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Oxfordshire Cotswolds Garden Village West Eynsham Strategic Development Area

Green Infrastructure Study

Final report
Prepared by LUC
August 2019

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Green Infrastructure Study

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West Eynsham Strategic Development Area

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Contents

1	Introduction	1
	Project aims and objectives	1
	Content and structure of the report	3
2	What is a Garden Village?	4
3	What is green infrastructure?	7
4	Policy context	14
	National policy context	14
	Regional policy context	15
	Local policy context	15
	Eynsham context	21
5	Green infrastructure themes	23
	Introduction	23
	5.1 Water environment	24
	5.2 Biodiversity	34
	5.3 Woodland, trees and hedges	43
	5.4 Landscape and local distinctiveness	51
	5.5 Cultural heritage	58
	5.6 Active travel	67
	5.7 Outdoor recreation	73
	5.8 Opportunities for growing	78
	5.9 Health and well-being	80
6	GI priorities for the Oxfordshire Cotswolds Garden Village	84
	Vision	84
	Green infrastructure priorities	85
7	GI priorities for the West Eynsham Strategic Development Area	88
	Vision	88
	Green infrastructure priorities	88
8	Natural capital and ecosystem services	90
9	Stewardship of green infrastructure	97
Appendix 1		99
	Designated wildlife sites	99
Appendix 2		103
	Garden Village Principles	103

1 Introduction

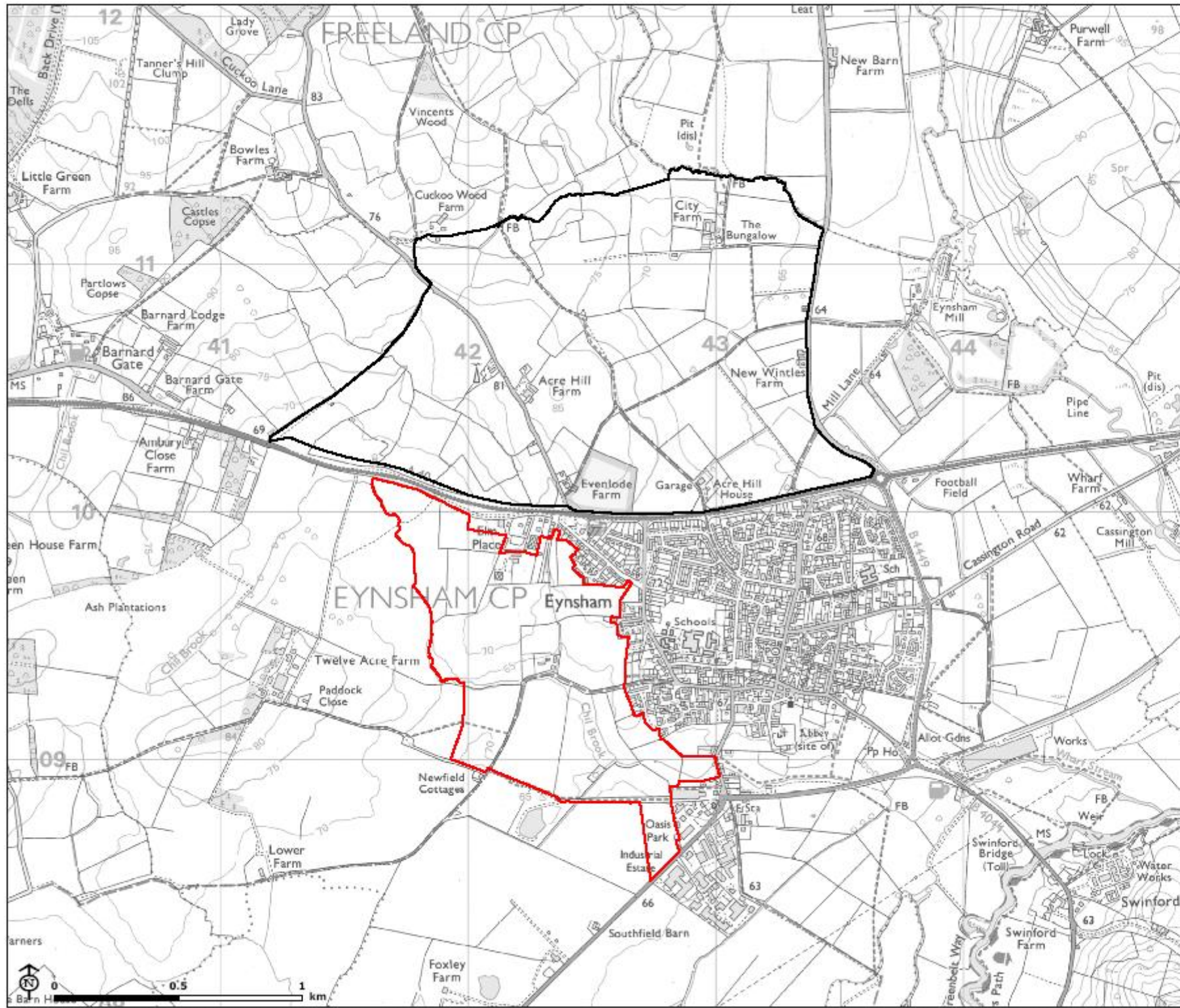
- 1.1 This report is intended to guide the provision of green infrastructure within a proposed Garden Village and settlement extension at Eynsham in West Oxfordshire. The study has included an analysis of existing green infrastructure within and around the Eynsham area and ways in which it should be reflected and enhanced as an integral part of new development. This analysis is used to inform the development of strategic framework proposals for the two schemes.

Project aims and objectives

Context

- 1.2 There are two allocated development sites to the north and west of Eynsham in West Oxfordshire for which advice on the provision of green infrastructure is required.
- Land north of the A40 near Eynsham is allocated in the West Oxfordshire Local Plan 2031 as a 'Strategic Location for Growth' (SLG) to accommodate a Garden Village (Policy EW1). The proposal - referred to as the 'Oxfordshire Cotswolds Garden Village' - is based on a working assumption of around 2,200 homes together with about 40 hectares of business land (B-class) in the form of a 'campus-style' science park. Other supporting facilities including community facilities, education, transport and green infrastructure will also be required. The Garden Village is envisaged as a stand-alone, self-contained settlement, though it is recognised that the relationship with adjoining Eynsham, and impacts of and on the A40 corridor will need to be addressed. The development will adopt Garden Village principles (see **Appendix 2**), including a commitment to a comprehensive green infrastructure network, net biodiversity gains, a hierarchy of high quality open spaces, opportunities for people to grow food, an accessible network of walking and cycling routes and a stewardship scheme to manage and maintain the green infrastructure.
- The Garden Village will be taken forward in more detail through a separate 'Area Action Plan' (AAP) which the District Council is aiming to submit for independent examination in 2019. Once adopted, the AAP will sit alongside the Local Plan and form part of the statutory development plan for West Oxfordshire. Green infrastructure advice will form part of the supporting evidence base for the AAP.
- Land to the west of Eynsham is allocated as a 'Strategic Development Area' (SDA) intended to accommodate an urban extension of Eynsham of around 1,000 homes together with supporting facilities including a new western spine road and primary school. Two schemes have already come forward within the SDA area¹, underlining the importance of defining a framework to secure co-ordinated development, including the provision of an enhanced green infrastructure network, to guide development.
- The West Eynsham SDA will be taken forward through a Supplementary Planning Document (SPD) in the form of a Development Framework which will set out a number of key principles and parameters. Whilst the SPD will not form part of the statutory development plan, it will be an important material consideration for any planning applications that subsequently come forward in this location. Green infrastructure advice will form part of the supporting evidence base for the SDA.
- 1.3 These development areas are shown on **Figure 1.1**, though it should be noted that the boundary of the Garden Village is indicative only and the intention is to more clearly define it through the AAP process.

¹ 160 homes on land west of Thornbury Road and 77 homes on the former Eynsham Nursery and Plant Centre.



**West Oxfordshire
Green Infrastructure
Advice**

Figure 1.1: Map Showing Eynsham and the Boundaries of the Garden Village and West Eynsham SDA

- Garden Village Site Boundary
- West Eynsham Site Boundary

Map Scale @A3: 1:15,000

LUC

Source: WODC

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Purpose

- 1.4 The main purpose of the study is to provide site-specific guidance to West Oxfordshire District Council on the implementation of relevant national and local policy, guidance and best practice on the provision of green infrastructure, especially in relation to Local Plan Policy EH4 on Public Realm and Green Infrastructure.
- 1.5 While the main focus of the study is on the two allocated development areas, the work also looks more widely to consider potential connections to the wider context of existing and potential green infrastructure networks in and around the Eynsham area more generally including the land to the north towards Freeland and Long Hanborough. This will help ensure that implications and opportunities associated with the two allocated sites reflect current and potential integration with this wider context.

Outputs

- 1.6 Key outputs from the study include:
- a detailed analysis and understanding of relevant, local background information and guidance;
 - the identification and description of the existing components of the green infrastructure (GI) within the area and the roles that they perform;
 - the identification of potential GI issues/constraints to the proposed development at the Garden Village and West Eynsham;
 - having regard to those issues and constraints, the provision of advice on the main opportunities for each site (both individually and where appropriate, collectively) in terms of how the proposed developments can most appropriately be accommodated, including recommendations for design options to avoid and/or minimise the effects on important GI components;
 - The identification of opportunities for GI network enhancement, including 'missing links' and connectivity within and through the developments to the wider countryside, in order to create and strengthen the area's GI network and delivering a wide range of environmental and quality of life benefits for local communities; and
 - advice on the potential options for long term maintenance and management of the GI network.

Content and structure of the report

- 1.7 The remainder of this report comprises the following sections:
- Chapter 2: What is a Garden Village?
 - Chapter 3: What is green infrastructure?
 - Chapter 4: Policy context
 - Chapter 5: Green infrastructure themes
 - Chapter 6: Green infrastructure priorities for Oxfordshire Cotswolds Garden Village
 - Chapter 7: Green infrastructure priorities for West Eynsham Strategic Development Area
 - Chapter 8: Natural capital and ecosystem services
 - Chapter 9: Stewardship of green infrastructure

2 What is a Garden Village?

- 2.1 In January 2017, the Government announced the development of fourteen garden villages (**Figure 2.1**) across England – including Oxfordshire Cotswolds Garden Village to the north of Eynsham. These fourteen garden villages have the potential to deliver more than 48,000 homes across England, having been given government backing. They will be distinct new places with their own community facilities, providing between 1,500 and 10,000 homes each.
- 2.2 Garden villages, towns and suburbs form an important part of Britain’s urban development history and have been used to describe a range of smaller new garden communities built in various forms in the period between the Industrial Revolution to beyond the second and last Garden City at Welwyn in the 1920s. The original garden villages were based on a strong foundation of industry and employment, with their philanthropic developers seeking to create well designed, healthy places and affordable homes.
- 2.3 According to the TCPA², garden villages today should apply the same principles but in a 21st century context, to create vibrant, diverse and affordable communities. The Garden City principles provide the best framework for designing new garden villages, on a smaller scale. The principles identified by the TCPA are as follows:
- Land value capture for the benefit of the community.
 - Strong vision, leadership and community engagement.
 - Mixed-tenure homes and housing types that are genuinely affordable.
 - A wide range of local jobs in the Garden City within easy commuting distance of homes.
 - Beautifully and imaginatively designed homes with gardens, combining the best of town and country to create healthy communities, and including opportunities to grow food.
 - Development that enhances the natural environment, providing a comprehensive green infrastructure network and net biodiversity gains, and that uses zero-carbon and energy-positive technology to ensure climate resilience.
 - Strong cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods.
 - Integrated and accessible transport systems, with walking, cycling and public transport designed to be the most attractive forms of local transport.
 - Community ownership of land and long-term stewardship of assets.
- 2.4 The Ministry of Housing, Communities and Local Government’s [prospectus on Garden Communities](#)³ defines a series of qualities which garden towns and villages are expected to embody:
- **Clear identity** – a distinctive local identity as a new garden community, including at its heart an attractive and functioning centre and public realm.
 - **Sustainable scale** – built at a scale which supports the necessary infrastructure to allow the community to function self-sufficiently on a day to day basis, with the capacity for future growth to meet the evolving housing and economic needs of the local area.
 - **Well-designed places** – with vibrant mixed use communities that support a range of local employment types and premises, retail opportunities, recreational and community facilities.

² <https://www.tcpa.org.uk/Handlers/Download.ashx?IDMF=3507c991-fde2-4218-8920-641416f521b5>

³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/734145/Garden_Communities_Prospectus.pdf

- **Great homes** – offer a wide range of high quality, distinctive homes. This includes affordable housing and a mix of tenures for all stages of life.
- **Strong local vision and engagement** – designed and executed with the engagement and involvement of the existing local community, and future residents and businesses. This should include consideration of how the natural and historic environment of the local area is reflected and respected.
- **Transport** –integrated, forward looking and accessible transport options that support economic prosperity and wellbeing for residents. This should include promotion of public transport, walking, and cycling so that settlements are easy to navigate, and facilitate simple and sustainable access to jobs, education, and services.
- **Healthy places** – designed to provide the choices and chances for all to live a healthy life, through taking a whole systems approach to key local health & wellbeing priorities and strategies.
- **Green space** – generous, accessible, and good quality green and blue infrastructure that promotes health, wellbeing, and quality of life, and considers opportunities to deliver environmental gains such as biodiversity net gain and enhancements to natural capital.
- **Legacy and stewardship arrangements** – should be in place for the care of community assets, infrastructure and public realm, for the benefit of the whole community.
- **Future proofed** – designed to be resilient places that allow for changing demographics, future growth, and the impacts of climate change including flood risk and water availability, with durable landscape and building design planned for generations to come. This should include anticipation of the opportunities presented by technological change such as driverless cars and renewable energy measures.

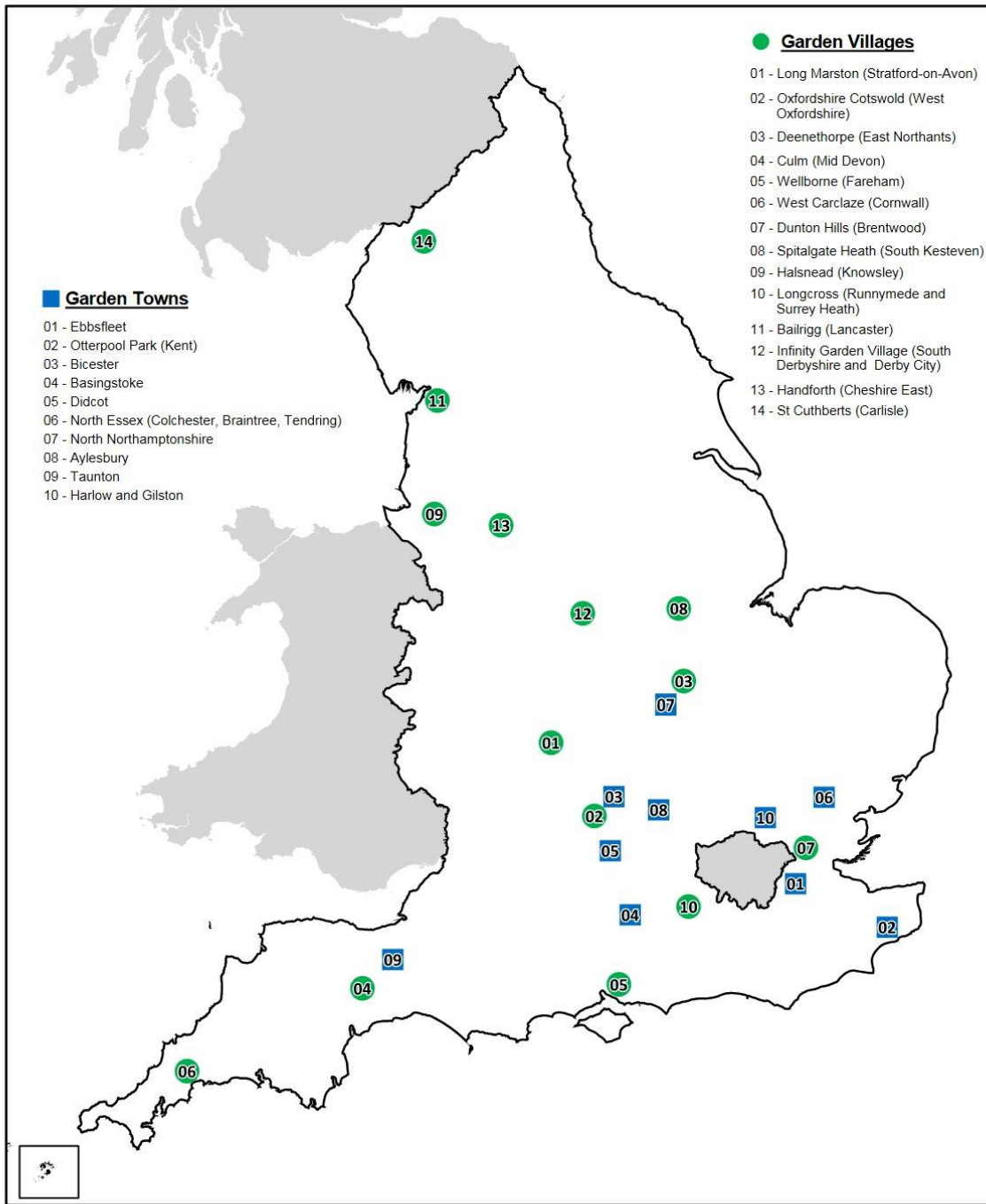
2.5 The prospectus defines Garden Villages as comprising between 1,500 and 10,000 homes, and indicates that proposals can be for a discrete new settlement, or take the form of transformational development of an existing settlement, both in nature and in scale. All proposals must be of sufficient scale to be largely self-sustaining and genuinely mixed use.

2.6 In summary, Garden villages should be:

- holistically planned;
- small in scale;
- planned for healthy living, providing opportunities for people to grow their own food;
- provide for a vibrant social life, involving all generations;
- designed with high-quality materials and attention to detail;
- designed to provide a mix of housing types including affordable homes close to employment;
- provision of services for day-to-day community needs within walking distance of homes; and,
- have in place land ownership and long-term stewardship arrangements. This could include opportunities for community ownership and management of community assets.

2.7 It is also clear that green infrastructure has a key role to play in shaping Garden Villages and creating distinctive, healthy, attractive and sustainable places for people to live, work and visit.

2.8 The next section defines what is meant by the term green infrastructure before the report goes on to examine existing and potential green infrastructure within and around the Garden Village and West Eynsham sites and how it should inform and shape proposals for the two sites.



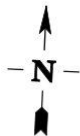

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Figure 2.1: Garden Towns and Villages

3 What is green infrastructure?

3.1 National Planning Practice Guidance⁴ defines Green Infrastructure (GI) as:

"A network of multifunctional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities. Green infrastructure is not simply an alternative description for conventional open space. As a network it includes parks, open spaces, playing fields, woodlands, but also street trees, allotments and private gardens. It can also include streams, canals and other water bodies and features such as green roofs and walls."

3.2 Green infrastructure can include:

- **Parks and gardens** including formal parks, sports grounds, event spaces, community gardens, pocket parks, play areas, allotments and cemeteries
- **Amenity greenspace** including informal recreation spaces, village greens, green roofs and private gardens
- **Natural and semi-natural greenspaces** including woodland and scrub, grassland and meadows, wetlands, open and running water
- **Green corridors** – rivers, rights of way, walking and cycling routes, road corridors, woodland belts and hedgerow networks
- **Productive land** – allotments, community growing, orchards, farmland and woodland
- **Historic sites and landscape elements** – historic field systems, settlements, boundaries and communication routes, historic buildings and structures.

3.3 A report by Wildlife Trusts Wales described green infrastructure as being "what brings our towns, cities and communities alive and makes them great places to live in. ... Simply by acting as a 'green oasis', they offer recreation and health services for all including the most disadvantaged in society. Green infrastructure can provide a healthier, more prosperous place – for people and for wildlife and more resilience to extreme weather events". This report found that green space makes for better students – more trees means higher scores regardless of financial status or gender. Greenspaces can also accommodate variety of outdoor break time activities and have a significant impact on childhood activity and self-esteem.

3.4 Green infrastructure provides learning and employment opportunities as an 'outdoor classroom' relevant to both the National Curriculum and lifelong learning. High quality greenspace can be a focus for community participation through public management, as well as providing opportunities for education, training, volunteering and capacity building. A natural play environment at school also helps reduce bullying, increases creative play, improves concentration and a feeling of self-worth in children.

3.5 Green infrastructure can include opportunities for food production, including allotments, community growing projects and orchards. This can increase access to healthy, locally grown food, providing opportunities for education and training and for people to connect with their environment and the cycle of seasons.

3.6 Green infrastructure can be thought about at all scales – from individual gardens, green roofs or pocket parks, through to the 'landscape scale' structure of woodlands, greenspaces and wetlands that can provide the setting for development.

3.7 The multifunctional nature of GI refers to the range of benefits it affords to human health (both physical and mental wellbeing), biodiversity, landscape, reducing local temperatures, decreasing

⁴ DCLG 2016 Planning Practice Guidance for the Natural Environment – Green Infrastructure
<http://planningguidance.communities.gov.uk/blog/guidance/natural-environment/green-infrastructure/>



Woodlands and wetlands for wildlife, learning and reflection



Meadows and wildlife



Green corridors for people and wildlife



Woodland, wetland, parkland and meadows, here at Eynsham Hall, creating a strong landscape structure

the impact of climate change and alleviating flood risk. The benefits of GI can be felt at a local, regional and national scale.

3.8 As well as offering environmental and social benefits, GI affords economic benefits through increasing the attractiveness of the local area which is an asset to residents, businesses and employees, supporting the visitor and tourism sector and reducing healthcare costs as well as adding economic value to built developments.

3.9 GI can be in public or private ownership of various sizes and in any condition.

3.10 The potential role of green infrastructure in shaping communities is illustrated in **Figure 3.1**.

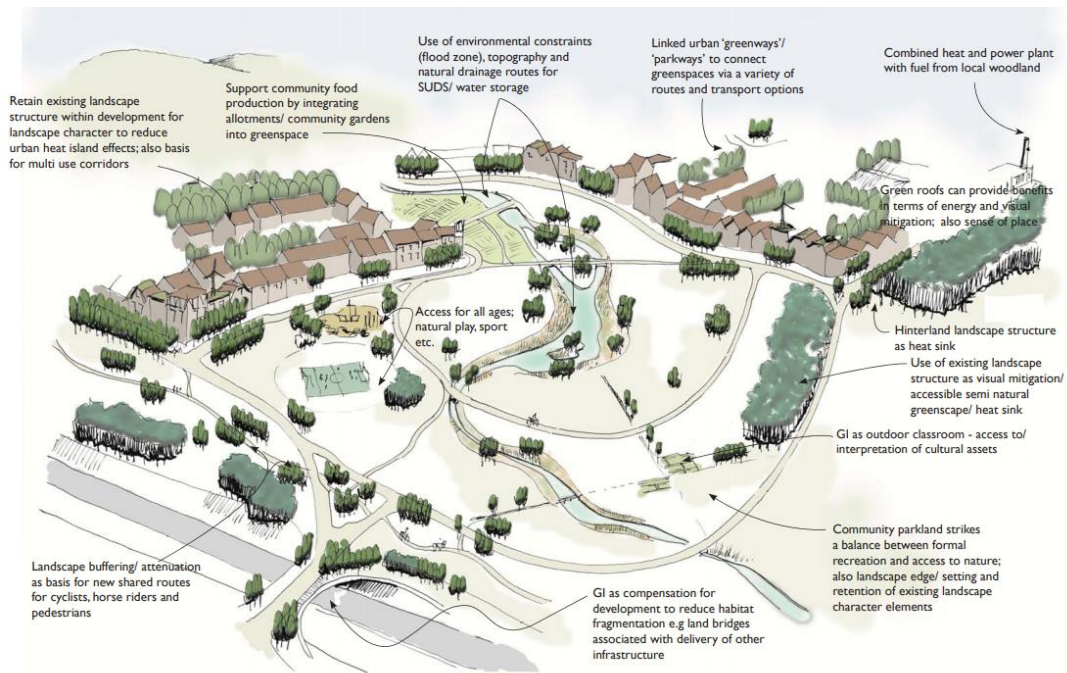


Figure 3.1: Green infrastructure, multi-functionality and place-making

(Source: South East GI Framework)

Benefits of Green Infrastructure

3.11 **Table 3.1**⁵ summarises some of the key benefits that well planned, multi-purpose green infrastructure can provide.

Table 3.1: Green Infrastructure benefits

Green Infrastructure can help create a healthy natural environment by:
<ul style="list-style-type: none"> • encompassing new and enhanced sites and habitats as well as diversifying existing habitat types • contributing to high quality and accessible landscapes benefiting people and wildlife • playing an essential role in maintaining and enhancing the health of the natural environment and its ability to provide a wealth of 'ecosystem services' • increasing ecological connectivity to overcome habitat fragmentation and increase the ability of the natural environment to adapt to climate change

⁵ Natural England Green Infrastructure Guidance



Sustrans

Safe, attractive and accessible routes for walking and cycling



© Bernard Spragg / Flickr

Avenues and green corridors framing development



Opportunities for people to get involved, to learn and volunteer



A productive, low carbon landscape

Green Infrastructure can encourage people to be inspired to conserve and value the natural environment and cultural heritage by:

- creating attractive and accessible places for people to enjoy direct and regular contact with the natural environment, historic sites and landscapes, accommodating informal contact, interpretation, education and lifelong learning on their doorsteps
- strengthening links between urban areas and their surrounding countryside, and bringing the natural world into every neighbourhood, with benefits for individual and community health and well-being. There is growing evidence that connecting people to a green environment can support better physical and mental health
- supporting healthier lifestyles by providing green routes for walking and cycling, and green spaces for exercise and play. By encouraging walking and cycling, Green Infrastructure can help reduce air pollution from transport whilst reducing levels of poor health associated with inactivity
- enabling people to live more sustainably and to grow their own food
- Linking people to nature and seasonal variations

Green Infrastructure can boost the capacity of a local environment to accommodate sustainable development and provide a wide range of environmental, social and economic benefits by:

- supporting the efficient management of water resources. A network of green spaces reduces the likelihood of flooding by allowing water to permeate through the ground
- accommodating flood storage areas, holding large volumes of water in temporary ponds to protect built up areas from flooding
- contributing to delivery of sustainable land management (agriculture and woodland management)
- creating a range of social and economic benefits, both directly (through community involvement in development and management of green infrastructure, employment in capital projects and future management) and indirectly (making attractive places to live, work and relax, creating new opportunities for people to meet and interact)

Green infrastructure helps to secure our environmental future by:

- ensuring the efficient use of land through a multifunctional approach to land use planning
- supporting functioning ecosystems and robust natural systems for the management of basic resources such as water, clean air, soil, and the maintenance of biodiversity
- delivering a broad range of ecosystem services and linked social and economic benefits that clearly demonstrate the relevance of the natural environment to the lives and livelihoods of individuals and communities
- making a direct contribution to the climate change 'proofing' of peoples' homes and communities, by absorbing and storing carbon from the atmosphere and facilitating renewable energy production
- enhancing the self-sufficiency of communities through providing local food production and recreational areas
- connecting children and young people to nature, and promoting the value of the natural environment to future generations.

Green infrastructure and Garden Villages

- 3.12 Green infrastructure is of particular importance in the development of Garden Villages, contributing to a landscape-led approach that delivers environmental, social and economic benefits. Creative use of green infrastructure can create a high quality setting and structure for



Sustainable drainage integrated into development – greenspace, habitat and flood protection



Sustainable flood management creating accessible and biodiverse green corridors



Managing surface water run-off with dry stream bed



Rain gardens to intercept and store rainfall, provide habitats and focal points in development

development, articulating the term 'garden' in the local context to help create a village that is rooted in its locality.

- 3.13 Analysis of the baseline can help ensure that important elements of existing green infrastructure are identified, evaluated and, as appropriate, protected and enhanced as part of the development. Such an approach can help ensure that sustainability is an integral part of the Garden Village, from the scale of an individual garden to the settlement as a whole.

4 Policy context

- 4.1 This section of the report sets out the national, regional and local policy context relating to green infrastructure within and around the Oxfordshire Cotswolds Garden Village and the West Eynsham SDA.

National policy context

National Planning Policy Framework

- 4.2 The [National Planning Policy Framework](#) (NPPF⁶) outlines the relevance of GI to the development of a Local Plan.
- 4.3 Paragraph 20 highlights the need for strategic policies to make sufficient provision for conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation.
- 4.4 Paragraph 91 emphasises the importance of planning policies and decisions aiming to achieve healthy, inclusive and safe places which enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.
- 4.5 Paragraph 96 highlights that ‘planning policies should be based on robust and up-to-date assessments of the need for open space, sport and recreation facilities (including quantitative or qualitative deficits or surpluses) and opportunities for new provision’.
- 4.6 The NPPF provides a mechanism by which local authorities can protect some open spaces under a ‘Local Green Space’ designation (paras. 99-100), and provides high level criteria for such a designation.
- 4.7 The NPPF (para. 97) sets out the only circumstances in which an open space can be developed for different uses. It clarifies that existing open space should not be built on unless:
- an assessment has been undertaken which has clearly shown the open space to be surplus to requirements; or
 - the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or
 - The development is for alternative sports and recreational provision, the needs for which clearly outweigh the loss of the current or former use.
- 4.8 Paragraph 99 states that Local Plans should take proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. According to para. 150, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of GI.
- 4.9 Paragraph 171 explains how Local Plans should ‘take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries’.

6

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

- 4.10 Paragraph 181 highlights the opportunities to improve air quality or mitigate impacts 'such as through traffic and travel management, and green infrastructure provision and enhancement'.

Planning Practice Guidance

- 4.11 The national Planning Practice Guidance (PPG) on [plan making](#)⁷ encourages a strategic approach to implementing GI into Local Plans through an evidence-based approach. Local planning authorities are encouraged to prepare an authority-wide GI framework or strategy that contains an assessment of current green infrastructure provision and identifies any gaps in the network. The framework or strategy should also identify opportunities for GI improvements. The assessment can inform the role of green infrastructure in local and neighbourhood plans, infrastructure delivery plans and Community Infrastructure Levy (CIL) charging schedules.
- 4.12 The PPG states that where appropriate, supplementary planning documents can set out how the planning, design and management of components of the GI strategy for the area will be delivered.

Regional policy context

South East Green Infrastructure Framework: From Policy into Practice

- 4.13 Published in 2009, this document was developed by a partnership of regional governmental and non-governmental organisations in the South East and sets out the policy context and other resources needed to deliver high quality GI in the South East region. It provides guidance on how GI might be delivered effectively through the Local Plan process from the establishment of an evidence base, to policy development and delivery. The framework highlights the significance of an evidence base formed with diverse partner organisations (e.g. private and public landowners, expertise and specialisms) to provide GI in a specified area.
- 4.14 According to the South East Green Infrastructure Framework, GI can play a key role in place-shaping through the formulation of design principles which respond to landscape character, vernacular and sense of place, and by identifying opportunities for community involvement in projects through design and implementation to foster ownership and involvement. GI also has the ability to help preserve the intrinsic cultural and environmental value of places and, in some cases, create a sense of place and identity.
- 4.15 GI can provide opportunities for recreation and physical exercise, whether for informal recreation such as walking or cycling or organised sports, which in turn can provide physical health benefits. By providing walking or cycling routes, GI also encourages more active and sustainable methods of transport, with benefits for traffic congestion, air pollution and reductions in greenhouse gas emissions. The most effective way to conserve and enhance regional biodiversity using GI is to create an ecological network that extends and links existing areas of high biodiversity value, facilitating the colonisation of new areas in response to new opportunities or changing conditions.

Local policy context

West Oxfordshire Local Plan 2031

- 4.16 The West Oxfordshire Local Plan 2031 was adopted in September 2018 and allocates two strategic sites at Eynsham through Policies EW1 (Oxfordshire Cotswolds Garden Village Strategic Location for Growth) and EW2 (West Eynsham Strategic Development Area). This study provides guidance on the provision of GI in these two developments in accordance with Local Plan Policy EH4 (Public realm and green infrastructure).
- 4.17 Policy EH4 (Public realm and green infrastructure) sets out the ways in which areas of public space and GI in West Oxfordshire should be protected and enhanced for their multi-functional role, including their biodiversity, recreational, accessibility, health and landscape value, as well as

⁷ <https://www.gov.uk/guidance/plan-making>

their contribution towards combating climate change. In accordance with Policy EH4, new development should provide opportunities for improvements to the District's multi-functional network of GI and open space, at the same time as providing opportunities for walking, cycling, and connecting settlements to the countryside. Opportunities for urban greening should also be maximised, through appropriate landscaping schemes and the planting of street trees.

- 4.18 In accordance with Policy EW1, development of the Oxfordshire Cotswolds Garden Village will be taken forward in accordance with key garden village principles. This includes ensuring that development enhances the natural environment, provides a comprehensive green infrastructure network and net biodiversity gains, and seeks to minimise carbon use and achieve energy-positive technology to ensure climate resilience.
- 4.19 With regard to both Policy EW1 and EW2 the masterplans for both sites are required to take account of open space, and GI networks and needs, maximising opportunities to create and strengthen GI. According to the Local Plan, provision will also be made for a comprehensive walking and cycling network with good connectivity provided to adjoining areas, specifically Hanborough train station. In addition to achieving Garden Village principles, appropriate landscape and biodiversity enhancements will be used to mitigate any adverse effects brought on by development.
- 4.20 Policy EW10 (Eynsham – Woodstock Sub-Area Strategy) sets out the general strategy for development within the Eynsham – Woodstock Sub-area. This reinforces the need for masterplanning of strategic areas/locations to take adequate account of open space and green infrastructure networks and needs and to maximise opportunities to create and strengthen GI.

Flora and fauna

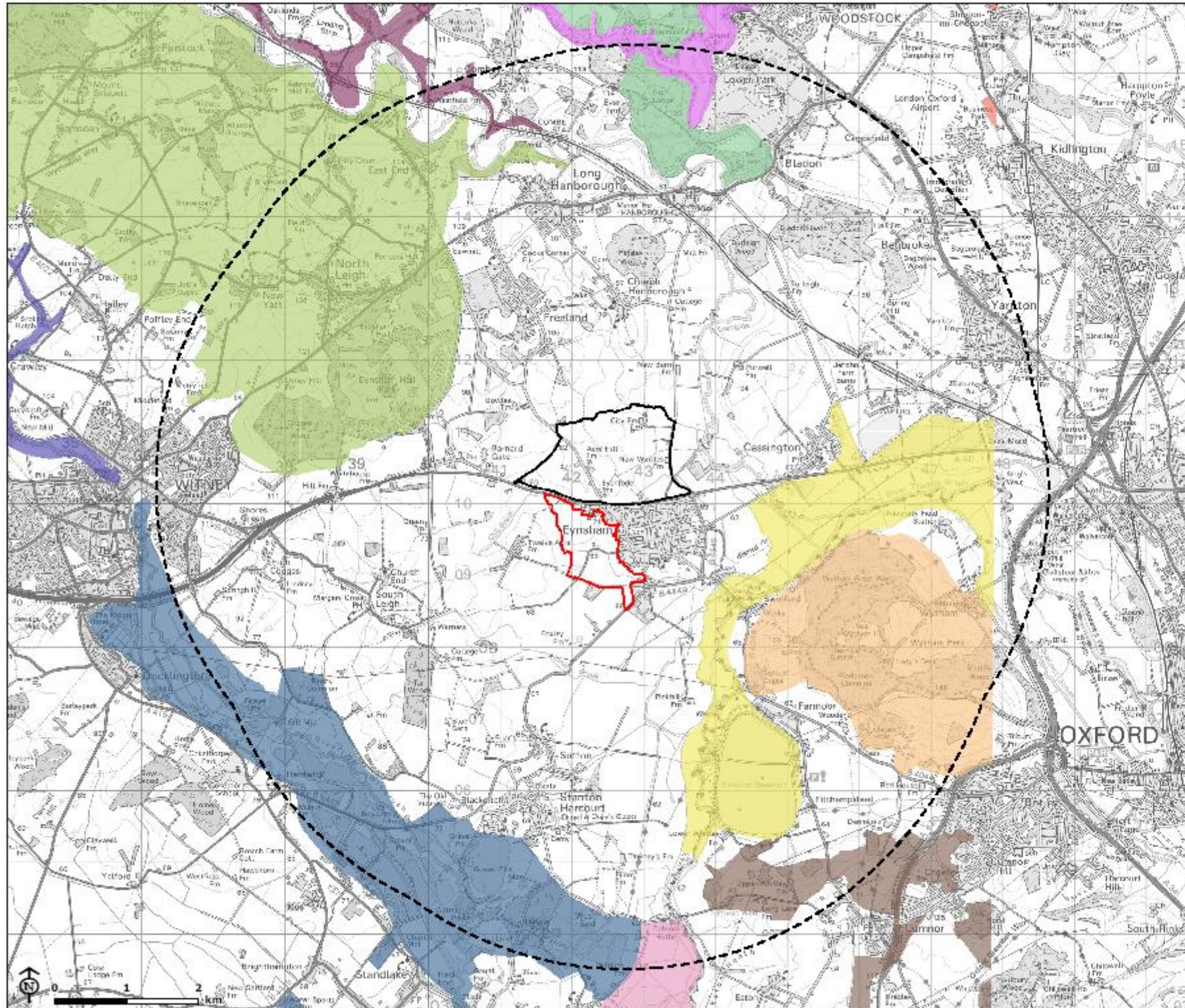
- 4.21 The two development sites sit within the Rolling Clayland and Lowland Village Farmlands landscape types and south and east of the Wooded Estatelands (Oxford Wildlife and Landscape Study – OWLS).
- 4.22 The sites are **not within a Conservation Target Area (CTA)**, though they do **sit within close proximity to a number of surrounding CTAs** associated with the River Thames, River Windrush, the River Evenlode, Eynsham Hall Park and Blenheim Park. CTAs within 5km of the sites are shown in **Figure 4.1** and further information on these CTAs is provided in **Appendix 1**.
- 4.23 The sites are **within the Wychwood Project target area**, which seeks to encourage local people to understand, conserve and restore the rich mosaic of landscapes and wildlife habitats within the historic location of Wychwood Forest, which used to cover an area of over 120,000 acres (sadly now only 870 acres).
- 4.24 The [Interim West Oxfordshire Green Infrastructure Study](#)⁸ identifies the **Public Rights of Way** as being existing features of green infrastructure within the two sites. **Chil Brook and the River Evenlode** are also identified as main river banks providing green infrastructure.
- 4.25 Policy EH3 (Biodiversity and geodiversity) of the West Oxfordshire Local Plan 2031 seeks to protect and enhance the biodiversity of West Oxfordshire in order to achieve an overall net gain in biodiversity, especially where this will help deliver networks of GI.
- 4.26 In accordance with paragraph 170 of the NPPF, and reflecting best practice guidance published by IEMA, CIRIA and CIEEM⁹, developments should minimise impacts on, and provide net gains for, biodiversity (with proposals delivering greater levels of biodiversity compared to that before development). The IEMA et al guidance sets out ten principles which provide a framework for development projects to follow to help improve the UK's biodiversity. As already mentioned, biodiversity enhancements are one of the benefits of GI and can therefore be integrated into developments as a mitigation strategy to minimise biodiversity loss or to contribute to biodiversity net gain.

