



## Appendix 5.3

### STRATEGIC DESIGN GUIDE

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Oxford University Development

# Begbroke Innovation District

Strategic Design Guide

July 2023

Hawkins\Brown  
With  
OKRA  
RCKa  
OOZE





# Document history

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# Cultivating a place ...in which a community can change the world



Our vision is for a successful innovation district, taking advantage of the site's peri-urban qualities and delivering homes for Oxfordshire.

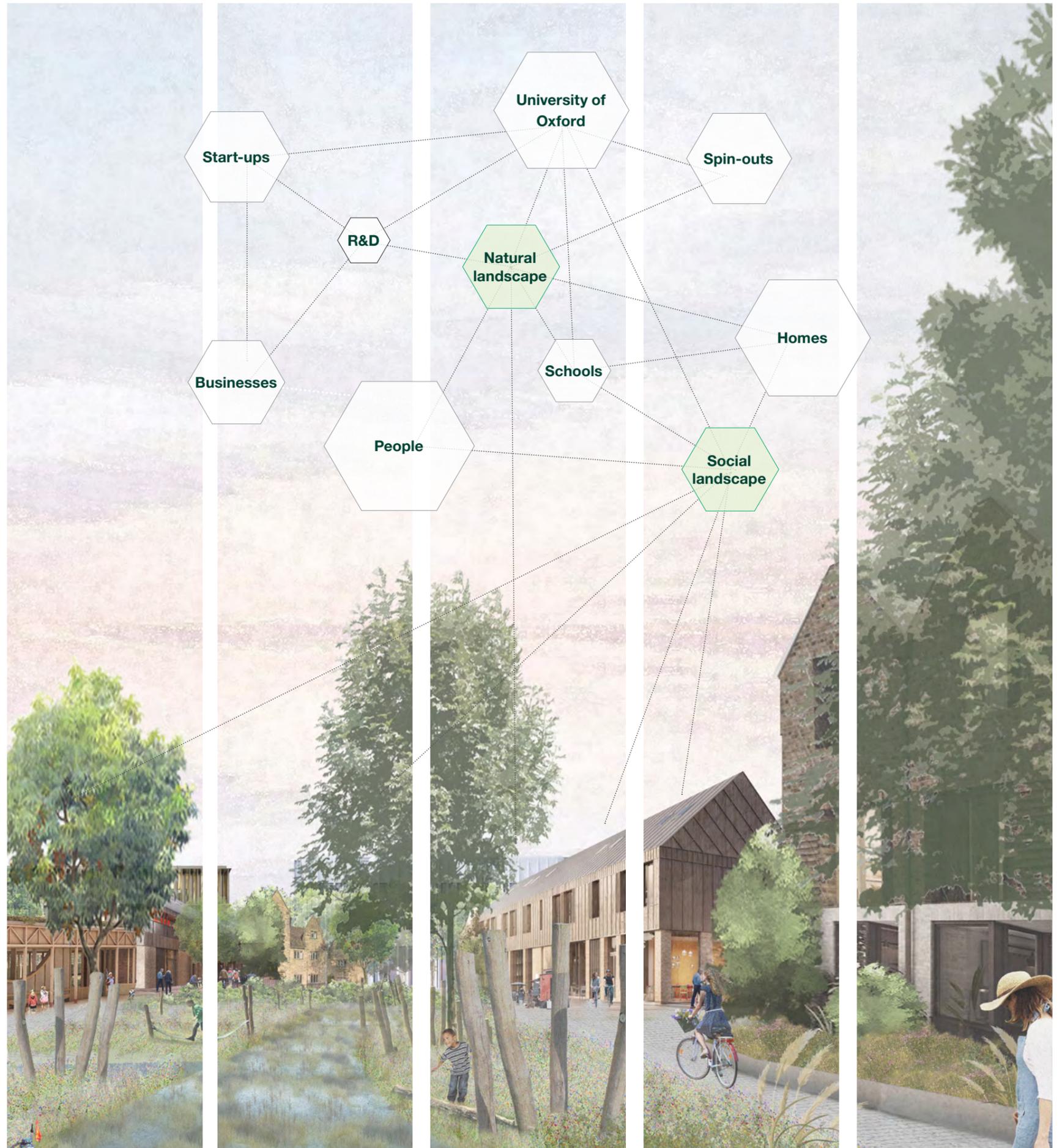
An innovation district is a mixed-use environment where the combination of academic researchers, start-ups, established companies, residents and visitors provides the critical mass and ecosystem services to support the growth of knowledge-based enterprises and the provision of social amenities that is attractive to a wide audience.

