



BASSETLAW
DISTRICT COUNCIL
NORTH NOTTINGHAMSHIRE



Nathaniel Lichfield
and Partners

Future Development Scoping Study For Harworth Bircotes

Volume 3: Appraisal of Sustainable Credentials of Scoping Study

September 2009



Contents

1.0	Introduction	1
	Background	1
2.0	Background & Methodology	3
	Sustainable Development in the East Midlands	3
	Nottinghamshire Sustainability Checklist	4
	Methodology	4
3.0	Sustainability Baseline Context	8
4.0	Options for Growth	12
5.0	Appraisal of Sustainability Credentials	17
6.0	Issues & Recommendations	24
7.0	Appendix 1 – Baseline Sources	26

Tables

Table 1	Scope of Baseline data and policy analysed	7
Table 2	Summary of Baseline Data and Future Trends	11
Table 3	Options for Growth of Harworth Bircotes	16
Table 4	Appraisal of Each Option against Sub-regional Sustainability Objectives	23

1.0 Introduction

- 1.1 In December 2008, Nathaniel Lichfield & Partners ('NLP') were appointed by Bassetlaw District Council to undertake a study to assess the short, medium and long term growth potential for the district's third largest settlement, Harworth Bircotes. This appraisal considers how the growth options generated as part of this work, and which have been used as a mechanism to understand the scope for growth, promote the principles of sustainable development.
- 1.2 The appraisal is not a Sustainability Appraisal in accordance with the requirements of European Directive 20/01/42/EC ('the Strategic Environmental Assessment ('SEA') Directive') and, given the current status of the Growth Zone Study and the requirements of s180 of the Planning Act 2008, there is no requirement to comply. However, for ease of reference the work is referred to as a 'sustainability appraisal' throughout.
- 1.3 This document is the third of three volumes comprising the Growth Zone Study:-
- i Volume 1 – sets out the findings of the Scoping Study for the growth of Harworth Bircotes
 - ii Volume 2 – provides detailed analysis of the background information
 - iii Volume 3 – this document

Background

- 1.4 Harworth Bircotes is located in the north-west of the administrative area of Bassetlaw in North Nottinghamshire; close to the boundary with Doncaster and Sheffield.
- 1.5 The settlement comprises Harworth in the west (including the original village centre) and Bircotes in the east (a largely residential area). The Harworth colliery dominates the south side of the town and is separated from the residential areas to the north by Scrooby Road which also acts as a town centre. The town benefits from good road accessibility due to its location adjacent to the A1(M).
- 1.6 The area of North Nottinghamshire is historically associated with the coal mining industry which has been in decline over the last thirty years. Pit closures have had significant impacts on the social and economic balance of the local communities affected but regeneration opportunities exist through the reclamation of colliery tips and redevelopment of colliery sites.
- 1.7 Since the publication of the Government's Sustainable Communities Plan in 2003, which sought to tackle housing supply issues, a number of Growth Areas and Growth Points have been established across the country designed to bring forward large scale and sustainable growth. In July 2008, the Doncaster and South Yorkshire (the Sheffield City Region) Growth Point was identified which is

located in close proximity to Harworth Bircotes and offers potential to the town as a catalyst for regeneration.

- 1.8 In addition, Bassetlaw has been identified in the East Midlands Regional Spatial Strategy (March 2009) as part of the Northern Sub-Area where economic decline arising from the fall in mining and manufacturing needs to be countered by promoting economic, social and environmental regeneration. Harworth Bircotes is also more specifically identified in a zone north of Worksop where the potential benefits from the growth of Robin Hood Airport also further regeneration and growth opportunities.

2.0

Background & Methodology

Sustainable Development in the East Midlands

2.1

Sustainable development is at the heart of the planning system (e.g. see PPS1). The purpose of this appraisal is to ensure that the growth of Harworth Bircotes promotes sustainable development taking into account relevant social, environmental and economic considerations.

2.2

The East Midlands RSS (March 2009) establishes as part of its regional vision that development will be achieved for the benefit of present and future generations through the integration of a vibrant economy, cohesive communities, a rich, diverse and attractive natural and built environment and cultural heritage and:-

“sustainable patterns of development that make efficient use of land, resources and infrastructure, reduce the need to travel, incorporate sustainable design and construction, and enhance local distinctiveness”

2.3

Policy 1 of the RSS sets out the core objectives for the region which seek to “secure the delivery of sustainable development within the East Midlands” by making sure that strategies, plans and programmes meet the following objectives:-

“(a) to ensure that the existing housing stock and new affordable and market housing address need and extend choice in all communities in the region

(b) to reduce social exclusion...

(c) to protect and enhance the environmental quality of urban and rural settlements...

(d) to improve the health and mental, physical and spiritual well being of the Region’s residents...

(e) to improve economic prosperity, employment opportunities and regional competitiveness...

(f) to improve accessibility to jobs, homes and services...

(g) to protect and enhance the environment...

(h) to achieve a ‘step change’ increase in the level of the Region’s biodiversity...

(i) to reduce the cause of climate change...

(j) to reduce the impacts of climate change...

(k) to minimise adverse environmental impacts of new development and promote optimum social and economic benefits...”

2.4

With particular regard to the Northern Sub-Area of the East Midlands, within which Harworth Bircotes is located, the RSS recognises that whilst the most

sustainable locations for growth will frequently be in or on the edges of identified sub-regional centres or medium sized towns, the decline of mining has affected many other settlements and strategies must also address their needs and provide a sustainable role for their future regeneration.

Nottinghamshire Sustainability Checklist

- 2.5 The local authorities within Nottinghamshire (including Bassetlaw) have collaborated in the preparation of a list of sustainability objectives which can be used to ensure that plans, strategies and proposals within the area can be assessed as to their contribution to sustainable development. The objectives are as follows: -
- 1 To ensure that the housing stock meets the housing needs of the region
 - 2 To improve health and reduce health inequalities
 - 3 To provide better opportunities for people to value and enjoy the region's heritage
 - 4 To improve community safety, reduce crime and the fear of crime
 - 5 To promote and support the development and growth of social capital across the region
 - 6 To increase biodiversity levels across the region
 - 7 To protect and enhance the rich diversity of the natural, cultural and built environmental and archaeological assets of the region
 - 8 To manage prudently the natural resources of the region including water, air quality, soils and minerals
 - 9 To minimise waste and increase the re-use and recycling of waste materials
 - 10 To minimise energy usage and to develop the region's renewable energy resource, reducing dependency on non-renewable sources
 - 11 To make efficient use of the existing transport infrastructure, help reduce the need to travel by car, improve accessibility to jobs and services for all and to ensure that all journeys are undertaken by the most sustainable mode available
 - 12 To create high quality employment opportunities
 - 13 To develop a strong culture of enterprise and innovation
 - 14 To provide the physical conditions for a modern economic structure, including infrastructure to support the use of new technologies
- 2.6 The objectives have been based on the aims of the overall regional strategy for the delivery of sustainable development and are considered an appropriate basis for assessing whether the options for the growth of Harworth Bircotes accord with the principles established by the RSS.

