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Oxford Flood Alleviation Scheme
GREEN INFRASTRUCTURE STUDY

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GILLESPIES

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1.1 THE PURPOSE OF THIS DOCUMENT

1.1.1.1 This Green Infrastructure Strategy (GIS) sets out the existing and potential Green Infrastructure (GI) framework to support the Oxford Flood Alleviation Scheme (Oxford FAS). It will form an integral part of the development of scheme options and feed into the Landscape Masterplan for the preferred option.

1.1.2 WHAT IS GREEN INFRASTRUCTURE?

1.1.2.1 Green infrastructure (GI) is a term used to describe a collection of open green spaces, including amongst other things parks and gardens, woodlands, grasslands, amenity green space, commons, playing fields, outdoor sports facilities, recreation spaces, allotments, churchyards, rights of way (footpaths, bridleways, cycle paths etc.), river corridors, green roofs and skate parks.

1.1.2.2 When considered together, the collective of these spaces provide an important resource for both people and nature, and provide multifunctional open spaces. The strategy aims to identify, strengthen and deliver a robust GI network.

1.1.3 WHY IS A GREEN INFRASTRUCTURE STRATEGY IMPORTANT – WHAT ARE THE BENEFITS?

1.1.3.1 A strategy identifies existing green spaces / resources in the study area / site boundary, and can aid decision making throughout the design process about which spaces to protect, how to strengthen and enhance them, and how to link up to them with new resources / aspects of the project.

1.1.4 A STRONG GI NETWORK CAN DELIVER ENVIRONMENTAL, SOCIAL AND QUALITY-OF-LIFE BENEFITS, SUCH AS (TAKEN FROM SOUTH OXFORDSHIRE GI STRATEGY):

- Protection and enhancement of biodiversity resources
- Conservation and enhancement of cultural and landscape heritage
- Creation of sense of place / identity
- Improved access to biodiverse habitats, recreational and amenity resources – supporting healthy living
- Help deliver sustainable water management – reduce flood risks
- Assist with adaptation to and mitigation of effects of climate change
- Promoting sustainable transport – green routes for walking and cycling
- Providing a resource for education and learning

1.1.4.1 The Green Infrastructure Strategy will also contribute towards carefully considered and effective spatial planning for Oxford by ensuring that local plans / new developments take account of existing green spaces / resources.

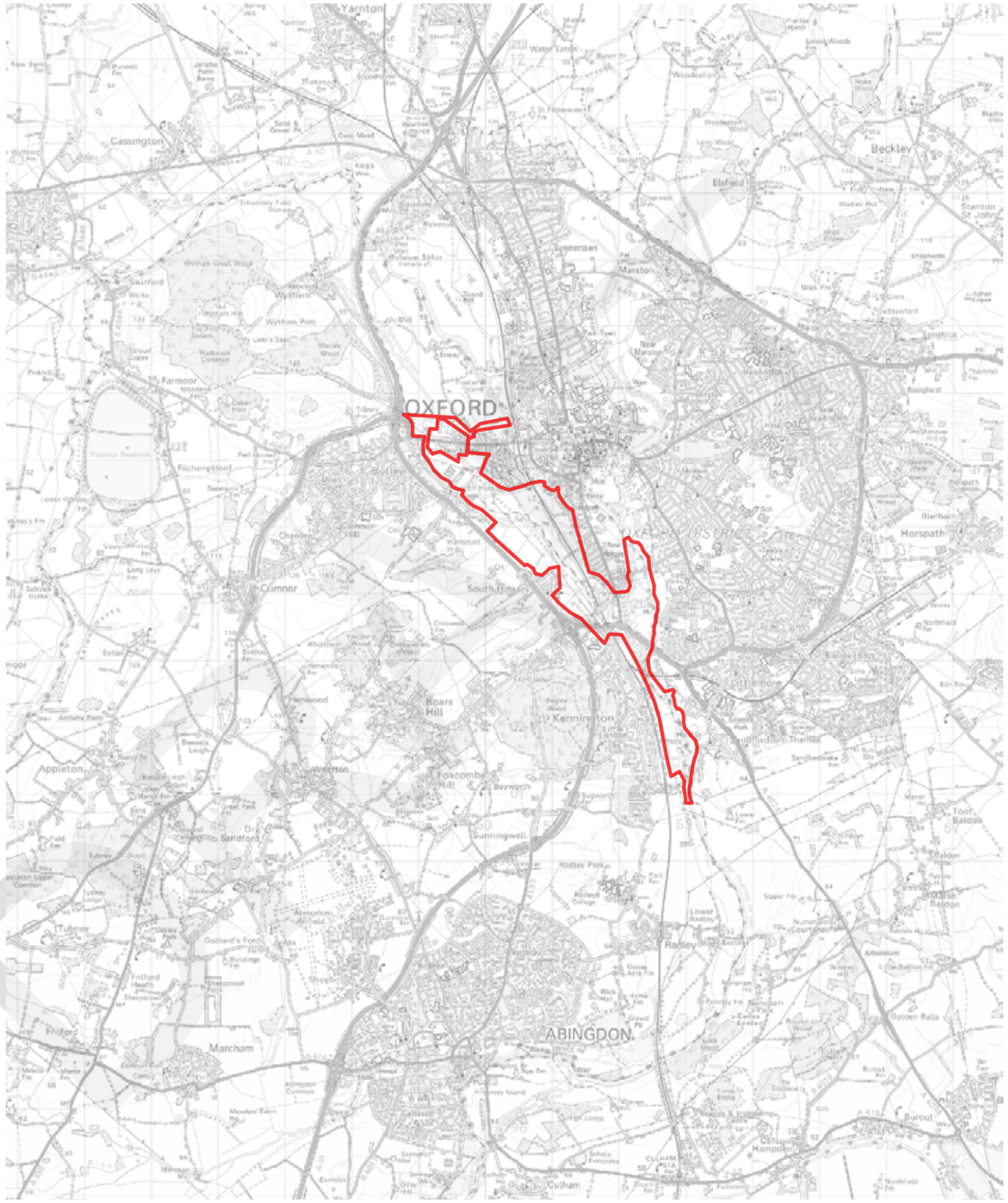


Figure 01 Oxford FAS Site Boundary Map

1.2 METHODOLOGY

1.2.1.1 The aim of this Green Infrastructure study is to identify and categorise existing Green Infrastructure in order to assess the impact of development, the likely needs arising from proposed development and the potential opportunities within the Oxford FAS study area. Based on the analysis the study seeks to develop a vision and framework to support a realistic and deliverable Green Infrastructure strategy, which builds upon current and future initiatives and identifies key areas and opportunities to enhance Green Infrastructure appropriate to the area. The methodology used is as follows:

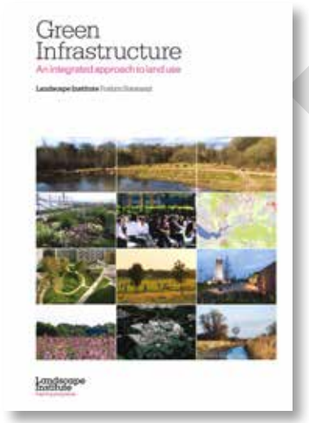
- Assess the baseline condition of the study area in order to identify current and future needs in terms of GI.
- Identify, classify and map current GI assets using existing mapping and baseline data.
- Analyse those existing assets and assign them a 'typology'.
- Identify GI functionality of each asset in terms of both present and potential multi-functionality.
- Identify current and potential GI benefits.

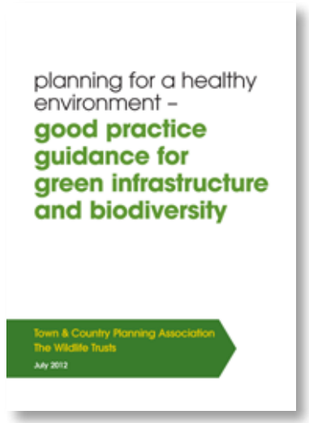
1.2.1.2 Analyse the findings against the baseline data (e.g. environmental, social and economic) in order identify key issues, opportunities and gaps in provision, having regard for future development projections.

- Identify a vision for a network of Green Infrastructure that will protect and enhance key existing assets and ensure adequate provision to meet future needs and healthy lifestyles.
- Produce a framework for multi-functional green/blue infrastructure networks.
- Identify any issues of implementation and delivery including funding mechanisms, future management and monitoring.

1.2.2 KEY DOCUMENTS REFERRED TO IN THIS REPORT INCLUDE:

- Natural England: 'Green Infrastructure Guidance'; 'Nature Nearby – Accessible Natural Greenspace
- Guidance' and 'Microeconomic evidence for the benefits of Investment in the environment – review'
- TCPA: 'Planning for a Healthy Environment – Good practice guidance for Green Infrastructure and Biodiversity'
- Landscape Institute: 'Green Infrastructure: An integrated approach to land use'
- Genecon: 'Green Infrastructure Valuation Toolbox User Guide'
- The National Planning Policy Framework





1.3 WHAT IS GREEN INFRASTRUCTURE AND WHY IS IT IMPORTANT?

1.3.1 THE NATIONAL PLANNING POLICY FRAMEWORK'S (NPPF) DEFINITION OF GREEN INFRASTRUCTURE (GI):

1.3.1.1 The NPPF defines GI as a network of multi-functional 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 the network of natural and semi-natural features, green spaces, rivers and lakes that intersperse and connect villages, towns and cities. Individually, these elements are GI assets, and the roles that these assets play are GI functions. When appropriately planned, designed and managed, the assets and functions have the potential to deliver a wide range of benefits – from providing sustainable transport links to mitigating and adapting the effects of change. (Landscape Institute Position Statement 2013)

1.3.2 GREEN INFRASTRUCTURE ASSETS

1.3.2.1 Green Infrastructure assets range from country parks, lakes and woodlands to urban interventions such as green roofs and street trees. They can be specific sites at the local level or broader environmental features at the landscape scale within and between rural and urban areas such as wetlands, moors and mountain ranges. (Landscape Institute Position Statement 2013).

1.3.2.2 Assets span spatial scales and types of land use. For example, they can include woodland, water courses, amenity spaces, highway verges, parks, urban trees, private gardens, the grounds of hospitals, schools and business parks etc. (GI valuation tool-kit user guide).

1.3.2.3 Not all of these general GI asset 'typologies' will be applicable to all specific areas. For this reason, this study will define the specific GI Assets for the study area (in section 02) with reference to the specific location.

1.3.3 GREEN INFRASTRUCTURE FUNCTIONS

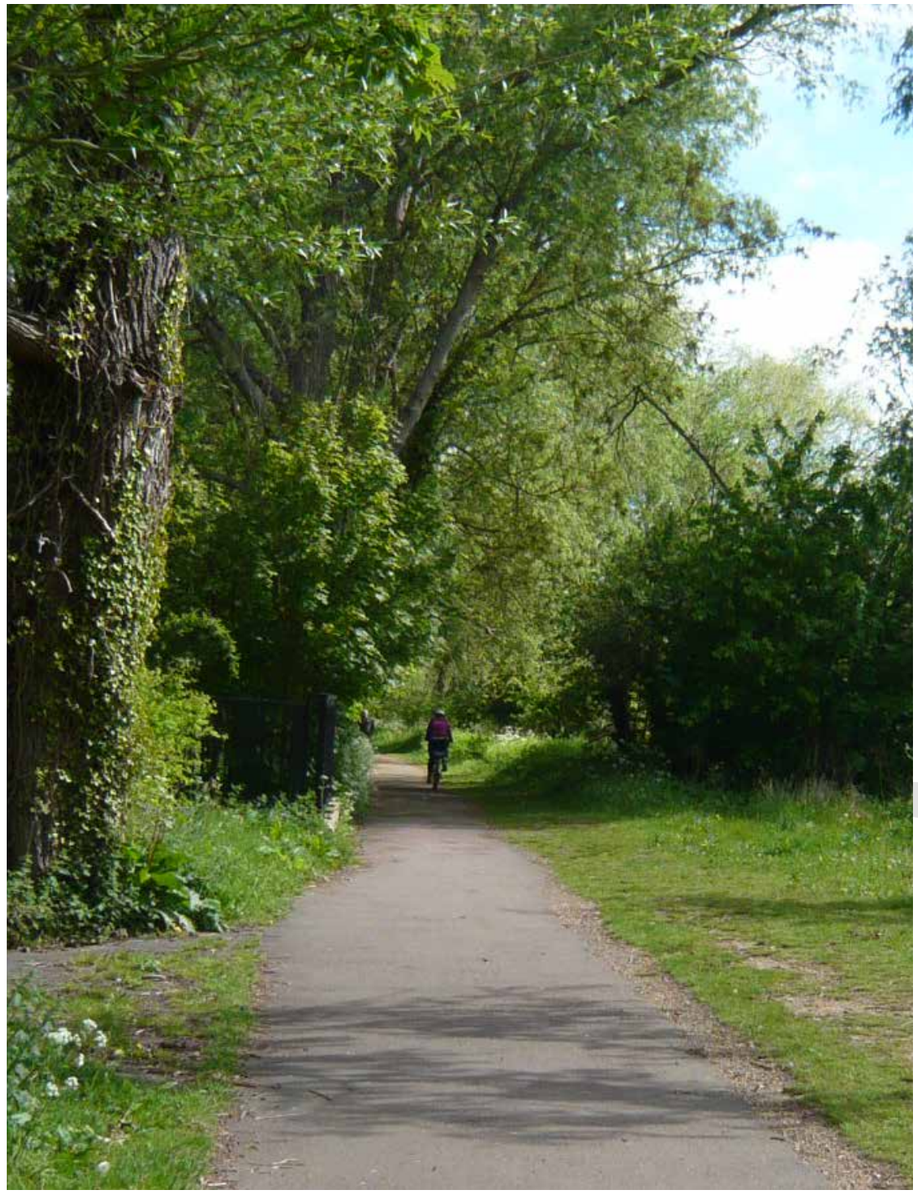
1.3.3.1 Green Infrastructure functions are the roles that assets can play if planned, designed and managed in a way that is sensitive to, and includes provision for, natural features and ecosystem services. An asset may have obvious primary functions, but each asset can perform different functions simultaneously – a concept known as multi functionality. For example, street trees add aesthetic quality to an urban area, but will also reduce airborne pollution, provide shade, reduce urban heat island effects, mitigate wind chill and turbulence and increase biodiversity. (Landscape Institute Position Statement 2013)

1.3.3.2 The more functions that assets can perform simultaneously means that it has greater value from a GI perspective, and one of the aims of GI planning is therefore to achieve high levels of multi-functionality where possible.

1.3.4 GREEN INFRASTRUCTURE BENEFITS

1.3.4.1 These GI functions give rise to benefits, which can be classified as environmental, social and economic.

1.3.4.2 There is a growing interest in how we can simultaneously achieve these economic, environmental and social goals. For example, through the promotion of biodiversity 'services', these ecological services can also provide benefits to our economy and society. (GI Valuation tool-kit user guide, Genecon).