An innovation district enables enterprises to grow from inception through incubation to maturity, as well as provide an environment attractive to established commercial organisations.

The site, client and brief provide the opportunity to pursue a development that moves the dial on development norms in their pursuit of the exemplary. Innovation refers to both the activity of the commercial/R&D space, as well as the way in which the development is designed and delivered.

The proposal establishes

- A framework for social restorative landscapes across more than half the site area
- A fundamental rebalancing of streets for active travel and landscape through 'living streets'; and
- Accommodation of cultural and social amenity delivered from the outset to 'engineer serendipity'.



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# 1. Introduction

# 1.1. Introduction

The Begbroke Innovation District is an ambitious project stemming from different needs. Its proposal sits at the intersection of Oxford's unmet housing needs and the desire to expand Oxford's university research and development facilities at Begbroke Science Park. In doing so, it opens the site to offer its great environmental assets to Oxfordshire, it fosters crossovers between existing communities and the university's research activities, it brings nature to people's doorstep, and it shifts development models to more sustainable, climate-change conscious, health and well-being focused models, through place making.

This Strategic Design Guide is prepared in support of an outline planning application submitted by OUD to define the vision and design quality intended for the Begbroke Innovation District and to demonstrate that all technical matters have been fully assessed and addressed in the development proposals.

The principles defined in the planning application will guide future design work, including reserved matters applications, undertaken with key stakeholders and the local community.

This document seeks to ensure that the outline planning permission defines the vision and design quality intended for Begbroke Innovation District.

# 1.2. How to use this document

This Strategic Design Guide supports the Outline Planning Application for Begbroke Innovation District. It sets strategic guidelines that are applicable to all development pursuant to the outline planning application, and character guidelines that are applicable to specific areas of the site.

A brief would be prepared for each relevant section of the site. It is anticipated that a Neighbourhood Brief would be prepared for a defined area of land, with each Neighbourhood Brief applying the guidelines and principles identified in this document, along with the Development Specification and Parameter Plans to create a clear spatial framework that enables Reserved Matters Applications for individual parts of the site to come forward.

The Neighbourhood Brief will include a Design Guide that will inform the detailed design of proposals in future reserved matter applications within that section of the site. The guides will be prepared in accordance with this Strategic Design Guide. The guide will set out further key design principles that will inform the character of the relevant section of the site, and these may relate to the design and layout of the development and the external appearance of buildings.

The Brief would set out the expected landscape proposals, including the relationship to adjacent land. It will include landscape principles for areas surrounding each section of the site and to provide further details of any strategic landscape infrastructure which is being brought forward alongside the land in question. It is anticipated that the landscape proposals will evolve over time and will be updated and resubmitted alongside each Development Area Brief.

Neighbourhood Briefs and Reserved Matters Applications will be expected to substantially accord with the principles set out by this document, unless otherwise agreed with the local planning authority.

In terms of structure the document includes 3 main chapters:

- Chapter 2, Vision and Place Principles

Explains the Place Principles and the vision for the site. The purpose of this chapter is to provide the rationale and context for the guidance included in the following chapters.

- Chapter 3, Site-wide guidelines

Sets out the design guidance that will inform the subsequent stages of design development. These design guidelines will apply to each part of the Site.

- Chapter 4, Character - Places and Parks

This section sets out some illustrative design work that has been prepared for identified character areas. The details in this section illustrate how the design might come forward. The details shown in this section are not fixed and are for illustrative purposes only.

# **2. Vision and Place Principles**

**This chapter describes the Place Principles and the vision for the site. It provides the rationale and context for the guidance included in the following chapters.**

## 2.1. A restorative landscape

The vision is to create a landscape-led masterplan where the site's environmental conditions, including the topography, hydrology or geology determine the layout and design of the masterplan. The site-wide guidelines and character principles set out in the following chapter suggest key considerations with this purpose as well as ways to incorporate natural and sustainable flooding systems thus creating a sustainable approach addressing climate change.

