BASSINGTHORPE FARM
URBAN EXTENSION

SUSTAINABLE COMMUNITIES ON THE EDGE OF ROTHERHAM URBAN AREA WITH GREEN INFRASTRUCTURE CONNECTING & INTEGRATING THE NEW DEVELOPMENT

CONCEPT FRAMEWORK REPORT

DRAFT 5TH JUNE 2013
# INTRODUCTION

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SECTION 1

INTRODUCTION
THE PROPOSAL

This Concept Framework Report provides an evidence base to support a sustainable urban extension at Bassingthorpe Farm within the Rotherham Core Strategy for around 2,400 new homes (1700 dwellings within the Plan Period up to 2028) and around 11 hectares of employment land together with associated infrastructure requirements. It is the result of collaborative and partnership working between the principal owners; Fitzwilliam (Wentworth) Estates and Rotherham MBC and the local planning authority. It is based on a considerable body of work which has been jointly commissioned by the landowners.

Whilst the framework contains spatial proposals for the site to inform the Core Strategy the plans will be shaped and informed by further technical and design work and numerous stakeholders, including the local community during the next stage of masterplanning work.

The Concept Framework allows for flexibility for subsequent masterplanning to develop ideas and options into more detailed planning and delivery proposals. A site plan is shown at Figure 1.

FIGURE 1: SITE LOCATION PLAN
PURPOSE OF THE CONCEPT FRAMEWORK

The overall objective of this Report is to support the delivery evidence for the Bassingthorpe Farm proposal. The Concept Framework is the first stage in the production of a Masterplan for the defined Study Area and should be seen as a record of progress made to date. The level of information is proportionate to that needed at this stage of the planning process. It seeks to:

- Explain what is intended in the development and the overall vision and development objectives;
- Describe the constraints, mitigation options and impact on residual development capacity;
- Set out the infrastructure requirements to support the development and their anticipated cost;
- Outline the place-making opportunities and identify some high level design principles;
- Provide spatial information on how the land use and infrastructure components could be integrated on site to meet the aims and objectives of the Core Strategy;
- Provide a high level viability assessment to demonstrate the scheme is viable and the approach to supporting delivery.

This Concept Framework Report is intended to provide sufficient evidence to demonstrate that Bassingthorpe Farm is available, suitable and deliverable to support the growth and spatial strategy identified in the emerging Core Strategy.

STATUS OF THE CONCEPT FRAMEWORK

The status of the Concept Framework is an evidence based report to support the broad location for growth policy for Bassingthorpe Farm in the Core Strategy. It should be seen as the first stage of the masterplanning process for the site, clearly setting our parameters and principles that will inform the site allocations within emerging Sites and Policies Document and an illustrative masterplan and planning application for the site. The Concept Framework will provide a body of evidence and brief to support and direct further masterplanning, technical work, design testing and wider consultation.

This is a draft version pending the final completion of the following studies which are largely complete and a public consultation event in June 2013:

- A Heritage Impact Assessment. As part of this process, we are working closely with English Heritage to ensure that the appropriate mitigation measures are assessed to minimise impact of new developments on the historic environment in particular taking into account the Grade I Listed Building at Wentworth Woodhouse and its Registered Parks and Historic Gardens.
- A review of the Green Belt has been independently commissioned by the landowners to examine the potential for a new Green Belt boundary that would exclude the Study Area. Rotherham MBC are reviewing the findings of this assessment so that a joint working approach can be agreed.
- Further viability testing work is being undertaken.

When these studies have been completed and the public consultation undertaken, the Concept Framework will be refreshed to take account of the recommendations and outcomes of this supporting work. It is not envisaged this will fundamentally change the overall thrust of the proposals, but may
require some revisions/additions to the report. Where this is anticipated, this is flagged up in the report.

As the project moves forward through subsequent stages this document will act as a foundation that will be developed through further testing and consultation with stakeholders and the general public.
LAND OWNERSHIP

The Bassingthorpe Broad Location for Growth is being promoted by the two principle landowners of the site: the Fitzwilliam (Wentworth) Estates and Rotherham MBC as a joint venture. Both parties are keen to see the creation of an economically attractive sustainable urban extension to Rotherham and the land in question is therefore available – a key test in terms of whether a development can be delivered. Figure 2 shows the extent and coverage of the two landowners which are: RMBC-56.92 Ha and FWE 154.67 Ha.

There are small pockets of land outside of the control of the two landowners that lie within the Broad Location for Growth area. It is considered that these third party ownerships can be accommodated in the overall development proposals.

FIGURE 2: LAND OWNERSHIP
PARTNERSHIP WORKING

At this stage of the planning process Rotherham MBC is currently the lead partner of the project as the Local Planning Authority (LPA) preparing the Local Plan and co-ordinating the supporting evidence. They are working collaboratively with the majority land owner of the site Fitzwilliam (Wentworth) Estates in agreeing a shared vision, development objectives and concept framework for the site. This partnership working will ensure that the planned development meets wider corporate and local community objectives to create a sustainable urban extension.

The Project Plan has been agreed between the parties to:

- Define Bassingthorpe Farm as a project with short and medium term objectives in the context of longer term delivery
- To secure and focus resources to the project to take forward tasks and achieve required outputs for project delivery
- To integrate multiple activities into a coherent working structure and process
- To establish roles, responsibilities and decision-making structures.

The Project Plan has been used to set out a work programme to support the preparation and agreement of the Concept Framework. It is a ‘living’ document that is monitored and reviewed as tasks are completed and will be updated to direct and co-ordinate tasks and resources for the next stage of masterplanning work. A delivery working group will be a key component of this combining relevant inputs, views and advice from the landowners, Council, consultants and ATLAS/HCA in considering and agreeing a delivery strategy/options for the site.

The project management structure for the project supports a strong ‘Development Team’ approach which combines the landowners together with the LPA as part of a joint decision-making body. It also supports a multi-disciplinary and integrated approach. The structure is set out on the next page:
SECTION 1

INTRODUCTION

PROCESS FOR PREPARING

THE CONCEPT FRAMEWORK

The Concept Framework commenced in March 2011 with an initial scoping of project requirements agreeing what the anticipated outcomes should be, what evidence was likely to be required, who should be involved in the project and a process for directing tasks and work. Since this time there has been an ongoing collaborative process supporting the preparation of the Concept Framework.

Key milestones are set out below:

NOVEMBER 2011

ATLAS facilitated an internal Visioning Workshop with the Council to assist the local authority in developing an initial set of development objectives, undertaking site analysis and then translating this information into some spatial mapping to inform the brief for the Concept Framework.

DECEMBER 2011

A joint visioning day was then facilitated by ATLAS. This brought the landowners, consultants and Council representatives together to jointly review the evidence base and agree further work required, map constraints and opportunities for the site and identify some key spatial components to further test. The outcome of the session was a high level concept plan to set the context for further more detailed work.

OCTOBER 2012

After a period of further technical and design work/testing supported by partnership working and an inter-disciplinary approach a final workshop was held. The purpose of this workshop was to collectively review the technical work produced, options for mitigation, impact on development capacity and masterplanning.

The outcome was agreed on key spatial components for the Concept Framework, further work required and what design concepts needed further testing. This provided a clear steer for the preparation of this draft Concept Framework and was supplemented by further transport, green infrastructure and place-making discussions through the working groups.

THE PROFESSIONAL TEAM

Both the Fitzwilliam (Wentworth) Estates and the Asset Management Department at Rotherham MBC have retained a consultancy team to provide sufficient robust evidence at this stage in the process to demonstrate that the Broad Location for Growth at Bassingthorpe Farm can be delivered as part of the spatial objectives within the Rotherham Core Strategy. This team has undertaken extensive preparation, testing and revision of the proposals since being instructed. The proposals have been prepared and tested by:

- Signet Planning (Planning Advisors and Masterplanning)
- DTZ (Development Consultants, Viability Financial Modelling)
- NTP (Highway and Transportation Consultants)
- BE Brooks (Ecologist Advisors)
- Lathams (Heritage Consultants)
- JBA Consultancy (Drainage and Flood Risk)
- WSP (Ground Conditions)
- Smeehen Foreman (Landscape Consultants)
- Wessex Archaeology (Archaeology Consultants)
DEFINITION OF THE STUDY AREA

The Broad Location for Growth at Bassingthorpe Farm is shown indicatively as a blue circle on Map 4 within the Publication Version of the Core Strategy and therefore at an early stage in the project it was agreed by the Project Working Group that a defined area of search (Study Area) should be identified so that there was a consistent approach to the evidence base work being undertaken by the various consultants.
INTRODUCTION

The main reasons for adopting this approach are as follows:

- Both landowners have extensive landholding interests within this area which should be seen as an opportunity so that the assessment work is not ‘straight jacketed’ by fixing development boundaries at an early stage in the process;

- A broad Study Area gives the necessary flexibility to accommodate development opportunities and facilitate not only the necessary infrastructure requirements but also incorporate any mitigation measures which may be identified during the assessment process.

Agreeing the Study Area was a collaborative process between Rotherham MBC and the Fitzwilliam (Wentworth) Estates based on the information available prior to the commissioning of the baseline assessment work. The Study Area has been the main focus for the consultants to examine the technical and environmental issues of the Broad Location for Growth area. However, the extent of the assessment for some of the disciplines has gone well beyond the Study Area such as determining visual impact, understanding the relationship of the Study Area with significant Heritage Assets and assessing connectivity/transportation issues.

Figure 3 identifies the initial Study Area which formed the basis of the baseline assessment work and it extends to approximately 215 Hectares in size. As a result of the most recent workshop session in October 2012, the boundaries of the Study Area have been slightly refined and expanded to address other adjoining key sites and opportunities relating to the potential delivery of important green infrastructure corridors along Fenton Road, transport and place making initiatives.

The precise development boundaries will be identified through the subsequent Sites and Policies Document process together with the realignment of Green Belt boundaries.

DELIVERY EVIDENCE APPROACH

The preparation of the Concept Framework and supporting evidence has been guided by addressing the following six issues to demonstrate that a robust approach has been taken to test the overall soundness of the Policy:

1. Identify clear objectives/aims intended for the overall development.
2. Identify site constraints including those that are fixed and those that need to be overcome;
3. Agree the overall quantum and distribution of uses across the site;
4. Identify the mitigation and infrastructure needs to ensure that the development is viable, attractive and sustainable;
5. Set out the interrelated phasing of all elements (infrastructure and development) and within this context, the sources of funding and timing of delivery;
6. The final stage of this assessment is the identification of the next steps in terms of an implementation route map recognising that the concept framework will need further refinement beyond demonstrating there are no showstoppers.

The issues outlined above have been used as the basis for the structure of this report.
SECTION 2

CONTEXT
STRATEGIC CONTEXT

In terms of its strategic context, the site is in a sustainable location close to the heart of Rotherham, within 800m of the town centre and within a short distance of some of the key destinations and commercial centres such as Parkgate Retail World and Parkgate Business Centre to the north east and Meadowhall and the Don Valley Corridor to the south west.

Rotherham is well connected to the strategic transport network via the M1 and M18 which run along its southern and eastern edges, in addition to the bus interchange and railway station which offers regional services to neighbouring towns and cities, both of which are within 10-15 minutes’ walk of the edge of the Study Area.

In addition Rotherham is also due to benefit significantly from two recently announced infrastructure projects through the “Tram Train” which is an extension of the Sheffield Supertram along existing railway line which will feed directly to Rotherham Railway Station and also the government’s HS2 High Speed Rail Network with a station planned at the Meadowhall Interchange which will dramatically increase the accessibility of Rotherham to key urban centres on a national scale.

Not only is the Study Area well connected to the key urban centres of Rotherham and South Yorkshire but it also lies adjacent to a highly valuable area of parkland in the form of the listed Wentworth Park and Gardens which forms a key part Rotherham’s green infrastructure.
FIGURE 4: CONTEXT PLAN

KEY

- HS2
- HS2 STOP
- EXISTING RAILWAY
- TRAM-TRAIN
- MOTORWAY M1-M18
- BUS ROUTES FOR 39/40, 4/42, 227
- PUBLIC RIGHTS OF WAY (ROtherham Roundwalk and Transpennine Trail)
- DESTINATIONS
- STUDY AREA
LOCAL CONTEXT
The areas around the Study Area are predominantly residential with the exception being the industrial edge to the south east and the interface with the countryside to the north. A number of key highways run around the periphery with New Wortley Road to the south comprising a dual carriageway which separates the Study Area from the town centre and Fenton Road and Car Hill (which passes through the Study Area) both serving outlying settlements such as Kimberworth Park, Wingfield and Greasbrough.

The southern end of the Study Area benefits from the close proximity to the Town Centre and the various retail, leisure and employment opportunities on offer. In addition, the Barbot Hall Industrial Area is a vibrant area and a source of employment. The new NHS walk in centre located at the edge of the Town Centre at Greasbrough Road/Drummond Street is also an excellent healthcare facility within 1km of the Study Area.

There are ‘local centres’ in both Kimberworth Park to the west of the Study Area and Greasbrough to the north. Some parts of the Study Area around the east/north east of Greasbrough are within walking distance of the Greasbrough Local Centre and the typical facilities on offer include a Co-op convenience store, Health Centre and a Library.

In terms of education provision, the Wingfield Business and Enterprise College (secondary school/sixth form) adjoins the western edge of the Study Area on the opposite side of Fenton Road and is therefore within a reasonable walking distance. In terms of primary schools, there are two within the vicinity of the Study Area, Thorn Hill Primary School fronts the southern edge of the Study Area at Clough Bank whilst the Greasbrough Primary School is accessible to parts of the Study Area around the north east edge of Greasbrough.

Overall a development of this size would generate requirements for new services and facilities, with figure 30 identifying the area south of Munsborough Lane, Greasbrough as the area with limited access to existing facilities, and given its central location within the Study Area, this represents a good location for new facilities within a service centre.
SECTION 3
VISION & DEVELOPMENT OBJECTIVES
The vision and objectives establish key principles and themes which the project will need to address. These have been agreed through the preparation of the Concept Framework and will become refined through further consultation, as more information becomes available and workable planning solutions are tested.

**VISION**

“To create sustainable communities on the edge of Rotherham Urban Area within a Green Infrastructure that enables connectivity and integration of new development with the existing communities of Greasbrough, Kimberworth Park, Thorn Hill and Masbrough and provides strong and convenient connections to services and facilities in Greasbrough and Rotherham Town Centre. The new communities will be of a high quality design that responds sensitively and positively to the historic and natural landscape, the built form and topography.”

**THEMATIC DEVELOPMENT OBJECTIVES**

<p>| | |</p>
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<tbody>
<tr>
<td>1</td>
<td>To create a strong network of multi-functional and accessible green space connected by two primary green corridors along Clough Streamside and Greasbrough Dyke and a green wedge to the south east.</td>
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<td>2</td>
<td>To mitigate traffic impact of the development and promote sustainable modes of transport and travel planning.</td>
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<td>3</td>
<td>To provide a range of housing types, densities and tenures through different characters area which respond to local site features, landscape and townscape character.</td>
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<td>4</td>
<td>To provide a mix of employment uses across the site to meet market and local needs.</td>
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<td>5</td>
<td>To provide a central community hub of uses within Bassingthorpe Urban Village anchored by a primary school, recreational facilities and neighbourhood retail uses along a new pedestrian friendly high street.</td>
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<td>6</td>
<td>To use the sites natural features (topography and water features) to sustainably manage water (responding to climate change).</td>
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<td>7</td>
<td>To provide a network of pedestrian, cycle and green linkages to connect the site internally and to wider destinations and facilities.</td>
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<td>8</td>
<td>To ensure high quality design and a distinctive character that positively responds to local landscape character, strategic views into and out of the site and townscape context through BFL, Lifetime Homes and SYRDG as a minimum.</td>
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<tr>
<td>9</td>
<td>To provide positive integration of existing communities in new development.</td>
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<tr>
<td>10</td>
<td>To successfully and sensitively integrate existing heritage assets with new development.</td>
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<tr>
<td>11</td>
<td>To develop a strong collaborative and inter-disciplinary team approach.</td>
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</table>
SECTION 4

PLANNING POLICY
NATIONAL PLANNING

POLICY FRAMEWORK (NPPF)

Paragraph 17 sets out the core land use planning principles that should underpin both plan making and decision taking. The key principles that have been influential in terms of progressing this Concept Framework Plan are as follows:

- Recognition that the planning system should be plan led and should be based on a joint working and cooperation to address larger than local issues;
- Planning should not simply be about scrutiny but instead be a creative exercise in finding ways to enhance and improve the places in which people live their lives;
- Proactively drive and support sustainable economic development to deliver homes, business and industrial units, infrastructure and thriving local places that the Country needs;
- Securing high quality design and good standard of amenity, take account of the different roles and character of different areas;
- Support the transition to a low carbon future in a changing climate
- Contribute to conserving and enhancing the natural environment;
- Promote mix use developments and encourage multiple benefits from the use of land in urban and rural areas recognising that some open land can perform many functions;
- Conserve heritage assets in a manner appropriate to their significance;
- Actively manage patterns of growth to make the fullest possible use of public transport, walking, and cycling, and focus significant development in locations which are or can be made sustainable;
- Take account of and support local strategies to improve health, social and cultural wellbeing for all.

LOCAL PLANS ‘POSITIVELY PREPARED’

The NPPF confirms at paragraph 150 that Local Plans are the key to delivering sustainable development that reflects the vision and aspirations of local communities. Local Plans should be aspirational but realistic (Para 154) and importantly, they should:

- Plan positively for development and infrastructure required in the area to meet identified objectives and key principles.
- Indicate broad locations for strategic development on a key diagram and land use designations on a proposals map.
- Allocate sites to promote development and flexible use of land and provide detail on form, scale, access and quantum of development where appropriate;
- Identify land where development would be inappropriate for instance because of its environmental or historic significance;
- Contain a clear strategy for enhancing the natural build and historic environment.

BOOSTING HOUSING SUPPLY

Paragraph 47 of the NPPF begins by stating that local authorities should ‘boost significantly the supply of housing’. They should use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing. Reference is also made to encouraging local authorities to identify key sites which are critical to the delivery of the housing strategy over the Plan Period.

The key principles and advice of relevance within the NPPF have been at the forefront of the overall approach and preparation of the Concept Framework Report.
ADOPTED UNITARY
DEVELOPMENT PLAN 1999

From the Proposals Map of the adopted UDP, the Study Area comprises the following designations:

- **Green Belt** – a significant proportion of the Study Area falls within this designation;
- **Known Interest Outside Protected Sites** – there are two sites within the Study Area that fall within this designation and these are: the historic woodland at Bassingthorpe Spring and along the watercourse at Clough Stream.
- **Urban Greenspace** – the historic woodland at Bassingthorpe Spring also falls within this designation together with the location around Greasbrough;
- **Housing Allocation H9** – this site lies to the south of Greasbrough with access off Munsbrough Lane.

The extended area of search comprises:

- **Housing Allocation H8** known as Bradgate Quarry – this site has a resolution to grant planning permission in outline form subject to the signing of a Section 106 Agreement.

- **Urban Greenspace** – This relates to the Fenton Road Corridor.

- The parcel of land at Thorn Hill has the following designations:
  - **Community Facilities** for Civic Buildings and education together with
  - **Leisure Development Site** immediately fronting the A630 Roundabout.
  - A proportion of this parcel of land is also designated as Urban Greenspace.
EMERGING CORE STRATEGY

The Publication Version of the Core Strategy was released for consultation in June 2012 and the overall vision identified for Rotherham is to promote economic growth, achieve sustainable development and create sustainable communities. The Core Strategy proposes the largest proportion of growth will be focused in the Rotherham Urban Area (38% of the overall housing provision or approximately 5,450 dwellings) and Bassinghamorpe Farm has been identified as a key priority to deliver growth in the heart of Rotherham.

The relevant strategic objectives set out in the Core Strategy for delivering development in sustainable locations such as Bassinghamorpe Farm have underpinned the rationale behind the Concept Framework Plan. These are as follows:

OBJECTIVE 1: SCALE OF FUTURE GROWTH
Provision of new homes and employment opportunities and a choice of development sites to meet the Borough’s projected needs.

OBJECTIVE 2: GREEN BELT
Whilst safeguarding the wider aims of Green Belt, it is acknowledged that a review is being undertaken in parallel to inform the phased release of limited areas of Green Belt land in the most sustainable locations for growth to meet the future needs.

OBJECTIVE 3: SUSTAINABLE LOCATIONS
By the end of the plan period the majority of new development will have been located in sustainable urban locations close to transport interchanges and within transport corridors.

OBJECTIVE 4: PROVISION OF HOUSING
By the end of the Plan Period new housing will have improved choice of type, tenure and affordability.

OBJECTIVE 6: PROVISION OF EMPLOYMENT
By the end of the Plan Period the Borough’s economy will be more modern, diverse and enterprising, and the policies will help provide a wide range of accessible job opportunities in the Borough.

OBJECTIVE 7: LOCAL TRANSPORT CONNECTIONS
By the end of the Plan Period the proportion of trips made by walking and cycling will have increased there is also encouragement towards development of live/work housing and mix use schemes in appropriate locations.

OBJECTIVE 8,9,10,11 & 12: MANAGING THE NATURAL & HISTORIC ENVIRONMENT
Over the Plan Period the policies will help promote and enhance the following: distinctive historic features and landscape character; the nature of green infrastructure; sites of biodiversity and geodiversity; and the Borough’s water environment and contribution to the wider integrated management of water catchments. There is also recognition of the plans policies to secure an increased proportion of energy generation through renewable and low carbon means as well as the use of sustainable construction techniques.

OBJECTIVES 15 & 16: CREATING SAFE & SUSTAINABLE COMMUNITIES
These objectives seek to contribute to enhancing distinctive townscape and character of heritage features within communities.

OBJECTIVE 17: INFRASTRUCTURE DELIVERY
By the end of the Plan Period the necessary utility infrastructure to support new development will have been provided in appropriate locations.
Local Community Services will have been provided or existing services enhanced in keeping with the scale of planned new development in each community.

The Rotherham Core Strategy identifies two Broad Locations for Growth and these are at Bassingthorpe Farm and Dinnington East in Policy CS1. By identifying Bassingthorpe Farm as a ‘Broad Location for Growth’ rather than as a ‘Strategic Allocation’, Policy CS6 anticipates it will not come forward in the first five years unless it is required to meet the five year housing land supply deficiency. The Core Strategy anticipates that 1,700 dwellings would be built on the site in the plan period with the remaining 700 dwellings delivered in the next plan period.

