



London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

London Borough of Hounslow

Green and Blue Infrastructure Strategy London Borough of Hounslow

Project Number
11210

BOSKYTREES



Version	Status	Prepared	Checked	Approved	Date
1.	Draft Report (Chapters 1-12)	H Liddle R Hammonds S Crewe	S Crewe	Draft	23.12.2020
2.	Draft Final Report	R Hammonds	S Crewe	Draft	22.01.2021
3.	Draft Final Report	R Hammonds	S Crewe	M Parkhill	06.05.2021
4.	Final Report	S Crewe	S Crewe	M Parkhill	11.10.2021

Contents

Chapter 1		Hounslow's communities	23	Chapter 7		Chapter 11	
Introduction	1	Health and wellbeing	27	Theme 2: Nature Recovery	68	Theme 6: Historic Landscapes and Built Heritage	130
Defining Green and Blue Infrastructure	1	Housing growth and infrastructure	36	Exploring the assets	68	Exploring the assets	130
A Green Recovery: the need for a Green and Blue Infrastructure Strategy	3	Economic growth and Green Recovery	39	Key considerations	72	Key considerations	133
Structure of the report	4	The climate emergency and environment	40	Key opportunities	77	Key opportunities	135
Approach to the strategy	6	Biodiversity	44				
		Chapter 5		Chapter 8		Chapter 12	
		Developing a Framework and Vision for Green and Blue Infrastructure in Hounslow	47	Theme 3: Access and Connectivity	86	Hounslow's Strategic Opportunities and Priorities	139
		Consultation and community engagement	47	Exploring the assets	87	Strategic Opportunities and Priority Areas	139
		Vision	48	Key considerations	90	Strategic Programmes	139
		A 'themed' approach	48	Key opportunities	93	1 - Re-wilding Hounslow's Rivers	140
						2 - Restoring and connecting Hounslow's historic landscapes	141
Chapter 2				Chapter 9		3 - Strategic riverside routes	142
Policy and Strategic Context	7			Theme 4: Urban Greening	99	4 - Breaking down barriers to people and wildlife	143
International Policy	8			Exploring the assets	99	5 - Cycle Hounslow	144
National Policy	9			Key considerations	103	6 - Greening the Grey	145
Regional Policy	10			Key opportunities	108	7 - Habitat creation in Hounslow's Green Belt and MOL	146
Local Policy	12					8 - Growing Hounslow	147
				Chapter 10		9 - Sports and recreation hubs	148
				Theme 5: Blue Infrastructure	118		
Chapter 3				Exploring the assets	118		
Benefits of Green and Blue Infrastructure	15			Key considerations	121		
Benefits of good quality Green and Blue Infrastructure	15			Key opportunities	125		
The value of GBI in Hounslow	19						
Chapter 4							
Drivers for Green and Blue Infrastructure in Hounslow	22						