1.4 LEGISLATION, POLICY AND GUIDANCE IN RESPECT TO GREEN INFRASTRUCTURE

1.4.1 NATIONAL LEVEL

1.4.1.1 The National Planning Policy Framework sets out the Governments planning policies for England and how it expects this to be applied to the planning system. Its core aim is to achieve sustainable development and lists a number of Core Principles (para 17) which includes:

'Promote mixed use developments, and encourage multiple benefits from the use of land in urban and rural areas, recognising that some open land can perform many functions (such as for wildlife, recreation,flood risk mitigation, carbon storage, or food production)';

1.4.1.2 Further, at para 114 it states that local planning authorities should:

'Set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and Green Infrastructure.'

1.4.1.3 Also, at para 99, that:

'Local Plans should take account of climate change over the longer term, including factors such as flood risk, coastal change, water supply and changes to biodiversity and landscape. New development should be planned to avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of Green Infrastructure.'

1.4.1.4 It is also stated at para 109 that the 'planning system should contribute to and enhance the natural and local environment by:

- Recognising the wider benefits of ecosystem services; and
- Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;'

1.4.2 LOCAL LEVEL

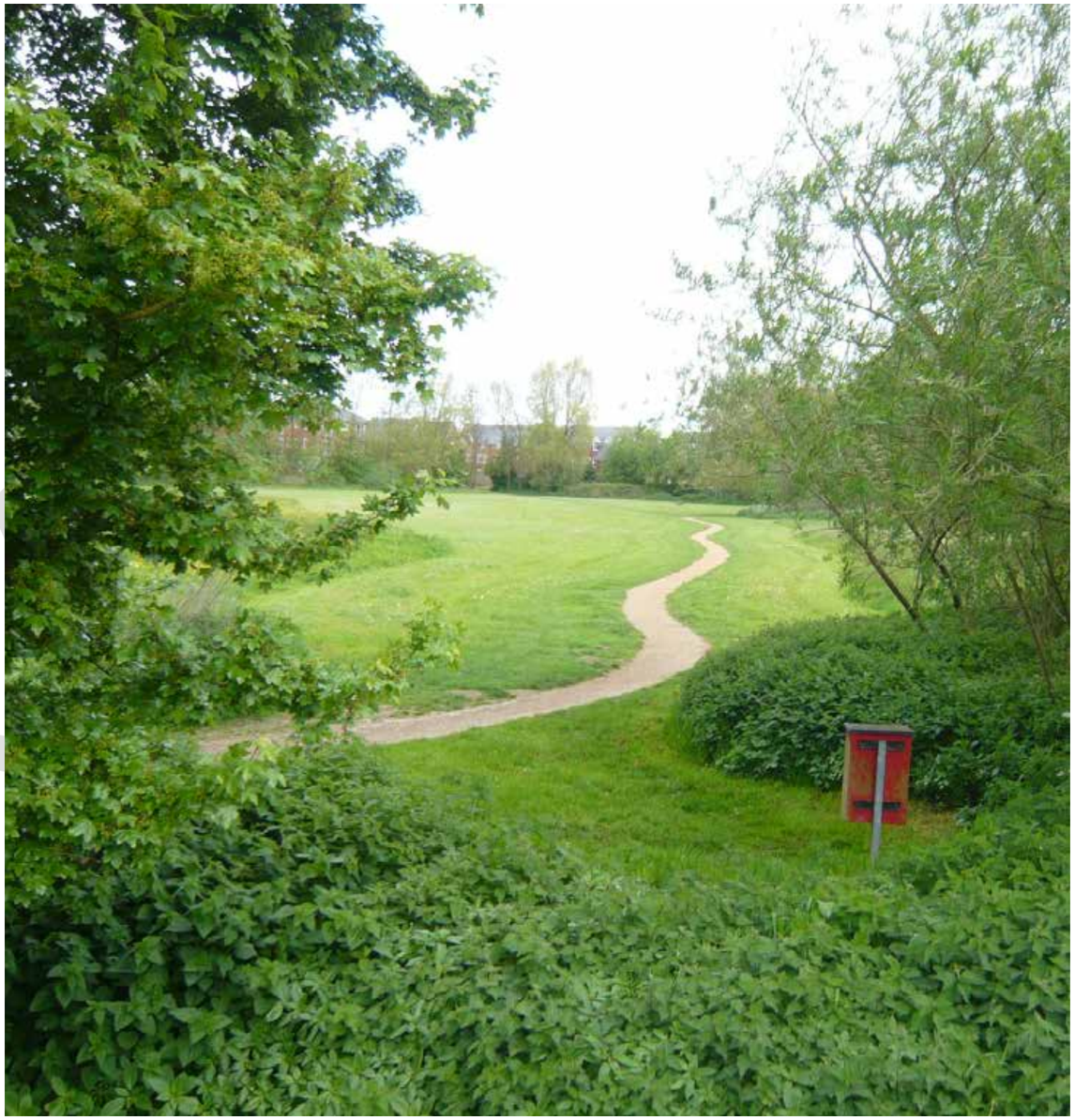
1.4.2.1 Oxford City Council's Core Strategy 2026 was adopted in March 2011 and sets out the spatial planning framework for the development of Oxford up to 2026.

1.4.2.2 Relevant Core Strategy policies include:

- CS17 (Infrastructure and developer contributions);
- CS18 (Urban design, townscape character and the historic environment);
- CS21 (Green spaces, leisure and sport); and
- CS12 (Biodiversity).

1.4.2.3 We have considered the unpublished green infrastructure work undertaken by Lepus for Oxfordshire County Council 'Green Infrastructure Framework - January 2014' which is a county wide Green Infrastructure Strategy and Vale of White Horse's 'Green Infrastructure Audit -2013' which is more of an inventory of green spaces and their proximity to urban areas.

1.4.2.4 Oxford City's 'Green Spaces Strategy - 2013-2027' is of particular relevance as it covers the majority of the study area in detail, uses a GI Asset Typology and maps the location of those GI Assets. We have used therefore used the same typology in our analysis of GI Assets for the Oxford FAS study area.



02
BASELINE MAPPING

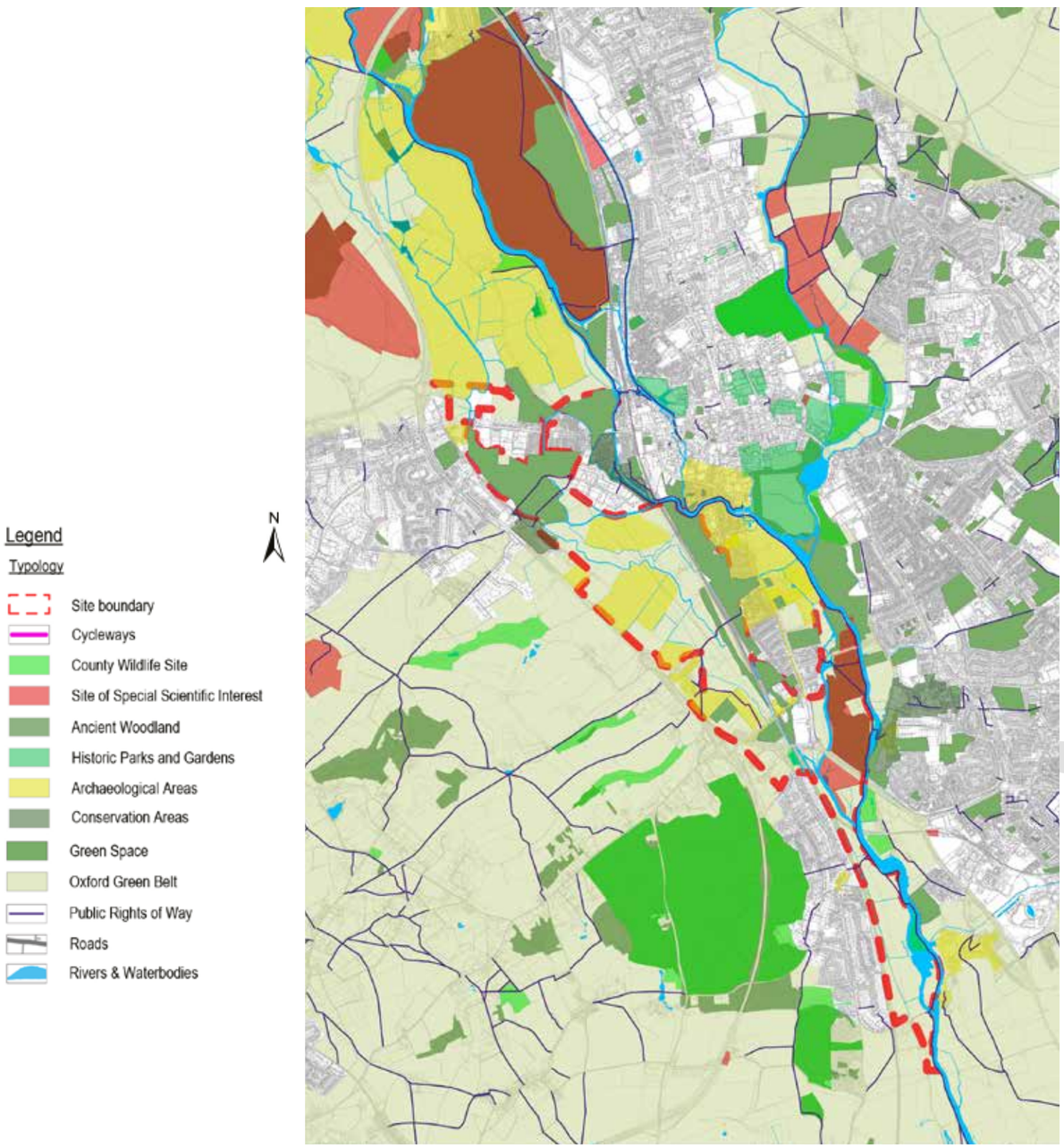


Figure 02 Oxford FAS Context Map

2.1 THE OXFORD FAS AREA CONTEXT

2.1.0.1 As illustrated within Figure 02, the Oxford FAS area is located to the west of the main urban area of Oxford. The northern boundary includes Seacourt Park and Ride and stream systems to the north of Botley Road.

2.1.0.2 The southern boundary is just to the south of Sandford Lock. The study area corridor runs north to south covering the river system through an area to the east of the A34 and the urban area of Oxford for the northern half of its length and to the east of the main railway line and the River Thames for its southern half.

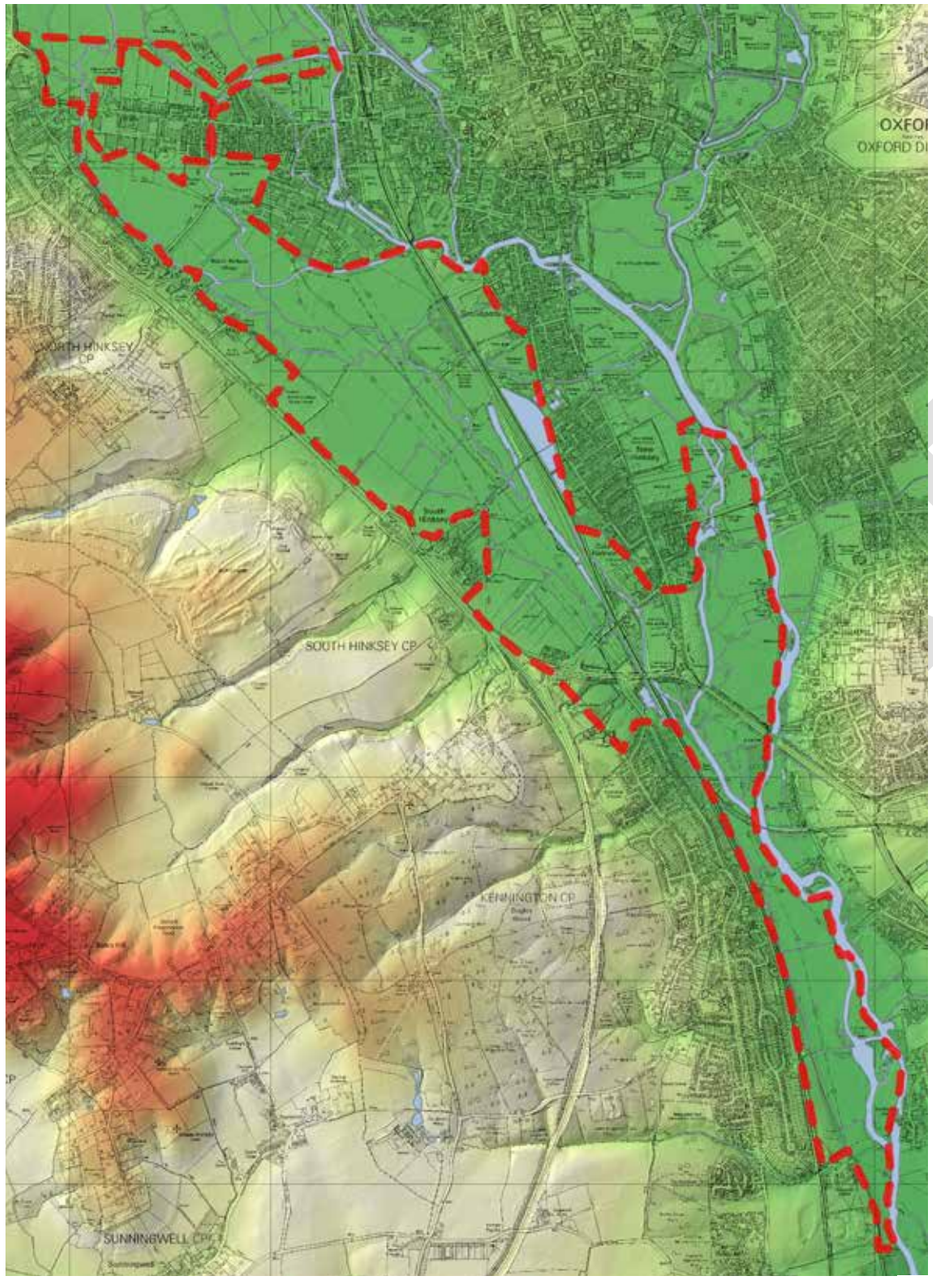


Figure 03 Topography

2.2 TOPOGRAPHY

2.2.0.1 Topographically, the area is relatively flat between 55m and 60m AOD, with the historic city centre of Oxford sitting on a gravel terrace to the east at about 58m AOD.

2.2.0.2 The corridor sits in the floodplain of the Thames with built development following ancient roads into the city for e.g. along Botley, Kennington and Abingdon Roads. The floodplain passes through the narrow gap at Sandford, less than 800m wide between the gravel terraces of Kennington and Rose Hill.

2.2.0.3 The land rises steeply outside the study area to form prominent limestone hills to the west at Cumnor and Boars Hill (144m AOD) and to the east at Shotover (171m AOD).