The Core Strategy identifies Rotherham as the prime focus for new development and the release of land at Bassingthorpe Farm (which lies within Rotherham Urban area) would direct growth to appropriate communities to meet the overall strategy for the Borough which has emerged through the Core Strategy.

The Bassingthorpe Farm site is well located in relation to the town centre and sustainable transport opportunities. Its development will support the delivery and maintenance of services and facilities within the wider Rotherham Urban Area and provide new homes of good quality, type, size and tenure meeting the needs of new residents. People living in Bassingthorpe will be close to the inner urban area and will support existing community and social infrastructure and enable the provision of new social infrastructure. It will assist in tackling deprivation in Rotherham Urban Area and it will be of considerable benefit to achieving the spatial objectives outlined in the Core Strategy.

Policies CS2 requires a detailed masterplan to bring forward the broad location for growth areas and this Concept Framework Plan provides a first stage in this process to understand the key constraints and issues to be resolved and the mitigation measures required to enable development to be delivered.

**GREEN BELT REVIEW & SITES & POLICIES DOCUMENT**

At this stage the Study Area represents the broad area of search but as more technical work is completed the impact of site constraints on development capacity, phasing and location will become clearer. Subject to timing and other issues associated with delivery and programming it is intended that a detailed Green Belt review to determine specific boundaries of future development sites would take place in coordination with the emerging Sites and Policies Document. This Document will follow on from the anticipated adoption of the Core Strategy to create a Rotherham Local Plan.
SECTION 5

STUDY AREA ANALYSIS
SECTION 5

STUDY AREA ANALYSIS

THE STUDY AREA
The Study Area extends to approximately 215 hectares and it is effectively a wedge of land lying between 850m and 2.5km kilometres north west of Rotherham Town Centre.

SITE DESCRIPTION
The site is characterised predominantly by arable fields enclosed by hedgerows which vary in maturity/size. A key feature of these fields is their sloping topography. Whilst the southern portion of the Study Area slopes down broadly from Henley Rise and Bassingthorpe Lane into the valley where a small watercourse flows, known as Clough Stream. The basin in which Clough Stream flows is characterised by significant clusters of trees and shrubs, a public footpath runs parallel to it, which then skirts an area of ancient woodland known as Bassingthorpe Spring at the south east edge of Greasbrough.

The name of the Study Area is derived from the Grade II listed farm building on the site known as Bassingthorpe Farm, which lies broadly half way between Rotherham Urban Area and Greasbrough along a narrow lane known as Bassingthorpe Lane/Gin House Lane. A small, disused, recreation ground is also located along Bassingthorpe Lane, south of the farm buildings and is enclosed by mature trees which have the potential to screen views and break up the development from views out of the town centre.

VIEW 1: View across the Study Area, north east towards Barbot Hall (centre)

VIEW 2: View of south west edge of the Study Area, Henley Rise

VIEW 3: View from Fenton Road with the Study Area to the right
SITE DESCRIPTION (CONTINUED)

To the west of this road there is a small recycle centre (with the former landfill site and fields beyond). To the east of this route, set back from the road is Barbot Hall, a Grade II Listed Building which is visible from both ends of the Study Area as it sits on the crest of a hill before the topography slopes downhill in a north-easterly direction towards the valley basin of Greasbrough Dyke at the northerly extent of the Study Area which wraps around the north eastern edges of Greasbrough. Whilst Barbot Hall the building is located in a highly visible location within the Study Area it is well screened by protected mature trees.

Adjacent to the curtilage of Barbot Hall is a small complex of converted farm buildings known as Barbot Farm (another Grade II Listed Building) and
SITE DESCRIPTION (CONTINUED)

new residential properties. This complex is sited on the sloping topography immediately to the east of Car Hill. Opposite these buildings is a T-junction with Barbot Hall Road which becomes Munsbrough Rise and leads down to the local centre in Greasbrough.

The northern half of the site comprises of arable fields which slope down relatively steeply towards Greasbrough Dyke. Scrooby Lane dissects the fields at the bottom of the slope; this is a minor, one way road and cycle route between Greasbrough and Rotherham. At the eastern end of Scrooby Lane an overground pipe runs parallel to it.

The remainder of the Study Area, along the northern edge is relatively flat as it constitutes the Greasbrough Dyke basin; again this watercourse is

**VIEW 7:** View of the slope from Car Hill down to Scrooby Lane

**VIEW 8:** View from Car Hill looking west across the fields and landfill site

**VIEW 9:** View from Barbot Hill of the Barbot Farm Complex and slope down to Greasbrough Dyke

**VIEW 10:** View from Cinder Bridge Road looking south back upslope towards Car Hill and Barbot Hall (surrounding by trees)
SITE DESCRIPTION (CONTINUED)
surrounding by trees and shrubs and is divided into a series of fields, with some wetland/marshy areas close to the watercourse and an allotment site adjacent to Greasbrough Park and behind properties served by Scrooby Lane. This area of land is significant as it is considered to be one of the approaches to the Listed Wentworth Park & Gardens from Rotherham.

VIEW 11: View from Cinder Bridge Road of the Greasbrough Dyke Basin

VIEW 12: View of Greasbrough Dyke on the northern portion of the Study Area

PLAN OF VIEWPOINTS
ILLUSTRATIVE SECTIONS

The illustrative sections below summarise the general topography of the Study Area and clearly show the undulating character throughout the site.
RELATIONSHIP TO SURROUNDINGS

A significant proportion of the existing built fabric which surrounds the Study Area turns its back to it, creating a number of impermeable edges to the site and limiting the number of frontages and opportunities for integration.

All the residential edges to the Study Area, in Thorn Hill, Henley and Greasbrough, with the exception of Munsbrough Rise (south east edge of Greasbrough) have a relatively poor interface with the Study Area given it predominantly meets their rear boundaries. The Barbot Hall Industrial Estate on the south eastern edge of the Study Area constitutes both a barrier to movement towards the town centre and a negative edge/view.

The key opportunities to integrate with surrounding communities are: -

- Clough Bank at the southern end of the site, currently an allotment site;
- Henley Way: a new street which has a side orientation to the Study Area;
- Fenton Road to the east of Kimberworth Park and south of Bassingthorpe Spring;
- Munsbrough Lane on the south east edge of Greasbrough.
- Extensions of green space from Greasbrough Park (Rossiter Road/Harold Croft).

The Listed Wentworth Park & Gardens along the northern/western edge has a clear relationship to the Study Area, not just in the immediate approach to the park along Greasbrough Dyke but also in terms of potential views into the Parks and Gardens throughout the Study Area.

The topography of the Study Area is such that there are a number of panoramic views out from the site, particularly from the northern edges of the site from Bassingthorpe Spring across to Barbot Hall and down the slope in a southerly direction.

Various heritage structures are visible such as Rockingham Mausoleum, Hoober Stand and also the spires of churches in the surrounding townscape of Greasbrough and Rawmarsh. In addition the site affords sweeping views looking back over Rotherham Urban Area with structures such as Rotherham Minster clearly visible.
FIGURE 7: BUILT HERITAGE
CHARACTER & VERNACULAR

In terms of the character of the Study Area itself, the topography gives rise to a number of views of built features both within the Study Area and further afield. There are views of Bassingthorpe Farm, Barbot Hall and Barbot Farm (and the adjoining residential complex), all of which are Listed Buildings and represent opportunities for integration for these buildings to contribute to the creation of place.

In addition, the high points in particular provide panoramic views of the surrounding Built Heritage of Rotherham (see Figure 7), including views of Rotherham Minster towards the urban area and also Hooberstand, Rockingham Monument (within Wentworth Park and Gardens, a Listed Park) and the spires of St Mary’s Church, Greasbrough and the Church of St Mary, Rawmarsh. These features provide opportunities to align new streets and open spaces to create vistas and views of existing built features in the surrounding area.

FIGURE 8: NEIGHBOURING COMMUNITIES
EXISTING RESIDENTIAL CHARACTER AREAS

Turning to the residential element which surrounds the Study Area broadly speaking these are from the south west corner (Thorn Hill/Henley) around the western edge (Kimberworth) and the northern edge (Greasbrough) before the Study Area meets the open countryside at its very northern extremity.

THORN HILL

The residential area of Thorn Hill adjoins the southern extent of the Study Area with the area around Clough Road comprising a range of house types including detached, semi detached and terrace properties predominantly red/dark brick construction and 2 to 2.5 storeys in height.

The area is characterised also by parallel street parking as the majority of the housing was built before the growth in car ownership and there are a number of attractive villa style properties in this area.

The density is relatively low averaging 15 dwellings per hectare due to the generous garden depths. A similar built structure with gardens that a modern house building standards/sizes would deliver, would produce a significantly higher density.
HENLEY

The area of Henley is the most compact of the adjoining residential communities with predominantly terraced properties reflecting a density of 61 dwellings per hectare. The area is relatively standard, monolithic and uninspiring especially the new build elements along Henley Rise. The exception to this is a new street, Henley Way, which is a contemporary terraced street with a shared surface/homezone style which stands in sharp contrast to adjoining street. This street has been the subject of Building For Life silver award and is identified as a potential design precedent for adjoining land within the Study Area with the potential to deliver a contemporary looking development.

KIMBERWORTH

Kimberworth lies further west of the Study Area and doesn’t directly adjoin it. The key relationship with this area is along Fenton Road, although the housing is orientated to turn its back on the road as historically this route was earmarked to be a dual carriageway. This has created a very poor and lifeless frontage to Fenton Road and this edge of the Study Area overall has a suburban and standardised feel with typical densities of around 30 dwellings per hectare and two storey building heights.
GREASBROUGH EAST

The southernmost portion of Greasbrough east of Bassingthorpe Spring is typically suburban in character with a density of 26 dwellings per hectare. Dwellings are typically semi-detached and detached properties, (including bungalows) with the appearance of these buildings not displaying features unique to the area and overall are considered to have a neutral value in terms of the overall character of the area.

GREASBROUGH SOUTH

The eastern edge of Greasbrough differs from the southernmost portion, given the change in topography as these neighbourhoods of post-war semi-detached housing were built on the downward slopes towards Scrooby Lane. The housing has a very uniformed character consisting of red/dark brick and some render. One of the features of the area are long rear gardens. The density of this area is 28 dwellings per hectare. However, if modern day garden plots were allied with the current building layout the density would be significantly more compact.
GREASBROUGH CONSERVATION AREA

Whilst the northernmost portion of the Study Area does not directly adjoin the Greasbrough Conservation Area, this area does have a different character given its location in between the countryside and the historic core of Greasbrough.

The edge of the Conservation Area (Rossiter Road) which fronts an area of open space (and play area) is considered to be an important edge as its high quality frontage comprising attractive stone row/terraces and villas can be extended into the Study Area at this northerly edge along with a swathe of green space.

INDUSTRIAL APPEARANCE

The character of the surrounding area includes both buildings with a residential and commercial/industrial character. The Barbot Hall Industrial Estate and Vitrex site form this south edge of the site and in terms of their appearance comprise large sheds with blank elevations and other structures associated with industrial activity and ultimately this creates a low quality and negative edge.
SECTION 6

BASELINE ANALYSIS

SUMMARY
TECHNICAL REPORTS

As part of the Local Plan process, the NPPF at Paragraph 158 acknowledges that Policies and Proposals should be based on adequate, up to date and relevant evidence about the economic, social and environmental characteristics and prospects of the area.

It advises that Local Authorities should ensure that their assessment of and strategies for housing, employment and other uses as part of their plan led approach are integrated and that they take full account of relevant market and economic signals.

TECHNICAL REPORTS FOR THE CONCEPT FRAMEWORK DOCUMENT

Since the initial workshop in December 2011, the following technical work has been scoped, commissioned and largely completed relating to the Study Area. These studies have informed and shaped the Concept Framework proposals.

This work has informed the understanding of the site constraints, opportunities mitigation required and impact on development capacity and viability.

The main purpose of this technical work is to demonstrate that there are no show stoppers to the site’s development, constraints can be mitigated, sufficient development capacity exists to accommodate the spatial proposals and the scheme is broadly viable and deliverable.

<table>
<thead>
<tr>
<th>Technical Reports</th>
<th>Draft Completed (Date)</th>
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<tr>
<td>Geo-Environmental Assessment prepared by WSP</td>
<td>20 Aug 2012</td>
</tr>
<tr>
<td>An initial Landscape and Visual Impact Appraisal prepared by Smeeden Foreman (Issue 3)</td>
<td>8 April 2013</td>
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<tr>
<td>An Ecological Appraisal Rev A prepared by BE Brooks Ecological</td>
<td>15 Feb 2013</td>
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<tr>
<td>An Accessibility Strategy prepared by Northern Transport Planning (Version 2)</td>
<td>May 2013</td>
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<td>Transport Modelling Assessment prepared by MVA Consultancy &amp; Northern Transport Planning</td>
<td>16 April 2013</td>
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<tr>
<td>An Urban Design Analysis prepared by Signet Planning</td>
<td>Dec 2012</td>
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<tr>
<td>Heritage Impact Assessment prepared by Lathams</td>
<td>To be completed</td>
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<td>A Ground Constraints Assessment prepared by WSP</td>
<td>19 Jan 2013</td>
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<td>Density and Capacity Framework (Rev A) prepared by Signet Planning</td>
<td>25 Jan 2013</td>
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<td>Greenspace/Openspace Assessment prepared by Signet Planning</td>
<td>27 March 2013</td>
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<td>Green Belt Assessment prepared by Smeeden Foreman</td>
<td>To be reviewed by RMBC</td>
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<tr>
<td>Archaeological Scoping Study prepared by Wessex Archaeology</td>
<td>28 March 2013</td>
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<tr>
<td>Viability Assessment (Stage 3) prepared by DTZ</td>
<td>12 April 2013 (Being reviewed)</td>
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UNDERSTANDING & ASSESSMENT OF TECHNICAL CONSTRAINTS AND OPPORTUNITIES

This section sets out the built and natural characteristics/assets of the site, the scale and nature of the site constraints, opportunities to create a sustainable well-designed place and mitigation options.

FIGURE 9: SITE TOPOGRAPHY
**STRENGTHS**

- There is very little separation between the surrounding settlements that were once individual villages and have now significantly expanded to form part of the wider area of Rotherham.
- Large settlements outside the Study Area already appear as skyline features on high ground/ridge.
- Major infrastructure characters and urbanises the landscape as a result of electricity pylons which traverse the site, a telephone mast and large scale industrial buildings.
- The strength and sensitivity of the landscape character is reduced as a result of the complex mix of built up areas, industrial land, infrastructure and farm land. This complexity enables change to local landscape character to be accommodated more easily into the wider fabric.
- The historic urban development on the surrounding area has introduced detractors into the site and therefore the sensitivity is considered to be "medium".
- The character of Greasbrough and Rotherham Conservation Areas would not be affected by the development of the Study Area.
- Within the north-west the ground falls away across Greasbrough to the north which is likely to quickly limit views across the settlement beyond those properties immediately adjacent to the Study Area.
- There are no Scheduled Ancient Monuments in the wider Study Area that would be impacted by development within the Study Area.

**WEAKNESSES**

- The site is currently designated as Green Belt.
- The Study Area is elevated to the west which enables potential views from the direction of Rotherham.
- To the north, a ridge rises beyond Greasbrough Dyke to potentially provide elevated views into the Study Area from the north.
- Recognise that a more detailed Heritage Impact Assessment is required and work is on-going to complete the HIA that will propose appropriate mitigation to minimise/remove the impact of new development on the historic environment.
- In the wider Study Area the parkland of Wentworth Woodhouse is punctuated by a series of landmark structures and follies.

**OPPORTUNITIES**

- The significant size of the Study Area has the opportunity of contributing to the creation of strategic green infrastructure corridors.
- Two key existing water courses (Clough Stream and Greasbrough Dyke) will be retained and enhanced as part of the development to form a key part of the green infrastructure provision.
- Opportunity to conserve and enhance the factors that presently contribute to the landscape character condition such as retaining existing trees and existing field patterns.
- Woodland planting could be incorporated into the design in line with the South Yorkshire forest.
- Large portions of the Study Area are not currently accessible by definitive rights of way due to most of the site comprising arable fields. There is an opportunity to significantly improve this element.
- Churches, landmark structures and follies are key elements in the scenery and should be celebrated by giving close consideration to the interface between the proposal and these structures.
- The undulating topography has the opportunity to create local distinctive character areas. This is likely to impact on the built form and alignment of the development in relation to site contours and views into and out of the Study Area to and from the wider landscape.

**THREATS**

- The Study Area is designated within the Wentworth Estate Character Area Fringe Sub-area (1b). The baseline assessment defines it as a "moderate" strength of character and in "moderate" condition equating to a rating of "improve and conserve".
- Consideration of the impact on the designation of "Area of High Landscape Value" will need to be considered in the context of the heritage assessment.
- The local topography of the Study Area could be changed if the site was fully exploited for removing coal deposits and then subsequently re-engineered to provide suitable building platforms.
- Several listed buildings could be affected by development of the Study Area and careful consideration needs to be given to integrate these sites into the wider design to the interface between these buildings and new development and to the function they may in the future perform in terms of place making and local distinctiveness.
- TPO trees at Barbot Hall and the Ancient Woodland in the western portion of the site should be protected and buffer from development.
FIGURE 10: OVERALL LANDSCAPE SENSITIVITY

Key
- Site boundary
- Water course
- Significant Vegetation
- Minor Landscape Sensitivity (Located within green belt but of poor character with deteriorating elements)
- Moderate Landscape Sensitivity (Located within green belt but not subject to a specific landscape designation and/or of moderate character)
- Major Landscape Sensitivity (Generally subject to a specific landscape designation e.g. TPO, Registered Park & Garden, Listed Building, PDCPs, Recreation Area and/or of strong character)
The sensitive areas of landscape value are the watercourse corridors of Clough Stream and Greasbrough Dyke, the ancient woodland at Bassingthorpe Springs, the setting of several listed buildings located within and on the edge of the Study Area and the high ground position to the south of Munsbrough Road. The major adverse impacts seem to be experienced at close proximity to the development. To address the major and moderate adverse impacts the landscape assessment recommends various mitigation measures and these include landscape buffers, integration of green infrastructure and the provision of good quality urban design and the careful and considered orientation of buildings.
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GREEN BELT ASSESSMENT

Smeedon Foreman have prepared a Green Belt assessment report to test the sensitivity of the Study Area against the five purposes of Green Belt as well as examine the potential for a new Green Belt boundary.

POLICY CONTEXT

The NPPF at Paragraph 80 identifies the five purposes of Green Belt and these are:

- To check unrestricted sprawl of large built up areas.
- To prevent neighbouring towns merging into one another.
- To assist in safeguarding the Countryside from encroachment.
- To preserve the setting and special character of historic towns; and
- To assist in urban regeneration by encouraging the recycling of derelict and other urban land.

Objective 2 of the emerging Core Strategy confirms that a borough wide review will inform the phased release of limited areas of Green Belt land in the most sustainable locations for growth to meet future needs.

Policy CS4 confirms that the Broad Location for Growth at Bassingthorpe Farm will be removed from Green Belt but the detailed boundary will be defined in the Sites and Policies Document.

When assessing the purposes of Green Belt, it should be acknowledged that the Bassingthorpe Farm Study Area is located within the Rotherham Urban Spatial Planning Zone within the Core Strategy that also includes Greasbrough and Rawmarsh.

To assess the Green Belt position, the following key documents have been reviewed:

- Rotherham Strategic Green Belt Review – April 2012
- Rotherham Landscape Character Assessment and Landscape Capacity Study prepared by The Landscape Partnership – January 2010
- Study Work relating to the preparation of the Concept Framework for Bassingthorpe Farm including the
  - Landscape and Visual Appraisal.
  - Heritage Impact Assessment
  - Green Infrastructure proposals.

Each relevant parcel of land as identified within the Rotherham Green Belt Review relating to the Bassingthorpe Farm Study Area and immediately beyond have been analysed against the review of the other studies referred to above and the assessment gives consideration as to whether these parcels should remain in Green Belt in order to formulate a revised position. The parcels for analysis are categorised on the following plan.

PARCEL 41
LAND SOUTH OF CAR HILL, GREASBROUGH & NORTH OF HENLEY RISE, THORN HILL

The strategic Green Belt review records the impact on purposes 1 and 3 as slight/negligible. The impact on purposes 2 and 4 is recorded also as slight/ negligible. This parcel contains areas ranging from minor to major visual sensitivity with a moderate sensitive landscape setting. The assessment recommends that this parcel of land can be removed from Green Belt to allow potential future development.

Proposed Mitigation - Layout/Density of any development would be the key to mitigate areas acknowledged as major landscape sensitivity as well as introduce a strong green infrastructure link.
FIGURE 12: GREEN BELT ANALYSIS
PARCEL 40
LAND EAST OF CAR HILL, GREASBROUGH
The strategic Green Belt review records the impact on purposes 1 and 3 as major. However, there is a strong inter-relationship with Parcel 41 and if this was released from Green Belt for development as recommended, this would create a ‘well contained’ character which would reduce the impact. In so far as purposes 2 and 4 is concerned, the strategic Green Belt review records this impact as slight/negligible. In landscape terms, the sensitivity varies across the site ranging from the setting of listed buildings to pylon corridors and a former landfill tip. The assessment recommends removal of the land from Green Belt.

Proposed Mitigation - It is recommended that those areas identified as major landscape sensitivity should form key parts of the green infrastructure for the site.

PARCEL 38
LAND BETWEEN SCROOBY LANE & CINDER BRIDGE ROAD, GREASBROUGH
The strategic Green Belt review records purposes 1 and 3 as having a major impact. However this assumes the parcel is developed in isolation and this would no longer be the case if parcels 40 and 39 were developed. As such, the impact would be reduced. The strategic review confirms that the Green Belt gap that separates Rotherham Urban Area with Swinton would not be prejudiced and therefore purposes 2 and 4 is recorded as slight/negligible.

The parcel has been assessed as having moderate landscape sensitivity. It is acknowledged that this parcel would form the northern boundary to the Bassingthorpe Farm Study Area and so form an interface between the proposal site and the wider countryside. It is acknowledged that the boundary of the Registered Park and Garden is well wooded and provides good visual separation from the wider area.

The recommendation is that this parcel of land is removed from Green Belt and the stream corridor could not only provide a strong green infrastructure feature but also has the potential to provide a strong physical feature to form the new Green Belt boundary.

