral resources and related development from sterilisation and incompatible forms of development.
Social
Help achieve a housing stock that meets the needs of Rutland.
Improve access to health and social care provision and maintain good health standards.
Provide opportunities for people to value and enjoy Rutland's heritage and participate in cultural and recreational activities, whilst preserving and enhancing the environment.
Environmental
Conserve or enhance the historic environment, heritage assets and their settings.
Increase biodiversity and geodiversity.
Protect and enhance the character, diversity and local distinctiveness of the natural environment and rural landscape of Rutland.
Protect the natural resources of the region - including water, air and soil.
Minimise waste, increase recycling and promote sustainable waste management.
Minimise energy usage and promote the use of renewable energy sources.
Reduce the adverse effects of traffic and improve transport infrastructure.
Reduce the risk and impact of flooding
Reduce emissions of greenhouse gases that cause climate change and adapt to its effects.
Progressively restore mineral development land, seeking to maximise beneficial opportunities.

Appendix 5 – Links between the plan making and SA process and the assessment method



Appendix 6 – Detailed Site Assessments

Sites for waste disposal or management
SHELAA/COT/07 – Land at Railway Sidings, Burley Road, Cottesmore
SHELAA/GRE/06 – Wood Lane, Greetham
SHELAA/KET/13 – Ketco Avenue, Ketton

Site details		
Site reference	SHELAA/COT/07	
Previous site reference:	• LPR/COT/07 • SALL/COT/09 • Site Appraisals October 2012, April 2013 • SHLAA 2008, 2011	
Address/Location	Land at Railway Sidings, Burley Rd	
Village/Town/Parish	Cottesmore	
Area (ha)	3.97	
Current use	Agricultural	
Proposed use	Waste management (Anaerobic Digestion facility)	
Proposed residential sites only:	NA	
Notes	Response 46 The majority of the site is an allocation under the adopted plan: Site W1 – Cottesmore Burley Lane. Allocated for small-scale preliminary treatment facility/Anaerobic Digestion (AD) facility. The strip of land running along the northern boundary and northeast corner are not within the site allocated under the adopted plan. Appraisal of site designated as allocation previously undertaken in line with preparation of the Site Allocations and Policies DPD October 2014. Site W1 (Cottesmore) received planning permission for a waste transfer and bulking facility in November 2012.	

	Assessment findings	Colour coding
Stage 2: Initial assessment against key policy considerations		
Key policy considerations	Compliance with key locational policies in the adopted and emerging plans. Rutland Core Strategy DPD: CS25 (Waste management and disposal) (Draft Plan RLP55). Supports the delivery of the indicative waste management capacity requirements regarding preliminary treatment/AD and is in line with the spatial strategy for waste management, being located to the south of Local Service Centre (LSC) of Cottesmore. Part of the site is an existing allocation (W1) (Draft Plan RLP56).	Meets key locational policies.

	Assessment findings	Colour coding
Stage 3: Detailed assessment against environmental, social and economic factors		
Environmental		
• Topography	Land gently slopes eastwards. Topography unlikely to be an issue for operations. The site is slightly depressed and sits lower than the surrounding land.	Green = No topographical constraints
• Agricultural land	The site is within a wider area identified as Grade 3 agricultural land however the site accommodates an existing industrial area which is buffered / screened by woodland from surrounding agricultural land. The majority of the site has previously been developed but does include some plantation areas. The site will not remove land from agricultural production and is not likely to have a significant impact on such activities.	Green = Best Most Versatile Agricultural land not affected.
• Biodiversity and Geodiversity	<u>Biodiversity</u> The woodland plantation forming within / surrounding the site forms part of a local biodiversity corridor along the disused railway line. The corridor includes scrub habitats, as well as fragments of grassland and wet grassland of local biodiversity value. To the immediate south is Watkin's Gorse broadleaved woodland of Parish level interest. Cottesmore/Westland Ancient replanted and Semi-Natural Woodland approximately 730m to the east. The adjacent habitats are likely to support European Protected bat species. The nearest SSSI Burley and Rushpit Woods is 2.3km south of the site. The nearest Local Wildlife Site Exton Lane Hedgerow and Oakham Road Hedgerow are approximately 1.9km south of the site. The internationally designated RAMSAR and	Orange = Moderate impact

	Assessment findings	Colour coding
	SPA, Rutland Water is located approximately 3.3km south of the site. Development or further operations within the footprint of the existing operations and brownfield site is unlikely to have an impact on ecology that cannot be mitigated. The scrub woodland, grassland and wetland on the site boundaries should be retained. An up-to-date habitat survey of the site and surrounding railway habitats would be required to accompany the planning application. Geodiversity The geology is predominantly Jurassic Limestone with parts overlain by a drift of glacial till and clays. Greetham Quarry, located 3km north-east, is designated as a RIGS site for 12 metre sections of Upper and Lower Lincolnshire Limestone.	
• Heritage Assets	Scheduled Ancient Monuments – Alstoe Moot and Alsthorpe deserted medieval village (SM ref: 17009 HER refs: MLE5094 & 5096). Registered Parks and Gardens - None Conservation areas - Cottesmore Listed buildings - Alstoe House (ref: 187298, Grade II); Chapel Farm (187299, II); Stables & barns at Chapel Farm (187300, II); The Thatch (186622, II); The Limes (186623, II); 17 Main Street (186624, II); Sun Inn Public House (18625, II); 5 The Leas (186626, II). Archaeological sites – Within former ironstone quarry; buildings originating as the engine shed and repair shop (MLE16256 Watkin's Gorse) for the associated mineral railway (MLE16254 Cottesmore Mineral Railways) located on site. Probable Anglo-Saxon cremation urns or grave goods apparently recovered during ironstone quarrying indicate a high potential for further remains in the vicinity (MLE6230 North-east of Chapel Farm). Roman remains recorded within the vicinity suggest the presence of an as yet unlocated Roman occupation site (MLE5101 Burley Quarry & MLE8093 West of Rattling Jack Spinney), while to the west finds and buried archaeological remains indicate the former site of a Roman pottery kiln (MLE5091 North-east of Chapel Farm). Further site specific investigations would be required to accompany the planning application; such as desk-based assessment, further pre-determination archaeological investigation may be required to inform a planning decision and to develop any appropriate post-determination mitigation strategy.	Orange = Moderate impact

	Assessment findings	Colour coding
• Landscape and townscape	<u>Landscape and townscape</u> The site sits within a (narrow) corridor of deciduous woodland plantation. Limited potential for impact on landscape / townscape. The site falls within the Leicestershire & Nottinghamshire Wolds. Site is located in the 'Cottesmore Plateau' which forms the most northern section of the 'Rutland Plateau' area. The higher parts are generally characteristic of a relatively high, open plateau; however this has been cut by significant river valleys of the River Gwash and the North Brook. The limestone geology strongly influences the landscape character, through its distinctive landforms (the plateau, scarp and dip slopes, shallow but quite narrow and steep-sided stream valleys). Land-use is predominantly arable farming. The site falls within the Vale of Catmose Landscape Character type. Burley on the Hill historic park is located 1.5km south and Exton Park registered gardens is 750m east. Alstoe Motte, Bailey and Medieval Village is 610m to the southwest. An area of Attractive Countryside is 770m to the east of the site. The site is located in a cutting is screened by woodland and sits at a lower level than the surrounding area, taken in combination these features would significantly screen potential for views from the surrounding area. Dependent on the proposed scale of the development, impacts on landscape could be mitigated although further assessment would be required to accompany the planning application.	Green = Low impact
• Loss of recreational or public open space land	No opportunities for recreational or public open space were identified. A sports field is located 500m north in Cottesmore.	Green = No impact on recreational or public open space
• Potential for new green infrastructure	Site falls within the North East GI Zone (Cottesmore Plateau GI Wedge). This GI wedge requires several priority areas to be addressed including extending access to woodland by improving access by linking and extending local corridors / footpaths for recreational use. There is the opportunity to link and extend local woodland corridors surrounding the site.	Green = Potential to enhance existing green corridors or access to green infrastructure
• Water conservation and management/flood risk	<u>Water conservation</u> Site overlays a primary aquifer. An ordinary watercourse is located approximately 300m to the south, with two others 120-250m to the north-east of the site (respectively). Overall water quality in the area is designated as moderate by the EA.	Green = No flood risk or minimal downstream flood risk

	Assessment findings	Colour coding
	The site is located within an existing industrial area, of which a large area benefits from having hard surfaces, thus reducing potential risk to water resources. Consideration of surface water drainage and continued maintenance of existing surfaces and drainage systems will mitigate contamination risk. Further assessment would be required to accompany a planning application. <u>Groundwater flooding</u> Site located on superficial deposits at risk of groundwater flooding of less than 25%. <u>Fluvial flood risk</u> The site is not located within, or adjacent to, flood zone 2 or 3. Waste treatment is classified as less vulnerable and so is considered appropriate. Refer to the National Planning Policy Framework and Associated Technical Guidance - Sequential Test table. <u>Surface water flooding</u> In the centre of the site there is a small depression which is highly susceptible to surface water flooding. A site specific FRA would be required to accompany the planning application to address issues of surface water flooding, including adequate flood mitigation measures i.e. SUDS. <u>Historic flooding hotspots</u> According to the flooding hotspot data received from RCC on the 30/06/16 this site is not subject to any historic flooding records.	
• Contamination	It is understood that the site used to operate as a goods yard associated with the former railway line, and in more recent times part of the site has been used for light industrial purposes and part is permitted for waste use. A large area of site already has a hard surface, thus reducing any contamination risk. However, depending upon the nature of the construction work required for a facility some ground investigation could be required. Enclosed operations, maintenance of surfaces and drainage systems (including sealed surfaces, bunding and treatment of surface waters if required) will mitigate contamination risk from any proposed new development.	Green = Contamination possible.
• Environmental quality and human health	<u>Air quality and pollution</u> There are no AQMAs in close proximity to the site. An increase in HGV movements resulting from the development would increase vehicle related emissions. The extent of any emissions would be dependant upon the number of movements but given the site location and road network would be unlikely to result in any significant adverse	Green = Limited potential for adverse impacts. Impacts are likely to be ameliorated by mitigation measures. Identified