Methodology

- 2.7 The objectives have been utilised in carrying out an appraisal of whether the four options for the growth of Harworth Bircotes accord with the principles of sustainable development. The process of assessment has included the following steps: -

Stage 1 - Inception & Baseline Analysis

2.8

A review of the existing and future trend data in respect of the key environmental, social and economic indicators for Harworth Bircotes. The scope of the data analysed has been based on the sustainability objectives identified above and covers the following issues:-

Sustainability Objectives		Decision Making Criteria	Indicators
1	Housing & Demographic data To ensure that the housing stock meets housing needs	<ul style="list-style-type: none"> - will it increase the range and affordability of housing for all social groups? - will it reduce homelessness? - will it reduce the number of unit homes? 	Build rates, housing stock, tenure, stock condition, affordability, vacant dwellings
2	Health To improve health and reduce health inequalities	<ul style="list-style-type: none"> - Will it reduce health inequalities? - Will it improve access to health services? - Will it increase the opportunities for recreational physical activity? 	Life expectancy, birth/death rates, health trends
3	Cultural Heritage To provide better opportunities for people to value and enjoy the area's heritage	<ul style="list-style-type: none"> - Will it provide new open space? - Will it improve the quality of existing open space? - Will it help people to increase their participation in cultural activities? 	Access and satisfaction with facilities
4	Crime & Safety To improve community safety, reduce crime and the fear of crime	<ul style="list-style-type: none"> - Will it provide safer communities? - Will it reduce crime and the fear of crime? - Will it contribute to a safe secure built environment? 	Crime rates, fear of crime and offence data
5	Social Capital To promote and support the development and growth of social capital	<ul style="list-style-type: none"> - Will it improve access to, and resident's satisfaction with community facilities and services? - Will it encourage engagement in community activities? 	Existing and proposed facilities
6	Biodiversity To increase biodiversity levels	<ul style="list-style-type: none"> - Will it help protect and improve biodiversity and in particular avoid harm to protected species? - Will it help protect and improve habitats? - Will it increase, maintain and enhance sites designated for their nature conservation interest? - Will it maintain and enhance woodland cover 	Statutorily designated sites and identified features

Sustainability Objectives		Decision Making Criteria	Indicators
		and management?	
7	Natural & Built Assets To protect and enhance the rich diversity of the natural, cultural and built environmental and archaeological assets	<ul style="list-style-type: none"> - Will it protect and enhance existing cultural assets? - Will it protect and enhance the historical and archaeological environment? 	Conservation Areas, Listed Buildings, Scheduled Ancient Monuments, other natural and built features
8	Natural Resources To manage prudently natural resources including water, air quality, soils and minerals	<ul style="list-style-type: none"> - Will it improve water quality? - Will it improve air quality? - Will it lead to reduced consumption of raw materials? - Will it promote the use of sustainable design, materials and construction techniques? - Will it minimise the loss of soils to development? - Will it maintain and enhance soil quality? 	Water, climate, air quality, flood risk
9	Waste & Recycling To minimise waste and increase the re-use and recycling of waste materials	<ul style="list-style-type: none"> - Will it reduce household waste? - Will it increase waste recovery and recycling? - Will it reduce hazardous waste? - Will it reduce waste in the construction industry? 	Generation of waste and recycling rates
10	Energy To minimise energy usage and to develop the area's renewable energy resource, reducing dependency on non-renewable sources	<ul style="list-style-type: none"> - Will it improve energy efficiency of new buildings? - Will it support the generation and use of renewable energy? 	Take up of renewable energy, energy consumption
11	Transport To make efficient use of the existing transport infrastructure, help reduce the need to travel by car, improve accessibility to jobs and services for all and to ensure that all journeys are undertaken by the most sustainable mode available	<ul style="list-style-type: none"> - Will it utilise and enhance existing transport infrastructure? - Will it help to develop a transport network that minimises the impact on the environment? - Will it reduce journeys undertaken by car by encouraging alternative modes of transport? 	Accessibility, modes of transport, travel to work data, infrastructure proposals, traffic levels
12	Employment To create high quality employment opportunities	<ul style="list-style-type: none"> - Will it improve the diversity and quality of jobs? - Will it reduce unemployment? - Will it increase average 	Workplace earnings, employment and unemployment rates, labour force, main sectors

Sustainability Objectives		Decision Making Criteria	Indicators
		income levels?	
13	Enterprise & Innovation To develop a strong culture of enterprise and innovation	- Will it increase levels of qualification? - Will it create jobs in high knowledge sectors?	Training and education
14	Technology To provide the physical conditions for a modern economic structure, including infrastructure to support the use of new technologies	- Will it provide land and buildings of a type required by businesses? - Will it improve the diversity of jobs available?	Employment land, levels of skills and occupational profile

Table 1 Scope of Baseline data and policy analysed

2.9 This study is based on the assumption that the scope of the above objectives encompasses all the key environmental, economic and social policy drivers and, on this basis, no further detailed analysis of the current policy framework has been carried out in the context of this appraisal with a view to refining the above sustainability framework.

Stage 2 - Developing & Refining Options/Assessing Effects

2.10 Working with the Growth Zone Study team, the four options for growth have been assessed against the above framework. Where necessary, methods for mitigation adverse effects and maximising beneficial effects have been identified and, as part of an iterative process of developing the Preferred Growth scenario, have been incorporated into the Preferred Option.

Stage 3 - Reporting

2.11 This report has been prepared to set out the appraisal of the four options and identify the mitigation measures recommended to be incorporated into the Preferred Option to ensure that it addresses the principles of sustainable development.

3.0

Sustainability Baseline Context

3.1

A review of the current and future baseline conditions has been carried out against the background of the indicators identified in Section 2.0. A more detailed analysis of key baseline conditions in respect of the study is provided in Volumes 1 and 2.

3.2

The table below provides a summary of the key indicators and likely future trends without implementation of an initiative for the growth of Harworth Bircotes.