PARCEL 39
LAND SOUTH OF GREASGROUGH ROAD
The strategic Green Belt review records this parcel of land as not being well contained with ‘low urban influence’ and therefore the impact on purposes 1 and 3 is recorded as major. However, rather than the assessment being conducted in isolation weight should be given to the interlinkage with parcels 40 and 38 that have been identified within the Broad Location Growth Study Area. On this basis, the impact would be reduced.

Due to the wide gap between Rotherham Urban Area and Swinton, the Green Belt Assessment concludes that Parcel 39 would not erode the gap and therefore the impact on purposes 2 and 4 has been recorded as slight/negligible.

From the landscape assessment, a ridge within the parcel has the potential to form the location of an element of green infrastructure particularly in relation to potential visual separation from the proposed industrial uses (EMP1) from the proposed residential. The assessment recommends that this parcel of land can be removed from Green Belt to allow potential future development.

ADJOINING PARCELS
Of the other parcels of land in the vicinity of the Study Area, there is recognition that Parcels 32, 35, 36 and 33 are retained within Green Belt. However, Parcels 34 – Land to the south west of
Rawmarsh Urban Area and Parcels 37 - Land between Greasbrough Road and Greasbrough Lane to the west of Park Gate have moderate to negligible Green Belt purposes as well as landscape and visual sensitivity. It therefore recommends that these parcels can be removed from Green Belt to allow potential future development and provide an area of ‘safe guarded land’.

Green Belt OVERVIEW

The study work has been independently provided by the landowners to assess the removal of the Study Area from Green Belt. This Study has been presented to the Council to support the Council’s detailed review of the Green Belt and this study is currently under consideration by the Rotherham MBC.

Based on the assessment, Figure 12 suggests a revised Green Belt boundary which would exclude the Study Area of Bassingthorpe Farm.

In considering the overall vision and development objective, significant weight would be given to the principles identified in the Core Strategy which seeks to ensure that where land is removed from Green Belt for built development, there is an opportunity to compensate by enhancing the features and facilities through the creation or improvement of existing green infrastructure.

The proposed green infrastructure provision relating to Bassingthorpe Farm seeks to achieve this objective by providing improved access, opportunities for sport and recreation; retain and enhanced landscapes, promote visual amenity and protect and enhance biodiversity as well as improving damaged and derelict land (see the Green Infrastructure Framework).
HERITAGE ASSESSMENT

Lathams are in the process of completing a Heritage Impact Assessment (HIA) and their detailed report will adopt a four stage approach which comprises:

- Identification of Heritage Assets;
- Assessment of their significance;
- Assessment of impact;
- Assessment of ways in which any harm should be mitigated.

Unlike the other technical studies that have formed the basis to guide this Concept Framework Plan the HIA was commissioned after the draft Concept Plan and Density and Capacity Framework had been produced by Signet Planning in January 2013. This HIA will be used to inform the assumptions in terms of the scale, form and type of development that might occur across the Study Area and in assessing the potential impact on Heritage Assets.

The HIA is being prepared following detailed discussion with English Heritage and within the context of the Visual and Landscape Assessment work prepared by Smeeden Foreman.

The agreed Study Area for the HIA will be significantly larger than the Bassingthorpe Farm Broad Location for growth Study Area. The HIA Study Area reveals a significant number of listed building both within and outside the Wentworth Woodhouse Registered Parkland. There was also 19 scheduled ancient monuments identified together with the Greasbrough Conservation Area.

These Heritage Assets are currently being assessed to establish their overall significance and whether they were likely to be affected by the development within the Bassingthorpe Farm Broad Area of Search Study Area. The following Heritage Assets are likely to be deemed likely to be affected by the development:

- Bassingthorpe Farm - Grade II Listed Building – L shaped combination barn;
- Barbot Hall – Grade II Listed Building
- Barbot Hall Farm – Grade II Listed Building
- Glossop Lodge – Grade II Listed Building
- Greasbrough Conservation Area
- Wentworth Woodhouse – Grade I Listed Building
- Wentworth Woodhouse Parkland Grade 2* – Registered Historic Parks and Gardens
FIGURE 7: BUILT HERITAGE
FIGURE 13: HISTORICAL MAPS
ARCHAEOLOGY

An archaeological scoping study was prepared by Wessex Archaeology in order to determine from existing information the scale, extent and significance of the historic environment within the Study Area.

The key findings reveal that there were no archaeological objections to development. However, as also recognised within the emerging Heritage Impact Assessment, the listed buildings at Bassingthorpe Farm, Barbot Hall and Barbot Hall Farmhouse have been identified as localised areas that could potentially have archaeological objections to development since they possess a high risk of containing certain heritage assets that will affect future development.

The central corridor of the Study Area to the west of Car Hill Road and south of Barbot Hall Road together with land surrounding Bassingthorpe Farm including land to the west of Bassingthorpe Lane have been identified as possessing a low risk that they contain heritage assets that may possess a risk to development.

The remaining areas of the Study Area (approximately 60%) are identified as ‘uncertain archaeological’ objections to development where there may be a risk associated with development. Whilst it is unlikely that this will prevent development occurring, the evidence suggests that further archaeological investigation will be required in these areas at some stage should development be required.
GREENSPACE ANALYSIS

In order to inform the emerging proposals for the Study Area it was identified that a baseline for open space provision should be established. This was achieved by reviewing and calculating open space provision set out in various policies in national guidance in the form of

- new guidance produced by the Fields In Trust (formerly the National Playing Fields Association);
- the emerging Local Plan policy in the Core Strategy and Sites and Policies Document and;
- other local standards such as the Rotherham Playing Pitch Strategy (it is noted that the basis for this policy is PPG17 Sport and Recreation which is no longer in force).

The Fields in Trust is now considered the recommend Benchmark Standards to planning authorities as a tool for assisting in the development of local standards moving forward. The benchmark standards are set out as follows:

- All Outdoor Sport (including Playing Pitches) - Benchmark Standard (hectares per 1000 population)
  - Urban 1.60
  - Rural 1.76
  - Overall 1.60

- All Playing Space (Children’s Playing Space) - Benchmark Standard (hectares per 1000)
  - Designated Equipped Playing Space 0.25
  - Informal Playing Space 0.55
  - Overall Children’s Playing Space 0.80

In relation to playing pitches the benchmark standard states that “Playing pitches should be available within 1.2 kilometres of all dwellings in major residential areas”.

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![Image of people cycling on a path]

![Image of children playing with wooden posts]

![Image of a garden scene with garden chairs and a blue sky]

![Image of a building complex with green surroundings]
In addition, the proximity of children’s play space is also considered in terms of accessibility and the following distance standards are recommended: 

- (LAPs) Local Areas for Play or ‘Door-step’ spaces – for play and informal recreation
  - Walking Distance – 100m
  - Straight Line Distance – 60m

- (LEAPs) Local Equipped, or Local Landscaped, areas for play – for play and informal recreation
  - Walking Distance – 400m
  - Straight Line Distance – 240m

- (NEAPs) Neighbourhood Equipped Areas for Play – for play and informal recreation, and provision for children and young people
  - Walking Distance -1000m
  - Straight Line Distance – 600m

The formulation of policy on Green Space in the Sites and Policies Document is at an early stage, however officers at the council have set the broad parameters for the policy which are set out below: 

- The overall requirement will be 2.4 ha per 1,000 population in line with national standards
- An additional 0.175 ha per 1,000 population will be required for the provision of allotments.
- Accessibility to ‘equipped play’ will have a minimum standard for 840m (15 mins) with no reference to be made to Child or Youth Play (i.e. LEAP or NEAP) but instead a balanced provision.
- Accessibility to unequipped areas for play will have a minimum standard of 280m.

The Rotherham Playing Pitch Strategy (2005) is acknowledged to be in need of a review, however it identified that the Rotherham North area had the following surplus/deficiencies in 2005: 

- Adult Pitches – SURPLUS of 9 Pitches
**SUMMARY**

**GREENSPACE ANALYSIS**

In terms of assessing the ‘baseline position’ it is clear that a provision of around 10 hectares of formal opens space is a reasonable starting point, the position for informal provision is less clear given that the emerging Rotherham Local Plan policy does not distinguish between formal and informal space. Overall it is maintained that for the emerging proposals the key figure is the amount of formal provision to be provided. The informal provision should remain flexible at this stage, but with a view to delivering the objectives of creating a multi functional Green Infrastructure environment.

Whilst the Field’s in Trust standards recommend much shorter walking distances to various types of open space it is maintained that a modern urban extension such as Bassingthorpe Farm will create a highly permeable development which will ensure green spaces are very accessible. On this basis the principle for the development of open space proposals should follow the emerging policy position of Rotherham MBC of 840m (15 mins) to an area of equipped play for children and youth ages.

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**BASELINE ANALYSIS**

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By estimating the population of the development to be around 5,520 the open space calculations are as follows:

- Junior Pitches – DEFICIENCY of 3 Pitches
- Mini Soccer – AT STANDARD*

*no surplus or deficiency however the Junior Pitches are used for Mini Soccer.
ECOLOGICAL ‘SWOT’ ANALYSIS

STRENGTHS

- The site’s ecological value is modest and the vast majority of the area comprises intrinsically low value habitats and the remaining habitats present are limited in nature.
- The proposed development is not expected to impact upon the Bradgate Brickworks SSSI lying approximately 200m south of the southwest site boundary.
- It is assumed that many of the large fields within the Study Area have poorly re-seeded soils following open cast operations. In general therefore samples of the fields have been found to support very limited range of plants.
- Improved and seeded grassland occupy a substantial part of the Study Area and are growing on imported/reclaimed substrate.
- There are suitable bat foraging and commuting habitats around the site. The site does not present any significant roosting opportunities other than in the woodland areas.
- The absence of significant areas of open water and the surrounding arable land use make the presence of Great Crested Newts unlikely.

WEAKNESSES

- The Study Area sits between significant urban areas which create barriers to prevent links to semi-natural habitats.
- Scrub along some of the water courses contains significant strands of Japanese Knotweed.

OPPORTUNITIES

- The development should exploit boundaries of the Study Area which do not border existing developments. As such there is the opportunity to create links to the north where arable land extends and to the west in relation to Bassingthorpe Springs and Kimberworth Park to form links to semi-natural habitat.
- The best habitats relate to the LWS, areas of rough grassland and scrub, water courses and occasional sections of hedgerow. The retention and buffering of these habitats could lead to significant increased value for local wildlife which is currently on the back foot as a result of intensive arable agriculture and by virtue of the historical activities associated with the restoration of the former coal mines etc.
- Create new open water features to improve wildlife as well as deliver sustainable drainage systems.
- Make better connected system of wooded habitat corridors.
- Within the developed areas look at making use of roof water to feed into wetland/ponds and ensuring boundaries are permeable to wildlife to minimise barriers to movement.

THREATS

- The ancient and seminatural woodland of Bassingthorpe Springs lying within the western boundary would need to be retained in the development.
- The area around Bassingthorpe Spring is classified as a Local Wildlife Site (LWS) and includes Hudson Rough. This will need protecting.
- Clough Stream within the Study Area is classified as a LWS and follows this stream through the south of the Study Area. This will need to be protected.
- An area between Munsborough Lane and Fenton Road in the northwest of the Study Area is interesting rough grassland and appears to represent a more natural colonisation of former workings.
- The field boundary adjacent to Bassingthorpe Lane could qualify as “important hedgerows” under the Hedgerow Regulations.
- In the northwest of the Study Area the scrub alongside grassland presents habitats likely to be of value to invertebrates and birds.
ECOLOGICAL ANALYSIS

FIGURE 15: ECOLOGICAL CONSTRAINTS & OPPORTUNITIES

FIGURE 16: ECOLOGICAL FEATURES
SUMMARY

ECOLOGICAL ANALYSIS

The ecological value of the Study Area is on balance modest. The vast majority of the site comprises low habitats and the remaining habitats present are limited in extent and variety. This can be accounted for by virtue of the nature of the site following the restoration of former coal mining activity.

The ecological areas of importance relate to: the local wildlife sites at Bassingthorpe Spring Wood; areas of rough grassland and scrub; the water courses of Clough Stream and Greasbrough Dyke and occasional sections of hedgerow.

The mitigation options are to seek to retain and enhance the existing corridors formed by the watercourses and associated woodland habitats including the locally designated wildlife site. The retention and buffering of these habitats could lead to significant increased value for local wildlife which is currently suffering as a result of relatively intensive arable agriculture. Other mitigation measures to support bio-diversity and green infrastructure include:

- Recreate species rich grassland in public open space areas;
- Pro-active management of wildlife sites;
- Create new open water features in association with sustainable drainage schemes; and
- Where appropriate enhance existing hedgerow networks and ensure boundaries are permeable to wildlife.
# Baseline Analysis

## Surface Water Drainage ‘SWOT’ Analysis

### Strengths
- The evidence base concludes there will be a feasible surface water drainage solution for the development scheme.

### Weaknesses
- A ribbon of land alongside Greasborough Dyke is designated as Flood Zone 3.
- A corridor of land near Rossiter Drive and Ochre Dyke is at risk of surface water flooding.
- The widespread extent of former mining works within the site pose ground stability, mine water and ground gas issues.
- The presence of the Car Hill Landfill site could create issues in terms of leachate made ground and contaminated fill.
- There are various public sewers running through the site that will constrain development. These are mainly located in land to the north of Scrooby Lane.
- Land is too steep for a pond between Scrooby Lane and Greasborough Road.
- Ground slopes adjacent to Clough Stream side is rather steep and it is not feasible to construct a pond or dam without major earthworks.
- There may be a need to upgrade Aldwarke WWTW to cater for the Bassingthorpe Farm development.

### Opportunities
- Three main watercourse systems were identified:
  - Clough Stream,
  - Greasborough Dyke,
  - The former Central Valley now infilled by the Car Hill Landfill site.

  These watercourses will influence and guide the opportunity for delivering a surface water drainage strategy.

- Using local watercourses as the preferred option for all surface water drainage would mimic the existing drainage regime, particularly if it is restricted to nominal greenfield run-off rates of 51/5/ha.

- Surface water drainage solutions may comprise:
  - Source control measures such as green roofs, rainwater recycling and soakaways;
  - Small scale dry and semi-dry or wetland detention features throughout the development linked in a cascade fashion down the hillside;
  - Large storage ponds or underground facilities at the bottom of the hillside.

- Foul drainage - whilst there is no provision to expand the WWTW at Aldwarke in AMPs running up to 2015, its expansion could be incorporated within AMP6 (2015-2020) and AMP7 (2020-2025) if the growth is flagged up prior to the determination of the relevant AMP.

- SUDS features could enhance amenity, landscape and ecology value.

### Threats
- Yorkshire Water has advised that the local public sewer network does not have capacity to accept any discharge of surface water from the proposal site. Discharge to the local watercourses is therefore the preferred option – see opportunity.

- RMBC and YW prefer use of soak-aways but the presence of clay and old mine workings would complicate the use of this approach as well as the location of the Car Hill Landfill site.

- Agreement is required with the local authority that the widespread use of soakaways has been eliminated. Engineering scoping works will be required to determine the feasibility of this approach.

- Under the forthcoming phased implementation of the Flood & Water Management Act 2010 the threshold of a raised reservoir coming within the scope of the Reservoirs Act is set to reduce from 25,000m³ to 10,000m³ of water. RMBC wish to avoid any large reservoirs coming under the scope of the Reservoirs Act.

- Whilst RMBC will become responsible for adopting SUDS facilities they do not yet have a SUDS design guide.

- Works will be necessary to improve the public sewer network to cater for foul discharge from the development to the WWTW. This would require a ‘Sewer requisition procedure’ and the cost is likely to be shared between YW and the developer.
SUMMARY
SURFACE WATER DRAINAGE

There are three main watercourse systems in the site:

- Clough Stream with a catchment area allocated in the south of the Study Area and slopes south eastwards;

- Greasbrough Dyke is the main watercourse system within the northern part of the Study Area flowing from high ground in the North (near Cinder Bridge) to lower ground near Mangham House and Brookside Court.

- The central catchment area. This has been largely infilled by Car Hill landfill site. There is a deep watercourse beneath the landfill site along the former valley line that discharges to the public foul sewer.

The widespread use of soakaways is unlikely to be feasible and Yorkshire Water has advised that the local public sewer network does not have capacity to accept any discharge of surface water from the proposal site. The preferred drainage strategy for surface water is the option of discharging into the local watercourses in compliance with the principles of sustainable drainage.

Whilst source control measures such as rain water recycling and soakaways will be further investigated, the preferred approach for the surface water drainage strategy is to incorporate small scale dry detention features throughout the development linked in a cascade fashion down the hillside (eg Swales, small basins).

Yorkshire Water has advised that the public sewer network does not have sufficient capacity to accommodate the anticipated foul drainage from the development. They have advised that a feasibility study is required to investigate upgrading the local public sewer network to serve the development. The sewage treatment works at Aldewarke may require additional capacity and discussions are in progress with them to investigate the upgrading of the WWTW at the appropriate time to ensure there is sufficient capacity to meet the needs of the development proposed within Rotherham Urban Area as part of the emerging Local Plan. Consideration be given to the works required in the next Asset Management Plan period 2015 to 2020 builds the increasing capacity required into their investment plans for this period.
**BASELINE ANALYSIS**

**MOVEMENT & TRANSPORT ‘SWOT’ ANALYSIS**

**STRENGTHS**

- There are several pedestrian links between the Study Area and Rotherham town centre.
- There is a clear recognition given the site’s close proximity to Rotherham town centre and Greasbrough that existing connections can be improved to ensure that a highly sustainable transport strategy can be achieved for the Study Area.
- There are frequent commercial bus services that serve the existing communities surrounding the site and a large proportion of the development sites is within a 400m walk from an existing bus service.

**WEAKNESSES**

- Whilst all of the roads surrounding the site can be used by cyclists there are currently no established rights of way (bridleways, etc) for cyclists between the Study Area and Rotherham town centre. Since a large proportion of the Study Area is beyond walking distance to the town centre, cycling has the potential to be a realistic option for such trips.
- The existing pedestrian routes between the Study Area and the town centre are constrained due to the presence of barriers including railway lines and dual carriageways and as a result have a poor local environment that is not conducive to pedestrian use (i.e. Primrose Hill footbridge over the railway). This bridge also has steep steps and so difficult to negotiate for some pedestrians.
- Gin House Lane provides another potential pedestrian link between the Study Area and the town centre but it passes through factory yards with no footway provision and resulting conflicts with heavy goods vehicles.
- The routes to and from the town centre and across the site feature in places, significant gradients, which may pose a barrier to walking and cycling for some.

**OPPORTUNITIES**

- The feasibility of improving pedestrian links between the site and the town centre should be considered including making at least two routes available for cyclists. The existing routes between the Study Area and the town centre offer most potential for improvement at this time.
- The footpath at Greasbrough No. 8 provides a convenient pedestrian route linking the Study Area with the centre of Greasbrough to the north.
- Highway verges are available to offer the potential to provide cycle routes between the Study Area and the centre of Greasbrough.
- The several public rights of way within the Study Area should be improved with the rights of way extending to serve both pedestrians and cyclists on all these routes.
- A recommendation proposed is for Basingthorpe Lane within the Study Area to be legally closed to vehicular traffic but the route be retained for pedestrians and cyclists.
- Rotherham Bus Interchange is the focal point for bus service operations and existing services comprise frequent local bus routes serving the Kimberworth Park and Greasbrough areas.
- Major improvements have recently been completed at Rotherham Central Railway Station to upgrade passenger facilities.
- An extended Supertram network from Meadowhall South tram stop to Partgate Retail World via Rotherham Central using Tram-Trains is intended to run for two years from 2015 with a view to permanent operation. This is a nationally significant project and will provide the first case study of tram-train technology and operations in the UK. Tram-train services will run to Sheffield Cathedral on a 20 minute frequency in addition to the existing heavy rail services to Sheffield.
- To improve accessibility onto the surrounding highway network by new residents and businesses, and accessibility into and through the site by buses, a route from Fenton Road to B6089 Car Hill is to be considered.
- Ensure that high density developable areas are close to bus routes and other sustainable/active travel measures.

**THREATS**

- Improving cycle links between the Study Area and the town centre is likely to involve third party land to secure rights of way.
- Need to ensure that even with a route linking Car Hill (B6089) to Fenton Road which buses can use, that all developable areas are accessible from 400m of a bus route.
- There is general recognition that given the scale of development and existing localised congestion (at peak times) highway improvement requirements will be required. The extent will be informed by the MVA modelling works.
- There is an AQMA in the Bradgate area to the south of the site as poor air quality maybe a problem.
- The need to ensure that infrastructure and facilities to encourage and embed the use of sustainable transport from day one are acknowledged.
- The need to ensure that infrastructure and facilities to encourage and embed the use of sustainable transport from day one are acknowledged.
FIGURE 17: HIGHWAYS
SUMMARY

MOVEMENT & TRANSPORT

The local highway network is focused on Rotherham Town Centre with an inner ring road connecting radial routes emanating from the central area. The two key local routes in the vicinity of the Study Area are the A6123/B6089 linking Greasbrough and Rotherham and Fenton Road.

In the vicinity of the Study Area, there is a high frequency of bus services serving the Kimberworth Park and Greasbrough area which operate via Fenton Road and Car Hill. A large proportion of the development site is already within 400m walk of an existing bus service.

There are various pedestrian routes linking the site with both Greasbrough and the town centre. A key issue in relation to pedestrian links to the town centre are the barriers to pedestrian movements such as major roads including the A629 New Wortley Road and A630 Centenary Way as well as the Sheffield to Doncaster Railway Line.

There are no dedicated cycle routes currently available serving the Study Area or providing links to Greasbrough or Rotherham Town Centre. Cyclists have the opportunity to use the existing carriageway of public highways. The system of subways passing under Centenary Way is also available for use by cyclists to provide access to the Town Centre. Another constraint to both pedestrian and cycle routes to and from the Town Centre are the significant gradients that may be encountered.

To deliver good public transport links it is considered essential to provide a bus service on a link road through the site between Fenton Road and Car Hill.

It is recognised that provision of a network of pedestrian cycle routes linking the proposed development with key locations in the local communities and Rotherham Town Centre is required. As Rotherham Town Centre is more than 2km from parts of the Study Area, walking to and from the Town Centre may be too far for some residents. However, links to community facilities should be identified by a combination of segregated footway/cycle ways and via means of footways running along the existing carriageways.