	Assessment findings	Colour coding
	impact. Dependent on the facility type there is potential for air emissions including dust and bio-aerosols. The site is over 400m from sensitive receptors reducing the potential for site-based impacts. Mitigation measures such as enclosed/covered operations, negative air pressure, filtration, dust management (e.g. dampening) and good 'house-keeping' (site management), significantly reduces potential for adverse impacts. In addition pollution control regulations would ensure effective prevention and control measures are implemented to maintain operations within air emission standards. <u>Noise and vibration</u> An existing HWRC is located to the west at the site entrance (Burley Road) in addition the site currently accommodates industrial and waste uses (waste transfer and bulking facility). The site is located away from sensitive receptors and is well screened by existing trees. Further screening and conditioning of hours of operation should prove effective to reduce noise impact from proposed operations to adequate levels. Additional HGV movements which could be a source of vibration are likely to be limited in number and, subject to appropriate routeing of HGVs along suitable roads, would only have a limited impact. <u>Odours</u> The development of a preliminary treatment facility would present potential for odours, however mitigation measures such as enclosed/ covered operations, negative air pressure, filtration, restrictions upon the storage of materials, quick turn over of materials, and good house-keeping would significantly reduce potential for adverse impacts. <u>Bio aerosols</u> The development of a preliminary treatment facility would present potential for bio-aerosols (generally within 250m of operations). Mitigation measures such as enclosed / covered operations, negative air pressure, filtration, quick turn-around of materials and good house- keeping would significantly reduce potential for adverse impacts. Processing of inert materials would be highly unlikely to generate such impacts. <u>Vermin and birds</u> Vermin and birds could potentially be attracted to the site dependent on the waste type; however enclosed storage and processing operations, use of	constraints are acceptable.

	Assessment findings	Colour coding
	rodenticides/pesticides, quick turn-over of materials, and good house-keeping would significantly reduce potential for adverse impacts. Litter Within this site litter should be able to be effectively controlled and unlikely to result in any adverse impact through the enclosure of storage and processing operations, compaction/baling of materials, enclosed loading areas, screening of site boundaries (e.g. netting/meshing), quick turnover of materials, and good house keeping. Bird strike hazard The site is located within the 13km bird strike zone of an airfield. The risk of bird strike associated with preliminary treatment facilities is low due the nature of operations, particularly where operations and storage are enclosed/covered. Potential for residual environmental nuisance A site specific assessment of the potential impacts and effectiveness / appropriateness of mitigation measures would be required to accompany the planning application. Mitigation measures (as previously noted) should effectively avoid or reduce any potential impacts to an acceptable level. Potential for cumulative impacts Subject to the application of suitable avoidance and mitigation measures (as previously noted) there is highly unlikely to be any cumulative impacts resulting from the development. The nature of the operations proposed and the proximity to sensitive receptors will effectively avoid and reduce the potential for any significant cumulative impacts.	
• Restoration and after use	Proposed facility would be permanent hence there are limited opportunities/requirements for restoration.	Orange = Proposed facility is of a type that has limited restoration requirements
• Waste management	The plan identifies a requirement for (small scale) preliminary treatment facilities – opportunities associated with this site include preliminary treatment/AD. The site is located to the south of Cottesmore, a LSC. The currently allocated site area (W1 Cottesmore) received planning permission for a waste transfer and bulking facility in November 2012. Continued allocation supports co-location of facilities and increased diversion of waste from landfill and would support the sustainable waste	Orange = Moderate level of support / contribution

	Assessment findings	Colour coding
	management and the waste hierarchy. An existing HWRC is located to the west at the site entrance (Burley Road). The site has a total area of 3.97ha, the proposed use is likely to be for a small scale preliminary treatment facility (e.g. AD/MRF), typically requiring 1ha or less.	

	Assessment findings	Colour coding
Social		
• Liveability	Located away from village and residential properties therefore environmental nuisance is likely to be minimal. HGV movements are able to be controlled through routing agreements determined through the planning application process.	Green = No adverse factors identified
• Amenity of existing residents and adjacent land uses	Site is located within an existing industrial area and is surrounded by plantation and agricultural land; low potential for adverse impacts on adjacent land uses. The closest sensitive receptors are residential dwellings and a sports field located 400m to 500m north (Cottesmore village), other isolated residential dwellings are located within the local area - over 400m away.	Green = No or little impact on amenity of existing residents and adjacent land uses
Economic		
• Available, viable and deliverable	The site has been put forward on behalf of the owners and would be available immediately. The site is currently permitted for a waste use/industrial area, and has a total site area of 3.97ha. Given Rutland's waste management requirements the proposed use is likely to be for a small scale preliminary treatment facility (AD/MRF), which would typically require 1ha or less hence the site would be able to accommodate both the existing and proposed use. At present no site operator has been identified.	Orange = Partially available, viable and deliverable
• Infrastructure available	Site has links to the mains water, electric, phone / internet but does not have access to the sewerage system or gas supply.	Green = Limited infrastructure constraints
• Accessibility and transport	Existing access is from the B668 (Burley / Cottesmore Road) to the east. Passenger and HGV movements currently associated with existing land use (HWRC and industrial); sufficient safety measures would be required to reduce potential conflict. Proposed waste use would increase vehicle (HGV) movements, which are able to be controlled through routing agreements determined through the planning application process. Any such agreement should seek to divert traffic away from local roads and villages where possible. Further site specific investigations would be required to accompany the planning application.	Green = Good accessibility and transport with opportunities for walking and cycling and to incorporate sustainable transport options
• Impact on the wider road network	Site benefits from existing access to B668, connecting to A1 and A606. Proposed waste use would increase vehicle (HGV) movements on road network. Given Rutland's waste management requirements the site is likely to accommodate small scale preliminary treatment facility, with potential to generate an average of 10-12	Orange = Impact on the wider road network

	Assessment findings	Colour coding
	additional HGV movements per day (i.e. 5-6 HGVs going in and out). Further site specific investigations would be required to accompany the planning application.	
• Rights of way	Nearest footpath is approximately 540m to the north of the site. A bridleway is located approximately 920m to the south-east.	Green = No public rights of way affected
• Potential for decentralised and renewable energy generation	The diversion of waste from landfill will contribute towards reduction of greenhouse gas emissions. Development of an AD plant would provide opportunity for energy generation (recovery from waste), however given the waste management capacity requirements and (small) scale the opportunity to support decentralised and renewable energy generation may be limited.	Orange = Moderate potential
• Need for the development	The plan identifies indicative waste management capacity requirements and the capacity gap for the plan period (up to 2036). There is a requirement for additional facilities, in particular (small scale) preliminary treatment facilities. The site would provide increased capacity within the county for waste management. This additional capacity will assist in working towards waste management targets.	Orange = Moderate need
• Other constraints	NA	Green = No other constraints

Site details		
Site reference	SHELAA/GRE/06	
Previous site reference:	• LPR/GRE/06 • SAL/GRE/05 • Site Appraisals October 2012, April 2013 • SHLAA 2008, 2011	
Address/Location	Wood Lane	
Village/Town/Parish	Greetham	
Area (ha)	Not recorded but 2.97 on SALL/GRE/05	
Current use	Agricultural	
Proposed use	Waste management	
Proposed residential sites only:	NA	
Notes	Response 82 Allocation under adopted plan: Site W2 – Greetham Wood Lane. Allocated for small-scale preliminary treatment facility. Appraisal of site previously undertaken in line with preparation of the Site Allocations and Policies DPD October 2014.	

	Assessment findings	Colour coding
Stage 2: Initial assessment against key policy considerations		
Key policy considerations	Compliance with key locational policies in the adopted and emerging plan. Rutland Core Strategy DPD CS25 (Waste management and disposal) (Draft Plan RLP55). Supports the delivery of the indicative waste management capacity requirements regarding preliminary treatment and is in line with the spatial strategy for waste management, being located to the east of the Local Service Centre (LSC) of Greetham. The site is an existing allocation (W2) (Draft Plan RLP56).	Meets key locational policies.

	Assessment findings	Colour coding
Stage 3: Detailed assessment against environmental, social and economic factors		
Environmental		
• Topography	Land is flat. Topography unlikely to be an issue for operations.	Green = No topographical constraints
• Agricultural land	Site located on agricultural greenfield land and is identified as Grade 3 (good to moderate quality). The land is currently used as a horse paddock and such use would cease as a result of the development. There is the potential for the strip of agricultural land to the north of the site to be affected by operations (depending on the facility type).	Orange = Best Most Versatile Agricultural land grades 3a and 3b affected
• Biodiversity and Geodiversity	<u>Biodiversity</u> Protected species records from surrounding sites include grass snake and European Protected Great crested newts to the south of the site. The surrounding woodland is likely to support bats and nesting birds and possibly badgers. The site borders Greetham Woodland Near an area of Ancient Woodland to the west () and is within 60m of Greetham Woodland Far a further area Ancient Woodland to the east (although separated by the A1). Osbonall Wood Ancient Woodland LWS is located 1km to the north east.and Woolfox Wood Ancient Woodland is 620m to the south east.). A further area of broadleaved woodland is located approximately 620m to the south. A LWS (Verge north-east of Greetham Wood – N side) is also located 650m to the west beyond Greetham Woodland Near and the verge opposite is identified as a Candidate Wildlife Site (Verge NE of Greetham Wood - S side). There are also other LWS and Ancient Woodlands are located within the area (over 1km).	Orange = Moderate – depends on scale and technologies