Summary of Current Baseline Conditions	Indication of Future Trends
Housing & Demographic Data	
Recent significant decline in new residential development (as a result of recession). Population largely static but slight increase over last five years. Over 95% of the study area population is identified as being of white British ethnicity. Evidence of a generally ageing population. Significant proportion of the existing housing stock is in the form of terraced/semi-detached properties and evidence of limited levels of aspirational housing	Without a clear strategy for growth in place it is possible that housing needs would not be met
Health	
Borough's health is generally significantly worse than the UK average and Harworth is in the most deprived half of the borough in terms of health. In the 2001 Census between 12 and 14% identified themselves as 'health not good'. Male life expectancy is markedly lower than for females; female life expectancy is significantly below the national average. Obesity levels are significantly higher than the national average. The study area has poor access to hospital facilities	Generally falling trend of early deaths from heart disease, strokes and cancer indicating slowly improving health which could be expected to continue. This would mirror national data projections.
Cultural Heritage	
The 6 th edition of the Condition of Nottinghamshire study (2009) shows Harworth's accessibility to cultural heritage facilities is slightly above the borough average.	No indication that the accessibility would increase or decrease without intervention
Crime & Safety	
Nottinghamshire Police data shows the average number of crimes between February and April 2009 has decreased by 22.3% (Bassetlaw shows a fall of 10.4%) in the study area when compared with the same three month period last year. However there has been a marked increase of 21.3% in anti-social behaviour when comparing the same time periods (Bassetlaw shows an increase of 5.1%)	Generally fluctuating trends in respect of crime unlikely to change; however generally good arrangements to address issues particularly fear of crime
Social Capital	
The Condition of Nottinghamshire study (2009) indicates residents have better accessibility to a post office, schools and shops than the borough average. However, the rate of participation in the democratic process for the study area is one of the lowest in the borough. The level of open space and recreational provision is generally above the standards required although there is a deficit in children's play space. Some	Without careful planning, facilities may come forward in an ad hoc manner and fail to meet demand from any growth in the study area Quantum of open space and recreation facilities would be unlikely to increase or be

Summary of Current Baseline Conditions	Indication of Future Trends
<p>refurbishment/improvements to recreational facilities required.</p> <p>Some anecdotal evidence that the closure of the colliery may have had some effect on the sense of community for this traditional mining town</p>	<p>improved without intervention</p>
Biodiversity	
<p>White House Plantation & the Marsh in the centre of the study area are both Sites of Important Nature Conservation (SINCs)</p> <p>No local nature reserves, SSSIs or other statutorily designated areas within Harworth Bircotes</p> <p>A 2007 EA report indicated much of the eastern part of the study area is located in the Water Resource Management Area for the River Idle where a reduction in water abstraction is recommended</p>	<p>Value of many priority sites in Bassetlaw are in decline/under threat due to direct/indirect effects of development and climate change</p>
Natural & Building Assets	
<p>7 Grade II Listed buildings in Harworth Bircotes including 6 on Main Street and 1 on Church Lane. No buildings are currently on the national At Risk register.</p> <p>No Conservation Areas, SAMs or Registered Parks/Gardens within the study area</p> <p>There are two woodland areas within Harworth Bircotes – Swinnow Wood (north) and Droversdale Wood (south). Part of Bawtry Forest is located in the far north of the study area.</p> <p>Located in the Idle Valley Lowlands Landscape Character area of mainly agricultural character which has been significantly affected by mineral extraction. The County Landscape Assessment suggests extensive woodland planting in the vicinity of the study area would assist in softening the effect of urban development</p>	<p>Without a strategy to ensure their protection in place there would probably be an increase in numbers of buildings at risk and a degeneration of the prevailing landscaping character</p>
Natural Resources	
<p>No Local Air Quality Management Areas in Harworth Bircotes. Air quality is generally better in the East Midlands than the national average although with poorer quality along the main road routes which includes those surrounding the study area.</p> <p>Data from the EA shows a low risk of flooding throughout the Harworth Bircotes study area.</p> <p>No study area data available but borough information shows that industrial (particularly in respect of the two power stations near Retford and Worksop) and transport CO₂ emissions are above the county and regional averages.</p> <p>The study area is underlain by deep coal deposits and the colliery is the only deep mine remaining in the district; notwithstanding it is currently mothballed. It is understood the colliery operators are investigating how to extract remaining reserves with a view to reopening the mine and it is anticipated that operations could continue for approximately 20 years.</p>	<p>Some pollutants have declined significantly in recent years and this can be expected to continue.</p> <p>Even with decline, temperatures worldwide are expected to generally rise which would lead to uncomfortable working conditions, increased flood risk and potential biodiversity effect all of which could have local effects on the study area</p> <p>The reopening of the colliery and mining operations would result in a reduction in coal deposits</p> <p>Poorer air quality on key transport routes unlikely to change without intervention</p>
Waste & Recycling	
<p>No study area data available but information shows Bassetlaw has one of the lowest rates of recycling in the</p>	<p>Without intervention waste generation could be expected</p>

Summary of Current Baseline Conditions	Indication of Future Trends
county. However, the East Midlands rate of household recycling is generally higher than the national average.	to increase without substantial increase of levels of recycling
Energy	
<p>The majority of energy in the East Midlands is from fossil fuels and the region is a major exporter of energy. The coal powered plants at Worksop and Retford provide the majority of this energy.</p> <p>Between 2003 and 2007 there was an 86% increase in generation from renewables in the UK; however the East Midlands increased by 96%. Information from 2007 indicates that landfill gas and other biofuels represented the East Midlands main contribution to generating renewable energy. A planning application was submitted to Bassetlaw in March 2009 for a windfarm close to Retford.</p>	The East Midlands are seeking to reduce the effects of climate change and move towards a low carbon regional economy. An increase in the use of renewable energy could be anticipated.
Transport	
<p>Close to main road networks providing good highways accessibility (Bassetlaw generally has low accessibility due mainly to its rural character). Scrooby Road is a barrier to movement north-south within the study area. Need for additional/upgrading of existing routes throughout the study area. Relatively frequent bus services; no railway station (nearest in Worksop). Limited road congestion within the study area.</p> <p>Relatively low car ownership levels but over 70% travel to work by car. Half of the resident population have a travel to work distance of under 5km.</p> <p>There are no major highway infrastructure improvements proposed for the Harworth area in any of the Council's current capital programmes</p>	Unlikely change without intervention
Employment	
<p>Significant fall in employee jobs (2003 and 2007) in comparison with borough, regional and national levels</p> <p>Levels of unemployment in Harworth Bircotes are slightly higher than borough, regional and national averages but levels of long term unemployed are generally lower</p> <p>Average wage levels in Bassetlaw are lower than regional and national averages</p> <p>The study area suffers from generally high levels of deprivation common with the rest of the borough and particularly in employment and education</p>	Without intervention it is unlikely that the underlying causes of deprivation in the district would be addressed notably the effects of the decline of traditional industries
Enterprise & Innovation	
Generally low skilled, manual workforce compared to regional and national averages. The Condition of Nottinghamshire report (2009) shows the study area has above average rate of access to further education compared to the borough average but generally low educational attainment.	Without intervention it is unlikely that the key issues would be addressed
Technology	
<p>Significant effect due to the decline in mining and manufacture over the last 30 years</p> <p>Large manufacturing, engineering and warehouse/distribution base in the town</p> <p>Three principal employment locations: Brunel Industrial</p>	Small scale growth to meet local needs only is likely; continuation of cycle of decline and increased economic deprivation likely without