⁸ <https://www.westoxon.gov.uk/media/299975/Interim-green-infrastructure-study-June-2011.pdf>

⁹ Institute of Environmental Management and Assessment (IEMA), Construction Industry Research and Information Association (CIRIA) and Chartered Institute of Ecology and Environmental Management (CIEEM) (2016) Biodiversity Net Gain: Good practice principles for development.

Water environment

- 4.27 Local Plan Policy EH7 (Flood risk) sets out how land required for flood management will be safeguarded from development and, where applicable, managed as part of the GI network – including maximising its biodiversity value.



**West Oxfordshire
Green Infrastructure
Advice**

Figure 4.1: Conservation Target Areas (CTAs) within 5km

- Garden Village Site Boundary
 - West Eynsham Site Boundary
 - 5km buffer
- Conservation Target Areas
- Blenheim and Ditchley Parks
 - Glyme and Dorn
 - Lower Cherwell Valley
 - Lower Windrush Valley
 - North Evenlode Valleys
 - Oxford Heights West
 - Oxford Meadows and Farmoor
 - Upper Thames
 - Upper Windrush
 - Wychwood and Lower Evenlode
 - Wytham Hill

Map Scale @A3: 1:52,000



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CE:LA EB:Stenson_K LUC FIG_4_1_10498_CTA_A3L 10/05/2019 Source: WOOD, TVERC

- 4.28 The [Evenlode Catchment Partnership](#)¹⁰ has a vision to improve water quality, enhance flood management, enrich biodiversity and secure greater community engagement with rivers at local and landscape scales. A similar approach applies to the Windrush catchment, where the [Lower Windrush Valley Project](#)¹¹ aims to create 'a brilliant place for people and wildlife' with high quality landscapes and wildlife habitats, healthy people and active communities and opportunities for education and economic activity.
- 4.29 All major development is required to use sustainable drainage schemes (SuDS) to manage surface water run-off and avoid any increases in flood risk. SuDS aim to mimic natural processes by intercepting rainfall, allowing some of it to evaporate or soak into the ground and using features such as swales or retention ponds to slow the rate at which water enters watercourses whilst also improving water quality. SuDS features such as ponds, swales and green roofs can become a key component of green infrastructure schemes, contributing to biodiversity and place-making as well as managing water quality and flood risk. Oxfordshire County Council has published guidance on SuDS in the [Oxfordshire Flood Toolkit](#)¹².

Landscape and local distinctiveness

- 4.30 "West Oxfordshire is a predominantly rural area and enjoys a strong sense of place derived from the Cotswold vernacular style of building, rolling countryside and river valleys"¹³.
- 4.31 High quality design is central to the strategy for West Oxfordshire, and Policy OS4 (High quality design) sets out the ways in which new development should respect the landscape character of an area, and contribute towards local distinctiveness. The [West Oxfordshire Design Guide](#)¹⁴ supports this policy, describing the qualities and characteristics of landscapes, settlements and buildings that make West Oxfordshire special and describes ways in which good design can protect and enrich the character of the District.
- 4.32 Policy EH2 (Landscape character) requires new development to conserve and, where possible, enhance the intrinsic character, quality and distinctive natural and man-made features of the local landscape, including features and their settings, such as stone walls, trees, hedges, woodlands, rivers, streams and ponds. The importance of tranquillity and dark-sky quality is also highlighted within this policy, which stipulates that proposed development should avoid causing noise and light pollution which can have an adverse effect upon landscape character.
- 4.33 The West Oxfordshire Landscape Assessment (1998) describes West Oxfordshire as a "predominantly rural agricultural landscape" with "a diverse pattern of landscapes including rolling limestone uplands, pastoral river valleys, historic parkland, remnants of ancient forests, low-lying farmland and riverside meadows with a scattering of rural villages and some larger settlements". Land around Eynsham falls within the Eynsham Vale character area "defined by its low-lying and gentle relief and the patchwork of large, regularly shaped fields and comparatively strong structure of hedgerows and trees." Looking more widely, the assessment also describes the significant influence of picturesque, designed landscapes of the eighteenth century.
- 4.34 Land to the east of Eynsham and the Oxfordshire Cotswolds Garden Village lies within the Oxford Green Belt, helping to ensure it is retained as undeveloped farmland.

Cultural heritage

- 4.35 All development proposals within West Oxfordshire are expected to conserve and/or enhance the special character, appearance and distinctiveness of the district's historic environment (Policy EH9: Historic environment). According to Policy EH10 (Conservation areas), development will be permitted where it can be shown to conserve or enhance the special interest, character, appearance and setting of Conservation Areas. Consideration must therefore be given to the location, form, scale, massing, density, height, layout, landscaping, use, alignment and external

¹⁰ <https://www.wildoxfordshire.org.uk/biodiversity/river-catchments/evenlode-catchment/>

¹¹ <https://www2.oxfordshire.gov.uk/cms/sites/default/files/folders/documents/environmentandplanning/countryside/naturalenvironment/lwvstrategicplan.pdf>

¹² <https://www.oxfordshirefloodtoolkit.com/planning/surface-water-drainage/>

¹³ West Oxfordshire Adopted Local Plan, paragraph 2.3.

¹⁴ https://www.westoxon.gov.uk/media/123778/wodg-2016_section1.pdf

appearance of development, so that it is sympathetic to the original curtilage and pattern of development in the area. While neither the Garden Village nor the West Eynsham site lie within the Eynsham Conservation Area, consideration of these qualities will help ensure that development is informed by an understanding of the settlement's historic character.

- 4.36 Policies EH11 (Listed buildings) and EH16 (Non-designated heritage assets) specifically require development to conserve and/or enhance the setting of listed and non-listed historic buildings, respectively, whilst Policy EH15 (Scheduled monuments and other nationally important archaeological remains) seeks to conserve and/or enhance the setting of Scheduled Monuments and/or non-scheduled archaeological remains. In general, attention must be paid to the degree to which the form, scale and layout of development respects and builds on the historic character of the area, and the sensitivity and capacity of the proposed development sites (Policy EH13).

Active travel

- 4.37 Development is expected to maximise opportunities for active travel, as well as the use of public transport. Like Policy T1 (Sustainable transport), Policy T3 (Public transport, walking and cycling) also seeks to encourage walking and cycling, making provision for new and/or enhanced walking and cycling infrastructure to promote a healthier lifestyle.

Access and recreation

- 4.38 According to Policy EH5 (Sport, recreation and children's play) and with regard to WODC's Open Space Study (2013) and Playing Pitch Strategy (2014), development is expected to provide or contribute towards the provision of improvements to open space, sport and recreational buildings and land.

Health and well-being

- 4.39 Large-scale developments are likely to generate pollution. As such, Policy EH8 (Environmental Protection) requires the implementation of measures to minimise pollution to a level that provides a high standard of protection for health.
- 4.40 With regard to residential amenity, Policy EH8 also requires noise sensitive development (e.g. housing) to not take place in areas where occupants would experience significant noise disturbance.

Submission Draft Eynsham Neighbourhood Plan 2018-2031

- 4.41 The submission draft Eynsham Neighbourhood Plan was recently consulted on for six weeks, ending 28th February 2019. The plan has recently been submitted for independent examination but at present, carries little weight.
- 4.42 According to Policy ENP2 (Design), all new development in Eynsham Parish should be well related to, and in keeping with, its immediate setting and character and, where relevant, to the wider Eynsham and landscape context. The policy states that appropriate use shall be made of well-designed Green Infrastructure in creating an attractive setting for new development.
- 4.43 Policy ENP4 (Green Infrastructure – the setting for new developments) requires new developments in Eynsham to integrate all aspects of design, connectivity and the natural environment. This shall be achieved through the creation of appropriate visual buffers between the edges of development and open countryside, inclusion of open spaces within and at the edges of development, planting adjacent to paths and other publicly accessible areas, and the protection of existing GI.
- 4.44 According to the primary objectives of the draft Neighbourhood Plan, the Oxfordshire Cotswolds Garden Village shall be built according to Garden Village principles as a new, separate community. It states that neither settlement (Eynsham and the Oxfordshire Cotswolds Garden Village) should be dependent on the other; any shared facilities shall be for mutual benefit and without causing harm to either.

Eynsham context

- 4.45 Eynsham lies in the Thames valley, midway between Oxford and Witney. Strategically important GI assets include the River Thames itself which meanders north eastwards a mile or so to the south, the flooded gravel pits (e.g. along the River Windrush) and reservoirs (e.g. Farmoor Reservoir) formed where sand and gravel has been extracted. The Thames Path, long distance route, follows the river valley, while many of the lakes provide a setting for recreation and a network of wetland habitats. To the north lies Blenheim Palace, while to the west lie the extensive parklands of Eynsham Hall.
- 4.46 The countryside around Eynsham is drained by the River Evenlode to the east, and the Chil Brook to the south, each of which is fed by a finer network of streams and drainage ditches. Once part of the Royal Hunting Forest of Wychwood, much of the area was enclosed during the eighteenth and nineteenth century' leaving a legacy of medium sized, often irregular shaped fields, defined by networks of mature hedges. In some parts of the area fields have been enlarged and hedges removed, creating a much more open lowland valley landscape, with a weaker network of GI assets. There are, however, a few woodlands (one or two ancient in origin), woodland belts and hedges with field boundary trees, together with more recently planted woodlands (e.g. the Woodland Trust's Millennium Wood). More extensive woods and parkland are associated with New Wintles Farm and Eynsham Mill to the east.
- 4.47 There are several rights of way, particularly to the north Eynsham. Greenspaces within Eynsham are relatively few but include the site of Eynsham Abbey, sports pitches, allotments and the corridor of the Chil Brook to the south and south west of the village. The settlement is compact and walkable. The area includes a number of listed buildings and scheduled archaeological remains at Foxley Farm, to the south west.
- 4.48 The A40, which includes segregated provision for pedestrians and cyclists, forms a major barrier along the northern edge of Eynsham, largely containing development and making recreational access to the north more difficult. While much of the surrounding countryside remains in agricultural use, there are a handful of small sand and gravel extraction sites and former gravel quarries which accommodate industrial or distribution related activities. There is an aggregate recycling plant off Lower Road. More extensive industrial premises are concentrated to the south of Eynsham on the Oakfield Industrial Estate.

Population and demographics

- 4.49 In 2017, the population of Eynsham parish was estimated to be 5,030, 24.14% of which are aged 65 or over compared to the England average of 18.2%. Although 57.2% of people are of working age, the England average for working age population is 63.1%. As such, the dependency ratio (0.75) is higher than the England average (0.59).

English Indices of Deprivation

- 4.50 The English Indices of Deprivation 2015¹⁵ are a measure of multiple deprivation in small areas or neighbourhoods, called Lower-layer Super Output Areas (LSOAs) in England, which are a similar size to electoral wards. Seven domains of deprivation are measured: Income; Employment; Education; Health; Crime; Barriers to housing & services and Living environment. Each domain contains a number of indicators. The seven domains are combined to give a multiple deprivation score. 969 people (20.6% of the population) in Eynsham live in the most deprived 20% of areas of England in relation to the Barriers to Housing and Services domain. This is just below the England average of 21.2%.
- 4.51 The currently low level of publicly accessible greenspace in Eynsham will compound these measures of deprivation.

¹⁵ English Indices of Deprivation (2015) <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

Health characteristics

- 4.52 Life expectancy for both men and women in Eynsham is higher than the England average. However, the life expectancy for women is 84 compared to 81 for men. The mortality ratio is 100, consistent with the age profile of the area¹⁶. According to the Office for National Statistics, 16.3% of the population have a limiting long-term illness, compared to the England average of 17.6%.
- 4.53 The population of Eynsham is generally healthier than the national average in that a higher proportion of people consume five or more portions of fruit and vegetables a day. Levels of binge drinking (17.7%) and smoking (15%) are below the national averages of 20% and 22.2%, respectively. However, the percentage of adults classified as obese (24.9%) is higher than both the Oxfordshire (20.7%) and national level (24.1%). Obesity in children in reception year (8.8%) is also higher than the Oxfordshire average (7.1%). Despite this, the amount of physically inactive people¹⁷ (0.2%) is equal to the Oxfordshire and national level.
- 4.54 Respondents of the 2011 Census were asked to rate their health. The percentage of residents in Eynsham rating their health as 'very good' was more than the national average. Also, the percentage of residents rating their health as 'very bad' was less than the national average.

Economic context

- 4.55 The proportion of economically active people in Eynsham (73.6%) is above the England average of 69.9%. The largest employment sector is Education (17% of the economically active population), followed by Retail (14%) and Health & Social Work (11%). Furthermore, a large proportion of the population of Eynsham (45.9%) work in managerial or professional occupations. According to the Office for National Statistics/Job Centre Plus, the 'Unemployment' to 'Available Jobs' ratio (1.21 claimants per job) is lower than the England average (3.43).
- 4.56 Eynsham has a higher rate of home ownership, either outright or via a mortgage than the national average, which suggests that Eynsham is a relatively affluent area.

Existing GI provision

- 4.57 Ordnance Survey (OS) publish the locations and extent of green spaces that are likely to be accessible to the public. The data include the following types of green spaces: allotments or community growing spaces, bowling greens, cemeteries, religious grounds, golf courses, other sports facilities, play spaces, playing fields, public parks or gardens and tennis courts.
- 4.58 According to the OS data, the total amount of green space in Eynsham half the average for England as whole (1.11% compared with 2.22%), indicating a significant shortfall in the provision of accessible greenspace.

Eynsham Proposed Park & Ride

- 4.59 Oxfordshire County Council is currently seeking people's views on proposals for A40 improvements and a new Park and Ride for Eynsham. The new Park and Ride will accommodate 1,000 cars to the north of the A40, just west of the A40/Cuckoo Lane junction. It will be accessed from a new roundabout on the A40 with designated lanes for buses and car traffic. The bus terminus will provide transport towards Witney, Carterton and Oxford. Upon opening the park and ride will be served by existing inter-urban bus services, with increased frequency.

Consented development

- 4.60 Two large housing developments within the West Eynsham SDA have received planning permission: (1) 15/03148/OUT and 18/01009/RES; and, (2) 15/00761/FUL. The first of these developments is for the provision of 160 dwellings, whilst the second of these is for 77 new dwellings. Both of these developments incorporate areas of green space, designed to create a useable local amenity for residents.

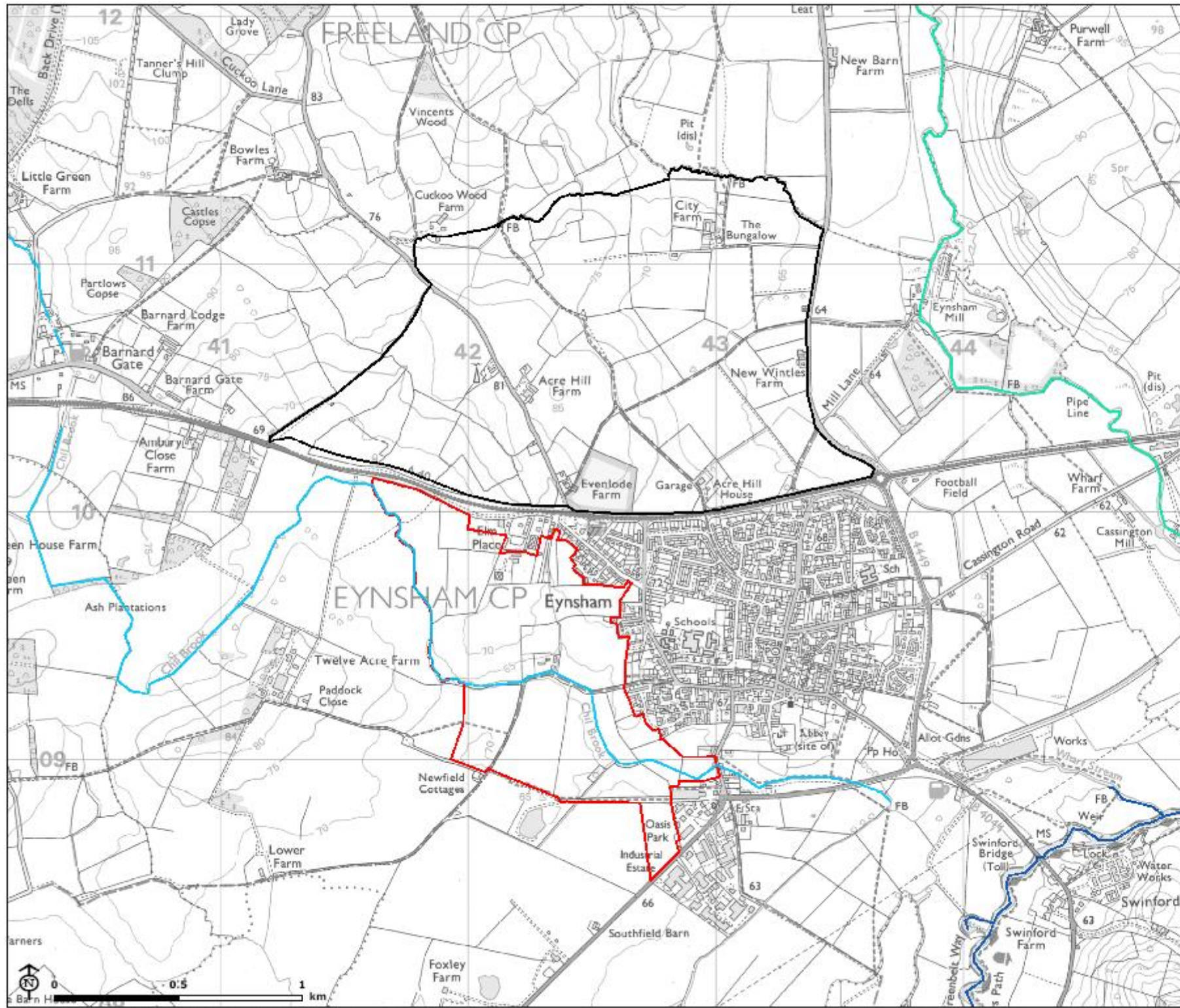
¹⁶ Less than 100 indicates that the mortality rate is slower than expected and higher than 100 indicates that the mortality rate is higher than expected.

¹⁷ Undertaking less than 30 minutes in the past month excluding gardening

5 Green infrastructure themes

Introduction

- 5.1 This part of the report provides more detailed analysis for the following Green Infrastructure themes:
- Water Environment
 - Biodiversity
 - Woodlands, trees and hedges
 - Landscape and sense of place
 - Cultural heritage
 - Active travel
 - Outdoor recreation
 - Opportunities for growing
 - Health and well-being
- 5.2 For each, it describes the existing context and GI provision, and GI issues relevant to the Oxfordshire Cotswolds Garden Village site and the West Eynsham Strategic Development Area.
- 5.3 Drawing on this analysis, it also provides a summary of the existing strengths and weaknesses and future opportunities and threats. This is followed by a description of how each GI theme should influence and shape the Garden Village and West Eynsham.



**West Oxfordshire
Green Infrastructure
Advice**

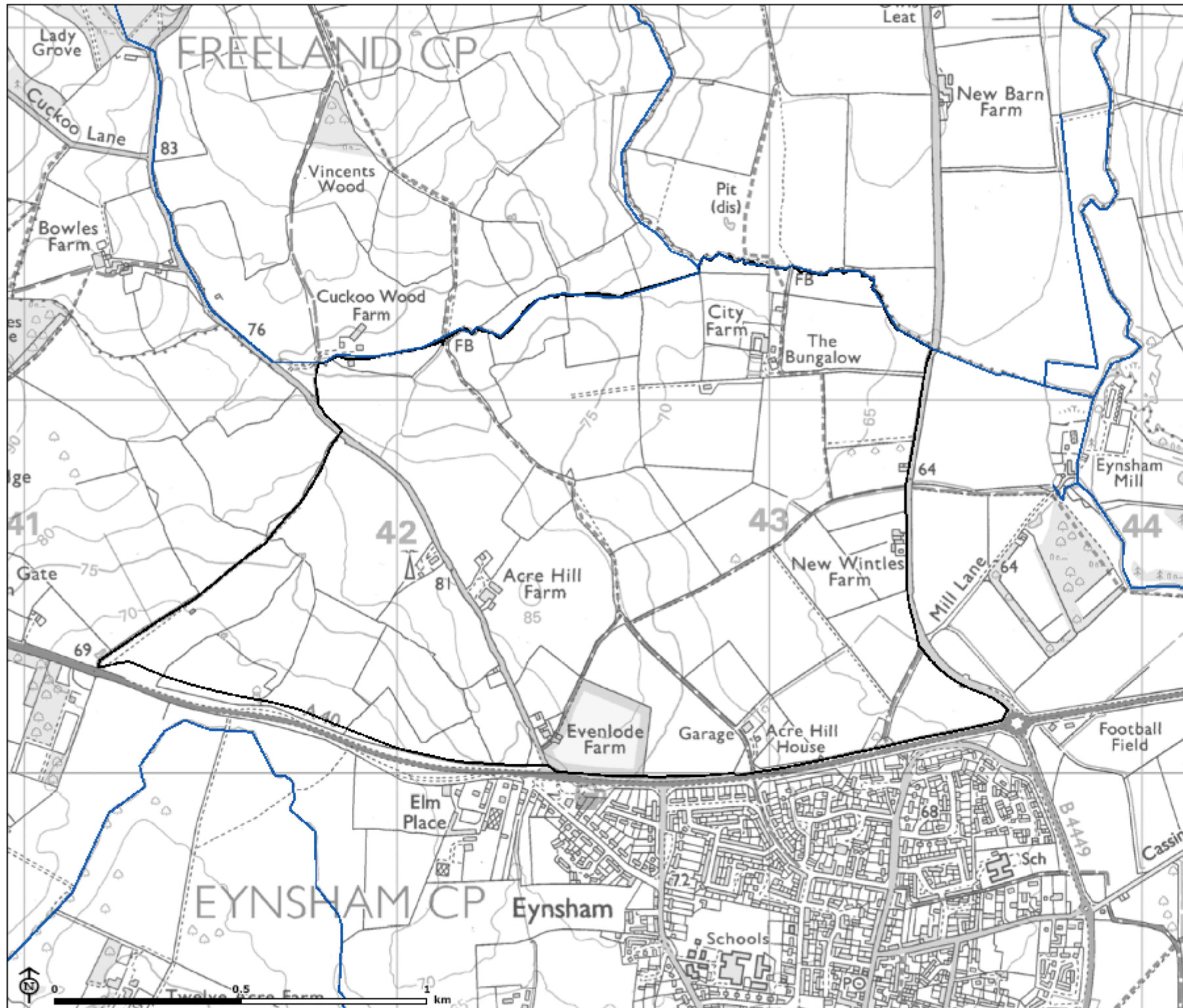
Figure 5.1.1: Map Showing Eynsham and the River Thames, Evenlode and Chil Brook

- Garden Village Site Boundary
- West Eynsham Site Boundary
- Rivers**
- Chil Brook
- River Evenlode
- River Thames

Map Scale @A3: 1:15,000

LUC

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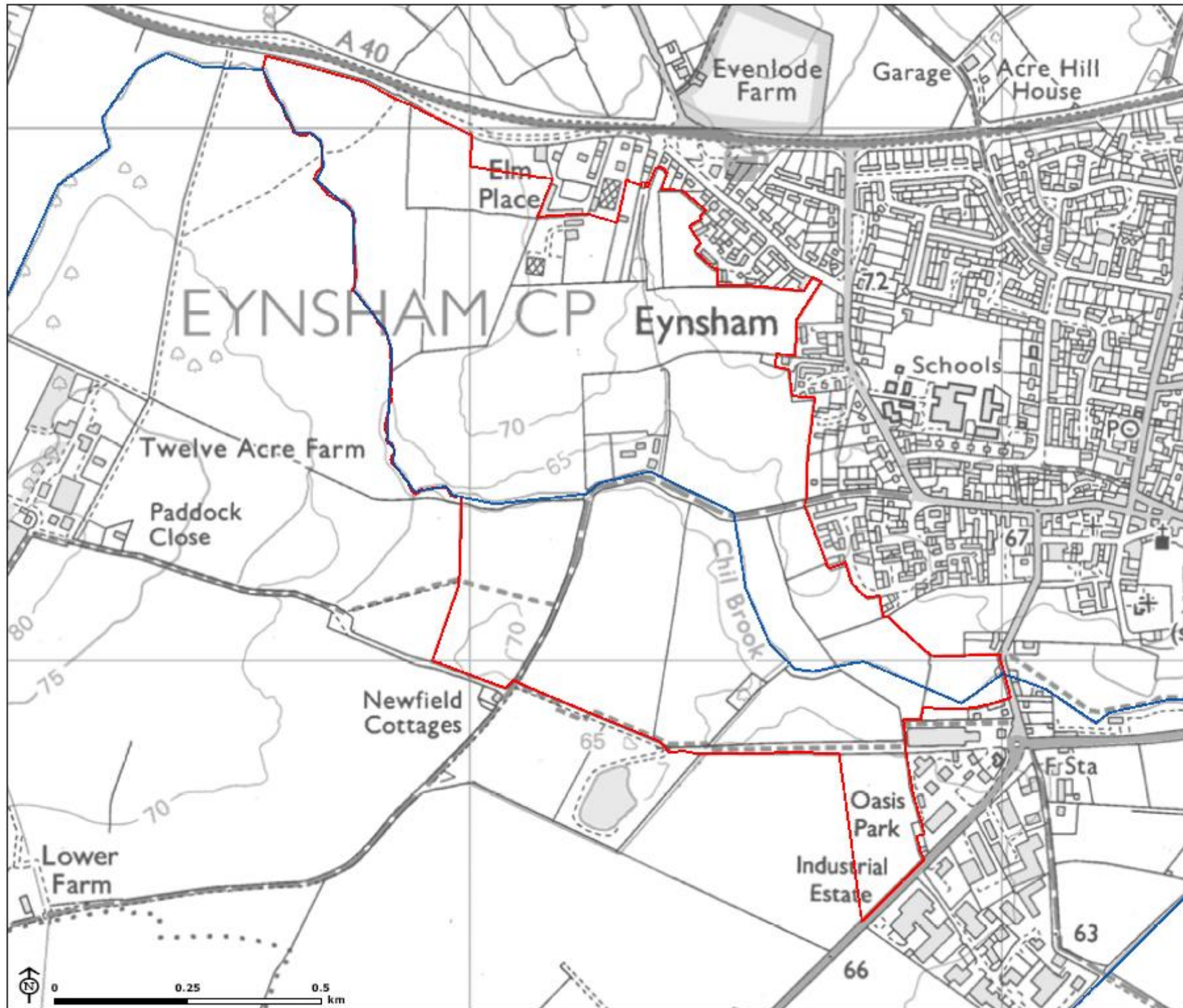
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Green Infrastructure
Advice**

**Figure 5.1.2: Map Focusing on
Garden Village Showing
Watercourses**

-  Garden Village Site Boundary
-  Watercourses

Map Scale @A3: 1:10,000

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Advice**

Figure 5.1.3: Map Focusing on West Eynsham Showing Watercourses

- West Eynsham Site Boundary
- Watercourses

Map Scale @A3: 1:7,000

LUC



Source: WODC

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CB:LA EB:Stenson_K LUC FIG_3_1_3_10498_WE_watercourse_A3L 10/05/2019

5.1 Water environment

- 5.4 The water environment is an important component of Green Infrastructure, providing a wide range of potential benefits including biodiversity, connectivity, sense of place and recreation. It is often described as 'blue infrastructure'. The water environment can make a direct contribution to the character and setting of a settlement in the form of green corridors, formal and informal lakes, ponds and wetlands.
- 5.5 It is also important to consider existing patterns of river and surface water flooding, and how these could be affected by development and by long term climatic trends. Green infrastructure can help manage these risks by building sustainable water management systems including green roofs, permeable surfaces, rain gardens into the development from the start.
- 5.6 Rainwater capture and greywater recycling systems can help meet gardens and growing needs, helping to build resilience to climate change.
- 5.7 The water environment has potential to contribute to a Garden Village that has a strong and clear identity, is well designed, has a rich and biodiverse environment which proposes health, wellbeing and quality of life and which is resilient to future climate risks.

Rivers and watercourses

- 5.8 West Oxfordshire District lies within the catchment of the River Thames and its tributaries including the Evenlode, Chil Brook and Windrush (**Figure 5.1.1**). Eynsham and the surrounding agricultural landscape are drained by the River Evenlode to the east and its tributary Chil Brook to the south. Eynsham is situated on a free draining gravel terrace between the confluences of Chil Brook and the River Evenlode with the River Thames, some six miles west and upstream of Oxford. A number of other tributaries join the River Thames in this area including Rynsham Mead Ditch and the Old Canal. A natural fording point on the Upper Thames, now the site of Swinford Toll Bridge, lies immediately east of Eynsham.

Oxfordshire Cotswolds Garden Village

- 5.9 An unnamed watercourse, which drains east to the River Evenlode, lies along the northern edge of the proposed Oxfordshire Cotswolds Garden Village site (**Figure 5.1.2**). The brook is a relatively minor feature in the landscape, a line of mature trees marking its course. It can be seen where Lower Road crosses it, north of Wintles Farm.

West Eynsham Strategic Development Area

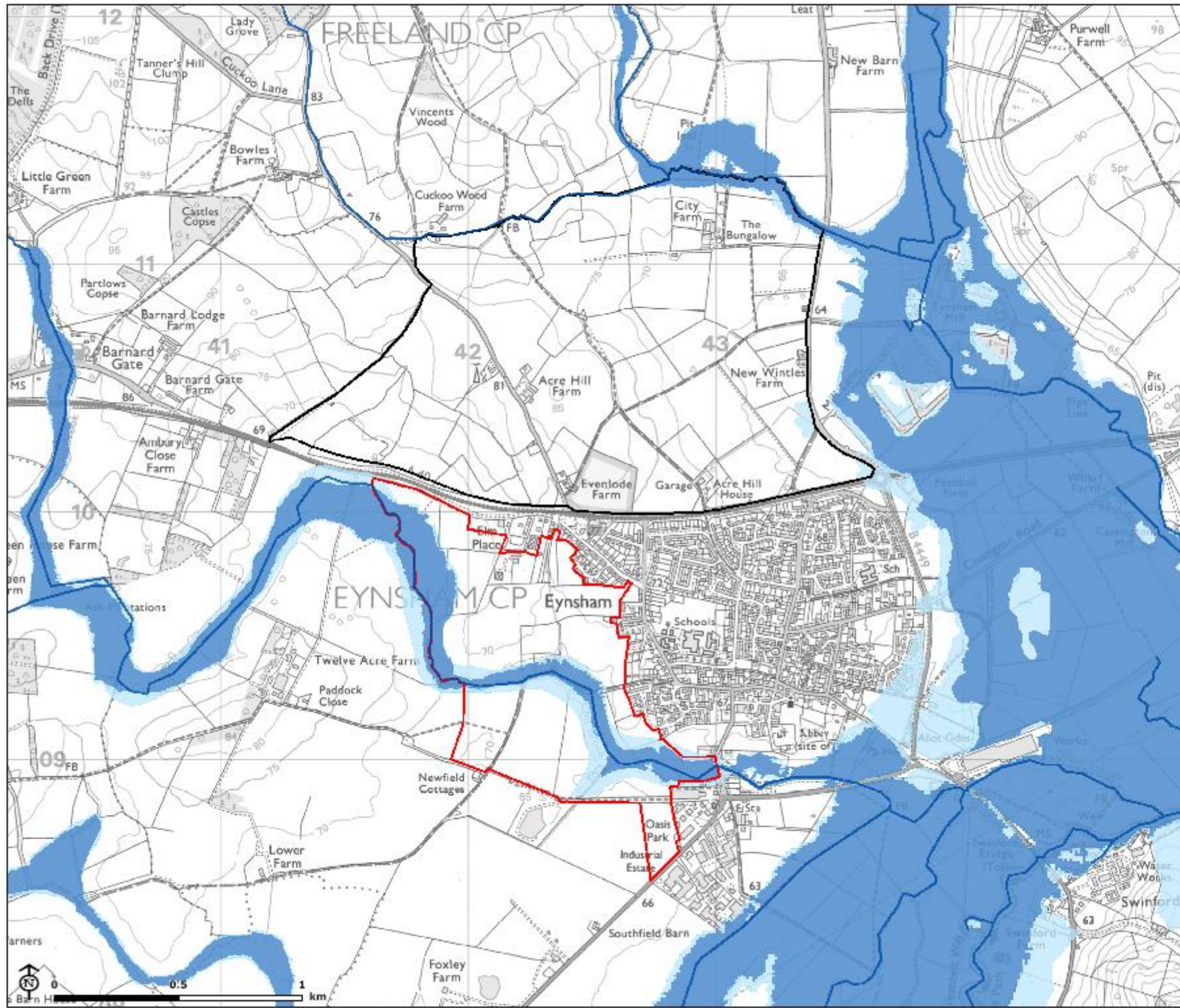
- 5.10 The Chil Brook flows south along the western edge of the West Eynsham Strategic Development Area (**Figure 5.1.3**), then south east through the site from where it joins the Wharf Stream, close to Swinford Toll Bridge. Again, the brook is a relatively minor feature in the landscape, in places marked by mature hedgerow vegetation and trees. To the east of the SDA, the brook flows through a public open space adjacent to Station Road.

Flooding and drainage

- 5.11 The main source of flood risk in West Oxfordshire is fluvial (i.e. from rivers and watercourses), predominantly associated with the River Thames in the south of the District, but also the smaller catchments of the Rivers Windrush and Evenlode, the Chil Brook (**Figure 5.1.4**) and the unnamed watercourse along the northern edge of the garden village site. Eynsham's location on a gravel river terrace, above surrounding floodplains, means that the settlement itself is currently largely unaffected by fluvial flood risk. According to the Council's Strategic Flood Risk Assessment¹⁸, Station Road and the nearby recreation ground have, in the past, experienced flooding from the Chil Brook. The Level 2 Strategic Flood Risk Assessment¹⁹ undertaken for Garden Village and West Eynsham SDA proposals lists a number of flood events on the Chil Brook, several of which have affected properties as well as farmland.