	Assessment findings	Colour coding
	Greetham Meadows SSSI, a ridge and furrow haymeadow, is approximately 1.5km to the north-west and Clipsham Old Quarry and Pickworth Great Wood SSSI are further afield to the southwest. The internationally designated Rutland Water RAMSAR site and SPA is located approximately 6km to the south. Indirect effects of development / site operation on surrounding woodland habitat such as noise pollution, runoff / leachates or air-borne pollution and dust should be avoided. A buffer/set back (5-15m) from the woodland edge would provide mitigation to reduce impacts and protect the woodland. Existing hedgerows and scrub should be retained and protected. Further investigation including habitat and species surveys and assessment would be required to accompany the planning application. <u>Geodiversity</u> The geology is predominantly Jurassic Limestone with parts overlain by a drift of glacial till and clays. The limestone geology strongly influences the landscape character, through its distinctive landforms (the plateau, scarp & dip slopes, shallow but quite narrow and steep-sided stream valleys). Land-use is predominantly arable farming and woodland. The main section of the site is approximately 100m north of a RIGS site located at Woolfox Quarry (the access point being 20m), designated for exposures of Lower Lincolnshire Limestone features. RIGS site designated at Greetham Quarry located 1.3km west, designated for 12 metre sections of Upper and Lower Lincolnshire Limestone. It is possible to mitigate any negative impacts of a small-scale preliminary treatment facility on geodiveristy sites or features in the vicinity.	
• Heritage Assets	Scheduled Ancient Monuments – None Registered Parks and Gardens – None Conservation areas – None Listed buildings – Group of 3 Grade II listed buildings are clustered around The Olde Greetham Inn 350m north of the site: The Stretton Highwayman Public House Grade II Public house of 1780 with extension of c. 1800 (LB ref: 186648), The Stable block and Turpin's Restaurant at the Stretton Highwayman Grade II Stable block, now partly restaurant, of c. 1800 (LB ref: 186649), The Forge Grade II Cottage of late 18th century (LB ref: 186650). Impacts upon setting depend upon the height of the proposed development, but the site is well screened by vegetation. Archaeological sites – No known archaeological sites recorded (HER) within the proposed development area. The site is adjacent the A1 (the Great North Road or Ermine Street), the latter originally a major Roman road (HER re.: MLE5748). The line of a second	Orange = Moderate impact

	Assessment findings	Colour coding
	Roman road, The Drift (MLE5345), runs north-west from Ermine Street, approximately 400m south west of the proposed site. Woolfox Lodge, a WW2 and post-war airfield lies c. 450m to the south east. Whilst it is possible that buried archaeological remains associated with the Ermine Street Roman road may be affected by the proposals, it is unlikely that either The Drift or Woolfox airfield will be detrimentally affected by the proposals. Greetham Near Wood has been appraised for the survival of historic / archaeological features, however, no remains or features of note were recorded. Further site specific investigations would be required to accompany the planning application; such as desk-based assessment, further pre-determination archaeological investigation may be required to inform a planning decision and to develop any appropriate post-determination mitigation strategy.	
• Landscape and townscape	The site is screened by woodland to the west and is bordered by the A1 main road to the east. Impacts on landscape character are likely to be generally limited to the impact on grassland lawns between Greetham Woodland Near and Greetham Woodland Far that can not be avoided or mitigated. Depending upon the height of the facility there is not likely to be any impact on townscape. The site falls within the Kesteven Uplands. Site is located in the 'Clay Woodlands sub character area of the 'Rutland Plateau' area. The eastern fringe of the Cottesmore Plateau is defined by the valley and limestone scarp of the North Brook, signalling the transition to the Clay Woodlands sub-area. To the north of this transition, the A1 trunk road corridor dominates the landscape character with its physical infrastructure and the perception of constant movement and noise in the landscape. The Clay Woodlands is an extensive area of gently undulating, predominantly arable countryside. The key characteristics of this landscape sub-area are the medium to large scale mixed broadleaved and coniferous woodlands within large farming estates. These woodlands are conspicuous features in most views within or into this area. Close to they enclose views whilst providing an extensive backdrop in most distant views across well maintained farmland. Land-use is predominantly arable farming and woodland. The site is 1.1km to the north of Exton Park and 90m to the west of an area of Attractive Countryside. The site is generally flat and slopes gently to the south. The site is screened from the A1 by trees and scrub and screened from the wider landscape by Greetham Wood Far and Near. Landscape impacts are likely to be mitigated by surrounding	Green = Low impact

	Assessment findings	Colour coding
	vegetation and natural topography, but an appraisal of any impacts should accompany any planning application.	
• Loss of recreational or public open space land	No opportunities for recreational or public open space identified. Footpaths and tracks are located in the woodland to the west and east of the site and Greetham Valley Golf Club is located 250m southwest of the site.	Green = No impact on recreational or public open space
• Potential for new green infrastructure	Site falls within the North East GI Zone (Clay Woodlands GI Wedge). This GI wedge requires several priority areas to be addressed including extending access to woodland by improving access by linking and extending local corridors / footpaths and protecting SSSIs and woodland in the area. There is opportunity to link to and extend the calcareous grassland verge LWS to the north-west of the site and to the calcareous grassland on the adjacent quarry site (as part of its restoration scheme).	Green = Potential to enhance existing green corridors or access to green infrastructure
• Water conservation and management/flood risk	<u>Water conservation</u> The site overlays a primary aquifer. The overall water quality in the area is designated as moderate by the EA. Potential risk to water resources would depend on specific type of development. Consideration of surface water drainage and continued maintenance of existing surfaces and drainage systems will mitigate contamination risk. Further assessment would be required to accompany a planning application. <u>Groundwater flooding</u> No identified risk of groundwater flooding. <u>Fluvial flood risk</u> The site is not located within, or adjacent to, flood zone 2 or 3. Waste treatment is classified as less vulnerable and so is considered appropriate. Refer to the National Planning Policy Framework and Associated Technical Guidance - Sequential Test table. <u>Surface water flooding</u> A third of the site is at risk of surface water flooding in extreme events i.e. low probability. Two small isolated areas where there depressions in the topography at risk of more frequent surface water flooding. A site specific FRA would be required to accompany the planning application to address issues of surface water flooding. <u>Historic flooding hotspots</u>	Green = No flood risk or minimal downstream flood risk

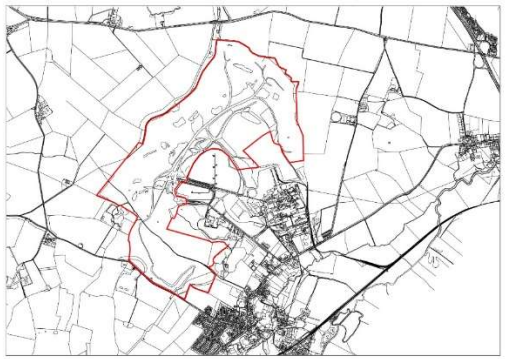
	Assessment findings	Colour coding
	According to the flooding hotspot data received from RCC on the 30/06/16 this site is not subject to any historic flooding records.	
• Contamination	The site is currently used as a horse paddock and does not have hard or sealed surfaces, but is in close proximity to Woolfox Airfield. The potential for soil contamination from the any new development can be effectively mitigated by maintenance of surfaces and drainage systems (including sealed surfaces, bunding and treatment of surface waters if required).	Green = Contamination unlikely
• Environmental quality and human health	<u>Air quality and pollution</u> There are few sensitive receptors in proximity to the site, with the closest likely to be properties associated with the Olde Greetham Inn over 300m north adjacent the A1 and properties associated with the golf club around 400m to the south west. The site is not within or adjacent to an AQMA, but being adjacent to the A1 the site and surrounding area are affected by traffic emissions. Dependant on the facility type there is potential for emissions to air, from both on-site operations (e.g. dust) and resulting increases in vehicle related air emissions (e.g. CO_2, NO_X). However any emissions are heavily dependent upon the type of facility, technology used, throughput of waste and proposed mitigation. Mitigation measures such as enclosed/covered operations, negative air pressure, filtration, dust management (e.g. dampening) and good site management significantly reduces potential for adverse impacts. Such controls are also likely to be requirements of the Environmental Permitting regime. <u>Noise and vibration</u> The A1, existing waste transfer station, inert landfill and recycling facility, operational quarry, and an agricultural contractors business are close to the site. Such uses add significantly to the local noise environment, therefore the development is unlikely to result in any breach of the appropriate noise standards. Imposing planning conditions to restrict certain activities to specific times, would help to reduce the potential for increases in noise at sensitive receptors. The development of the site is likely to generate a limited number of additional HGV movements, which together with the nature of the surrounding highway network, means that the potential for increasing ground vibration is limited, particularly where controls (e.g. vehicle routeing) are implemented. <u>Odours</u> A preliminary treatment facility has the potential to generate some odour. However, mitigation measures such as enclosed/covered operations, negative building air pressure, good filtration, expeditious processing of materials to avoid long term storage would	Green = Limited potential for adverse impacts. Impacts are likely to be ameliorated by mitigation measures. Identified constraints are acceptable.

	Assessment findings	Colour coding
	significantly reduce potential for adverse impacts. Consideration would need to be given to the cumulative impact with the existing waste transfer station to the south of the site. Bio-aerosols Development of a preliminary treatment facility would present potential for bio-aerosols (generally within 250m of operations). The site is removed from sensitive receptors; potential for impact is very limited. Vermin and birds Vermin and birds could be attracted to the site depending upon the types of waste material to be processed, however measures such as enclosed storage and operations, expeditious turn-over of waste, and regular cleansing of the site would significantly reduce potential for adverse impacts. Litter The generation of litter from the site would be dependant upon the type of waste imported, and given the proximity to the A1 is important to control effectively. The enclosure of all processing and storage operations, the netting and screening of site boundaries, and regularising tidying and cleaning of the site is likely to reduce the likelihood of litter generation significantly. Bird strike hazard The site is located within the 13km bird strike zone of an airfield. The risk of bird strike associated with a relatively small scale preliminary treatment facility is low due the nature of operations, particularly where operations are enclosed/covered. Potential for residual environmental nuisance Depending upon the type of facility specific assessments of the potential impacts of the development would be required, together with the use and likelihood of the effectiveness of mitigation measures would be required to accompany a planning application. The surrounding land uses present some opportunities for co-location. Mitigation measures (as previously referenced) should effectively reduce any potential impacts to an acceptable level, and therefore avoid or reduce potential for residual environmental nuisance. Cumulative impacts There is the potential for some cumulative impacts given nearby land uses, however given the limited scale of impacts and surrounding land uses and subject to effective mitigation, potential is limited and unlikely to inhibit the development of the site for a preliminary treatment facility.	