Summary of Current Baseline Conditions	Indication of Future Trends
Estate (north); Plumtree Industrial Estate (west); and British Coal Enterprise Park (south) Most sought after occupations by unemployed are for elementary/unskilled work, sales and customer services and plant/machine operatives Current trends indicate the employment sectors with biggest potential for growth in the study area are metal based manufacture, education and other services. In Bassetlaw generally in the retail, healthcare, transport and food and drink sectors	intervention to create new economic opportunities for the study area

Table 2 Summary of Baseline Data and Future Trends

3.3

The likely future trends indicated in the table above have been taken into account the effects of the current economic recession but have assumed a resumption of normal market conditions at such time that the economy recovers.

4.0

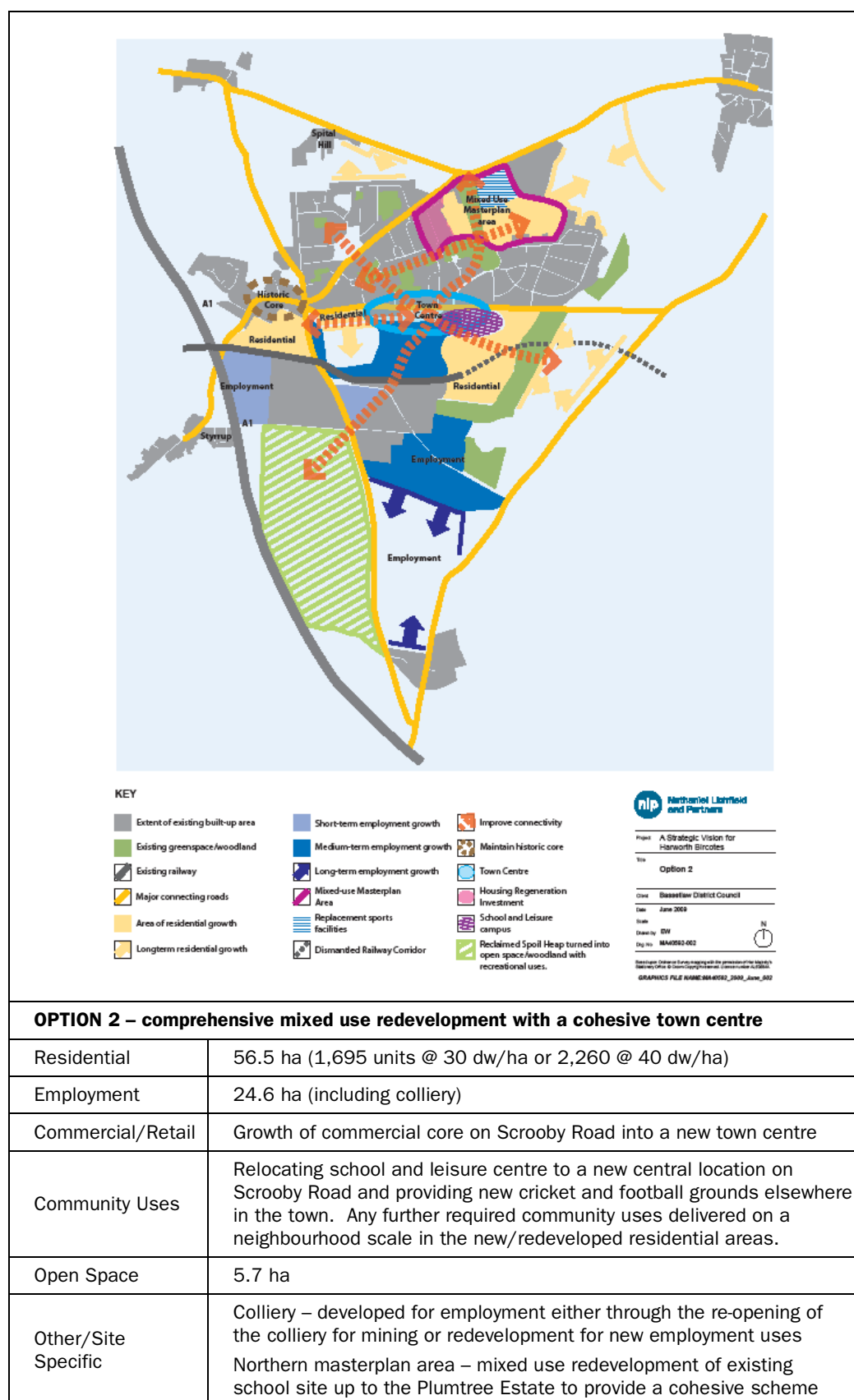
Options for Growth

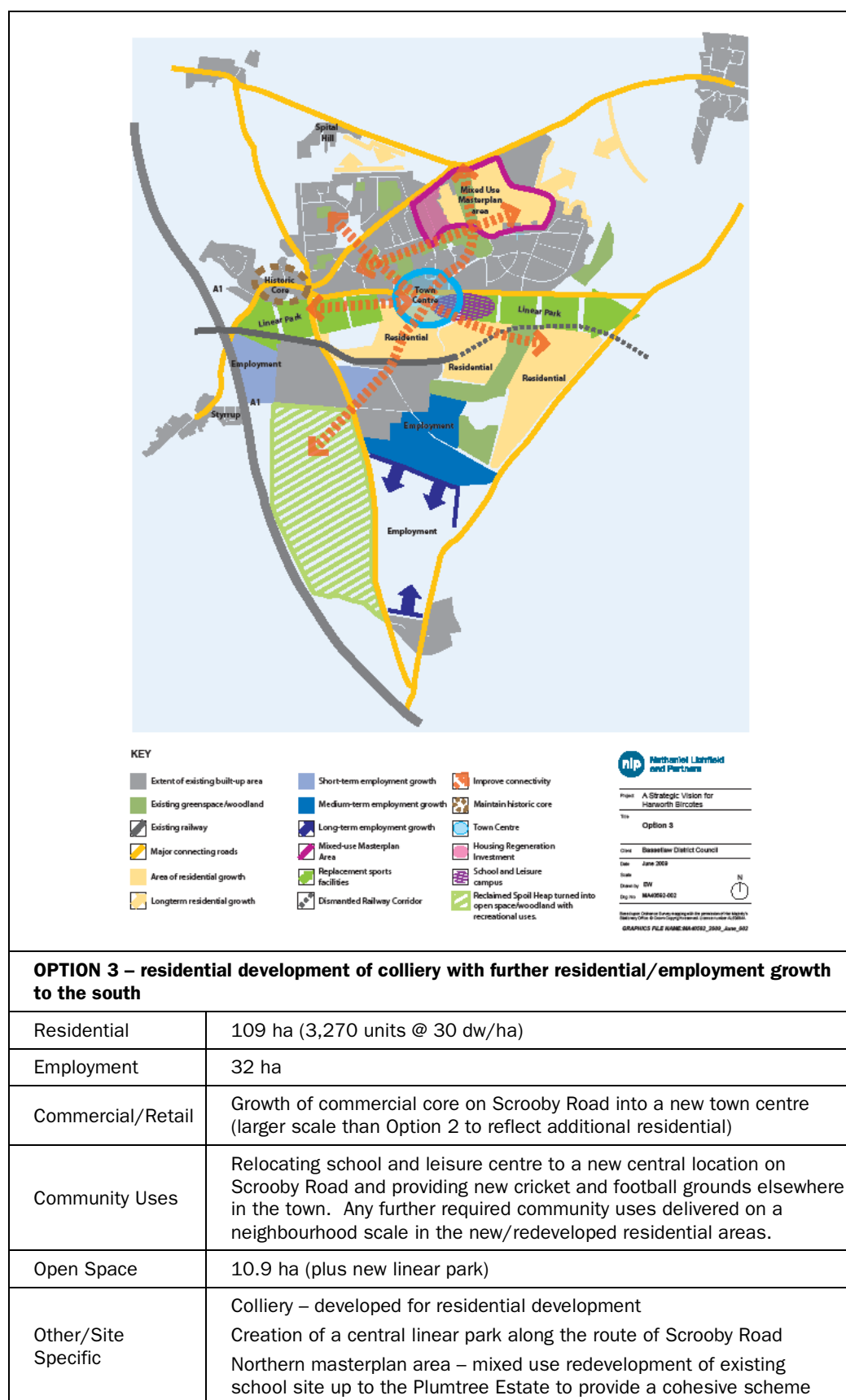
4.1

Volume 1 identifies that there are several different ways in which sustainable growth could be brought forward in Harworth Bircotes. To assist in the process of developing the growth scenario, a series of options have been generated to allow consideration of those aspects or types of growth for the town that could be taken forward. Representing the options in different spatial forms also assist in clarifying the different choices for growth that need to be taken into account; albeit that it is likely no one 'option' will ultimately represent the final growth scenario for the town.

4.2

Volume 1 provides a full summary of the evolution and components of each of the options that have been appraised and we provide a brief summary of each below for ease of reference.