¹⁸ Scott Wilson (2009) Cherwell and West Oxfordshire: Level 1 Strategic Flood Risk Assessment <https://www.westoxon.gov.uk/media/298964/West-Oxfordshire-Level-1-Strategic-Flood-Risk-Assessment-SFRA-2009.pdf>

¹⁹ JBA Consulting (2019) Strategic Flood Risk Assessment – Land North and West of Eynsham



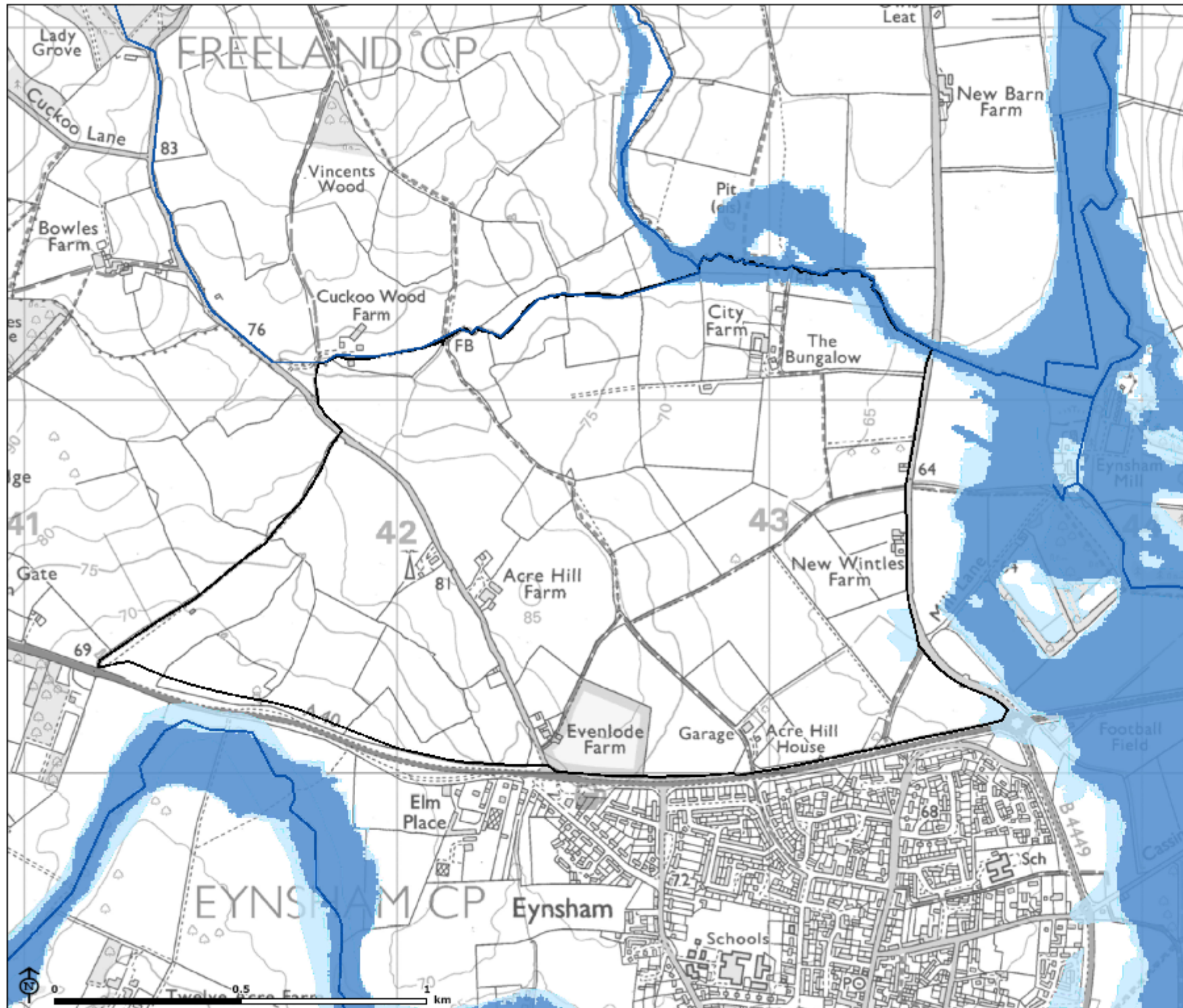
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Green Infrastructure
Advice**

**Figure 5.1.4: Map Showing Eynsham
and Flood Risk**

-  Garden Village Site Boundary
-  West Eynsham Site Boundary
-  Watercourses
-  Flood Zone 3
-  Flood Zone 2

Map Scale @A3: 1:15,000

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Green Infrastructure
Advice**

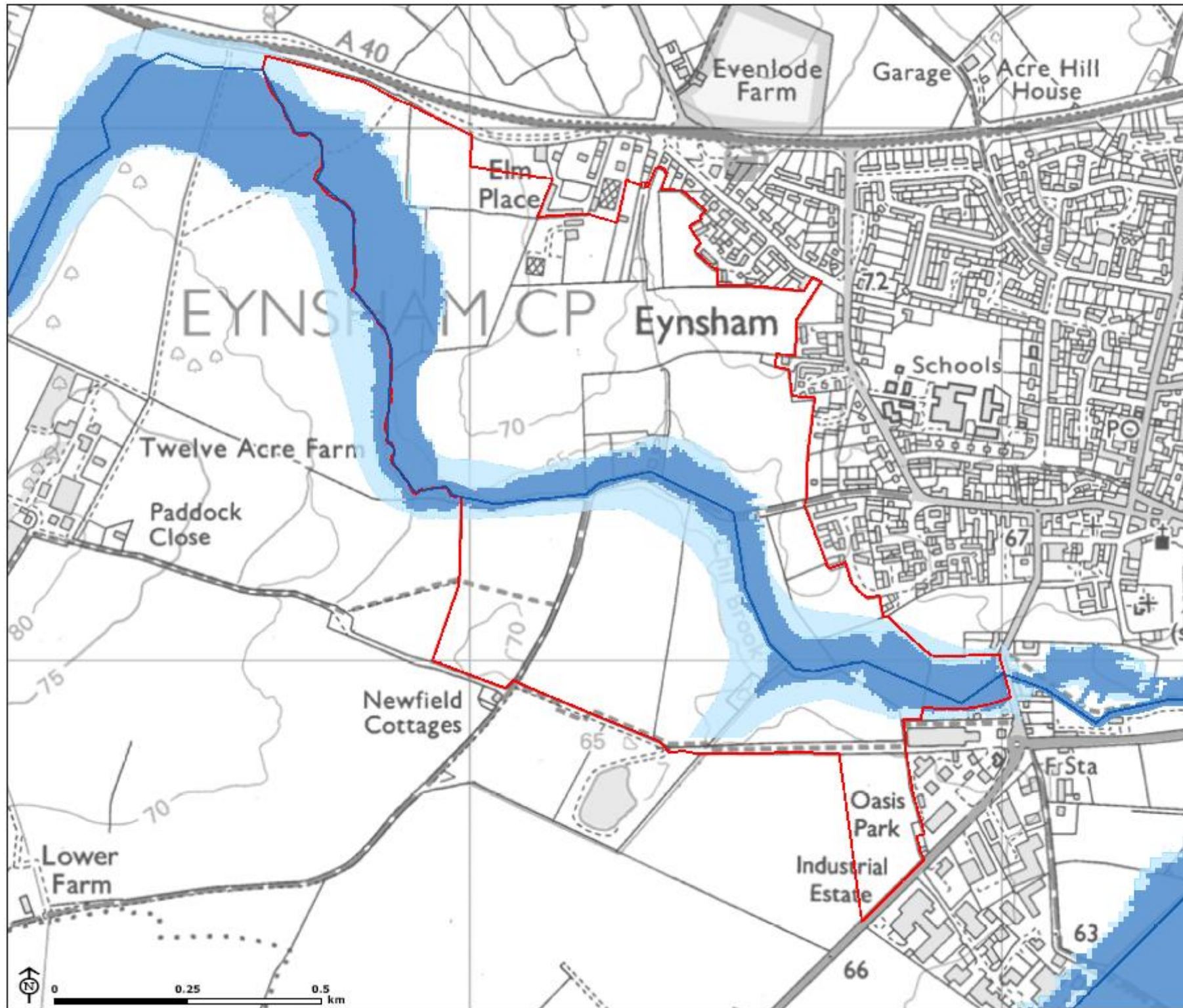
**Figure 5.1.5: Map Focusing on
Garden Village Showing Flood Risk**

- Garden Village Site Boundary
- Watercourses
- Flood Zone 3
- Flood Zone 2

Map Scale @A3: 1:10,000



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**West Oxfordshire
Green Infrastructure
Advice**

Figure 5.1.6: Map Focusing on West Eynsham Showing Flood Risk

- West Eynsham Site Boundary
- Watercourses
- Flood Zone 3
- Flood Zone 2

Map Scale @A3: 1:7,000

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CB:LA EB:Stanton_K LUC FIG_S_1_6_10498_WE_flood_rnk_A3L 10/05/2019

Source: WOOD, EA

Climate change

- 5.12 UKCP18 climate projections²⁰ suggest that by the middle of the century, the Thames catchment could be experiencing significantly drier and warmer summers together with wetter winters.
- 5.13 There is also evidence that the frequency and intensity of heavy rainfall events is increasing²¹. This means that it is likely that the risk of fluvial and surface water flooding will increase during the winter and that the risk of low flow conditions affecting watercourses during summer drought will also increase. Intense rainfall events make it more likely that surface water flooding will occur, potentially contributing to fluvial flood events.

Oxfordshire Cotswolds Garden Village

- 5.14 The Environment Agency's flood risk maps indicate flooding along the unnamed watercourse along the northern edge of the Oxfordshire Cotswolds Garden Village, with areas of farmland within the site falling within flood zones 2 and 3 (**Figure 5.1.5**). The Level 2 Strategic Flood Risk Assessment²² that has been carried out for the garden village indicates that risk of flooding is likely to increase a result of climate change
- 5.15 The south western corner of the Garden Village is close to the Chil Brook, but the site at this point does not fall within a flood zone.
- 5.16 Land to the north of Eynsham comprises less permeable clay, giving rise to reports of surface water flooding²³ affecting farmland in a number of places. This is supported by the Level 2 Strategic Flood Risk Assessment²⁴ which indicates that in parts of the eastern portion of the site, groundwater levels lie at or very close to the ground surface. The assessment also noted that the unnamed watercourse along the northern boundary of the garden village tends to have a 'flashy response' due to its clay catchment and floods regularly.
- 5.17 The Oxfordshire Cotswolds Garden Village should be designed to:
- Conserve and manage the existing functional floodplain along the unnamed watercourse at the north of the Garden Village site to include habitat creation, recreation networks and a high quality setting for the development.
 - Use sustainable drainage techniques to manage existing and increased surface water run-off within the site. There is potential to use this positively to create a variety of new water based features including permanent and temporary waterbodies and wetlands, dry river bed features, permeable surfaces, green roofs and rain gardens integrated throughout the development.
 - Use rainwater capture and grey water recycling to provide a water resource during periods of drought and providing water for household, garden and growing needs.

West Eynsham Strategic Development Area

- 5.18 A significant part of the West Eynsham Strategic Development Area is liable to flooding from the Chil Brook (**Figure 5.1.6**). Just under 30% of the site lies within flood zone 2, with around 19% falling within flood zone 3. Again, climate change means the risk of flooding is likely to increase in the future. Surface water flooding is less frequent, reflecting the presence of free draining river gravels.
- 5.19 Although development here would be on gravel river terraces, any increase in impermeable surfaces resulting from development could result in a need to manage surface water run-off to avoid pluvial flooding issues within the site, or an increase in fluvial flooding along the Chil Brook.
- 5.20 The West Eynsham Strategic Development Area should be designed to:
- Conserve and manage the existing functional floodplain along the Chil Brook to include habitat creation, recreation networks and a high quality setting for the development.

²⁰ <https://www.metoffice.gov.uk/research/collaboration/ukcp/land-projection-maps>

²¹ https://www.ofwat.gov.uk/wp-content/uploads/2015/11/rpt_com_met_rainfall.pdf

²² JBA Consulting (2019) Strategic Flood Risk Assessment – Land North and West of Eynsham

²³ Personal communication – Nigel Pearce 2018

²⁴ JBA Consulting (2019) Strategic Flood Risk Assessment – Land North and West of Eynsham

- Use sustainable drainage techniques to manage existing and increased surface water run-off within the site. There is potential to use this positively to create a variety of new water based features including permanent and temporary waterbodies and wetlands, dry river bed features, permeable surfaces, green roofs and rain gardens integrated throughout the development.
- Use rainwater capture and grey water recycling to provide a water resource during periods of drought and providing water for household, garden and growing needs.

Access and recreation

- 5.21 Public access to watercourses around Eynsham is mainly limited to public open space along the Chil Brook to the east of Station Road and the Thames Path National Trail running along the south side of the River Thames. Existing public rights of way in the Oxfordshire Cotswolds Garden Village and West Eynsham Strategic Development Area sites cross the City Farm Brook and Chil Brook respectively, but there is no access along the stream corridors.
- 5.22 There is considerable potential to create new public access along both stream corridors as part of the development of these sites and to create access to areas of new wetland habitat.

Table 5.1.1: Green infrastructure and the water environment – SWOT analysis

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
Existing Strengths	
Continuous watercourse corridor to the north of the Garden Village site is an important ecological feature, connecting to the Evenlode and Thames	Continuous watercourse corridors to the west and south of Eynsham form important natural and ecological features
Existing Weaknesses	
<p>Water course is relatively hidden in the landscape, marked by tree lines and visible where crossed by pedestrian or road bridges</p> <p>Areas of fluvial flood risk mainly currently affecting areas of farmland</p> <p>The prevalence of clay soils across the west of the Garden Village site is reflected in instances of surface water flooding and means that changes in surface water run-off associated with development will require careful management to avoid increasing flood risk within the site, or downstream</p> <p>Public access to the watercourse corridors is generally limited</p>	<p>Water course is relatively hidden in the landscape, marked by tree lines and visible where crossed by pedestrian or road bridges</p> <p>Areas of fluvial flood risk, mainly currently affecting areas of farmland</p> <p>Public access to the watercourse corridors is generally limited</p>
Future Threats	
<p>Potential for increased flood risk along the watercourses and further downstream if development results in an increase in surface water run-off (volume of run-off and speed of run-off)</p> <p>Threat of increase in surface water flooding as a result of an increase in the extent of impermeable surfaces and the prevalence of clay soils</p> <p>Likelihood that increases in summer drought will result in low flow conditions along watercourses in the area, with potential impacts on aquatic habitats and species</p> <p>Potential for run-off from the Garden Village to adversely affect water quality in watercourses and other waterbodies</p> <p>Increased recreation pressure along the stream corridor could also affect the water environment through disturbance, erosion etc.</p>	<p>Potential for increased flood risk along the watercourses and further downstream if development results in an increase in surface water run-off (volume of run-off and speed of run-off)</p> <p>Threat of increase in surface water flooding as a result of an increase in the extent of impermeable surfaces</p> <p>Likelihood that increases in summer drought will result in low flow conditions along watercourses in the area, with potential impacts on aquatic habitats and species</p> <p>Potential for run-off from the SDA site to adversely affect water quality in watercourses and other waterbodies</p> <p>Increased recreation pressure along the stream corridor could also affect the water environment through disturbance, erosion etc.</p>

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
Future Opportunities	
<p>Opportunities to make creative use of measures such as permanent or temporary waterbodies, wetland and water features, permeable surfaces, dry river beds, green roofs and rain gardens to manage surface water run-off, contribute to sense of place, provide wetland habitats and recreation opportunities as well as mitigating flood risk. Natural flood risk management measures are being introduced within the catchment</p> <p>Opportunity to create linear green space along watercourse corridors, extending to include areas currently at risk of flooding. Riparian green corridors could include habitat creation, new wetland features, walking and cycling routes</p> <p>Opportunity to connect into wider walking and cycling routes, ultimately connecting to the Thames Trail and other longer distance routes including Sustrans' national routes 57, 557, and 442</p> <p>Opportunity to increase awareness and prominence of the watercourses in the landscape, enhance existing ponds and wetland features and create new waterbodies at a variety of scales including lakes, ponds, rain gardens, bogs and streams</p> <p>Opportunity to design green infrastructure to help make the water environment more resilient to climate change, including the use of rainwater harvesting and grey water recycling</p>	<p>Opportunities to make creative use of measures such as permanent or temporary waterbodies and features, permeable surfaces, dry river beds, green roofs and rain gardens to manage surface water run-off, contribute to sense of place, provide wetland habitats and recreation opportunities as well as mitigating flood risk. Natural flood risk management measures are being introduced within the catchment</p> <p>Opportunity to create linear green space along watercourse corridors, extending to include areas currently at risk of flooding. Riparian green corridors could include habitat creation, new wetland features, walking and cycling routes</p> <p>Opportunity to connect into wider walking and cycling routes, ultimately connecting to the Thames Trail and other longer distance routes Sustrans' national routes 57, 557, and 442</p> <p>Opportunity to increase awareness and prominence of the watercourses in the landscape, enhance existing ponds and wetland features and create new waterbodies at a variety of scales including lakes, ponds, rain gardens, bogs and streams</p> <p>Opportunity to design green infrastructure to help make the water environment more resilient to climate change, including the use of rainwater harvesting and grey water recycling</p>

Shaping the Garden Village

- 5.23 Green infrastructure will play a key role in shaping a settlement that reflects Garden Village principles and that is distinctive and rooted in the environment of West Oxfordshire. The water environment will contribute to this by:
- Forming the basis for a biodiversity, flood storage, recreation and landscape corridor along the unnamed watercourse along the northern edge of the Garden Village site, defining the northern boundary of the Garden Village and connecting into the wider network of streams, rivers and waterbodies;
 - Creating a series of wetlands, ponds and lakes which will manage surface water run-off, create wetland habitats, contribute to the parkland character, sense of place and add to the area's recreational opportunities;
 - Using green infrastructure in the form of waterbodies, dry river beds, green roofs, permeable surfaces to build sustainable water management into development of the Garden Village at strategic and site specific levels;
 - Creating opportunities to capture and store rainwater and greywater to provide a climate resilient water resource for household, garden and growing needs.

Shaping the West Eynsham SDA

- 5.24 Green infrastructure will also play a critical role in shaping development at West Eynsham, helping to create a high quality and sustainable development, integrated with the existing settlement benefiting existing and new residents alike. The water environment will contribute to this by:
- Forming the basis for a biodiversity, flood storage, recreation and landscape corridor along the Chil Brook and connecting into the wider network of streams, rivers and waterbodies, existing greenspaces and rights of way;
 - Using green infrastructure in the form of waterbodies, dry river beds, green roofs, permeable surfaces to build sustainable water management into the development at strategic and site specific levels;
 - Creating opportunities to capture and store rainwater and greywater to provide a climate resilient water resource for household, garden and growing needs.

5.2 Biodiversity

- 5.25 Green Infrastructure can play a key role in providing a framework of connected and integrated habitats within and surrounding settlements. This can include trees, hedges, woods and woodland belts, watercourse corridors, lakes, ponds and wetlands and parkland meadows. It can range in scale from individual wildlife gardens or green roofs to the habitat framework which frames development and ties into surrounding areas.
- 5.26 It is important that the planning of the Oxfordshire Cotswolds Garden Village and West Eynsham Strategic Development Area wherever possible incorporates, connects and enhances habitats found within and adjacent the development sites. This section therefore reviews existing habitats around Eynsham and the development sites before setting out ways in which development can make a positive contribution to biodiversity. It draws on the findings of the preliminary ecological impact assessment undertaken by TACP and the principles of the [Building with Nature initiative](#)²⁵ which the District Council is exploring further as part of the planned growth at Eynsham.
- 5.27 There is potential to create a Garden Village whose identity is closely bound up with the quality of the local environment, including its biodiversity, with opportunities for people to become involved and learn about the natural environment. An ecologically rich environment will support the aims of creating an environment that is healthy and contributes to residents' wellbeing.

Designated Sites

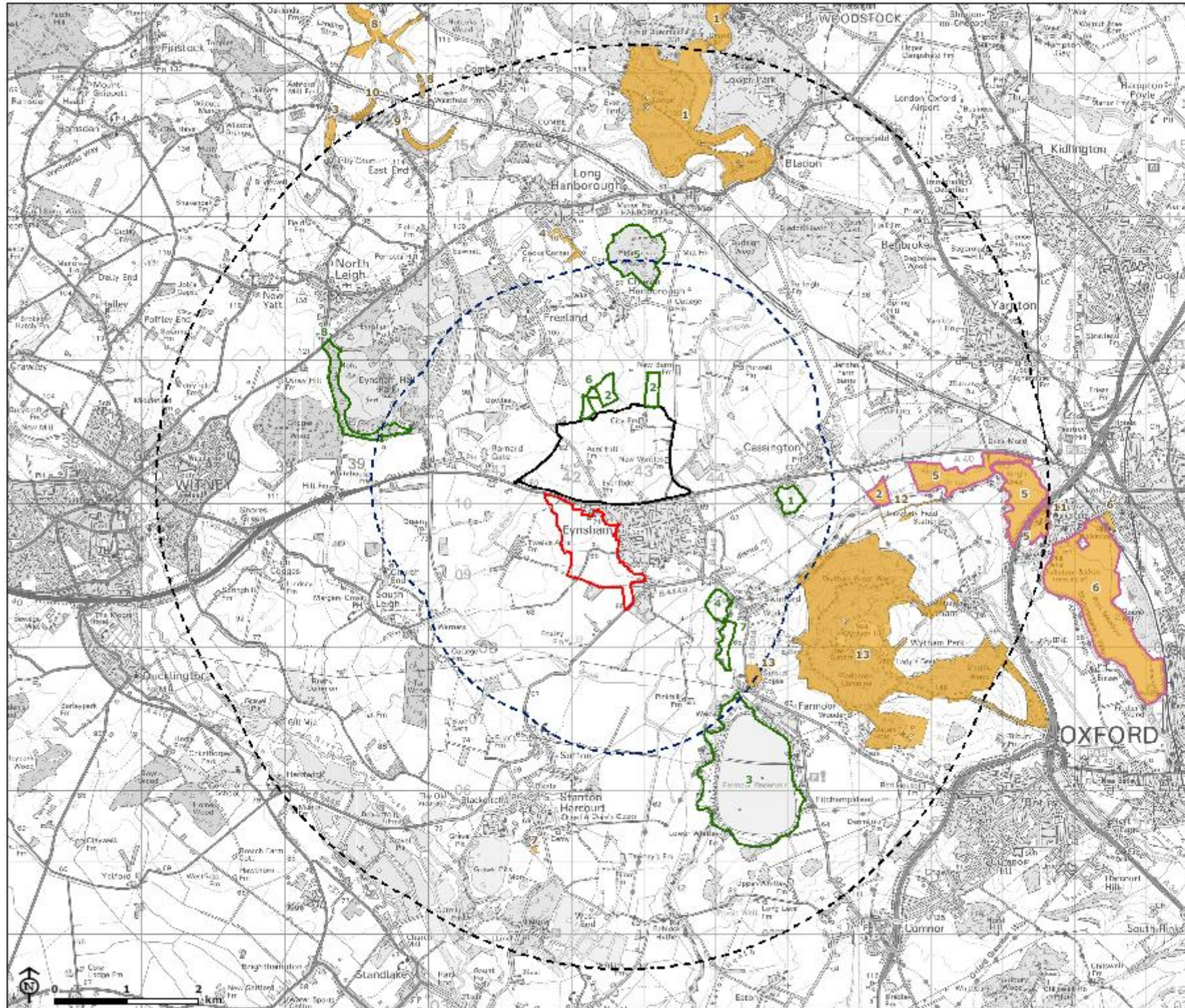
- 5.28 There are no nature conservation designations within the Garden Village or West Eynsham development sites. One European designated site (Oxford Meadows Special Area of Conservation) is located within three kilometres of the Garden Village and SDA. In addition, twelve national statutory designated sites are located within 5km and eight non-statutory Local Wildlife Sites (LWS) are located within 2km. These sites comprise a mosaic of habitats within the landscape which connect directly or indirectly to the Garden Village and SDA, including: semi-natural broadleaved woodland (some ancient); wood pasture; plantation wood; parkland; lowland hay meadows and floodplain meadows; species-rich calcareous grassland; species-rich arable fields; extensive river systems and associated wetland.
- 5.29 The locations of these designated sites are shown in **Figure 5.2.1** and further information is provided in **Appendix 1**.

Habitats

Rivers, streams and waterbodies

- 5.30 **The Garden Village and SDA are situated between three extensive river systems** (shown in **Figures 5.1.1. – 5.1.3**). These linear features form high quality wildlife corridors, providing good connectivity with the wider landscape. They are also associated with large areas of ecologically valuable habitat such as wetland habitat, meadow and woodland, which includes a number of statutory and non-statutory designated sites. Connectivity between the Garden Village and SDA and these river systems should therefore be a priority:
- **The River Evenlode** – Located east of the Garden Village and connected to it via a **tributary stream** corridor running along the northern boundary. The River Evenlode is a tributary of the River Thames, connecting the Garden Village to this river system and its associated protected sites. To the north, it connects the site to Blenheim Park SSSI and the Cotswolds AONB.
 - **The River Thames** – east/ south-east of the Garden Village and SDA. It connects to the River Evenlode which is itself connected to the Garden Village via a **tributary stream**. The Thames also connects to the West Eynsham SDA via **Chil Brook** which runs through the centre of the SDA. Chil brook connects upstream to habitats of high ecological value within Eynsham Hall Park.

²⁵ <https://www.buildingwithnature.org.uk/about>



**West Oxfordshire
Green Infrastructure
Advice**

Figure 5.2.1: Statutory Designated sites within 5km and Non-statutory Designated sites within 2km

- Garden Village Site Boundary
 - West Eynsham Site Boundary
 - 2km buffer
 - 5km buffer
 - Oxford Meadows SAC
 - SSSI
- 1: Blenheim Park
 - 2: Cassington Meadows
 - 3: Holly Court Bank
 - 4: Long Hanborough Gravel Pit
 - 5: Pixey and Yarnton Meads
 - 6: Port Meadow with Wolvercote Common & Green
 - 7: Stanton Harcourt
 - 8: Stonesfield Common, Bottoms & Banks
 - 9: Sturt Copse
 - 10: Whitehill Wood
 - 11: Wolvercote Meadows
 - 12: Wytham Ditches and Flushes
 - 13: Wytham Woods
- Local Wildlife Sites
 - 1: Cassington Gravel Pits South (Smiths Pits)
 - 2: City Farm
 - 3: Farmoor Reservoir
 - 4: Long Mead
 - 5: Pinsley Wood
 - 6: South Freeland Meadows
 - 7: Swinford Farm Meadow
 - 8: West Woods, Eynsham Hall Park

Map Scale @A3: 1:52,000



© Natural England 2019. © Crown copyright and database rights, Ordnance Survey licence number 100024316. (2019) CB/LA 88:Stenson_K LUC FIG_5_2_1_10498_Stat_and_NonStat_A3L 10/05/2019 Source: WOOC, NE

- 5.31 The River Windrush and associated waterbodies - A tributary of the River Thames, south-west of the sites with an extensive network of waterbodies including many large dis-used gravel pits. Limited ecological connectivity to the West Eynsham Strategic Development Area, though features such as hedgerows and Tar Wood LWS act as stepping stones. Connected rather indirectly via Chil Brook and the River Thames.
- 5.32 A small number of **ponds** are present within and immediately adjacent to the Garden Village and SDA, most notably a large pond immediately to the north of the Garden Village, adjacent to the stream and a large pond immediately to the south of the West SDA.

Farmland

- 5.33 Farmland dominates both sites and forms a relatively flat or gently sloping, drained landscape with very limited provision of sheltering and foraging opportunities for most wildlife. Mature hedgerows and treelines provide some connectivity along field boundaries.
- 5.34 Since 2010, the tenant farmer at City Farm, in the north east of the Garden Village site, has **farmed organically** under a regime inspired by '1950s-style' farming methods with wildlife conservation as a high priority. Surveys of the farm, undertaken by Plantlife in 2016, identified a high diversity of arable plant species, including a number that are nationally scarce, near threatened, vulnerable or endangered. The survey scoring system, which was developed in collaboration with Natural England, showed City Farm to be of European Importance for arable plants with an Important Arable Plant Area (IAPA) score of 90 for the farm as a whole. The most important fields lie to the north of the Garden Village Site (achieving scores of 50 or more) while fields within the Garden Village site individually score a maximum of less than 20, though several include species classed as 'vulnerable' and all contribute to the overall importance of City Farm²⁶. These fields are shown in **Figure 5.2.2**.
- 5.35 **City Farm LWS (fields 9 and 11 in Figure 5.2.2, and also shown in Figure 5.2.1)** is located immediately to the north of the Garden Village and the stream, and was identified in the Plantlife surveys as having the fields with the highest IAPA scores. In addition to plants, City Farm supports a **high diversity and abundance of bird species**. In the LWS nesting lapwing and skylark are known to be present, as well as large winter flocks of linnet, goldfinch and yellowhammer. Several ponds, species-rich hedges, oak trees and a c. 12-acre area of oak scrub are also present in the LWS.

Grassland

- 5.36 There are large areas of grazing pasture within the sites and surroundings.
- 5.37 **South Freeland Meadows LWS (shown in Figure 5.2.1)** is located immediately to the north of the Garden Village and the stream, it is an area of lowland meadow habitat, sown with wildflower seed mixes. Some areas of publically accessible amenity grassland are located within the West Eynsham Strategic Development Area.

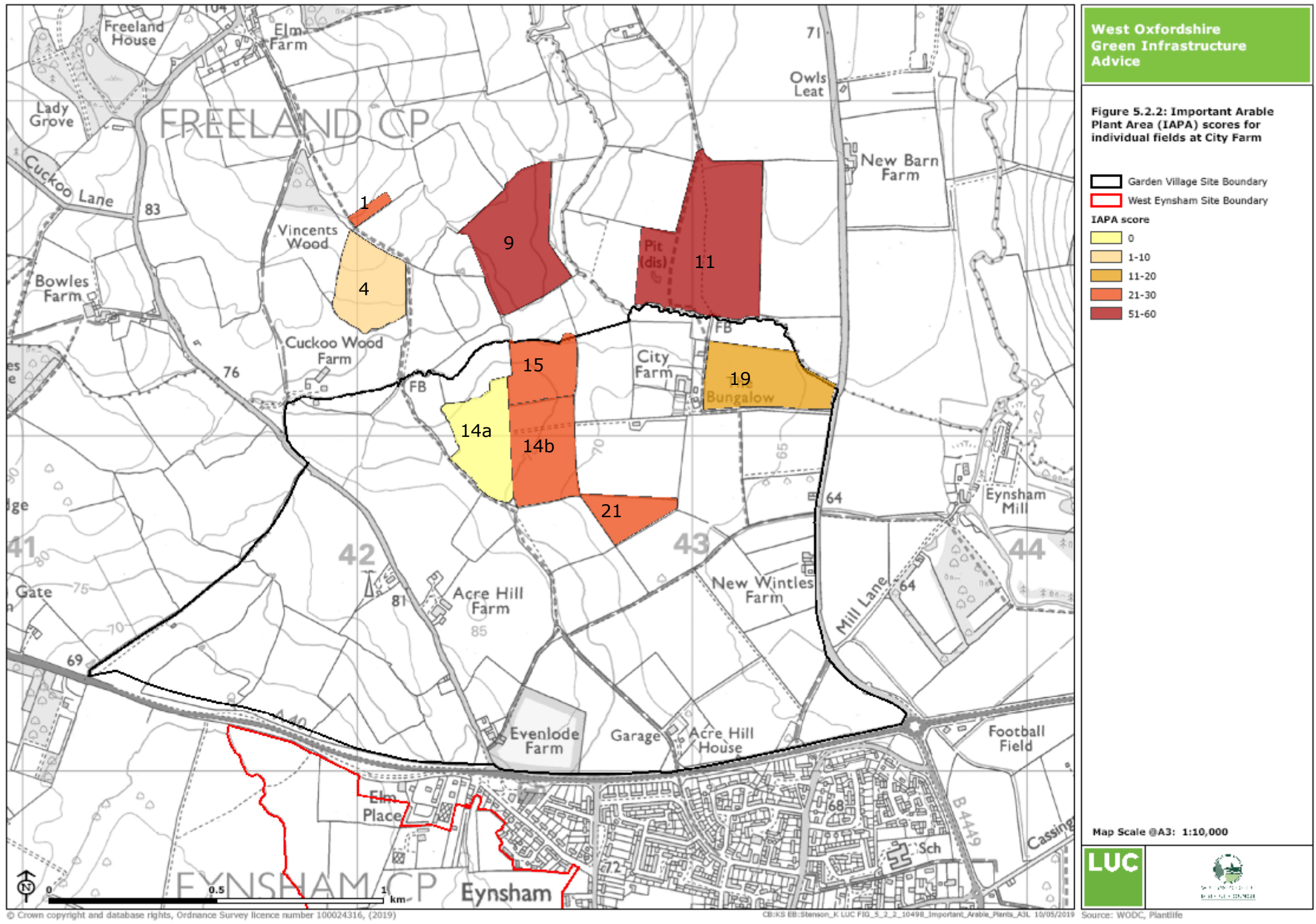
Hedgerows and treelines

- 5.38 These linear features provide some of the only habitat connectivity for species which will not venture out into open areas. They are present along most field margins, though tree distribution is often sparse and many hedgerows appear to be tightly pruned and of low plant species diversity.

Woodland and scrub

- 5.39 Limited to a few areas within an otherwise open landscape, as shown in **Figure 5.3.1**:
- An area of woodland (**Millennium Wood**) is present next to the junction of Cuckoo Lane and the A40 within the south of the Garden Village.
 - An area of woodland/ scrub is present within the north-eastern part of the West Eynsham SDA, accessible via Fruitlands road.

²⁶ The criteria for IAPA scoring is presented in Byfield, A.J. & Wilson, P. J. (2005). Important Arable Plant Areas: identifying priority sites for arable plant conservation in the United Kingdom. Plantlife International, Salisbury, UK.



5.40 Large areas of woodland, including ancient woodland, are present within the wider landscape and connectivity to these could be improved, for example by establishing new woodland belts or reinforcing existing hedgerows. No ancient woodland lies within the Garden Village or West Eynsham SDA.

Species

5.41 A number of protected and/ or notable species have been recorded within the Garden Village and West Eynsham SDA and the wider area. These include Species of Principle Importance for Nature Conservation and Local Biodiversity Action Plan priority species. A biodiversity records search of the Garden Village and SDA and a 2km buffer was undertaken by Thames Valley Environmental Records Centre (TVERC) in 2018 and the results of this are presented in the Preliminary Ecological Impact Assessment prepared by TACP in 2018²⁷. Species which are considered to be of particular interest given the habitats present and the potential impacts of development are listed below:

- **Bats** – eight bat species were identified in the records search and other species are also likely to be present. Habitats such as wetland habitats, woodland, scrub, hedgerows, treelines and wildflower grassland provide suitable foraging, commuting and roosting opportunities for bats. The open arable fields which comprise the majority of the sites however are considered to be of low suitability for bats.
- **Birds** - a high abundance and diversity of bird species has been recorded within the City Farm area in the SLG, as noted above. Elsewhere, habitats such as wetlands, woodland, scrub, hedgerows, treelines, arable fields and wildflower grassland provide good foraging and/or nesting opportunities for birds.
- **Amphibians and reptiles** – the following species were identified within the records search: great crested newt, common toad, common frog, adder, grass snake and slow worm. These species are likely to favour wetland habitats, field margins, scrub and long grassland.
- **Other mammals** – Numerous records for badgers and hedgehog were identified and the Garden Village and SDA are considered to provide suitable habitat for these species. Records for otters and water vole were also identified; though the Preliminary Ecological Impact Assessment (TACP, 2018) noted that the watercourses within and immediately adjacent to the sites currently lack suitable sheltering or burrowing opportunities to support these species, and therefore any populations would likely be small and non-breeding. Harvest mouse records were also identified and the sites are considered to have potential to support small populations of this species, though their distribution is likely to be limited.
- **Invertebrates** – a number of moth, butterfly and beetles which are listed as priority species and as locally or nationally scarce were identified.