Another important ambition is to bring nature to people's doorstep. For that effect, the Parameter Plans and guidelines in the following chapter define a series of landscape corridors running through the centre of each neighbourhood and connecting them to larger green areas.

Biodiversity and ecological value are another key aspect of the vision in respect to the landscape. Strategic Design Guide in following chapters will set out principles to create a diversity of characters, scales and habitats, that will contribute to wider green ecological networks. Special mention should be given to the opportunities to establish sustainable agriculture and well-being activities and the subsequent chapter will elaborate on those as well.

Strategic Design Guide will also focus on lay strategies as these are a crucial part of the landscape design as they create opportunities to combine innovation education and intergenerational interaction with research, nature and sustainability.

Finally, the cultural offer, such as walking trails, public art, meanwhile uses and other placemaking interventions also form part of a restorative landscape and will be picked in site-wide and place character guidelines on chapters 3 and 4 of this document.





## 2.2. Engineering serendipity

Creating spaces for different communities to meet around landscape or amenity will foster casual encounters both science and social life can benefit from. The site-wide and character guidelines set out in the following chapters define ways in which these spaces should be created to maximise the opportunities for these encounters.

The existing Farmhouse present a great opportunity to create a place to meet defined by the character and built around a heritage asset and surrounding landscape. Guidelines will define ways in which detailed buildings and landscape design should work together to create a heart for the whole community, that is easily accessible from the surrounding villages, providing a focal point for different people to meet.

Equally important will be the use of landscape to congregate multiple uses on its edges providing yet more opportunities for synergies and cross-overs. Guidance will set out ways in which this should be done in future sages of design.

At a neighbourhood scale, central amenity and landscape will increase intergenerational social interaction and community-making. Relevant guidelines are provided in the two following chapters to ensure these spaces include multiple opportunities to meet your neighbours.

Variety in offer of places to dwell on, including landscape or different types of amenity will provide opportunities to meet with people with similar affinities.

## 2.3. Car is a guest

**Prioritise active travel and limiting car movement to create better streets.**

Rich and permeable cycling and walking networks will provide most direct movement alternatives between all areas across the site. This will ensure active travel is prioritised over vehicular movement.

A public transport connection, linking the site to the wider context is a critical strategy to reduce vehicular movement. Links to established infrastructure such as Oxford Parkway or even the potential

inclusion of a Rails Halt within site can contribute to the success of the Begbroke Innovation District. As these strategies tend to require time, investment and stakeholder coordination, the proposal will look for future opportunities opening as many options as practically possible.

The vehicular network including roads and shared-surface routes will be designed to give priority to cyclists and pedestrians whilst

ensuring access for cars, servicing, deliveries and waste collection to all areas of the site.

Parking and vehicular routes should be laid out in ways that facilitate the creation of living streets in residential neighbourhoods. (Detailed in following chapters).

The site-wide and character guidelines include the relevant strategies and level of details to ensure the right steps are taking at the early and subsequent stages of design.



## 2.4. Opening to Oxfordshire

**Respect boundaries, connect to neighbours, and provide amenity for beyond our borders.**

Opening the site to Oxfordshire and offering a new range of landscaped areas that are open and accessible to everyone is at the core of the vision for the Begbroke Innovation District.

Complementing this a new amenity offer will provide a new destination that is also open to everyone and invites people in.

The amenity offer will extend out of the existing science park that will also become open to everyone, thus fostering a community of communities that includes new and existing residents from within and outside the site.

To reinforce the integration between communities and to enhance the experience of navigating through the site and benefiting from the new landscape and amenity, a series of direct links will ensure the neighbouring villages are treated as part of the Begbroke community.

Beyond the surrounding communities, landscape and open spaces will form part of and contribute to wider ecology and environmental networks.

To contribute to a wider Oxfordshire character and identity, design will acknowledge and provide a positive response to its context, either by drawing references where appropriate and/or positively differentiating from it.

The site-wide and character chapters include guidance leading on to strategies ensuring the vision for an open accessible site that fosters integration with the immediate and wider context is taken forward by the next stages of the design.