	Assessment findings	Colour coding
• Restoration and after use	Proposed facilities would be permanent hence has limited opportunities/requirements for restoration.	Orange = Proposed facility is of a type that has limited restoration requirements
• Waste management	The plan identifies a requirement for (small scale) preliminary treatment facilities. The site is located to the east of Greetham, a LSC. The proposal for a waste management facility would seek to increase diversion of waste from landfill and would support the sustainable waste management and the waste hierarchy. An existing waste transfer station and inert landfill are adjacent the site (south), in addition the site is adjacent an operational quarry; the surrounding land uses present opportunities for co-location. The site is removed from sensitive receptors and has limited potential for residual environmental nuisance and cumulative impact, subject to implementation of mitigation measures. Further assessment of the potential impacts and effectiveness / appropriateness of mitigation measures would be required to accompany the planning application. The site has a total area of 3ha, the proposed use is likely to be for a small scale preliminary treatment facility (e.g. in-vessel / open windrow composting, inert processing or waste transfer), typically requiring 1ha or less.	Orange = Moderate level of support / contribution

	Assessment findings	Colour coding
Social		
• Liveability	The site is located away from sensitive receptors being adjacent to the A1, bordered to the west by woodland, adjacent a waste transfer station and operational quarry (including inert landfill associated with the quarry restoration works). There is limited potential for environmental nuisance impacting on liveability. Properties associated with the Olde Greetham Inn are located over 300m north of the site; currently a commercial business premise. HGV movements will be along main routes that are already used by the adjacent industrial site.	Green = No adverse factors identified
• Amenity of existing residents and adjacent land uses	The site is located away from sensitive receptors being adjacent to the A1, bordered to the west by woodland, adjacent a waste transfer station and opposite an operational quarry (including inert landfill associated with the quarry restoration works). The proposed waste use is unlikely to cause conflict with the existing land uses.	Green = No or little impact on amenity of existing residents and adjacent land uses
Economic		
• Available, viable and deliverable	The site has been put forward by the owners and would be available immediately. The site is currently used for horse grazing and has a total site area of 3ha. Given Rutland's waste management requirements the proposed use is likely to be for a small scale preliminary treatment facility, which would typically require 1ha or less. It is likely that the existing use would cease, or the available area would be significantly reduced, in order to accommodate the proposed use. At present no site operator has been identified however the owners indicate they are in the process of identifying operators.	Orange = Partially available, viable and deliverable
• Infrastructure available	Site has links to the mains water, electric, gas and phone / internet. It is unknown whether the site has access to gas supply. Potential need for joint private discharge of foul sewage.	Green = Potential infrastructure constraints
• Accessibility and transport	Access to and from site is available from Wood Lane, connecting to Stretton Road (B668) and the A1. Passenger vehicles (associated with golf club) and HGV movements currently associated with existing waste transfer, inert landfill and operational quarry; sufficient safety measures would be required to reduce potential conflict. Proposed waste use would increase vehicle (HGV) movements, which are able to be controlled through routing agreements determined through the planning application process. Any such agreement should seek to divert traffic away from local roads and villages where possible. Further site specific investigations would be required to accompany the planning application	Green = Good accessibility with opportunities for walking and cycling and to incorporate sustainable transport options

	Assessment findings	Colour coding
• Impact on the wider road network	Access to the site is along Wood Land connecting to the B668 and A1; currently used for existing access to adjacent minerals and waste operations. Proposed waste use would increase vehicle (HGV) movements on road network. Given Rutland's waste management requirements the site is likely to accommodate small scale preliminary treatment facility, with potential to generate an average of 10-12 additional HGV movements per day (i.e. 5-6 HGVs going in and out). Further site specific investigations would be required to accompany the planning application.	Orange = Moderate
• Rights of way	A Bridleway is located 140m south-east of site (separated from the site by the A1) and approximately 590m to the south-west. Various tracks and paths associated with Greetham Woods Near (directly west – track 420m north-west) and Greetham Woods Far (to the east separated from the site by the A1 –50m east).	Green = No public rights of way affected
• Potential for decentralised and renewable energy generation	The diversion of waste from landfill will contribute towards reduction of greenhouse gas emissions. Given the waste management capacity requirements there is limited opportunity to support decentralised and renewable energy generation.	Orange = Moderate potential
• Need for the development	The plan identifies indicative waste management capacity requirements and the capacity gap for the plan period (up to 2036). There is a requirement for additional facilities, in particular (small scale) preliminary treatment facilities. The site would provide increased capacity within the county for waste management. This additional capacity will assist in working towards waste management targets.	Orange = Moderate need
• Other constraints	None	Green

Site details		
Site reference	SHELAA/KET/13	
Previous site reference:	W3 – Ketton, Ketco Avenue Site Appraisals October 2012, April 2013	
Address/Location	Ketco Avenue, Ketton	
Village/Town/Parish	Ketton	
Area (ha)	Total site area 275ha	
Current use	Mix of restored land, agricultural land, clay stockpiles and mineral workings.	
Proposed use	Inert disposal linked to restoration of mineral extraction operations	
Proposed residential sites only:	NA	
Notes	The site would support restoration of the existing mineral extraction operations.	

	Assessment findings	Colour coding
Stage 2: Initial assessment against key policy considerations		
Key policy considerations	Compliance with key locational policies in the adopted and emerging plans. Rutland Core Strategy DPD: CS25 (Waste management and disposal) (Draft Plan RLP55). Facilitates restoration of existing quarry and is in line with the spatial strategy for waste related development, being located at the Local Service Centre (LSC) of Ketton. The site is an existing allocation (W3) (Draft Plan RLP56).	Meets key locational policies.

	Assessment findings	Colour coding
Stage 3: Detailed assessment against environmental, social and economic factors		
Environmental		
• Topography	The topography of the site varies greatly particularly in areas where extraction, restoration or landfilling is operational. The disposal of inert waste would support restoration works.	Green = No topographical constraints
• Agricultural land	The site is a mix of green and brownfield land; identified as Grade 3 (good – moderate quality) agricultural land with some areas of non-agricultural land. The majority of the agricultural land however has been lost to mineral extraction operations. The current land use is comprised of restored limestone grassland, clay stockpiles or areas of mineral extraction (which continues in the south of the site). Inert disposal will enable the restoration of the remainder of the site and the land may be returned to agricultural use.	Orange = Best Most Versatile Agricultural land grades 3a and 3b affected
• Biodiversity and Geodiversity	<u>Biodiversity</u> Notable and protected species including white letter hairstreak, reptiles, barn owl, raptors, a range of bat species, badgers, Great crested newts and otter that are recorded on the site or the surrounding area. Rutland Water internationally important RAMSAR, SPA and Country Park are located 2.2km to the west. The eastern part of site is designated as Ketton Quarries SSSI designated for woodland, calcareous grassland and earth heritage, including an exposure of Jurassic limestone. Site also borders Shacklewell Hollow SSSI designated for woodland, lowland neutral grassland, calcareous grassland and fen, marsh and swamp. Edith Weston Verge, Ketton Normanton Verge South of New wood (west side) Roadside Verge Nature Reserve and Local Wildlife Sites are located approximately to the west and 1.25 km to the east. Geeston Quarry, a Candidate Local Wildlife Site, is located 1km to the south-east and there are further undesignated broadleaved woodlands Ketton Gorse and Wytchley Warren Spinney to the west and southwest.	Green = With mitigation further extraction should avoid impacts on protected sites and designated sites.

	Assessment findings	Colour coding
	Up-to-date habitat survey plans, ecological assessment and details of restoration plans would be required to accompany the planning application in order to determine the potential to mitigate impacts and provide further enhancements for biodiversity of the area including further calcareous grassland in the north and east adjacent to the active quarry. Existing landscape mitigation and re-created and retained habitats should be retained and protected (e.g. bat hopover bridge). Protected species and habitat mitigation strategies in operation in existing phases of Ketton Quarry should also be required to avoid impacts on protected species, woodland and BAP habitats and designated sites to reduce and avoid effects of importation/infill. Geodiversity A river valley where the geology is principally ironstone and clay, overlain by a drift of alluvium. The south-eastern area of site is designated as a geological SSSI associated with quarry operations (Ketton Quarries SSSI - four identified units including one for Jurassic limestone). There are no other RIGS in the immediate area. A geology trail is associated with the SSSI, this shows some of the exposures in parts of the old quarry workings. Access to the trail is from the main road from Stamford through Ketton (A6121). Further limestone faces created as part of current quarrying operation might be retained and managed as part of restoration of the site.	
• Heritage Assets	Scheduled Ancient Monuments – None Registered Parks and Gardens – None Conservation areas – None Listed buildings – None Archaeological sites – Archaeological investigations and chance finds have produced an extensive range of sites and finds from Ketton Quarry. Given the extensive previous disturbance (removal) of archaeological remains within the quarry, it is not envisaged that a proposed waste disposal facility will necessitate additional significant and detrimental impacts upon surviving archaeological remains. However, careful consideration should be given to the development of plans so as to avoid unnecessary damage to the historic environment. South of Scout Camp - Neolithic to Bronze Age flint scatter (HER ref: MLE8553), west of Tinwell Lodge Farm - Mesolithic side scraper (MLE8554), north of the Old Windmill - ring ditch (MLE5422), north of Blackground Close - Iron Age double ditched enclosure (MLE5987), north of Blackground Close - rectilinear enclosure (MLE5393), Roman site, Ketton Quarry (MLE5388), possible Roman burial, Ketton Quarry (MLE5390), Iron Age / Roman site west north-west of Tinwell Lodge (MLE8463), north east of Hunts Lodge - disturbed Roman burial in a stone coffin (MLE5391), Old Heath Lodge Field - early Anglo Saxon pottery (MLE8555), Newbottle deserted medieval hamlet - late Saxon settlement of Newbottle (MLE8556), and Newbottle chapel and cemetery - Christian cemetery associated with timber church (MLE8570).	Orange = Moderate impact

	Assessment findings	Colour coding
	Further site specific investigations would be required to accompany the planning application; such as desk-based assessment, further pre-determination archaeological investigation may be required to inform a planning decision and to develop any appropriate post-determination mitigation strategy in areas that have not been previously or fully investigated as part of extraction operations.	
• Landscape and townscape	<u>Landscape and townscape</u> The site forms part of a river valley where the geology is principally ironstone and clay, overlain by a drift of alluvium. Site located to the north of the village of Ketton. The landscape is already impacted upon due to historical quarrying and existing cement works which are a prominent feature within the landscape / townscape. The site is in both the Kesteven Uplands and the Leicestershire and Nottinghamshire Wolds. The site is in the Ketton Plateau Landscape Character sub-area. There are Areas of Attractive Countryside immediately to the north and south east. Ketton Ketco Avenue is visible from a number of surrounding Public Rights of Way and the steeply inclined Steadfold Lane which rises from the site to the north-east. Further assessment would be required to accompany the planning application in order to determine the potential to mitigate long term impacts on landscape and provide compensation or enhance the landscape character of the area. The use of inert waste in restoration works will assist in re-profiling the landform and provide opportunity for restoration of landscape mitigating impacts on landscape character (resulting from quarry operations).	Green = Low impact
• Loss of recreational or public open space land	Hereward Way (long distance public footpath) passes through the south-west section of the site for approximately 1.6km and a public footpath crosses the south-east corner of the site for approximately 290m. A bridleway crosses an area of the site in the west for approximately 260m. These public rights of way will need to be temporary re-routed and/or buffered during extraction and subsequent restoration works. There are several other public footpaths and bridleways in the vicinity including some that run alongside the site boundary.	Orange = Moderate impact on recreational or public open space Diversions may stay in place longer term and views from them different as result of infilling