Table 5.2.1: Green infrastructure and biodiversity – SWOT analysis

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
Existing Strengths	
<p>Proximity to river systems, supporting high quality wildlife corridors and good connectivity with the wider landscape and associated with ecologically valuable habitat such as wetland habitat, meadow and woodland, which includes a number of statutory and non-statutory designated sites</p> <p>A large pond immediately to the north of the Garden Village, adjacent to the City Farm Brook</p> <p>Hedgerows and treelines provide some connectivity and shelter for species within the site and to surrounding farmland</p> <p>High diversity of nationally rare arable plant species at City Farm and in the City Farm Local Wildlife Site located</p>	<p>Proximity to river systems, supporting high quality wildlife corridors and good connectivity with the wider landscape and associated with ecologically valuable habitat such as wetland habitat, meadow and woodland, which includes a number of statutory and non-statutory designated sites</p> <p>A large pond immediately to the south of the West Eynsham Strategic Development Area</p> <p>Hedgerows and treelines provide some connectivity and shelter for species within the site and to surrounding farmland</p> <p>Ancient woodland present in wider landscape</p>

²⁷ TACP (2018) Oxfordshire Cotswolds Garden Village and West Eynsham Preliminary Ecological Impact Assessment

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
<p>to the north which also includes ponds, species rich hedges, ancient oak and oak scrub. While fields supporting the most important assemblage of arable plants lie north of City Farm Brook, a number of fields within the Garden Village site contribute to the overall importance of City Farm.</p> <p>Habitats at City Farm Local Wildlife Site support high diversity and abundance of bird species</p> <p>South Freeland Meadows LWS – located immediately to the north of the Garden Village and the stream, it is an area of lowland meadow habitat, sown with wildflower seed mixes</p> <p>Ancient woodland present in wider landscape</p> <p>Presence of protected or notable species including bats, birds, amphibians, other mammals and invertebrates</p>	<p>Presence of protected or notable species including bats, birds, amphibians, other mammals and invertebrates</p>
Existing Weaknesses	
<p>Open farmland provides few sheltering and foraging opportunities for most wildlife</p> <p>Some hedges tightly pruned with low plan species diversity</p> <p>Limited woodland cover</p> <p>A limited range of habitat types</p>	<p>Open farmland provides few sheltering and foraging opportunities for most wildlife</p> <p>Some hedges tightly pruned with low plan species diversity</p> <p>Limited woodland cover</p> <p>A limited range of habitat types</p>
Future Threats	
<p>Risk of impacts to existing watercourses through change in water quality, change in flow rates, increased flooding and increased visitor pressure</p> <p>Loss of arable fields and field margins, some of which are likely to support vulnerable or 'near threatened' arable plant species, as well as foraging resources for a variety of fauna. There is also a risk of loss of nesting and foraging habitat for farmland birds.</p> <p>Potential for impacts to the adjacent City Farm and South Freeland Meadows LWSs</p> <p>Potential for loss of habitat and habitat connectivity due to creation of new roads, built structures, fences etc.</p> <p>Potential for impacts to protected and notable species, including roosting, foraging and commuting bats (loss or disturbance of roost sites, impact of lighting) , foraging and nesting birds (loss of habitat, nesting sites, foraging sites, disturbance and predation by domestic dogs and cats), loss of habitat and disturbance affecting amphibians (including great crested newt), reptiles, badgers, European hedgehog, otters, water vole, harvest mouse.</p> <p>Increase in recreation activity in and around the Garden Village has the potential to cause disturbance to protected and notable species, which could result in a reduction in habitat suitability for these species in some areas. In addition, recreational pressure could result in direct impacts to habitats, for example through erosion of walkways, littering, vandalism and/or dog fouling. An increase in the cat population could also result in increased predation of birds and small mammals</p>	<p>Risk of impacts to existing watercourses through change in water quality, change in flow rates, increased flooding and increased visitor pressure</p> <p>Loss of arable fields and field margins which are likely to support a variety of fauna. There is also a risk of loss of nesting and foraging habitat for farmland birds.</p> <p>Potential for loss of habitat and habitat connectivity due to creation of new roads, built structures, fences etc.</p> <p>Potential for impacts to protected and notable species, including roosting, foraging and commuting bats (loss or disturbance of roost sites, impact of lighting) , foraging and nesting birds (loss of habitat, nesting sites, foraging sites, disturbance and predation by domestic dogs and cats), loss of habitat and disturbance affecting amphibians (including great crested newt), reptiles, badgers, European hedgehog, otters, water vole, harvest mouse.</p> <p>Increase in recreation activity in and around the SDA has the potential to cause disturbance to protected and notable species, which could result in a reduction in habitat suitability for these species in some areas. In addition, recreational pressure could result in direct impacts to habitats, for example through erosion of walkways, littering, vandalism and/or dog fouling. An increase in the cat population could also result in increased predation of birds and small mammals</p>
Future Opportunities	
<p>Opportunity to adopt and implement the Building with Nature benchmark to integrate biodiversity into the development through the design and management of green infrastructure and to create more diverse range of habitats</p>	<p>Opportunity to adopt and implement the Building with Nature benchmark to integrate biodiversity into the development through the design and management of green infrastructure and to create more diverse range of habitats</p>

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
<p>Habitat creation to build links to Conservation Target Areas associated with the River Thames, River Windrush, the River Evenlode, Eynsham Hall Park and Blenheim Park</p> <p>Opportunities to create green corridors within the landscape, along watercourses and public rights of way to create / enhance semi-natural habitats of a high ecological value, whilst providing areas of high quality green space for local residents</p> <p>Design and manage recreation provision to keep activity away from most sensitive ecological areas.</p> <p>Creation of habitat corridors comprising woodland or enhanced hedgerows and shelter belts to improve connectivity of existing woodland across the area and the wider landscape</p> <p>Corridors which enhance the connectivity and ecological value of local watercourses should be a priority, particularly given the site's proximity to large river systems such as the River Thames and River Evenlode. These river systems are associated with a large number of habitats of high ecological value, including designated sites, meadows, large waterbodies and areas of ancient woodland</p> <p>It would be beneficial to extend the Garden Village site boundary to the north to include the City Farm Brook, bringing both sides of the river corridor into positive management</p> <p>Opportunity to reverse fragmentation of habitats by the A40 by creation of a green bridge – most beneficially linking the Garden Village with the West Eynsham Strategic Development Area</p> <p>Opportunity for woodland planting throughout the Garden Village site and woodland and species rich grassland verges along the A40 to strengthen ecological connectivity</p> <p>Enhance habitat diversity by conservation and enhancement of watercourses and ponds to enhance water quality, flow rates and species diversity; riparian vegetation planting of native species such as willow and alder; and enhancement measures to target specific species as appropriate</p> <p>Enhancement of botanical diversity of grassland through native wildflower seed mixes and appropriate cyclical mowing regimes</p> <p>Enhancement of woodland and scrub by increasing structural and plant species diversity; replacing non-native tree specimens with native species; provision of bat and bird boxes and log piles etc.</p> <p>Retention and enhancement of arable field margins across the wider area to help mitigate the loss of arable field habitat, targeting rare arable plant species known to be present</p> <p>Retention and enhancement of hedgerows and treelines wherever possible to help mitigate losses through development and target species including farmland birds (such as yellowhammer, corn bunting, linnet, goldfinch and grey partridge) and bats</p> <p>Creation of new wetland, species rich grassland, broadleaf woodland, parkland and traditional orchard habitats</p> <p>Inclusion of green roofs with plant species selected to support a diverse insect assemblage, which could provide additional foraging opportunities for bats</p> <p>Sustainable Drainage System features such as ponds,</p>	<p>Habitat creation to build links to Conservation Target Areas associated with the River Thames, River Windrush, the River Evenlode, Eynsham Hall Park and Blenheim Park</p> <p>Opportunities to create green corridors within the landscape, such as wide buffers along watercourses and public rights of way to create / enhance semi-natural habitats of a high ecological value, whilst providing areas of high quality green space for local residents</p> <p>Design and manage recreation provision to keep activity away from most sensitive ecological areas.</p> <p>Creation of habitat corridors comprising woodland or enhanced hedgerows and shelter belts to improve connectivity of existing woodland across the area and the wider landscape</p> <p>Corridors which enhance the connectivity and ecological value of local watercourses should be a priority, particularly given the site's proximity to large river systems such as the River Thames and River Windrush. These river systems are associated with a large number of habitats of high ecological value, including designated sites, meadows, large waterbodies and areas of ancient woodland</p> <p>Opportunity to reverse fragmentation of habitats by the A40 by creation of a green bridge – most beneficially linking the Garden Village with the West Eynsham Strategic Development Area</p> <p>Conservation and enhancement of watercourses and ponds to enhance water quality, flow rates and species diversity; riparian vegetation planting of native species such as willow and alder; and enhancement measures to target specific species as appropriate</p> <p>Enhancement of botanical diversity of grassland through native wildflower seed mixes and appropriate cyclical mowing regimes</p> <p>Enhancement of woodland and scrub by increasing structural and plant species diversity; replacing non-native tree specimens with native species; provision of bat and bird boxes and log piles etc.</p> <p>Retention and enhancement of hedgerows and treelines wherever possible to help mitigate losses through development and target species including farmland birds (such as yellowhammer, corn bunting, linnet, goldfinch and grey partridge) and bats</p> <p>Creation of new wetland, species rich grassland, broadleaf woodland, parkland and traditional orchard habitats</p> <p>Inclusion of green roofs with plant species selected to support a diverse insect assemblage, which could provide additional foraging opportunities for bats</p> <p>Sustainable Drainage System features such as ponds, swales, rain gardens and permeable pavements can provide valuable additional opportunities for wildlife, whilst also improving habitat connectivity and complimenting wetland habitats in the wider landscape. Wetland areas could be of benefit for species such as reed bunting and lapwing</p> <p>Wildlife friendly planting including nectar-rich flowers to increase insect abundance and diversity, and foraging opportunities for species such as bats and birds</p> <p>Creation of flower beds which are botanically and structurally diverse to provide sheltering and nesting opportunities for animal species. Shrub species (ideally native) with a high berry load will also provide foraging</p>

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
<p>swales, rain gardens and permeable pavements can provide valuable additional opportunities for wildlife, whilst also improving habitat connectivity and complimenting wetland habitats in the wider landscape. Wetland areas could be of benefit for species such as reed bunting and lapwing</p> <p>Wildlife friendly planting including nectar-rich flowers to increase insect abundance and diversity, and foraging opportunities for species such as bats and birds</p> <p>Creation of flower beds which are botanically and structurally diverse to provide sheltering and nesting opportunities for animal species. Shrub species (ideally native) with a high berry load will also provide foraging opportunities for insects and birds.</p> <p>Detailed design to include gaps in fences to allow species such as hedgehogs and amphibians to move across the development</p> <p>Incorporation of bird and bat boxes into buildings, wall and on trees – target red-listed farmland bird species such as tree sparrow, house sparrow, starling, barn owl and spotted flycatcher</p> <p>Sensitive lighting scheme to avoid light spill into semi-natural habitats</p> <p>Seasonal planting and countryside / nature watch schemes, bird boxes and develop local nature groups to link people to nature and benefit health and wellbeing.</p>	<p>opportunities for insects and birds.</p> <p>Detailed design to include gaps in fences to allow species such as hedgehogs and amphibians to move across the development</p> <p>Incorporation of bird and bat boxes into buildings, wall and on trees – target red-listed farmland bird species such as tree sparrow, house sparrow, starling, barn owl and spotted flycatcher</p> <p>Sensitive lighting scheme to avoid light spill into semi-natural habitats</p> <p>Seasonal planting and countryside / nature watch schemes, bird boxes and develop local nature groups to link people to nature and benefit health and wellbeing.</p>

Shaping the Garden Village

- 5.42 Green infrastructure will play a key role in shaping a settlement that reflects Garden Village principles and that is distinctive and rooted in the environment of West Oxfordshire. Green infrastructure will ensure that biodiversity is protected and enhanced across the site and in surrounding areas by:
- Creating new and more diverse habitats across the Garden Village site and extending into surrounding countryside and connecting with the West Eynsham development. These will comprise new woodlands (parkland planting, woodland belts), wetlands (ponds, lakes and watercourses), parkland meadows and biodiverse orchards, allotments, growing spaces and greenspaces;
 - Building biodiversity into development by providing wildlife friendly building designs and materials and prioritising the use of native species;
 - Protecting and enhancing valuable habitats within the Garden Village and adjacent areas. This includes the important arable fields associated with City Farm, the ecologically richest hedgerows, trees and woodland, the unnamed watercourse corridor and Local Wildlife Sites to the north of the Garden Village;
 - Combining existing and new habitats to create diverse and resilient network of habitats which contribute to the landscape structure of the Garden Village and which connect it into the wider countryside;
 - Managing recreation and other pressures so as to minimise damage and disturbance to sensitive habitats and species within and around the Garden Village;
 - Creating new opportunities for people to experience and learn about nature on their doorstep, through education, volunteering, opportunities for lifelong learning and interpretation.
- 5.43 Together, these measures offer the potential to result in a net gain in biodiversity across the Garden Village and surrounding area, creating a rich natural setting for people to live, work and visit.

Shaping the West Eynsham SDA

- 5.44 Green infrastructure will also play a critical role in shaping development at West Eynsham, helping to create a high quality and sustainable development, integrated with the existing settlement benefiting existing and new residents alike. Green infrastructure will ensure that biodiversity is protected and enhanced across the site and in surrounding areas by:
- Creating new and more diverse habitats within the West Eynsham SDA site and extending into surrounding countryside and connecting with the Garden Village development to the north. These could include new woodlands (woodland belts), wetlands (ponds), meadows and biodiverse orchards, allotments, growing spaces and greenspaces;
 - Building biodiversity into development by providing wildlife friendly building designs and materials and prioritising the use of native species;
 - Protecting and enhancing the most important habitats within the West Eynsham SDA site and adjacent areas. This includes the Chil Brook corridor and hedgerows and trees;
 - Combining existing and new habitats to create diverse and resilient network of habitats which contribute to the character of Eynsham and which connect it into the wider countryside;
 - Managing recreation and other pressures so as to minimise damage and disturbance to sensitive habitats and species within and around the Garden Village;
 - Creating new opportunities for people to experience and learn about nature on their doorstep, through education, volunteering, opportunities for lifelong learning and interpretation.

5.3 Woodland, trees and hedges

- 5.45 Woodland, trees and hedges, are an important contributor to Green Infrastructure. They can help shape landscape and townscape character, provide important and connected habitats for birds, mammals and insects, intercept rainfall, filter noise and air pollution and absorb carbon from the atmosphere. Green Infrastructure can help restore, connect and create woodland as an integrated and defining component of new development.
- 5.46 This section of the report describes existing woodland, trees and hedges within and around the proposed Garden Village and West Eynsham sites, highlighting its importance as a key characteristic of the landscape of West Oxfordshire, including the district's many historic designed landscapes. It describes how the pattern of tree-cover can be reflected and form the basis of a bold green infrastructure framework, connected to existing woodlands and providing a setting for new development with the Oxfordshire Cotswolds Garden Village and West Eynsham Strategic Development Area.
- 5.47 Trees, woodlands and hedges will play a critically important role in creating a distinct garden village, with a strong identity, rich ecology and with diverse opportunities for recreation and for people to become involved in planning and managing their local environment. Trees and woodland will help build resilience into the Garden Village, making it less vulnerable to the effects of heavy rain whilst providing shade and natural cooling during hot weather.

Ancient and semi-natural woodland

- 5.48 This part of West Oxfordshire is characterised by a rich legacy of woods, many associated with historic parks and gardens (**Figure 5.3.1**). There are a number of ancient woodlands, semi-natural woodlands located in the area around the two development sites, and more recently planted woodlands such as the Millennium Wood, located close to Eynsham. **Figure 5.3.2**, which shows only the boundary of the Garden Village site, Eynsham and woodland demonstrates the wooded character of this part of West Oxfordshire. The area surrounding Eynsham, including the two sites, was once the Royal Hunting Forest of Wychwood and now comprises rolling farmland with occasional blocks and belts of woodland. The development sites fall within the Wychwood Project Area, which uses the focus of the Royal hunting Forest of Wychwood to encourage local people to understand, conserve and restore its rich mosaic of landscapes and wildlife habitats.
- 5.49 Two registered parks and gardens lie close to the proposed Garden Village and West Eynsham development sites. Blenheim Palace lies around six kilometres to the north of the village, set within more than 2000 acres of parkland designed by Lancelot Capability Brown with extensive plantations, ancient woodlands and hedgerows. Eynsham Hall Park, between the villages of Freeland and North Leigh to the north west of Eynsham, is also encircled by wooded belts including The Ride, which forms the eastern boundary of the park. Woodlands and hedgerows represent a key characteristic of the landscape within West Oxfordshire and especially around the proposed Garden Village and West Eynsham development sites.

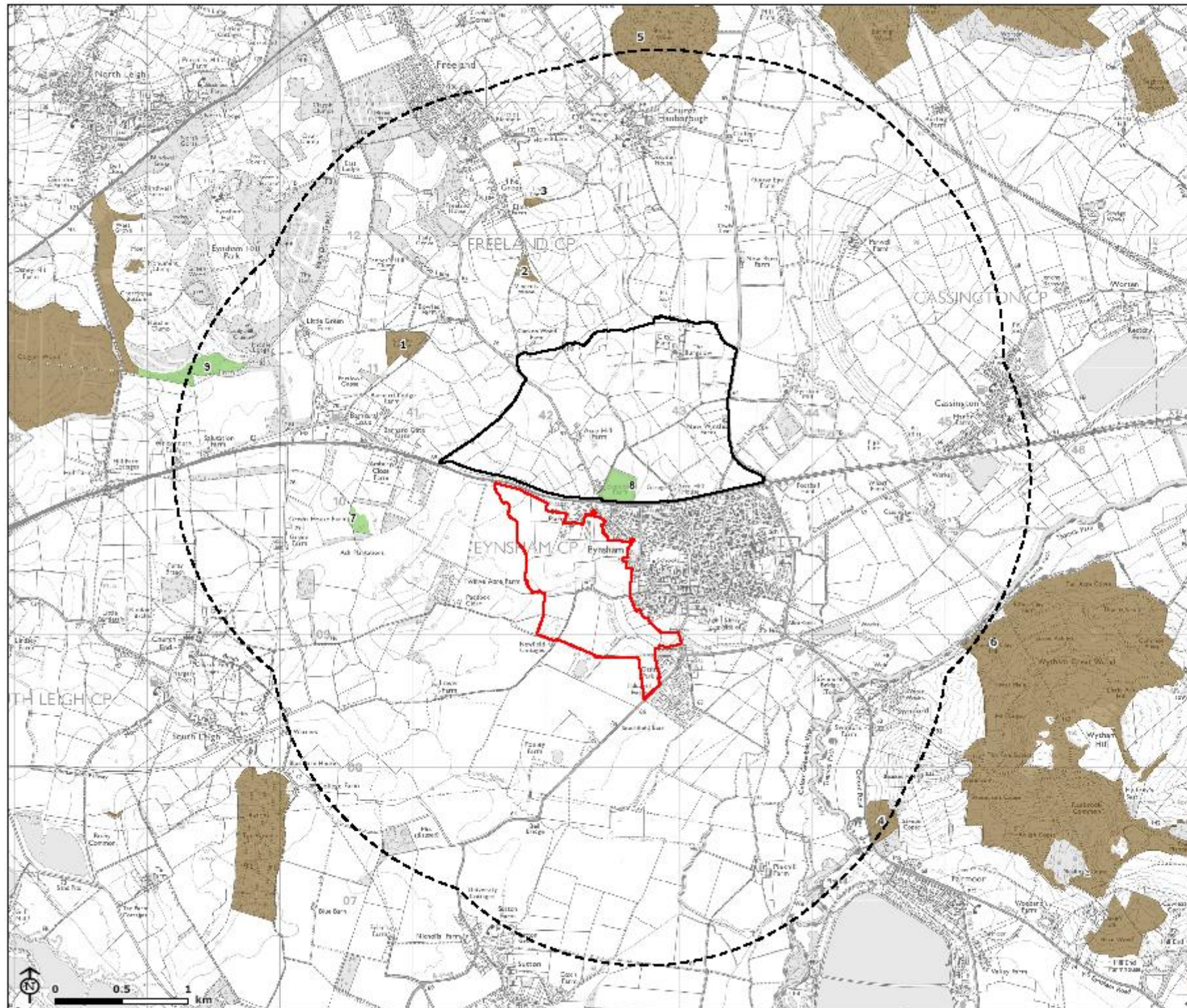
Hedgerows and field boundary trees

- 5.50 The landscape of the two development sites and surrounding areas to the north and west of Eynsham are characterised by a patchwork of agricultural enclosures, many of which have an intact structure of hedges and field boundary trees. In places, hedges and trees have been lost, or hedges closely cut, creating a more open character. Roads and some of the key rights of way are generally lined by hedges and trees. Hedges and tree belts help screen the A40 and provide some mitigation in terms of noise and air pollution.

Oxfordshire Cotswolds Garden Village

- 5.51 The Millennium Wood (5.36 ha) is located within the Oxfordshire Cotswolds Garden Village site (**Figure 5.3.3**), adjacent to Cuckoo Lane and is managed by the Woodland Trust. The community wood has been planted with native trees and the major tree species are oak (30%) and ash (25%), along with field maple (15%) and hazel (15%). Three pure blocks of hazel have also been established, each 0.25 ha in size. Most of the perimeter boundary contains a mature

hedgerow, with occasional willows. A network of wide rides throughout makes the wood accessible for the public and there is a public bridleway on the western boundary. According to



**West Oxfordshire
Green Infrastructure
Advice**

Figure 5.3.1: Records of Woodland Cover within 2km

- Garden Village Site Boundary
- West Eynsham Site Boundary
- 2km buffer
- Ancient Woodland Inventory
- 1: Castles Copse
- 2: Vincents Wood
- 3: The Thrift
- 4: Strond Copse
- 5: Pinsley Wood
- 6: Further Clay Hill
- Woodland (other record)
- 7: Assumed Woodland
- 8: Millenium/Eynsham Wood
- 9: West Woods, Eynsham Hall Park

Map Scale @A3: 1:25,000



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CB:LA EB:Stenson_X LUC F10_S_3_1_10498_Woodland_cover_A3L 13/05/2019

Source: WOOC, FC, NE

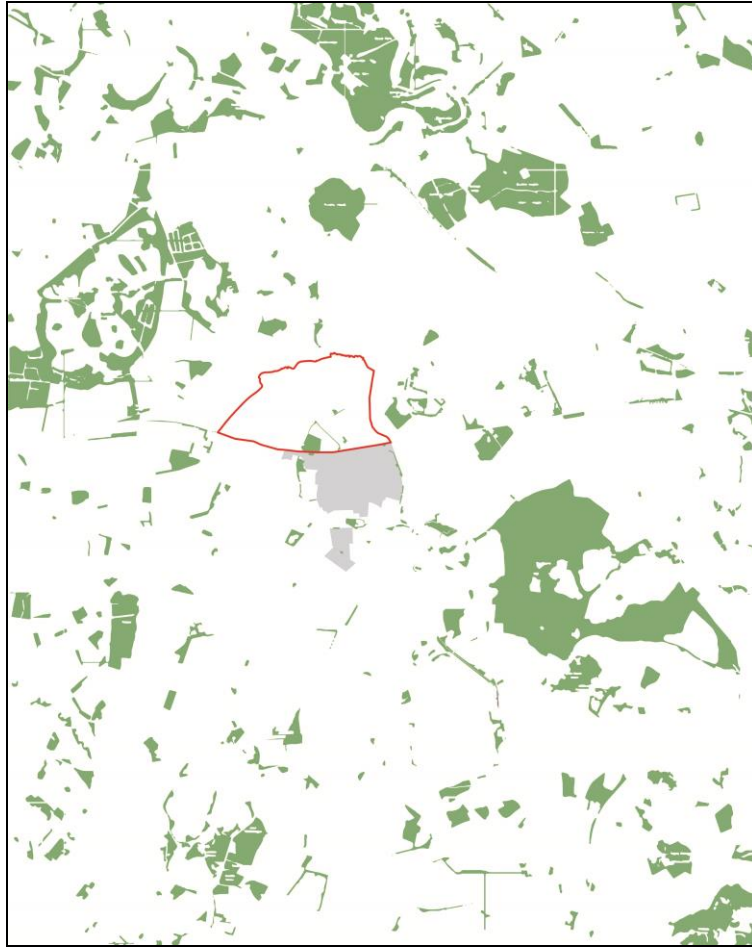


Figure 5.3.2: Analysis of woodland cover

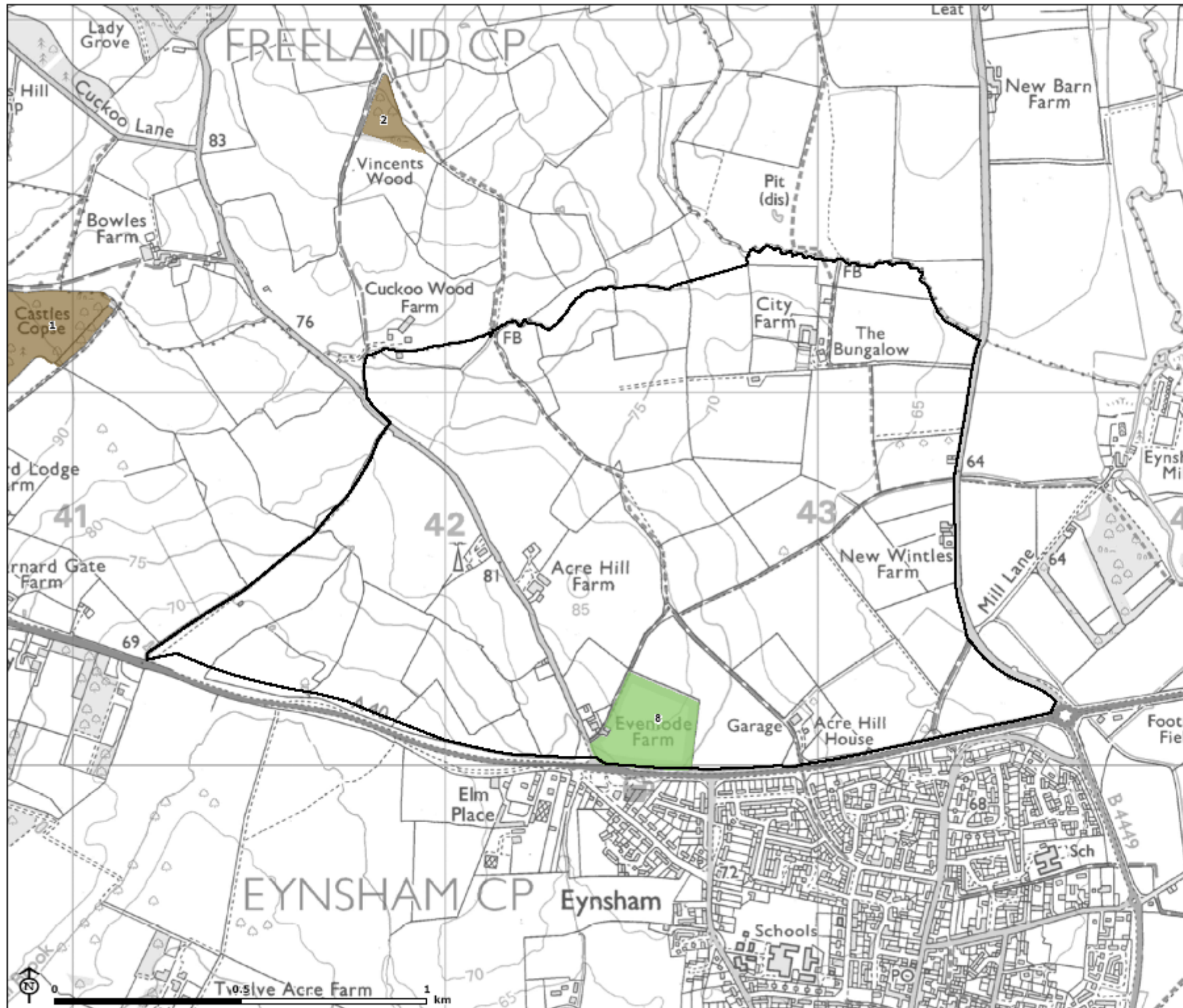
the Eynsham Woodland Management Plan 2014-2019²⁸, there is an opportunity to coppice and manage the small blocks of hazel to generate local wood products, if there is interest by the local community in the future. Additionally, there is an area of ancient woodland (Vincent's Wood – approximately 2 ha) located around 500m from the north-west edge of the site.

- 5.52 The Garden Village site is bordered by hedgerows and trees, as well as Lower Road to the east and the A40 to the south. Hedgerows and field boundary trees are also located throughout the site, including along several of the rights of way that cross it. Many of the trees are mature oaks and make a significant contribution to landscape character whilst supporting a diverse range of species.

West Eynsham Strategic Development Area

- 5.53 The northern part of the West Eynsham Strategic Development Area (**Figure 5.3.4**) contains the former Eynsham Nursery and Plant Centre (which now has planning permission for 77 dwellings), the former Fruitlands Orchard, pockets of woodland and orchard, and a playing field associated with Bartholomew School. Throughout the area, but particularly in the southern half of the site, there are important views into the southeast of Wytham Wood.
- 5.54 The site is bordered by hedgerows and trees, as well as the settlement edge to the north and east. As is the case with the Oxfordshire Cotswolds Garden Village site, hedgerows and field boundary trees are located throughout.

²⁸ <https://www.woodlandtrust.org.uk/woodfile/314/management-plan.pdf?cb=1f82580874a94c18a8d2f7451230f1b5>



**West Oxfordshire
Green Infrastructure
Advice**

**Figure 5.3.3: Records of Woodland
Cover- Garden Village**

- Garden Village Site Boundary
- Ancient Woodland Inventory
- 1: Castles Copse
- 2: Vincents Wood
- Woodland (other record)
- 8: Millenium/Eynsham Wood

Map Scale @A3: 1:10,000



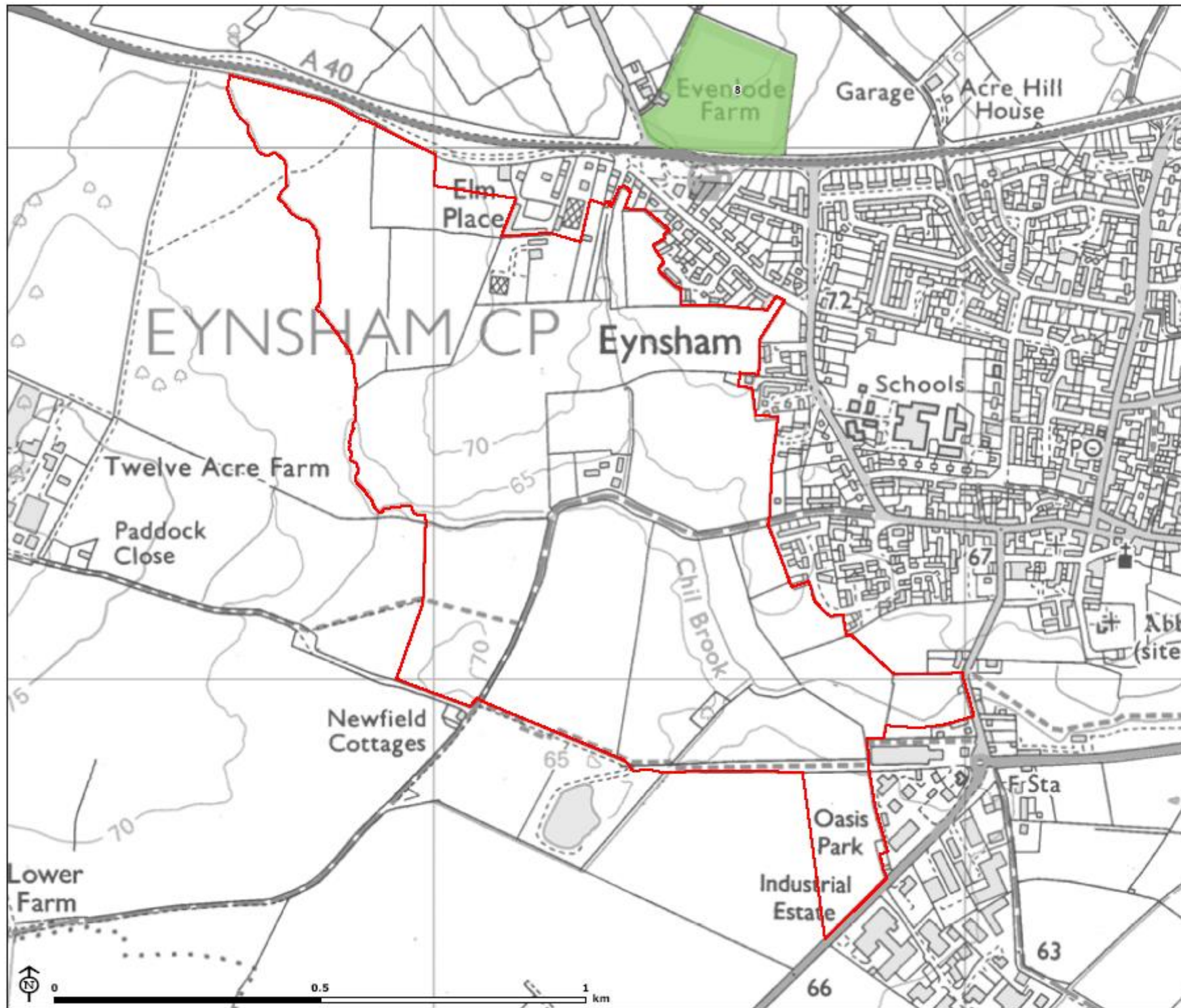
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CB:LA EB:Stenson_K LUC FIG_5_3_3_10498_OV_Woodland_cover_A3L 13/05/2019

Source: WODC, FC, NE

Table 5.3.1: Green infrastructure and woodland, trees and hedges – SWOT analysis

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
Existing Strengths	
<p>Legacy of mature field boundary trees, most of which are oaks</p> <p>Despite limited woodland cover, trees and mature hedges give the impression of a well wooded landscape, screening and filtering views</p> <p>The community woodland at Eynsham Wood, provides an important recreation and wildlife resource and a future source of biomass</p>	<p>Legacy of mature field boundary trees</p> <p>Despite limited woodland cover, trees and mature hedges give the impression of a well wooded landscape, screening and filtering views</p>
Existing Weaknesses	
Comparatively few areas of woodland	Comparatively few areas of woodland
Future Threats	
<p>Risk that development could deplete the stock of field boundary trees and hedges</p> <p>Risk that development could result in the loss of legibility of field boundaries</p> <p>Risk that the effects of future climate change including drought and the increased prevalence of pests and diseases could impact the existing stock of trees across the area</p> <p>Within the Garden Village, where clay soils predominate, a risk that building too close to existing or newly planted trees could result in problems of subsidence during periods of drought</p> <p>Risk that climate change and increases in pests and diseases will impact on stock of mature trees</p>	<p>Risk that development could deplete the stock of field boundary trees and hedges</p> <p>Risk that development could result in the loss of legibility of field boundaries</p> <p>Risk that the effects of future climate change including drought and the increased prevalence of pests and diseases could impact the existing stock of trees across the area</p> <p>Risk that climate change and increases in pests and diseases will impact on stock of mature trees</p>
Future Opportunities	
<p>Opportunity to retain and significantly enhance the role of trees and woodland in creating a woodland character, screening and filtering views – including along the A40 corridor, and along roads serving the developments and to provide a new recreation resource for all local communities.</p> <p>Opportunity to establish tree nursery on part of the site, growing trees of local provenance</p> <p>Opportunity to establish community orchards and grow local fruit varieties</p> <p>Opportunity to create woodland structure and landscapes that references the historic designed landscapes of Eynsham Hall Park and Blenheim Park, and references the character of Wychwood Forest</p> <p>Opportunity to create new, more extensive and connected areas of woodland within and beyond development boundaries, accommodating walking and cycling networks, creating new woodland habitats and sequestering atmospheric carbon</p> <p>Opportunity to use management of woodland and trees to develop a new and sustainable source of low carbon woodfuel (logs, chips and pellets) to provide a source of heat for community buildings</p> <p>Opportunities to involve existing and new communities in woodland management, for example through innovative projects such as wood allotments</p>	<p>Opportunity to create new, more extensive and connected areas of woodland within and beyond development boundaries, accommodating walking and cycling networks, creating new woodland habitats and sequestering atmospheric carbon</p> <p>Potential, in combination with woodlands created on the Garden Village site, to create a new and sustainable source of low carbon woodfuel (logs, chips and pellets) to provide a source of heat for community buildings</p> <p>Opportunities to involve existing and new communities in woodland management, for example through innovative projects such as wood allotments</p>



**West Oxfordshire
Green Infrastructure
Advice**

**Figure 5.3.4: Records of Woodland
Cover- West Eynsham**

- ▭ West Eynsham Site Boundary
- ▭ Woodland (other record)
- 8: Millenium/Eynsham Wood

Map Scale @A3: 1:7,000



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CB:LA EB:Stenson_K LUC FIG_5_3_4_10498_WE_Woodland_cover_A3L 13/05/2019

Source: WOOC, FC, NE

Shaping the Garden Village

5.55 Green infrastructure will play a key role in shaping a settlement that reflects Garden Village principles and that is distinctive and rooted in the environment of West Oxfordshire. Woodland and trees are defining features of the landscape of West Oxfordshire, shaping the many historic designed landscapes and the rich legacy of hedgerow trees and smaller woods. Woodland will be a critical component of the Garden Village's green infrastructure, helping to shape the Garden Village by:

- Creating a landscape structure that reflects the distinctive character parkland of the many historic designed landscapes of West Oxfordshire with new woodlands, copses, shelterbelts and avenues framing a mosaic of development, open meadows and greenspace (including community growing, orchards, sports, events, learning and local spaces), wetlands and water features whilst maintaining, creating and containing key views and vistas;
- Creating a strong woodland buffer along the north side of the A40, particularly to the east of Millennium Wood (Eynsham Wood), helping to mitigate the noise and pollution impacts of the road and maintaining the visual separation of the Garden Village from Eynsham to the south. To the west, greater visibility from the road corridor could permit views of the Science Park and Park and Ride development;
- Enriching biodiversity across the Garden Village and extending into surrounding areas, with a mix of native planting and woodland habitats;
- Accommodating new and improved opportunities for recreation and active travel;
- Creating a new and sustainable source of wood fuel which could be used to heat community and other buildings, whilst absorbing and storing atmospheric carbon and intercepting rainfall and reducing runoff from the development and creating shade for buildings, gardens and public spaces;
- Contributing to opportunities for people to become involved in growing, for example by establishing orchards.