## 2.5. Active stewardship

**Plan, manage, curate and monitor for long-term value creation.**

Critical for the success of the Begbroke Innovation District will be a long-term stewardship. A long-term ownership and resulting long-term view in the approach to management will put sustainability at the top of the priority list and ensure the vision and supporting strategies are brought forward.

Heritage and environmental assets are great assets. Nurturing, designing around them and inviting people to enjoy them is part of the long-term view to character and placemaking linked to the success of the proposals.

Equally important will be the public realm strategies, including arts and culture, early interventions or meanwhile uses. As such, proposals have started and will continue embedding them in, looking to create a place for all from early days and for the future.

Relevant guidance is provided in relation to character, sustainability, health and well-being and public realm to ensure an active stewardship is present at all relevant stages of design.



# 2.6. Applying the Place Principles

L - A restorative landscape  
 E - Engineering serendipity  
 C - Car is a guest  
 O - Opening to Oxfordshire  
 S - Active stewardship

Begbroke Innovation District includes 15 key components, shown below, bringing the Place principles to life. The following chapters of this document provide guidance to ensure the quality of these spaces meet the ambitions set out by the Place Principles.



**The arrival**  
O|C



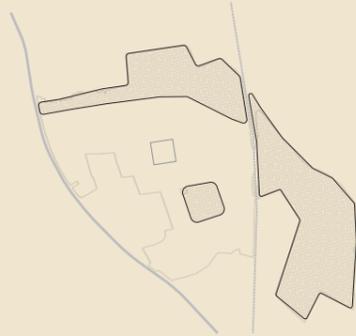
**The Farmstead**  
E|O|S



**Green arteries**  
L|E|C



**Farm link & innovation avenue**  
L|E|C



**Parks**  
L|O|S



**Canal**  
L|O



**The community farm**  
O|S



**The hedge**  
O|E



**Lanes**  
O|S



**Bridges**  
O|S



**Landmarks**  
E|C



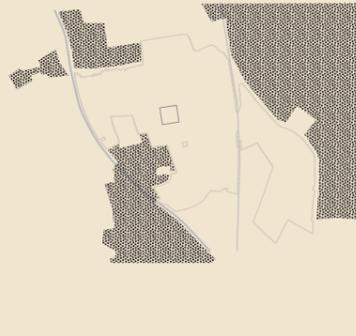