	Assessment findings	Colour coding
• Potential for new green infrastructure	Site falls predominantly within the North East GI Zone and a small section to the south lies within the South East GI Zone (Ketton Plateau GI Wedge) – This GI wedge requires the conservation and enhancement of parks and other designed landscapes in the area, the historic mosaic of agriculture and woodland and the mixed arable and pastoral agricultural plateau landscapes where they occur. Distinctive landscape features such as hedgerows, hedgerow trees, copses, spinneys, dry stone walls and woodlands (especially where they would filter views of mineral and related industrial operations) should be restored and re-instated where possible. There is the opportunity to link to and extend local woodland corridors and improve public access for recreational use. Other opportunities include extending the area of species-rich, calcareous grasslands already present on part of the site (following quarry restoration). The use of inert waste in restoration works will assist in achieving restoration outcomes.	Green = Potential to enhance existing green corridors or access to green infrastructure
• Water conservation and management/flood risk	<u>Water conservation</u> Part of the site overlays a primary aquifer (leading from south-western section to north-east). Small areas of the site overlay secondary aquifers in the north-eastern and south-western sections. The site is approximately 500m to the south-east of the River Chater which feeds into the River Welland (located approximately 1000m to the south-east). The northern tip of the site is located approximately 60m south of a minor watercourse which feeds into the River Gwash (approximately 565m to the north). There are small bodies of water located within the western, northern and southern areas of the site. There are small bodies of water and drainage watercourses located to the south-east of the site. Overall water quality in the area is designated as moderate to poor by the EA. Consideration of surface water drainage and continued maintenance of existing surfaces and drainage systems will mitigate contamination risk. Further assessment would be required to accompany a planning application. <u>Groundwater flooding</u> The majority of the site is susceptible to a risk of clearwater flooding of less than 25%. <u>Fluvial flood risk</u> The site is not located within flood zones 2 or 3. However these zones are located approximately 730m south-east of the southern section of the site, and approximately 1,000m south of the north-eastern section of the site. Proposed development within flood zone 1 is appropriate as per flood risk vulnerability/compatibility table. Refer to the National Planning Policy Framework and Associated Technical Guidance - Sequential Test table. <u>Surface water flooding</u> Pockets of the site are susceptible to surface water flooding for all three categories of risk (high, moderate and low) and are interspersed across the site. A site specific FRA would be required to	Green = No flood risk or minimal downstream flood risk

	Assessment findings	Colour coding
	accompany the planning application to address issues of surface water flooding, including adequate flood mitigation measures i.e. SUDS. <u>Historic flooding hotspots</u> According to the flooding hotspot data received from RCC on the 30/06/16 this site is not subject to any historic flooding records.	
• Contamination	The disposal of inert waste would be related to restoration of worked areas. There is limited potential for contamination however licensing and regulation will ensure effective prevention and control measures are implemented to maintain operations within accepted standards.	Green = Contamination unlikely.
• Environmental quality and human health	<u>Air quality and pollution</u> There are no AQMAs within 5km of the site. The site has the benefit of multiple operations related to mineral extraction, mineral processing, cement production and site restoration. It is likely that the developments would result in an increase in vehicle movements and associated emissions where there is no opportunity for backhauling associated with existing operations. However the increase in movements is likely to be relatively limited in the context of the site operations. Inert infilling presents potential for dust and for cumulative impacts (in-combination with quarry operations), however there are existing detailed management schemes and monitoring which are effective in mitigating impacts.	Green = Limited potential for adverse impacts. Impacts are likely to be ameliorated by mitigation measures.
	<u>Noise and vibration</u> The site operations are the subject of existing noise and vibration management and monitoring schemes, and other matters such as noise levels and hours of operation. Restricting matter such as hours of operation, screening/bunding and the operation and maintenance of plant and machinery should prove effective to reduce noise impact from proposed operations. The proposed use would generate additional HGV movements which could be a source of vibration and would need to adhere to existing routeing agreements directing traffic away from any residential areas (where possible). <u>Odours</u> Odours are generally not associated with inert landfill. <u>Bio aerosols</u> Bioaerosols are not associated with inert landfill. <u>Vermin and birds</u> Vermin and birds are not generally attracted to inert landfill. <u>Litter</u> Limited potential for litter associated with inert landfill. <u>Bird strike hazard</u>	

	Assessment findings	Colour coding
	Bird strike hazard is not associated with inert landfill. <u>Potential for residual environmental nuisance</u> A site specific assessment of the potential impacts and effectiveness/appropriateness of mitigation measures would be required to accompany the planning application. However the nature of the proposed operations and the existing management and mitigation regimes in present use at the site, means that it is unlikely that operations would result in an environmental nuisance. <u>Potential for cumulative impacts</u> Mitigation measures (as previously noted) should effectively reduce any potential impacts to an acceptable level; unmitigated there is the potential for cumulative impacts (e.g. dust and noise). The site is currently managed to an acceptable standard with measures specified in planning permissions and the pollution control regulations.	
• Restoration and after use	Disposal of inert waste would be within current areas subject to extractive operations and would support restoration outcomes. The active quarry area in the north and east has potential for habitat creation of important calcareous grassland. Significant area of this habitat might be recreated to meet Biodiversity Action Plan targets for this habitat. The use of inert waste to infill voids resulting from extraction supports long-term restoration outcomes of the site.	Green = High potential for beneficial outcomes
• Waste management	The plan identifies a requirement for inert disposal and identifies a preference for inert fill to support the restoration of quarries. The site is located at Ketton, a LSC. The proposed use of inert waste will support the achievement of restoration outcomes for the site. The site is of substantial size and will be sufficient to accommodate the proposed use with inert landfill taking place within areas subject to extraction.	Green = High level of support / contribution

	Assessment findings	Colour coding
Social		
• Liveability	The site currently accommodates an industrial use (Ketton cement works, operational quarry and hazardous landfill). Disposal of inert waste as part of the restoration work is likely to generate dust, appropriate mitigation measures (such as currently employed to control dust associated with the operational quarry) are able to reduce potential effects to an acceptable level. In addition there may be additional HGV traffic (import of inert fill).	Orange = One or more adverse factors
• Amenity of existing residents and adjacent land uses	Site is located within an existing industrial area, with the village of Ketton to the south and countryside to the west, north and east. There are residential dwellings adjacent the site at main access road (Ketco Avenue). A public footpath and proposed cycle path cross the site and could need to be re-routed during subsequent restoration works (temporary). Public footpaths are located along site boundaries to the north, south and west and Rutland Country Park is in close proximity. A Scout Camp Site and Ketton Sports and Social Club Grass Pitches are located close to site boundary. There is potential for noise and dust impacts however given the current operations and size of the site it is likely that mitigation measures and site management will prove adequate.	Green = No or little impact on amenity of existing residents and adjacent land uses
Economic		
• Available, viable and deliverable	Site has been put forward by the planning consultants and land agents on behalf of the owner (Hanson Cement) as a potential site for inert disposal associated with restoration of the existing extractive operations. The site is available however given the timeframe of existing operations it is likely that the development would come forward in the medium term. The site would be able to accommodate both the existing and proposed use. The site is owned and operated by Hanson Cement; it would be expected that they would continue to be the operators.	Green = Available, viable and deliverable
• Infrastructure available	Site has links to the mains water, sewerage system, electric, gas and phone / internet.	Green = No significant infrastructure constraints
• Accessibility and transport	Access to the site is already established from the A6121 Stamford Road / High Street and Pit Lane; providing access onto the A1, A606 and A43. The A6121 passes through residential area of Ketton. The site currently accommodates a large and well established (since 1928) mineral extraction and cement works; internal road network present. Proposed waste use would increase vehicle (HGV) movements, which are able to be controlled through routing agreements determined through the planning application process. Any such agreement should seek to divert traffic away from local roads and villages where possible. Further site specific investigations would be required to accompany the planning application.	Green = Good accessibility with opportunities for walking and cycling and to incorporate sustainable

	Assessment findings	Colour coding
		transport options
• Impact on the wider road network	The surrounding road network is adequate to accommodate current operations. Inert waste is currently imported for restoration - this would continue.	Green = No or little impact on the wider road network
• Rights of way	Hereward Way (long distance footpath) passes through the south-west section of the site for approximately 1.6km and may require temporary re-routing during extraction and subsequent restoration works. A footpath adjoins the Hereward Way and crosses the south-east corner of the site for approximately 290m. It may also require temporary re-routing. A public footpath runs alongside the northern site boundary for approximately 990m. A bridleway follows the northern and western boundary of the site for approximately 1.8km before crossing an area of the site for 260m and so may require re-routing. There are several other public footpaths and bridleways in the vicinity of the site.	Green = No public rights of way affected (directly as a result of the non-inert processing or inert fill – impacts will result from preceding extraction)
• Potential for decentralised and renewable energy generation	The diversion of waste from landfill will contribute towards reduction of greenhouse gas emissions; however given that the proposed use is inert fill greenhouse gas reduction associated with inert material is limited. Inert fill will not present opportunities for decentralised/renewable energy production.	Red = None nor very limited potential
• Need for the development	The plan identifies indicative waste management capacity requirements and the capacity gap for the plan period (up to 2036), including inert fill. The plan is sets a preference for inert fill to be directed towards restoration of mineral extraction sites. This additional capacity will assist in addressing capacity gaps.	Green = Significant need
• Other constraints	N/A	Green = No other constraints

Sites for minerals development
SHELAA/GRE/07 – Greetham Quarry, Stretton Road, Greetham
SHELAA/STR/03 – Hooby Lane, Stretton

Site details		
Site reference	SHELAA/GRE/07	
Previous site reference:	• LPR/GRE/07 • Site Appraisals October 2012, April 2013 • SHLAA 2008, 2011	
Address/Location	Greetham Quarry, Stretton Road	
Village/Town/Parish	Greetham	
Area (ha)	15.38	
Current use	Agricultural	
Proposed use	Oolithic limestone, dimensional masonry stone and aggregates extraction. Proposed 100,000 tonnes per annum. Continuation (extension) of existing quarry. Approximately 35 years.	
Proposed residential sites only:	NA	
Notes	The site is to act as an extension to the existing extractive operations, and is located to the northwest of them.	