Contents

Green and Blue Infrastructure Strategy
October 2021

Contents

10 - A tree for every child	149	Table 6.2: Seeds sown: A summary of the principal initiatives and projects identified for parks and open spaces	65	Table 13.1: Additional funding opportunities for both Council and community-led projects	156	Figure 4.4: Air quality (PM2.5) and tree coverage	32
11 – Destination Spaces	150	Table 7.1: Summary of SINCs within Hounslow	70	Table 13.2: Green and blue infrastructure aspirations to be realised through borough design guidance	160	Figure 4.5: Indices of Multiple Deprivation	33
12 – Achieving a Healthy Hounslow	151	Table 7.2: Broad correlation of BAP and priority habitat types recorded within Hounslow	71	Table 14.1: Examples of measurable standards relating to green and blue infrastructure	162	Figure 4.6: Indices of Multiple Deprivation – Living Environment	34
<hr/>							
Chapter 13							
Delivering the Strategy	153	Table 7.3: Seeds sown: A summary of the principal initiatives and projects identified for nature recovery	83	Table of Figures			
Funding	153	Table 8.1: Hounslow’s Priority Cycle Network routes	93	Figure 1.1: The components of green and blue infrastructure	2	Figure 4.7: Indices of Multiple Deprivation - Health	35
Partnership working	158	Table 8.2: Seeds sown: A summary of the principal initiatives and projects identified for access and connectivity	97	Figure 1.2: Navigating Hounslow’s approach to a green and resilient future	5	Figure 4.8: Planned growth and new transport infrastructure	38
Alternative governance	158	Table 9.1: Summary of priority tree planting types and locations	110	Figure 2.1: Structure of existing policy context	7	Figure 4.9: Fluvial and tidal flood risk	42
Design Guides and Codes	159	Table 9.2: Focus schools for air quality enhancements	111	Figure 2.2: International policy context	8	Figure 4.10: Surface water flood risk	43
Maintenance and stewardship	160	Table 9.3: Seeds sown: A summary of the principal initiatives and projects identified for urban greening	116	Figure 2.3: Structure of existing policy context	14	Figure 4.11: Access to nature	46
<hr/>							
Chapter 14		Table 10.1: Key watercourses in LB Hounslow	120	Figure 3.1: Benefits of GBI	16	Figure 5.1: Example of workshop outputs	49
Monitoring and Review	161	Table 10.2: Seeds sown: A summary of opportunities and projects identified for blue infrastructure	128	Figure 3.2: Value of GBI in Hounslow and London	20	Figure 5.2: Structure of GBI themes	50
<hr/>							
Appendix A		Table 11.1: Seeds sown: A summary of the principal initiatives and projects identified for Historic Landscapes and Built Heritage	137	Figure 4.1: Population density	25	Figure 6.1: Open space typologies in Hounslow	53
<hr/>							
Table of Tables				Figure 4.2: Percentage ethnic minority and open space access	26	Figure 6.2: Good Parks for London – overall scores	54
Table 2.1: International policy context	8			Figure 4.3: Air quality (PM2.5) and open space	31	Figure 6.3: Accessibility to play spaces	56
Table 2.2: National policy context	9					Figure 6.4: Accessibility to Green Flag Award sites	57
Table 2.3: Regional (London) policy context	10					Figure 6.5: Access to allotments	59
Table 2.4: Local policy context	12					Figure 6.6: Parks and Open Spaces Considerations	60
Table 6.1: Open space typologies in Hounslow	51					Figure 6.7: Parks and Open Spaces Opportunities	64
						Figure 7.1: Designated nature conservation sites	69

Contents

Figure 7.2: Notable and Priority Habitat Types	73	Figure 11.2: Built heritage features	132
Figure 7.3: Notable Habitat Types: Natural Forestry Inventory	74	Figure 11.3: Historic Landscapes and Built Heritage Considerations	134
Figure 7.4: Nature Recovery Considerations	76	Figure 11.4: Historic Landscapes and Built Heritage Opportunities	136
Figure 7.5: Pre-existing Strategic Habitat Opportunity Mapping	78	Figure 12.1: Green and Blue Infrastructure Strategic Programme Masterplan	152
Figure 7.6: Pre-existing Strategic Habitat Opportunity Mapping	79		
Figure 7.7: Nature Recovery Opportunities	82		
Figure 8.1: Access and connectivity assets	89		
Figure 8.2: Access and Connectivity Considerations	92		
Figure 8.3: Access and Connectivity Opportunities	96		
Figure 9.1: Tree canopy cover	102		
Figure 9.2: Access to private gardens and public open space	106		
Figure 9.3: Urban Greening Considerations	107		
Figure 9.4: Urban Greening Opportunities	115		
Figure 10.1: Blue Infrastructure assets	119		
Figure 10.2: Blue Infrastructure Considerations	124		
Figure 10.3: Blue Infrastructure Opportunities	127		
Figure 11.1: Historic landscapes	131		

Contents

Green and Blue Infrastructure Strategy
October 2021

Chapter 1

Introduction

1.1 Green and Blue Infrastructure (GBI) is well recognised as an essential component of resilient, healthy and sustainable communities. This document has been prepared to address the need to plan for GBI within Hounslow in a strategic, coordinated way.