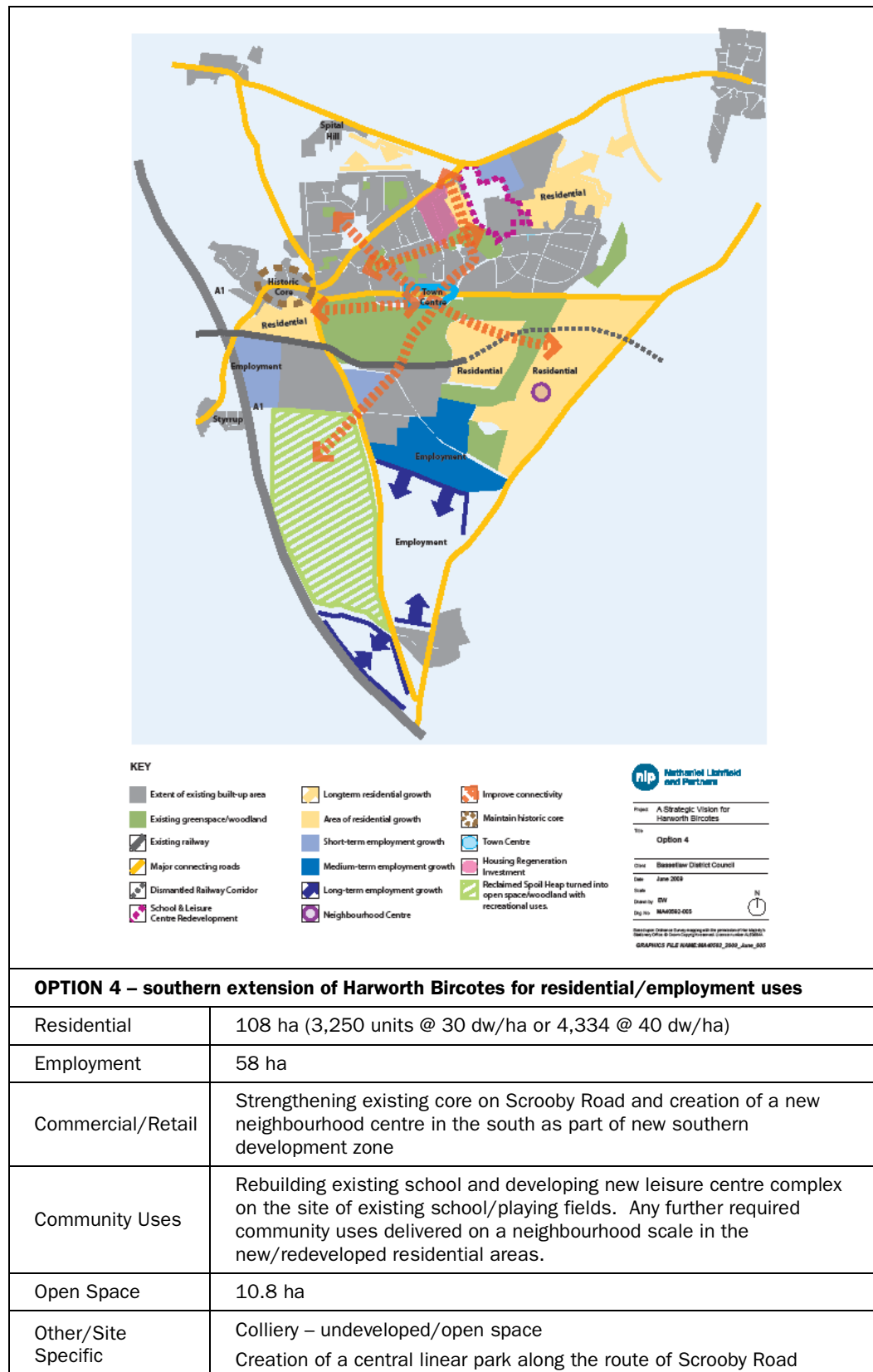


Table 3 Options for Growth of Harworth Bircotes

5.0 Appraisal of Sustainability Credentials

5.1 The following schedule sets out the findings of the sustainability appraisal of each option described in Section 4.0. The findings are presented with reference to the colour coded key set out to the right. In addition the following key has been used to identify whether the effect on each sustainability objective will be direct or indirect, permanent or temporary and the degree of significance:-

- Direct or indirect (✓ for direct effects; ✕ for indirect effects)
- Permanent or temporary (✓ for permanent effects; ✕ for temporary effects)
- Significance ('H' for high significance; 'M' for medium; 'L' for low)

++	Strongly positive implications
+	Overall positive implications
Ø	Neutral/mixed effect
?	Unclear/not known
-	Overall negative implications
--	Strongly negative implications
0	Not relevant

Sustainability Objective Does the option....?		Implications	Direct / Indirect	Permanent / Temporary	Significance	Commentary
OPTION 1 - infill development with potential to expand onto edge of town greenfield sites within defined boundaries						
1	...ensure that the housing stock meets the Growth Zone's housing needs?	++	✓	✓	H	Additional homes will assist BDC in both meeting its housing targets and providing for additional growth to address housing needs
2	...improve health and reduce health inequalities?	?	✕	✓	L	Unknown effect of additional growth on health of residents but it could be expected to improve following both general trends and strategies for improvement of health of existing and new residents
3	...provide better opportunities for people to value and enjoy the area's heritage?	Ø	✕	✓	L	No indication that the accessibility to the area's heritage would increase or decrease without intervention
4	...improve community safety, reduce crime and the fear of crime?	?	✕	✓	L	Likely continuation of existing fluctuating trends
5	...promote and support the development and growth of social capital?	+	✓	✓	M	General strengthening of town centre could be expected to provide further opportunities for development of community facilities and sense of community

Sustainability Objective Does the option....?		Implications	Direct / Indirect	Permanent / Temporary	Significance	Commentary
6	...increase biodiversity levels?	Ø	✖	✓	L	Unlikely to directly impact on general decline of biodiversity in the town but unlikely to lead to direct impact on features of biodiversity interest
7	...protect and enhance the rich diversity of the natural, cultural and built environmental and archaeological assets of the Growth Zone?	Ø	✖	✓	L	As for comments on biodiversity
8	...manage prudently the natural resources of the Growth Zone include water, air quality, soils and minerals?	-	✓	✓	H	General reduction in natural resources can be expected for growth of town unless mitigation is put into place
9	...minimise waste and increase the re-use and recycling of waste materials?	?	✖	✓	L	Unknown effect with current strategies in place
10	...minimise energy usage and develop the region's renewable energy resource, reducing dependency on non-renewable sources?	?	✖	✓	L	An increase in the use of renewable energy could be expected but unknown effect of growth in the light of previous trends. Strategies for developing green economies in Harworth could create impetus for development of resources