	Assessment findings	Colour coding
Stage 2: Initial assessment against key policy considerations		
Key policy considerations	Compliance with key locational policies in the adopted and emerging plans. Minerals Core Strategy & Development Control Policies (MCS) DPD: *MCS Policy 3* (General Locational Criteria) (Draft Plan – RLP45) – Compliant as located within the Areas for Future Minerals Extraction (limestone primarily for aggregate purposes). *MCS Policy 4* (Ketton Quarry Area of Search) (Draft Plan RPL45) – NA. *MCS Policy 5* (Extensions to Aggregates Sites)(Draft Plan RLP38) – Site is an extension to an existing quarry (provision of crushed rock) and includes the recovery of building stone. *MCS Policy 6* (Building and Roofing Stone) (Draft Plan RLP48) – Site includes recovery of building stone from a quarry which is already understood to service the local market for new and historic buildings, output of usable building stone unknown at this stage.	Meets key locational policies.

	Assessment findings	Colour coding
Stage 3: Detailed assessment against environmental, social and economic factors		
Environmental		
• Topography	Land gently slopes southwards. Topography unlikely to be an issue for operations.	Green = No topographical constraints
• Agricultural land	Site located on agricultural greenfield land and is identified as Grade 3 (good to moderate quality). It is currently used for field crops. The land would be temporarily lost during the operational life of the quarry however restoration to previous land use and condition is possible. The quarrying of crushed rock is unlikely to result in soil contamination. Standard planning conditions require soil handing to be undertaken according to government best practice guidelines which ensures that soils are not unduly detrimentally affected.	Orange = Best Most Versatile Agricultural land grades 3a and 3b affected
• Biodiversity and Geodiversity	The site is located near to a number of LWS protected verges including: Great Lane Hedgerow road LWS adjacent to the site (12m west) forming a section of the boundary (around 60m) with the sports field/community centre; Greetham Verge and Greetham Roadside Verge 20-25m to the northwest; Verge north-east of Greetham Wood (north side) 600m south-east; and candidate LWS Verge northeast of Greetham Wood (south side) 600m to the southeast. Greetham Local Greenspace is located within the village. Greetham Wood Near Ancient Woodland is 1km to the east. Greetham Meadow SSSI, a ridge and furrow hay meadow, is 500m to the north east. Indirect effects of the development / site operation on surrounding woodland habitat such as noise pollution, runoff / leachates or dust should be avoided. Retention of a natural vegetation buffer (5m) from the hedges would provide mitigation. Habitat surveys would be required to accompany a planning application. Restoration of the site presents opportunities for return to agriculture or creation of limestone/calcareous grasslands (BAP priority habitat). <u>Geodiversity</u> The geology is predominantly Jurassic Limestone with parts overlain by a drift of glacial till and clays. Site is 140m from RIGS site located at Greetham Quarry designated for 12 metre sections of Upper and Lower Lincolnshire Limestone. Quarrying proposals are unlikely to affect existing designated sites. Where opportunities arise similar limestone faces could be created within the north east extension area.	Green = No impact
• Heritage Assets	Scheduled Ancient Monuments – None Registered Parks and Gardens – None	Orange = Moderate impact

	Assessment findings	Colour coding
	Conservation Areas – None but site is located in close proximity to Greetham Conservation Area. Listed Buildings – There are a number of listed buildings in proximity to the site within the settlement of Greetham. The closest to the proposed allocation is the Grade II Holly Cottage Farmhouse which is approx 200m south of the site, – a Grade II listed 17th Century cottage of one and a half storeys. The gable on the front is possibly the oldest secular building work in the village. Archaeological sites –Excavations within the adjoining quarry identified Neolithic and Bronze Age activity but the most sustained occupation began in the latter stages of the Early Iron Age. A small settlement comprising two single phased roundhouses and an isolated four post structure was framed by a loosely bounded enclosure to the west and a long segmented boundary ditch to the east. Finds included Early Iron Age ceramics, a rubbing stone and a burnt bone weaving comb. The settlement continued and developed during the Middle Iron Age with the enclosure being periodically re-worked. The archaeological investigations within the adjoining site highlights the potential for archaeological activity within the current study area. Further site specific investigations would be required to accompany the planning application; such as desk based assessment, further pre-determination archaeological investigation may be required to inform a planning decision and to develop any appropriate post determination mitigation strategy. The site would supply building stone to be able to maintain and enhance local heritage assets.	
• Landscape and townscape	<u>Landscape and townscape</u> The site is arable bordered by roads (along north and west boundary) and located immediately to the north of Greetham Village. Quarrying would have temporary landscape and visual impacts during the development phase and very limited long term landscape impacts. Site is located in the 'The Cottesmore Plateau' which forms the most northern section of the 'Rutland Plateau' area has the most typical plateau-like characteristics of the four subareas. It is predominantly of a level relief, with long, shallow, gradual undulations rather being flat. Arable farming, with large geometric field patterns is the predominant land use, but this is interspersed with significant amounts of pasture and many trees, both in larger woods and in the distinctive network of hawthorn hedges. This extensive tree cover is most apparent in the southern section of the Cottesmore Plateau, and is particularly dominant as a landscape feature around the estate and parklands of Burley-on-the-Hill and Exton House. The geology is predominantly Jurassic Limestone with parts overlain by a drift of glacial till and clays. The limestone has been worked for many years as a building stone, in cement manufacture and for general limestone uses.	Orange = Moderate capacity

	Assessment findings	Colour coding
	Consequently, several parts have been disturbed by old workings and are in differing stages of restoration e.g. east of Exton and Greetham villages. The limestone geology strongly influences the landscape character, through its distinctive landforms (the plateau, scarp and dip slopes, shallow but quite narrow and steep-sided stream valleys), characteristic building materials, typical limestone ecology of semi-natural, species-rich calcareous grasslands and verges and the frequent occurrence of limestone dust on fields, verges and roads. The site falls within the Leicestershire and Nottinghamshire Wolds. The site is screened from the roads that border it by hedgerows for substantial lengths of these highways. Views from the village and Footpath E156 are partially screened. The Viking Way runs along Great Lane. Dependent on the location of plant and provision of screening the impacts on landscape could be mitigated. Further site appraisal would be required to accompany the planning application.	
• Loss of recreational or public open space land	The extraction of mineral from the site would not result in a loss of recreational or public open space land. Greetham Community Centre and sports field (including tennis courts, football pitch and bowls club) are adjacent (20m west) the south west corner of the site, separated by Great Lane. The Viking Way runs along Great Lane. There is potential (unmitigated) for impact on the nearby recreational activities. Greetham Valley Golf Club is approximately 840m south-east.	Orange = Moderate impact on recreational or public open space land with limited or informal public access
• Potential for new green infrastructure	Site falls within the North East GI Zone (Cottesmore Plateau GI Wedge). This GI wedge requires several priority areas to be addressed including extending access to woodland by improving access by linking and extending local corridors / footpaths for recreational use. There is the opportunity to link to, and extend the Local Wildlife Site corridor (Greetham roadside verge) to the west. The adjacent quarry is currently being worked and its restoration scheme includes the creation of calcareous grassland. There is opportunity therefore to link to, and extend, this grassland and any other green infrastructure created as part of the restoration scheme. Potential to link to sub-regional green corridor.	Green = Potential to enhance existing green corridors or access to green infrastructure
• Water conservation and management/flood risk	Water conservation The site overlays a primary aquifer. The Medbourne Brooke, a tributary of the River Welland, is located 650m south of the middle of the site. There are also several drainage lines and small waterbodies to the east and north (125 to 350m). Overall water quality in the area is designated as moderate by the EA. Potential risk to water resources would depend on specific type of	Green = No flood risk or minimal downstream flood risk

	Assessment findings	Colour coding
	development. Consideration of surface water drainage and continued maintenance of existing surfaces and drainage systems will mitigate contamination risk. Further assessment would be required to accompany a planning application. Groundwater flooding Risk of clearwater flooding of less than 25% to a small part of the eastern segment of the site. Fluvial flood risk The site is not located within, or adjacent to, flood zone 2 or 3. Minerals working and processing and classified as less vulnerable, as per the flood risk vulnerability/compatibility tables the development is appropriate. Refer to the National Planning Policy Framework and Associated Technical Guidance - Sequential Test table. Surface water flooding A small eastern segment of the site is susceptible to surface water flooding in extreme events i.e. low probability. A site specific FRA would be required to accompany the planning application to address issues of surface water flooding. Historic flooding hotspots According to the flooding hotspot data received from RCC on the 30/06/16 this site is not subject to any historic flooding records.	
• Contamination	The proposed site is agricultural land with no previous development understood to have taken place, or any history of contamination.	Green = Contamination unlikely.
• Environmental quality and human health	Air quality and pollution There are no AQMAs within 5km of the site. Emissions from the proposed operation are primarily expected to be dust (particulate matter), which would include quantities of PM_{10} and $PM_{2.5}$. Sources of emissions include soil stripping, overburden handling, mineral extraction, loading and tipping, stone breaking and cropping, stone crushing, material haulage and wind blow. The proposed operation would be likely to generate visible dust emissions. The nearest privately owned residential property is around 30m away, but subject to suitable mitigation (e.g. dust suppression, bunding, wheel cleansing, appropriate phasing, and processing to take place to the east of the site) any adverse dust impact would be unlikely. The transportation of materials from the site would be unlikely to be significantly above existing levels which are operating within acceptable levels. Noise and vibration The proposed development has the potential to generate significant noise levels, given the production of crushed limestone as well as building stone at the site. However, the proposed	Green = Limited potential for adverse impacts. Impacts are likely to be ameliorated by mitigation measures. Identified constraints are acceptable.