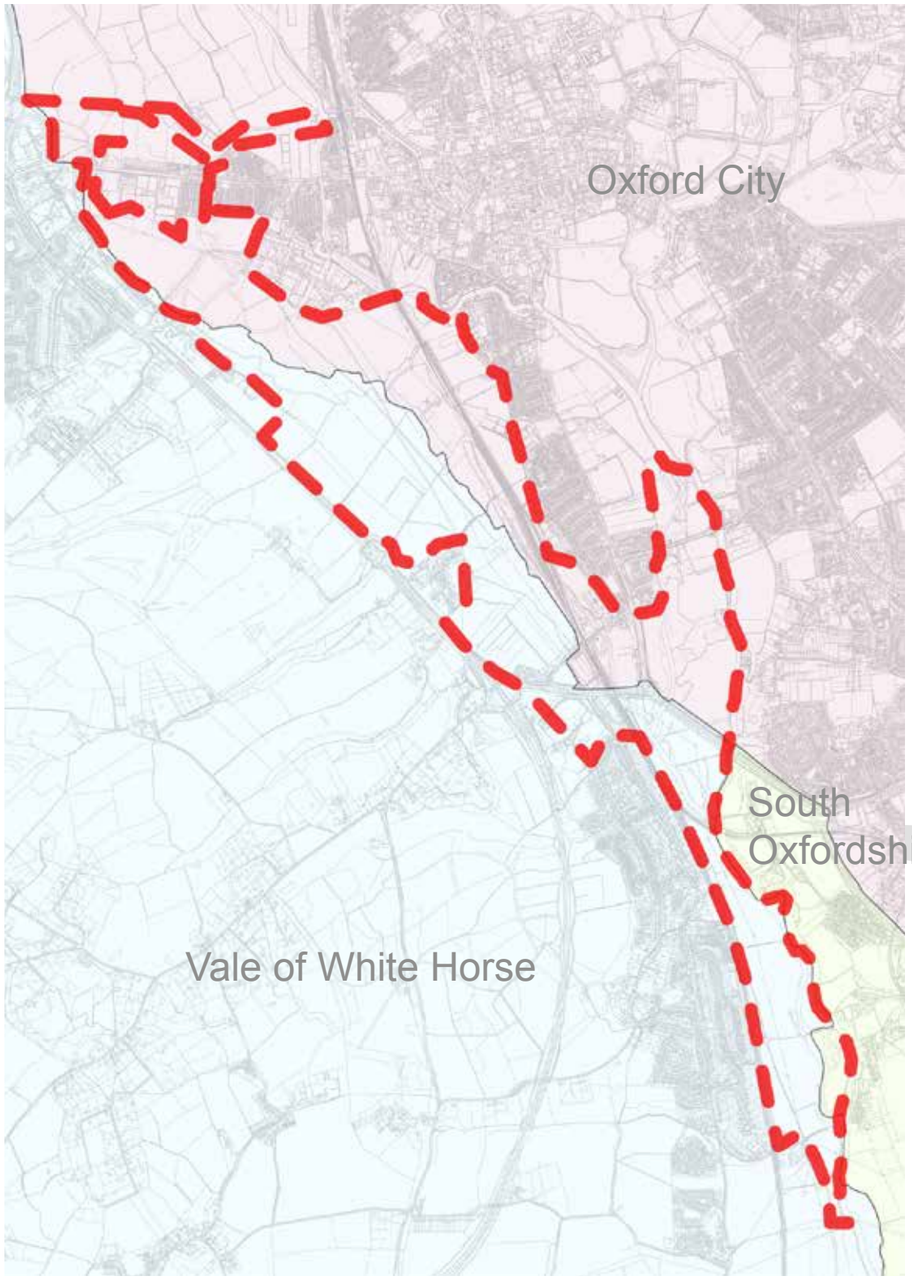


Figure 04 Local Planning Authority Boundaries

2.3 LOCAL PLANNING AUTHORITY BOUNDARIES

2.3.0.1 The study area falls within three Local Planning Authority boundaries. Much of the northern and eastern section is within Oxford City and the western and southern section is part of Vale of White Horse (VOWH). There is a very small area just to the east of Sandford Lock which is in South Oxfordshire District.

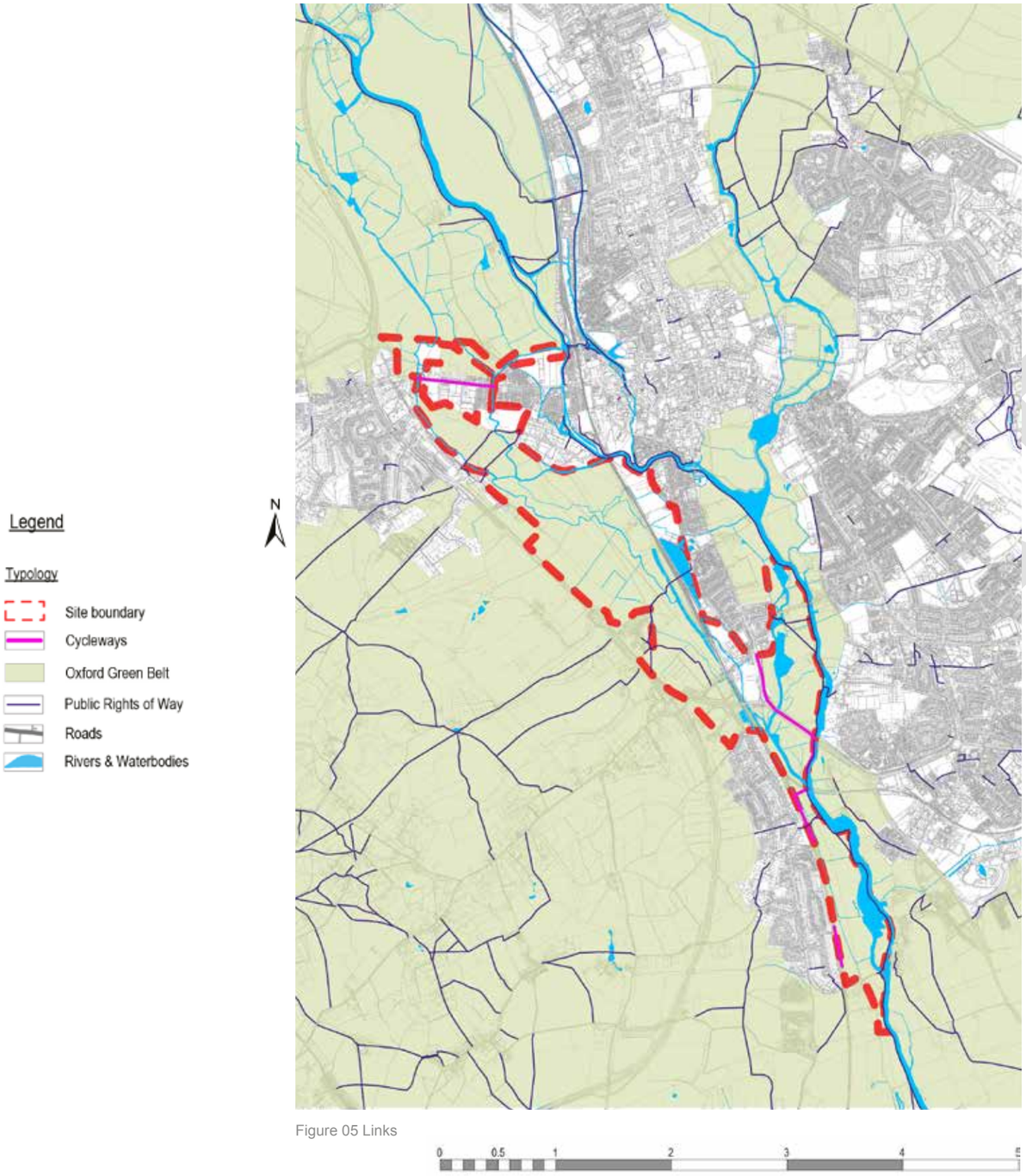


Figure 05 Links

2.4 TRANSPORT LINKS

2.4.0.1 There are several key existing and proposed links which are relevant to this study:

- The Thames Path National Trail
- Sustrans Route 5
- PRoW connections with the above
- The Oxford Canal
- The River Cherwell
- The rail line and foot/road bridges across it
- Links to local amenities: schools, sport and recreation, religious, visitor attractions, key employment areas, the city centre
- Large parks and informal green spaces outside of the study area.

2.4.0.2 A variety of recreational interests are represented in the study area including angling, cycling (Sustrans route), walking (the Thames Path National Trail runs through the study area), nature conservation and boating (unpowered and motor boating).

2.4.0.3 There are also a number of land uses adjacent to the watercourses which represent recreational activities such as parks, sports grounds and playgrounds with a concentration just south of the Botley Road at North Hinksey, Grandpont and New Hinksey.

2.4.0.4 There are several areas of allotments within or close to the study area, on the northern side of the Botley Road, adjacent to the Seacourt Stream, and at South and New Hinksey.

2.4.0.5 The Oxford Canal, although just to the east of the study area, joins the River Thames near Oxpens, and runs north for almost 77 miles to near Coventry where it then connects with the Midlands canal system. The Oxford Canal also has a right of navigation and is a popular cruising canal.

2.4.0.6 A number of major ROADS serve and run through or link to the Oxford FAS study area (see Figure 03).

- A34 (western bypass and part of southern Oxford bypass - Bicester to north. Newbury to south).
- A40 (northern Oxford bypass - Cheltenham to west).
- M40 (Thame and Aylesbury to the east).
- A420 (main route into Oxford city centre from the west - Oxford city centre, Swindon and M4 motorway).
- A4144 (main route into Oxford city centre from the south -Oxford city centre, A474 southern bypass, A34 western bypass).
- A4074 (southern Oxford bypass - Wallingford and Reading).
- A415 (Witney to A420 - Witney and the south west of the study area).

2.4.0.7 Traffic congestion is a significant problem in Oxford city centre during peak hours, especially on Botley Road and Abingdon Road as these are the main routes into the city centre. Traffic congestion is also frequently experienced on the Oxford bypass and the A34 within the vicinity of Oxford.

2.4.0.8 Oxford occupies a central position within the national RAIL transport network. The railway line in the study area runs from the south, dividing in Oxford to continue north east and north-west. Oxford railway station provides links to Worcester and Hereford, Banbury, Bicester and Birmingham to the north, whilst links to the south connection with Bristol, South Wales, Southampton, Basingstoke, Reading and London. Rail-freight goods are carried from Southampton docks to Birmingham. Foot and road bridges across the rail line are essential for encouraging east-west movement across the study area.

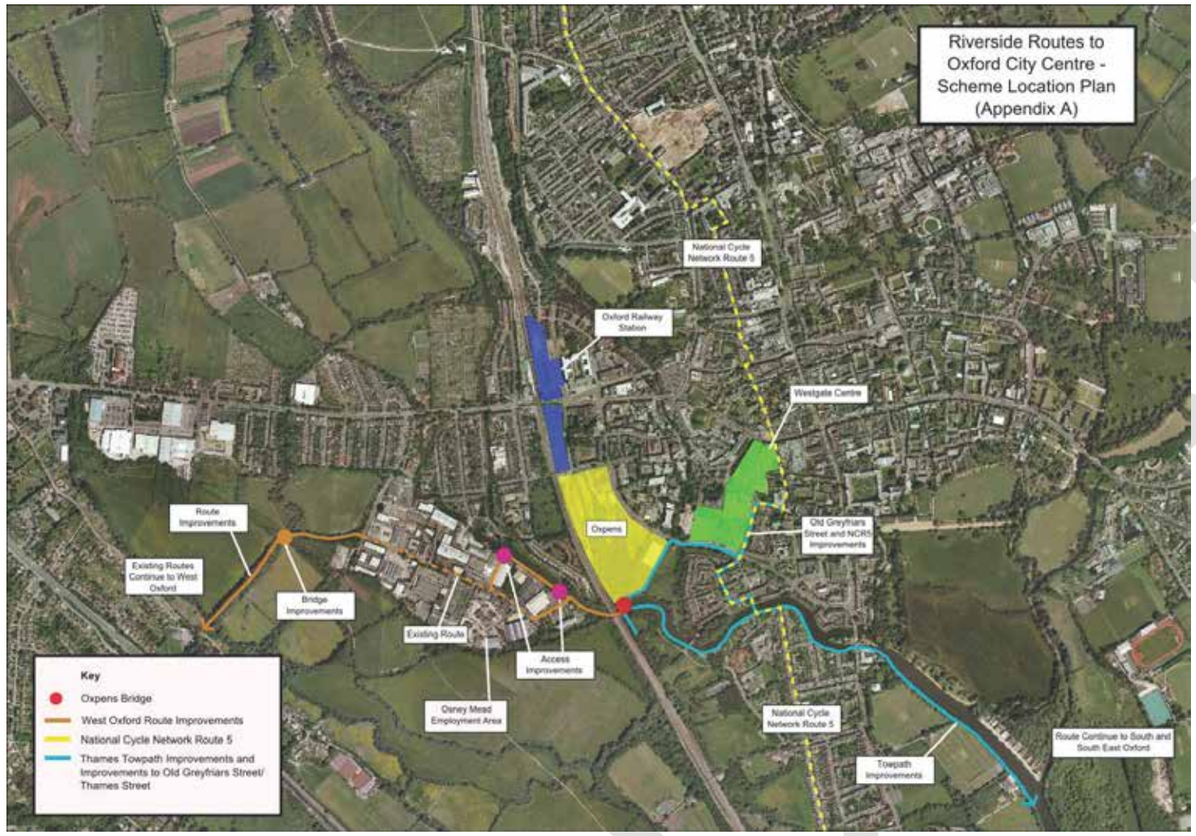


Figure 06 Oxfordshire Cycle Scheme Map

Source; https://www.oxfordshire.gov.uk/cms/news/2015/mar/county-council-secures-%C2%A333m-funding-cycle-scheme

2.4.0.9 CYCLING is traditional in Oxford and especially popular in the city centre. There are two National Cycle Routes within the study area which are:

- Route 5 through Oxford towards Woodstock
- Route 51 from Oxford north east to Bicester; and
- There are also Local Signed Cycle Routes between Botley and Osney (Route 8 along Willow Walk) and between the centre and Redbridge (Route 7) to join the National Cycle Route 5 to the south. In addition, there are numerous Public Bridleways which are often used for cycling.

2.4.0.10 The FOOTPATH AND PUBLIC RIGHTS OF WAY (PRoW) network in the study area is extensive (Figure 03) and an important recreational resource that is well utilised. The Thames Path National Trail follows the River Thames for 184 miles from its source in the Cotswolds (to the west of the study area), through the entire study area to the City of London (Thames Path National Trail, 2008). There are also some permissive footpaths that cross the meadows between Botley, North Hinksey, South Hinksey and the outskirts of Oxford city centre.

2.4.0.11 Oxfordshire County Council have secured funding in March 2015 to provide a number of improvements including:

- a pedestrian and cycle bridge at Oxpens to connect to future City centre redevelopment and the train station
- improvements along the Thames towpath including certain sections being widened, resurfaced together with the installation of lighting
- widening of the foot and cycle bridge over Bulstake Stream (Figure 06). These imporvements will link in with the Oxford FAS proposals.