**Schools**  
E|O|S



**Living streets**  
C|L|E



**Research & development**  
E|O



**Neighbouring villages**  
O|E

# **3. Site-wide Design Guidelines**

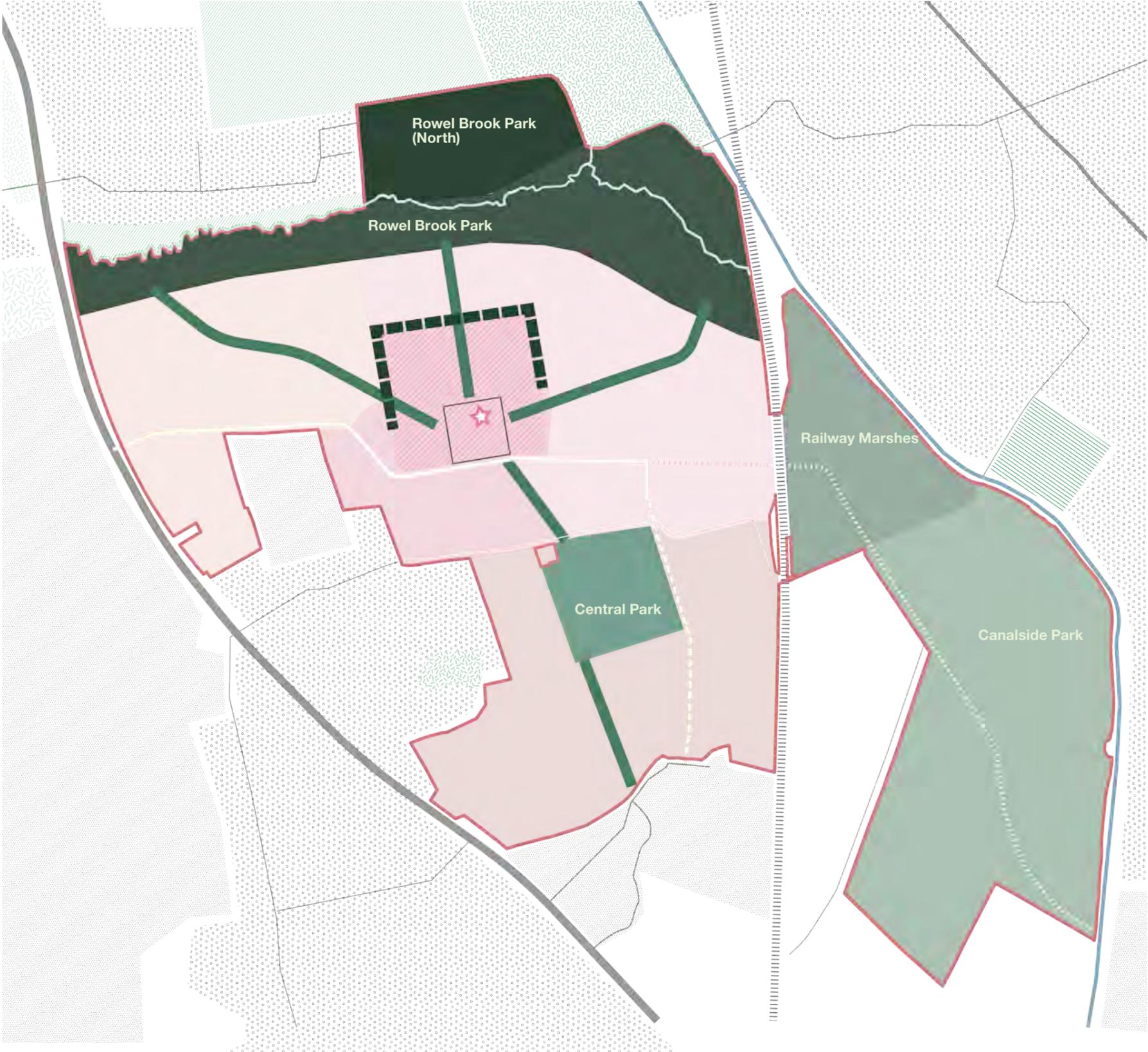
**This chapter sets out key guiding principles in relation to critical topics bringing forward the Place Principles.**

# 3.1. Landscape character, amenity and open spaces

## A restorative landscape

### Principles

- 3.1.1. Neighbourhood Briefs will identify long and short range views to create connections with existing built and landscape features.
- 3.1.2. Tree and plant selection should support native species, promote diversity and be responsive to local climate and geological conditions.
- 3.1.3. Landscape design should consider opportunities for habitat creation within the Lower Cherwell Valley Conservation Target Area in the north of the Site
- 3.1.4. Local fauna should be supported by providing features such as bird and bat houses, logs, rock piles and, insects hotels.
- 3.1.5. Connections to open spaces will be carefully designed to be direct, safe and pleasant.
- 3.1.6. Neighbourhood Briefs should identify points or areas providing access to nature.
- 3.1.7. Existing Public Rights of Way ('PRoW') within the Site should be retained or re-provided, alongside the creation of new informal pathways.
- 3.1.8. Landscape should be varied and include a range of distinctive characters.
- 3.1.9. Landscape offer should balance activity and programmed spaces with nature and regenerative zones.
- 3.1.10. Open spaces including parks, marshes and arteries should integrate into wider ecological networks.
- 3.1.11. The Green Arteries should bring landscape through the centre of each neighbourhood, and nature to the doorstep of residential and commercial areas.
- 3.1.12. Private and Public open space should be easily distinguishable, soft edges are welcomed.