	Assessment findings	Colour coding
	development would be similar in character and proximity to sensitive receptors, to the existing operations, which are able to operate within the limits stipulated in the NPPG (55 dB(A) or +10 dB). Appropriate conditions could be imposed to secure measures to minimise the impact of noise from the site (e.g. location of processing, type of plant and machinery used, reversing alarms, appropriate maintenance of plant and machinery, etc.). Existing operations do not undertake blasting and it is expected that the proposed development would continue this practice, particularly given the proximity to residential properties (which may make blast limits difficult to comply with). Existing operations have demonstrated that vibration from transportation of materials is not likely to be an issue. <u>Odours, bio aerosols, vermin & birds, litter and bird strike hazard</u> Given the nature of the proposed operation there is unlikely to be any discernible odour, bio aerosols, vermin & birds, litter and bird strike hazard impacts associated with the operations. <u>Potential for residual environmental nuisance</u> The operator is operating an existing quarry on adjacent land on a similar scale and with similar methods to that proposed. It is understood that this proposed site would be developed as an extension to existing operations and would therefore replace the existing extraction area once operational. This would reduce the potential duration from impacts of both sites as there would not be effectively two operational quarries in the same location. Subject to suitable planning conditions and phasing/scheduling of operations, it is considered that the proposal would not result in unacceptable impacts. <u>Potential for cumulative impacts</u> Site proposed to be worked as an extension to existing quarry – phased to come online following depletion of currently permitted reserves. There is also a quarry operating 1km to the north on Hooby Lane and another around 1.2km to the south east on Wood Lane. It is considered that the distance and proximity of other quarries and the distance to the nearest sensitive receptors, would mean that there would be no significant or unacceptable cumulative impacts.	
• Restoration and after use	The adjacent quarry is currently being worked and its restoration scheme includes the creation of calcareous grassland. There is opportunity therefore to link to, and extend, this grassland and any other green infrastructure created as part of the restoration scheme.	Green
• Waste management	N/A	

	Assessment findings	Colour coding
Social		
• Liveability	The site is located adjacent (north-west) to the existing quarry and so is within a similar distance to sensitive receptors around Greetham and the dwelling to the east. Receptors nearest to the site boundary include a sports field, community centre and a residential dwelling, the White House, located within 20-50m of the site boundary, with residential dwellings and commercial businesses of Greetham located approx 70m south and Greetham campsite located 300m west – classified as being of medium to low level of sensitivity with regards to mineral extraction. Oak House residential care home is located approx 360m southeast – classified as being of high level of sensitivity with regards to mineral extraction. The site is bounded by Great Lane and Thistleton Lane to the west and north, with agricultural land and the existing quarry adjacent to the east and south – separating the site from the nearest sensitive receptors. Greetham village is located to the south. The site is within close proximity to receptors and Greetham settlement as such there is potential for adverse impacts resulting from mineral extraction, however, given the proximity of the existing quarry and extent to which this is able to operate within acceptable limits, the likely impact on liveability is considered to be limited. HGV movements could be controlled as per routing agreement for the existing quarry.	Orange = One or more adverse factors
• Amenity of existing residents and adjacent land uses	Given the proximity of the site to sensitive receptors and that the site would operate as an extension to the existing quarry (which is within similar proximity to receptors and Greetham settlement in general), the proposed use is unlikely to result in conflict with adjacent land uses and unacceptable adverse impacts however some residual environmental nuisance impacts may occur dependant upon the effectiveness of on site management. A moderate impact on amenity is likely without mitigation, with appropriate avoidance/mitigation measures and site management this could be reduced to low.	Orange = Moderate impact
Economic		
• Available, viable and deliverable	The proposed site was brought forward by the owner of the site, also current operator of the existing quarry. One years notice is required to vacate the current tenant (farm). The site would operate as an extension of the existing site. Mineral resource identified as economically viable by proponent (and based on current operations) and supported by BGS data.	Green = Available, viable and deliverable
• Infrastructure available	Site has links to the mains water supply, electric and phone / internet but does not have access to the sewerage system or gas supply.	Green = No significant infrastructure constraints

	Assessment findings	Colour coding
• Accessibility and transport	Access to and from the site is proposed to be from Thistleton Lane, connecting to Stretton Road (B668) and the A1. Site is an extension to an existing quarry so HGV movements are expected to remain the same. Sufficient safety measures would need to be considered to make sure there is no potential conflict with other road traffic. HGV movements would need to be controlled through routing agreements determined through the planning application process. Any such agreement should seek to divert traffic away from local villages where possible. Further site specific investigations and assessments would be required to accompany the planning application.	Green = Good
• Impact on the wider road network	The surrounding road network is adequate to accommodate current operations. It is expected that HGV movements will remain at current levels. Further site specific investigation would be required to accompany the planning application.	Green = No or little impact on the wider road network
• Rights of way	Nearest footpaths are approximately 30m north and 164m west (separated by Thistleton Lane and Great Lane respectively) and 90m south of the site. There are no bridleways in the vicinity.	Green = No public rights of way affected
• Potential for decentralised and renewable energy generation	N/A Extraction of mineral resources presents opportunities to reduce greenhouse gas emissions or for renewable energy generation.	N/A
• Need for the development	The Draft Local Plan identifies a crushed rock provision rate of 0.19 million tonnes per annum (Mtpa) over a 20 year plan period up to 2036. At present this provision rate is being met by three active commitments: Clipsham, Greetham and Woolfox Quarries. The proposed site is planned to be worked around 2025 following completion of extraction operations at the adjacent quarry at Greetham. At this point it is likely (provided the commitments continue to remain active) that Woolfox will have been fully worked and that Clipsham will be fully worked soon after (with permission expiring in 2028). The quarry at Thistleton is currently inactive and its operation is dependant on the construction of a dedicated haul road; therefore there is no guarantee that the site will commence operations/become active during the plan period. The proposed site would provide a supply of around 0.1 Mtpa of crushed rock and assist in meeting the aggregate provision rate as well as contributing towards supply of local building stone.	Orange = Significant / Moderate need (dependant on status of existing commitments)

	Assessment findings	Colour coding
	The site is located in the north of the County and is in proximity to Lincolnshire and Leicestershire boundaries. The mineral is likely to be used to support development within Rutland however given the distance to other growth areas outside of the County it is likely that some minerals could be exported to neighbouring authorities. Ooidal limestone in Rutland is considered a good quality building stone. It is currently extracted at the adjacent operational quarry, along with aggregate, where it is understood to service the local market for use in new and historic buildings. An operation of this size is anticipated to generate between 3-5 full time jobs which would likely include a site manager /supervisor for the overall site operations, plant operators and site foreman. Additional contract positions maybe required during the life of the operation.	
• Other constraints	NA	Green = No other constraints

Site details		
Site reference	SHELAA/STR/03	
Previous site reference:	STR03	
Address/Location	Hooby Lane	
Village/Town/Parish	Stretton	
Area (ha)	9.5	
Current use	Agricultural	
Proposed use	Extraction of blockstone for building/dimensions stone purposes and aggregates extraction. Approximate yield of building stone between 10,000 - 20,000 tonnes per annum. Continuation (extension) of existing quarry. Approximately 30 years.	
Proposed residential sites only:	NA	
Notes	The site is to act as an extension to the existing extractive operations, and is located to the north.	

	Assessment findings	Colour coding
Stage 2: Initial assessment against key policy considerations		
Key policy considerations	Compliance with key locational policies in the Minerals Core Strategy & Development Control Policies (MCS) DPD: *MCS Policy 3* (General Locational Criteria) (Draft Plan – RLP45) – Complaint as located within the Areas for Future Minerals Extraction (limestone primarily for aggregate purposes). *MCS Policy 4* (Ketton Quarry Area of Search) (Draft Plan RPL45) – NA. *MCS Policy 5* (Extensions to Aggregates Sites) (Draft Plan RLP38) – Site is an extension to an existing quarry (provision of crushed rock) and includes the recovery of building stone. *MCS Policy 6* (Building and Roofing Stone) (Draft Plan RLP48) – Site includes recovery of building stone from a quarry which is already understood to service the local market for new and historic buildings, output of usable building stone unknown at this stage.	Meets key locational policies.

	Assessment findings	Colour coding
Stage 3: Detailed assessment against environmental, social and economic factors		
Environmental		
• Topography	Land is flat therefore topography unlikely to be an issue for operations	Green = No topographical constraints
• Agricultural land	Site located on agricultural greenfield land and is identified as Grade 3 (good to moderate quality). It is currently used for field crops. The land would be temporarily lost during the operational life of the quarry however restoration to previous land use and condition is possible. The quarrying of limestone is unlikely to result in soil contamination. Standard planning conditions require soil handing to be undertaken according to government best practice guidelines which ensures that soils are not unduly detrimentally affected.	Orange = Best Most Versatile Agricultural land grades 3a and 3b
• Biodiversity and Geodiversity	<u>Biodiversity</u> The site is opposite Greetham Meadows SSSI one of the best remaining 'ridge and furrow' unimproved hay meadows in the region. There are a range of locally designated Wildlife Verges around the site: Hooby Lane verge 200m to the west, Thistleton Roadside Verge Nature Reserve 600m to the northwest and Greetham Verge around 1.5km to the southwest and west. Stretton Wood LWS and Ancient Semi Natural Woodland lies 1.4km to the east. Hooby Lane Plantation broadleaved woodland to the	Green = Few constraints /only issues of sensitivity arising from proximity to SSSI and

	Assessment findings	Colour coding
	south east adjacent to the existing quarry. The boundary trees and managed hedgerows should be retained and protected throughout the development wherever possible. To provide enhancement for biodiversity the site could be restored at medium or low level to either woodland providing links to Hooby Lane Plantation to the south, hay meadow or calcareous grassland with exposed quarry faces. <u>Geodiversity</u> The site has potential for restoration to exposed quarry faces and scree slopes. There are no existing geodiversity designations within Hooby Quarry.	other designated biodiversity sites and non designated features and other designated sites
• Heritage Assets	Scheduled Ancient Monuments – None Registered Parks and Gardens – None Conservation Areas – None Listed Buildings - There are a number of listed buildings locate over 1km east of the site in the settlement of Stretton. Archaeological sites - No known archaeological sites recorded (HER) within the proposed development area. The site is approx 1km from the A1 (the Great North Road or Ermine Street, the latter originally a major Roman Road HER ref MLE5748). The line of a second Roman Road , the Drift (MLE5345) is approx 2km south-east of the site. Sources indicate that a Deer Park of medieval date lay approximately 500m to the east of the site (MLE5746). Medieval ridge and furrow earthworks exist widely in the area in and around the site. Further site specific investigations would be required to accompany the planning application; such as desk-based assessment, further pre-determination archaeological investigation may be required to inform a planning decision and to develop any appropriate post determination mitigation strategy.	Orange = Moderate impact
• Landscape and townscape	The site is in both the Kesteven Uplands and the eastern edge of the Cottesmore Plateau character sub-area of the Rutland Plateau. The site is visible from New Road to the north west and Hooby Lane situated close to the crossroads of the two roads. The site is crossed by public footpath E129. The site is flat, arable and in general is not well screened. There is no existing hedgerow screening the site from Hooby Lane and gappy hedgerows border the site along the other three sides. The boundary trees and managed hedgerows should be retained wherever possible and protected throughout the development. Views of the site from the village of Stretton to the east are well screened.	Orange = Moderate