2.5 WILDLIFE SITES AND OTHER ECOLOGICAL ASSETS

2.5.0.1 Ecological assessments were undertaken as part of the Strategic Environmental Assessment in 2009 and a more detailed Extended Phase 1 Habitat Survey of the study area in July 2015.

2.5.0.2 A summary of the Oxford FAS study area's key existing ecological assets are illustrated within Figure 07 and discussed below.

2.5.0.3 The study area supports a diversity of flora and fauna and protected species such as creeping marshwort and snakeshead fritillary. A number of statutory sites are designated for their nature conservation value including protected habitats and species and Biodiversity Action Plans priority habitats.

2.5.0.4 The Internationally designated Oxford Meadows Special Area of Conservation (SAC) which is made up of four water-dependent Sites of Special Scientific Interest (SSSI), lies to the north of the study area around Port Meadow and Wolvercote. Iffley Meadows SSSI is within the study area as well as a number of County Wildlife Sites (CWS) and Sites of Local Importance for Nature Conservation (SLINCs).

2.5.0.5 Many of these sites and other, non-designated, sites are dependent on a certain groundwater and surface water regime. The Thames and its distributaries also provide ecologically important aquatic ecosystems and habitats for fish and fry.

2.5.0.6 The Extended Phase 1 Habitat Survey July 2015 concluded - "most valuable habitats are the water courses and their associated vegetation, including marginal and wetland habitats, along with the species rich flood and hay meadows at Iffley and Hinksey. There are also a number of species poor grasslands and habitats that would benefit from enhancement and conservation management."

2.5.0.7 Figure 07 illustrates that the study area is well served by existing ecological assets and that there is significant potential to improve and link these assets such as Oxford Meadow SAC and Iffley Meadows SSSI, creating a high quality GI network with significant ecological benefits.

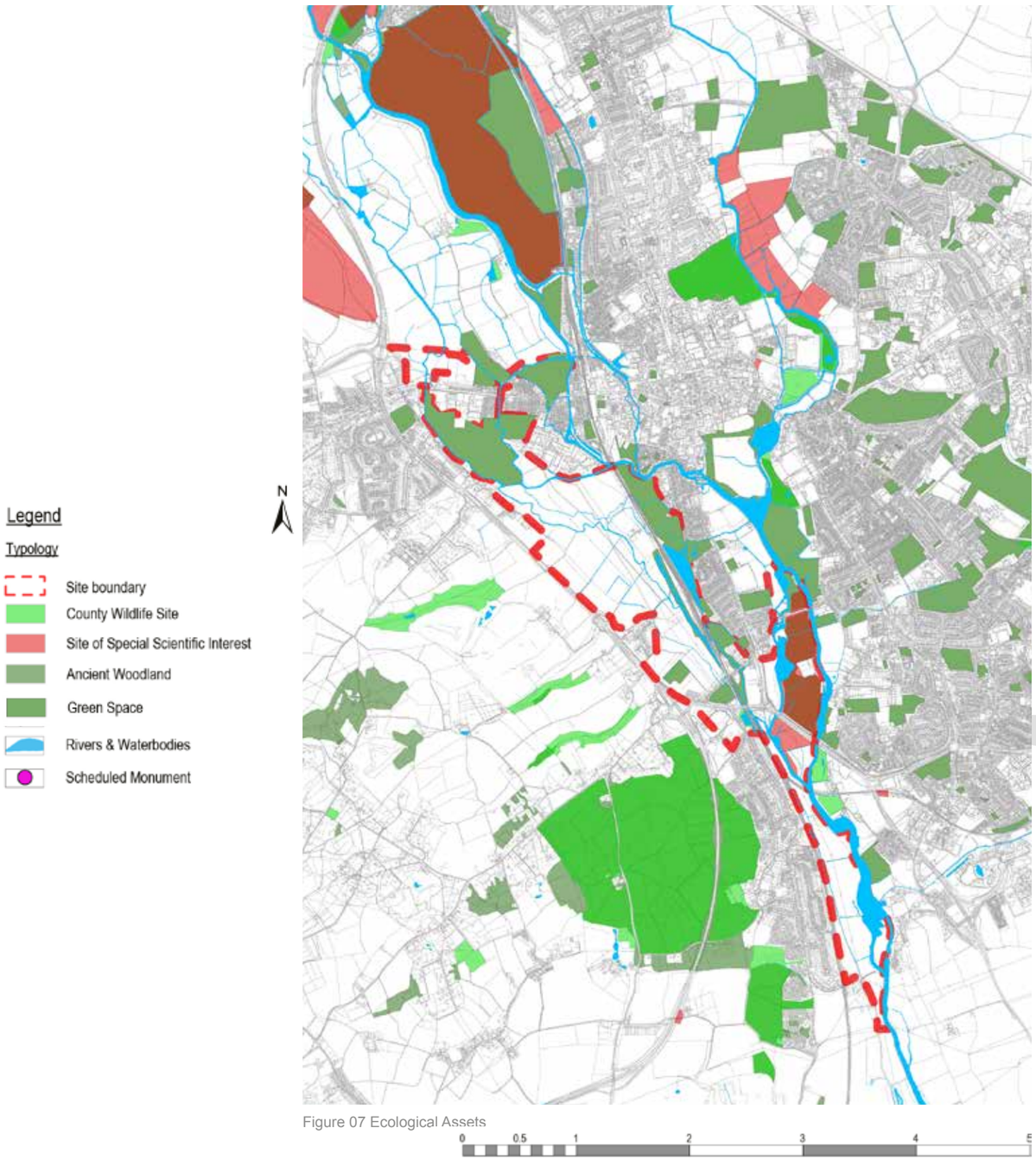


Figure 07 Ecological Assets

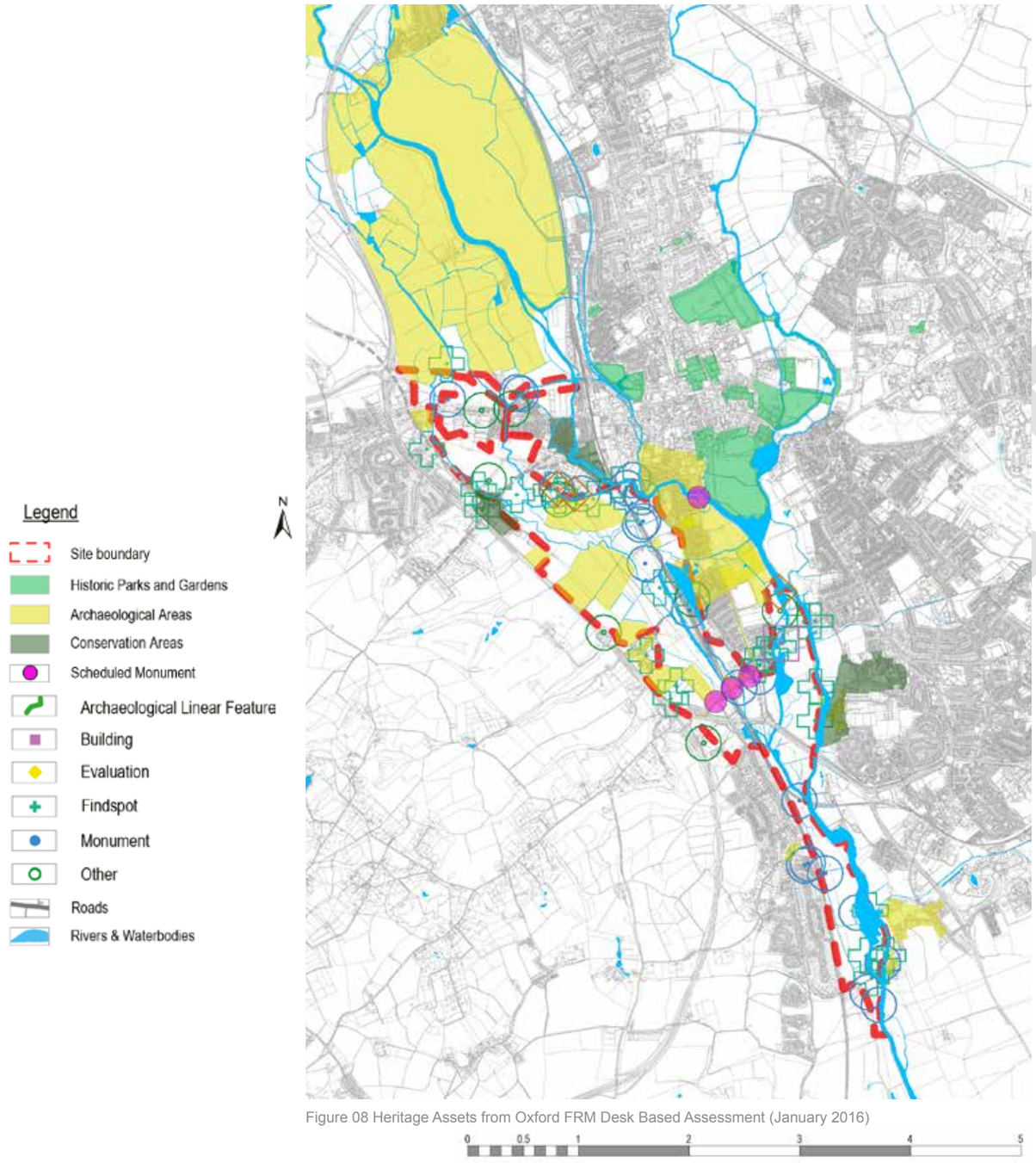


Figure 08 Heritage Assets from Oxford FRM Desk Based Assessment (January 2016)

2.6 HERITAGE SITES

2.6.0.1 Oxford has a wealth of history and is renowned worldwide for its cultural heritage characterised by the historic colleges, punting on the Thames and views of the dreaming spires from Boars Hill.

2.6.0.2 The study area also has a substantial number of important archaeological and heritage sites as well as areas of high potential for undiscovered archaeology. The quality of the Green Infrastructure located within or adjacent to these areas can have an impact upon the setting of these important sites.

2.6.0.3 A 'Heritage Desk Based Assessment' (DBA) was carried out by Oxford Archaeology for the study area in September 2015. In November 2015 Oxford Archaeology undertook a 'Geoarchaeological Watching Brief 'during initial geotechnical ground investigations for Oxford FAS. The DBA was updated from this work in January 2016. The results are show on Figure 08

2.6.0.4 The northern part of the study area includes part of the mixed modern and historic Botley Road. The meadows to the south have had little archaeological investigation but contains archaeological cropmarks identified on aerial photographs and has also produced various archaeological findspots.

2.6.0.5 There are Conservation Areas at North Hinksey and parts of the Conservation Areas for Osney and Iffley.with a number of Listed Buildings in all settlements.

2.6.0.6 North and South Hinksey are recorded as Hengestesie' ('Hengest's Island' or the 'Island of the Stallion') in the late Saxon charters, and as separate places from the 13th century. Both villages lie on the slightly higher ground.

2.6.0.7 The Devils Backbone, a likely medieval causeway runs between South Hinksey and Oxford.

2.6.0.8 There was a crossing of the Thames into the centre of Oxford at North Hinksey possibly from the Roman period which was replaced by a series of causeways along the line of Abingdon Road from the 9th century on. A

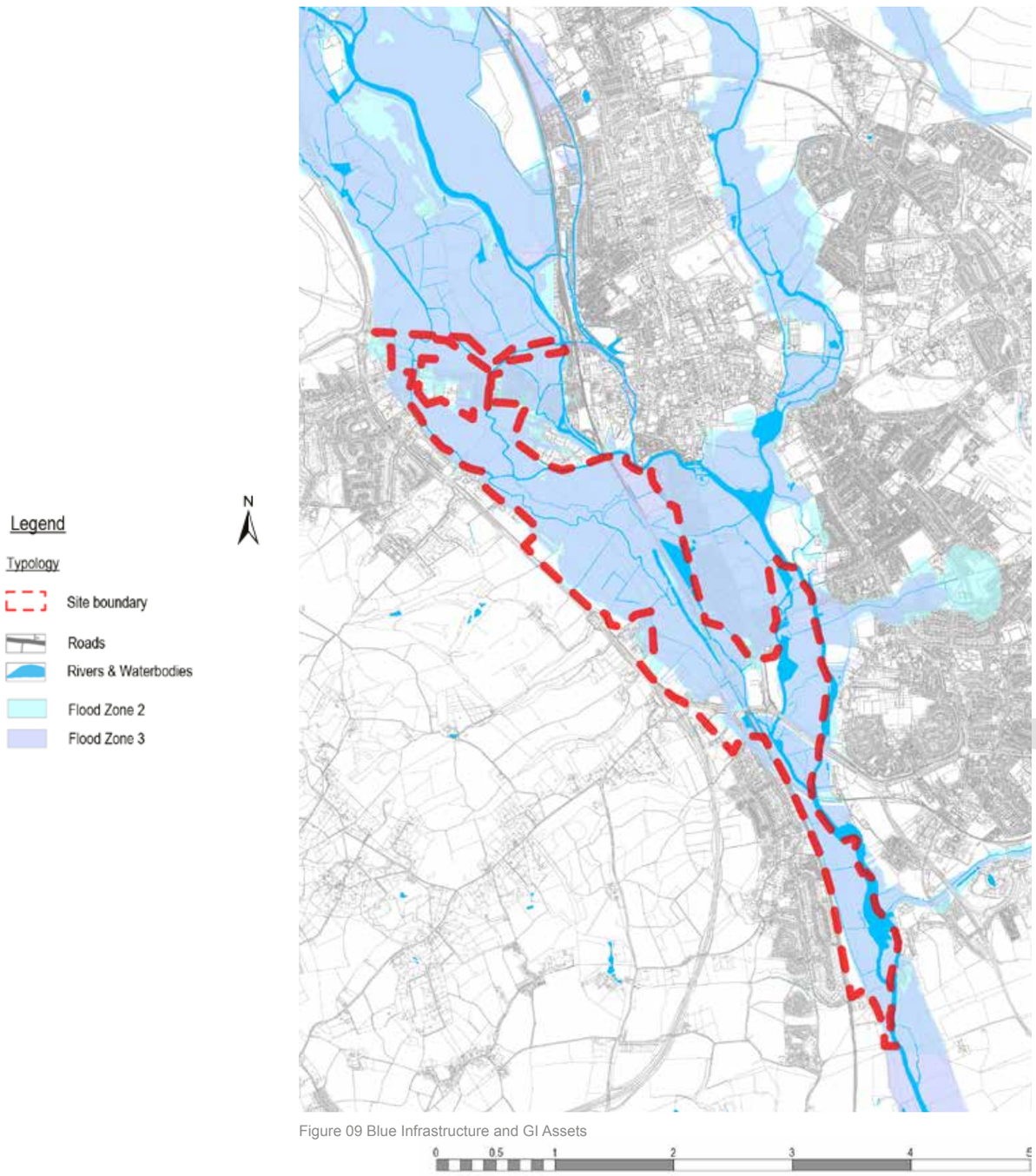


Figure 09 Blue Infrastructure and GI Assets

fragment of the Grandpont remains, protected as a Scheduled Monument to the north east of the study area.