11	...make efficient use of the existing transport infrastructure, help reduce the need to travel by car, improve accessibility to jobs and services for all and ensure that all journeys are undertaken by the most sustainable mode available?	+	✓	✓	H	Improvements to permeability promoted as part of option which could be expected to lead to a reduction in the need to travel by car
12	...create high quality employment opportunities?	++	✓	✓	H	New employment space for a range of end users promoted as part of option
13	...develop a strong culture of enterprise and innovation?	+	✓	✓	H	Improvement to schools promoted as part of option. Growth in employment opportunities could be expected to lead to an increase in enterprise.
14	...provide the physical conditions for a modern economic structure, including infrastructure to support the use of new technologies	+	✓	✓	H	New employment space for a range of end users promoted as part of option. Strategies for promoting a step change in growth to generate opportunities for new technologies.

Sustainability Objective Does the option....?		Implications	Direct / Indirect	Permanent / Temporary	Significance	Commentary
OPTION 2 - comprehensive mixed use redevelopment with a cohesive town centre						
1	...ensure that the housing stock meets the Growth Zone's housing needs?	++	✓	✓	H	Additional homes will assist BDC in both meeting its housing targets and providing for additional growth to address housing needs
2	...improve health and reduce health inequalities?	?	✗	✓	L	Unknown effect of additional growth on health of residents but it could be expected to improve following both general trends and strategies for improvement of health of existing and new residents
3	...provide better opportunities for people to value and enjoy the area's heritage?	+	✗	✓	L	No indication that the accessibility to the area's heritage would increase or decrease without intervention; however cohesive town centre could be expected to give rise to opportunities for enjoyment
4	...improve community safety, reduce crime and the fear of crime?	?	✗	✓	L	Likely continuation of existing fluctuating trends
5	...promote and support the development and growth of social capital?	++	✓	✓	M	Development of a cohesive town centre could be expected to give rise to significant growth in social capital and a focus for ensuring the continuation of the current strong sense of community
6	...increase biodiversity levels?	∅	✗	✓	L	Unlikely to directly impact on general decline of biodiversity in the town but unlikely to lead to direct impact on features of biodiversity interest
7	...protect and enhance the rich diversity of the natural, cultural and built environmental and archaeological assets of the Growth Zone?	∅	✗	✓	L	As for comments on biodiversity
8	...manage prudently the natural resources of the Growth Zone include water, air quality, soils and minerals?	-	✓	✓	H	General reduction in natural resources can be expected for growth of town unless mitigation is put into place
9	...minimise waste and increase the re-use and recycling of waste materials?	?	✗	✓	L	Unknown effect with current strategies in place