	Assessment findings	Colour coding
	Further assessment accompanying the planning application would be needed to determine the potential to mitigate impacts of the extraction phase on landscape local to the site or enhance the landscape character of the area in the long term.	
• Loss of recreational or public open space land	A public footpath passes diagonally through the site from the north-west corner to the south-east corner for approximately 500m which may require temporary re-routing during extraction and subsequent restoration works.	Green = No impact on recreational or public open space* *Provided public rights are diverted (temporarily)/or buffered
• Potential for new green infrastructure	Site falls within the North East GI Zone (Cottesmore Plateau GI Wedge). This GI wedge requires several priority areas to be addressed including extending access to woodland by improving access by linking and extending local corridors / footpaths for recreational use. There is the opportunity to link and extend local woodland corridors and LWS (Hooby Lane Verge).	Green = Potential to enhance existing green corridors or access to green infrastructure
• Water conservation and management/flood risk	<u>Water conservation</u> Consideration of surface water drainage and continued maintenance of existing surfaces and drainage systems will mitigate contamination risk. Further assessment would be required to accompany a planning application. <u>Groundwater Flooding</u> None. <u>Fluvial flood risk</u> The site is not located within, or adjacent to, flood zone 2 or 3. Minerals working and processing are classified as less vulnerable, as per the flood risk vulnerability/compatibility tables the development is appropriate. Refer to the National Planning Policy Framework and Associated Technical Guidance - Sequential Test table.	Green = No flood risk or minimal downstream flood risk

	Assessment findings	Colour coding
	Surface water flooding There is a small pond located in the south-eastern corner of the site. As part of any quarrying dewatering and surface water drainage implications will be need to be assessed as part of any planning application. Historic flooding hotspots According to the flooding hotspot data received from RCC on the 30/06/16 this site is not subject to any historic flooding records.	
• Contamination	The proposal site is agricultural land with no previous development understood to have taken place, or any history of contamination.	Green = Contamination unlikely.
• Environmental quality and human health	Air quality and pollution There are no AQMAs within 5km of the site. Emissions from the proposed building stone operation are primarily expected to be dust (particulate matter), which would include quantities of PM_{10} and $PM_{2.5}$. Sources of emissions include soil stripping, overburden handling, mineral extraction, loading and tipping, stone breaking and cropping, material haulage and wind blow. The proposed operation would be likely to generate visible dust emissions however with the nearest privately owned residential property is over 700m away, given suitable mitigation (e.g. phasing, dampening down, wheel cleansing), any adverse dust impact would be unlikely. As the site is solely for building stone production, subject to appropriate routeing, the transportation of materials from the site would be limited and would be unlikely to result in any significant increase in or impact associated with vehicular movements. Noise and vibration In principle the nature of the proposed operations are such that the noise levels could be relatively limited (e.g. limited level of extraction and earth movement, use of modern cropping machinery, and small amounts of mobile plant). Although the site is within a rural setting, the A1 contributes to background noise levels. Given the distance to sensitive receptors it is expected that the site could meet the 55 dB(A) or +10 dB noise limits stated in the NPPG. Subject to appropriate routeing directly to the A1, vibration is not considered an issue. Odours, bio aerosols, vermin & birds, litter and bird strike hazard Given the nature of the proposed operation there is unlikely to be any discernible odour, bio aerosols, vermin & birds, litter and bird strike hazard impacts associated with the operations.	Green = Limited potential for adverse impacts. Impacts are likely to be ameliorated by mitigation measures. Identified constraints are acceptable.

	Assessment findings	Colour coding
	Potential for residual environmental nuisance There is currently a limestone quarry operating on the opposite side of Hooby Lane by the same operator with similar methods to that proposed. It is understood that this proposed site would be developed as an extension to existing operations and would therefore replace the existing site once operational. This would reduce the potential duration from impacts of both sites in as there would not be effectively two operational quarries in the same location. Subject to suitable planning conditions and phasing/scheduling of operations, it is considered that the proposal would not result in unacceptable impacts. Potential for cumulative impacts Site proposed to be worked as an extension to existing quarry (located opposite side of Hooby Lane) operated by same operator – phased to come online following depletion of currently permitted reserves There is also a quarry operating 1.5km to the south. It is considered that the distance and proximity of other quarries and the distance to the nearest sensitive receptors would mean that there would be no significant or unacceptable cumulative impacts.	
• Restoration and after use	The site has potential for restoration to a medium or low level using site derived clay overburden and the limestone not suitable for building stone production. There is no requirement for importation of fill. Final restoration would be to agricultural land or beneficial nature conservation uses such as either woodland or calcareous grassland with exposed quarry faces.	Green = High potential for beneficial outcomes
• Waste management	NA	N/A

	Assessment findings	Colour coding
Social		
• Liveability	The site is located to the north of the existing quarry (separated by Hooby lane). The predominant land use surrounding the site is agricultural. Hooby Lane Plantation is located to the south-east (adjacent existing quarry). The nearest sensitive receptors include Hooby Lodge 780m northwest (separated by New Road) and Stretton settlement 950m southeast (separated by the A1). There are no land uses adjacent / in close proximity to the site of medium to high level of sensitivity with regards to mineral extraction. Located away from Stretton settlement and residential properties therefore environmental nuisance is likely to be minimal. HGV movements are able to be controlled through routing agreements determined through the planning application process.	Green = No adverse factors identified
• Amenity of existing residents and adjacent land uses	The site is removed from sensitive receptors and would operate as an extension to the existing quarry (which is within similar proximity to receptors and Stretton settlement in general). The proposed use is highly unlikely to adversely impact on residents or result in conflict with adjacent land uses.	Green = No or little impact on amenity of existing residents and adjacent land uses
Economic		
• Available, viable and deliverable	The proposed site was brought forward by the operator of the existing quarry (agreement with landowner). The site would operate as an extension of the existing site. Mineral resource identified as economically viable by proponent (and based on current operations) and supported by BGS data.	Green = Available, viable and deliverable
• Infrastructure available	There are no known mains water, sewerage system, electric, gas or phone / internet services available at the site. The operator indicates that whilst no known services are available, these could be provided as required (as have been at the existing adjacent quarry).	Green = Limited infrastructure constraints
• Accessibility and transport	Access to and from the site is proposed to be from Hooby Lane connecting on to the A1. The site is an extension to an existing quarry but is likely to be an intensification of extraction so HGV movements may increase. Careful phasing would be required to make sure both sites are not operational at the same time. Sufficient safety measures	Green = Good accessibility with opportunities for walking and

	Assessment findings	Colour coding
	would need to be considered to make sure there is no potential conflict with other road traffic. HGV movements would be controlled through routing agreements determined through the planning application process. Any such agreements should seek to divert traffic away from local villages where possible. Further site specific investigations would be required to accompany the planning application.	cycling and to incorporate sustainable transport options
• Impact on the wider road network	The surrounding road network is adequate to accommodate current operations. Although there is expected to be an increase in HGV movements, the increase would be small and the HGVS would route straight to the A1. Further site specific investigations would be required to accompany the planning application.	Green = No or little impact on the wider road network
• Rights of way	A public footpath passes diagonally through the site from the north-west corner to the south-east corner for approximately 500m which may require re-routing during extraction and subsequent restoration works (temporary). Public footpaths in the area are located approximately 775m west, 1.1km north-west and 1.1km north-east of site (separated by the A1). A bridleway is approximately 1.2km north of the site.	Orange = Permissive footpaths affected.
• Potential for decentralised and renewable energy generation	NA Extraction of mineral resources does not present opportunities to reduce greenhouse gas emissions or for renewable energy generation.	N/A
• Need for the development	The reserves will ensure a continuing supply of building stone is available for local builders and merchants. Geological investigations have confirmed the presence of high quality limestone which would be suitable for building/dimension stone purposes for use in new and historic buildings. There remains a strong market for building stone in Rutland with the operator of the adjacent operational building stone quarry currently having to meet demand in Rutland by importing stone from outside the County. The site is located in the north of the County and is in proximity to Lincolnshire and Leicestershire boundaries. The mineral will predominately be used to support the building industry within Rutland however there is also potential for export due to the proximity of the site to neighbouring authorities. Operations will be small scale (typical of building stone quarries in the County) and it is anticipated between 2 - 3 jobs will be created. Additional contract positions may be required during the life of the operation. One of the jobs is anticipated to be a	Green = Significant need

	Assessment findings	Colour coding
	managerial/supervisory position for the overall site operations and the remaining positions will be plant operators and site foreman working on the quarrying operation.	
• Other constraints	NA	Green = No other constraints

Appendix 7 – Comparison Matrix of colour coding between all sites assessed

Sites assessed for waste and mineral developments	Topography	Agricultural Land	Biodiversity and Geodiversity	Heritage Assets	Landscape and townscape	Loss of recreational or public open space	Potential for new green infrastructure	Water conservation and management/ flood risk	Contamination	Environmental quality and human health	Restoration and after use	Waste management	Liveability	Amenity of existing residents and adjacent land uses	Available, viable and deliverable	Infrastructure available	Accessibility and transport	Impact on the wider road network	Rights of way	Potential for decentralised and renewable energy generation	Need for the development	Other constraints
Sites for waste disposal or management																						
SHELAA/COT/07																						
SHELAA/GRE/06																						
SHELAA/KET/13																						
Sites for minerals development																						
SHELAA/GRE/07												N/A								N/A		
SHELAA/STR/03												N/A								N/A		

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