Another important priority is to improve cycle and pedestrian routes between the Study Area and Rotherham Town Centre. An cycle route opportunity at Rodger Street has been identified to improve accessibility. Traffic management measures and creating a more attractive environment for cyclists (or pedestrians) are being investigated along this route.

No suitable opportunities for providing cycle routes in the Greasbrough Road corridor approaching the Town Centre from the north have been identified due to the topography and the environment. Likewise, the route along Gin House Lane passes through a factory yard and is unlikely to be appealing to cyclists.

The development of an accessibility/movement framework to investigate these issues further will also improve accessibility and promote the use of sustainable modes of transport.

It is recognised that efficient operation of the highway network for vehicular traffic will be a continuing essential requirement. The modelling work undertaken by MVA Consultants has assessed accumulative impact of all likely allocations of substantial housing and employment allocations coming forward within the Local Plan. The
individual highway aspects and mitigation required for Bassingthorpe Farm and the proportionate costs for transport infrastructure have been quantified.

The Sheffield and Rotherham Transport Model was used to assess the impact of the Local Plan on the strategic transport network in Rotherham. This model was updated to a revised base year of 2011 and a future year of 2028 was used taking account Local Plan development traffic, background growth in traffic, changes in values of time and vehicle operating costs, and planned future year transport intervention.

Combined with background growth on traffic, the trip generations for the Local Plan development resulted in an increase of 6,983 (13%) to 7,778 (14%) car trips per hour to/from/within Rotherham in the peaks between 2011 and 2028 ‘do minimum’. A gravity model showed that the majority of the growth in traffic is likely to be on the corridors between Rotherham and Sheffield which is logical given the type and quantity of employment opportunities in Sheffield.

For the morning and evening peak periods, the model predicts an increase in delay per vehicle kilometres of 53% and 67% respectively between 2011 and 2028 ‘do minimum’. The percentage increase in delay is more than the growth in traffic because as junctions approach or exceed capacity, the rate of increase in delay starts to increase.

The conclusion reached by MVA is that although delays increase overall as a result of the increase in trips, in most areas of Rotherham the network has sufficient spare capacity to accommodate the increase in trips without significant problems. However, a number of problematic junctions were identified where large delays are predicted to occur if no further improvements were made to the network. The worst of these relating to the Bassingthorpe Farm site related to traffic trying to join the A629 Upper Wortley Road from Oaks Lane, Old Wortley Road, Fenton Road and Henley Rise due to increased traffic on Upper Wortley Road.

To resolve the problem potential mitigation measures have been considered and these include:

- Signalised junction at A629 Wortley Road and Oaks Lane;
- Signalise junction at A629 Wortley Road and Fenton Road;
- Provision of a signalised crossroads at Pool Green Roundabout (A630 Centenary Way, Masbrough St, Main St)

The mitigation measures have been tested in the model and shown to successfully reduce delays at the problematic junctions to an acceptable level, reducing overall delays per vehicle – kilometre by 10% and 19% respectively in the morning and evening peak hours.

Further refinement of the analysis of the impact of the development on the local highway network, including any implications on road safety, will be undertaken as the proposals are developed.
FIGURE 18: LOCAL BUS ROUTES
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### STRENGTHS
- The site does not lie within a Ground Water Source Protection Zone nor are there any licence ground water or surface water abstraction within 500m of the site. The majority of the site is not indicated to be within a ground water vulnerability zone. However, the far north and north-east of the Study Area is indicated as being in a ‘high vulnerability’ area.
- None of the constraints identified in the report represent an insurmountable issue and the solution would be driven by the findings of more detailed research but there would be abnormal costs involved.

### WEAKNESSES
- Numerous open cast pits are located on site including the following abandoned mines:
  - Munsborough Open Cast in the central and southern areas (resoiled by 2 July 1957);
  - The Barbot Hall and Manham open cast re-soiled by 8 August 1957; and
  - The Scooby Lane open cast in the north area – resoiled by 9 June 1958.
- Within the south-western area of the site there are Coal Authority records identifying 20 mine entries. SYMAS identifies further potential shafts/locations as well as identifying areas of known potential shallow workings.
- The SYMAS report identifies a high risk of unrecorded workings within the Fenton and Barnley seam.
- To the west of Bassingthorpe Lane potential exists for shallow coal associated with the seam to the north of Bassingthorpe Farm.
- The Swallow Wood coal seam to the southwest of Bassingthorpe Lane has been subject to shallow underground coal extraction prior to open cast operation.
- There is an outcrop of Tankersley Ironstone seam across the central area of the site. Anecdotal evidence suggests bell pits/ shafts are present in this area and SYMAS has identified the area to the east of the seam as having shallow workings and a high risk of land instability.

### OPPORTUNITIES
- RMBC is intending to undertake further site investigation of Car Hill Landfill in 2012 to understand its nature and extent.
- There may be potential to work outstanding coal reserves. Consideration could be given to undertaking a bulk excavation and replacement exercise to create sound development platforms.
- The values associated with surface mining could offset the cost of remedial earthworks since if it can be won economically this could fund a bulk excavation strategy. It could also be progressed in phases in order to prevent delay to development.
- The engineering of foundation solutions may be able to address backfilled open cast pits.
- Emphasis could be placed upon locating and treating mine shafts that have been recorded so that it creates certainty for directing development to these areas. Hard caps or drilling and grouting would be required for those shafts in the immediate vicinity of new structures and associated infrastructure.
- Ground gas risk is associated with the former coal and ironstone working areas and therefore engineering work of the foundations (membranes, passive or active vent systems to under floor voids) to address this risk is relatively straightforward.
- The primary risk from the landfill areas are associated with migration of gas but given this issue already exists within the Study Area due to the former coal and ironstone working areas this is not a significant additional development constraint. As such provided the foundations of structures are engineered to address ground gas risk there is no need for a 250m buffer zone, around the landfill sites.

### THREATS
- There are four faults crossing the site. Three trend northeast to southwest down to the southeast and one trends northeast to southwest down to the south. These faults are part of the North Don Fault Belt.
- There are approximately 11 separate areas that have been the subject of open cast mining from several seams.
- Two landfills are within the Study Area: the large Car Hill Landfill and the former Clough Quarry.
- Car Hill Landfill: there has been no surface water sampling conducted downstream of the site and the condition of the culvert of the former surface water beneath the landfill is unknown.
- The Car Hill site has received a wide variety of waste but there are no records now available.
- The Victor Manufacturing Limited site has adjacent to the southern boundary of the Study Area and is an active top layer Control of Major Accident Hazards (COMAH) installation. Part of the site lies within the planning consultation zones and may be subject to objection from the HSE if they consider there is an increase of risk to human health.
- The following constraints could threaten development:
  - Deep fill within the backfilled open cast pits and form of landfill areas;
  - High walls around the perimeter of the backfilled open cast pits;
  - Shallow coal mining to the east of coal and reinstates outcrops on site;
  - Mineshafts across the site;
  - Ground gas from the RMBC landfill and from shallow coal mine workings;
  - Former sewage works to the south of Scooby lane may also present potential source of ground gas as well as areas of deeper and potentially soluble made ground;
  - Contamination from the landfill and the former sewage works may represent sources of heavy metal and organic contaminants.
FIGURE 19: EXISTING LAND CONDITIONS

KEY
- Employment Land (industrial)
- Employment Land (residential)
- Site Boundary
- Scrooby Lane Opencast
- Barbot Hall Opencast
- Swallow Wood Seam Opencast
- Top Hill Moor Seam Opencast
- Low Hill Moor Seam Opencast
- Lidgett Seam Opencast
- Unnamed Seam Opencast
- Flockton Thick Seam Opencast
- Areas at Greater Risk of Shallow Mine Workings
- Estimated Outcrop of Seam
- Deep Made Ground (Opencast and Landfill)
- Former Colliery

Note: Areas shown at greater risk of shallow mine workings have been estimated based upon overlying seam thickness, dip amount and direction (based on the reviewed BS5 mapping data) and 10^- thickness of overlying competent strata. Variations in topography have not been accounted for. Further assessment is required to refine these areas.

WSP
SUMMARY
CONTAMINATION/LAND STABILITY

Within the Study Area, there are former open cast areas which comprise significant depths of made ground circa 15-25m. This may be as thick as 50m in the former Barbot Hall and Mangham Open Cast where the Swallow Wood seam was worked. In addition, a significant thickness of made ground will be associated with the closed Car Hill Landfill which infilled a former Valley.

Outside the landfill and former open cast pits, ground conditions generally comprise a layer of cohesive superficial material overlying weathered coal measures strata which include worked and unworked coal seams as well as the Tankersley Ironstone seam.

In total there are 45 recorded mine entries within the Study Area but for the majority there is no record of the steps taken to treat the mine entries. There is also a high risk of unrecorded workings within the Fenton and Barnsley seam.

Key constraints to overcome and mitigation option are as follows:

<table>
<thead>
<tr>
<th>CONSTRAINTS</th>
<th>PROPOSED MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep fill with back filled open cast pits and former landfill areas.</td>
<td>Ground engineering methods such as re-engineering of the upper layer of fill or piling may be suitably sufficient to reduce the risk this presents.</td>
</tr>
<tr>
<td>High walls around the perimeter of the back filled open cast pits.</td>
<td>For fill that has been in place for a number of years the risk of internal differential movement in the vicinity of a high wall might be considered to be lower.</td>
</tr>
<tr>
<td>Shallow mining represents potential ground stability issue.</td>
<td>This issue can be dealt with either by adopting a drill and grout exercise or undertake a bulk excavation and replacement exercise.</td>
</tr>
<tr>
<td>The location of mine shafts.</td>
<td>The recorded shafts can be identified through a series of targeted probe holes and emphasis would be placed upon locating and treating the mine shafts that are known about. These could involve drilling and grouting using a flexible Geo-textile solution or a hard cap of reinforced concrete slab.</td>
</tr>
<tr>
<td>Ground grass from the RMBC landfill and from shallow coal mine works.</td>
<td>It is considered that the ground gas from the land fill is unlikely to represent a significant risk to development however, the engineering of building foundations would achieve suitable mitigation.</td>
</tr>
</tbody>
</table>
SERVICES & UTILITIES

There are a network of overhead 132kV electricity lines together with pylons that run across the site. An initial approach to Northern Power Grid has indicated that the cost of installing new cables underground to replace the overhead circuits would be a significant cost and as such these have been classified as a fixed constraint. The guidance in terms of the standoff distance between development and the overhead power lines has been set at 30 metres.

There are various public sewers and related infrastructure which are likely to pose a constraint to development. The most significant sewers are:

- A 1,300 mm trunk combined sewer with various branch sewers in the land north of Scrooby Lane.
- A trunk 1,500 mm surface water sewer discharging to Ochre Dyke between Scrooby Street and Rossiter Road.

The minimum stand-off distances for public sewers varies between 3.0 metres and 6.5 metres.

There is a pumping station and steel lattice truss tower located immediately east of Barbot Old Hall Farm House (owned by UK Coal). A pipeline was observed crossing Greasbrough Dyke that may originate from this pumping station. Further investigation of these installations is required.
MARKET DEMAND/ NEED ASSESSMENT

The NPPF requires local authorities to have a clear understanding of their housing needs based on full objectively assessed needs for market and affordable housing. To this end the Strategic Housing Market Area (SHMA) together with ONS Household and Population Projections must be considered as a starting point. Over the plan period, the 2008 Household Projections indicate that 13,000 households will be formed within Rotherham MBC. The 2010 based Sub-National Population Projections (2010 SNPP) indicates that the population will increase by 14,000 over the same period. This data provides the starting point.

The Strategic Housing Market Assessment (SHMA) considers other components of housing need beyond the baseline provided by the Household Projections including household waiting lists, homelessness etc. The SHMA 2010 update indicates a need for 1,100 dwellings per year within the Borough. It is also important to bear in mind that these projections reflect the lack of an up to date development plan and the associated Green Belt review that have inhibited housing growth thereby suppressing effective demand.

The ‘What Homes Where’ website shows that the key drivers of population change in Rotherham over the last decade have come from inward migration from outside the UK and an increase in births over deaths. Another important impact on the future housing provision is the likely increase in trend for higher levels of inward migration from elsewhere in the UK, particularly from Sheffield and the difficulties they face in meeting their own objective need. As a consequence, Rotherham may experience higher levels of needs during the lifetime of the Plan Period.

HOUSING MARKET

Bassingthorpe Farm is a project that will be delivered over two decades during which time market conditions and demands are likely to vary. Therefore when considering the type of housing that could be viably delivered it is essential to consider not only what is currently appropriate for the market but also how the property market may change over the lifetime of the development.

The research undertaken by DTZ has found that at present the house building industry is seeking to deliver predominantly family accommodation targeted at the first time movers market. The lack of delivery of smaller starter homes/apartments for first time buyers has not risen due to lack of demand but instead a response to the difficulties in securing sales because of the restrictions of mortgage financing on a purchaser’s ability to buy a property. Whilst in general the current flat market conditions following the property downturn, is likely to persist
for the foreseeable future, it is realistic to expect market upturn during the lifetime of the scheme as a result of relaxation of current restrictions on mortgage finance. As the number of houses built continues to fall significantly below the current requirement for Rotherham, the level of pent-up demand continues to grow.

In conclusion, it is reasonable to assume that market conditions in the Rotherham area will improve and this will increase demand for property across the whole spectrum of the residential market. As such, a scheme the scale of Bassingthorpe Farm has the ability to deliver a range of property types and sizes.

EMPLOYMENT MARKET

The potential for industrial development at Bassingthorpe Farm must be put in the context of the demand for and supply of industrial land and property in the wider Rotherham area. Much of Rotherham’s industrial and employment land lies in close proximity to the motorway network and these are likely to absorb much of the demand for industrial floorspace in the future. DTZ recommends that whilst industrial development in the short term will be challenging over a fifteen year period, it is reasonable to expect some limited further development and extensions to the existing industrial area at Mangham Road will be feasible particularly with these units being at the smaller end of the floor area size spectrum sub 465 sq.m. (5,000 sq.ft.).

The regional office market conditions is poor and so the recommendation is these uses are not expected to be viable in the foreseeable future having regard to the location of Bassingthorpe Farm. Nevertheless, office accommodation forming part of a mixed use scheme should not be ruled out, particularly if this is small scale and has the benefit of public sector involvement or support.

RETAIL MARKET

From applying per capita convenience spending assumptions to the existing and proposed population, the opinion of DTZ is that a neighbourhood centre comprising a single convenience store of 375 sq.m. (4,000 sq.ft.) in addition to a small scale complementary service orientated retail of 465 sq.m. maximum could be appropriate to create the necessary local facilities to support a sustainable new neighbourhood centre.
FIGURE 20: TECHNICAL CONSTRAINTS PLAN
EVALUATION OF SITE CONSTRAINTS & OPPORTUNITIES

The methodology that has been used to assess possible developable opportunity areas within the Study Area is based on the spatial grading of the likely impact of the identified constraints on the following basis.

FIGURE 21: CAPACITY ASSESSMENT
FIXED CONSTRAINTS
(RED AREAS)
These comprise the following:

- A ribbon of land alongside Greasbrough Dyke designated as Flood Zone 3.
- Surface water flooding areas around Ochre Dyke;
- Easements relating to the public sewers which run mainly to the north of Scrooby Lane;
- Two landfill areas known as Car Hill and Clough Quarry as a result of contamination issues;
- The Planning Consultation Zone of the COMAH Regulations in relation to the VICTREX Manufacturing premises;
- The electricity pylons;
- The Ancient Woodlands to the western section of the site;
- Local wildlife sites at Bassingthorpe Spring Wood and Clough Stream side;

The Study Area amounts to 215 hectares in size and these fixed constraints equate to 55 hectares.

FLEXIBLE CONSTRAINTS
(ORANGE AREAS)

Ground Conditions

Ground conditions have been identified as a significant factor that requires further investigation. There are numerous open cast pits and abandoned mines together with four fault lines running across the site. In addition to the recorded mine shafts, initial investigations by SYMAS identifies that there is a high risk of unrecorded workings. The area affected by these ground conditions is extensive. The type of mitigation currently being investigated focuses on treatment of recorded mine shafts and exploring engineering foundation solution to deliver.

Landscape/Heritage Setting

In landscape terms the conclusion reached is that the overall strength and sensitivity of the areas character is reduced as a result of the complex mix of built up areas, industrial land, existing infrastructure and farmland. This complexity enables changes to the local landscape character to be accommodated more easily. Nevertheless, the sensitive landscape elements have been identified as follows:

- The sites function and relationship with Green Belt particularly in relation to redefining boundaries;
- The relationship with its historic context in particular the Greasbrough and Rotherham Town Centre Conservation Areas, Wentworth Woodhouse and its related Registered Park and Gardens particularly from the follies as well as certain Listed Buildings;
- Ensuring that development on high ground to the south of Munsbrough Lane is sensitively incorporated into the overall townscape setting.

Mitigation measures will involve landscaping being a key strand in the design process in the Concept Framework to celebrate, frame and respond to key views in and out of development. The introduction of strategic and woodland planting would be introduced and mitigate against sensitive views. Place making mitigation measures would also be investigated ensuring that building heights, scale and densities respond to the sensitive of this natural and historic environment. Given the wider land ownership of the Fitzwilliam Wentworth Estate there are also opportunities to undertake off-site landscaping treatment and planting if required.
Ecological

The ecological baseline assessment reveals the site has a relatively low value in terms of existing habitats but sensitive treatment of important hedgerows, woodlands and key water courses such as Clough Stream and Greasbrough Dyke should be respected.

Drainage

Surface Water Drainage can be accommodated within the Study Area with the incorporation of small scale drainage detention features linked in a cascade approach down the hillsides. This strategy allows drainage facilities to be provided almost anywhere within the site provided that an appropriate area is allowed for when determining dwelling capacity of developable areas.

Landownership – Relocation of Allotments

The Clough Bank and Scrooby Lane/Drive Allotment areas are unconstrained in technical terms but may be sensitive as a political/land ownership constraint. Partial relocation of these allotments is proposed in order to create a development that achieves the overall vision. It is recognised that appropriate mitigation will be required including the provision of replacement facilities close by.

UNCONSTRAINED LAND
(GREEN AREAS)

Approximately 45 hectares of the Study Area is unconstrained having regard to the technical study work undertaken. Having regard to achieving a sustainable urban extension and delivering key priorities such as green infrastructure networks and improved connections these unconstrained areas do not necessarily fall within location that are appropriate for development. Therefore, in order to deliver the scale of development required at Bassingthorpe Farm a significant proportion of the land identified as a ‘flexible’ constraints will be required and therefore subject to appropriate levels of mitigation.

The extent to which flexible constraints can be mitigated will require further more detailed technical work and the evolution of the masterplan and design code. For the purposes of the Concept Framework broad assumptions have been made based on appropriate level of technical assessment at this stage. No intrusive site investigations have as yet been undertaken.
SECTION 7

INFRASTRUCTURE REQUIREMENTS
The evolution of the Concept Framework Report has been informed by the evidence work found within the Infrastructure Delivery Study (IDS) dated May 2012 the whole Plan Viability Assessment dated January 2013 and the technical work relating to a Study Area. Whilst further testing is required to ensure the project is viable, the likely infrastructure has been identified as follows:

**TRANSPORT INFRASTRUCTURE**

Since the preparation of the infrastructure delivery study more detailed traffic modelling work has been undertaken by MVA to assess the accumulative impact of not only Bassingthorpe Farm but also the likely allocations of substantial housing and employment allocations coming forward within the Sites and Policies Document. This modelling work has provided evidence to determine the mitigation measures required for Bassingthorpe Farm as well as the proportionate costs for transport infrastructure to be quantified.

The MVA results identify that in most areas of Rotherham, the network has sufficient spare capacity to accommodate the increase in trips without significant problems. However, a number of problematic junctions were identified where long delays are predicted to occur if no further improvements were made to the network.

The worst of these relate to the Bassingthorpe Farm site are traffic joining the A629 Upper Wortley Road from Oaks Lane, Old Wortley Road, Fenton Road and Henley Rise due to increase traffic on Upper Wortley Road.

To promote the use of sustainable modes of transport by providing infrastructure and services, it is recognised that a framework travel plan should be prepared for the overall Bassingthorpe Farm development recognising that there will be site specific costs associated with the Travel Plan that will be brought forward as the development proceeds. The framework will ensure that infrastructure and facilities will encourage the use of sustainable transport throughout the delivery of the development.

**Summary**

Offsite highway mitigation measures have been considered and these include:

- Signalised junction at A629 Wortley Road and Oaks Lane;
- Signalised junction at A629 Wortley Road and Fenton Road;
- Provision of a signalised crossroads at Pool Green roundabout (A630 Centenary Way, Masbrough Street, Main Street).

The phased delivery of such improvements and the apportionment of costs will be required in due course as well as the provision of a Travel and Movement Plan to create sustainable modes of transport.
GREEN INFRASTRUCTURE

Having reviewed the baseline open space standards against the design objectives of the project we have been able to build up a picture of the potential level of greenspace provision that Bassingthorpe Farm may generate. This has identified a provision of around 10 hectares of formal open space to be a suitable starting point. The infrastructure costs for this element relates to the laying out and future maintenance of playing pitches as well as the delivery of equipped play areas for children in accessible locations (i.e. 15 minutes walk).

In terms of the informal greenspace provision there is limited baseline work to guide the likely amount required. This provision has been derived from following the design objective of delivering a Framework of multi-functional green infrastructure to provide a network of informal openspace areas across the site which will function as recreation facilities incorporating the surface water drainage strategy and enhanced wildlife corridors.

Summary
Based on the likely level of greenspace provision, the likely costs of delivering and maintaining these infrastructure components have been assessed and calculated and are shown in the table at the end of this section.

SOCIAL INFRASTRUCTURE

EDUCATION
Based on the information currently known to the Rotherham MBC’s education team an assessment has been made on how best to meet the future requirements stemming from the proposed growth. This assessment has factored in current capacity, scope to physically expand an existing school, current and possible catchment area boundaries and the potential to ‘claw back’ some spare capacity used by non Rotherham pupils.

From the scale of growth proposed at Bassingthorpe Farm, the number of primary pupils will increase by approximately 500 and the IDS proposes a new 420 primary school and nursery facility.

In so far as secondary education requirements are concerned, it is envisaged that the Bassingthorpe Farm development would generate approximately 360 new pupils. It is envisaged that the classroom requirement could be met as a result of Winterhill School absorbing 100 to 150 pupils within the existing capacity but this will require a catchment boundary review. The number of classrooms required after the capacity adjustment amounts to eight and therefore the expansion of Wingfield School by 200-250 places is proposed within the IDS.