Shaping the West Eynsham SDA

5.56 Green infrastructure will also play a critical role in shaping development at West Eynsham, helping to create a high quality and sustainable development, integrated with the existing settlement benefiting existing and new residents alike. Trees and woodland will be a critical component of the development's green infrastructure, helping to shape it by:

- Retaining and enhancing key hedgerows and mature hedgerow trees to create a landscape structure to frame new development, tie it into the surrounding landscape and filter views;
- Contributing to the habitat corridor along the Chil Brook, connecting with existing greenspace east of Station Road and to the north of the A40, within the Garden Village site;
- absorbing and storing atmospheric carbon and intercepting rainfall and reducing runoff from the development whilst creating shade for buildings, gardens and public spaces.

5.4 Landscape and local distinctiveness

- 5.57 Green infrastructure, comprising networks of open spaces, woodlands, wetlands and access routes, can play a defining role in shaping the landscape character of existing and new settlements. It should respond to the character of the site and its wider setting whilst creating a landscape framework for development.
- 5.58 This section provides an overview of the landscape relating to the two development sites to the north and west of Eynsham, and the wider context, identifying key characteristics of the existing landscape and aspects that should be reflected in proposals for the Oxfordshire Cotswolds Garden Village and the West Eynsham Strategic Development Area. It draws on the more detailed landscape and visual appraisal that has been carried out for the sites and considers the landscape within 1km of the two sites and Eynsham itself (**Figure 5.4.1**).
- 5.59 A strong and locally rooted landscape framework will help deliver a Garden Village that has a strong and clear identity. It will help accommodate a range of land uses, provide a high quality setting for people's home and contribute to health, wellbeing, and quality of life.

Previous landscape character assessments

- 5.60 The character of the landscape around Eynsham has been characterised at a number of levels.
- 5.61 At the national scale, the area falls into the Upper Thames Clay Vales National Character Area (NCA).²⁹ The NCA profile describes the "gently undulating lowland farmland bounded by the limestone scenery of the Cotswolds to the north and the narrow limestone outcrop of the Midvale Ridge to the south", which are "characterised by 18th and early 19th century enclosure landscapes of small woods and thorn hedges."
- 5.62 The NCA profile provides a wealth of background material on the landscape of the area, but at a broad level that offers more limited local insight. More detailed studies of the local landscape are presented in the West Oxfordshire Landscape Assessment (1998),³⁰ and the Oxfordshire Wildlife and Landscape Study (2004).³¹

West Oxfordshire Landscape Assessment (WOLA)

- 5.63 This 1998 study described West Oxfordshire as a 'predominantly rural agricultural landscape' with 'a diverse pattern of landscapes including rolling limestone uplands, pastoral river valleys, historic parkland, remnants of ancient forests, low-lying farmland and riverside meadows with a scattering of rural villages and some larger settlements'.
- 5.64 The study describes the significant influence of picturesque, designed landscapes of the eighteenth century, with notable examples including Lancelot Capability Brown's work at Blenheim Palace, William Kent's masterpiece at Rousham and at Ditchley Park and Humphrey Repton's work at Sarsden and Great Tew. Eynsham Hall Park, to the north west of Eynsham, was created by the enclosure of heath in the late eighteenth century, with further development in the nineteenth and twentieth centuries. These designed landscapes (listed below and shown on **Figure 5.4.2**), and the influence they have on the character of the wider countryside, are a key characteristic of West Oxfordshire.

Historic designed landscapes in West Oxfordshire³²

Blenheim Palace	Great Tew	Sarsden House
Chastleton House	Heythrop	Shipton Court
Cornbury Park	Kelmscott Manor	Swerford
Cornwell Manor	Kiddington Hall	Tackley
Ditchley Park	Rousham	
Eynsham Hall	Sandford Park	

²⁹ Natural England (2014) National Character Area Profile 108: Upper Thames Clay Vales. NE570.

³⁰ Atlantic Consultants (1998) West Oxfordshire Landscape Assessment. West Oxfordshire District Council.

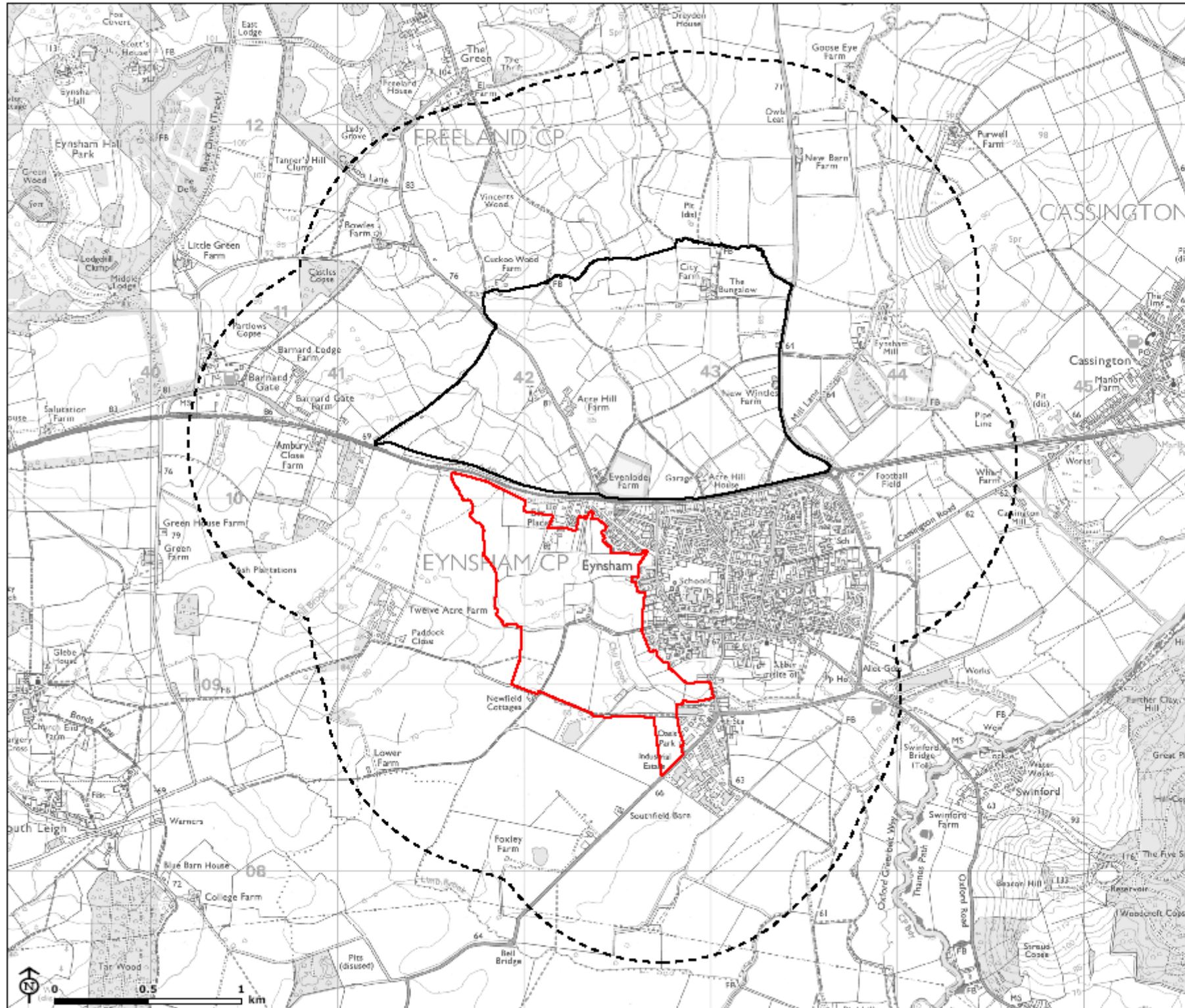
³¹ Oxfordshire County Council (2004) Oxfordshire Wildlife and Landscape Study. Available at [<http://owls.oxfordshire.gov.uk>].

³² <https://historicengland.org.uk/listing/what-is-designation/registered-parks-and-gardens/>

- 5.65 The 1998 landscape assessment identifies the landscape (including the two development sites) to the north and west of Eynsham as 'rolling vale farmland', with areas to the east and south defined as 'flat vale farmland' and 'floodplain pasture'. This highlights the situation of Eynsham at the edge of the Thames floodplain, at the point where the Evenlode joins from the north. The 'rolling vale farmland' is further divided into 'open' to the south-west, and 'semi-enclosed' elsewhere, reflecting a difference in woodland and tree cover.
- 5.66 This distinction is reflected in the identification of separate character areas covering *Eynsham Vale* to the north and west, and *Lower Windrush Valley and Eastern Thames Fringes* to the south and east. With the exception of a small section of the lower Chil Brook, the study area is all within the *Eynsham Vale* character area. This area is "defined by its low-lying and gentle relief and the patchwork of large, regularly shaped fields and comparatively strong structure of hedgerows and trees."
- Oxfordshire Wildlife and Landscape Study (OWLS)*
- 5.67 This 2004 study draws a similar general distinction in landscape character, but presents a gradual transition between the 'rolling clayland' to the west of Eynsham, the 'lowland village farmlands' to the north and south, and the 'alluvial lowland' and 'river meadowland' to the east and south.
- 5.68 Acre Hill and the upper Chil Brook are included in the 'rolling clayland' landscape type, with the following key characteristics:
- "Rolling landform, strongly undulating in places;
 - Dense corridors of willows bordering many small streams and ditches;
 - Small to medium-size mixed plantations;
 - Small to medium-size grass fields and some arable cropping; and
 - Moderately sized settlements and dispersed farmsteads."
- 5.69 The lower Chil Brook and the area around City Farm and New Wintles Farm are included in the 'lowland village farmland' landscape type, with the following key characteristics:
- "A varied, gently rolling and almost flat topography;
 - Medium to large-sized arable and hedged fields;
 - Thinly scattered hedgerow trees, which are mostly ash;
 - Ash, willow and poplars fringing ditches and streams; and
 - Prominent village settlements scattered throughout the area."
- 5.70 The study also defines a 'Wooded Estatelands' character type, which includes Eynsham Hall Park and Blenheim Park, and describes key characteristics as comprising:
- "Rolling topography with localised steep slopes.
 - Large blocks of ancient woodland and mixed plantations of variable sizes.
 - Large parklands and mansion houses.
 - A regularly shaped field pattern dominated by arable fields.
 - Small villages with strong vernacular character."
- 5.71 When considering landscape at a local scale, the boundary lines between character types become less important, though the local variations remain key to understanding the intrinsic character of an area. As such, the present study has not identified further local character areas, but seeks to describe local characteristics within the framework of these existing classifications.

Landscape of the Garden Village and West Eynsham development sites

- 5.72 The landform of the area rises to 85m at Acre Hill, roughly in the centre of the Garden Village site. Acre Hill extends in a low ridge to the north-west and south-east: to the east the land falls towards the floodplain of the Evenlode; and to the south it falls to the meandering Chil Brook. Both these watercourses flow southwards into the Thames, framing the settlement of Eynsham which sits just above the floodplain.



**West Oxfordshire
Landscape and Historic
Environment Advice**

Figure 5.4.1: Landscape and visual appraisal – study area

- Garden Village Site Boundary
- West Eynsham Site Boundary
- 1 km buffer

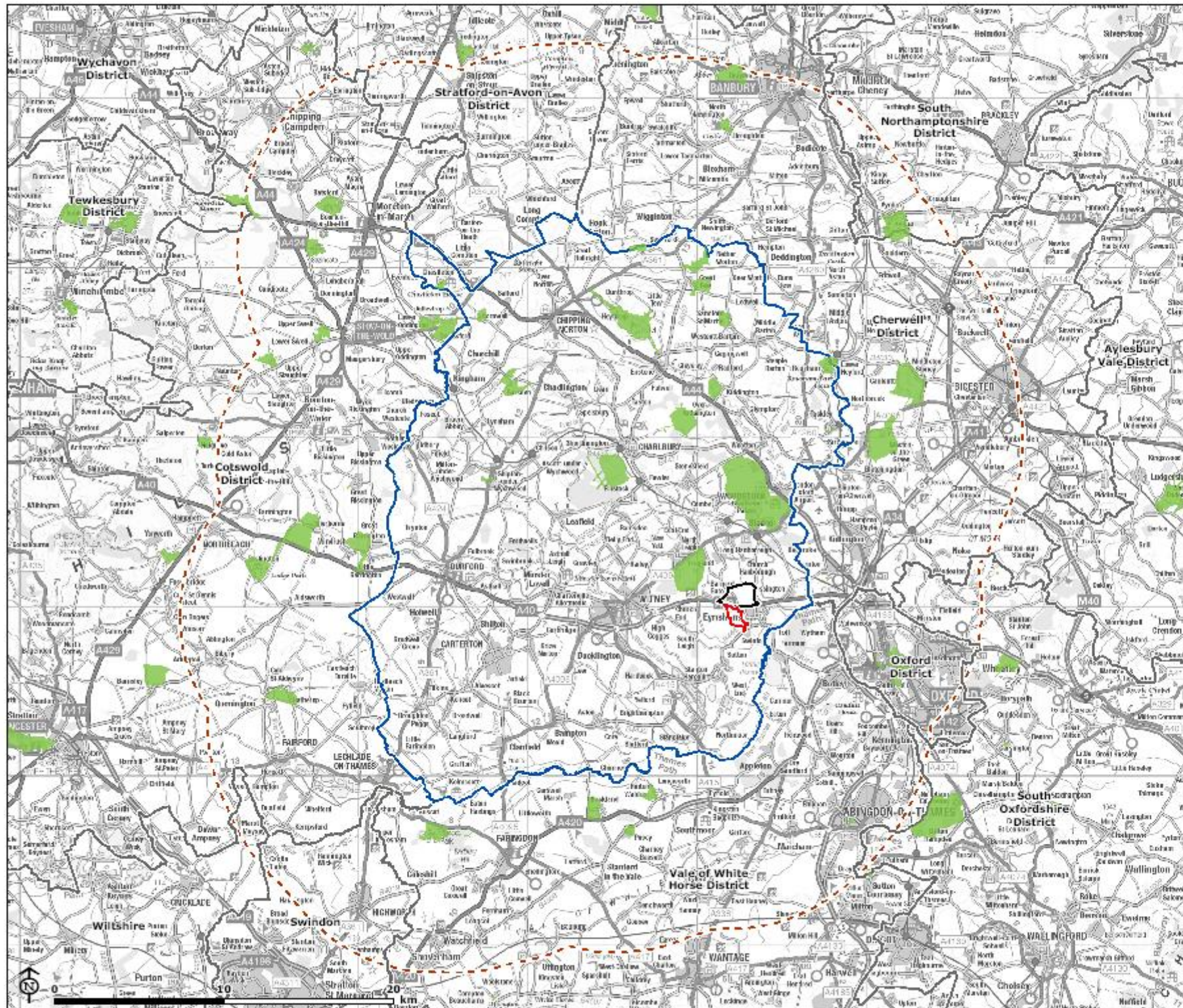
Map Scale @A3: 1:20,000



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CB-LA BB-Stenson_K LUC FIG_5_4_1_10493_Study_Area_A3L 10/05/2019

Source: TVERC



**West Oxfordshire
Green Infrastructure
Advice**

Figure 5.4.2: Registered Parks and Gardens

- West Oxfordshire District
- West Oxfordshire 10 km buffer
- Neighbouring Local Authority
- Garden Village Site Boundary
- West Eynsham Site Boundary
- Registered Park and Garden

Map Scale @A3: 1:220,000



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- 5.73 The lowest ground is just under 65m at the Evenlode and lower Chil Brook, so that the topographic variation is under 25m. The changes in elevation are subtle, and are perceived as a gently rolling topography rather than as prominent slopes or hills.
- 5.74 The Chil Brook flows through the southern part of the area. This narrow stream follows an irregular course and is generally a minor feature in the landscape, forming a tree-lined field boundary. The Chil Brook is prone to flooding, affecting nearby parts of Eynsham. North of Acre Hill, field drains flow east towards the Evenlode, and the north boundary of the Garden Village site is marked a tree-lined, unnamed watercourse.
- 5.75 There is limited natural landcover within the area, which has a strongly rural nature, with farmland extending across much of the area. The land use is mainly pastoral on higher ground, with some arable on lower lying fields, particularly towards the Evenlode floodplain. There is a mix of improved pasture and rougher, more rushy pastures. Across Acre Hill and to the west, fields tend to be small and irregular in shape, and remnant ridge-and-furrow earthworks can still be discerned in places. On the lower ground to the east and south fields become larger and more regular in outline, with even larger fields on the floodplain proper, such as north of City Farm.
- 5.76 Fields are generally divided by hedges, which vary in character from clipped hawthorn, to more outgrown lines of mixed scrub. Some hedges are gappy or missing. Along the A40 high hedgerows are a feature enclosing the road on both sides. Trees are an important element of field boundaries across the site, not only along watercourses as noted above. Many field boundaries are marked by trees, and occasionally there are dense tree lines as along the footpath north of the garage on the A40. Particular examples include the mature oaks lining the sides of Cuckoo Lane. These trees are an important element of the landscape character and sense of place, filtering views and giving the impression of a well wooded landscape.
- 5.77 There are few areas of woodland within the two development sites. The most significant is Millennium Wood, a recently planted woodland, comprising just over five hectares of native species with grass paths for access. To the south of Old Witney Road is a second area of woodland at Fruitlands. Although woodland is not widespread, combined with the good level of field boundary trees the area has a semi-enclosed character, with trees being a feature in almost all views. This contributes to the sense of an intact landscape in good condition.
- 5.78 Several farms and other commercial enterprises are located in the area. Some of these, including an aggregate recycling plant, are quite extensive, but are well screened by the frequent field boundary trees noted above. Farm and agricultural buildings are generally non-traditional in character, with the exception of City Farm which includes an early 19th-century farmhouse and outbuildings.
- 5.79 The A40 forms a firm boundary along the northern edge of Eynsham, but to the west, residential development forms an irregular edge, adjoining open spaces and horse paddocks. Closer to the A40 are commercial premises. To the south of the Chil Brook lies the Oasis Park industrial estate.
- 5.80 Much of Eynsham comprises relatively modern residential development, with more traditional building types along High Street, Acre End Street, Mill Street and Newland Street, together forming the historic nucleus of the settlement.
- 5.81 A network of public rights of way gives access through the study area, including routes east-west and north-south across the Garden Village site, and east-west across the West Eynsham site, with paths continuing into the wider countryside. The A40 incorporates footpath/cycleways on either side, though this wide busy road presents a barrier to north-south access.
- 5.82 Away from the noise of the A40, this is a strongly rural landscape with a relatively high level of tranquillity. Light pollution maps³³ indicate brighter skies around Eynsham itself, but relatively dark skies in the north of the Garden Village site. The subtle changes in elevation and layers of field boundary trees means that long, open views are not a feature of the area. From the more elevated parts of Acre Hill there are occasional views south to the wooded slopes of Wytham Hill, over the roofs of Eynsham, as well as glimpses of higher ground east of the Evenlode. Eynsham parish church is a local landmark.

³³ <https://www.nightblight.cpre.org.uk/maps/>

5.83 The key characteristics of the area can be summarised as follows:

- Gently rolling clay vale landscape, with subtle changes in elevation;
- Strongly rural character, a landscape in good condition;
- Parcels of small irregular fields with hedges and field boundary trees particularly associated with streams, giving way to more open arable land on river floodplain areas;
- Small-scale streams provide local variety and connections through the landscape;
- Traditional building types are found within Eynsham and for example at City Farm;
- Woodland is limited, but dense hedges and hedgerow trees provide a wooded character; and
- Character is locally by small scale industrial sites, settlement edges and by the busy A40.

5.84 The character of the wider area is significantly influenced by West Oxfordshire’s rich legacy of historic designed landscapes.

Table 5.4.1: Green infrastructure and landscape character – SWOT analysis

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
Existing Strengths	
<p>A distinctive and strongly rural character shaped by agriculture, extending across and beyond the Garden Village site and protected to the east by green belt.</p> <p>A landscape in good condition, with intact hedges and field boundary trees</p> <p>Strong network of hedges and field boundary trees giving the impression of a wooded character</p> <p>Traditional buildings contributing to the rural and historic character</p> <p>Small-scale streams which provide local variety and connections through the landscape</p>	<p>Moderately strong rural character</p> <p>Strong network of hedges and field boundary trees give the impression of a wooded character</p> <p>Small-scale streams which provide local variety and connections through the landscape</p>
Existing Weaknesses	
<p>Landscape and visual impact of mineral recycling plant</p> <p>Landscape, visual and aural impacts, and severance created by the A40</p>	<p>Weakly defined boundary on the western side of Eynsham</p>
Future Threats	
<p>Potential impact of disease (e.g. Ash die back) and climate change on existing tree cover</p> <p>Continued deterioration and loss of field boundaries</p> <p>Potential for development to result in the loss of key landscape characteristics and features</p> <p>Potential for development to be a prominent and visually intrusive element in the local landscape, particularly on higher ground and close to the A40</p>	<p>Potential impact of disease (e.g. Ash die back) and climate change on existing tree cover</p> <p>Continued deterioration and loss of field boundaries</p> <p>Potential for development to result in the loss of key landscape characteristics and features</p> <p>Potential for development to be a prominent and visually intrusive element in the local landscape</p> <p>Risk that the spine road will form a transport corridor through the development</p>
Future Opportunities	
<p>Create a strong woodland structure that reflects and potentially connects to the woodlands of surrounding areas, contributing to a landscape structure for the Garden Village. This should include Eynsham Wood and linking to other woodlands, hedgerows and watercourses.</p> <p>Wherever possible, retain, enhance and manage existing field boundaries and hedgerow trees – key features include historic hedges along rights of way and road corridors, Eynsham Wood and more recent planting along</p>	<p>Wherever possible, retain, enhance and manage existing field boundaries and hedgerow trees – key features include the hedge along Chillbridge Road, and the hedge linking north to the wood at Fruitlands</p> <p>Conserve and manage the Chil Brook as an undeveloped corridor linking eastward existing open space to the south of Eynsham. Enhance tree cover along the northern part of the Chil Brook extending into wider countryside</p>

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
<p>the A40</p> <p>Extend the site area to the north to safeguard and manage the corridor of the unnamed watercourse to the north of the Garden Village site</p> <p>Create a green infrastructure framework along the A40 to separate the Garden Village from Eynsham, and potentially help mitigate noise and other impacts. This could comprise parkland and woodland planting, incorporating green corridors with walking and cycling routes, greenspaces and opportunities for food growing.</p> <p>Create a green infrastructure framework around the minerals recycling plant to minimise visual, dust and noise impacts. This could comprise woodland, incorporate walking and cycling routes and other green infrastructure elements.</p> <p>Avoid development on the highest part of the site, across Acre Hill, where it would be more visible in the wider landscape</p> <p>Retain public rights of way conserving their rural setting and outlook – particularly views towards Wytham Hill from the paths on Acre Hill</p> <p>Create a high quality village landscape where public and private greenspaces and gardens contribute to the Garden Village’s character and distinctiveness</p>	<p>Create a woodland and open space network throughout the site, building on woodlands to the north and south of the site, and linking with retained hedgerows and watercourses</p> <p>Carefully integrate new development along the existing, irregular urban edge to ensure integration of character and avoid the creation of a physically separate place</p> <p>Enhance sections of weaker settlement edge where these currently exist, with the overall intention of deliberately creating a stronger, defensible and more permanent boundary to the west of Eynsham</p> <p>Careful design of the proposed spine road and associated corridor to reflect the local landscape and the scale and grain of proposed development</p>

Shaping the Garden Village

- 5.85 Green infrastructure will play a key role in shaping a settlement that reflects Garden Village principles and that is distinctive and rooted in the environment of West Oxfordshire. The design of green infrastructure will help ensure that the Garden Village responds to the character of the wider landscape and of the site itself, creating a strong and locally rooted sense of place. This will be achieved by:
- Reflecting West Oxfordshire’s rich legacy of historic designed landscapes to create a bold landscape framework for the Garden Village, combining new woodlands, copses, shelterbelts and avenues, framing a mosaic of development, open meadows and greenspace (including community growing, orchards, sports, events, learning and local spaces) and stream corridors, wetlands and water features, creating and maintaining key views and vistas;
 - Retaining key landscape features including the unnamed stream corridor, historic field boundaries, mature trees, tracks and rights of way and vernacular buildings at City Farm;
 - Creating a high quality village landscape where public and private greenspaces and gardens contribute to the Garden Village’s character and distinctiveness;
 - Responding to the subtle topography of the site and avoiding locating development on the low ridge at Acre Hill;
 - Mitigating existing detracting landscape influences, including the A40 corridor and aggregate recycling plant.

Shaping the West Eynsham SDA

- 5.86 Green infrastructure will also play a critical role in shaping development at West Eynsham, helping to create a high quality and sustainable development, integrated with the existing settlement benefiting existing and new residents alike. Green infrastructure will help ensure that the development responds to and reflects the local landscape and townscape character by:
- 5.87 Retaining key landscape features including the Chil Brook corridor, historic field boundaries, mature trees and tracks and rights of way;
- 5.88 Enhancing the character of the settlement edge on the western side of Eynsham, whilst connecting into the existing structure of the built environment;
- 5.89 Creating new local landscape assets including linear greenspace along the Chil Brook corridor together with new public and private gardens and greenspaces throughout the development.

5.5 Cultural heritage

- 5.90 The historic environment plays an important role in shaping the way in which people experience their local area. The street patterns, historic buildings, field systems, ancient rights of way, archaeological sites and even place names reflect the way that places evolve and change over many centuries. A good understanding of the historic environment and its importance can play a key role in shaping the design of green infrastructure associated with new or expanded settlements. It can help ensure that important historical sites, landscapes or routes are conserved. It can also provide new opportunities for people to experience and learn about the area's past.
- 5.91 This section of the report provides an overview of the historic environment of Eynsham and surrounding countryside, focusing in particular on the Oxfordshire Cotswolds Garden Village (**Figure 5.5.1**) and West Eynsham Strategic Development Area (**Figure 5.5.2**) sites. It draws substantially on the more detailed historic environment assessment that has been undertaken for these sites.
- 5.92 A good understanding of cultural heritage can help ensure that the Garden Village has an identity that reflects the area's evolution and history. It should inform the shape and form of the development and provide ways for people to learn about their local area.

Context

- 5.93 Eynsham lies a short distance to the northeast of the River Thames and between two of its tributaries – the River Evenlode to the east and the Chil Brook to the west. Historically, these waterways have made the area attractive for settlement providing food, communications and transport. There is a natural fording point on the Thames, just southeast of Eynsham, at what is now Swinford Bridge and this provided a land route between the Cotswolds and Oxford, the importance of which is suggested by the discovery of prehistoric shields at Swinford Bridge.

Archaeology

Palaeolithic (c. 700,000 to 10,000 BC) and Mesolithic (10,000 to 4,000 BC)

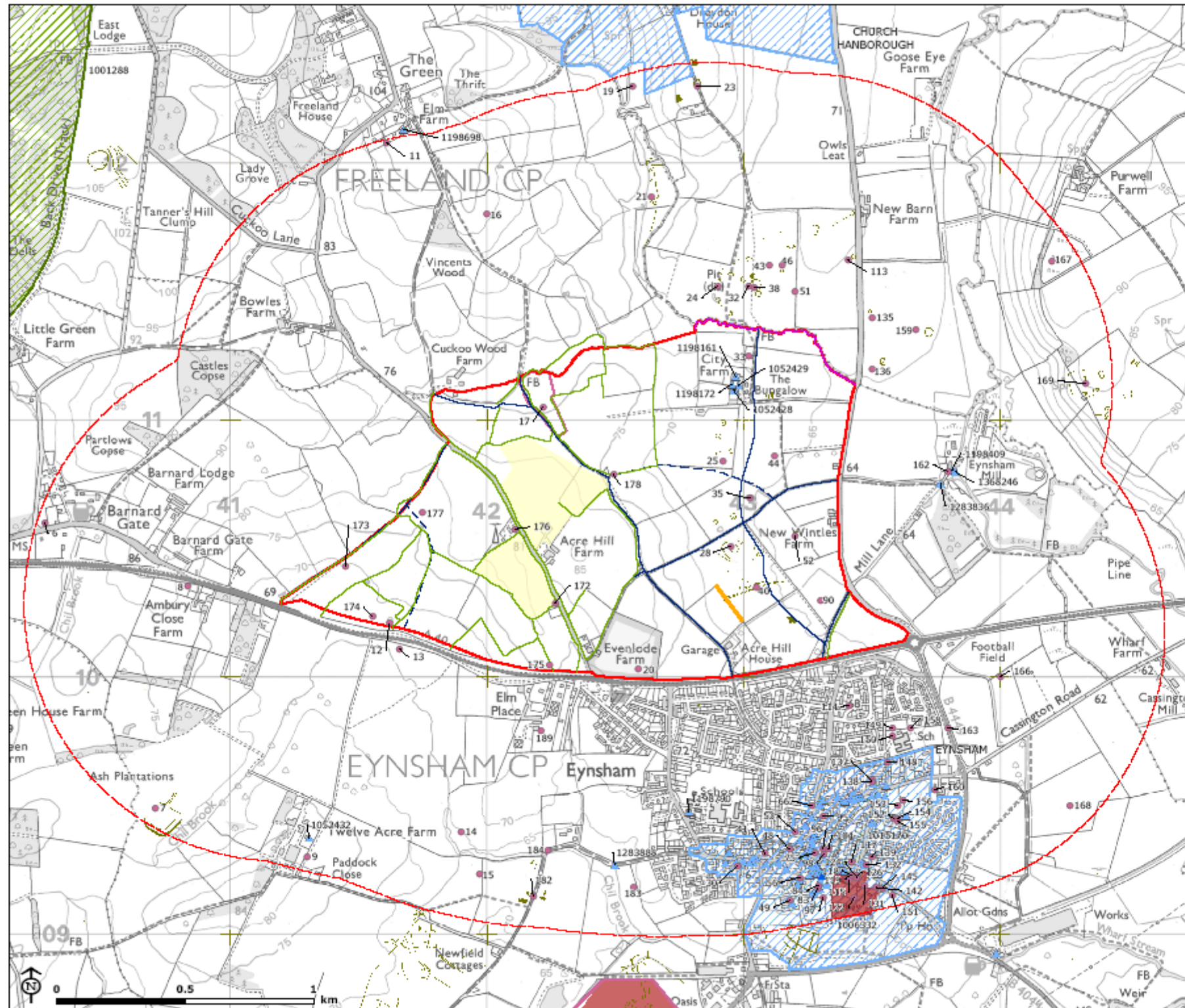
- 5.94 In-situ evidence for these periods is rare as the earliest humans led nomadic lives leaving little archaeological trace. Additionally, most Palaeolithic land surfaces have been lost as a result of erosion. However, there is some residual evidence for early prehistoric activity in the area with the findspots of a Palaeolithic handaxes and two Mesolithic flint cores recorded near City Farm in the Garden Village site. Another two Palaeolithic handaxes have been recovered to the east and south of Eynsham. The Palaeolithic finds are mainly derived from within the gravel terraces that underlie the Sites, but the Mesolithic finds were recovered on the gravels following stripping of the area.
- 5.95 In addition to containing residual Palaeolithic material the gravels also have considerable potential for environmental remains, potentially even buried land surfaces, which can aid our understanding of the evolution of the landscape. In rare circumstances, buried land surfaces can also contain further in-situ archaeological material.

Neolithic (4000 to 2500 BC)

- 5.96 Some of the earliest indications of human settlement in the area date back to the Neolithic period, with evidence of this within both the Garden Village and West Eynsham sites.
- 5.97 In the Garden Village site pits, postholes, and ditches containing Neolithic pottery and worked flint have been recorded. These included cremated remains suggesting that they formed part of a funerary enclosure, similar to other mid to late Neolithic non-megalithic burial sites. Remains of a Neolithic pot were found at nearby Purwell Farm.
- 5.98 In the West Eynsham site, the focus of this settlement is towards the south, where an area of multi-period cropmarks, designated as a scheduled monument, have been found to contain Neolithic pits and graves. The pits have produced sherds of pottery, animal remains and charcoal, representative of domestic activity, comparable to sites at Cassington and Stanton Harcourt. Such pits often occur in concentrations and there is a high potential for more in the area.

Bronze Age (2500 – 800 BC)

- 5.99 Evidence of Bronze Age activity in the study area is largely limited to funerary monuments, although settlement must also have existed nearby.



**West Oxfordshire
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**Figure 5.5.1: Garden Village
Heritage Assets**

- Garden Village Site Boundary
- 1km Study Area
- Designated Assets**
 - Listed buildings
 - Grade II*
 - Grade II
 - Registered Parks and Gardens
 - Scheduled Monuments
 - Conservation Areas
- Non-designated Assets**
 - Non-designated asset (point)
 - Non-designated asset (polygon)
 - National Mapping Programme (NMP) data
 - Ridge and furrow (GV180)
 - Potential Historic Hedgerows (GV179)
 - Contains arch feature (linear cropmark)
 - Parish boundary
 - Predates Inclosure Act
 - Routes (GV190)
 - Extant routes
 - Not extant routes

Map Scale @A3: 1:14,500

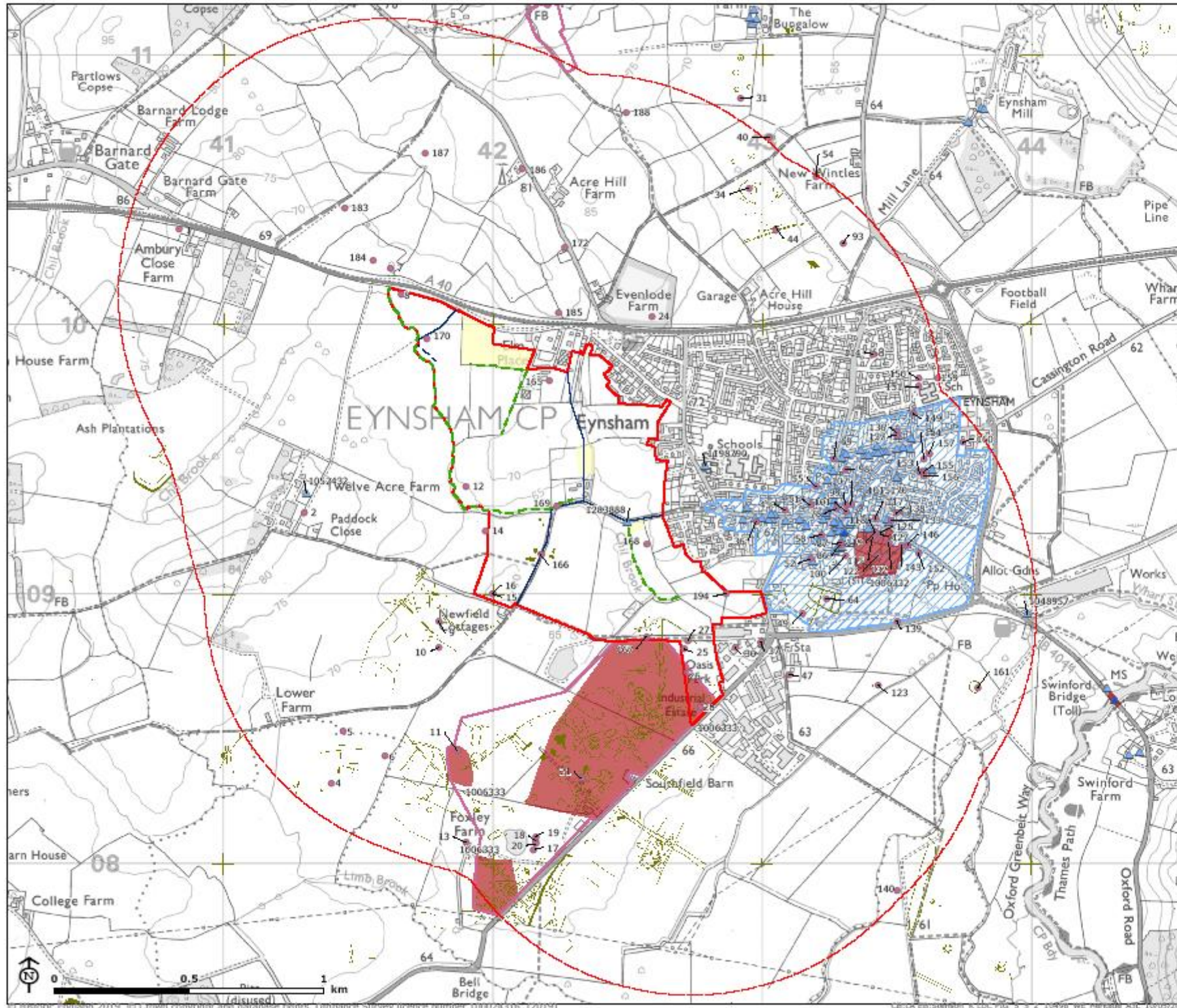
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Source: HE, OCC



West Oxfordshire Landscape and Historic Environment Advice

Figure 5.5.2: West Eynsham Heritage Assets

- West Eynsham Site Boundary
- 1km Study Area
- Designated Assets**
 - Listed buildings
 - Grade II*
 - Grade II
 - Scheduled Monuments
 - Conservation Areas
- Non-designated Assets**
 - Non-designated asset (point)
 - Non-designated asset (polygon)
 - National Mapping Programme (NMP) data
 - Ridge and furrow (WE164)
 - Potential Historic Hedgerows (WE171)
 - Pre-enclosure boundary
 - Routes (WE195)
 - Extant routes
 - Not extant routes

Map Scale @A3: 1:13,750

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West Oxfordshire Local Planning Board

Source: HE, OCC

5.100 The eastern side of the Garden Village site contains cropmarks of ring ditches located near New Wintles Farm. Three of these were excavated ahead of gravel extraction in the 1960s and 1970s and found to include Bronze Age burial remains. To the south of these, further ring ditch cropmarks survive. A third Bronze Age burial site has been excavated north of the Garden Village site, near City Farm.