Sustainability Objective Does the option....?		Implications	Direct / Indirect	Permanent / Temporary	Significance	Commentary
10	...minimise energy usage and develop the region's renewable energy resource, reducing dependency on non-renewable sources?	?	✗	✓	L	An increase in the use of renewable energy could be expected but unknown effect of growth in the light of previous trends. Strategies for developing green economies in Harworth could create impetus for development of resources
11	...make efficient use of the existing transport infrastructure, help reduce the need to travel by car, improve accessibility to jobs and services for all and ensure that all journeys are undertaken by the most sustainable mode available?	+	✓	✓	H	Improvements to permeability promoted as part of option which could be expected to lead to a reduction in the need to travel by car
12	...create high quality employment opportunities?	++	✓	✓	H	New employment space for a range of end users promoted as part of option
13	...develop a strong culture of enterprise and innovation?	+	✓	✓	H	Improvement to schools promoted as part of option. Growth in employment opportunities could be expected to lead to an increase in enterprise.
14	...provide the physical conditions for a modern economic structure, including infrastructure to support the use of new technologies	+	✓	✓	H	New employment space for a range of end users promoted as part of option. Strategies for promoting a step change in growth to generate opportunities for new technologies.
OPTION 3 - residential development of colliery with further residential/employment growth to the south						
1	...ensure that the housing stock meets the Growth Zone's housing needs?	++	✓	✓	H	Additional homes will assist BDC in both meeting its housing targets and providing for additional growth to address housing needs
2	...improve health and reduce health inequalities?	?	✗	✓	L	Unknown effect of additional growth on health of residents but it could be expected to improve following both general trends and strategies for improvement of health of existing and new residents
3	...provide better opportunities for people to value and enjoy the area's heritage?	+	✗	✓	L	No indication that the accessibility to the area's heritage would increase or decrease without intervention; however cohesive town centre could be expected to give rise to

Sustainability Objective Does the option....?		Implications	Direct / Indirect	Permanent / Temporary	Significance	Commentary
						opportunities for enjoyment
4	...improve community safety, reduce crime and the fear of crime?	?	✗	✓	L	Likely continuation of existing fluctuating trends
5	...promote and support the development and growth of social capital?	+	✓	✓	M	General strengthening of town centre could be expected to provide further opportunities for development of community facilities and sense of community
6	...increase biodiversity levels?	∅	✗	✓	L	Unlikely to directly impact on general decline of biodiversity in the town but unlikely to lead to direct impact on features of biodiversity interest
7	...protect and enhance the rich diversity of the natural, cultural and built environmental and archaeological assets of the Growth Zone?	∅	✗	✓	L	As for comments on biodiversity
8	...manage prudently the natural resources of the Growth Zone include water, air quality, soils and minerals?	-	✓	✓	H	General reduction in natural resources can be expected for growth of town unless mitigation is put into place
9	...minimise waste and increase the re-use and recycling of waste materials?	?	✗	✓	L	Unknown effect with current strategies in place
10	...minimise energy usage and develop the region's renewable energy resource, reducing dependency on non-renewable sources?	?	✗	✓	L	An increase in the use of renewable energy could be expected but unknown effect of growth in the light of previous trends. Strategies for developing green economies in Harworth could create impetus for development of resources
11	...make efficient use of the existing transport infrastructure, help reduce the need to travel by car, improve accessibility to jobs and services for all and ensure that all journeys are undertaken by the most sustainable mode available?	∅	✓	✓	H	Improvements to permeability promoted as part of option which could be expected to lead to a reduction in the need to travel by car however employment located to the south of the town further from the existing core
12	...create high quality employment opportunities?	++	✓	✓	H	New employment space for a range of end users promoted as part of option
13	...develop a strong culture of enterprise and	+	✓	✓	H	Improvement to schools promoted as part of

Sustainability Objective Does the option....?		Implications	Direct / Indirect	Permanent / Temporary	Significance	Commentary
	innovation?					option. Growth in employment opportunities could be expected to lead to an increase in enterprise.
14	...provide the physical conditions for a modern economic structure, including infrastructure to support the use of new technologies	+	✓	✓	H	New employment space for a range of end users promoted as part of option. Strategies for promoting a step change in growth to generate opportunities for new technologies.
OPTION 4 - southern extension of Harworth Bircotes for residential/employment uses						
1	...ensure that the housing stock meets the Growth Zone's housing needs?	++	✓	✓	H	Additional homes will assist BDC in both meeting its housing targets and providing for additional growth to address housing needs
2	...improve health and reduce health inequalities?	?	✗	✓	L	Unknown effect of additional growth on health of residents but it could be expected to improve following both general trends and strategies for improvement of health of existing and new residents
3	...provide better opportunities for people to value and enjoy the area's heritage?	∅	✗	✓	L	No indication that the accessibility to the area's heritage would increase or decrease without intervention
4	...improve community safety, reduce crime and the fear of crime?	?	✗	✓	L	Likely continuation of existing fluctuating trends
5	...promote and support the development and growth of social capital?	+	✓	✓	M	General strengthening of town centre could be expected to provide further opportunities for development of community facilities and sense of community
6	...increase biodiversity levels?	+	✗	✓	L	Unlikely to directly impact on general decline of biodiversity in the town but unlikely to lead to direct impact on features of biodiversity interest
7	...protect and enhance the rich diversity of the natural, cultural and built environmental and archaeological assets of the Growth Zone?	∅	✗	✓	L	As for comments on biodiversity
8	...manage prudently the natural resources of	-	✓	✓	H	General reduction in natural resources can be

Sustainability Objective Does the option....?		Implications	Direct / Indirect	Permanent / Temporary	Significance	Commentary
	the Growth Zone include water, air quality, soils and minerals?					expected for growth of town unless mitigation is put into place
9	...minimise waste and increase the re-use and recycling of waste materials?	?	✖	✓	L	Unknown effect with current strategies in place
10	...minimise energy usage and develop the region's renewable energy resource, reducing dependency on non-renewable sources?	?	✖	✓	L	An increase in the use of renewable energy could be expected but unknown effect of growth in the light of previous trends. Strategies for developing green economies in Harworth could create impetus for development of resources
11	...make efficient use of the existing transport infrastructure, help reduce the need to travel by car, improve accessibility to jobs and services for all and ensure that all journeys are undertaken by the most sustainable mode available?	Ø	✓	✓	H	Improvements to permeability promoted as part of option which could be expected to lead to a reduction in the need to travel by car
12	...create high quality employment opportunities?	++	✓	✓	H	New employment space for a range of end users promoted as part of option
13	...develop a strong culture of enterprise and innovation?	+	✓	✓	H	Improvement to schools promoted as part of option. Growth in employment opportunities could be expected to lead to an increase in enterprise.
14	...provide the physical conditions for a modern economic structure, including infrastructure to support the use of new technologies	+	✓	✓	H	New employment space for a range of end users promoted as part of option. Strategies for promoting a step change in growth to generate opportunities for new technologies.