Summary

PRIMARY HEALTHCARE

The IDS acknowledges there are currently major changes expected in the delivery of health services in the future as a result of the abolition of the Primary Care Trust. These changes inevitably create a considerable degree of uncertainty about the future planning of infrastructure. However, the service providers have articulated what they think the capacity and future requirements are likely to be.

It is possible that future GP infrastructure and services provision could be treated as entirely private and it will be up to the individual GP’s to decide whether to invest in new capital infrastructure to meet the needs of growth in the
same way as the existing dentist and opticians operate.

Over the last few years, there has been considerable investment to create new or refurbished joint GP/service centres and close to Bassington Farm are the Rotherham Community Health Centre and Kimberworth Park.

The IDS estimates that for Bassington Farm a new surgery to accommodate two GP’s would be required and the timing of delivery would be dependent upon the build out rate. It is considered that provision will need to be kept under close review until the full implications of the Health Act are known.

Summary
A new surgery for two GP’s.

LIBRARY
In close proximity to the Bassington Farm site, there are community libraries at Greasbrough, Kimberworth Park and Rawmarsh.

Based on the growth requirement for the Bassington Farm location, a number of options are proposed in the IDS: a new build within the development; or refurbishment existing provision; or remodel with a combination with other service provision.

Summary
The Viability Assessment assumes refurbishment of existing facility.

COMMUNITY CENTRES
Community Centres serve as a meeting place used by members of the community for social, cultural or recreational activities and the IDS allows for a new community centre as part of the infrastructure requirements for Bassington Farm. The calculation of the space standards for the size of the community centre are based on those relating to the Waverley development where the standard on 0.16 metres per dwelling was used. Thus a centre for a community of 2,400 dwelling units would result in a requirement of approximately 384 square metres.

Given the imperative to ensure that the development remains economically viable, the IDS suggest it may be wise to investigate other methods for the provision of community centres for the strategic sites. One option to consider is the development of joint multipurpose centres that provide for a range of uses including community, social, health, learning and sports facilities for the sustainable urban extensions. There may be economies that can be achieved with the provision of these multi use centres at Bassington Farm. Whilst this approach has been explored as part of the Concept Framework, the actual configuration, costs and management of a multipurpose centre may vary considerably and will need to be investigated as the masterplan process is developed.

Summary
The Viability Assessment assumes the refurbishment of an existing facility.
SERVICES

EMERGENCY SERVICES
Ambulance stations do not have a tightly drawn catchment area so the possible requirement for additional provision cannot be linked to a specific growth area but it does relate generally to growth.

The fire station that services the Bassingthorpe Farm area is the Fitzwilliam Road at Eastwood. Based on their targets, the fire service currently has some capacity to support future developments. However, it is recognised that the proposed growth at Bassingthorpe Farm will put the coverage from Rotherham Fire Station at Eastwood further north and therefore the IDS concludes that coverage will be insufficient to address development needs. It is therefore recognised that in the latter stages of the plan there will be a requirement for a new three bay fire station for the accommodation for 15 staff to be located to the south of Rotherham near the Sheffield parkway. This facility is required to not only support the level of growth at Bassingthorpe Farm but also other developments adjacent to Rotherham Urban Area as well as the Waverley Strategic site.

Based on a qualitative assessment of Police Services, there is capacity within existing facilities across Rotherham including at Main Street, Rotherham and Rawmarsh.

Summary
A proportion of the contribution towards the costs of a new fire station.

SERVICES & UTILITIES
Rotherham’s electricity distribution network operator is Northern Power Grid. The approach has been to estimate the level of electricity that will be required by anticipating the total of new dwellings and comparing the electricity requirements against the current capacity in the system in the area. For Bassingthorpe Farm and for the rest of Rotherham the model has demonstrated that there is spare capacity to meet the proposed residential growth. The likely requirement for Bassingthorpe Farm is 4.8MVA and the available capacity at 2011/2012 was 12.88MVA.

National Grid operates the National Gas Transmission System. Evidence suggests that there is currently sufficient capacity in the existing network to accommodate new domestic growth. For the Bassingthorpe Farm site, the assumed connection point would be Munsborough Lane which has a medium pressure mains at present.

Summary
There is sufficient capacity relating to the electricity and gas.
WASTE WATER

Yorkshire Water is the owner of the Waste Water Sewage Network and operator of the Waste Water treatment works at Aldwark which relates to the Bassingthorpe Farm catchment area.

The service delivery is overseen by the water regulator (OFWAT) based on a five year Asset Management Plan (AMP). Yorkshire Water have a duty to accept new domestic connections into the sewage network but at this stage allowance has only been made for the needs of customers up to 2015. Based on the growth at Bassingthorpe Farm the IDS has highlighted that the Aldwarke Waste Water Treatment Works may require additional capacity during the middle phase of the development and it recommends early discussion with Yorkshire Water will be critical to ensure that the next AMP 6 (2015 to 2020) builds into their investment plans an increase in the capacity of the WWTW. The Development Team has entered into early engagement with Yorkshire Water and ongoing discussions are progressing. It is understood that the Aldwarke WWTW currently has spare capacity and therefore there is the possibility that a proportionate element of Bassingthorpe Farm could come forward in advance of the phased plan.

Summary

Based on the discussions it is unlikely that Waste Water infrastructure will materially damage development viability.

OVERVIEW

The adjacent table below brings together a provisional list of infrastructure requirements and costs that have been referred to having regard to addressing technical requirements based on the baseline evidence as well as seeking to achieve the overall objectives for the site.

These headline infrastructure measures are taken into account within the viability appraisal work together with other aspirations such as affordable housing at 25% provision on site, lifetime homes at £545 per unit and low carbon energy at £11,700 per unit.

Based on the findings of the initial financial viability work, it is unlikely that the scheme will be able to pay for all these measures and therefore other funding sources will be explored by the project team to support scheme viability.

It is recognised that in order to support a viable and deliverable scheme there needs to be an ability to phase the infrastructure items in a flexible manner throughout the lifetime of the development programme. Furthermore, it has been agreed that no expensive infrastructure items such as the link road between Fenton Road and Car Hill will be needed before housing can commence.

As the project moves forward, it is envisaged there will be further infrastructure planning work and testing undertaken through the masterplanning process as part of a specifically identified working group. This group would focus on understanding when infrastructure components are needed, when they could be delivered in the development programme and how they can be funded.
### INFRASTRUCTURE REQUIREMENTS

<table>
<thead>
<tr>
<th>INFRASTRUCTURE CATEGORY</th>
<th>REQUIREMENT</th>
<th>LIKELY INFRASTRUCTURE ATTRIBUTABLE TO COST</th>
</tr>
</thead>
</table>
| **Transport**           | Highway Mitigation Strategy  
Off-site highway improvements at various locations, including:  
- A629 Fenton Road roundabout A630 Pool Green roundabout  
- A629 Wortley Road/Oaks Lane  
- A630 Ickles Roundabout  
Travel Plan  
Sustainable Transport Measures, public transport, etc  
NB. It should be noted that the modelling undertaken provides an indication of the impact on the strategic road network and further infrastructure and mitigation may be required as the proposals are developed.  
In addition, none of the costs associated with new accesses into the public highway or internal roads are included. | **£2,750,000** |
| **Green**                | - Allotments @ 1.75 sqm per person @ £20 per sqm (tbc) (i.e. 2,400 x 2.3 people per dwelling x 1.75 sqm x £20 per sqm)  
- Recreational Green Space management/maintenance 24 sqm per person @ £20 per sqm (i.e. 2,4000 x 2.3 people per dwelling x 24 sqm x £20 sqm)  
- Drainage ballpark figures for Management and Maintenance of SUDS (not wetlands)  
- For 1 pond less than 10,000 sqm for 60 year life span (but the number of ponds/wetlands to be created need to be determined)  
- A stretch of ditch/swale of 200-250 metre for 60 year lifespan (if managed to maximise biodiversity this figure will be higher) | **£193,200 (tbc)** |
| **Social**               | Education  
- New 420 primary school & nursery  
- Secondary school requirement 360 pupil requirement, 8 classrooms  
Primary Healthcare  
- New surgery with about 2 GP’s  
Library Requirement  
- Options to provide a new building/refurbishment  
Community Centre  
- Refurbishment of existing community provision | **£6,500,000** |
| **Services**             | Emergency Services  
- New 3 bay whole Fire Station to serve Bassingthorpe Farm and rest of Rotherham £3m: 4,300 dwelling – 2,400 dwelling at Bassingthorpe Farm = 56%  
- Ambulance Services  
- Police Services  
Services and Utilities  
- Gas and Electricity  
- Waste Water | **£1,680,000** |

No Charge  
No Charge  
No Charge  
No Charge
SECTION 8

DESIGN EVOLUTION
FIGURE 22: URBAN DESIGN ANALYSIS
Design Evolution

Developing the Concept Framework has been an iterative process responding to:

- The site’s character, local context and assets based on area appraisals.
- Understanding the nature and scale of constraints and interactions between them and the development of potential, mitigation options.
- Opportunities the site presents to create a sustainable and effective disposition of land uses, green infrastructure and key infrastructure. Infrastructure requirements to support the scale of development envisaged.
- This process has brought all the layers of the evidence base into a comprehensive masterplanning process in order to generate outputs in terms of plans, supporting text and illustrations.

The continual testing has referred back to the original development objectives and the design has evolved through a balanced consideration of the following:

- The site’s ability to meet the vision and objectives based on its unique qualities and characteristics.
- Will it provide an effective framework for the creation of a sustainable layout of buildings, spaces and streets and design quality?
- Is the site viability in economic and market terms?
- Is the plan deliverable?

Design Objectives

1. To create a strong network of multi-functional and accessible green space connected by two primary green corridors along Clough Streamside and Greasbrough Dyke and a green wedge to the south east.

- To provide a sensitively designed new Green Belt boundary along Cinder Bridge Road;
- To extend the high quality village green character around Greasbrough Park into the Cinder Bridge development;
- To create a well-designed and carefully managed green wedge with sustainable uses between the Barbot Hall industrial estate and new housing development;
- To retain and enhance the value of Clough Streamside and create a high quality green gateway to the site at Fenton Road;
- To create two primary green corridors along Clough Streamside and Greasbrough Dyke connected by a series of green linkages utilising existing site features such as hedgerows;
- To create a unifying and integrating strategic green ring around and within the site along Fenton Road Clough Streamside and Greasbrough Dyke;
- To ensure multi-functional green infrastructure and design influences and integrates the built form of the character areas (including urban drainage);
- To provide accessible public open space, allotments and recreational facilities complemented by network of informal open spaces throughout the character areas.
2. To mitigate traffic impact of the development and promote sustainable modes of transport and travel planning.

- To reduce traffic speeds and the barrier effect of Fenton Road and create a better pedestrian environment and frontage;
- To create a well-designed and high quality primary route/s that are safe and attractive to use for pedestrians and cyclists and provide a positive feature to the character of the development;
- To provide supporting infrastructure and on-going initiatives that promote sustainable and active travel as a first choice at all stages of development;
- To provide two points of access to Fenton Road to retain and enhance the value of Clough Streamside.
- To enable buses to travel through the development, providing key linkages to and from the site at an early stage.

3. To provide a range of housing types, densities and tenures through different characters area which respond to local site features, landscape and townscape character.

- To develop specific character areas with a mixed of housing types to create choice.
- To take opportunity for a number of parcels to be developed in parallel.

4. To provide a mix of employment uses across the site to meet market and local needs.

- To locate extended commercial space at School Lane and additional at Car Hill and provide effective connections and well designed interfaces with the wider site;
- To explore the potential for new workspace within the community hub, including the scope for atelier units to support homeworking.

5. To provide a central community hub of uses within Bassingthorpe Urban Village anchored by a primary school, recreational facilities and neighbourhood retail uses along a new pedestrian friendly high street.

- To provide effective spatial integration of buildings, streets, and spaces around the proposed community hub, including an attractive focal point.

6. To use the sites natural features (topography and water features) to sustainably manage water (responding to climate change)

- To create an effective and integrated cascading approach to water management that sustainably manages and controls water into the sites discharge locations.

7. To provide a network of pedestrian, cycle and green linkages to connect the site internally and to wider destinations and facilities.

- To create a well designed linkage between the community hub and the Wingfield Secondary School across Fenton Road;
- To create well designed pedestrian and cycle linkages between the community hub the town centre, public transport hubs and other destinations;
- To create a strong pedestrian and cycle connection between the site and town along Rodger Street and Thorn Hill Recreation Ground.
8. To ensure high quality design and a distinctive character that positively responds to local landscape character, strategic views into and out of the site and townscape context through BFL, Lifetime Homes and SYRDG as a minimum.

- To ensure that development on high ground is sensitively designed and incorporated into the landscape/townscape setting;
- To mitigate the visual impact of the pylons through the careful arrangement of streets, green spaces and buildings;
- To capitalise on the sites topography and views/vistas into and out of the site in creating an attractive townscape.
- To minimise impact of the new development on this historic environment particularly Wentwood Woodhouse and the Registered Park and Gardens.

9. To provide positive integration of existing communities in new development.

- Many of objective above help to realise this aim.

10. To successfully and sensitively integrate existing heritage assets with new development.

- To be determined following the conclusion of the Heritage Impact Assessment and in agreement with English Heritage.

11. To develop a strong collaborative and inter-disciplinary team approach

- As demonstrated in the preparation of this concept framework.
WORKSHOPS

As set out earlier, a number of workshops have been facilitated by ATLAS to support this design evaluation and testing. These workshop reports set out the design issues debated and concepts, principles and further work agreed.

At a workshop session held on 19 October 2012 the baseline assessment analysis was collectively reviewed by Rotherham MBC Officers, the Fitzwilliam (Wentworth) Estate and their consultant representatives. The testing of the evidence highlighted areas of agreement, where changes and options were debated and an acknowledgement of additional areas of work needed to make clear decisions.

FURTHER REFINEMENTS & CONSULTATION

Since the workshop session there has continued to be on-going joint working arrangements to discuss key issues within the context of the management structure of the project team as new evidence and outcomes of studies are known for example the transport modelling work and greenspace provision analysis.

Initial key stakeholder consultation has also taken place with the Environment Agency, English Heritage and Natural England. They have all indicated a willingness to work with the project team to deliver a sensitive scheme that can accommodate their requirements. The initial feedback has not raised any significant concerns that cannot be accommodated at the more detailed stage. However, English Heritage recommended an in depth Heritage Impact Assessment be undertaken to determine the likely impacts of the scheme on key heritage assets and explore appropriate mitigation measures.

Community consultation is scheduled to take place on the Concept Framework proposals in June 2013 and this will feed into the revised version of the Framework.

SUMMARY

It is considered that the range of specialist officers and consultants that have been party to the evolving design process has ensured that there has been a robust and systematic testing approach of the options facilitated by ATLAS in order to inform the selection of the preferred Concept framework approach at this point in time.

For each of the evolving frameworks relating to movement, placemaking and green infrastructure this section outlines options that have been jointly considered by the project team as well as those areas of common ground and consensus have been reached as the scheme has evolved. As the role of this document is to undertake a high level review of proportionate evidence which supports the submission stage of the Core Strategy, there is also a recognition that further areas of work are required to ensure the delivery of a sustainable scheme in order to fulfil the aspirations of the vision and related objectives. These are identified to help guide and inform the masterplan process.
EXPLORING GROUND CONSTRAINTS

The initial feasibility work identified a number of ground constraints which could impact on development within the Bassingthorpe Farm area. The Project Working Group agreed for additional work to be commissioned to provide further assessment of the likely magnitude and cost of the potential abnormal development measures that may be required to mitigate the ground conditions relating to the former mining works.

WSP have investigated the potential abnormal development costs associated with the formation of foundations for development based on a desk top non-intrusive investigation at this stage. The implications of ground stability work have also been influenced by the underlying spatial objectives and vision of the project and therefore the basis of the costing calculations by WSP have been prepared and tested on a collaborative basis within the context of an initial Density and Capacity Framework study prepared by Signet Planning dated 25 January 2013.

Against this background development parcels have been identified and the WSP report provides a range of potential costs with ‘Scenario 1’ providing a reasonable best case estimate whilst ‘Scenario 2’ providing a reasonable worst case estimate. These initial abnormal cost calculations and related development parcels have then been examined as part of the overall viability of the Broad Location for Growth which have been investigated by DTZ and re-assessed as part of the place-making framework.

Another option that was considered by the Project Working Group was the potential viable coal reserves within the Study Area that could be extracted which would allow the land to be remodelled to create development platforms. However, at this stage in the feasibility process, the decision was taken to hold this investigation work in abeyance whilst the abnormal development costs associated with overcoming the former mining works was explored.
Evolving Movement Framework

Options Considered

- Providing individual vehicular access points to the development parcels that are accessed from the exterior but without interconnection between the parcels.
- The provision of a local bypass of Greasbrough to enable areas south east and north of Greasbrough to be brought forward for development with the objective of reducing congestion at existing junctions within Greasbrough.
- An estate road/street that is suitable for public transport use and has frontage to create coherent and connected sustainable communities.

Areas of Agreement

- The principle of vehicular access shown on Henley Rise which could involve the relocation of existing allotments.
- The Bradgate Quarry application proposal should integrate with the wider Bassingthorpe Farm site and there should be an opportunity to rationalise the access to create a better frontage onto Fenton Road. It would also have less impact/disturbance on Clough Streamside to allow a quality green gateway to be provided.
- The need to create a legible, well defined and attractive cycle and pedestrian route from the site to the town across Rodger Street and Thorn Hill Recreation Ground.
- The pedestrian route to the town centre at Primrose Hill over the railway line is considered unattractive and not appropriate for improvement due to the inability to influence wider infrastructure that currently contributes to the poor environment.

SYPTA recognises the site has the potential to be well served by public transport and they welcome that it forms part an integral approach as part of the evolving development process. The concept favoured and agreed with SYPTA is for a central spine road to be provided through the main site suitable for buses. This would enable the potential access by the existing group of services which is the preferred approach but also allows for a new service if this is required.

Further Work

- Ensuring that careful consideration is given the phasing to provide sustainable forms of transport is available from ‘day one’ throughout all stages of the development.
- The preparation of a Framework Travel and Movement Plan as the development proceeds to promote the use of sustainable modes of transport.
- Based on the highway network options there is a balance between the highway role of the new access road and its required function as a street to support a quality of place. The results of the MVA traffic modelling will help inform the design approach and the movement options referred to above. There are a number of access options to be further developed and tested as the traffic modelling outcomes become available.
- Further testing in managing traffic along Fenton Road linking to a better green infrastructure environment.
- Further testing of the feasibility of stopping up Rodger Street to traffic over bridge and creating a pedestrian/cycle only route.
- Further design work should identify clear design principles for the Thorn Hill Recreation ground given the importance of this site in linking it to the town centre.
EVOLVING LAND USE/PLACEMAKING FRAMEWORK

OPTIONS CONSIDERED

- The initial framework identified three housing character areas namely: Roth: Urban (now renamed Clough Bank-Urban Living); Bassingthorpe: Urban Village; and Cinderbridge Waterside. It was agreed that the Cinderbridge area could be split into two separate character areas along the Scrooby Street area. The northern area had a strong link to the Greasbrough Conservation area whilst the southern area was more open exposed and rural in character (now called Barbot Hill).
- Another option was to create a separate character area straddling Car Hill where a strategic gateway into the site could be located and commercial development preferable. Whilst this would reduce the Bassingthorpe Urban Village there was an opportunity to extend this character area further to the west to encompass Bassingthorpe Spring Wood and interface with Fenton Road.
- Recognition that the relocation of Greasbrough allotments at the end of Scrooby Drive could allow a more effective layout and integration of development parcels (eg extending the Village Green character through the green corridor from Greasbrough Park).

AREAS OF AGREEMENT

- To create a central focus for sports provision that is accessible to both existing and future residents.
- The need to maximise development land in the Cinderbridge area due to the lower probability in ground constraints as compared to the rest of the site.
- The location of a community hub (or linear street) at Bassingthorpe Farm was judged to be a sound given it is equal distance to existing facilities and central location.
- The five hectares employment site at School Lane adjacent to the gateway industrial estate was logical in providing an expansion for the existing and new businesses.
- There was support for some commercial workshop units at Barbot Hill Road off Car Hill. There was also support for integrated workspace units including some ‘Atelier’ units to housing in the urban village character area as part of a mix use sustainable hub.

FURTHER WORK

- A commitment to working together to deliver the appropriate mix type and location of employment opportunities on the site.
- More work is require to define how the buildings, spaces would be integrated to create a quality hub as well as the relationship between this and the suggested focal point to the west where there was long distant views out from the site. This also links in to the form and design of the new skyline/roofscape to strategic vantage points into the site from the town and approaches including heritage assets.
- To explore the creation of built frontage to the south of Munsbrough Lane to create a two sided street as opposed to maintaining a green corridor.
EVOLVING GREEN INFRASTRUCTURE FRAMEWORK

OPTIONS CONSIDERED

- Consideration given to Fenton Road as a potential green corridor (as part of a wider strategic green ring).

AREAS OF AGREEMENT

- It was agreed that the surface water drainage strategy should relate to a cascade arrangement of dry, semi-dry or wetland detention features throughout the site.
- The overall quantum of greenspace provision and their multi function purposes for the scheme has been agreed.
- A suitable use for the Car Hill tipping area would be for recreational purposes.
- The provision of a quality green gateway at Clough Streamside should be both enhanced and maintained.
- The green corridors should provide a unifying element to seek to stitch together the new development into its wider community and green infrastructure network as well as provide for multifunctional green infrastructure with enhanced biodiversity measures.
- The proposed Green Belt boundary along Cinder Bridge Road was considered to be appropriate having regard to landscape consideration.
- There was general agreement that the green wedge between the industrial estates to the south east and the development character areas should be protected under a greenspace policy from future developments.