### Key

<ul style="list-style-type: none"> <li>Application site boundary</li> </ul>	<p><b>Green Infrastructure</b></p> <ul style="list-style-type: none"> <li>Green Arteries (Green corridors running through the centre of each neighbourhood)</li> <li>Rowel Brook Park (North)</li> <li>Rowel Brook Park</li> <li>Railway Marshes (Nature Conservation Area)</li> <li>Canalside Park</li> <li>Central Park</li> </ul>	<p><b>Local centre</b></p> <ul style="list-style-type: none"> <li>Farmstead</li> </ul> <p><b>Other features</b></p> <ul style="list-style-type: none"> <li>Oxford canal</li> <li>Rowel brook</li> <li>Key vehicular routes</li> <li>Railway line</li> <li>Existing Science Park</li> <li>Existing Hedge (To be strategically thinned down)</li> </ul>
<p><b>Neighbourhoods</b></p> <ul style="list-style-type: none"> <li>Begbroke Hill</li> <li>Parkers Farm</li> <li>Foxes Cover</li> <li>Begbroke Science Park</li> </ul>		

# 3.2. Biodiversity

## A restorative landscape

### Principles

3.2.1. Existing biodiversity corridors should be strengthened with interventions targeted at ecological enhancement. Specific focus should be set on the Oxford Canal corridor and its strengthened contribution to Oxfordshire's Nature Recovery Network.

3.2.2. Existing ecological assets should be retained wherever possible with particular attention to the Oxford Canal corridor, Sandy Lane hedgerow, hedgerows with high ecological value and woodlands.

3.2.3. A wide range of bio types should be provided (such as woodlands, wet meadows, dry meadows, marshlands), Monitored and maintained in time to retain their ecological value.

3.2.4. Within the development, roads, pocket parks and courtyards should have a green planted character.

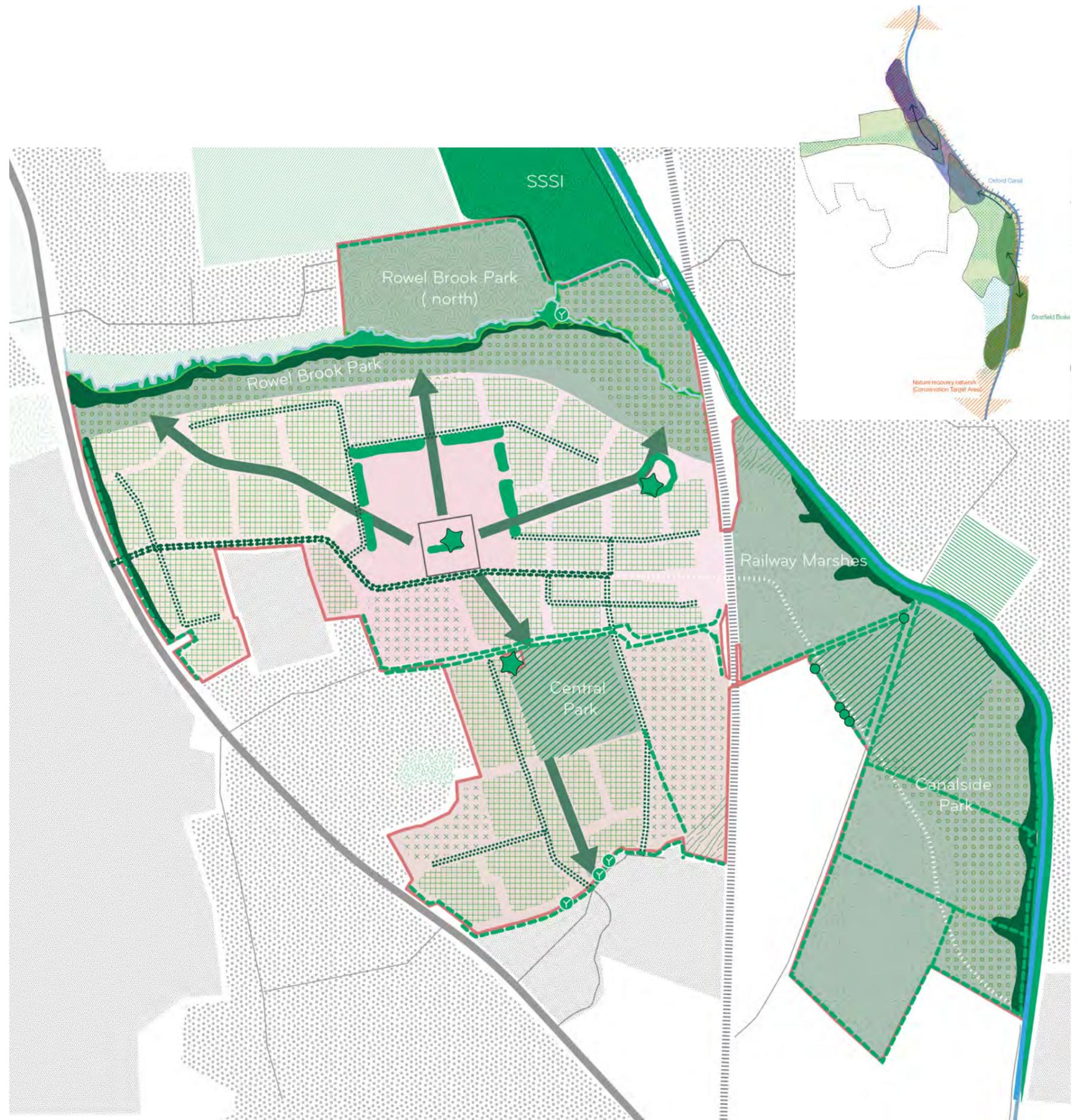
3.2.5. Planting should be composed in layers: ground covers, grasses, plants, shrubs and trees.