2.6.0.9 The historic crossing of the Old Abingdon Road is likely to have been an extension of a this Norman causeway and is also a Scheduled Monument. Designated site, with the culverts being the scheduled features.

2.6.0.10 The historic settlement of Kennington lies directly to the south of the A423 (Southern Bypass). The rest of the southern part of the study area comprises open flood meadows with a series of mills, locks and weirs down to Sandford Village,.The name apparently originating from the 'Sandy Ford' that is recorded here in the Middle Ages on the site of the later ferry below Sandford Lock. There are onlyl a few Listed Buildings in this southern part of the study area.

2.6.0.11 The Watching Brief took evidence from 140 trial pits. There were no archaeological features or finds of significance, apart from occasional sherds of medieval and post-medieval pottery from the floodplain meadows between North and South Hinksey. The scheme will not otherwise affect any known areas of high archaeological

2.6.0.12 The area is still however of uncertain archaeological potential, with known areas of historic and archaeological activity to the west and east situated on the adjacent higher ground.

2.7 EXISTING BLUE INFRASTRUCTURE AND FLOOD RISK

2.7.0.1 Figure 09 illustrates the areas of Flood risk within and around the Oxford FAS area, which is medium in Flood zone 2 and high in Flood zone 3. It also shows that it is well served by existing blue infrastructure both within and in close proximity to its boundaries. Both the River Thames through the study area and the River Cherwell in the vicinity of Oxford (just outside the study area) are used extensively for recreational river transport such as rowing, canoeing and punting. Navigation of the Cherwell has been unregulated but unpowered craft have a right of navigation.

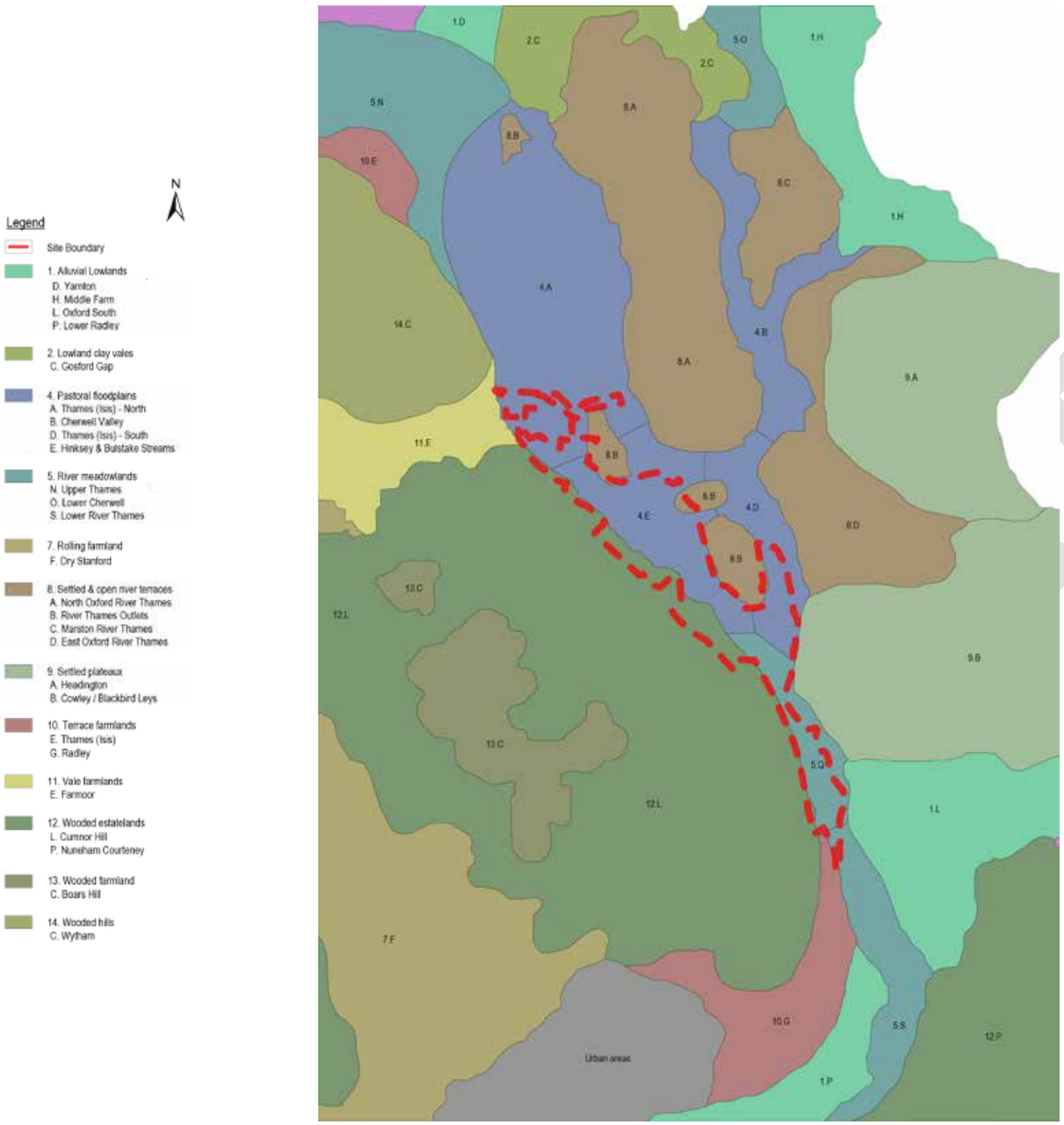


Figure 10 Landscape Character Areas.
Source; ENPLAN OFRMS Landscape Character Report 2009 - fig.15

2.7.0.2 A statutory right of navigation exists not only on the River Thames itself, but also on the following small braided watercourses within the floodplain in the study area:

- Seacourt Stream
- Castle Mill Stream (where it rejoins the River Thames downstream of Osney Lock)
- Bulstake Stream (which splits into the Osney & Botley Streams which both re-join the River Thames at Osney Lock)
- Weirs Mill Stream (from Long Bridges just upstream of Donnington Bridge to where it re-joins the River Thames)

2.7.0.3 Other non-navigable watercourses within the study area still form essential links for wildlife and habitat continuity including:

- Hinksey Stream
- Hogacre Ditch

2.7.0.4 The low lying agricultural floodplain, dissected by intertwining streams in the west of the study area and the more formal Thames riverside lined with mature trees with views to historic colleges in the east are all part of the landscape character of Oxford.

2.8 LANDSCAPE CHARACTER ASSESSMENT AREAS

2.8.0.1 There are a number of existing and overlapping Landscape Character Assessments (LCA) which cover the study area. The Oxford Flood Risk Management Strategy (OFRMS) Landscape Character Report 2009, reviewed and validated all of the already published landscape character types and areas.

2.8.0.2 The OFRMS is based on an assessment of the validity of the Oxford City Council 'A Character Assessment of Oxford City in its Landscape Setting' (OLS) March 2002. OLS and The 'Oxfordshire Wildlife and

Landscape Study' (OWLS) by Oxfordshire County Council, English Nature, the Countryside Agency and the Northmoor Trust in 2004. These two landscape character assessments are the most relevant and recent studies and an amalgamation of their landscape types and character areas is shown on the extract (Figure 10) taken from Figure 15 the OFRMS Landscape Character Map.

2.8.0.3 Each of the landscape types identified in OWLS and OLS were assessed for compatibility with each other during field study work and where possible integrated. As an example - the differences between landscape types 'River Meadowlands' and 'Pastoral Floodplains' was noted and boundaries between them defined upon the OFRMS plan. The 'Pastoral Floodplains' Landscape Type was then further dissected, given the variety of character found around the edge of Oxford, into five areas with the help of the more detailed townscape assessment contained within the OLS.

2.8.0.4 Detailed Landscape Type Descriptions for Type 4 Pastoral Floodplains and Type 5 River Meadowlands are included below:

2.9 LANDSCAPE TYPE DESCRIPTIONS

2.9.1 LAND TYPE 4. PASTORAL FLOODPLAINS

2.9.1.1 Overview: Flat, wide alluvial floodplains of the rivers flowing between the prominenthills have long been used for pasture and hay crops and are part of the classic image of Oxford. The tranquil pastoral scene of open meadows with cattle grazing amongst the silhouettes of mature floodplain trees contrasts with the busy urban scenes whichoften lie adjacent. Boathouses, locks and pubs along the river are landmarks. Historic buildings and ancient groves are features. Allotments and land uses such as playing fields and large scale business/retail parks are often found in the floodplain landscapes. In landscape terms, the simple open green meadows expanses and open water allow long views and provide a dramatic contrast, both in colour and form, to the built core of Oxford.

Key characteristics:
- Historic commons and meadowlands
- Tranquil and pastoral landscape
- Areas of ancient wooded groves
- Expanses of open water allowing long views
- Proximity of meadow landscape to cityscape provides dramatic contrast
- Local Character Areas within this Landscape Type include:
- A. Thames (Isis) North D. Thames (Isis) South
- B. Cherwell Valley E. Hinksey and Bulstake Streams

Landscape Guidelines
- Maintain the open character and views across the floodplain
- Maintain the rural, pastoral character by resisting development
- Maintain opportunities for public access and enjoyment of this pastoral landscape
- Promote traditional management of meadowlands (pasture and hay cropping) and trees (pollarding of willows)
- Maintain historic continuity of land use of the water meadows and commons
- Conserve and enhance wildlife resource and wetland habitats

2.9.1 LAND TYPE 5. RIVER MEADOWLANDS

2.9.1.1 Overview: This landscape type covers the flood plains and valley floors of the rivers Cherwell, Thames, Evenlode, and Windrush. This is a linear riverine landscape witha flat, well-defined alluvial floodplain. It has pastoral character with meadows, wet and semi-improved pasture.

Key characteristics:
- Flat, low-lying topography with seasonally flooded alluvial floodplains.
- Meandering river channels.
- Grazing meadows and small fields of permanent pasture.
- Riparian character with strong pattern of riverside willows and tree lined ditches
- Sparsely settled with a few roads.
- Local Character Areas within this Landscape Type include:

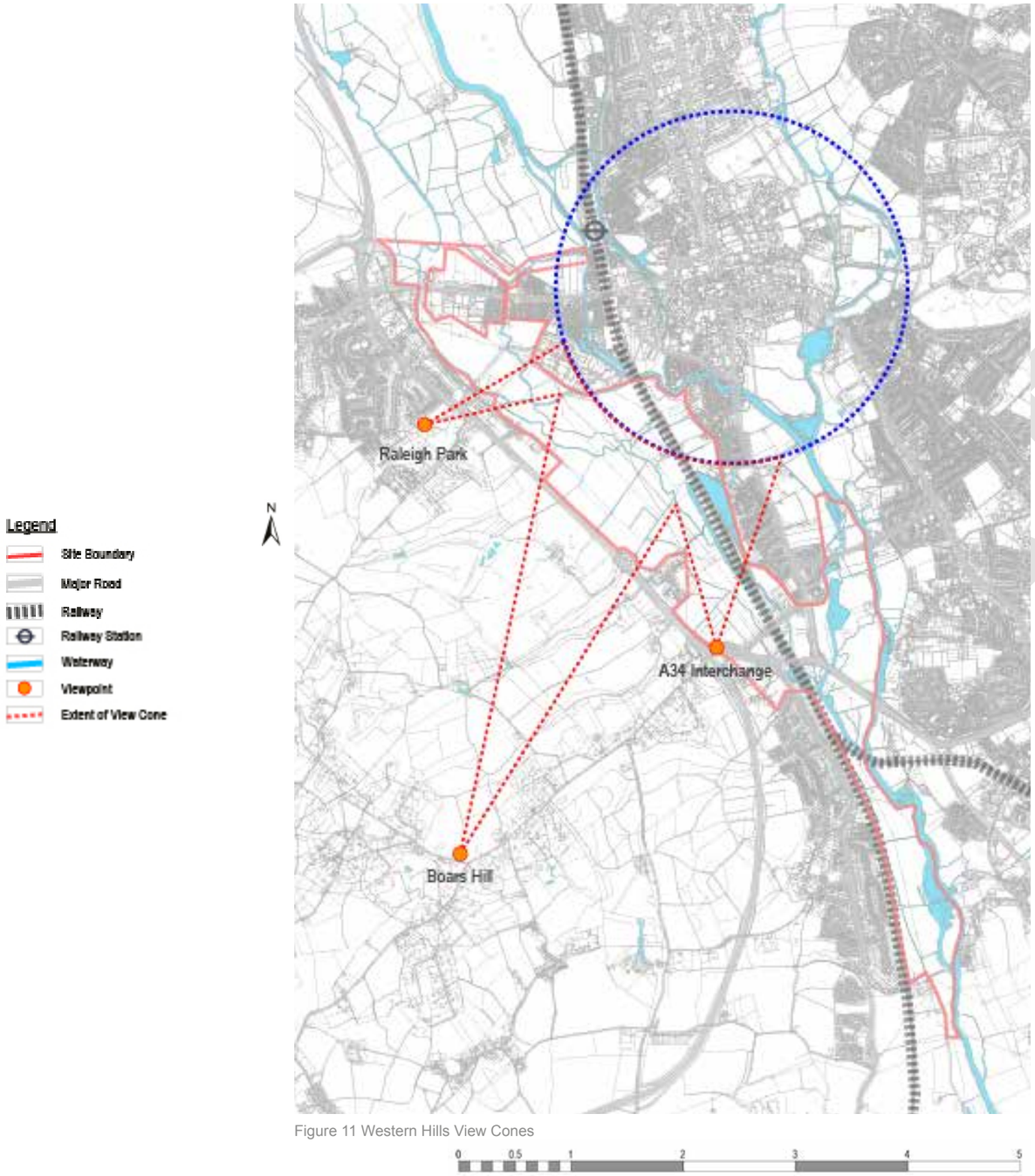


Figure 11 Western Hills View Cones

- L. Lower Windrush Valley N. Upper Thames
- O. Lower Cherwell S. Lower River Thames

Landscape Guidelines

- Conserve the surviving areas of permanent pasture and promote arable reversion to grassland particularly on land adjacent to rivers and other watercourses.
- Strengthen the field pattern by planting up gappy hedges using locally
- characteristic species such as hawthorn, and hedgerow trees such as oak and ash.
- Promote environmentally-sensitive maintenance of hedgerows, including coppicing and layering when necessary, to maintain a height and width appropriate to the landscape type.
- Enhance and strengthen the character of tree-lined rivers and other watercourses by planting willows and alders and, where appropriate, pollarding willows.
- Promote small-scale planting of deciduous woodland blocks using locally characteristic species such as willows and alders.
- Minimise the visual impact of intrusive land uses with the judicious planting of appropriate tree and shrub species characteristic of the landscape type.

2.9.1.2 In general the landscape character area of the Oxford FAS study area is one of floodplain meadow which can't be built on, therefore allowing access to rural open space close to Oxford city centre.