FURTHER WORK

- Examine the exact location and function of the green wedge along the eastern edge of the Study Area to ensure it provides a buffer with the adjacent industrial area and has a clear function and management approach particularly if it will remain as agricultural land.
- In terms of the SUDS cascade system, the main discharge points around and outside the site needed to be identified and the provision of appropriate surface water drainage links.
- Further design testing and the optimal locations for surface water detention areas should be integrated with further design considerations of house streets, buildings and open spaces related to the water areas to create good quality design and wildlife habitats.
- To assess optimum locations for footpaths through the woodland to Fenton Road.
- Further testing of H9 UDP allocation against ecological heritage and landscape constraints.
- The examination of drainage issues between the Bradgate Quarry site and the Study Area.
- GI and SUDS Solutions for Fenton Road should be explored along this route.
- On-going site investigation work of the Carr Hill Landfill is currently been undertaken by Rotherham MBC to understand its nature and scale.
SECTION 9

CONCEPT FRAMEWORKS
GREEN INFRASTRUCTURE

EXISTING LANDSCAPE FEATURES
The green infrastructure framework identifies the existing landscape features which should be integrated into the development proposals. These are:

- **Bassingthorpe Spring Ancient Woodland** to the south west of Greasbrough and adjacent to Fenton Road;
- **Clough Stream** - a watercourse running from just below Bassingthorpe Spring Ancient Woodland/Fenton Road diagonally (south east) towards Rotherham Town Centre (Clough Road);
- **Greasbrough Dyke** – a watercourse running broadly west to east along the northern edge of the Study Area parallel to Cinder Bridge Road;
- **Listed buildings - Bassingthorpe Farm** (off Bassingthorpe Lane), **Balbot Hall and Barbot Farm** (off Car Hill) and **Glossop Lodge** at the northern boundary of the Study area (off Cinder Bridge Road). It is noted that the trees around Balbot Hall are also subject to a Tree Preservation Order.

- **Extensive panoramic views** from the highest point of the site between Bassingthorpe Spring Ancient Woodland and Bassingthorpe Farm with views across the rural landscape to the north east and over to the Rotherham townscape to the east.
- **Allotment gardens** – there are two allotments within the Study Area on the southern edge known as Clough Bank (3.4 ha) and the northern edge of the Study Area in Greasbrough known as Scrooby Lane (2.2Ha). There are three allotment sites in close proximity to the Study Area, Hartley Gardens (Clough Road), Lowfield Avenue (Greasborough) and Kimberworth (off Fenton Road).
- **Mature Hedgerows** - these are located selectively throughout the Study Area
FIGURE 6: GREEN NETWORK
CREATE A STRONG NETWORK OF MULTI-FUNCTIONAL AND ACCESSIBLE GREEN SPACE CONNECTED BY TWO PRIMARY GREEN CORRIDORS ALONG CLOUGH STREAMSIDE & GREASBROUGH DYKE AND A GREEN WEDGE TO THE SOUTH EAST. (OBJECTIVE 1)

The green infrastructure strategy for the site is to create multi-functional ‘green corridors’ utilising existing landscape features such as Clough Streamside and Greasbrough Dyke and creating new green links between these features.

The existing spaces can be subject to ecological enhancement and habitat creation through new (wetland) planting and opening up of the watercourses. In addition swales and small ponds can be integrated as part of a sustainable urban drainage system which can cascade down the slopes of the Study Area.

New and resurfaced pathways can be created to give these areas recreational value with opportunities for larger green spaces to be created along green routes suitable for play areas, picnic/seating areas etc.

Overall there is a clear, and spatially mapped, vision to create a network of multi-functional greenspaces.
FIGURE 23: GREEN INFRASTRUCTURE FRAMEWORK
CONCEPT FRAMEWORKS GREEN INFRASTRUCTURE

PROVIDE A NETWORK OF PEDESTRIAN, CYCLE AND GREEN LINKAGES TO CONNECT THE SITE INTERNALLY AND TO WIDER DESTINATIONS AND FACILITIES. (OBJECTIVE 7)

GREEN RING
A ‘green ring’ (which extends beyond the Study Area limits) will be created. The route of the green ring follows the enhanced Clough Stream Corridor, and then follows a green route wrapping tightly around the southern edge of Bassingthorpe Urban Village close to the allotments and sports provision across to Car Hill. From this point a green corridor would run down Barbot Hill, crossing Scooby Lane and meeting the enhanced Greasbrough Dyke Corridor.

The route will run parallel to Greasbrough Dyke before heading back into Greasbrough through the attractive park just south of the Conservation area (Rossiter Road), through to Greasbrough ‘Rec’ and then an enhanced green corridor will be created on the existing, relatively lifeless, grass verges which run parallel to Fenton Road as it runs between Kimberworth Park, Wingfield and Greasbrough and meets the top end of the Clough Stream Corridor close to Bassingthorpe Spring Ancient Woodland.

In addition to the “green ring” important links to the town centre, Wingfield Business & Enterprise College and Bassingthorpe Urban Village “service centre” will be created.

ROUTE TO WINGFIELD BUSINESS & ENTERPRISE COLLEGE
In terms of providing a link to Wingfield Business and Enterprise College a pedestrian and cycle route is intended to be created using stretches of Bassingthorpe Lane (integrating existing mature hedgerows), through the proposed park in Bassingthorpe Urban Village, using the proposed tower as a focal point and then providing a link through Bassingthorpe Spring Ancient Woodland down to Fenton Road where a new crossing would be provided, with this route also linking into the Green Ring.

ROUTE TO TOWN CENTRE
A link to the town centre is also of primary importance, a green route is to be created which will include part of the Green Ring which runs up Barbot Hill and then across the site around the edge of the Sports Fields and Allotments down to Clough Stream. From Clough Stream a town centre route will be created which continues south east down to Clough Road, with the route crossing the Study Area diagonally to cut into the slope and ease the gradient. This route progresses through the existing street network down Rodger Street, which could be subject to public realm enhancements including the planting of streets trees, and then around the perimeter of Thorn Hill Recreation Ground.

ROUTE THROUGH THE BASSINGTHORPE URBAN VILLAGE SERVICE CENTRE
Part of the Green Infrastructure Strategy is to provide a hierarchy of green routes which creates a network linking the key green spaces with dwellings and services. This approach will involve the creation of separate but narrower corridors in residential areas and in the community hub which then open out to wider corridors such as Clough Streamside and Greasbrough Dyke. Thus green space would be accessible to all and close to their doorstep.

The vision here is to ensure important routes such as the new road from Fenton Road to Car Hill which penetrates the main services in the urban village such as schools, shops; health care etc has a green character. A separate green corridor running parallel to the road should be created, with landscaping and tree planting, to ensure an attractive route which links the wider green infrastructure network with new dwellings and the local services.
FIGURE 24: GREEN SPACE STRATEGY
PROVIDE A CENTRAL COMMUNITY HUB OF USES WITHIN BASSINGTHORPE URBAN VILLAGE ANCHORED BY A PRIMARY SCHOOL, RECREATIONAL FACILITIES AND NEIGHBOURHOOD RETAIL USES ALONG A NEW PEDESTRIAN FRIENDLY HIGH STREET. (OBJECTIVE 5)

The green infrastructure strategy includes the provision of sports pitches, equipped play areas and allotments within the Bassingthorpe Urban Village Community Hub which contributes to the mix of uses in the area.

A large allotment site south of Bassingthorpe Farm at the centre of the Study Area is also proposed which is positioned so that it can form part of the Community Hub, with the new Primary School and Community Zone backing onto this space which provides opportunities for synergy between the uses in terms of sustainability and learning. This new large allotment site can compensate for the potential reduction in size of existing allotment sites at Clough Bank and Scrooby Lane.

The undulating topography is a challenge to locating a suitable position for sports provision within the Study Area. One of the flattest areas is the landfill site in the centre of the Study Area to the west of Car Hill and it is noted that this would be an appropriate use for this land. Therefore it is proposed to create a Sports Hub with a variety of sports pitches to satisfy the scale of development but would also be of benefit to the wider community. This position is very accessible to the wider public and also is located on the edge of the community hub.
ENsure HIGH QUALITY DESIGN AND A DISTINCTIVE CHARACTER THAT POSITIVELY RESPONDS TO LOCAL LANDSCAPE CHARACTER, STRATEGIC VIEWS INTO AND OUT OF THE SITE AND TOWNSCAPE CONTEXT THROUGH BUILDING FOR LIFE 12, LIFETIME HOMES AND SYRDG AS A MINIMUM (OBJECTIVE 8)

The design proposals set the development parcels within a strong network of green infrastructure which capitalises on opportunities to retain and enhance existing landscape features such as the watercourses, existing trees and woodlands and mature hedgerows (where possible at the detailed design stage) which, along with new green corridors, parks and landscaping will contribute to the creation of a high quality new development with a distinctive character.

In addition new areas of planting for screening/protecting views and breaking up the built form will be proposed and consideration should be given to the phasing of such planting early in the process giving it time to mature as the development progresses.

The Green Infrastructure Framework identifies key views across the surrounding landscape to structures in the Wentworth Park & Garden as well as the Rotherham Urban Area which will be used to frame key views and create vistas through the new development at the detailed stage.

PROVIDE POSITIVE INTEGRATION OF EXISTING COMMUNITIES IN NEW DEVELOPMENT (OBJECTIVE 9)

The green routes proposed and outlined previously in this section are designed to ensure the integration of existing communities with the new development. Neighbouring communities will benefit from the new facilities provided at Bassingthorpe Urban Village and the green routes will allow direct access to the new Primary School from these areas.

In addition there will be more attractive green spaces for recreation created which will be connected to existing streets and paths in the surrounding communities, this includes the proposed Green Ring which extends beyond the Study Area and serves as a feature which integrates the communities of Kimberworth, Wingfield and Greasbrough with the new communities created at Clough Bank, Bassingthorpe Urban Village and Barbot Hill etc.

Similarly the proposed route through to the town centre will improve pedestrian and cycling accessibility for existing residents, particularly in Greasbrough.
BLUE INFRASTRUCTURE FRAMEWORK

USE THE SITES NATURAL FEATURES (TOPOGRAPHY AND WATER FEATURES) TO SUSTAINABLY MANAGE WATER (RESPONDING TO CLIMATE CHANGE).

(OBJECTIVE 6)

This framework plan particularly focuses on the surface water drainage strategy for the site with the aspiration being to avoid large attenuation ponds but instead adopt an approach using sustainable urban drainage systems (SUDS) which involves smaller dry water retention basins which cascade down the slopes into Clough Streamside, Greasbrough Dyke and other surface water outfalls at the eastern edge of the Study area.

These dry water retention basins have the opportunity to become an attractive green space feature within the built fabric of the scheme with opportunities for planting and habitat creation.

The Blue Infrastructure Framework identifies indicative locations for SUDS within the development parcels and importantly outside of the flood zone. The size of these water retention basins will be subject to further testing, however 10% of the developable area has been assumed and set aside to accomplish this aspiration.
FIGURE 25: BLUE INFRASTRUCTURE
MOVEMENT FRAMEWORK

MITIGATE TRAFFIC IMPACT OF THE DEVELOPMENT AND PROMOTE SUSTAINABLE MODES OF TRANSPORT AND TRAVEL PLANNING. (OBJECTIVE 2)

PROVIDE A NETWORK OF PEDESTRIAN, CYCLE AND GREEN LINKAGES TO CONNECT THE SITE INTERNALLY AND TO WIDER DESTINATIONS AND FACILITIES. (OBJECTIVE 7)

The Movement Framework seeks to meet the above objectives to provide alternatives to the private car and mitigate traffic impact. To achieve this, the framework is underpinned by the principles of the Masterplanning Checklist for Sustainable Transport in New Developments considering:

- location of new development,
- density of development
- local facilities and jobs
- street design and layout
- public transport

LOCATION OF NEW DEVELOPMENT

A number of key routes pass through the Study Area; in particular the B6089 Car Hill which runs through the centre and Fenton Road, which skirts around the western edge, carry traffic between the outlying settlements of Kimberworth Park, Wingfield and Greasbrough and Rotherham Urban Area, onto New Wortley Road. These routes are also important public transport corridors. It was therefore considered logical to integrate the existing highways infrastructure and make necessary improvements to the highway network at key junctions.

In order to use the existing infrastructure effectively one key new route is proposed between Fenton Road and Car Hill which will unlock land for development which can be accessed by public transport as services are diverted through the site as appropriate.

In considering suitable parcels of land for development a clear opportunity exists to link with the town centre and subsequently Rotherham Central railway station and the Bus Interchange with these facilities located approximately 800m from the edge of the Study Area.

On this basis new development is located around this southern edge closest to the town centre and then wrapped around existing communities to maximise opportunities to integrate with existing movement networks and the public transport services.

DENSITY OF DEVELOPMENT

In order to maximise the patronage of public transport the highest residential densities on the site (in the region of 37 dwellings per ha) are located in the parcels closest to the town centre. In addition higher densities would, where possible, be located along the new route between Fenton Road and Car Hill where it is anticipated a new service centre would be congregated.

FACILITIES & JOBS

On a strategic level clearly routes south to the town centre will be important as this will be a key source of journeys to work as well as for retail purposes. The Parkgate Retail Park will also have a significant draw for the same reasons, with the desire line being routes to the north east of the Study Area. The Barbot Hall Industrial Estate along the south eastern
FIGURE 26: MOVEMENT FRAMEWORK
The edge of the Study Area is also a primary source of employment in the area.

In terms of “local” facilities there are two primary schools at opposite ends of the Study Area, Greasbrough Primary School to the north and Thorn Hill Primary School to the south. The Wingfield Business & Enterprise College is the local secondary school and this lies adjacent to the western edge of the Study Area on the opposite side of Fenton Road (see figure 29). The key consideration here is providing safe and direct access by foot/cycle to the Secondary School as a new Primary School is likely to be provided as part of the proposals.

In terms of access to shops and healthcare facilities a similar scenario exists to the primary schools where facilities are located in the town centre to the south, including the modern Rotherham Health Centre and NHS Walk-In centre or in the Greasbrough Local Centre. Thus the gap in coverage for local facilities is in the land south of Munsbrough Lane and as such this is considered to be a suitable location for a service centre which will have good access to public transport and an array of cycle and pedestrian routes ensuring a significant proportion of properties will be within walking distance.

STREET DESIGN & LAYOUT

Highways
The new route between Fenton Road and Car Hill is to be designed as a public transport corridor; however this road should be designed as a 30mph route which is well integrated to the development, unlike streets such as Fenton Road. Whilst at this stage a detailed street hierarchy has not been produced it is clear that the streets should be people centred and designed for low vehicle speeds (20mph).

FIGURE 17: HIGHWAYS

The Movement Framework specifically identifies the key access points where new routes will be integrated with the existing highway network following a cellular approach where specific parcels are not all connected up but instead traffic is directed onto key existing routes. These routes are:

- Henley Rise/Clough Bank – a route to serve the southern parcels of development linking back through the Bradgate Quarry site onto Fenton Road.
- Fenton Road to Car Hill – new junctions on either end to accommodate this new primary route and public transport corridor.
- Car Hill East – a route to serve land between Car Hill and Scrooby Lane downslope from Barbot Hall and Barbot Farm on the eastern edge of Greasbrough (it is anticipated that traffic will circulate back onto Car Hill rather than connecting into Scrooby Lane to keep vehicles on the main routes into town).
- Scrooby Lane & Scrooby Drive – a new vehicular loop will be created off these two streets to serve the area abutting the countryside.
Cycle Routes

The Green Infrastructure Framework within this section out a commentary for the various pedestrian and cycle routes that are also proposed within the Movement Framework with the principle being to create safe and direct routes to key destinations. In summary these routes are:

- **Green Ring** – a route around and beyond the Study Area including Clough Streamside Green Corridor and Greasbrough Dyke Green Corridor.
- **Town Centre Link** (from Clough Streamside through to the Town Centre via Rodger Street and Thorn Hill Recreation Ground).
- **Wingfield Business & Enterprise College Link** (along Bassingthorpe Lane).
- **Green Corridor** running parallel to the new primary vehicular/public transport route between Fenton Road & Car Hill.

With particular reference to cycling Figure 27 emphasises the key routes within the Study Area which are based around a cycle corridor to the town centre which runs diagonally from Car Hill south east towards the town centre, with other routes branching off, including the route to/from Wingfield Business & Enterprise College and the route parallel to the proposed new highway link between Fenton Road and Greasbrough.

Whilst the main cycle corridor (see #1) isn’t as direct as following the highway network down Car Hill into the town centre, it is considered that there are a number of factors which make this existing route unsuitable:

- The gradient up Car Hill away from Rotherham Urban Area is very steep and likely to be a discouraging feature of the route.
- The environment around this route is industrial and of a poor quality.
- The highway network involves 3 lanes of traffic at certain points and is not considered to be a very safe route.

On the above basis the proposed cycle corridor will benefit from being separated from vehicular traffic and be set in a more attractive environment. In addition the route seeks to cut across the various slopes in order to ease the gradients. Overall it is maintained this will provide a more attractive route which is likely to be better used.

The strategy for cycling also includes some alternative new routes (see #2) south towards the town centre, crossing New Wortley Road and linking into the existing cycle path on Midland Road/College Road. These routes would have particular significance to new residents close to the western boundary of the Study Area with access onto Fenton Road.
In addition a route is proposed from Car Hill in the opposite direction (see #3), diagonally north east, down to the existing cycle route along Scrooby Lane and out towards Rawmarsh. This route is particularly designed with accessibility to Parkgate in mind. Again the route cuts across the slope which runs from Car Hill down to Scrooby Lane to ease the gradients wherever possible.

Cycling is currently prohibited through the Wentworth Park & Gardens, therefore a feature of the strategy is to avoid the creation of links which lead up to the Parkland entrance.

**Pedestrian Routes**

Figure 28 emphasises the key pedestrian routes, a number of which are shared with cyclists, who would benefit from a separate ‘lane’. The key principles here are

- Key links to destinations: the town centre, railway station, bus interchange (see #1), secondary schools/sixth form (Wingfield Business & Enterprise College) (see #2), and the main service centre (see #2 & #3) to be created at Bassingthorpe Urban Village.

- Recreational routes via the Green Ring (see #4) following Clough Streamside, Greasbrough Dyke, Greasbrough Park and enhancements to Fenton Road.

Public footpath links along the northern edge of the Study Area (see #5) will be retained and linked into the Green Ring. A key concern is access into Wentworth Parks & Gardens, whilst there is an opportunity to provide a footpath link this needs to be carefully designed (suitably narrow) so that it prevents use by cyclists.

**PUBLIC TRANSPORT**

Figure 18 identifies the existing Bus Routes 39/40 and 40/41 which circulate around the western and northern edge of the Study Area servicing the surrounding areas of Kimberworth, Wingfield and Greasbrough before passing through the site along Car Hill, returning into Rotherham. In addition Bus Route 221 passes directly through Greasbrough along Car Hill as it travels between Rotherham and Barnsley.

The Movement Framework identifies the coverage of existing bus stops within and around the Study Area, indicating that the existing routes would serve a significant proportion of development providing new housing is delivered as extensions to the existing neighbourhoods. Two additional bus stops are proposed in order to ensure that 95% of the new development is within 400m of a bus stop, with the remaining 5% only a further 100-150m away. These are most likely to be achieved via the redirection/extension of Services 39/40 and 40/41.
In order to create high quality new communities four main character areas are identified, which constitute extensions to the existing built fabric at Henley/Thorn Hill and the north-east edge of Greasbrough. Where applicable, the character areas have been drawn in the Placemaking Framework to take in existing built form of the surrounding area suggesting integration and the potential to take design cues from these areas. These character areas will retain and enhance existing positive features of the areas to create high quality places to live and work.

In addition to the extensions to existing communities the opportunity has been taken to create a ‘stand alone’ urban village at the centre of the site between the logical, natural boundaries of Clough Streamside and Car Hill. The Placemaking Framework identifies a gap in the coverage of the local services in the area at this central point, and it is therefore logical to deliver a ‘service centre’ in this location. Again this locality will build upon the positive features of its surrounding, in particular the views of the surrounding countryside and townscape given its elevated location and the existence of the listed farm buildings, Bassingthorpe Farm. A brief description of the vision for each area is provided below.

**CLOUGH BANK: Urban Living Character Area** (formerly Roth:Urban)

The name of this character area provides an indication of its likely character. At the design evolution stage the character area was known as Roth:Urban. The area could build upon the design precedent of contemporary housing on Henley Way. The surrounding urban grain is compact with a significant number of terraced houses, and given this area is best related to the Town Centre, a compact urban community could be delivered, with the density averaging at 37 dph, slightly higher than the recommendations of DTZ but reflective of the character of the adjacent neighbourhood, and a lower density than the new development, Henley Way.

It is anticipated this area will comprise predominantly terraced rows and semi-detached properties with a contemporary appearance similar to the photographs.
BASSINGTHORPE Urban Village

Character Area

This character area should function as a stand-alone settlement given the lack of coverage of existing facilities and logical boundaries in the form of Clough Streamside and Car Hill (main road).

Bassingthorpe Urban Village will be a mixed use community which incorporates the listed building at Bassingthorpe Farm, as part of a Community Hub/High Street which may include a primary school, retail, health and community uses. It is envisaged the Bassingthorpe Urban Village will have a traditional appearance in accordance with the aspirations of the landowner with the adjacent images providing a flavour of the likely character and appearance. It is in this area, in particular, that there is an aspiration to ‘create a market’ and a very distinctive and desirable place.
BARBOT HILL Mixed Use

Character Area

It is envisaged that this area will have traditional character respecting the two listed buildings, Barbot Hall and Barbot Hall Farm with a mix of residential and small employment units working with the sloping topography to the east of Car Hill to create an attractive townscape and ensuring views of the listed buildings are captured.

A standard density of around 35 dph with a mix of detached, semi-detached and terraces/rows is considered to be a suitable approach to this area. The employment units would be located on the west side of Car Hill offering good access onto the strategic road network and fit in with the traditional/rural appearance of the listed buildings as per the accompanying photographs.

The further development of this area presents place making opportunities to reduce the dominance of Car Hill in terms of visual prominence, noise and traffic speeds whilst ensuring the highway is suitable to serve employment development and continue its wider function as part of the strategic highway network.
CINDER BRIDGE Waterside Character Area
There are a number of features within this area which suggest the opportunity for the creation of a high quality community and a new aspirational area which could attract wealth and investment to Rotherham. These features are listed below:

1. The location of the site at the rural fringe with views out to the countryside.
2. The potential waterside location (Greasbrough Dyke) which could be enhanced.
3. The close proximity of the Listed Wentworth Park & Gardens and the attractive walks on offer in this area.
4. Views of Listed buildings in the form of Barbot Hall, Barbot Hall Farmhouse and Glossop Lodge.
5. The Greasbrough Conservation Area which borders the site, along with the adjacent green space which could be extended and integrated into this character area.