1.2 London Borough of Hounslow (herein referred to as the 'Council') is currently working to address several global challenges at a local scale. This includes the climate emergency and significant health, social and economic crises as a result of Covid-19. LUC was commissioned by the Council to develop a GBI Strategy (herein referred to as the 'Strategy') for the borough in consultation with key stakeholders. The Strategy will help support a Green Recovery for Hounslow by providing a vision and framework for GBI in the borough. It establishes GBI as of equal importance to 'grey' infrastructure and the built environment and will help to bring consideration of GBI to the forefront of planning decisions in the borough.

1.3 This GBI Strategy has been prepared in collaboration with Community First Partnership (CFP) and Bosky Trees.

Defining Green and Blue Infrastructure

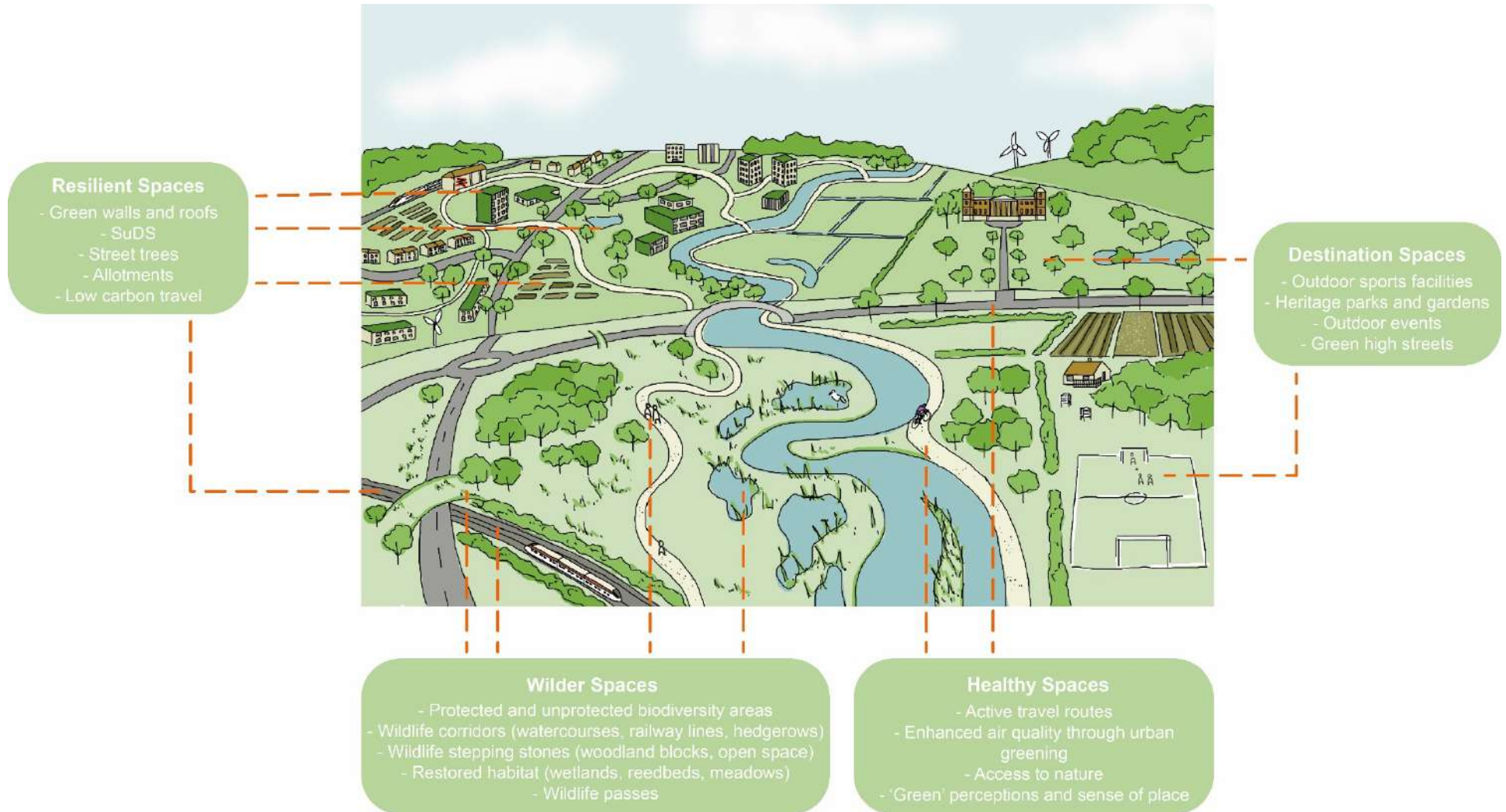
1.4 The National Planning Policy Framework (NPPF) 2021¹ defines Green Infrastructure as:

“A network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity.”