2.9.1.3 This rural meadow and watery setting with the backdrop of the Oxford skyline, has been much celebrated in art and literature such as the paintings by J.M.W. Turner (1775-1851) and William Turner (1789-1862), and the poet Matthew Arnold (1822-1888) who coined the phrase 'dreaming spires'.

2.9.1.4 VOWH and Oxford City Council in the Oxford Local Plan (2001-2016) and the Oxford Core Strategy 2026 have agreed a series of protected views or 'Oxford View Cones' around Oxford, some of which are from the high ground to the west of the city across from Wytham, Cumnor and Boar's Hill to the historic skyline of the city.

03

GI CONTEXT

3.1 GI ASSET TYPOLOGY

3.1.0.1 The classification of the study area's spaces into GI Asset 'typologies' was carried out through analysis of precedent studies in particular considering Oxford's green spaces based on 'Oxford City Council's Green Spaces Strategy 2013-2027' and reference to GI functions observed on site.

- Allotments
- Churchyards / Cemeteries
- Ecological Spaces
- Green Link
- Amenity Land / PRoWs
- Park – city > 10ha
- Park – Neighbourhood < 2ha
- Sports Ground
- Playgrounds
- Common Land
- Operational Land
- Square/garden

3.2 GI FUNCTIONS

3.2.0.1 These functions were determined through analysis of existing documents (including the GI Valuation Toolbox).

A. Provide safe and attractive links (cycling / walking routes to / between) residential areas, employment areas and Community facilities (schools and public transport nodes)

B. Provide opportunities for social interaction

C. Provide opportunities for physical health and well-being for all ages

D. Provide opportunities for mental health and well-being for all ages

E. Provide attractive places for living

F. Provide attractive places for working / studying

G. Provide attractive places for securing inward investment

H. Provide attractive places for recreation (open spaces, play facilities, cycling, walking and boating etc.)

I. Provide attractive places for tourism

J. Provide attractive places for increasing land / property values and demand

K. Reduce urban run-off and reduce flood risk (through increasing natural 'water storage' /infiltration capacity)

L. Urban cooling

M. Improve air quality

N. Carbon sequestration

O. Provide wildlife corridors (to help facilitate species migration caused by climate change)

P. Provide local food and energy production

Q. Provide a local environmental resource for education and skills development

R. Provide an attractive setting for townscape / cultural heritage assets

S. Provide habitat / ecological network of habitats

T. Additional Sustainable Urban Drainage Systems (SuDS) functionality: Provide multi-functional 'Blue / Green Infrastructure' areas (e.g. temporary flood storage on areas mainly used as public greenspace)

3.3 GI BENEFITS

3.3.0.1 The Green Infrastructure functions described above lead to tangible benefits.

3.3.0.2 Well designed, planned and managed Green Infrastructure can offer multi-functional approaches to achieving sustainable economic development and address genuine practical challenges.

3.3.0.3 These benefits include:

- Climate change mitigation and adoption
- Improving Health
- Economic growth and investment
- Recreation and education
- Enhancing biodiversity

3.4 HOW DO THESE FUNCTIONS AND BENEFITS TIE INTO THE OXFORD FAS?

3.4.0.1 These functions and benefits can also be shown to support the specific Oxford FAS scheme Environmental Objectives.

3.4.0.2 The distribution of different GI Assests listed in the Typology across the study area are shown on Figures 12 to 23. The mapping data has been sourced form the Oxford City Green Spaces Strategy 2013-2027 and relates the to GI Asset Typology categories shown in Table 01 in the Appendix.

3.4.0.3 This data for the Oxford City area is not available in equivalent detail for the VOWH which forms the most significant remaining section of the study area. VOWH produced a 'Green Infrastructure Audit' in February 2013 and intend to follow this up with a Green Infrastructure Strategy including detailed mapped data, but this has not as yet been commenced.

3.4.0.4 We have therefore used data on the location of green spaces, allotments, parks etc. within the VOWH boundary based on available data sets from magic.gov, NE, BBOWT which were used in the production of the Environmental Site Appraisal Plans for the Oxford FAS. Should further detailed data become available from VOWH this could be added to the Green Infrastructure Strategy at a later date.

3.4.0.5 The current GI functions and benefits for each GI asset shown on Figures 12 to 23 are set out in Table 01 in the Appendix and the potential additional GI functions and benefits that can be brought by the Oxford FAS are considered.

3.4.0.6 Figure 24 is taken from the Oxford City Green Spaces Strategy 2013-2027' and shows the Key Actions which are to be taken forward by Oxford City. The 'Improved Green Corridor' in particular relates directly to potential GI enhancement opportunites which could be proposed as part of the Oxford FAS.