It is anticipated that the buildings in this area would have a traditional, potentially rural appearance and front over the Greasbrough Dyke Corridor and other green spaces. The density is likely to be low at 30 dph, reflecting the rural-urban fringe location with house types predominantly detached in form.
SECTION 9
CONCEPT FRAMEWORKS PLACEMAKING

FIGURE 30: DENSITY & CAPACITY FRAMEWORK
CONCEPT FRAMEWORKS PLACEMAKING

PROVIDE A RANGE OF HOUSING TYPES, DENSITIES AND TENURES THROUGH DIFFERENT CHARACTER AREAS WHICH RESPOND TO SITE FEATURES, LANDSCAPE AND TOWNSCAPE CHARACTER. (OBJECTIVE 3)

The proposed character areas constitute a series of extensions to existing communities with distinct characteristics which respond to local context such as the proximity of the Clough Bank to the town centre reflected in a more compact urban grain, and the relationship of Cinder Bridge Waterside to the countryside reflected in lower density development.

These areas also respond to local architectural form with Clough Bank taking design cues from the contemporary Henley Way development, and the other character areas taking a more traditional appearance respecting the listed buildings on site and also the heritage setting.

These distinctive character areas will provide a range of house types from compact terraces and rows at Clough Bank, to larger detached properties at Cinder Bridge and a wide variety of choice at Bassingthorpe Urban Village and Barbot Hill. It is envisaged that a range of tenures will be provided across the scheme.

Given an understanding of the more complex ground conditions in this area in particular that connected properties were more cost effective to build, initial ‘design led’ solutions have been explored which feed into this approach to create an area with a unique identity. House typologies such as ‘linked detached’ properties which give a ‘village’ feel have been considered and in lower density areas (30 to 35 dph) ‘green neighbourhoods’ have also been identified, comprising semi-detached properties with allotments either as part of gardens or as communal space giving reference to the Garden City movement, which feeds into the overall premise of Bassingthorpe Urban Village as a traditional organic, ‘green community’.

FIGURE 31 - LINKED HOUSE TYPOLOGY
In central areas of the urban village, where ground conditions permit, higher densities averaging at 45 dph including apartments and townhouses above/adjacent to retail will be used to create a 'High Street'/Community Hub which may also include light industrial units as well as education and community provision.

To the east the density steps down from 45 to 35 dph but remains relatively compact with house typologies generally being linked into rows or pairs of semis, including flexible housing incorporating an additional building for work/craft/play space linked to the main property, again fostering the sense of community and a mix of uses.
provide a mix of employment uses across the site to meet market and local needs. (Objective 4)

The Land Use Framework identifies two distinct employment areas, one in the north east corner of the Study Area removed from the core development, this is seen as an extension to the Barbot Hall Industrial Estate for Class B2/B8 purposes. The other employment zone is located in the Barbot Hill Character Area, and will divide the residential element of this character area with Bassingthorpe Urban Village. This location is well related to the existing highways network and in relatively close proximity to Barbot Hall Industrial area. Given the proximity to residential development this zone is envisaged to be for Class B1 uses.

In addition to the two distinct employment zones, the service centre of Bassingthorpe Urban Village will also be a source of employment in terms of retail, education and health. On the edge of the community hub a zone for Class B1 Light Industrial Units and Flexible Housing (workshop/studio/office space) is also provided.

Provide a central community hub of uses within Bassingthorpe Urban Village anchored by a primary school, recreational facilities and neighbourhood retail uses along a new pedestrian friendly high street. (Objective 5)

The Place Making Framework identified the vision for a Community Hub or High Street at Bassingthorpe Urban Village, this is considered to be a logical location for new services and facilities as it is located centrally within the Study Area and the analysis of access to local schools, healthcare and convenience shopping identifies that this area is outside of the 800m catchments of neighbouring facilities.

The Hub or High Street would most likely include retail with residential above, townhouses, community & health uses, a primary school and a pub restaurant (conversion of Bassingthorpe Farm).

Use the sites natural features (topography and water features) to sustainably manage water (responding to climate change). (Objective 6)

Whilst this objective is fundamentally related to the Blue Infrastructure Framework it is important to note that the use of Sustainable Urban Drainage Systems (SUDS) presents an opportunity to add to the richness of the various character areas as swales, ponds and associated wetland planting are integrated into the streets.
TO PROVIDE POSITIVE INTEGRATION OF EXISTING COMMUNITIES IN NEW DEVELOPMENT (OBJECTIVE 9)

Integration with existing communities is a key feature of the Place Making Framework which seeks to view new development as high quality extensions to existing communities rather than the creation of isolated new developments. This involves not only respecting the character and form of the area (as previously outlined) but also ensuring the movement and green infrastructure networks connect with existing communities to allow access to new facilities such as schools, retail, health and recreational facilities.

Furthermore the Green Space Audit identifies an initial strategy for Equipped Play which recognizes opportunities to upgrade or extend existing play facilities within neighbouring communities where they are accessible to the new development again to promote integration and for existing communities to share some of the benefits to development.

In order to ensure that new development is positively integrated into the urban fabric of the surrounding area the following key gateways and frontages have been identified as being important.

TOWN CENTRE GATEWAY

The most important frontage in terms of the Study Area’s relationship with the town centre is Clough Bank, with the Study Area boundary facing over Thorn Hill Primary School. The frontage will be visible from New Wortley Road (at the edge of the town centre) looking along Henley Rise. At present this frontage consists of the Clough Bank allotments which do not create a particularly attractive or legible gateway to a development of approximately 600-700 new dwellings. A design solution therefore is needed which allows for the creation of a distinctive built frontage, whilst minimising the loss of allotments.

The movement framework identified a town centre route crossing Clough Road, following Rodger Street over the railway bridge and following the edge of Thorn Hill recreation ground. In placemaking terms it is important that there are legible and direct town centre routes in and out of the development which are welcoming environments, with natural surveillance so that it feels safe in order to promote walking and cycling. Key interventions to deliver this route are identified on page.

The allotments limit the opportunity for an attractive frontage to the town centre gateway.
FENTON ROAD GATEWAY

Fenton Road has been identified as a poor quality street along its entire length, weaving through Bradgate, Kimberworth Park, Wingfield and Greasbrough, with dwellings orientated to turn their back on the street and a wide expanse of relatively lifeless grass verges leading to a vehicular dominated space. The urban extension therefore represents an opportunity to ‘reclaim the street’ through the enhancement of the frontage of the Study Area which meets Fenton Road and also additional developments along Fenton Road, such as the Bradgate Quarry site.

The frontage where the Study Area meets Fenton Road is also an important green infrastructure corridor where a link between Bassingthorpe Spring Ancient Woodland and the Clough Streamside corridor is proposed, with the Clough Streamside corridor essentially splitting the eastern frontage to Fenton Road in half, into the two distinct character areas of Bassingthorpe Urban Village and Clough Bank.

A wider opportunity exists to provide a built frontage and ‘active edge’ to Fenton Road on the opposite side of the road to the Study Area, where currently there is some underused and low quality public open space. This could be developed in such a way as to face Fenton Road, with the loss of existing green space compensated for on the opposite site of the road within the Study Area (linking with woodland and streamside corridor), with the Bassingthorpe Urban Village character area set back behind the open space.

Development right up to the frontage of Fenton Road could also then be provided in the area defined as Clough Bank character area and then continued through the future residential development coming forward on the Bradgate Quarry site.
BARBOT HILL GATEWAY
This is an important frontage with gateways on either side of the road. Consideration should be given to incorporating the listed buildings of Barbot Hall and Barbot Hall Farmhouse into this gateway/frontage to ensure the protecting of their setting. Given that Car Hill is quite a busy main road, consideration should be given to the set back of buildings from the road and also the opportunities which may exist to calm traffic and create a less vehicle orientated space.

CINDER BRIDGE GATEWAY
There are a number of facets to integration at this point given the need to protect the approach to Wentworth Park & Gardens and the fact that vehicular and pedestrian accesses are likely to be separated.

Pedestrian links are proposed from the east across Scrooby Lane through the Greasbrough Dyke corridor and from the south as an extension of Greasbrough Park which abuts the site and is an attractive area of open space at the edge of the Conservation Area.

Vehicular access to the development cells is likely to be delivered via Scrooby Drive and Scrooby Lane. Scrooby Drive currently serves the existing allotments and a small number of semi-detached dwellings arrange in a linear pattern. This street could therefore be extended in a logical, organic fashion to create an attractive gateway into the development parcel. An access could also be achieved through the widening of Scrooby Lane at the point it currently becomes ‘one way’. This area will be further informed by the emerging Heritage Impact Assessment.
LAND USE FRAMEWORK
The Land Use Framework identifies suitable land for development taking into account a range of factors.

The broad disposition of development parcels is reflective of the aspiration in place making terms to deliver natural/logical extensions to existing urban areas in a manner which respects their character and context. Development parcels protrude out from the southern, western, northern edges of the Study Area, with a wedge of green space therefore retained on the south eastern half of the Study Area.

A large area extending to 43ha known as Bassingthorpe Urban Village is also located relatively centrally within the Study Area in addition to the pockets of development which extrude out from neighbouring settlements with this creating a new service centre, with a mix of uses in addition to residential development such as new education facilities, retail, health, community and employment uses.

All the development parcels are set within the strong green infrastructure framework strategy previously identified which will serve to create well connected and sustainable new residential communities.

In terms of the spread of employment uses approximately 11ha of employment land is to be delivered with a 4.5ha site for Class B1, B2 or B8 at the very north east corner of the Study Area away from other areas proposed for development with this representing a natural extension to the Barbot Hall Industrial Estate. In addition, given the aspiration of the Council to deliver new employment alongside housing as part of a mixed use community an additional employment site, envisaged to be for Use Class B1(c) Light Industry is located close to Car Hill, which is most suitable in terms of good accessibility.

The wedge of green space created by the proposed layout of development is not only logical from a place making perspective, but also from various other technical standpoints:

- Currently the Study Area is located within the Green Belt, and this wedge of green space could therefore be re-designated as a green wedge to preserve some separation between Rotherham main urban area and the outer lying settlements/neighbourhoods.

- These areas are close to existing industrial areas and were considered unsuitable for residential development given the poor aspect/views likely to be created and potential hazards to residential amenity.

- In environmental terms there were constraints such as the COMAH stand-off distances, issues over ground conditions such as land stability and the existing landfill site.
SUSTAINABILITY FRAMEWORK
In developing the Concept Framework Plan, a comprehensive approach to achieving sustainability objectives and low carbon as part of an integrated design process has been recognised. Running alongside and complementing the key thematic development objectives, important sustainability themes have been developed to create a clear framework to ensure that key opportunities are achieved as the project evolves to deliver environmental and sustainable low carbon solutions.

TRANSPORT, MOVEMENT & CONNECTIVITY
In developing the movement framework consideration has been given to the key destinations and the options available for sustainable (strategic and local) linkages and modes of transport. Careful consideration has been given to how the existing and proposed linkages within the Study Area ‘are able to plug into’ off site linkages and the key destinations to ensure sustainable movement is being physically achieved.

DEVELOP MULTI-FUNCTIONAL INTEGRATED GREEN INFRASTRUCTURE
The green infrastructure framework has been a key element in driving the design evolution of the development. The function, location and type of green space provision has been designed to integrate and respond positively to the development parcels and the site topography. This is borne out by the underlying rationale behind the green infrastructure framework and the sectional drawings.

VARIETY & QUALITY OF THE BUILT ENVIRONMENT
The place making framework and the associated character areas are the basis for creating distinct areas character that respond to local context. The four identified character areas provide an opportunity to promote a diverse housing types within a unified public realm.

The next stage of work will require the preparation of an appropriate design code, this will identify opportunities for local/sustainably sourced materials providing a variety of finishes to development.

ENVIRONMENTAL RATINGS
Embedded in the Concept Framework Plan is the opportunity to consider the Code for Sustainable Homes as a framework to tackling sustainability in the round. The key opportunities for enhancing sustainability measures relating to a reduction in energy and CO2 emissions; managing surface water runoff and having regard to the waste hierarchy; enhancing biodiversity. These factors will be important considerations as the design process moves forward.

ENERGY EFFICIENCY & LOW CARBON TECHNOLOGY
Taking account of the energy hierarchy, buildings should in the first instance be designed and constructed to be energy efficient and at a strategic level using the principles of passive design including active solar opportunities these aspects will be factored into the design process.

The second stage is to consider the use of the centralised renewable and low or zero carbon technologies. At this stage it has been agreed that a range of technologies be explored so that one can be chosen that gives the best environmental performance, is cost efficient, and has no adverse impact on the surrounding area.

Given the scale of development, provision of a community energy scheme in terms of biomass or CHP will also be investigated.
In terms of aligning with the policies within the Core Strategy, it is noted that the explanation to Policy CS30 introduces flexibility where viability and deliverability are critical factors. However, schemes are encouraged to seek higher standards ahead of the trajectory of this policy where viability allows. This policy position will be closely monitored and reviewed in light of changing national policy and on-going economic conditions. The underlying objective will be to ensure a high standard of energy efficiency as possible is achieved. It is also recognised that increased public awareness, technological advances and economies of scale will play an important role in achieving our stated aims.

**SUMMARY**

Sustainability is at the heart of the integrated design approach to the Concept Framework Plan and the sustainability framework provides a model of good practice to address a range of issues including urban design, mixed use, transportation, water, energy and ecology as the project continues to evolve.

There is a strong synergy and alignment between the thematic development objectives identified in Section 2 and the key sustainable framework
SECTION 10

CONCEPT PLAN
CONCEPT PLAN
The Concept Plan draws together the visions and aspirations of the various framework plans to deliver a design concept which is:

- Distinctive
- Sustainable
- Well connected
- Green infrastructure led
- Viable

Many of the features of the Concept Plan have been previously described as part of the commentary on the individual framework plans, below is a summary of how the various features are brought together to create new sustainable communities.

CLOUGH BANK Urban Living
“A compact and contemporary housing development with direct links to the Town Centre and strong connections to the Clough Streamside corridor with pedestrian/cycle connections across to the other services at Bassingthorpe Urban Village”

KEY PRINCIPLES
- A built frontage to Clough Bank and Henley Rise is achieved with the remainder of the allotments retained.

- A vehicular link is provided through the Bradgate Quarry site integrating the two schemes.

- A built frontage will be achieved to the Fenton Road edge.

- The existing equipped play area within the neighbouring community (Henley) will be enhanced/extended in order to foster integration and bring benefits to the wider community.

- Opportunities are provided for links into Clough Streamside which separates Clough Bank from the adjacent development area (Bassingthorpe Urban Village).
**BASSINGTHORPE:** Urban Village

A new mixed use residential community with a traditional character offering panoramic views over the surrounding countryside and Rotherham townscape.

**KEY PRINCIPLES**

- Varied house typologies with lower density to the west, compact and increased density in the centre, and medium density on the north and eastern edge.

- In the centre of the character area provision is made for a “High Street” with retail (with residential above), a pub/restaurant (conversion of Bassingthorpe Farm), new primary school, health and community facilities, play area and town-houses.

- Light industrial units and “flexible housing” are located just off the High Street on the eastern periphery of the central hub/High Street.

- A sports hub and new allotment site are located to the rear and east of the school and community zones allowing for potential synergy/links which will promote the shared use of these facilities.

- A large park is set at the west end of the High Street and opposite Bassingthorpe Farm which is set out as a village green with a cricket pitch, and equipped play area (for children and young people).

- A tower is also provided within the park intended to become an iconic landmark, visible from distant views similar to other heritage features in the vicinity/surrounding landscape.

- The tower is located on a key pedestrian and cycle route to be created through the urban village to create a direct pedestrian and cycle link to the local secondary school, Wingfield Business and Enterprise College.

- The Bassingthorpe Urban Village area will be served by a new public transport corridor with this primary route running east – west between Car Hill and Fenton Road.
BARBOT HILL Mixed Use

An enterprising community providing places to live and work with traditional housing alongside small business units, respecting the context of Barbot Hall and Barbot Farm.

KEY PRINCIPLES

- Barbot Hall Road is realigned and forms the boundary between the Bassingthorpe Urban Village and the Barbot Hill Mixed Use Character Area on the west side of Car Hill (main road).

- Important cycle routes run the southern edge of Bassingthorpe urban village and then diagonally south west across to the town centre, cutting into the slope to Parkgate.

- Residential development will then be located down the slope from Car Hill similar to the adjacent part of Greasborough. An equipped play area is located adjacent to the Barbot Farm House residential complex as part of an open space which protects the setting of listed buildings rather than development going hard up against the curtilage.

- No vehicular connection is provided through to Scrooby Lane to the north, only access for cyclists and pedestrians will be provided in this location. This reduces traffic which would potentially circulate through Greasbrough to get to other parts of Rotherham.

- The allotments of Lowfield Avenue have been extended underneath the power lines to make efficient use of land and provide an alternative site for potential losses elsewhere in the Study Area.

CINDER BRIDGE WATERSIDE

A high quality, low density, residential area reflecting its rural urban fringe setting and fronting over an enhanced Greasborough Dyke corridor and taking account of the mitigation and suggest Design Code recommendations proposal in the emerging Heritage Impact Assessment.

KEY PRINCIPLES

- This area seeks to build on the attractive setting on the edge of Greasborough Conservation Area and the views out to the countryside.

- Opportunity to create a green corridor along Greasborough Dyke combined with enhancements to the watercourse in order to add to the overall setting of these development parcels.

- Extension of the green space located south of the Conservation Area in Greasborough Park providing a link between the park and the green corridor.
WIDER OPPORTUNITIES
LOOKING BEYOND THE STUDY AREA

In order to realise the visions and aspirations for this urban extension, it is of critical importance that the following interventions are delivered and viewed as integral to the development proposals in order to deliver great places.

- Ensure a high level of design quality and consideration of ‘the bigger picture’ with regard to the Bradgate Quarry development along Fenton Road.

- The redevelopment of the open space on the western side of Fenton Road in order to deliver an improved streetscene along this road.

- The enhancement of the grass verges within Fenton Road in order to provide an attractive ‘green rim’ for walking and cycling.

- The delivery of a Town Centre link through Rodger Street and Thorn Hill Recreation Ground.
SECTION 11

SCHEME VIABILITY
OVERVIEW

The need for Viability Testing within the context of the emerging Local Plan has arisen as a result of the requirement of the National Planning Policy Framework which has strengthened the importance of viability in the planning process.

Paragraph 173 confirms that plans should be deliverable and therefore the scale of development identified should not be subject to a scale of obligation and policy burdens that would threaten their ability to be developed viably.

DTZ have been commissioned by Rotherham Borough Council and the Fitzwilliam (Wentworth) Estate (FWE) to undertake preliminary viability modelling taking into account of:

- Viability Testing of Local Plans prepared by Local Housing Delivery Group 2012;
- Financial Viability and Planning (RICS 2012);
- Rotherham Whole Plan Viability Evidence (January 2013);
- Infrastructure Delivery Study (Final Report May 2012)

This work is at a relatively early stage of the scheme and the outcomes of this study will be used by the land owners and the Council to continue with the process of considering and managing the factors impacting on viability to support a sustainable and deliverable scheme.

METHODODOLOGY

The approach adopted relates to the standard residual development appraisal that subtracts all development costs (including reasonable developers profit) from end sales values to generate an estimated residual site value which is benchmarked against suitable thresholds to determine viability.

Whilst the mechanisms and arrangements for delivering development on the site are yet to be agreed between the landowners, for the purposes of the viability assessment, it is assumed that a partnership arrangement would be formed between Fitzwilliam (Wentworth) Estates and the Council enabling a single overarching master developer to be appointed to built out the site in a phased manner. The master developer would be responsible for carrying out site remediation and inserting the major elements of site infrastructure following which they would dispose of individual development parcels to enable implementation by a number of other developers.

In order to assess the impact of planning gain contributions on the potential development viability, DTZ assess two different scenarios in the modelling work;

BASELINE POSITION (POLICY OFF)

This considers only the costs and revenues associated with the planned development. Costs for onsite infrastructure necessary to facilitate the development and offsite contributions for highway improvements required to increase the road capacity and deliver the proposed development are also included. All specific build costs to provide the buildings (residential and commercial) are included along with the associated revenue. There is no allowance for affordable housing, offsite greenspace contributions, CIL contributions or any other planning gain. This results in the baseline viability assessment and allows RMBC and FWE to understand the likely viability of the site and determine its deliverability.
FULLY COMPLIANT (POLICY ON)

This scenario assesses the costs of delivering all of the requirements of the Core Strategy alongside those costs previously allowed within the baseline position. It is proposed that the planning gain contributions are consistent with those requirements relating to Bassingthorpe Farm found within the Infrastructure Delivery Framework prepared by Roger Tym and Partners and these are as follows:

- Affordable Housing 25%
- Lifetime Homes £545 per unit
- Low Carbon Energy £11,700 per unit
- Green Space Management and Maintenance £2,649,600
- Additional planning fees – 8% of plot build costs
- Education Payments £2,400 per unit
- Highways Costs and Travel Plan - £4,864,000
- New Surgery £2,000,000
- New Fire Station £1,680,000
- Refurbish Community Centre £496,000

As the Concept Framework Plan has evolved the identification of potential development cells have emerged through collective and collaborative sensitivity testing by:

- WSP in terms of assessing land stability issues and abnormal mitigation measures;
- Signet Planning as part of progressing the placemaking framework and ensuring the overall vision and objective continue to be achieved and;
- DTZ to examine likely values in the context of providing a market and viability assessment.

In accordance with the assumption of progressing with a masterdeveloper approach the costs within the viability appraisal have been separated between those relating to ‘enabling infrastructure’ and those that would be incurred in the development of individual development cells (including the planning gain/policy contribution).

The viability appraisal calculates a residual site value for the entire site by deducting from the cumulative total sales receipts for the enabling infrastructure items and associated incidental costs. The resulting figure effectively represents the price that the master developer will be prepared to pay for the site at the beginning of the development programme. It assumes that the land will be drawn down (and payments for the land made) in four instalments consistent with the four phases of development outlined within the delivery approach section and the master developers profit have been set at 15%. These assumptions are consistent with market practice and the draw down helps to limit the extent of finance costs to the master developer.

RESULTS

The overall residual development values are low with the full ‘Policy On’ scenarios and the ‘Policy Off’ scenarios producing positive land values that are marginal when set against anticipated land owner return expectations. This result suggests that the viability of development at Bassingthorpe Farm will be highly sensitive to the scale of infrastructure and planning obligations required.