Table 4 Appraisal of Each Option against Sub-regional Sustainability Objectives

6.0 Issues & Recommendations

- 6.1 The SA has considered the extent to which various options for securing growth in Harworth Bircotes accord with the principles of sustainable development. The analysis identified significant similarities between the likely effects of all of the options provided. This is likely to arise in part due to the base for all the options being the ten objectives for growth identified in Volume 1; which are largely aligned with the sustainability objectives for the East Midlands.
- 6.2 Notwithstanding, there are a series of key issues and recommendations arising from the SA of the four options as follows: -
- i The most fundamental issue addressed by all four of the options is the growth in a range of employment opportunities for the town and associated direct and indirect links including investment and the potential for upskilling of the population.
 - ii It has been assumed that the ability of all of the options to achieve some of the longer term economic growth envisaged is based on successful achievement of the 'step change' of growth outlined in Volume 1.
 - iii It has not been possible to identify the likely effect of the options on some of the features of sustainable development e.g. levels of health, recycling and energy usage as this is to some extent outside of the remit of the Scoping Study. However, it can be assumed that baseline trends for some or all of these features are likely to continue without direct intervention through a clear policy or strategy framework associated with the growth of the town.
 - iv Similarly, the growth of Harworth Bircotes both in the event that the colliery is re-opened for mining operations and if it is not re-opened is likely to lead to a negative effect on the natural resources of the town. This is consistent with the baseline trends identified and without intervention from a policy perspective. A strong policy stance to target renewable energy sources and minimise energy usage could be expected to positively address these effects and should be addressed in the forthcoming Local Development Framework.
 - v It must be assumed that additional housing growth brought forward in the town will address local housing needs and that the Local Development Framework will incorporate policy according with regional guidance which seeks to ensure housing choice for the population.
- 6.3 There are also a number of spatial issues arising from a consideration of the four options that have been generated. However these will be more appropriately addressed as the Local Development Framework for Bassetlaw progresses and site specific issues are under consideration. At this Scoping Study stage, it is recommended that the above issues are taken into account in the Issues and Options Paper and the key indicators identified in Table 1 of

report monitor the effect on each objective as the policy framework for Harworth Bircotes emerges.

Appendix 1 – Baseline Sources

- Bassetlaw District Council Local Development Framework Sustainability Appraisal Scoping Report and Baseline Assessment (October 2005)
- Office for National Statistics (www.statistics.gov.uk)
- Bassetlaw Annual Monitoring Report (December 2008)
- Renewable Energy Statistics Database for the United Kingdom (www.restats.org.uk)
- Bassetlaw Open Space Assessment (2008)
- Home Office Crime Statistics (<http://www.homeoffice.gov.uk/crime-victims/crime-statistics/>)
- East Midlands Public Health Observatory - Health Trends within the East Midlands: 2008
- East Midlands State of the Region Report: 2008
- Environment Agency (www.environment-agency.gov.uk)
- The Idle and Torne Catchment Abstraction Management Strategy - March 2007 (Environment Agency)
- Nottinghamshire Minerals and Waste Development Framework Annual Monitoring Report (1 April 2007 to 31 March 2008)
- Sustainable Communities: Building for the Future (February 2003)
- Housing Green Paper 'Homes for the Future: More Affordable, More Sustainable' (July 2007)
- Second Round Growth Points: Partnerships for Growth (July 2008)
- Planning Policy Statement ('PPS') 1: Delivering Sustainable Development (January 2005)
- Planning and Climate Change - Supplement to PPS1 (December 2007)
- PPS3: Housing (November 2006)
- Draft PPS4: Planning for Prosperous Economies (May 2009)
- PPS6: Planning for Town Centres
- PPS7: Sustainable Development in Rural Areas
- Planning Policy Statement 9: Biodiversity and Geological Conservation
- Planning Policy Statement 10: Planning for Sustainable Waste Management
- Planning Policy Statement 11: Regional Spatial Strategies
- Planning Policy Statement 12: Local Spatial Planning
- Planning Policy Statement 22: Renewable Energy
- Planning Policy Statement 23: Planning and Pollution Control
- Planning Policy Statement 25: Development and Flood Risk
- Planning Policy Statement (PPS) 1: Delivering Sustainable Development
- PPS3: Housing (November 2006)
- PPG4: Industrial, Commercial Development and Small Firms (1992)
- draft PPS4: Planning for Prosperous Economies was published in May 2009
- PPS6: Planning for Town Centres (March 2005)
- PPG13: Transport (1999)
- PPG17: Sport & Recreation (2002)
- PPS22: Renewable Energy (2004)
- MPG3 Coal Mining and Colliery Spoil Disposal (revised March 1999)
- Accessible Natural Green Space (NE)

- ‘Six Acre Standard’ NPFA’s (now known as Fields in Trust) ‘six acre standard’ was originally published in 2001 and has been recently updated by the Fields in Trust’s document “Planning & Design for Outdoor Sport and Play” (2008).
- Museums, Libraries & Archives Council, ‘Public Libraries, Archives and New Development – A Standard Charge Approach’ (2008)
- East Midlands Regional Plan (RSS) (March 2009)
- Northern Sub-Regional Housing Group Strategic Housing Market Assessment (2007)
- East Midlands North Sub-Region Employment Land Review (2008)
- North Nottinghamshire Local Transport Plan 2006-2011 (LTP2)
- Local Plan (October 2001)
- Local Development Framework (LDF)
- Core Strategy Preferred Options (January 2006)
- Bassetlaw Corporate Plan 2007-2010
- Bassetlaw Sustainable Community Strategy 2007-2009
- Bassetlaw District Council Services & Facilities Study (2008)
- Bassetlaw Draft Open Space Study (2008)



Nathaniel Lichfield
and Partners

Planning Design Economics

Nathaniel Lichfield and Partners

14 Regent's Wharf

All Saints Street

London N1 9RL

T: 020 7837 4477

E: london@nlppanning.com

www.nlpplanning.com