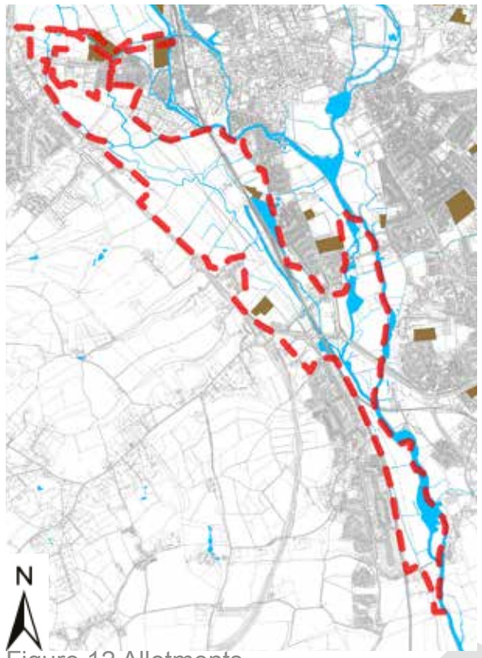


Figure 12 Allotments

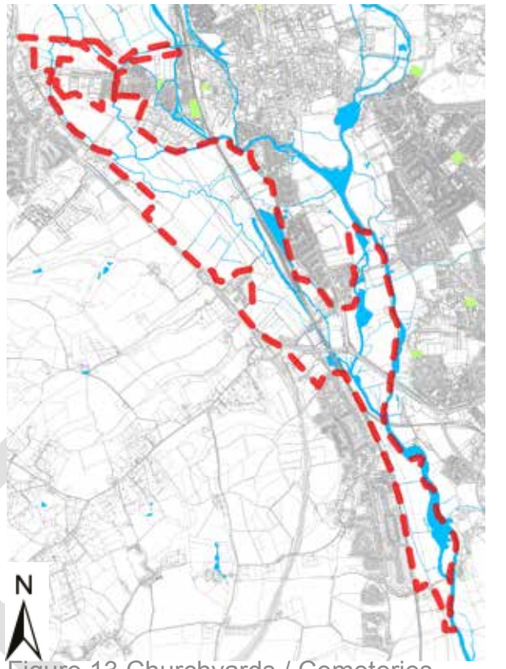


Figure 13 Churchyards / Cemeteries

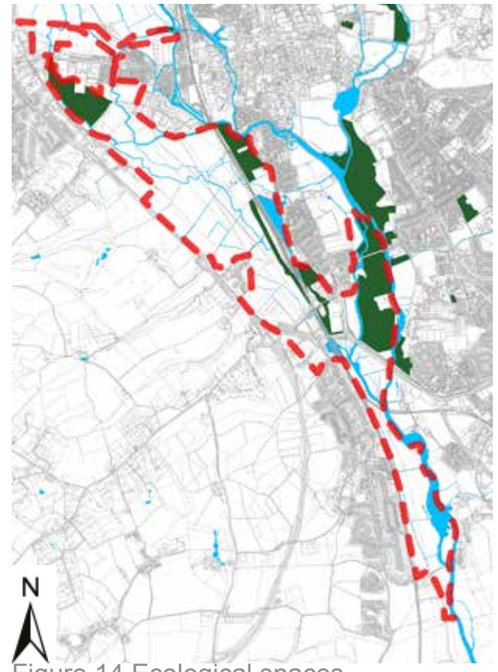


Figure 14 Ecological spaces

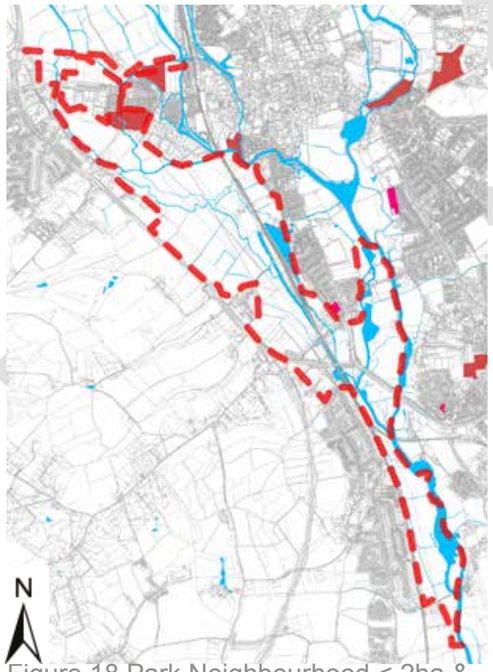


Figure 18 Park Neighbourhood < 2ha & Local 2 > 10ha

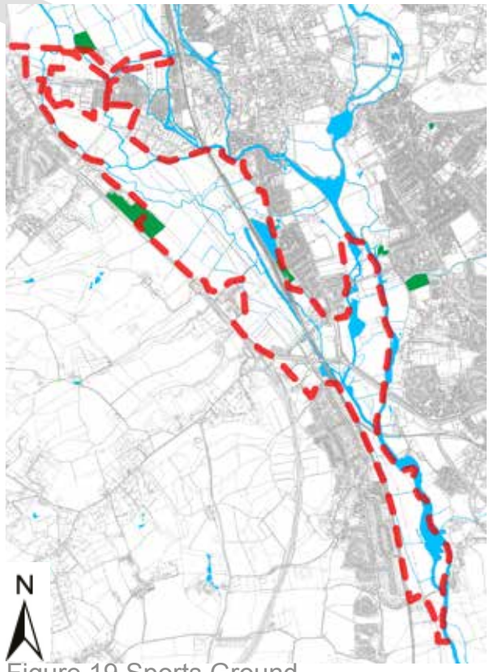


Figure 19 Sports Ground

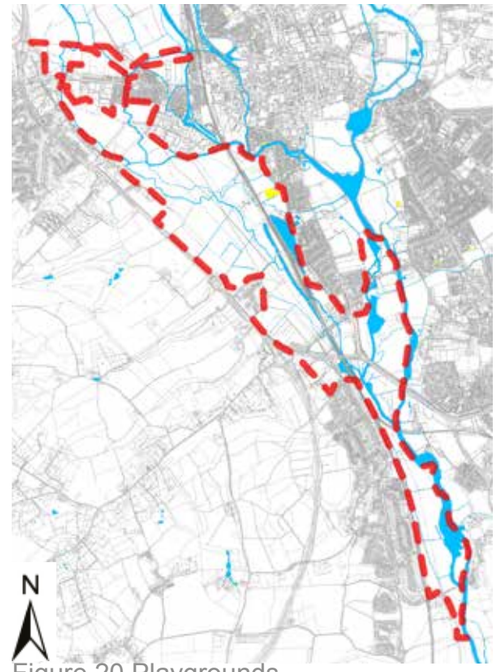


Figure 20 Playgrounds

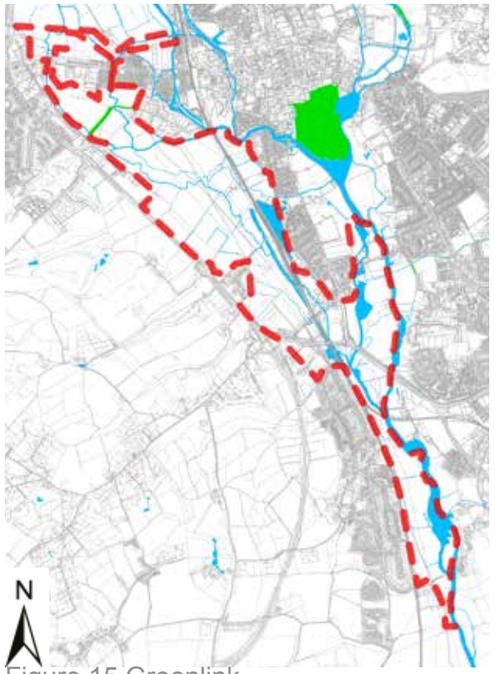


Figure 15 Greenlink

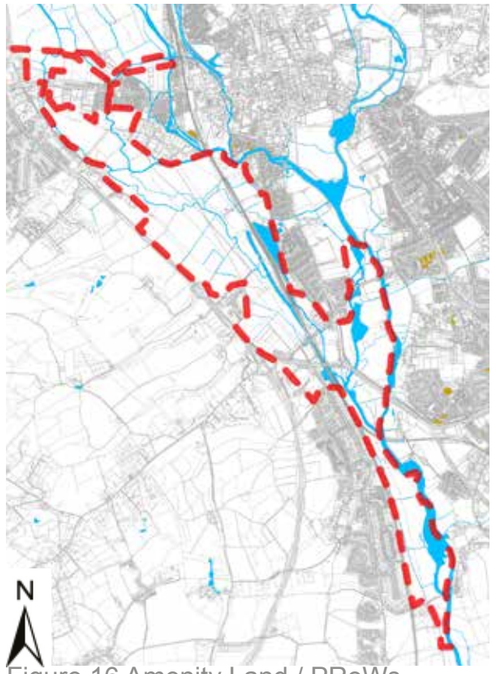


Figure 16 Amenity Land / PRoWs

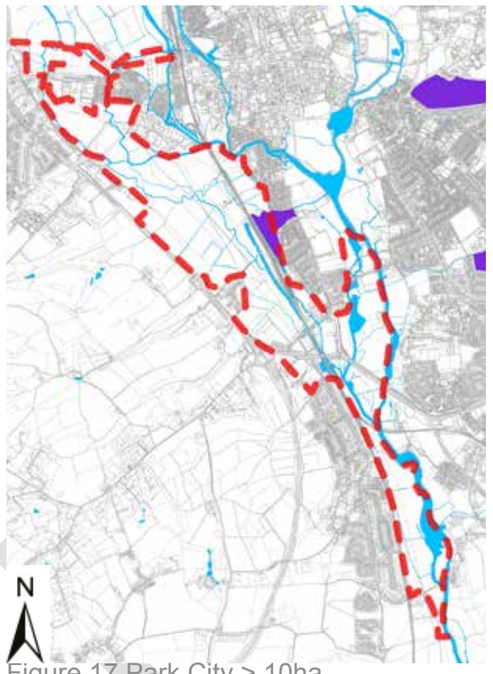


Figure 17 Park City > 10ha

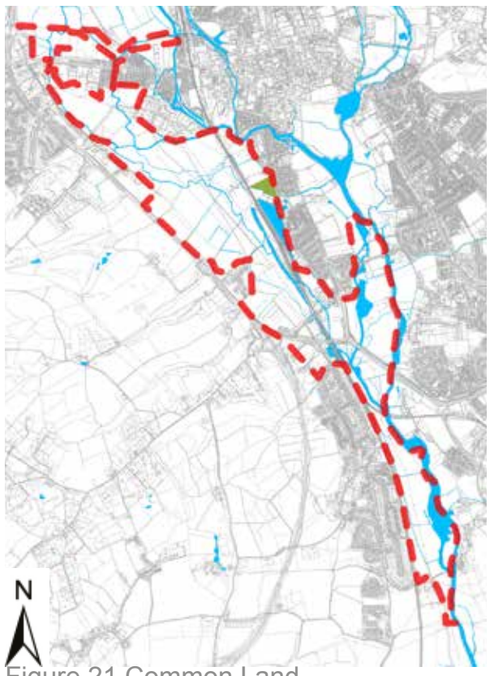


Figure 21 Common Land

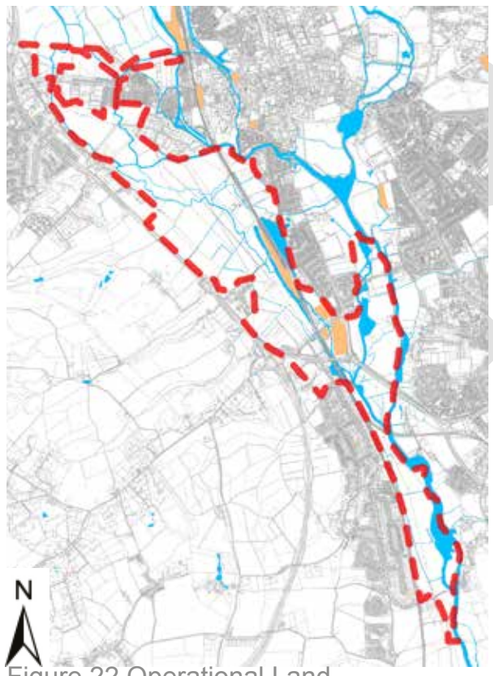


Figure 22 Operational Land

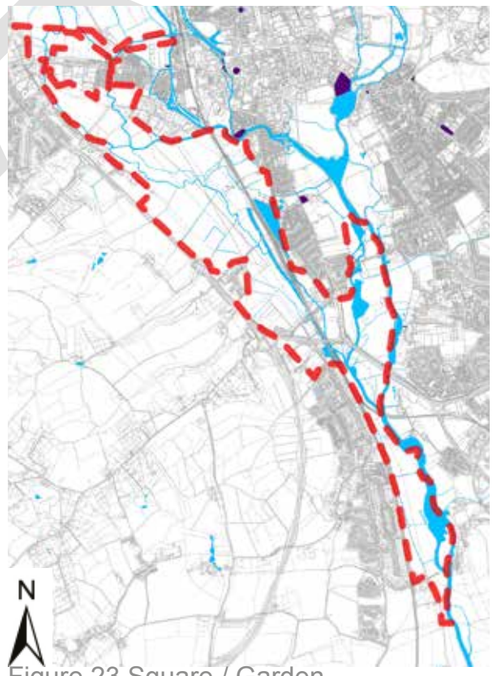


Figure 23 Square / Garden

04
ANALYSIS

4.1 POTENTIAL MULTI-FUNCTIONALITY

4.1.0.1 There is a high level of potential multi-functionality provided by the existing GI assets provide in the study area. With effective planning, design and management there is great capacity to increase multi-functionality across the study area by implementing environmental and recreational enhancement projects which will can be carried out as part of the Oxford FAS.

4.2 COMMITTED DEVELOPMENT ON EXISTING GREEN INFRASTRUCTURE

4.2.0.1 It will be key that important GI assets are preserved and enhanced within future development proposals adjacent to the study area through a well planned and managed GI network. For e.g. to ensure that cycle and pedestrian routes through the proposed development at Osney Mead tie into those new routes proposed as part of the Oxford FAS, allowing access to Botley Road and into the city through the new development.

4.2.0.2 The extent of GI will inevitably decrease further with future development. It is therefore essential that multi-functionality and quality is increased in order to maximise the potential of remaining GI assets.

4.3 SIGNIFICANT GI ASSETS OUTSIDE OF THE STUDY AREA BOUNDARY

4.3.0.1 There is potential to create and enhance a far-reaching GI network utilising the GI assets both within and beyond the study area boundary, with a range of parks and ecological spaces bordering the study area.

4.3.0.2 There is also the potential to further promote east-west links to formal and informal green space beyond the Oxford FAS study area boundary. This has the potential to encourage even wider sustainable routes for people but also the potential to create wildlife corridors between the study area and wider GI assets as shown on the Landscape Concept Plan Figure 25.

4.4 CREATING LINKS WITH EXISTING GI ASSETS - PEOPLE

4.4.0.1 Although there are good long distance PRoW such as The Thames Path and Sustrans cycle routes running north to south, there are areas of conflict for pedestrians/cyclists trying to cross the ring road and rail line particularly in the area around Redbridge in the centre of the study area. As part of the Oxford FAS there is potential to resolve some of these issues and strengthen links north-south to join areas of high recreational usage such as Port Meadow in the north with the Thames Path and the Sustrans route down to Sandford Lock in the south. This is in line with the 'Oxford City Green Spaces Strategy 2013 - 2027' for an 'Improved Green Corridor' north-south as shown on Figure 24.

4.4.0.2 The Oxford FAS study area has been shown to lack good pedestrian and cycle links in an east-west direction due to the need to cross a series of obstacles including the main rail line, A34 andring road network plus various watercourses running in a north-south direction. The main route currently runs from the city centre, along Willow Walk under the A34 and out west to Raleigh Park. Links from the city of Oxford out to the countryside in the west could be improved as part of the scheme, particularly from Hinksey Park across the railway line, out west to South Hinksey and the countryside beyond the A34.

4.4.0.3 The scheme area is well used by horse riders. Existing routes need to be retained and further routes could be developed as part of the scheme.

4.5 CREATING LINKS WITH EXISTING GI ASSETS - ECOLOGICAL

4.5.0.1 The study area has a strong existing network of ecological assets which have the potential to be strengthened and linked with green/ blue infrastructure.

4.5.0.2 Key habitats, such as floodplain meadows, ponds, scrapes and ditches will be retained wherever possible and extended where appropriate. Suggested areas of habitat opportunity include creation of lowland meadow, fen and reedbed throughout the scheme area.

4.5.0.3 The study area could benefit from enhanced ecological/habitat connectivity links for e.g. enhancing habitat links between Port Meadow, Hinksey Meadow and Kendal Copse Community Woodland to the west of the railway line and Iffley Meadow to Christchurch Meadow to the east. These two linkages are shown as 'Improved Green Corridors' and Key Actions for Oxford City on Figure 24.

4.5.0.4 There is potential to create new, well-managed informal greenspace, allowing greater access for the community into the Oxford FAS area.

4.6 HERITAGE AND GREEN INFRASTRUCTURE

4.6.0.1 The analysis shows that there are a substantial number of important archaeological and heritage sites as well as areas of high potential for undiscovered archaeology. GI located within these areas should reflect the qualities of their setting and the character of the city of Oxford and the landscape of the floodplain. A potential trail linking heritage assets in the study area could be set up with interpretation using web based technology to give their historical background and significance.

4.6.0.2 Views from the three view cone points to the west of the site looking directly over the study area could be enhanced as described in the 'Assessment of the Oxford Viewcones 2015' report. This could be linked in to the heritage asset trail and web based information given on Turner's views of Oxford and Matthew Arnold's poetry.

4.7 BLUE/GREEN INFRASTRUCTURE

4.7.0.1 The analysis shows that the study area benefits from a large number of GI assets in the study area, along with a further network of GI assets which lie outside of its boundary. Many of these assets currently or potentially provide good habitat. The study area is also well served by existing blue infrastructure both within and in close proximity to its boundaries.

4.7.0.2 The River Thames running through the study area and the River Cherwell to the east just outside of the study area has both a transport and recreational use. Some of the small, braided watercourses within the floodplain in the study area are also navigable, but all form essential links for wildlife and habitat continuity. There is significant potential to increase the extent of blue infrastructure with the creation of new navigable channels as part of the Oxford FAS as well as additional SUDs measures. The potential is there to create a large, extended network of high quality, multi-functional blue/green infrastructure.

4.7.0.3 Surrounding the city of Oxford there are numerous rivers and tributaries which are used for canoeing alongside other water based activities. There is potential to further enhance the existing recreational opportunities e.g. connecting the Oxford FAS scheme with navigable section of the Bulstake Stream and then into the River Thames or by the creation of new waterbodies as part of the scheme.

05 SUMMARY OF KEY FINDINGS

5.1 SUMMARY OF KEY FINDINGS FROM ANALYSIS

5.1.1 POTENTIAL TO INCREASE MULTI-FUNCTIONALITY IS HIGH

5.1.1.1. The analysis has shown that through the Oxford FAS, the potential to increase multi-functionality of existing GI is high which would help to balance the loss of GI as a result of future development elsewhere around Oxford. Additionally, areas of non-GI could be given GI functionality especially along the proposed route of the flood alleviation channel. Key routes created as a result of the scheme could provide green links joining up existing key habitats where there are currently gaps creating enhanced ecological/habitat connectivity.

5.1.1.2 For example, where work associated with the Oxford FAS are adjacent to areas of impermeable surfacing associated with the road or rail network planting could be incorporated and derelict land could be landscaped to provide multi-functional greenspace.

5.1.2 GOOD LONG DISTANCE LINKS, BUT LACK OF CONNECTIONS NORTH-SOUTH, EAST-WEST

5.1.2.1 Providing good walking and cycling routes is a key to sustainability. If GI accompanies these routes, it can provide a safe and pleasant environment and promote use. Promoting such connections is seen as key to the Oxford FAS and it is essential to ensure that new and existing development is well linked.

5.1.2.2 The study area could benefit from enhanced north-south recreational/PRoW links eg. between Port Meadow, Hinksey Park and Sandford via the existing Thames Path and Sustrans route. There is also potential to create further strong east-west links eg. between Hinksey Park and South Hinksey village and west to the countryside beyond in the Chilswell Valley, linking to the wider GI assets located outside of the study area boundary.

5.1.2.3 There are a significant number of GI assets located along or adjoining these links which have the potential to enhance the routes.

5.1.3 LANDSCAPE/HERITAGE SETTING

5.1.3.1 The incorporation of existing archaeological and heritage sites is key and there is further potential to enhance their settings as part of the Oxford FAS. New archaeology may be uncovered as part of the scheme allowing greater interpretation e.g. at Old Abingdon Road Scheduled Monument.

5.1.3.2 GI located within these areas should reflect the qualities of their setting and the character of the city of Oxford and the landscape of the floodplain.

5.1.4 BLUE/GREEN INFRASTRUCTURE

5.1.4.1 Flood alleviation measures such as new channels or bunds not only alleviate flooding issues but, if designed well, could also create a multi-functional GI asset.

5.1.4.2 Opporunitites for increased water based recreation such as canoeing and fishing can be developed as well as creating new recreational links in the GI network within and around the study area.

5.2 GI STUDY OBJECTIVES

5.2.0.1 Objectives for the Green Infrastructure Study are set out below under their key themes:

- Protect existing GI assets in the Oxford FAS study area
- Enhance existing GI assets in the area
- Create new GI assets in the area
- Link existing and new GI assets to create a GI network
- Enhance links to GI assets outside the Oxford FAS study area.
- Create a functioning GI network of spaces and routes directly linked to the Oxford FAS
- Concentrate GI efforts to maximise natural assets and value related to the Oxford FAS
- Create accessible and attractive green spaces connected to the Oxford FAS
- Target spaces to increase biodiversity connected to the Oxford FAS
- Allow for compensation spaces for all natural assets lost as part of Oxford FAS interventions
- Include protection and conservation measures for designated sites and spaces, including heritage, ecological and landscape assets
- Encourage community engagement and activity with the Oxford FAS through GI led initiatives e.g community allotments, wildlife sites etc.

5.3 GI FRAMEWORK TARGETS

5.3.0.1 There are opportunities to provide additional recreational benefits and to enhance wildlife habitats as a result of creating a flood relief channel. Some typical GI Targets are listed below and examples/case studies shown on the next pages. Their exact proposed location will be determined as part of the masterplanning process, but we have indicated potential areas for enhancements on our Concept Plan Figure 25.

- 1 - Improved cycleway/pedestrian routes - N-S and E-W e.g. connecting North Hinksey Village and Hinksey Park.
- 2 - Habitat creation - Lowland Meadow, fen and reedbed.
- 3 - Improved setting of Heritage Assets - including interpretation for Old Abingdon Road Scheduled Monument and potential trail linking heritage assets in study area.
- 4 - Enhance allotments.
- 5 - Blue infrastructure - flood alleviation with additional opportunites for water based recreation e.g. canoeing.
- 6 - Horse riding - opportunities for additional routes.
- 7 - Increased access to river banks for fishing and recreation.
- 8 - Preserve exisitng protected viewcones across the study area as well as potential enhancements through the removal or screening of intrusive features.

5.3.0.2 These GI study targets will feed into the detailed Environmental Objectives for the Oxford FAS.

05 SUMMARY OF KEY FINDINGS

IMPROVED CYCLEWAY/PEDESTRIAN ROUTES

HABITAT CREATION - LOWLAND MEADOW, FEN AND REEDBED

IMPROVED SETTING OF HERITAGE ASSETS - INTERPRETATION FOR OLD ABINGDON ROAD SCHEDULED MONUMENT AND TRAIL LINKING HERITAGE ASSETS

ENHANCE ALLOTMENTS

BLUE INFRASTRUCTURE - FLOOD ALLEVIATION AND OPPORTUNITIES FOR WATER BASED RECREATION

HORSE RIDING - OPPORTUNITIES FOR ADDITIONAL ROUTES

INCREASED ACCESS TO RIVER BANKS FOR FISHING AND RECREATION

PRESERVE AND ENHANCE EXISITING PROTECTED VIEWCONES

06

GI FRAMEWORK CONCEPT MASTERPLAN

6.1 HOW DO WE GET FROM THE ANALYSIS TO THE CONCEPT PLAN?

6.1.1 THE CONCEPT PLAN

6.1.1.1 Figure 25 presents the Concept Plan for the Oxford FAS. The objective is to draw together all the key points and issues discussed in the previous sections and considers the existing and potential GI Assets along with connected routes. The Concept Plan illustrates how these have been developed into a Green Infrastructure Strategy for the study area and a series of projects identified, which can only be executed as part of the Oxford FAS. The GIS will form the template for the more detailed Landscape Masterplan at the next stage of design.