1.5 The various components of GBI are illustrated diagrammatically on **Figure 1.1**.

¹ Ministry of Housing, Communities and Local Government (2021). National Planning Policy Framework

Figure 1.1: The components of green and blue infrastructure



Chapter 1

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

1.6 National Planning Practice Guidance states that GBI may include:

'...parks, playing fields, other areas of open space, woodland, allotments, private gardens, sustainable drainage features, green roofs and walls, street trees and 'blue infrastructure' such as streams, ponds, canals and other water bodies.'

1.7 The London Plan² describes the 'green infrastructure approach'. This recognises the importance of those GBI assets which extend beyond the boundaries of parks and open spaces and make up an integrated 'network'. Recognition of the multi-functional nature of GBI is also of particular importance. When considering any given GBI asset, it is likely that several functions will be identified, and several benefits derived. A high-quality urban park will likely provide opportunities for informal recreation, support active travel, provide education opportunities, space for wildlife, reduce surface water run-off and mitigate against air pollution.

1.8 The definition of GBI within the London Environment Strategy³ outlines the key benefits. These are further explored in **Chapter 3**.

'London's green infrastructure... is planned, designed and managed to:

- Promote healthier living
- Lessen the impacts of climate change
- Improve air quality and water quality
- Encourage walking and cycling
- Store carbon
- Improve biodiversity and ecological resilience

A Green Recovery: the need for a Green and Blue Infrastructure Strategy

1.9 In January 2020, the Council's Cabinet approved the 'Greener Borough Framework'. The Greener Borough Framework is a strategy for coordinating efforts to address the climate

emergency and make the borough greener and more attractive. During June 2019 the Council had already joined many other local authorities in declaring a climate emergency. This declaration resulted in several pledges to help bring forward net-zero targets, including the production of a Climate Emergency Action Plan.⁴

1.10 In light of the particular challenges that the borough will face as a result of Covid-19, the Council is also developing a recovery programme. The recovery programme is overseen by the Recovery Programme Board, supported by four Taskforces (Economy and Regeneration; Community; Social and Wellbeing; and **Green Recovery**). The Green Recovery also provides an opportunity to deliver, at speed, many of the objectives of the Greener Borough Framework, whilst acting to address the climate emergency.

1.11 The GBI Strategy will support and help to deliver multiple and interconnected work streams and projects associated with the Greener Borough Framework, Green Recovery and climate emergency. The multifunctional and varied nature of GBI necessarily requires consideration of multiple work areas. The Strategy aims to address the need to bring together and 'signpost' towards key delivery partners and delivery documents in a coordinated way.

1.12 The key aims of the GBI Strategy are as follows:

- Identify and provide an assessment of the green and blue infrastructure network;
- Set out the key drivers and 'needs' for GBI in the borough;
- Identify areas of deficiency in terms of quality, value, quantity and accessibility;
- Identify priority areas and areas of opportunity. To include improvements to existing GBI and new GBI; and
- Set out mechanisms for delivery. To include priority projects, actions and partnership working.

1.13 The focus for future delivery of GBI in the borough will be to ensure benefits are provided where they are most needed. This includes identifying priority locations for:

- Improving health and wellbeing outcomes - *'Healthy Spaces'*;

² https://www.london.gov.uk/sites/default/files/intend_to_publish_-_clean.pdf

³ <https://www.london.gov.uk/what-we-do/environment/london-environment-strategy>

⁴ https://www.hounslow.gov.uk/info/20006/environment/2063/climate_emergency/2

- Climate adaptation – ‘Resilient Spaces’;
- Ecological improvements – ‘Wilder Spaces’; and
- Recreation, income generation and regeneration – ‘Destination Spaces’.