Against this background each development cell has initially been assessed on a ‘policy on’ and ‘policy off’ scenario.
**FURTHER SENSITIVITY WORK**

The appraisals that have been produced are indicative and that the cost information relating to infrastructure and site remediation is particularly high level and so it is reasonable to assume that savings in these areas would be feasible in the actual development process. It is therefore recommended by DTZ and agreed with the project team that further high level sensitivity testing be carried out to examine the prospects and likelihood for ensuring improvements to viability could be achieved.

In terms of reviewing the ‘Policy On’ assumptions the list of obligations identified is the maximum possible standards to which the planning authority aspires. As the ‘Policy On’ and ‘Policy Off’ scenarios represented two extremes, two further scenarios showed the impact on values of meeting 66% and 33% of the policy requirements. Within the Rodger Tym Whole Plan Viability Assessment it is acknowledged that the request for all the ‘Policy On’ requirements would be unrealistic and they advise that choices will have to be made by RMBC (Paragraph 1.7).

Within the partnership framework, Rotherham MBC have indicated a general willingness to accept the principle of reviewing if required reducing and prioritising policies in the interests of achieving a viable proposal. It is also accepted, in the interests of achieving a deliverable scheme, that a mechanism could be introduced to ensure deferment or phasing of contributions to help reduce the initial upfront costs.

DTZ also acknowledges that the scale of building cost and enabling infrastructure could be reviewed and be lower than estimated in the model and this is another factor that could influence further testing.

DTZ indicate that there is limited comparable evidence of land values in the local market relating to large strategic mix use sites. However, it is worth noting that for the residential element of the proposal, the scheme can achieve similar land values to other recent transactions in the area on the assumption that it excludes the employment land value and enabling infrastructure costs together with a reduction in the ‘Policy On’ position to 33%.

Whilst the viability appraisals assumes a commercial partner will be appointed to act as a master developer, if the Council or FWE were willing to act in this role and fund enabling infrastructure works themselves this would be a significant cost saving arising from development.

The initial sensitivity work highlights a wide range of variable measures that could (when considered collectively) significantly influence the overall costs and lead to improvements in the viability of the scheme. The project partners acknowledge that the impact of planning obligations, infrastructure enabling works and allowing for the blending effect of employment land values have all had an impact on reducing residual values. However, there is general consensus of opinion that as the project moves forward, a pragmatic and realistic approach will be adopted to ensure that as more detail becomes available, all elements of the viability can be refined and balanced to ensure that the main objective can be achieved whilst demonstrating deliverability.

**FUNDING OPPORTUNITIES**

There are a wide range of funding sources that are available that could potentially assist and support development at Bassingham Farm. Public sector funding is increasingly focused on investment/equity rather than subsidy however, there are options available such as through the emerging Sheffield City Region Investment Fund (SCRIF) for major infrastructure schemes that unlock development. Further consideration must be given to how such sources of funding can be drawn on to assist delivery particularly as the project has an important role to play in meeting the growth and sustainability objectives of the Core Strategy for Rotherham.
SECTION 12
DELIVERY APPROACHES
**POLICY CONTEXT**

Within Policy CS1 of the Core Strategy the Broad Location for Growth at Bassingthorpe Farm refers to development being provided for around 2,400 new dwellings but suggest that only 1,700 will be developed within the plan period. Policy CS6 as drafted restricts the delivery of Bassingthorpe Farm until after the first five years of the Plan Period (assume 2019) and from this date it proposes 1,700 dwellings with the remainder coming from outside the Plan Period (a delivery rate of 170 dwellings per annum). Policy CS6 does allow for an earlier release of the development if it is required to meet a deficiency in the five year land supply of deliverable sites.

Based on the anticipated lead in time identified in Policy CS6 it is interesting to note that no reduction in employment provision over the Plan Period has been factored in to the Core Strategy and 11Ha is proposed to come forward within the Plan Period.

**MARKET BUILD OUT RATES**

DTZ who have provided market evidence for Bassingthorpe Farm as part of the financial viability appraisal consider that during the course of the strategic development a housing delivery rate of in the region of 35-40 open market dwellings per outlet could be achieved. Based on anticipated market conditions DTZ recommend on a maximum of three sales outlets progressing together and this would equate to between 105-120 units per annum. Across the lifetime of the development DTZ consider that in the early years, the delivery rate may be significantly below this but may well exceed this in other years later in the development plan period. An allowance of 25% affordable housing in addition to the market housing has been made and DTZ recommend an average total build rate of 125 dwellings per annum.

In so far as employment provision is concerned, DTZ commercial view is to encourage new industrial development as part of an extension to the existing industrial area. Whilst recognising this type of development in the short term Bassingthorpe Farm will be challenging and therefore a take up rate of 0.6Ha (1.5 acres) per annum is appropriate for the area and over a 15 year period this would lead to the delivery of about 9Ha overall.
PROGRAMMING OF DEVELOPMENT OPTIONS

Based on DTZ’s commercial view on the anticipated build out rates of residential development, the objective of delivering 1,700 dwellings within the Plan Period would not be achieved if the site is not released within the first five years of the Plan Period as suggested by Policy CS6 (i.e. post March 2019 assuming adoption of Core Strategy March 2014).

Given current housing land supply data, it is reasonable to assume that Rotherham will continue to have difficulty achieving its five year housing land supply of deliverable housing sites and in these circumstances an earlier release of the site is possible based on the wording of Policy CS6.

FWE have submitted objections to the Core Strategy to seek an earlier release of the Broad Location for Growth Area at Bassingthorpe Farm than that referred to in Policy CS6. FWE argue that the development lies at the heart of delivering growth and sustainability principles to achieve the underlying objectives of the Core Strategy. It should therefore be seen as a major priority and all measures should be undertaken to enable and facilitate its development in the short term.

Against this background, the delivery approach options that are worth exploring further to maximise the amount of development to be delivered in the Plan Period relates to investigating the feasibility of an earlier preparation of the master plan/design code and planning application.

The two options assessed are as follows:

Option 1 – Commence preparation of Masterplan work and application immediately after adoption of Sites and Policies Document.
Option 2 – Commence preparation of Masterplan work and application immediately after adoption of Core Strategy.

Considering Options 1 and 2 in the table below - we have assumed a lead in preparation period of around 33 months following the adoption of either the Sites and Policies Document or the Core Strategy to the commencement of development. Based on adoption of the Core Strategy in early 2014 it is realistic to assume that housing construction could start November 2016 whereas waiting for the adoption of the Sites and Policies Document would delay the start until November 2017 but still before the March 2019 suggested in Policy CS6.
## DELIVERY APPROACHES

<table>
<thead>
<tr>
<th>STAGE</th>
<th>OPTION 1: WAITING FOR ADOPTION OF SITES AND POLICIES DOCUMENT</th>
<th>OPTION 2: WAITING FOR ADOPTION OF CORE STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Strategy Hearing</td>
<td>November 2013</td>
<td>November 2013</td>
</tr>
<tr>
<td>Core Strategy Inspector’s Report</td>
<td>February 2014</td>
<td>February 2014</td>
</tr>
<tr>
<td>Core Strategy anticipated Adoption</td>
<td>March 2014</td>
<td>March 2014</td>
</tr>
<tr>
<td>Sites and Policies Document anticipated Adoption</td>
<td>March 2015</td>
<td>March 2015</td>
</tr>
<tr>
<td>Commence preparation of Site Masterplan/Design Code and EIA work to support a Hybrid Planning Application (i.e. outline an entire site with full application phase 1)</td>
<td>March 2015-January 2016</td>
<td>March 2014 – January 2015</td>
</tr>
<tr>
<td>Hybrid Planning Application submitted</td>
<td>February 2016</td>
<td>February 2015</td>
</tr>
<tr>
<td>Hybrid application determined/S106 negotiated and</td>
<td>August 2016</td>
<td>August 2015</td>
</tr>
<tr>
<td>Detailed design and approvals for primary infrastructure</td>
<td>February 2017</td>
<td>February 2016</td>
</tr>
<tr>
<td>Construction procurement and lead in/First Land Sale</td>
<td>August 2017</td>
<td>August 2016</td>
</tr>
<tr>
<td>Primary Infrastructure and Start Housing Construction</td>
<td>November 2017</td>
<td>November 2016</td>
</tr>
</tbody>
</table>
ASSUMED TIMESCALES
The assumed timescales for Option 2 would secure substantive delivery of the residential development in accordance with the scale identified in Policy CS1 of the Core Strategy based on the following calculation:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Lead in’ period to commencement of development following adoption of Core Strategy</td>
<td>33 months</td>
</tr>
<tr>
<td>Remaining Plan Period at start of commencement</td>
<td>12.25 years (approx.)</td>
</tr>
<tr>
<td>Average Build out rate per annum (advised by DTZ)</td>
<td>125 dwelling</td>
</tr>
<tr>
<td>No of dwellings delivered in the Plan Period</td>
<td>1,531 dwelling</td>
</tr>
</tbody>
</table>

An implication of this approach is that whilst the adoption of the Core Strategy policies would confirm the principle of removing Green Belt in this Broad Location for Growth area, the likelihood is that the detailed Green Belt boundary review would not be decided until the adoption of the Sites and Policies Document in 2015. Although progressing Option 2 could be seen as pre-empting this process, the detailed evidence being compiled as part of this Concept Framework Plan is robust, particularly in relation to assessing landscape sensitivity and visual impact. This has led to a clear rationale and approach to the proposed revision of the Green Belt boundary to follow Cinderbridge Road so that the underlying purposes of Green Belt are not fundamentally comprised. It is also important to balance this issue against the requirement to accommodate and direct future sustainable growth within Rotherham Urban Area to meet the borough’s housing and employment needs.
### PHASING ASSUMPTIONS

A draft development phasing plan contained within Figure 36 and associated Schedule below outlines a suggested phasing strategy for the site showing an indicative sequence of development parcel.

<table>
<thead>
<tr>
<th>TIMING</th>
<th>RESIDENTIAL</th>
<th>EMPLOYMENT</th>
<th>SOCIAL INFRASTRUCTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years 1-5</td>
<td>RU1</td>
<td>EMP1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUV 3d</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CH1 – 167 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL DELIVERY</td>
<td>600 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years 6-10</td>
<td>CH1 – 202 units</td>
<td>EMP1</td>
<td>MU1</td>
</tr>
<tr>
<td></td>
<td>RU2</td>
<td>EMP2</td>
<td>Primary School</td>
</tr>
<tr>
<td></td>
<td>CB3</td>
<td></td>
<td>Community Facility</td>
</tr>
<tr>
<td></td>
<td>BUVMU1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUV3c – 25 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL DELIVERY</td>
<td>608 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years 11-15</td>
<td>BUV3c – 128 units</td>
<td>EMP2</td>
<td>MU1</td>
</tr>
<tr>
<td></td>
<td>BUVMU2</td>
<td></td>
<td>Primary School</td>
</tr>
<tr>
<td></td>
<td>RU3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUV1a</td>
<td></td>
<td>Community Facility</td>
</tr>
<tr>
<td></td>
<td>CB2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUV1b – 48 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL DELIVERY</td>
<td>600 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 16 onwards</td>
<td>BUV1b – 73 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUV1c</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CB1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUV2a</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUV2b</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUV3a</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUV3b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL DELIVERY</td>
<td>567 units</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Abbreviation for Character Areas

- RU – Rotherham Urban
- BUV – Bassingthorpe Urban Village
- CH – Car Hill
- CB – Cinderbridge
DELIVERY APPROACHES

These development parcels have been derived from on-going discussions taking into account key constraints and opportunities in particular the abnormal land conditions, key place making objectives and important viability principles. There is expected to be some overlap in delivery between the character areas based on the principle of three initial starts on site. Furthermore, some key infrastructure may be delivered through the different phases rather than fit neatly into one.

The indicative phasing is designed with the timing of infrastructure investment in mind in order to create a sense of place and identity as well as ensure sustainable connectivity from ‘day one’ of the development to key destinations such as Rotherham Town Centre.

The development is broken down into four phases which are 0-5 years, 6-10 years, 11-15 years and 16 years onwards. Each outline a level and type of development they are anticipated to accommodate including the phasing of likely social infrastructure including education provision. For the purposes of this assessment the 0-5 years will begin upon commencement of the site and each phase runs for five years.

The suggested first phase of development in terms of the three independent starts on site have been chosen since they are adjacent to current existing areas of residential development. In the context of the viability assessment work, the general principle has been to explore initial areas that do not require significant upfront expenditure in terms of infrastructure, remediation or ground working but also provide good access to local facilities and amenities and major transport links. This has led to development parcels RU1, BUV3d and CH1 being identified within the first five years together with bringing forward the standalone EMP1 site for employment purposes.

As an alternative, the project team will also continue to explore the feasibility of a start on site at BUV1a rather than BUV3d since this will give the opportunity to start to deliver the aspiration of a new mixed use residential community off Fenton Road known as Bassingthorpe Urban Village with its unique character area instead of it being associated with an existing community.

In so far as the composition and distribution of employment land is concerned, the project team recognises the comments made by DTZ that the most realistic form of employment development within the Study Area would be light industry accommodation based on an extension to the Barbot Hall industrial area. However, from a phasing perspective, the project team have aspirations to ensure that the Concept Framework Plan encourages the delivery of light industry (Class B1c) that is able to fully integrate and relate to the new community rather than create isolated pockets of employment development remote from the new residential area. Therefore, any opportunity to bring forward EMP2 and MU1 earlier in the phasing progress will continue to be investigated as the Masterplan process moves forward.

The proposed phase development trajectory table represents an initial approach but further work is required to investigate the known infrastructure provision, to determine who will be responsible for delivering infrastructure and when the infrastructure will be delivered. This work will need to bear in mind the overall viability and cash flow of the project as well as needing to ensure that the development remains sustainable and attractive throughout the life of the phasing programme.
FIGURE 36: PHASING PLAN
SECTION 13

NEXT STEPS/ROUTE MAP
PLANNING ROUTE MAP

As we move forward with the subsequent stages of the project, the Concept Framework Plan will act as a firm foundation and it has been the first stage in providing sufficient evidence to demonstrate that Bassingthorpe Farm is available, suitable and deliverable to support the growth and spatial strategy identified in the emerging Core Strategy.

It is considered that this document provides sufficient evidence at this stage in the process to demonstrate that there are no major showstoppers associated with facilitating the required scale and mix of development. The report also demonstrates the collaborative working that has been undertaken to prepare this initial concept framework.

Nevertheless, there are challenges to reconcile having regard to the impact of site constraints and opportunities on development as well as clarifying appropriate mitigation options and infrastructure requirements within the context of the agreed overall vision and objectives.

It should be noted that these tables contain indicative but realistic timetables that will need to be continually monitored and reviewed.

In order to maximise the opportunity of delivering the desired number of dwellings within the Plan Period (1,700 dwellings and 11 hectares of employment land) the market evidence has demonstrated that the preparation of the masterplan, design code and planning application would need to closely follow the adoption of Core Strategy. Assuming that option is progressed it would entail that approval of development in advance of the Sites and Policies Document and the detailed Green Belt review which are not anticipated to be adopted until 2015. Further clarity is required regarding this issue so that we can respond to the effective delivery of the development at Bassingthorpe Farm to align with the objectives of the Core Strategy.
## NEXT STEPS/ROUTE MAP

### PLANNING ROUTE MAP

<table>
<thead>
<tr>
<th>KEY MILESTONES</th>
<th>TIMESCALES</th>
<th>COMMENTARY</th>
</tr>
</thead>
</table>
| Core Strategy Examination Hearing       | November 2013    | This Concept Framework Report provides sufficient evidence at this point in time to demonstrate the high level suitability of the site as part of the Core Strategy process. However, additional evidence is continuing to be prepared and assessed to further test areas of potential sensitivity. These are inter alia as follows:  
  - Heritage Impact Assessment;  
  - Ongoing Viability Testing Work;  
  - Green Belt Assessment to justify route removing the Study Area from Green Belt as well as defining a revised boundary. |
| Core Strategy Inspector’s Report        | February 2014    | The Project Team will review the conclusions and recommendations of the Inspector’s Report and respond accordingly.                           |
| Sites and Policies Document Preferred Draft | May 2013 – July 2013 | The consultation process over Summer 2013 provides an opportunity for the Project Team to engage with the public and stakeholders at organised exhibitions. The feedback received will feed into further iterations of the scheme either as a result of an addendum to the Concept Framework Plan or at the subsequent masterplan stage. |
| Core Strategy Anticipated Adoption      | March 2014       | Depending on the outcome of the Core Strategy process, the Project Team will make a decision as to whether to progress with the detailed masterplan/design code work. |
| Sites and Policies Document Submission Version | June 2014 | Further opportunity to engage with the public to share more detailed assessment work and receive further feedback to refine the scheme where necessary. |
| Sites and Policies Document Examination Hearing | February 2015 | Project Team to decide on proportionate level of evidence required to justify the Broad Location for Growth at Bassingthorpe Farm as a formal site allocation. |
| Sites and Policies Document Anticipated Adoption | July 2015 | If the masterplan/design code process has not commenced following adoption of Core Strategy, the Project Team will decide at this point in time whether to progress the work or review in accordance with Policy CS6 of the Core Strategy (i.e. suggested delivering of site not until five years after start of Core Strategy Plan Period – March 2019). |
# Delivery Route Map

<table>
<thead>
<tr>
<th>Key Milestones</th>
<th>Timescales</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commence preparation of Site Masterplan/Design Code and EIA Work to support the Hybrid Planning Application (i.e. outline on entire site with full application on Phase 1).</td>
<td>11 months</td>
<td>It is assumed that the masterplanning, design code and EIA work to support a planning application would all run concurrently. It is also suggested that a Hybrid Application is progressed to create an efficient timescale to delivery.</td>
</tr>
<tr>
<td>Planning Application Process – (i.e. Submission of the application through to approval).</td>
<td>7 months</td>
<td>Whilst it is envisaged that the pre-application work will resolve a significant number of the issues, the time of the determination process has factored in the negotiations of Section 106/CIL Contributions linking in with ensuring a viable scheme whilst creating an attractive and sustainable community.</td>
</tr>
<tr>
<td>Detailed Design and Approvals for preliminary infrastructure.</td>
<td>5 months</td>
<td>This element of work would relate to discharging of conditions, and approval for Section 38/Section 278 works.</td>
</tr>
<tr>
<td>Construction Procurement and Lead-in /First land sale.</td>
<td>7 months</td>
<td>This element of work is likely to run concurrently with the detailed design and approval work (see above).</td>
</tr>
<tr>
<td>Preliminary Infrastructure and Start Housing Construction.</td>
<td>3 months</td>
<td>This time period allows for site set up and implementation of initial infrastructure.</td>
</tr>
<tr>
<td>Total Timescale</td>
<td>33 months</td>
<td></td>
</tr>
</tbody>
</table>
VIABILITY SENSITIVITY TESTING

There is recognition that the development process is at an early stage and as the scheme moves forward, viability will be further assessed and costs refined in a dynamic process informed by up to date information at that time.

The high level viability assessment work has identified that by applying the aspirational policy requirements combined with the costs of the enabling works and remediation works generally, the anticipated land values are low so there are challenges to delivering a viable scheme.

It is not unusual at this early stage of the development and appraisal process to be in this position as the assessment work is driven by a range of high level assumptions. These are likely to change significantly as the scheme becomes more defined and solutions to improving viability whilst delivering a sustainable community are found. As part of this process, it has been agreed that further clarification is required in terms of the factors impacting on viability: abnormal costs (ground works, remediation enabling infrastructure and policy requirements such as affordable housing, low carbon build costs etc) as well as development mix particularly the lower values associated with employment uses.

It has also been recognised that measures should be investigated to seek to improve viability such as receiving S106 requirements, the timing/phasing to support positive cashflow as well as exploring the availability of alternative funding and delivery sources (eg Government Funding and private finance) for infrastructure items. The high level viability works suggest that compromises will be needed to help deliver a scheme that is financially viable and meets the planning objectives of the Core Strategy. The landowning parties will continue to work collaboratively with the planning department to achieve a deliverable and sustainable scheme.

PHASING STRATEGY

Having regard to viability sensitivity testing as well as acknowledging market conditions and delivering a sustainable development throughout the lifetime of the project construction, further consideration and clarity will be required in terms of the timing and phasing of the development parcels. The Concept Framework Plan assumes an initial three starts on site within the first phase and these have been selected to deliver early ‘wins’ without incurring significant costs infrastructure. This approach needs to be tested so that there is a coordinated approach to ensure key infrastructure is delivered at points within the development when certain threshold levels are reached whilst ensuring the aspirations of the development objections are achieved.

EXPLORING SUSTAINABILITY

A key thread that will continue to run through the project is the testing of sustainability initiatives and solutions. The project team will collectively review the principles of achieving sustainable new communities against the evolving masterplan.

PUBLIC CONSULTATION

It is recognised that further consultation and engagement with both key stakeholder agencies and the public will need to be organised and the current programme is for two Public Exhibitions in coordination with the Preferred Option stage of the Sites and Policies Document to be held at Rawmarsh High Street Church and at MyPlace on the edge of Rotherham Town Centre and at Greasbrough Town Hall.
PROGRESSING THE MASTERPLAN/DESIGN CODE
While the Concept Framework provides a sound evidence base to support high level spatial parameters provide clear design principles and infrastructure requirements further detailed technical studies will be undertaken in order to formulate a site masterplan.

A brief will be agreed between the landowners, Council and key stakeholders in terms of the further evidence base is needed, anticipated outcomes as well as the detailed masterplanning process.

Ultimately a detailed masterplan and design code will be prepared to bring forward the Bassingthorpe Farm Broad Location for Growth in a coordinated way, this will involve the detailed examination of further technical information such as ground conditions/land stability, transportation etc. It will also investigate in more detail the phasing and delivery of essential infrastructure to enable the creation of viable sustainable communities.

A strong collaborative and inter-disciplinary team approach (which has integrated the landowner and consultancy team with the Council team) has supported the preparation and decision-making behind the Concept Framework. This will continue to support the next phase of masterplanning work. A new project plan will be agreed between parties as well as refreshed project management arrangements with wider stakeholder involvement. This will include the establishment of a delivery working group to resolve issues of infrastructure planning and provision, viability, funding, phasing and implementation in order to deliver a viable and sustainable development. The membership of this team will include senior and specialist officer representation from the Council, landowner and consultancy advice and enabling support from ATLAS/HCA.
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