5.101 At Foxley Farm, south west of the West Eynsham site, an extensive Beaker cemetery has been discovered, possibly extending into the scheduled multi-period cropmark site where features interpreted as ring-ditches have been recorded. A funerary site has also been found at Twelve Acre Farm, to the east.

Iron Age (800BC – 43AD)

5.102 Evidence of Iron Age activity in the area is not extensive.

5.103 In the Garden Village site evidence is limited to a series of Iron Age pits identified during the excavations by New Wintles Farm. However, these may be associated with the two settlements to the north of the site, just beyond City Farm. Both of were excavated ahead of gravel extraction and are thought to have been farmsteads, one dating to the Early Iron Age and the other to the Middle Iron Age.

5.104 The most substantive evidence is within the West Eynsham site, where the scheduled multi-period cropmark is believed to include an Iron Age enclosure and settlement.

Roman (43 – 410AD)

5.105 During the Roman period the nearest urban settlement was the small town of Alchester (near Bicester), 20km northeast of Eynsham. Elsewhere, the Upper Thames Valley experienced agricultural intensification until the mid-2nd century, with increased grazing on wetter areas of the floodplain and cultivation extended on to the higher areas of the floodplain. From the late 3rd century onwards these areas were increasingly abandoned as a result of more frequent seasonal flooding and deposition of river alluvium.

5.106 A considerable amount of evidence, including features and finds of pottery and coins, has been recorded around Eynsham, suggesting a small Roman farmstead may have existed close to the later abbey fishponds. A further area of Roman settlement was found during construction of the Eynsham by-pass, to the east of the settlement.

5.107 Excavations at New Wintles Farm in the Garden Village site found some Roman pottery and a single find of pottery is believed to have been found near to Evenlode Farm. However, finds such as these, may be the result of manuring rather than indicators of domestic activity.

5.108 To the immediate south of the West Eynsham site, the scheduled multi-period cropmark site is believed to include a Roman farmstead (possibly a small villa) and associated field system, elements of which extend beyond the scheduled area into the site. Records also suggest that a 4th century coin hoard and bust of Minerva were found near Twelve Acre Farm.

Early Medieval (410 – 1065)

5.109 Archaeological evidence for this period is focused around the site of the abbey (now a scheduled monument) on the southern side of Eynsham. The abbey was founded in 1005, possibly on the site of an earlier 7th or 8th century Minster church. Other evidence of early medieval activity has been found elsewhere in Eynsham.

5.110 To the north of Eynsham, a 6th - 8th century settlement, probably a farmstead, has been partially excavated in eastern side of the Garden Village site, just west of New Wintles Farm. In addition, six early medieval burial sites have been excavated just to the north of the Garden Village Site, not far from City Farm.

Medieval (1066 – 1539)

5.111 During this period Eynsham Abbey grew in size and power and the settlement around it expanded. By the beginning of the 14th century a wharf had been established on the Thames at Eynsham, providing an important river connection to Oxford and London. Following the dissolution of the abbey in 1538, its buildings were plundered for stone, and today a number of houses in Eynsham include carved stonework from the abbey. The only surviving remains of the abbey are the abbey Fishponds.

- 5.112 Within the Garden Village and West Eynsham sites, there is evidence of ridge and furrow, past field boundaries, and medieval plough soil, suggesting they were in agricultural use during this period. At this date, the sites would have been part of the open field systems that supported Eynsham and Tilgarsley Manors. The boundary between these manors was, in part, defined by an ancient boundary which appears to be preserved within surviving hedgerows, banks, ditches and footpaths, running from Eynsham Mill to Evenlode Farm where it turns south towards the Chil brook and from there towards the ancient parish boundary near Hamstall. This means it crosses the middle of the Garden Village site and runs through the eastern part of the West Eynsham site.
- 5.113 The manor of Tilgarsley is known to have included a village, depopulated and deserted as a result of the Black Death. This is believed to have been located to the north west of Eynsham, close to Cuckoo Wood Farm where a series of earthworks have been interpreted as a village green surrounded by houses. The abandoned village is connected to the Tilgarsley manor boundary by a hollow way that adjoins an old road, much of which is now used as a footpath. In addition to this, the site of a medieval moated farmhouse has been identified in the south west of the Garden Village site. This may also have formed part of the Tilgarsley settlement.

Post-medieval (1540 – 1901)

- 5.114 In the post-medieval period, Eynsham retained its market and a small trading community but ceased to grow, probably due as a result of its proximity to other market towns such as Oxford. Farmsteads known to date from this period include the now grade II listed Twelve Acre Farm which had been established by the later medieval period, as well as Home Farm, Blankstones Farm and Lord's Farm. Although it met with local resistance, the process of parliamentary enclosure was started in the late 18th century. The earliest enclosure was that of heath which was used to create the now registered parkland for Eynsham Hall during the 1770s. Further enclosure in the early 19th century led to the establishment of further outlying farms.
- 5.115 By 1790 the recently-completed Oxford Canal was trading with Eynsham Wharf, although this was affected by the arrival of the Witney Railway Co.'s Oxford-Worcester line in the mid-19th century with a station, adjacent to the West Eynsham site, opening in 1861. The line, which runs through the south of the West Eynsham site, was closed to passenger traffic in 1962, to goods traffic in 1965, and was decommissioned in 1970.
- 5.116 The Garden Village site includes City Farm, a group of four post-medieval buildings now listed at grade II status. The farm buildings represent good examples of early 19th century vernacular architecture that reflects local agricultural practices. The buildings have an important relationship with each other, and with the surrounding agricultural landscape, including the network of tracks and paths that lead to them.
- 5.117 The West Eynsham site includes the grade II listed Chil Bridge, which dates back to the late 18th or early 19th century, although it may mark a much older crossing. The structure carries Chilbridge Road, which once ran all the way to South Leigh and beyond, but which now becomes a footpath, rather than a road after a couple of kilometres.
- 5.118 As noted previously, the eighteenth century saw the creation of the many picturesque designed landscapes which are a particular feature of West Oxfordshire. These include Eynsham Hall Park and Blenheim Palace Park close to Eynsham. They typically combine extensive woodland planting with open parkland often with mature broadleaf parkland trees, avenues and copses, lakes and ponds and follies, all laid out to create pleasing views and vistas.

Modern (1901-present)

- 5.119 Eynsham experienced considerable growth during the 20th century, reflecting the its growing role as a satellite to Oxford and the development of industry to the south. Eynsham conservation area was designated in 1975, the boundary encompassing the historic core of the settlement (including the now scheduled abbey site and 91 listed buildings), as well as substantial areas of adjoining agricultural land to the south and south-east.
- 5.120 The conservation area is characterised by a number of 16th and 17th century Cotswold stone buildings, a small number of which are thatched and bear traces of earlier timber frame cruck construction. These domestic scale buildings front directly onto narrow streets. The intimate layout of buildings, their differing heights, styles and materials create a distinctively English village character.

- 5.121 Amendments were made to the conservation area in the 1980s, when the boundary was extended south to the line of the former railway, and east to the B4449 to include surrounding areas of agricultural land. Today there is a heritage trail linking the scheduled Abbey site, the fishponds and Abbey Farm, this runs along Station Road just west of the West Eynsham Site.
- 5.122 To the north and west of the old village centre is an extensive area of inter-war and post-war development.

Historic landscape character

Oxfordshire Cotswolds Garden Village

- 5.123 The [Oxfordshire Historic Landscape Characterisation](#) ³⁴(HLC) (**Figure 5.5.3**) shows that the western half of the Garden Village site comprises late 18th to 19th century piecemeal enclosure and 19th century reorganised enclosures, which are common types for the area. These surround Acre Hill Farm and Evenlode Farm, both of which date to the 20th century. There is an area of modern woodland plantation to the south of Evenlode Farm.
- 5.124 Most of the eastern half of the Garden Village site comprises fields created as a result of parliamentary enclosure in the 19th century. These partially enclose farmsteads – the 19th century City Farm (sited along the northern perimeter) and the 20th century New Wintles Farm (sited along the eastern perimeter). Between the two is a former gravel pit which has been landfilled with waste. This area is currently occupied by an aggregates recycling facility.
- 5.125 The planned and reorganised enclosure implies a high degree of relatively modern agricultural adaptation of the landscape, but much of the earlier historic landscape still remains legible, as is typical of the area.

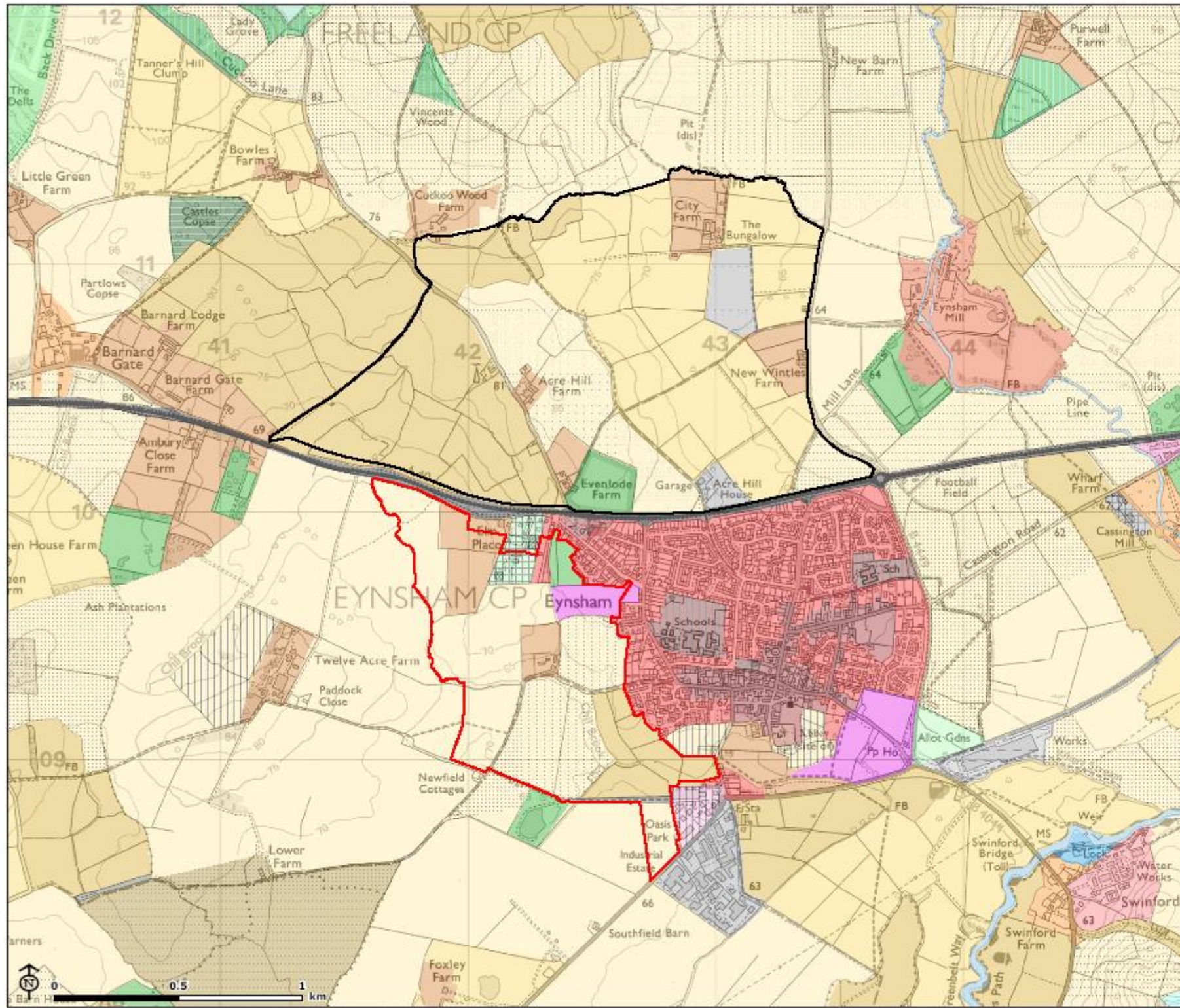
West Eynsham Strategic Development Area

- 5.126 According to the Historic Landscape Characterisation (HLC) the south-eastern corner of the SDA site comprises piecemeal enclosure of late 18th -19th century origin, much of which remains relatively intact. The fields adjacent to this comprise 20th century re-organised enclosure and modern amalgamated enclosure, though former field boundaries may survive as archaeology in this area. These reorganised and amalgamated fields surround a modern farm (Corlan Farm) located at the centre of the site and partially surround the post-medieval Derrymerry Farm, the buildings of which are sited just beyond the northern edge of the Site. To the east of Derrymerry Farm is Eynsham Nursery, an area of modern detached properties that partially fall within the Site. East of these is an area of modern woodland plantation and sports playing fields, formed from former fields or, in the case of the playing fields, allotments.

Table 5.5.1: Green infrastructure and cultural heritage – SWOT analysis

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
Existing Strengths	
<p>Rich time depth evident across the area with a range of designated and undesignated archaeological sites reflecting settlement since prehistoric eras, including an abandoned Medieval village at Tilgarsley</p> <p>Built heritage including historic vernacular buildings making up the historic core of Eynsham (reflected in the Conservation Area status) adjacent to the study area and listed agricultural buildings at City Farm</p> <p>A historic landscape reflecting multiple phases of enclosure and agricultural improvement which retains many early features</p>	<p>Rich time depth evident across the area with a range of designated and undesignated archaeological sites reflecting settlement since prehistoric eras</p> <p>Built heritage including historic vernacular buildings making up the historic core of Eynsham (reflected in the Conservation Area status), as well as structures such as the Chil Bridge and Twelve Acre Farm</p> <p>A historic landscape reflecting multiple phases of enclosure and agricultural improvement which retains many early features including boundaries, tracks and paths and hedgerows</p>

³⁴ https://archaeologydataservice.ac.uk/archives/view/oxfordshire_hlc_2017/



West Oxfordshire Green Infrastructure Advice

Map 5.5.3: Map Showing Historic Landscape Characterisation Around Eynsham

- Garden Village Site Boundary
- West Eynsham Site Boundary

Historic Landscape Character

- Ancient Enclosure
- Civic Amenities - Reservoir
- Civic Amenities - Utilities
- Civil Provision - Educational Facility
- Civil Provision - Health Care Facility
- Civil Provision - Religious and Funerary
- Commercial - Business Park
- Commercial - Retail park
- Communication - Main Road
- Communication - Canals and Locks
- Communication - Rail transport sites
- Enclosure - Paddocks and Stables
- Industry - Depot
- Industry - Processing Industry
- Industry - Extractive Works
- Industry - Industrial Estate
- Orchard and Hort - Allotment
- Orchard and Hort - Nursery/ Garden Centre
- Orn - Ornamental water body
- Orn - Parkland / Designed Landscape
- Piecemeal Enclosure
- Planned Enclosure
- Prairie / Amalgamated Enclosure
- Recreation - Sports Facilities
- Reorganised Enclosures
- Rural - Caravan/Chalet/ Camping site
- Rural - Country House
- Rural - Hamlet
- Rural - Village
- Rural - Farmstead
- Urban - Historic Urban Core
- Urban - Public House
- Urban - Town
- Water - River
- Woodland - Ancient Woodland
- Woodland - Plantation
- Woodland - Secondary Woodland

Map Scale @A3: 1:15,000

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Source: WOOD, OCC

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
Existing Weaknesses	
The impact of past development including construction and widening of the A40 and other roads, gravel working, landfill and ongoing aggregate recycling	The impact of past development including the twentieth century expansion of Eynsham and construction and widening of the A40 and other roads
Future Threats	
<p>Risk of continued loss and deterioration of the historic landscape as a consequence of changes in agricultural management and incremental development</p> <p>Risk that development of the Garden Village could result in the loss of historically significant archaeology, structures and landscape features, or could cause setting change that affects their heritage significance or the ability of people to understand their form and function</p> <p>Risk that development of the Garden Village could result in the creation of a settlement which does not reflect the historic character of the area, the setting of historic sites and the influence of historic parks and gardens</p>	<p>Risk of continued loss and deterioration of the historic landscape as a consequence of changes in agricultural management and incremental development</p> <p>Risk that development of the West Eynsham Strategic Development Area could result in the loss of historically significant archaeology, structures and landscape features, or could cause setting change that affects their heritage significance or the ability of people to understand their form and function</p> <p>Risk that development of the West Eynsham Strategic Development Area could result in the creation of a development which does not reflect the historic character of the area and the setting of historic sites</p>
Future Opportunities	
<p>Opportunity to retain historically important hedgerows, boundaries, paths and tracks and to use these to inform the layout and character of development</p> <p>Opportunity to conserve the aspects of setting that contribute to the heritage significance of the listed buildings at City Farm and other designated and non-designated heritage assets within and near to the sites</p> <p>Opportunity to protect significant archaeological sites either by excluding from the development areas or by bringing them into the development area but ensuring their proper conservation through the masterplanning process</p> <p>Opportunity to use the character of Eynsham Conservation Area as a cue for contemporary interpretation of aspects such as street layout and building design/materials. The now deserted settlement of Tilgarsley sets an historical precedent for settlement in the area and could provide a focus for within the Garden Village site. Opportunity to reflect the character of historic designed landscapes in the wider area.</p> <p>Opportunity to deliver public benefits by increasing understanding of the historic environment, providing people with improved opportunities to experience and learn about the area's past with potential for a range of interpretation and living history experiences</p>	<p>Opportunity to retain historically important hedgerows, boundaries, paths and tracks and to use these to inform the layout and character of development</p> <p>Opportunity to conserve the aspects of setting that contribute to the heritage significance of the the historic Chil Bridge and other designated and non-designated heritage assets within and near to the sites</p> <p>Opportunity to protect significant archaeological sites either by excluding from the development areas or by bringing them into the development area but ensuring their proper conservation through the masterplanning process</p> <p>Opportunity to use the character of Eynsham Conservation Area as a cue for contemporary interpretation of aspects such as street layout and building design/materials.</p> <p>Opportunity to deliver public benefits by increasing understanding of the historic environment, providing people with improved opportunities to experience and learn about the area's past</p>

Shaping the Garden Village

5.127 Green infrastructure will play a key role in shaping a settlement that reflects Garden Village principles and that is distinctive and rooted in the environment of West Oxfordshire. Green infrastructure will help ensure that the historic environment is reflected in the development of the Garden Village by:

- Reflecting the site's historic character and structure in the design and layout of the Garden Village's landscape framework so development is connected with its context and the historic evolution of the landscape can continue to be read and appreciated;
- Ensuring the most important historic field system and field boundaries are protected and, wherever possible, integrated into the structure of the Garden Village. This will integrate the development into the site and the evolution of the area's landscape as well as providing mature and biodiverse landscape elements.

- Safeguarding, and providing people with interpretative information about, the abandoned medieval village at Tilgarsley, creating an opportunity for people to learn about the local area's settlement history;
- Safeguarding the listed buildings at City Farm and protecting their setting;
- Using the historic rights of way as a starting point for the development of safe and attractive walking and cycling routes within the Garden Village and connecting Eynsham, the wider countryside and surrounding settlements and transport connections;
- Creating new opportunities for people to experience and learn about the history of their local area.

Shaping the West Eynsham SDA

5.128 Green infrastructure will also play a critical role in shaping development at West Eynsham, helping to create a high quality and sustainable development, integrated with the existing settlement benefiting existing and new residents alike. This will include:

- Ensuring the most important historic field system and field boundaries are protected and, wherever possible, integrated into the structure of the development. This will integrate the development into the site and the evolution of the area's landscape as well as providing mature and biodiverse landscape elements;
- Protecting other historic elements including trackways, rights of way and historic structures such as the Chil Bridge;
- Reflecting the historic character and evolution of Eynsham in the layout of the development, its integration with the existing settlement edge and in the choice of building style, design and materials;
- Creating new opportunities for people to experience and learn about the history of their local area.

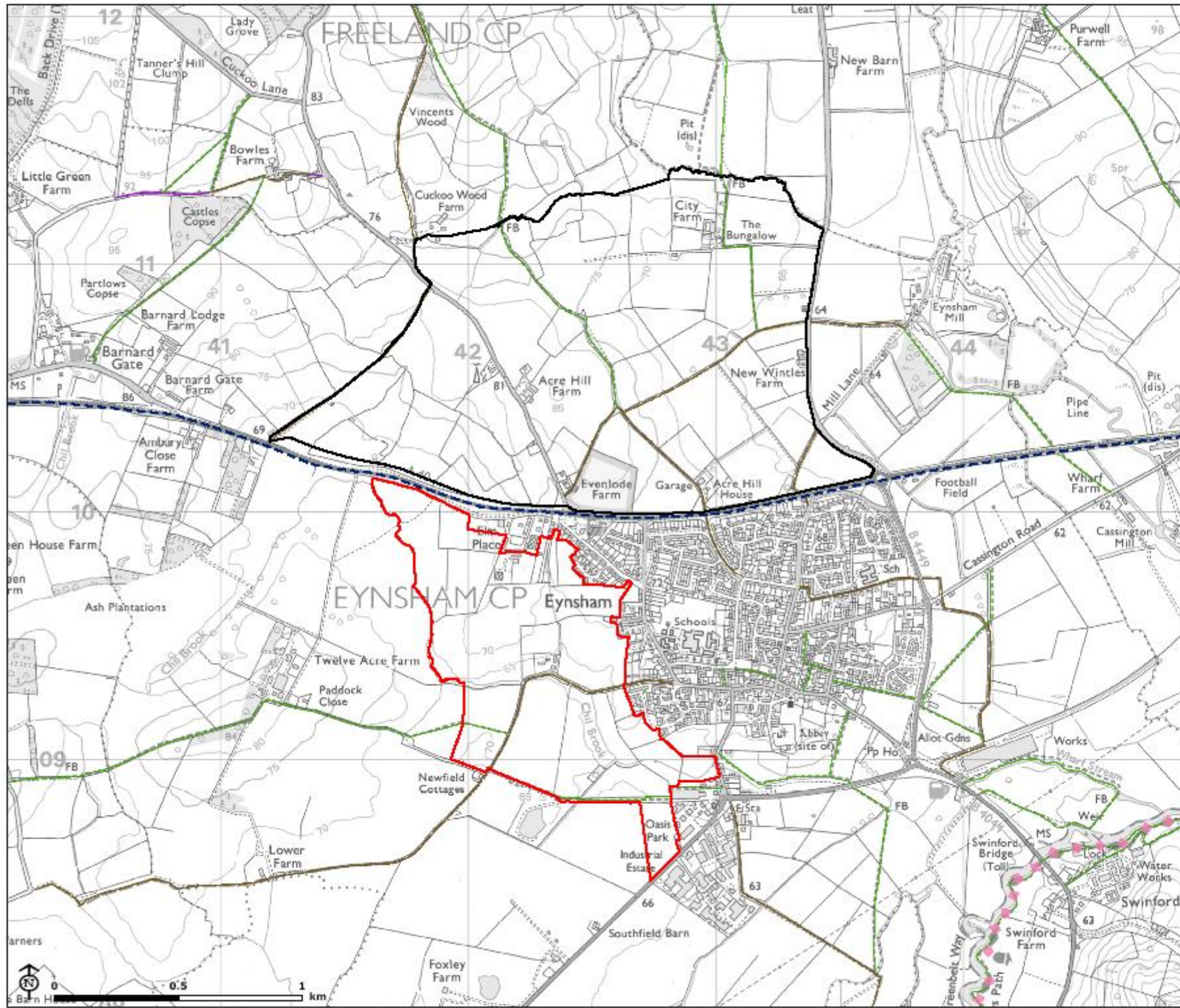
5.6 Active travel

- 5.129 Green Infrastructure should include path networks to allow and encourage people to walk or cycle for local journeys, or to access public transport. It can ensure opportunities for walking and cycling are attractive and accessible and in many cases quicker and more direct than use of the road network.
- 5.130 This section of the report examines existing walking and cycling opportunities in and around Eynsham before considering the implications of development of the Oxfordshire Cotswolds Garden Village and West Eynsham Strategic Development Area.
- 5.131 Providing high quality, accessible walking and cycling networks, providing sustainable access to jobs, education and services, is a key principle for Garden Villages. It can help ensure sustainable patterns of movement, whilst promoting health and wellbeing and shaping the identity of the village.

Walking and cycling networks

- 5.132 The gentle topography, compact and relatively dense character of Eynsham means that it is well suited to walking and cycling for local trips to school, shops, community facilities and employment, and existing bus routes and stops. The A40 to the north of Eynsham and, to a lesser extent the B4449 to the east, have taken most through traffic out of the settlement, though they do create barriers to walking or cycling trips beyond the boundaries of the settlement. Walking and cycling connections to Hanborough, the nearest railway station and the nearest point on the National Cycle Network (**Figure 5.6.1**), are poor, with footpaths overgrown and indirect and roads affected by fast moving traffic. There is an existing cycle path along the north side of the A40, connecting Eynsham with Witney to the west. The challenges of active travel beyond the settlement are reflected in relatively high levels of car ownership and dependence for everyday travel.
- 5.133 Oxfordshire County Council proposals include measures to connect this route east towards Oxford. The County Council's Local Transport Plan aims to achieve a high quality cycle network for each town/village, with a particular focus to improve accessibility to key destinations.
- 5.134 At present, no National Cycle Route passes through Eynsham. The nearest parts of the National Cycle Network are a Witney to the west and Freeland / Long Hanborough to the north. However, a number of local cycling groups have identified various cycling routes through the settlement, along its road network. The Oxfordshire Cycling Network (OCN) for example, has identified a Primary Route through Eynsham, just south of the Oxfordshire Cotswolds Garden Village³⁵. Sustrans has identified a route for utility and leisure cycling linking Oxford, Eynsham and Witney, as well as with the existing cycling route to Burford and Gloucestershire.
- 5.135 The area around the Eynsham contains an extensive network of Public Rights of Way, linking to surrounding settlements, including Church Hanborough, Freeland, Long Hanborough and South Leigh. Some rights of way are overgrown and unmaintained. The Thames Path is located to the south east of Eynsham, near Swinford. The busy A40 does, however, form a barrier for people using rights of way to the north of Eynsham.
- 5.136 Oxfordshire's Local Transport Plan 2015-2031 includes an Active and Healthy Travel Strategy. This sets out requirements for new development to be planned and designed to make cycling convenient and safe for cyclists travelling within the development and to and from major residential, employment, education, shopping and recreation sites within 5-10 miles. It also aims to use green infrastructure and the development of safe, attractive and high quality routes to encourage recreational cycling and increase people's access to nature and areas of high quality landscape.
- 5.137 The Active and Healthy Travel Strategy also supports walking as mode of transport, promoting physical and mental health, benefiting personal security, reducing crime and helping to create

³⁵ <http://cyclingukoxfordshire.org/strategic-cycle-network/>



**West Oxfordshire
Green Infrastructure
Advice**

Figure 5.6.1: Map Showing Existing Rights of Way and Cycle Routes Around Eynsham

- Garden Village Site Boundary
- West Eynsham Site Boundary
- Bridleway
- Footpath
- Restricted Byway
- National Trail
- Cycle route

Map Scale @A3: 1:15,000

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CB-LA EB-Stenson_K LUC FIG_5_6_1_10498_P/W_A3L 10/05/2019 Source: WOOC, OCC, NE



**West Oxfordshire
Green Infrastructure
Advice**

Figure 5.6.2: Map showing the National Cycle Network in the vicinity of Eynsham

- Garden Village Site Boundary
- West Eynsham Site Boundary
- National Cycle Network

Map Scale @A3: 1:150,000



Contains Ordnance Survey data © Crown copyright and database right 2019

CB:CB EB:96m: C: LUC FIG: 5_2_2_10498_NCN_A3L 12/06/2019 Source: WODC, Sustrans

5.138 stronger communities. The strategy highlights factors that can encourage people to become more active:

- Proximity of local services to people
- Streets designed to encourage physical activity
- Attractive environments that are perceived to be safe
- Traffic reduction and calming measures
- Well-designed user-friendly walking (and cycling) routes, which also consider the needs of disabled people
- Access to well-designed and maintained green spaces such as parks
- Access to a variety of environments for play

Access to facilities and public transport

5.139 The A40 is often faced with severe congestion, to the east of Witney at peak times. As such, bus services are vulnerable to delay because of congestion within Witney, through Eynsham and approaching Oxford on the A40. A long term strategy for the A40 which will look at the potential role of public transport improvements, increased highway capacity and/or traffic management improvements is currently underway. As part of these improvements, Oxfordshire County Council is proposing a new Park and Ride facility north of Eynsham (just west of the A40/Cuckoo Lane junction), which will accommodate 1,000 cars, and a dedicated bus lane running east from the new Park and Ride towards Oxford. There are longer term plans to provide a west bound bus lane to reduce delays for buses returning to the Park and Ride facility.

Green infrastructure and active travel

5.140 Green infrastructure can play a key role in supporting walking and cycling and avoiding dependency on the private car. Key opportunities include integrating a hierarchy of walking and cycling routes throughout the development, making full use of green and blue corridors, opens spaces and quiet roads. Creating safe and attractive routes will be critical in allowing access for all and encouraging those who might not otherwise walk and cycle to consider these modes. It can be particularly important for the elderly, those who are less mobile and parents with small children and buggies.

- In the case of the Garden Village this network should connect principal land uses, providing quick, easy and attractive access from home to community facilities, open spaces, retail, employment park and ride and recreation opportunities. These routes should extend from the Garden Village into surrounding areas, providing safe connections to Eynsham to the south and Hanborough to the north.
- In the case of West Eynsham, walking and cycling routes should provide a key means of connecting new development into the existing settlement (including schools and workplaces), and providing improved access from Eynsham, through the development, to the wider countryside.

5.141 Other aspirations for the Garden Village and West Eynsham SDA will also help to reduce the demand for travel. These include the development of work:live units, a hierarchy of green and blue spaces within easy reach of everyone's home and easy access to park and ride facilities.

Table 5.6.1: Green infrastructure and active travel – SWOT analysis

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
Existing Strengths	
Existing cycling provision along the A40 corridor to the adjoining the Garden Village site There is a range of proposals to improve cycling and public transport provision	Compact form of the existing settlement makes it well suited to walking and cycling for local journeys. A range of proposals to improve cycling and public transport provision Good bus connections to Oxford and Witney

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
Good bus connections to Oxford and Witney	
Existing Weaknesses	
<p>Existing cycle provision along the A40 currently discontinuous and impacted by traffic and air pollution along the route</p> <p>Poor connections to the nearest railway station and the National Cycle Network at Long Hanborough</p> <p>High traffic volumes across the road network, making minor country roads unattractive for walking, cycling and horse-riding</p> <p>Barrier effect of main roads discouraging walking and cycling for every day journeys</p>	<p>Poor connections to the nearest railway station and the National Cycle Network at Long Hanborough</p> <p>High traffic volumes across the road network, making minor country roads unattractive for walking, cycling and horse-riding</p>
Future Threats	
Risk that traffic generated by new development will add to traffic volumes, congestion and associated noise and air quality impacts	Risk that traffic generated by new development will add to traffic volumes, congestion and associated noise and air quality impacts
Future Opportunities	
<p>Opportunity to create high quality and accessible network of walking and cycling routes, supporting active travel for commuting and other non-recreational trips and integrated with green infrastructure in the form of green and blue corridors and spaces.</p> <p>New walking and cycling routes could connect and contribute to the National Cycle Network, helping to address key gaps in the wider area.</p> <p>Opportunity to reduce the severance effect of the A40, reconnecting Eynsham with the Garden Village site, and countryside to the north. This could be achieved through improved crossing points or more radical options such as dropping the level of a section of the A40 and creating a 'green bridge' linking Eynsham and the Garden Village site</p> <p>Opportunity to create a dedicated route from Eynsham, through the Garden Village site to the railway station and national cycle network at Long Hanborough</p> <p>Opportunity to create new walking and cycling networks within the development, including within riparian greenspaces and through areas of structural planting, along existing paths and bridleways and following other linear landscape features (e.g. hedge lines)</p> <p>Opportunity to create easy walking and cycling access to the proposed Park and Ride facility, encouraging 'stride and ride' and 'ride and ride'</p> <p>Opportunity to provide additional planting along the A40 corridor to offset development and provide enhanced filtering of road noise and air pollution</p> <p>Opportunity to develop live:work units which reduce the need to travel</p>	<p>Opportunity to create high quality and accessible network of walking and cycling routes, supporting active travel for commuting and other non-recreational trips and integrated with green infrastructure in the form of green and blue corridors and spaces.</p> <p>Opportunity to create new walking and cycling networks within the development, including within riparian greenspaces and through areas of structural planting, along existing paths and bridleways and following other linear landscape features (e.g. hedge lines)</p> <p>Opportunity to create easy walking and cycling access to the proposed Park and Ride facility, encouraging 'stride and ride' and 'ride and ride'</p> <p>Opportunity to provide additional planting along the A40 corridor to offset development and provide enhanced filtering of road noise and air pollution</p> <p>Opportunity to develop live:work units which reduce the need to travel</p>

Shaping the Garden Village

5.142 Green infrastructure will play a key role in shaping a settlement that reflects Garden Village principles and that is distinctive and rooted in the environment of West Oxfordshire. Green infrastructure will:

- Include an attractive and safe network of walking and cycling routes, connecting principal land uses within the Garden Village, linking to the proposed park and ride facility, employment at the science park and to Eynsham to the south.
- The walking and cycling network will connect the Garden Village with the wider countryside, creating recreational opportunities for people living in Eynsham and the Garden Village, and connecting to neighbouring villages, the railway station at Hanborough and filling a key gap in the National Cycle Network.

Shaping the West Eynsham SDA

5.143 Green infrastructure will also play a critical role in shaping development at West Eynsham, helping to create a high quality and sustainable development, integrated with the existing settlement benefiting existing and new residents alike. This will include:

- An attractive and safe network of walking and cycling routes, connecting residential areas with the existing settlement, linking to the proposed park and ride facility, employment areas, open spaces and to the Garden Village to the north.