Structure of the report

1.14 The GBI Strategy is structured as follows:

Chapter 2: provides an overview of national, regional and local policy context for the Strategy.

Chapter 3: describes the benefits and value of GBI to Hounslow.

Chapter 4: explores the key drivers and need for GBI in Hounslow.

Chapter 5: sets out a framework and ‘Vision’ for GBI in the borough.

Chapter 6 to Chapter 11: explores the GBI ‘assets’ of the borough under several themes, as shown in **Table 1.1** below

Chapter 12: Identifies the opportunities and priorities for GBI in the borough.

Chapter 13 and Chapter 14: Set out requirements for delivering the strategy, monitoring and review.

Table 1.1 GBI ‘themes’ explored in Hounslow

	Parks and Open Spaces	Ensuring good access to high quality, multi-functional green spaces close to home
	Nature Recovery	Developing ecological resilience through bigger, better and more joined up habitat areas. Encouraging access to, and interaction with, nature.
	Access and Connectivity	Providing a network of green corridors across the borough. Facilitating active travel and working towards ‘15-minute neighbourhoods’.
	Urban Greening	Greening ‘grey’ infrastructure to adapt to a changing climate. Ensuring nature is available on people’s doorsteps throughout local neighbourhoods and town centres.
	Blue Infrastructure	Developing a resilient network of rivers, streams, ponds and wetlands for wildlife and people.
	Historic Landscapes and Built Heritage	Protecting and enhancing local character, heritage and improving Destination Spaces.

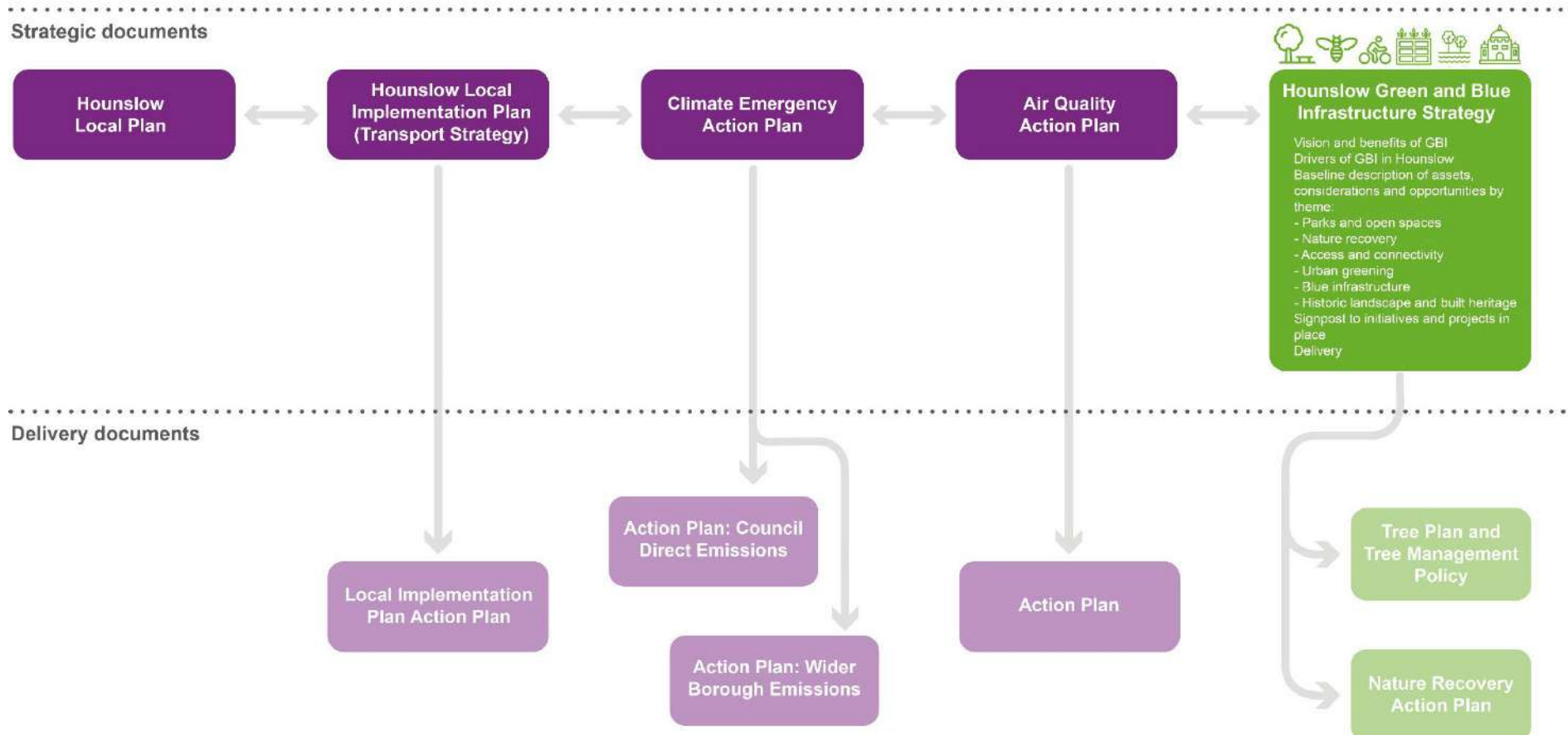
Relationship to other plans and strategies: Navigating Hounslow’s Approach to Delivering a Green and Resilient Future