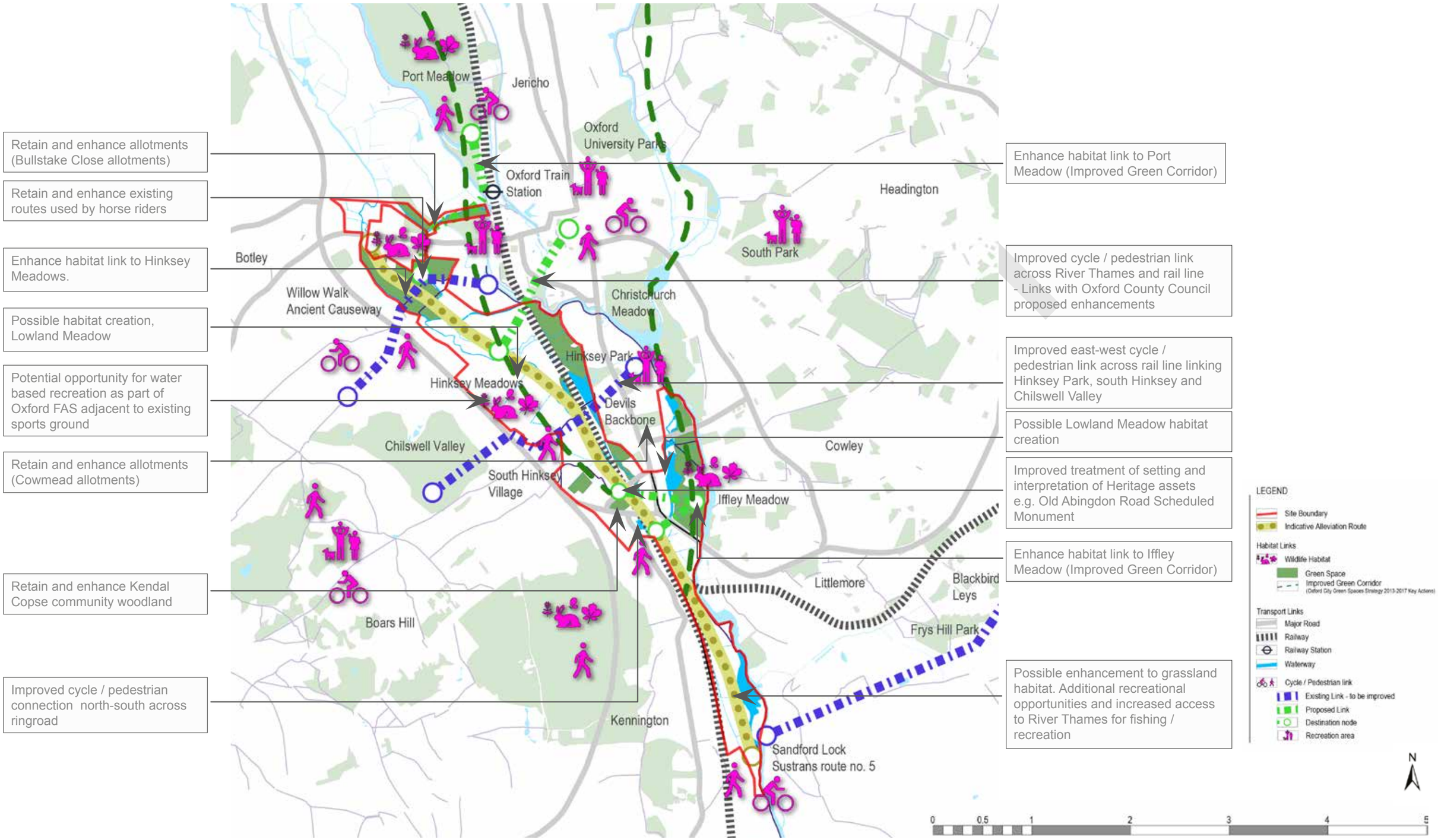


Figure 25 Concept Plan

07

APPENDIX

APPENDIX CURRENT AND POTENTIAL GI ASSETS, FUNCTION AND BENEFITS

GI Asset	Current GI Functions	Benefit	Potential additional GI Functions	Potential Additional Benefits
Allotments (e.g. South Hinksey)	Provide opportunities for social interaction (B) Provide opportunities for physical health and well being for all ages (C) Provide opportunities for mental health and well being for all ages (D) Reduce urban run-off and reduce flood risk (K) Urban cooling (L) Provide local food and energy production (P)	Improving health. Climate change mitigation and adaptation	Provide attractive places for recreation (H) Improve air quality (M) Carbon sequestration (N) Provide wildlife corridors (O) Provide habitat/ecological network of habitats (S) Enhancements possible to periphery of allotments. Would result in small loss to allotment area in exchange for areas of benefit to habitat. Potential educational resource for users. Possible allocation of additional areas of council land for allotment resulting from FAS.	Providing recreational and educational opportunities. Enhancing biodiversity.
Churchyards/ Cemeteries	Reduce urban run-off and reduce flood risk (K) Urban cooling (L) Provide wildlife corridors (O) Provide habitat/ecological network of habitats (S)	Climate change mitigation and adaptation Providing recreational and educational opportunities. Enhancing biodiversity.	n/a	n/a

Table 01 - GI Asset Typology

GI Asset	Current GI Functions	Benefit	Potential additional GI Functions	Potential Additional Benefits
Ecological Spaces (e.g. Hinksey and Iffley Meadows)	Provide opportunities for physical health and well being for all ages (C) Provide opportunities for mental health and well being for all ages (D) Provide attractive places for living (E). Provide attractive places for working / studying (F). Provide attractive places for increasing land / property values & demand (J) Reduce urban run-off and reduce flood risk (K) Urban cooling (L) Improve air quality (M) Carbon sequestration (N) Provide wildlife corridors (O) Provide an attractive setting for townscape / cultural heritage assets (R) Provide habitat (S)	Supporting growth and investment Climate change mitigation and adoption Improving health Enhancing biodiversity	Provide safe and attractive links (A) Provide attractive places for recreation (H) Provide attractive places for tourism Provide a local environmental resource for education and skills development (Q) Significant / degree of control over land vested with the council. Potential agreements with landowners such as Oxfordshire Preservation Trust (OPT) who own large areas within the scheme corridor. Enhance by ensuring existing habitats and species such as Snakeshead Fritilary are preserved. Improve access and encourage development of education opportunites and where designated such as SSSI in colaboration with Natural England.	Providing recreational and educational opportunities.
Green Link	As above	As above	As above	As above
Amenity Land/ PRoWs e.g. Thames Path and throughout study area	Reduce urban run-off and reduce flood risk (K) Urban cooling (L) Improve air quality (M) Provide an attractive setting for townscape / cultural heritage assets (R) Some AG assets provide: Provide attractive places for living (E). Provide attractive places for working / studying (F). Provide attractive places for increasing land / property values & demand (J) Carbon sequestration (N)	Supporting growth and Investment Climate change mitigation and adoption Improving health	Provide wildlife corridors (O) Provide local food & energy production (P) Provide habitat (S) Potentially also: Provide attractive places for securing inward investment (G) Provide additional SuDS functionality (U) Enhancements for habitat and recreation possible along length of PRoW with landowner agreement. Habitat creation along new PRoW where possible in the scheme corridor.	Providing recreational and educational opportunities. Enhancing Biodiversity

Table 01 - GI Asset Typology

GI Asset	Current GI Functions	Benefit	Potential additional GI Functions	Potential Additional Benefits
Park - city >10ha e.g. Hinksey Park	Provide safe & attractive links to / between community facilities etc. (A) Provide opportunities for social interaction (B). Provide opportunities for physical health & well-being for all ages (C). Provide opportunities for mental health & well-being for all ages (D). Provide attractive places for living (E). Provide attractive places for working / studying (F). Provide attractive places & routes for recreation (H) Provide attractive places for increasing land / property values & demand (J) Reduce urban run-off and reduce flood risk (K) Urban cooling (L) Improve air quality (M) Provide an attractive setting for townscape / cultural heritage assets (R) Provide attractive places for tourism (I)	Supporting growth and investment Improving health. Climate change mitigation and adaptation. Providing recreational and educational opportunities.	Provide attractive places for securing inward investment (G) Provide attractive places for tourism (I) Provide local food & energy production (P) Provide additional SuDS functionality (T) Enhancements for habitat and recreation possible within park and along length of potential improved cycle and pedestrian links to wider countryside.	Enhancing Biodiversity
Park - neighbourhood <2ha	As above	As above	As above	As above
Sports Ground e.g. Oxford Rugby Football Club in North Hinksey	Provide opportunities for social interaction (B) Provide opportunities for physical health & well-being for all ages (C) Provide opportunities for mental health & well-being for all ages (D) Provide attractive places for recreation (open spaces, play facilities, cycling, walking & boating etc.) (H) Reduce urban run-off and reduce flood risk (through increasing natural 'water storage' / infiltration capacity) (K) Urban cooling (L)	Improving health. Climate change mitigation and adaptation. Providing recreational and educational opportunities.	Provide wildlife corridors (to help facilitate species migration caused by climate change) (T) Provide a local environmental resource for education & skills development (R) Provide habitat / ecological network of habitats (T) Enhancements possible to periphery of sports grounds. Would result in small loss to recreational areas in exchange for areas of benefit to habitat. Potential educational resource for users. Potential enhancement of water based recreation through scheme corridor.	Enhancing Biodiversity

Table 01 - GI Asset Typology

GI Asset	Current GI Functions	Benefit	Potential additional GI Functions	Potential Additional Benefits
Playgrounds	Provide opportunities for social interaction (B) Provide opportunities for physical health & well-being for all ages (C) Provide opportunities for mental health & well-being for all ages (D) Provide attractive places for recreation (open spaces, play facilities, cycling, walking & boating etc.) (H) Reduce urban run-off and reduce flood risk (through increasing natural 'water storage' / infiltration capacity) (K) Urban cooling (L)	Improving health. Climate change mitigation and adaptation. Providing recreational and educational opportunities.	Provide wildlife corridors (to help facilitate species migration caused by climate change) (T) Provide a local environmental resource for education & skills development (R) Provide habitat / ecological network of habitats (T) Enhancements possible to periphery of playground. Would result in small loss to recreational areas in exchange for areas of benefit to habitat. Potential educational resource for users.	Enhancing Biodiversity
Common Land	Provide opportunities for social interaction (B) Provide opportunities for physical health & well-being for all ages (C) Provide opportunities for mental health & well-being for all ages (D) Provide attractive places for recreation (open spaces, play facilities, cycling, walking & boating etc.) (H) Reduce urban run-off and reduce flood risk (K) Urban cooling (L)	Improving health Climate change mitigation and adaptation. Providing recreational and educational opportunities.	Provide wildlife corridors (O) Provide habitat (S) Provide additional SuDS functionality (U)	n/a
Operational Land e.g Park and Ride and Network Rail Sidings	Reduce urban run-off and reduce flood risk (K) Provide habitat (S)	Climate change mitigation and adaptation. Enhancing Biodiversity	Urban cooling (L) Provide wildlife corridors (O) Enhancements possible to periphery of operational land. Negotiations required with Oxford City Council and Network Rail over delivery.	n/a
Square/garden	Provide opportunities for social interaction (B) Provide attractive places for living (E)	Improving health Climate change mitigation and adaptation	Provide opportunities for mental health & well-being for all ages (D) Provide attractive places for increasing land / property values & demand (J) No control over this typology	Supporting growth and investment

Table 01 - GI Asset Typology

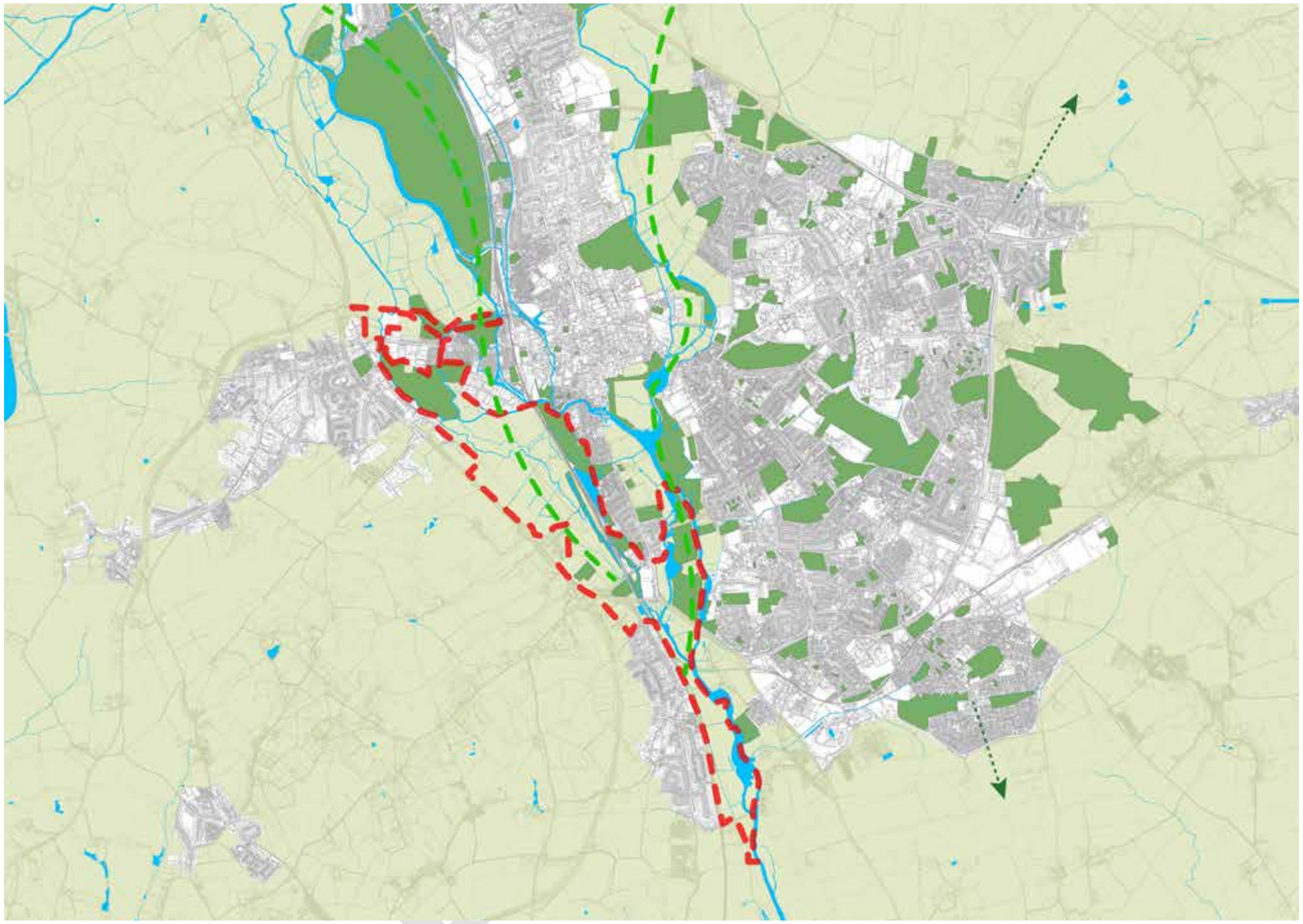


Figure 24 Oxford City Green Spaces Strategy (2013-2017) - Key Actions

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Environment Agency

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00	08.09.2015	JL	MH/CM	DRAFT		
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