5.7 Outdoor recreation

- 5.144 One of the key benefits of green infrastructure is to provide a range of opportunities for active outdoor recreation close to where people live or work. Outdoor recreation has proven benefits in terms of physical and mental wellbeing. Green infrastructure can help ensure that the Garden Village and development at West Eynsham benefit from a wide range of high quality opportunities for recreation. This will also benefit people living in the surrounding area.
- 5.145 The creation of generous, accessible and good quality green and blue infrastructure is central to Garden Village principles, helping to promote health, wellbeing and quality of life. It can provide a focus for local engagement and involvement and contribute to a well designed and distinctive village.

Footpaths and rights of way

- 5.146 The area around the Eynsham contains an extensive network of Public Rights of Way, linking to surrounding settlements, including Church Hanborough, Freeland, Long Hanborough and South Leigh (**Figure 5.6.1**). Some rights of way are overgrown and unmaintained. The Thames Path is located to the south east of Eynsham, near Swinford. The busy A40 does, however, form a barrier for residents of Eynsham wishing to use rights of way to the north.
- 5.147 At present, no National Cycle Route passes through the Eynsham area, including the two development sites. The nearest parts of the National Cycle Network are a Witney to the west and Freeland / Long Hanborough to the north. However, a number of local cycling groups have identified various cycling routes through Eynsham, along its road network. The Oxfordshire Cycling Network (OCN) for example, has identified a Primary Route³⁶ through Eynsham, just south of the Oxfordshire Cotswolds Garden Village³⁷.
- 5.148 There is an existing cycle path along the north side of the A40, connecting Eynsham with Witney. County Council proposals include measures to connect this route east towards Oxford.

Public greenspace

- 5.149 West Oxfordshire District Council's Public Open Space Audit³⁸ indicates there is a relative scarcity of public open space in Eynsham (**Figure 5.7.2**), with around half the amount of greenspace that the average English settlement has. The submission draft Eynsham Neighbourhood Plan identifies 14 Local Green Spaces. Most of the Eynsham's public open spaces are located around the perimeter of the settlement, especially to the south east. Here are located allotments, Eynsham AFC's sports grounds, Eynsham fishponds, two areas of amenity green space, a semi natural site and St Leonard's Church grounds. There are few areas of ecological/semi-natural land and comparatively little amenity greenspace. This apparent shortfall is to some extent mitigated by the Eynsham's location close to open countryside, although this does not compensate for a lack of amenity open space.

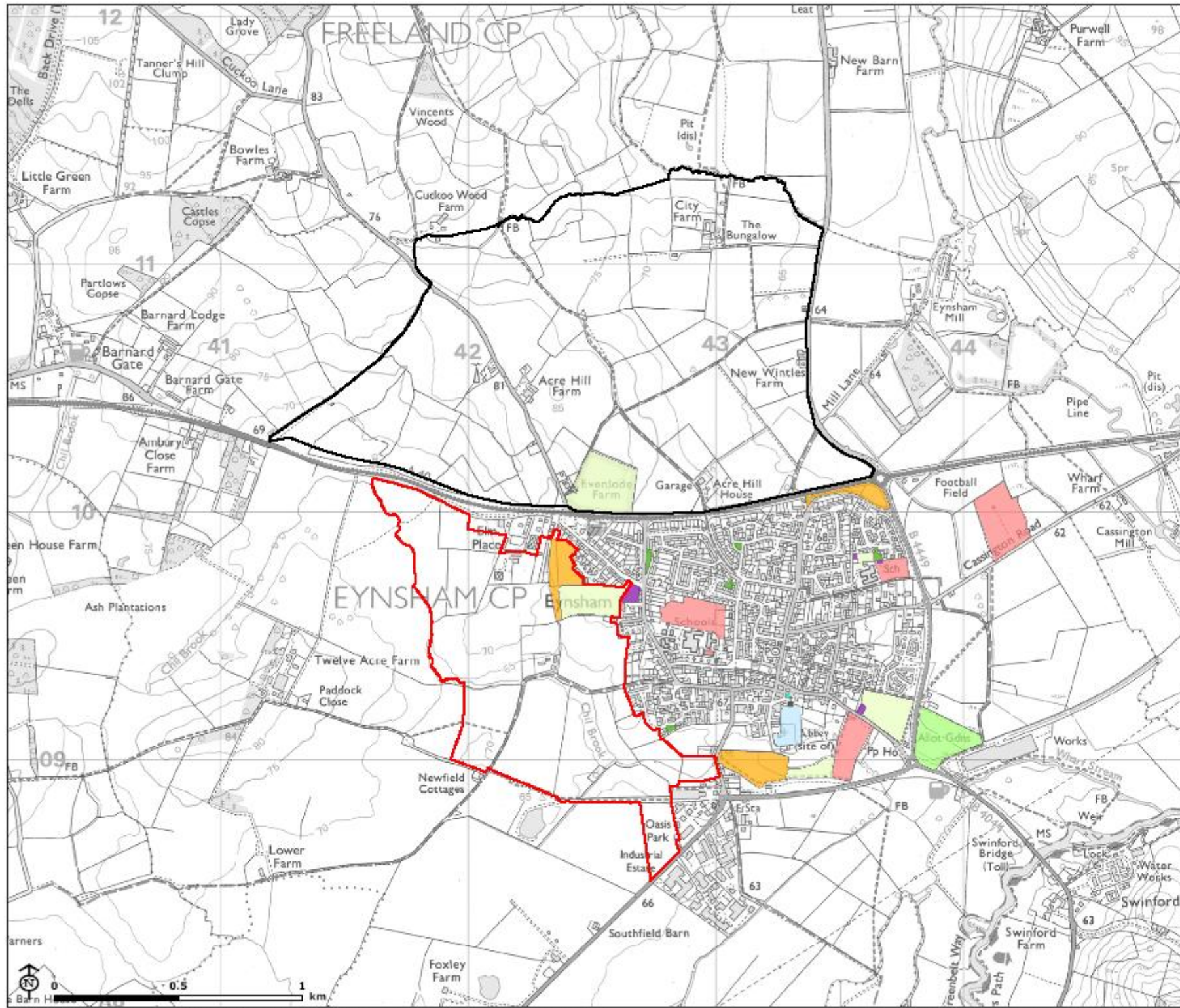
Sport facilities

- 5.150 At present, Eynsham contains three sports facilities – two of which are located at schools (Bartholomew School (secondary) and Eynsham Primary School). Eynsham Amateur Football Club's sports grounds located to the south of the settlement are also used for the benefit of the community. Eynsham Cricket Club is located to the north east of Eynsham along Cassington Road.

³⁶ Defined as Key routes with high traffic potential to be prioritised for 'all ages, all abilities' infrastructure.

³⁷ <http://cyclingukoxfordshire.org/strategic-cycle-network/>

³⁸ <https://www.westoxon.gov.uk/media/300050/Open-space-study-2008-Report-summary.pdf>



**West Oxfordshire
Green Infrastructure
Advice**

Figure 5.7.1: Map Showing Existing Public Open Space in Eynsham (Location and Type)

- Garden Village Site Boundary
- West Eynsham Site Boundary
- Open space**
- Allotment
- Amenity greenspace
- Church
- Civic space
- Parks and gardens
- Provision for children and young people
- Semi natural site
- Sports grounds

Map Scale @A3: 1:15,000

LUC

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CB:LA BB:Stinson_K LUC FIG_5_7_1_10496_Open_space_A3L 10/05/2019

Source: NE, WODC, TVERC

Other recreation sites

- 5.151 A small number of amenity greenspaces are scattered within Eynsham, whilst three areas of civic space are located on the edge of the settlement. One in the north eastern corner of Eynsham between the A40/B4449 and Hanborough Road, another in the north western corner of the settlement (within the West Eynsham Strategic Development Area).
- 5.152 To the north west of Eynsham, [Eynsham Wood](#)³⁹ was created as a millennium community woodland by the Woodland Trust. This lies within the Garden Village site.
- 5.153 Other recreation sites in the wider area include the network of waterbodies (former gravel pits) within the Lower Windrush Valley Project Area and Wytham and Pinsley Woods. Increases in the number of people living in the area could create additional demand for recreation in these locations.

Oxfordshire Cotswolds Garden Village

- 5.154 There is currently limited provision for recreation within the Garden Village site. A number of Public Rights of Way pass through the site, connecting Eynsham with settlements to the north – namely Church Hanborough and Freeland. However, the A40 to the south of the site forms a barrier between the Garden Village and Eynsham. The Garden Village site contains Millennium Wood, established by the Woodland Trust and accessible to the local community.

West Eynsham Strategic Development Area

- 5.155 One Public Right of Way passes through the West Eynsham Strategic Development Area site, along Chilbridge Road, into the centre of Eynsham. There is another Public Right of Way that joins this path in the south western corner of the site, whilst the southern edge of the site is bordered by an additional Public Right of Way. The north east corner of the site contains a playing field associated with Bartholomew School, as well as pockets of woodland and orchard.

Table 5.7.1: Green infrastructure and outdoor recreation – SWOT analysis

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
Existing Strengths	
Existing network of public rights of way, radiating out from Eynsham to the north and providing potential connections to nearby villages, though access is severed by the A40 while paths' overgrown character in some locations suggests that use is limited Existing cycling provision along the A40 corridor to the south and adjoining the Garden Village site	Existing network of public rights of way, radiating out from Eynsham to the west and providing potential connections to nearby villages, though paths' overgrown character in some locations suggests that use is limited Existing cycling provision along the A40 corridor to the north of Eynsham
Existing Weaknesses	
Currently relatively limited opportunities for outdoor recreation within the Garden Village site – confined to rights of way and the Millennium Wood. Relatively little open space within the built up part of neighbouring Eynsham, with most concentrated to the south and south east of the settlement or associated with schools and a deficiency closest to the Garden Village site High traffic volumes across the road network around the Garden Village, making minor country roads unattractive for walking, cycling and horse-riding.	Relatively little open space within the built up part of Eynsham, with most concentrated to the south and south east of the settlement or associated with schools High traffic volumes across the road network, making minor country roads unattractive for walking, cycling and horse-riding.
Future Threats	
Risk that the Garden Village will place additional pressure on existing open space, including sports facilities, allotments and other recreational space in communities	Risk that development will place additional pressure on existing open space, including sports facilities, allotments

³⁹ <https://www.woodlandtrust.org.uk/visiting-woods/wood/5456/eynsham-wood/>

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
<p>surrounding the Garden Village site.</p> <p>Risk that the Garden Village will result in the loss or severance of existing rights of way and weaken connections with surrounding countryside.</p>	<p>and other recreational space.</p> <p>Risk that development will result in the loss or severance of existing rights of way and weaken the settlement's connection with surrounding countryside, reducing recreation opportunities for Eynsham residents.</p>
Future Opportunities	
<p>Opportunity to create a green infrastructure that creates a wide range of opportunities for outdoor recreation and which helps connect people to nature.</p> <p>Opportunity to create new linear open spaces along watercourse corridors, accommodating walking, cycling and horseriding routes.</p> <p>Opportunity to create other new open spaces including allotments, community growing, wood allotments, recreation and sports provision, outdoor gyms, event spaces, facilities for 'forest schools', locations for biodiversity education and interpretation and opportunities for people to enjoy nature, tranquillity and dark skies.</p> <p>Opportunity to create other new walking and cycling networks within the developments, including within riparian greenspaces and through areas of structural planting. These networks could connect through new development to surrounding countryside, creating recreation opportunities for people living in the Garden Village and neighbouring communities.</p> <p>Opportunity to reduce the severance effect of the A40, connecting Eynsham with the Garden Village site, and countryside to the north. This could be achieved through improved crossing points or creating a 'green bridge' linking Eynsham and the Garden Village site.</p> <p>Opportunity to create a dedicated route from Eynsham, through the Garden Village site to the National Cycle Network and railway station at Hanborough.</p> <p>Opportunities to create social 'green' spaces such as play areas and wild play and to create range of social events spaces to hold a wide range of community events.</p> <p>Opportunities to create a wide range of 'sensory' gardens and to explore 'gardens'.</p> <p>Opportunities to reignite interest in horticulture, growing and forestry.</p> <p>Opportunities to create a wide range of gardens from traditional English country gardens to rain gardens.</p>	<p>Opportunity to create new linear open spaces along watercourse corridors, accommodating walking, cycling and horseriding routes.</p> <p>Opportunity to create other new open spaces including allotments, community growing, wood allotments, recreation and sports provision, outdoor gyms, facilities for 'forest schools', locations for biodiversity education and interpretation.</p> <p>Opportunity to create other new walking and cycling networks within the developments, including within riparian greenspaces and through areas of structural planting. These networks could connect through new development to surrounding countryside.</p>

Shaping the Garden Village

5.156 Green infrastructure will play a key role in shaping a settlement that reflects Garden Village principles and that is distinctive and rooted in the environment of West Oxfordshire. Green infrastructure will create new opportunities for outdoor recreation, including:

- Significant areas of open parkland, reminiscent of historic designed landscapes elsewhere in the District, accommodating a range of opportunities for formal and informal recreation, and serving residents of the Garden Village and nearby Eynsham;
- A range of other open spaces within the Garden Village including opportunities for play, allotments and community growing projects, orchards, pocket parks and public realm at the heart of the village;
- Opportunities for people to experience and reconnect with nature, experience tranquillity and dark skies;

- The creative design of new lakes, ponds, wetlands and watercourses to create opportunities for recreation and interpretation alongside surface water run-off and habitat management;
- Managed access, with interpretation, to existing and new wildlife sites, including the corridor of the City Farm Brook and local wildlife designations to the north;
- Managed access, with interpretation, to historic sites such as the abandoned medieval village at Tilgarsley;
- An attractive and safe network of walking and cycling routes connecting the Garden Village to the wider countryside, offering improved recreation opportunities for people living in Eynsham and the Garden Village.
- Opportunities to deliver an exciting diverse range of gardens, from sensory gardens, to sky gardens and rain gardens and encourage and share horticultural skills and knowledge.

Shaping the West Eynsham SDA

5.157 Green infrastructure will also play a critical role in shaping development at West Eynsham, helping to create a high quality and sustainable development, integrated with the existing settlement benefiting existing and new residents alike. This will include:

- A range of open spaces with and adjacent to the development including opportunities for play, allotments and community growing projects, pocket parks and a linear open space along the Chil Brook corridor;
- The creative design of ponds, wetlands and watercourses to create opportunities for recreation and interpretation alongside surface water run-off and habitat management;
- An attractive and safe network of walking and cycling routes connecting the development to the wider countryside, offering improved recreation opportunities for people living in Eynsham and the new development.

5.8 Opportunities for growing

- 5.158 Green infrastructure create a wide range of opportunities for people to grow their own food, with the inclusion of community growing schemes, allotments, orchards, fruit trees in public spaces and private gardens. Green roofs and green walls, increasingly used to help mitigate run-off from buildings and reduce overheating could also provide opportunities for food growing.
- 5.159 The benefits of these kinds of growing opportunities include the production of healthy, locally produced food and the creation of ways for people to reconnect with the environment and to experience the cycle of the seasons. Growing projects can provide a powerful focus for the community and can help support education, training and volunteering initiatives, supporting vulnerable members of the community.
- 5.160 The inclusion of diverse opportunities for growing can help create a village which supports health, wellbeing and quality of life, providing a focus for local engagement and involvement.

Current situation

- 5.161 The Garden Village and West Eynsham sites are currently made up of farmland, supporting arable and livestock production. People can of course grow fruit and vegetables in their own gardens, but community growing opportunities are limited to an area of around 120 allotments on Wharf Road the south eastern side of Eynsham (the Eynsham Allotment Association maintains a waiting list).

Table 5.7.1: Green infrastructure and growing – SWOT analysis

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
Existing Strengths	
Existing agriculture including organic farming across part of the site An existing culture of growing in the wider area in the form of Eynsham Allotments, Eynsham Garden Club, etc	An existing culture of growing in the wider area in the form of Eynsham Allotments, Eynsham Garden Club, etc.
Existing Weaknesses	
Currently limited opportunities for community growing in the wider area and none within the Garden Village site	Limited opportunities for community growing in the wider area and none within the West Eynsham site
Future Threats	
Development of the Garden Village could further increase demand for the limited number of allotments available in the area	Development at West Eynsham could further increase demand for the limited number of allotments available in the area
Future Opportunities	
<p>Significant opportunity to build food growing into the green infrastructure of the Garden Village with a broad range of opportunities including:</p> <ul style="list-style-type: none"> • Community growing gardens • School vegetable gardens • Allotments • Community orchards • Fruit trees in public spaces, community gardens and private gardens • Fruit and vegetable planting in public spaces • Food growing on green walls and green roofs • Growing to sell food as local food supply chains. <p>Equally importantly will be the community infrastructure to support people’s engagement with growing and to develop links to healthy eating and living, education, training, volunteering and support for vulnerable members of the community</p>	<p>Opportunity to build food growing into the green infrastructure of the development at West Eynsham with a broad range of opportunities including:</p> <ul style="list-style-type: none"> • Community growing gardens • Allotments • Community orchards • Fruit trees in public spaces • Fruit and vegetable planting in public spaces • Food growing on green walls and green roofs <p>Equally importantly will be the community infrastructure to support people’s engagement with growing and to develop links to healthy eating and living, education, training, volunteering and support for vulnerable members of the community</p>

Shaping the Garden Village

- 5.162 Green infrastructure will play a key role in shaping a settlement that reflects Garden Village principles and that is distinctive and rooted in the environment of West Oxfordshire. The Garden Village presents a unique opportunity to create new opportunities for growing as a defining and integral part of the settlement's green infrastructure. Examples could include:
- The creation of new community growing garden projects with facilities such as polytunnels, training and mentoring;
 - More traditional allotments for more confident gardeners;
 - School vegetable gardens providing opportunities for children to engage in food growing
 - Community orchards, with an emphasis on local varieties of fruit
 - Fruit trees and fruit and vegetable planting in public spaces
 - Food growing as an integral part of green walls and green roofs
 - Venue for community events celebrating key milestones in the growing season and sharing produce and cooking together.
- 5.163 This range of growing opportunities will need community infrastructure to support people's engagement with growing and to develop links to healthy eating and living, education, training, volunteering and support for vulnerable members of the community. A fully developed stewardship plan and delivery mechanism will also be required.

Shaping the West Eynsham SDA

- 5.164 Green infrastructure will also play a critical role in shaping development at West Eynsham, helping to create a high quality and sustainable development, integrated with the existing settlement benefiting existing and new residents alike. This will include expanding the range of opportunities for food growing for existing and new Eynsham residents, taking the form of allotments, community growing projects and private gardens. This will be most successful if developed in tandem with food growing initiatives within the Garden Village and linked to existing horticultural projects in Eynsham.

5.9 Health and well-being

- 5.165 It is increasingly understood that a high quality 'natural' environment in cities, towns and villages can bring significant benefits for physical and mental health and well-being. Green infrastructure can help improve air quality, reduce noise and reduce the risk of flooding or impacts of heatwaves. As the previous section described, green infrastructure can provide a range of opportunities for active outdoor recreation. It can also provide opportunities to meet other people, to grow food, to hold events and for children and adults to interact with, and learn about, nature. It can provide a safe, attractive and accessible environment for everyone, but particularly for older people, those with impaired mobility and parents with young children or using pushchairs and buggies. Together, these benefits provide some of the vital ingredients to support healthy and sustainable communities.
- 5.166 This section provides an overview of existing green infrastructure benefits in and around Eynsham, before exploring ways in which the Oxfordshire Cotswolds Garden Village and West Eynsham Strategic Development Area can contribute to health and well-being.
- 5.167 Creation of a high quality physical environment, with opportunities for active recreation, growing and community involvement, will help create a village that promotes health, wellbeing and quality of life.

Existing health characteristics

- 5.168 Life expectancy for both men and women in Eynsham is higher than the England average. However, the life expectancy for women is 84 compared to 81 for men. The mortality ratio is 100, consistent with the age profile of the area⁴⁰. According to the Office for National Statistics, 16.3% of the population have a limiting long-term illness, compared to the England average of 17.6%.
- 5.169 The population of Eynsham is generally healthier than the national average in that a higher proportion of people consume five or more portions of fruit and vegetables a day. Levels of binge drinking (17.7%) and smoking (15%) are below the national averages of 20% and 22.2%, respectively. However, the percentage of adults classified as obese (24.9%) is higher than the average for Oxfordshire (20.7%), slightly above the national level (24.1%). Obesity in children in reception year (8.8%) is also higher than the Oxfordshire average (7.1%). Despite this, the proportion of physically inactive people⁴¹ (0.2%) is similar to the Oxfordshire and national level.
- 5.170 Respondents of the 2011 Census were asked to rate their health. The percentage of residents in Eynsham rating their health as 'very good' was higher than the national average. Also, the percentage of residents rating their health as 'very bad' was lower than the national average.

Sources of noise and air pollution

- 5.171 The A40 located to the north of Eynsham is a significant source of noise and air pollution. The annual average daily flow of all motor vehicles on the A40 near the Eynsham Roundabout in 2017 was approximately 30,500⁴². According to West Oxfordshire District Council's 2018 Air Quality Annual Status Report⁴³, the main air quality issues in West Oxfordshire District are related to vehicular density within relatively congested urban areas, with nitrogen dioxide being the main pollutant of concern. The West Oxfordshire 2017 monitoring survey shows nitrogen dioxide levels slightly lower than in 2016, though the variation between years is thought to be due to meteorological differences.

⁴⁰ Less than 100 indicates that the mortality rate is lower than expected and higher than 100 indicates that the mortality rate is higher than expected.

⁴¹ Undertaking less than 30 minutes in the past month excluding gardening

⁴² <https://roadtraffic.dft.gov.uk/manualcountpoints/46441>

⁴³ https://www.westoxon.gov.uk/media/1912443/westox2017asr_2018_final.pdf

Active outdoor recreation

- 5.172 As the previous section of the report described, Eynsham has comparatively little open space, with most concentrated around the edges of the settlement, particularly to the south east. Open space includes school playing fields, sports fields, children’s play parks, a skate park, informal open space and allotments.
- 5.173 In addition, there is a network of public rights of way (footpaths and bridleways) extending out into surrounding countryside, though some of these are overgrown and apparently little used, particularly where the A40 has severed them from Eynsham itself.

Community growing

- 5.174 Eynsham benefits from an area of allotments between the B4449 and the Siemens factory, on the south east of the settlement. This provides opportunities for residents to grow their own fruit and vegetables, but is relatively distant from the northern and western parts of Eynsham.

Community woodland

- 5.175 Eynsham community woodland, established by the Woodland Trust as the Millennium Wood, lies to the north of the A40 close to Cuckoo Lane. With a mix of woodland planting, and a network of paths and rides, the wood provides an outdoor recreation opportunity close to the settlement.

Development sites

Oxfordshire Cotswolds Garden Village

- 5.176 The majority of the Garden Village site is actively farmed, with public access limited to public rights of way and the Millennium Wood. The A40 bordering the southern edge of this site is a source of noise and air pollution and could have an adverse effect on any residential property located close to the road, particularly without the introduction of any mitigating measures. Additionally, the minerals recycling plant located at New Wintles Farm, could create a source of noise and dust nuisance for nearby dwellings.

West Eynsham Strategic Development Area

- 5.177 The A40 bordering the northern edge of this site is a source of noise and air pollution and could have an adverse effect on any residential property located close to the road, particularly without the introduction of any mitigating measures. Development of the site could also cause temporary noise pollution, with an adverse effect on the amenity of residents of houses adjacent to the northern, southern and eastern edges of the site.

Green infrastructure and health and well being

- 5.178 Green infrastructure can help ensure that development of the Garden Village and at West Eynsham makes a positive contribution to people’s health and well-being. Key opportunities include:
- Creating a high quality setting for people to live, work and spend their leisure time
 - Providing safe and convenient opportunities for people, including children, to move about on foot or by bike
 - Providing open spaces for a range of civic, cultural and community functions which encourage people to come together, be active within their communities and help to avoid isolation and loneliness
 - Providing new opportunities for people to grow food in their own gardens or in community growing projects
 - Creating memorable and sensory dementia-friendly outdoor environments
 - Creating excellent access to a range of outdoor recreation opportunities within and surrounding the developments

- Encouraging people to experience and learn about nature and food growing, on their doorstep, including specific opportunities such as outdoor classrooms
- Using of green infrastructure measures to help reduce the effects of air and noise pollution, minimise the risk of flooding and mitigate against the effects of climate change (for example through shading and shelter), all of which should benefit people’s health and well-being

Table 5.8.1: Green infrastructure and health and well being – SWOT analysis

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
Existing Strengths	
Some provision for active outdoor recreation along rights of way and at Eynsham Wood	Relatively healthy local population, though some issues of obesity
Existing Weaknesses	
<p>Deficiencies in open space provision in the wider area may limit opportunities for active outdoor recreation ‘on the doorstep’.</p> <p>Severance of countryside by the A40 corridor may discourage the existing population undertaking active outdoor recreation within the wider countryside.</p> <p>Lack of integrated path network (circuits and loops) and the poor condition of some rights of ways may also discourage active outdoor recreation.</p> <p>High traffic volumes on the local road network may discourage recreational cycling and walking.</p> <p>High traffic volumes along the A40 represent a source of air and noise pollution</p>	<p>Deficiencies in open space provision may limit opportunities for active outdoor recreation ‘on the doorstep’.</p> <p>Severance of countryside by the A40 corridor may discourage active outdoor recreation within the wider countryside.</p> <p>Lack of integrated path network (circuits and loops) and the poor condition of some rights of ways may also discourage active outdoor recreation.</p> <p>High traffic volumes on the local road network may discourage recreational cycling and walking.</p> <p>High traffic volumes along the A40 represent a source of air and noise pollution</p>
Future Threats	
<p>Risk that development will place additional pressure on existing open space, including sports facilities, allotments and other recreational space, further limiting opportunities of active outdoor recreation.</p> <p>Risk that new development will add to existing pollution from road traffic.</p> <p>Risk that residents of the Garden Village will be exposed to noise and dust from the aggregate recycling plant at Wintles Farm (although there are no records of previous complaints).</p>	<p>Risk that development will place additional pressure on existing open space, including sports facilities, allotments and other recreational space, further limiting opportunities of active outdoor recreation.</p> <p>Risk that new development will add to existing pollution from road traffic.</p>
Future Opportunities	
<p>The Garden Village offers to the opportunity to create a settlement where the high quality of its environmental setting and green infrastructure provision support physical and mental health and well being, at individual and community levels.</p> <p>Opportunity to create new open spaces as an integral part of new development, creating opportunities for active outdoor recreation, social interaction, formal and informal events, encouraging people to be active in their community and helping to overcome isolation and loneliness</p> <p>Opportunity to create a high quality functional network of walking, riding and cycling routes as well as for mobility vehicles, encouraging the use of these modes for everyday local journeys</p> <p>Opportunity to promote local food growing in the form of allotments, community growing projects and orchards, linked to community based organisation and schools, supporting healthy lifestyles and providing a focus for the</p>	<p>Opportunity to create new open spaces as an integral part of new development, creating opportunities for active outdoor recreation, social interaction, formal and informal events</p> <p>Opportunity to create a high quality functional network of walking and cycling routes, encouraging the use of these modes for everyday local journeys</p> <p>Opportunity to promote local food growing in the form of allotments, community growing projects and orchards, linked to community based organisation and schools</p> <p>Opportunity to encourage people to experience and learn about nature and food growing</p>

Oxfordshire Cotswolds Garden Village	West Eynsham Strategic Development Area
<p>community</p> <p>Opportunity to encourage people to experience and learn about nature, growing, seasonality and food growing</p> <p>Creating memorable and stimulating outdoor spaces that support a wide range of therapeutic activities, including for people with dementia</p> <p>Creating a healthy and resilient environment that minimises the impact of climate change by providing shade, shelter and reducing the risk of flooding</p> <p>Opportunity to design the Garden Village to mitigate noise and air pollution from the A40 and dust and noise pollution associated with the aggregates recycling plant at Wintles Farm.</p>	

Shaping the Garden Village

5.179 Green infrastructure will play a key role in shaping a settlement that reflects Garden Village principles and that is distinctive and rooted in the environment of West Oxfordshire. Green infrastructure will supports people’s health and well-being by:

- creating an exceptional setting for people to live, work and spend their leisure time.
- providing diverse, safe and high quality opportunities for active travel, active outdoor recreation, walking and cycling and food growing;
- designing spaces which create opportunities for formal or informal social interaction, encouraging people to become involvement in their local community and reducing social isolation;
- creating spaces which support a wide range of therapeutic activity, including for people living with dementia or other special needs;
- anticipating the effects of continued climate change by building shelter, shade, the cooling influence of water and the management of surface water run-off and future flood risk into the design of the Garden Village, minimising people’s exposure to climate risk;
- creating opportunities for local food growing, providing a healthy and local source of food;
- minimising the impact of existing sources of air or noise pollution on the Garden Village.

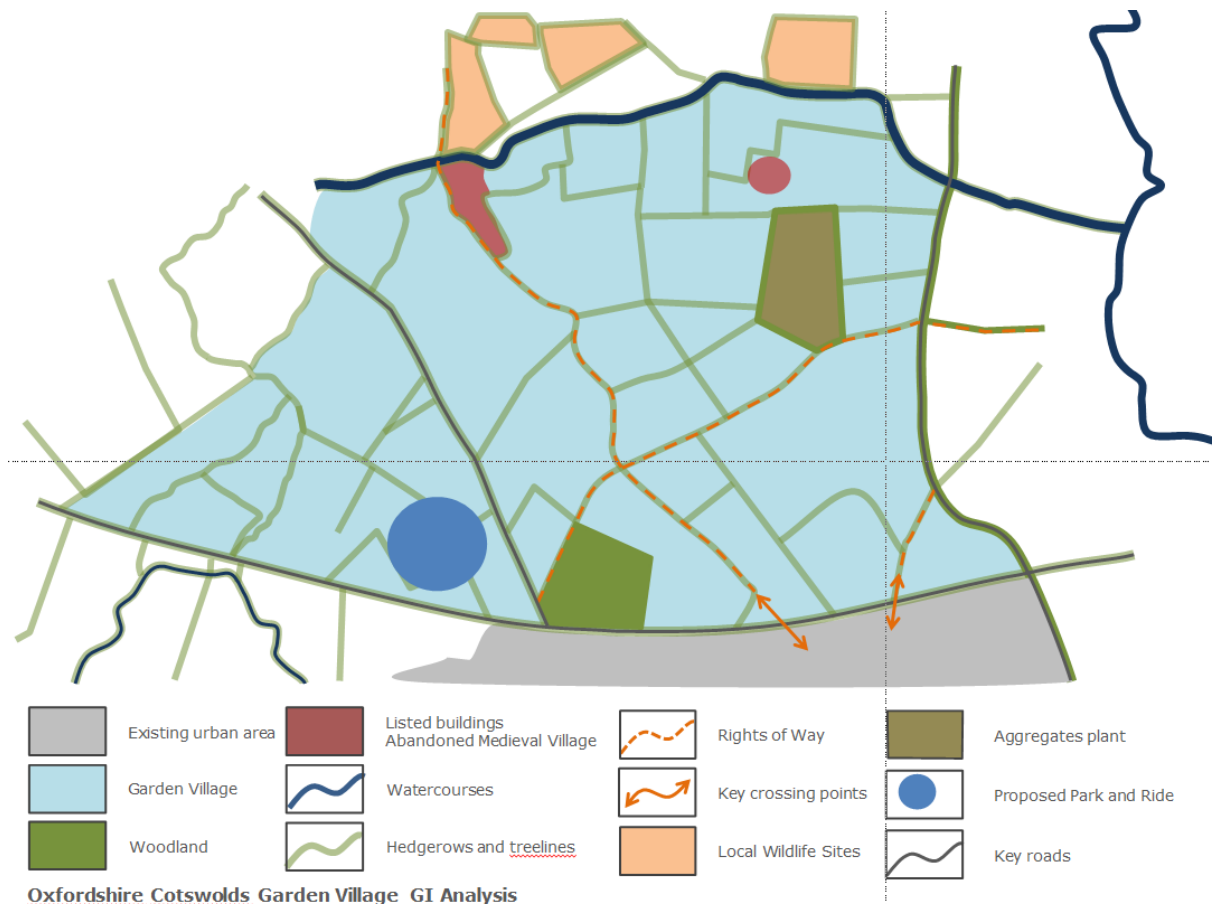
Shaping the West Eynsham SDA

5.180 Green infrastructure will also play a critical role in shaping development at West Eynsham, helping to create a high quality and sustainable development, integrated with the existing settlement benefiting existing and new residents alike. This will include:

- creating an exceptional setting for people to live, work and spend their leisure time.
- providing diverse, safe and high quality opportunities for active travel, active outdoor recreation, walking and cycling and food growing;
- designing spaces which create opportunities for formal or informal social interaction, encouraging people to become involvement in their local community and reducing social isolation;
- anticipating the effects of continued climate change by building shelter, shade, the cooling influence of water and the management of surface water run-off and future flood risk into the design of the Garden Village, minimising people’s exposure to climate risk;
- creating opportunities for local food growing, providing a healthy and local source of food.

6 GI priorities for the Oxfordshire Cotswolds Garden Village

6.1 This section draws together the GI priorities for the Oxfordshire Cotswolds Garden Village, drawing on the information contained in previous chapters.



6.2 It is recommended that the **boundary** of the Garden Village (which as identified in the Local Plan 2031 is indicative only) is extended to the north to include the floodplain of the City Farm Brook, and ecologically important fields to the north. This will help ensure that they are protected and where appropriate enhanced as part of the development of the Garden Village. Built development, other than an enhanced network of paths, would not take place within this area.

Green Infrastructure 'Vision'

- 6.3 Green infrastructure will provide a robust framework to shape the design and development of the Garden Village, creating a distinctive character and unique sense of place.
- 6.4 Green infrastructure will reference the local and wider landscape setting to create a bold framework of woodlands and open spaces, reflecting existing trees and woods, whilst echoing the historic designed landscapes of Eynsham Hall Park and Blenheim Palace Park.

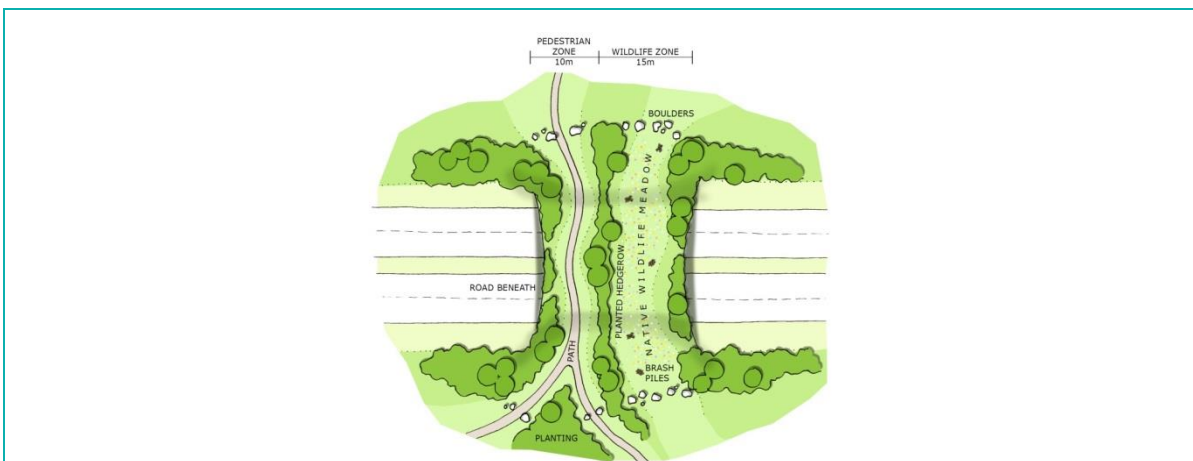
- 6.5 The Garden Village will be designed to maximise the benefits of this landscape framework in creating a setting for development, protecting and enhancing a more diverse network of open, woodland and wetland habitats, creating opportunities for outdoor recreation, growing and learning and encouraging active travel, healthy lifestyles and low carbon development.
- 6.6 The Garden Village will have a distinct identity but will be connected with Eynsham to the south (including development at West Eynsham) and Church and Long Hanborough to the north, helping to ensure that existing as well as new communities benefit from the opportunities and benefits that the development will bring.