3.2.6. The planting palette should favour a healthy variety of native species, including trees that produce fruits and berries. The mix of species should aim to provide food for pollinators throughout the year and include species that are resilient to a changing climate.

3.2.7. Local fauna should be supported by providing strategically located solutions within the landscape as well as buildings including bird & bat houses, logs, rock piles, insects hotels, etc.

### Key

Application site boundary	Railway Marshes (Nature Conservation Area)	Buildings suitable for bat roosting
<b>Neighbourhoods</b>	Canalside Park	Dense scrubland / grassland
Begbroke Hill	Central Park	Strengthened existing corridors
Parkers Farm	Begbroke Hill Road (East-west tree-lined route with multiple layers of planting)	Areas of reduced human access
Foxes Cover	Living streets (Residential streets including landscape islands)	Areas with moderate human access & activities
Begbroke Science Park	Secondary vehicular routes (Including roadside trees and multi-tiered planting verges)	Areas of programmed nature
<b>Bio-diversity</b>	School sites	<b>Other features</b>
Green Arteries (Green corridors running through the centre of each neighbourhood)	Woodlands	Oxford canal
Rowel Brook Park (North) (Including agricultural uses and allotment gardens)	Hedgerows	Rowel brook
Rowel Brook Park	Veteran trees	Key vehicular routes
	Trees suitable for bat roosting	Railway line



# 3.3. Sustainable drainage

## A restorative landscape

### Principles

3.3.1. Drainage systems should control surface water in close proximity to where it falls and replicate natural drainage as closely as is feasible.

3.3.2. Drainage layout should consider and utilise the existing topography as much as possible.

3.3.3. Piped and engineered solutions should be minimised.

3.3.4. Priority should be given to retention and direct infiltration. This can be achieved through the implementation of open-air Sustainable Drainage Systems (SuDs) such as infiltration swales, rain gardens, and permeable paving.

3.3.5. Sustainable urban drainage systems will be designed as attractive features and surrounding landscape, and take into account environmental and archaeological sensitivities.

3.3.6. Green Arteries should constitute the primary drainage feature of the development.

3.3.7. SuDs should be designed to maintain effective hydraulic performance while accommodating active uses where feasible as well as refuge for flora and fauna.

3.3.8. Retention basins should be located outside flood zones and have sufficient capacity to accommodate expected runoff volumes. The shape of the basin should follow the contour lines to minimise impact on existing gardens.

### Key

Application site boundary

Living streets  
(Residential streets including landscape islands)

### Other features

Oxford canal

Rowel brook

Key vehicular routes

Railway line

### Neighbourhoods

Begbroke Hill

Parkers Farm

Foxes Cover

Begbroke Science Park

Secondary vehicular routes  
(Potentially including landscaped rain gardens)

Existing water systems (main rivers)

Existing water system flow direction

Rainwater flow direction

Indicative Retention basins outlets

SuDS solution for flood mitigation

Potential for direct infiltration

Indicative Retention Basins

Revised flood extent

### SuDS

Green Arteries  
(Green corridors including SuDS running through the centre of each neighbourhood)

Begbroke Hill Road  
(Potentially including landscaped rain gardens)