Green infrastructure priorities

- 6.7 Development of the Garden Village provides an opportunity to create a new landscape that responds to the character and history of the wider area. Mature **Trees** and hedges make an important contribution to the existing rural character of the landscape in and around the Garden Village site. Parkland woodland associated with historic designed landscapes is a characteristic of the wider area, while mature field boundary trees, many of them oaks, filter views within the Garden Village and create a well wooded appearance, though woodland is relatively limited within the site itself. The design of the Garden Village should be designed to retain the most important hedges and hedgerow trees wherever possible, contributing to a strong landscape structure, connecting with the sites past and providing important biodiversity and recreation corridors.
- 6.8 There is considerable potential for new woodland creation within the Garden Village, and integrating into the wider area. While the aim should not be to create a pastiche, reference to the woodlands and parklands of nearby Eynsham Hall and Blenheim Palace Parks, together with the Garden Village's legacy of mature field boundary trees and hedges, suggest a landscape led approach to the development, structured around networks of woodlands and open parkland. These would provide a landscape led setting for development and contain new and enhanced habitats, walking, riding and cycling routes. Woodland can be used to provide a buffer around the aggregate recycling plant and a linear parkland adjacent to the A40 corridor. New and existing woodlands should be managed to provide a source of low carbon fuel for community buildings. There is an opportunity to create a countryside park around the periphery of the Garden Village site, linking to West Eynsham by a green bridge and creating a 'green corridor' around the Eynsham area. The area to the north of the Garden Village is a sensitive landscape and there is merit in creating a nature reserve within the country park area. A string of water features will create strong wildlife corridor habitats as well as acting as attenuation ponds and attractive features.
- 6.9 The linear parkland adjacent to the A40 will enable communities of Eynsham and the new Garden village to meet as well as reducing noise and pollution to housing areas. A more formal avenue and designated paths along Lower Road will enable direct safe access from the Garden Village and Eynsham to Hanborough Station. Greenways within the Garden Village and the character of walkable neighbourhoods can all be defined by planting characteristics as well as building typologies.
- 6.10 The more sensitive parts of the site should be treated carefully, retaining the undeveloped corridor of the City Farm Brook and the setting of City Farm. More visually prominent parts of the site close to the A40 corridor and on the low ridge of Acre Hill will require careful design. Parkland or woodland buffers along the A40 and the south eastern side of the site will help reinforce the distinctive identity of the Garden Village.
- 6.11 The compact nature of Eynsham means it is well suited to **walking and cycling** for everyday journeys, though longer distance trips tend to be by car or public transport. There is scope not only to build a similar level of accessibility into the Garden Village, but to improve linkages to surrounding centres, including the nearest railway station at Hanborough. Existing, often historic, rights of way should form the basis of this network but there is potential to create a network of safe, attractive routes through woodlands, open spaces and along stream corridors. Accessibility to Eynsham would be enhanced by safe crossing points on the A40, potentially taking the form of a green bridge, connecting rights of way, open spaces and habitats across the road corridor and

helping to ensure that the new network of walking and cycling routes is accessible to the existing community.

- 6.12 Eynsham currently has relatively limited provision of **open space**, with most concentrated to the south and east of the settlement, or associated with schools. There is potential to significantly increase the amount and range of open spaces through development of the Garden Village with a combination of semi-natural woodland and meadows, green corridors, event space, sports pitches and growing space. Good linkages to Eynsham should help ensure that the increase in provision also benefits the existing community, providing a range of opportunities for people to take part in active outdoor recreation.
- 6.13 Parts of the Garden Village site are **ecologically sensitive** and where possible should be conserved and enhanced. This includes a number of fields around City Farm where traditional farming has allowed now rare arable plants to survive, the corridor of the City Farm Brook and Eynsham Wood. Mature hedgerows and field boundary trees also provide important habitats. Other parts of the site are more intensively farmed with closely clipped hedges and lower ecological interest. Sensitive ecological areas should be protected from development and from increases in recreation activity, for example through the design of path networks or the zoning of recreation areas. In addition to protecting the more sensitive areas, there is great potential to create a network of new and enhanced habitats comprising retained field boundaries and trees, new woodlands, new wetlands and waterbodies (including those created to manage surface water run-off) and wildflower and nectar rich grassland. This habitat network should connect into surrounding countryside, along stream corridors, field boundaries and rights of way.



Sketch design for a green bridge for people and wildlife



Example of green bridge on the A21 at Scotney



Users of the bridge are, for the most part, unaware of the main road below

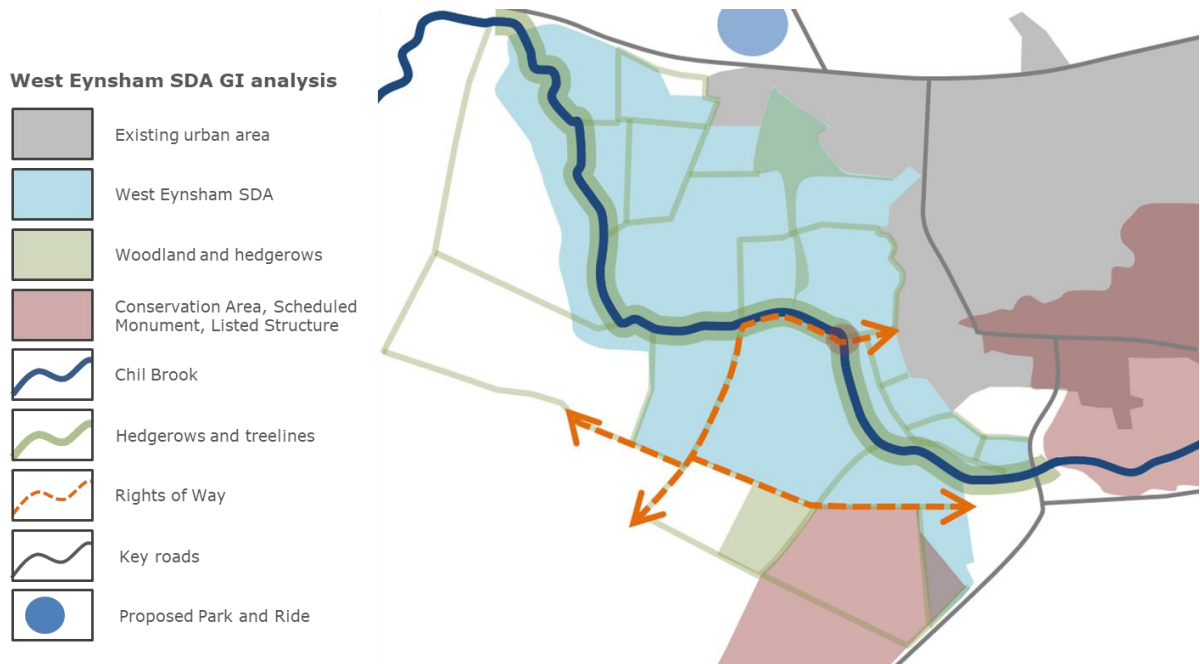
- 6.14 Fluvial **flooding** occurs along the City Farm Brook (and downstream along the River Evenlode) and surface water or pluvial flooding affects a number of fields in the area. Much of the site comprises clay. The development of an effective SuDS scheme for the development will therefore

be essential to manage surface water run-off from buildings and other impermeable surfaces. There is potential to use this to create a network of waterbodies and watercourses to support aquatic habitats and contribute to the Garden Village's sense of place with a mix of formal and more naturalistic features, reflecting the local setting. The design and management of 'blue infrastructure' should reflect the projected trends towards wetter winters and warmer, drier summers and should therefore be resilient to cope with high and low flow conditions.

- 6.15 The Garden Village site, and the surrounding area, includes a variety of designated and undesignated **archaeological sites and listed buildings**, and field patterns, paths and tracks which are historic in origin. While development of the Garden Village will bring a further layer of change to the area, there is potential to reflect the most valuable historic sites in the masterplanning process, conserving their setting and providing new opportunities for people to experience and learn about the area's history. Key historic sites include the listed agricultural buildings at City Farm Farm, the abandoned medieval village of Tilgarsley and more significant boundaries, tracks, paths and hedgerows. There is also an opportunity to respond to (but not replicate) the historic character of Eynsham and other local settlements such as Church Hanborough and the historic core of Witney.

7 GI priorities for the West Eynsham Strategic Development Area

- 7.1 This section draws together the GI priorities for the West Eynsham Strategic Development Area, drawing on the information contained in previous chapters. It will inform the strategic framework that will, in turn, shape the masterplanning process for the development.



Green Infrastructure 'Vision'

- 7.2 Green infrastructure will play a key role in shaping development at West Eynsham and integrating it with the existing settlement and connecting to the Garden Village to the north.
- 7.3 Green infrastructure will create a network of wetlands, woodlands, hedges and open spaces to - frame development and create new opportunities for outdoor recreation, growing and safe and attractive provision for walking and cycling.
- 7.4 Green infrastructure will connect the development into Eynsham, along the course of the Chil Brook and with the wider countryside, bring benefits to the existing community and to new residents.

Green infrastructure priorities

- 7.5 Fluvial **flooding** occurs along the Chil Brook, so the stream floodplain should be retained undeveloped creating a focus for new informal access and habitat creation. Sufficient capacity should be built into accommodate any increases in flood flows likely as a result of projected climate change. Development should be designed to avoid any increase in surface water run-off, using SuDS to mitigate flood flows. This should include the creation of new wetland habitats and should help avoid the risk of low flow in the Chil Brook during periods of drought.
- 7.6 Development will bring further **landscape change** on the western side of Eynsham. There is, however, potential to use development to firm up the currently poorly defined edge of the

settlement, with the creation of a new settlement edge along the open corridor of the Chil Brook. The design and alignment of the new link road will need careful design, with one option to run it along the boundary between the development and the Chil Brook corridor.

- 7.7 The West Eynsham development should be designed to encourage **active travel** by providing high quality walking and cycling routes to the settlement centre and north to the proposed park and ride facility. A linear route along the corridor of the Chilbrook will facilitate wider access to the park and ride facility for residents on the south and eastern sides of Eynsham, and provide a connection towards the industrial units to the south. New access provision should be coordinated with new routes through the Garden Village site to the north, particularly with respect to providing access to the railway station at Long Hanborough.
- 7.8 Eynsham currently has relatively limited provision of **open space**, with most concentrated to the south and east, or associated with schools. Development at West Eynsham should include a significant open space element. This is likely to focus on the riparian corridor of the Chil Brook, connecting east to existing open space to the south of Eynsham and north towards the proposed Garden Village. Green corridors could structure the development, accommodating access links into the existing settlement, recreation provision, SuDS provision and new habitats.
- 7.9 Parts of the site are **ecologically** sensitive and where possible should be conserved and enhanced. This includes the corridor of the Chil Brook, hedgerows and field boundary trees. Other parts of the site are more intensively farmed with closely clipped hedges and lower ecological interest. In addition to protecting the more sensitive areas, there is potential to create a network of new and enhanced habitats comprising retained field boundaries and trees, new woodlands, new wetlands and waterbodies (including those created to manage surface water run-off) and wildflower and nectar rich grassland. This habitat network should connect into surrounding countryside, along the Chil Brook, field boundaries and rights of way. It is important that comprehensive development of the West Eynsham SDA ensures the conservation and enhancement of the stream corridor where it runs through, or forms the boundary of the scheme.
- 7.10 **Tree cover** within the site is largely confined to trees and hedges along field boundaries, though there is an area of woodland in the north eastern part of the site. Wytham Wood is visible to the south. There is potential for new woodland creation within the development to create a network of linked woodland habitats and accommodate walking and cycling routes. Woodland can be used to frame development. If developed in conjunction with new woodlands forming part of the Garden Village, woodland could be managed to provide a source of low carbon fuel for community buildings.
- 7.11 The West Eynsham site, and the surrounding area, includes a variety of designated and undesignated **archaeological sites and listed structures**, and field patterns, paths and tracks which are historic in origin. Key historic sites include the multi-era archaeological site to the south of the area, the listed Chil Bridge and more significant boundaries, tracks, paths and hedgerows. There is potential to reflect this historic character in the masterplanning process, conserving important sites and their setting and providing new opportunities for people to experience and learn about the area's history. The alignment of the proposed link road will need careful design to minimise impacts of the multi-era archaeological site south of the SDA. There is also an opportunity to respond to (but not replicate) the historic character of Eynsham in terms of street patterns, building scale, massing, materials and vernacular.

8 Natural capital and ecosystem services

8.1 The analysis of Green Infrastructure, and recommendations as to how it can help shape the Garden Village and development at West Eynsham, reflect a growing understanding that the environmental assets such as hedges or streams provide us with a number of different types of benefit and need to be planned and managed with this in mind.

8.2 The Natural Capital approach, which has been adopted by the Government in its [25 Year Environment Plan](#)⁴⁴, reflects this explicitly. The approach establishes a framework which defines:

- **Natural capital** – comprising environmental assets such as woodlands, wetlands, fields and the ecosystems they support, together with cultural assets such as historic buildings, ancient field systems or archaeological remains;
- **Ecosystem services** – representing different ways that these assets support human life. A wetland, for example, could provide a habitat for plants and animals, accommodate flood water after heavy rain, provide a supply of water for agriculture or domestic supply, opportunities for recreation whilst contributing to an area's character and sense of place.

The Natural Capital approach normally distinguishes between different types of service or benefit –provisioning services (such as the production of food, drinking water, timber or energy), regulating services (such as helping to manage flood risk, avoiding pollution or absorbing and storing carbon) and cultural services (such as recreation, sense of place, religious or spiritual inspiration, art or heritage). Some assessments also consider supporting services (such as processes that are essential for ecosystems to exist) though this can require scientific data on aspects such as nutrient, carbon and water cycling processes.

An important aspect of the approach is that it recognises that environmental assets are important for a number of different reasons and that this should be reflected in the way they are managed.

The mix of benefits will vary from place to place and according to the way we manage the land. By adopting this way of thinking we can help ensure that the importance of environmental and cultural assets is reflected in the design, implementation and management of large developments.

- **Socio-economic benefits** – representing the income, employment and other economic activity which is derived from ecosystem services and the condition of natural capital. Agricultural land, for example, supports food production which in turn provides employment and income for farmers, food processing companies, wholesalers and retailers. High quality landscapes can shape distinctive places which are attractive for people to live, work and invest.

8.3 The Natural Capital approach can be applied to all aspects of a development or other land use change and at many different scales. It is, however, particularly applicable to green infrastructure given the range of functions it can fulfil. By carrying out a strategic assessment at this stage, we are able to gain a snap shot of the range of services or benefits currently provided by the Garden Village and West Eynsham sites and, importantly, an indication of the benefits they should aim to provide in the future.

8.4 Table 8.1 provides an initial analysis of the ecosystem services currently provided by the two sites and how green infrastructure-led development could change this. There is potential for a significant increase in the services provided by the two sites, with benefits for existing and new communities. It must also be recognised, however, that some services may be lost or changed, and that this could affect people who currently use the two sites or live within or adjacent to

⁴⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

them. More detailed analysis, including use of the '[eco-metric](#)⁴⁵' tool that is being developed by Defra to measure the delivery of ecosystem services should be undertaken as proposals for the Garden Village and development at West Eynsham progress.

⁴⁵ <http://publications.naturalengland.org.uk/publication/6020204538888192>

Table 8.1: Analysis of existing ecosystem service provision

Service category	Service or benefit	Currently	Potential future
Provisioning	Food production	Agriculture is the predominant land use on both sites, producing cereals and animal products	<p>Development would result in the loss of some farmland, with a reduction in agricultural food production. Some areas would remain undeveloped and could be used for agriculture.</p> <p>Green infrastructure could a wide range of opportunities for local food growing including community growing projects, traditional allotments, orchards, growing at home and growing as an integral part of domestic, community, employment and education development.</p> <p>The result could be a change in the diversity of food produced from the two sites, with a move to much greater community involvement and a significant reduction in food miles for the food that is grown.</p>
	Drinking water	The sites lie within the wider Thames catchment and make a minor contribution to water supply at a regional scale	Green infrastructure can help ensure that the quality of water entering streams and watercourses is of equal or better quality than at present. Green infrastructure solutions could help reduce the risk of low flow conditions during periods of drought, benefiting downstream water supplies.
	Water for other purposes	The sites lie within the wider Thames catchment and make a minor contribution to water supply at a regional scale	Green infrastructure can help ensure that the quality of water entering streams and watercourses is of equal or better quality than at present. Green infrastructure solutions could help reduce the risk of low flow conditions during periods of drought, benefiting downstream water supplies.
	Biomass for energy	It is likely that fallen timber provides an occasional and ad hoc supply of logs for burning.	Green infrastructure could include large scale woodland planting and the management of existing trees and woods to provide a sustainable source of low carbon fuel for community and other buildings. Efficient harvesting, drying, storage and combustion will be important to minimise air pollution.
	Wood	Little or no quality timber is provided by the two sites	Green infrastructure could include large scale woodland planting and the management of existing trees and woods as a source of timber for local use.
	Other fibres	Agriculture may currently include the production of fleeces and animal skins	Development would result in the loss of some farmland with a potential reduction in the production of fleeces and animal skins.

Service category	Service or benefit	Currently	Potential future
			Some areas of farmland or open 'parkland' may be retained, creating new opportunities for livestock based grazing. This could maintain or increase the production of animal based fibres.
Regulating	Water storage	The sites lie adjacent to two ponds, while information on fluvial and surface water flooding suggests that areas along the two watercourses accommodate water during flood events. Run-off from fields within the two sites is likely to add to this flooding, though this is likely to be a relatively minor contributory factor.	Green infrastructure has the potential to intercept rainfall (trees and vegetation) with a proportion evaporating rather than entering watercourses. The creation of water courses and new water bodies as an integral part of the design could regulate run-off from hard surfaces, helping to ensure that downstream flood risk is not exacerbated and, if possible, is reduced. The use of sustainable urban drainage techniques in buildings and hard surfacing will also make a positive contribution.
	Carbon storage	Carbon is currently absorbed by trees, woodland and other vegetation within the two sites. Carbon is also stored in agricultural soils, though the extent to which it remains sequestered depends on the nature of farm operations. Deep ploughing and the use of fertilisers can increase carbon release.	Development activity will result in the release of carbon to the atmosphere where soils are disturbed and any existing trees and hedges are lost. However, extensive woodland planting, parkland and wetlands could significantly increase the amount of carbon absorbed from the atmosphere and stored across the sites. Low carbon heating will help minimise emissions from domestic and other buildings, while provision of excellent walking and cycling routes, proximity of homes to work, education and recreation provision, and high quality public transport would help reduce emissions associated with the two sites.
	Absorption of noise	Potential sources of noise within and adjacent to the two sites are the A40 corridor and aggregate recycling plant. Noise is mitigated by woodland planting along the A40, bunds around the recycling plant and current low level of development within the two sites.	Extensive woodland planting along the A40 corridor could help absorb noise from traffic as well as bringing a range of other benefits. Similarly, woodland planting around the aggregate recycling plant could supplement existing noise mitigation.
	Air purification	Potential sources of air pollution and dust within and adjacent to the two sites are the A40 corridor and aggregate recycling plant. Impacts are mitigated by woodland planting along the A40, bunds around the	Extensive woodland planting along the A40 corridor could help filter pollutants and dust from traffic as well as bringing a range of other benefits. Similarly, woodland planting around the aggregate recycling plant could supplement existing mitigation to reduce the impact of dust on the surrounding area. Use of locally produced woodfuel as a source of heating for community and other

Service category	Service or benefit	Currently	Potential future
		recycling plant and current low level of development within the two sites.	buildings could increase air pollution. Efficient harvesting, drying, storage and combustion will be important to minimise air pollution.
	Soil conservation	Agriculture is the predominant land use on both sites. City Farm is managed sustainably and it is likely that soil quality is high, supporting invertebrates and performing a range of soil functions such as carbon storage etc. In other parts of the sites, conventional modern farming techniques may involve ploughing and the application of chemical based fertilisers, herbicides or insecticides, with potential impacts on soil quality, structure and ecology.	Any loss of fields where soil is currently managed sustainably could impact on soils. More widely, there is potential to increase significantly the quality, structure and ecology of soils by creating permanent pasture / parkland, establishing community growing areas and extensive woodland creation.
	Water purification	It is likely that the sites play a minor role in contributing to the quality of water in neighbouring watercourses, though it is possible that agricultural operations such as ploughing, the use of chemical inputs or retention of uncultivated ground result in episodes of poorer water quality	Development can present the risk of temporary impacts on water quality though modern construction methods are designed to keep this risk to a minimum. In the longer term, green infrastructure can play an important role in maintaining water quality by capturing and filtering run-off from hard surfaces. Beyond the initial construction period, there is potential to improve water quality by creating permanent pasture / parkland, establishing community growing areas and extensive woodland creation.
	Pests and diseases	The two sites comprise a mix of farmland, hedgerows and stream corridors. Mature field boundary trees could be at risk from species specific disease (e.g. ash dieback) while stream corridors can allow the movement of invasive species.	Green infrastructure comprising a mix of woodland, wetlands, pasture, parkland and growing space would introduce greater diversity into the local environment, increasing resilience to pests, diseases and other risks (e.g. extreme climate events).
	Pollination	Insects play a key role in pollinating crops and wild plants. Pollinators are likely to	Any loss of fields which are currently managed without chemical inputs could

Service category	Service or benefit	Currently	Potential future
		be most prevalent within City Farm where insecticides and other chemical inputs are avoided, and along stream corridors, in woodlands, hedges and field boundary trees. There is growing evidence that some agricultural practices can have a detrimental impact on pollinator populations.	<p>impact pollinator populations.</p> <p>More widely, there is potential to increase significantly the range of habitats supporting populations of pollinators (and insects and their predators more widely), with meadows, woodlands, wetland and growing areas all offering particular potential.</p>
Cultural	Recreation	Both sites include public rights of way some of which are overgrown and severed from Eynsham by the busy A40 corridor	Green infrastructure would create significant opportunities for recreation including private gardens, local greenspaces, community gardens, event spaces, sports fields, commons, wetlands and parkland, served by a network of high quality walking and cycling routes, connecting development with Eynsham, surrounding villages and key longer distance cycling and walking networks.
	Natural heritage	The two sites support a range of wetland, hedgerow and woodland habitats, together with important arable habitats at City Farm. Areas of more intensive farmland can be of lower natural heritage interest. Opportunities to learn about the area's natural heritage are limited.	<p>Any loss of fields which contribute to the ecological importance of City Farm could impact on the area's natural heritage importance..</p> <p>Green infrastructure could significantly increase the diversity, extent and connectivity of natural and semi-natural habitats across the two sites, resulting in a net biodiversity gain. Development could also safeguard adjacent important nature sites, whilst the design and management of access should be such as to avoid impacts in more sensitive areas or at more sensitive times.</p> <p>There could also be opportunities for people to experience and learn about nature on their doorstep. This could include outdoor classrooms, nature trails, local nature reserves, interpretative information and citizen science projects.</p>
	Cultural heritage	Both sites include, or lie close to, features which are of historic importance and reflect the evolution of settlement, land use and communication.	<p>Careful design of green infrastructure, including retention of undeveloped areas and protection of significant features can help ensure that impacts on known assets and their setting are minimised.</p> <p>There could also be opportunities for people to experience and learn about the area's history, including interpretation provision and links to local schools.</p>
	Sense of	The two sites currently have rural character, with agricultural fields enclosed	Development would change the character and sense of place within the two

Service category	Service or benefit	Currently	Potential future
	place	by hedges with field boundary trees. Although woodland cover is limited, these field boundary trees give the impression of a well wooded landscape. There are a number of more 'urban' influences including the A40 corridor, existing development along the western edge of Eynsham and uses such as the aggregate recycling plant.	development sites and in neighbouring areas. Green infrastructure could help ensure this is a positive change, creating a bold new landscape structure which reflects the wider character of the landscape (e.g. prevalence of designed parkland landscapes and the role of woodland and trees) whilst framing and accommodating development, open spaces, wetland and walking and cycling networks. Positive use of green infrastructure can also help address existing detracting elements, whilst maintaining or creating key views and vistas.
	Education and lifelong learning	There are currently relatively few opportunities for education and lifelong learning.	Green infrastructure could include new opportunities for education and lifelong learning covering topics such as cultural heritage, natural heritage, community growing, woodland management and low carbon energy. This could include outdoor classrooms, nature trails, local nature reserves, interpretative information, citizen science projects, links to education, training and volunteering initiatives.
	Spiritual and artistic inspiration	It is likely that both areas provide inspiration for some people, though the opportunities are currently relatively limited.	By creating high quality networks of openspaces, habitats and walking and cycling routes, it is likely that green infrastructure will increase opportunities for people to gain spiritual and artistic inspiration from their local area. Development may affect the enjoyment and inspiration that people currently derive from the two sites.

9 Stewardship of green infrastructure

- 9.1 In the same way that other kinds of infrastructure require ongoing maintenance, it is important that the way that green infrastructure is managed is considered from the outset.
- 9.2 The approach to management needs to reflect the range of natural, cultural and community assets that together make up green infrastructure, the different kinds of benefit that these assets provide and the range of the range of stakeholders with an interest in these assets and benefits. Management of an area's woodland should reflect their role in providing habitats, slowing run-off into watercourses, accommodating walking and cycling routes, providing a venue for outdoor education, framing neighbourhoods and providing a source of biomass for low carbon energy.
- 9.3 A first step will therefore be to develop an Integrated Green Infrastructure Management Plan with short, medium and long term time horizons and which can inform and direct the way that green infrastructure assets are managed as the Garden Village and West Eynsham SDA are developed. It is important that the area covered by the management plan considers and includes wider habitats and corridors, access and landscape linkages into the wider countryside as well as with the existing and proposed settlements. The management plan should be sufficiently flexible to respond to changes in circumstances and sufficiently devolved to provide people living in the area with an opportunity and an incentive to become involved, or manage the areas..
- 9.4 Management of the green infrastructure will require resources. Options for this include:
- Creation of a Green Infrastructure Management Trust, funded by an endowment provided by the Garden Village and West Eynsham SDA developers, with overall responsibility for managing green infrastructure assets in perpetuity;
 - Contracting an organisation such as the [Land Trust](#) to perform the role of a Management Trust, again funded by an endowment provided by developers;
 - Establishing [management or 'friends of' groups](#) for specific green infrastructure assets such as allotments, path networks, neighbourhood play areas, parks or greens;
 - Supporting the development of [income streams](#) associated with specific green infrastructure assets. This could include developing a market for locally produced biomass (e.g. heating of community and public buildings) or locally grown fruit and vegetables;
 - [Securing grants](#) to support different aspects of management. The Environmental Land Management Scheme being developed to delivery land management funding following the UK's departure from the European Union is likely to place an increased emphasis on payment for environmental outcomes, including the delivery of ecosystem services such flood regulation or carbon reduction, and may apply to a much wider range of types of land than the previous programme. There may also be grants to support local food growing, community involvement and ownership, though these may be subject to change over the coming years.

Appendix 1

Designated wildlife sites

One European statutory designated site and twelve national statutory designated sites are located within 5km of the Garden Village and SDL. In addition, eight Conservation Target Areas are located within 5km and eight non-statutory designated sites are located within 2km of the Garden Village and SDL.

Site Name	Designation	Qualifying Features	Distance/ Orientation from Site (km)
European Statutory Sites within 5km			
Oxford Meadows	SAC	Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), including the larger of only two known sites in the UK for creeping marshwort <i>Apium repens</i> .	2.4km east
National Statutory Sites within 5km			
Wytham Woods	SSSI	Ancient semi-natural broadleaved woodland, wood pasture, plantation woodland, common land and old limestone grassland.	1.9km east
Long Hanborough Gravel Pit	SSSI	This site provides exposures in the gravel of the Pleistocene Hanborough Terrace of the Evenlode Valley, for which it may be considered the type site.	2.2km north
Wytham Ditches and Flushes	SSSI	The ditches of Wytham support a species-rich eutrophic aquatic and fen flora, examples of which are rare in the county following widespread drainage, pollution and fertiliser enrichment.	2.2km east
Cassington Meadows	SSSI	Cassington Meadows are a cluster of neutral hay meadows and fen, which are surviving remnants of semi-natural vegetation in an area now characterised by intensive arable farming and gravel extraction.	2.4km east
Pixey and Yarnton Meads	SSSI	These unimproved floodplain meadows on alluvium over calcareous gravel on the first terrace bordering the River Thames are internationally renowned. They are amongst the best remaining examples of neutral grassland in lowland England	3km east
Blenheim Park	SSSI	Blenheim Park contains one of the finest areas of ancient oak-dominated pasture woodland in the country and is descended from a twelfth century deer park and Anglo-Saxon chase. The lakes, which were excavated and landscaped in the early eighteenth century, are some of the largest areas of open water in Oxfordshire and are of regional importance for breeding and wintering birds. It hosts one of the greatest collection of ancient oak trees in Europe, including one that is 1,000 years old.	3.2km north
Stanton Harcourt	SSSI	These gravel deposits, near Stanton Harcourt, represent the Pleistocene Summertown-Radley Terrace of the Upper Thames.	3.8km south
Sturt Copse	SSSI	The site is an important relic of the ancient hanging ash-wych elm woodlands of the Evenlode Valley and is noted for several uncommon plants. The wood is characteristic of the biologically rich ash-wych elm woodlands of the south-west limestones of Britain.	4.3km north-west

Site Name	Designation	Qualifying Features	Distance/ Orientation from Site (km)
Wolvercote Meadows	SSSI	These meadows bordering the River Thames consists of unimproved and semi-improved neutral grassland which continued to be managed traditionally for hay and pasture and support a rich flora.	4.4km east
Stonesfield Common, Bottoms and Banks	SSSI	This site comprises a series of steep sided valleys and banks with unimproved limestone grassland and scrub habitats. Other features of interest on the site include a semi-natural beech-wych elm woodland which has a ground flora which includes several species of plants normally associated with ancient woodland.	4.9km north-west
Holly Court Bank	SSSI	Holly Court Bank is an isolated fragment of unimproved calcareous grassland and scrub, situated near the eastern edge of the Cotswold plateau, an area now largely converted to arable and re-seeded pasture. It supports one of the few Oxfordshire examples of a <i>Bromus erectus-Brachypodium pinnatum</i> grassland community.	4.9km north-west
Whitehill Wood	SSSI	This site is a remnant of the calcareous ash-wych elm woodland which was formerly more widespread in the Evenlode Valley, traditionally managed as coppice with standards.	5km north-west
Non-Statutory Sites within 2km			
City Farm	LWS	Arable habitats which include significant populations of rare arable plants, identified as being of European Importance by Plantlife. It is also a site for as nesting lapwing and skylark. Includes a lapwing plot, a wild birdseed plot, and a pollen and nectar plot. The LWS also has several ponds, species-rich hedges, some ancient oak trees and a c. 12-acre area of oak scrub.	Adjacent north
South Freeland Meadows	LWS	Meadow with areas of lowland unimproved meadow habitat.	Adjacent north
Long Mead	LWS	Species-rich floodplain hay meadow adjacent to River Thames.	0.9km south-east
Cassingotn Gravel Pits South	LWS	Areas of reedbed and wet woodland in an old gravel pit. Adjacent to a large waterbody.	1.2km east
Swinford Farm Meadow	LWS	Largely semi-improved but with areas of lowland meadow habitat, wet grassland and a small patch of swamp.	1.3km south-east
West Wood, Eynsham Hall Park	LWS	Lowland ancient woodland, part semi-natural, part replanted. Part of a large area of green space, comprising a mosaic of woodland, parkland, grassland and wetland habitats.	1.6km west
Pinsley Wood	LWS	Lowland ancient woodland, part semi-natural, part replanted.	1.6km north
Farmoor	LWS	Man-made reservoir and land adjacent to the River Thames	1.8km south-

Site Name	Designation	Qualifying Features	Distance/ Orientation from Site (km)
Reservoir			east
Conservation Target Areas within 5km			
Oxford Meadows and Farmoor	CTA	This area includes the Thames Valley to the west of Oxford as far as Farmoor. It includes the Oxford Meadows Special Area of Conservation, Farmoor Reservoir and gravel workings between Yarnton and Cassington. Extensive areas of nationally important lowland meadow habitat are present, as well as areas of remnant wet grassland, reedbed, swamp, fen and wet woodland.	0.8km east
Wychwood and Lower Evenlode	CTA	The remains of Wychwood Forest and extensive areas within the old forest boundary extending as far as Eynsham Hall Park. It includes the southern side of the Evenlode Valley. The area supports species-rich ancient woodland, parkland, limestone grassland and small areas of acid grassland and heathland.	1.5km south-west
Wytham Hill	CTA	Most of the woodland is within the woods of Wytham SSSI which form a large and continuous area. Some of the woodland was once wood pasture and there are many veteran trees. There are also areas of limestone grassland, lowland meadow and fen.	1.6km east
Blenheim and Ditchley Parks	CTA	Areas of historic parkland with high biodiversity. Includes large areas of semi-natural broadleaved woodland, ancient woodland, lakes, wetland and sections of the Rivers Evenlode and Glyme. The park supports one of the greatest collections of ancient oak trees in Europe, including one that is 1,000 years old.	3.4km north
Lower Windrush Valleys	CTA	Riverside meadowlands and a large number of gravel pits lakes, managed largely for fishing and water sports. Some have a rich invertebrate fauna and aquatic plant flora. The area is important for birds, especially overwintering wildfowl. There are also areas of reedbed and swamp habitat.	3.5km south-west
Oxford Heights West	CTA	Wooded estate land and farmland. The area supports the main concentration of fen in Oxfordshire especially along the Sandford Brook, as well as wet woodland, lowland mixed deciduous woodland, limestone grassland, lowland meadow, acid grassland and heath.	3.6 south-east
Glyme and Dorn	CTA	The valleys of the rivers Glyme and Dorn. Includes many areas of limestone grassland, lowland meadow, swamp, fen, reedbed, standing water, woodland (mostly plantation), parkland and an area of acid grassland.	3.8km north
North Evenlode Valleys	CTA	A group of valleys on the northern side of the Evenlode Valley cutting into the Cotswolds plateau. Includes areas of limestone grassland, lowland meadow, wetland springs and flushes and woodland.	4km north-west

Appendix 2

Garden Village Principles

The Ministry of Housing, Communities and Local Government's [prospectus on Garden Communities](#)⁴⁶ defines a series of qualities which developments are expected to embody:

- **Clear identity** – a distinctive local identity as a new garden community, including at its heart an attractive and functioning centre and public realm.
- **Sustainable scale** – built at a scale which supports the necessary infrastructure to allow the community to function self-sufficiently on a day to day basis, with the capacity for future growth to meet the evolving housing and economic needs of the local area.
- **Well-designed places** – with vibrant mixed use communities that support a range of local employment types and premises, retail opportunities, recreational and community facilities.
- **Great homes** – offer a wide range of high quality, distinctive homes. This includes affordable housing and a mix of tenures for all stages of life.
- **Strong local vision and engagement** – designed and executed with the engagement and involvement of the existing local community, and future residents and businesses. This should include consideration of how the natural and historic environment of the local area is reflected and respected.
- **Transport** – integrated, forward looking and accessible transport options that support economic prosperity and wellbeing for residents. This should include promotion of public transport, walking, and cycling so that settlements are easy to navigate, and facilitate simple and sustainable access to jobs, education, and services.
- **Healthy places** – designed to provide the choices and chances for all to live a healthy life, through taking a whole systems approach to key local health & wellbeing priorities and strategies.
- **Green space** – generous, accessible, and good quality green and blue infrastructure that promotes health, wellbeing, and quality of life, and considers opportunities to deliver environmental gains such as biodiversity net gain and enhancements to natural capital.
- **Legacy and stewardship arrangements** – should be in place for the care of community assets, infrastructure and public realm, for the benefit of the whole community.
- **Future proofed** – designed to be resilient places that allow for changing demographics, future growth, and the impacts of climate change including flood risk and water availability, with durable landscape and building design planned for generations to come. This should include anticipation of the opportunities presented by technological change such as driverless cars and renewable energy measures.

The prospectus defines Garden Villages as comprising between 1,500 and 10,000 homes, and indicates that proposals can be for a discrete new settlement, or take the form of transformational development of an existing settlement, both in nature and in scale. All proposals must be of sufficient scale to be largely self-sustaining and genuinely mixed use.

The Town and Country Planning Association⁴⁷ has defined garden settlements as holistically planned new settlements which enhance the natural environment and offer high-quality affordable housing and locally accessible work in beautiful, healthy and sociable communities.

It defines [Garden City Principles](#) as a framework for their delivery:

- Land value capture for the benefit of the community.
- Strong vision, leadership and community engagement.
- Community ownership of land and long-term stewardship of assets.
- Mixed-tenure homes and housing types that are genuinely affordable.
- A wide range of local jobs in the Garden City within easy commuting distance of homes.

⁴⁶

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/734145/Garden_Communities_Prospectus.pdf

⁴⁷ <https://www.tcpa.org.uk/garden-city-principles>

- Beautifully and imaginatively designed homes with gardens, combining the best of town and country to create healthy communities, and including opportunities to grow food.
- Development that enhances the natural environment, providing a comprehensive green infrastructure network and net biodiversity gains, and that uses zero-carbon and energy-positive technology to ensure climate resilience.
- Strong cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods.
- Integrated and accessible transport systems, with walking, cycling and public transport designed to be the most attractive forms of local transport.