1.15 The GBI Strategy has been prepared in a co-ordinated way alongside several related plans and delivery documents. Baseline information gathered as part of the preparation of these documents has been summarised and referred to within the GBI. The delivery documents include:

- Nature Recovery Action Plan; and
- Tree Management Policy.

1.16 Figure 1.2 illustrates how the GBI Strategy acts as an overarching approach to inform the three delivery documents, and how these relate to other key ‘sibling’ Council documents.

Figure 1.2: Navigating Hounslow’s approach to a green and resilient future



Approach to the strategy

1.17 The section below sets out the stages that were followed to develop the strategy.



Stage one: Policy and strategy review

1.18 Relevant national, regional and local policy documents and studies were collated and reviewed. This included a high level review of social, health, economic and environmental data for the borough. Key implications have been set out within the document and were taken forward as part of development of the strategy. This review provided the policy context for the Strategy and developed further understanding of the need for GBI in the borough.

Stage two: Data collation and review

1.19 Baseline spatial data was gathered from a wide range of sources and collated using Geographical Information Systems (GIS). This stage identified the distribution of the existing network, including qualitative data in some instances. Spatial socio-economic data and environmental data (e.g. flooding / air quality) has also been analysed to identify areas with most 'need' for GBI.

Stage three: Stakeholder engagement

1.20 A wide ranging programme of engagement and consultation has been undertaken to inform the strategy. Engagement has been via several platforms:

- An online survey which aimed to capture the views and aspirations of borough residents.
- Three online workshops:
 - Green infrastructure and tree workshop one (Council officers and partner organisations);

- Green infrastructure and tree workshop two (community reference groups); and
- Nature Recovery workshop (Council officers and partner organisations)

1.21 Partner organisations that have been engaged in the process include statutory consultees, NGOs, conservation organisations and local partnerships. Several Council officers and partner organisations were also via telephone conversation individually throughout the development of the strategy.

1.22 The consultation and engagement exercises generally sought to capture information on the following aspects:

- Where GBI is performing well or poorly;
- How the network is used and valued (including any barriers to access);
- Specific pressures on the network;
- Opportunities areas (specific sites or opportunities for partnerships); and
- Any current or planned initiatives in and around the borough.

1.23 Consultation findings are included throughout the strategy where relevant. Key outputs from the consultation exercises can be found in **Appendix A**.

Stage four: thematic analysis

1.24 A 'themed' approach was adopted to analyse the GBI assets across the borough. Key considerations relating to quality, management, issues and opportunities were also assessed. Potential partners and current initiatives relevant to each theme were also assessed.

Stage five: identification of strategic opportunities and priorities

1.25 Areas of deficiency and need were identified and further explored to set out strategic opportunities and priorities within each theme. This was then translated into action through the creation of strategic programmes, each containing a number of location-specific projects.

Stage six: options for delivery

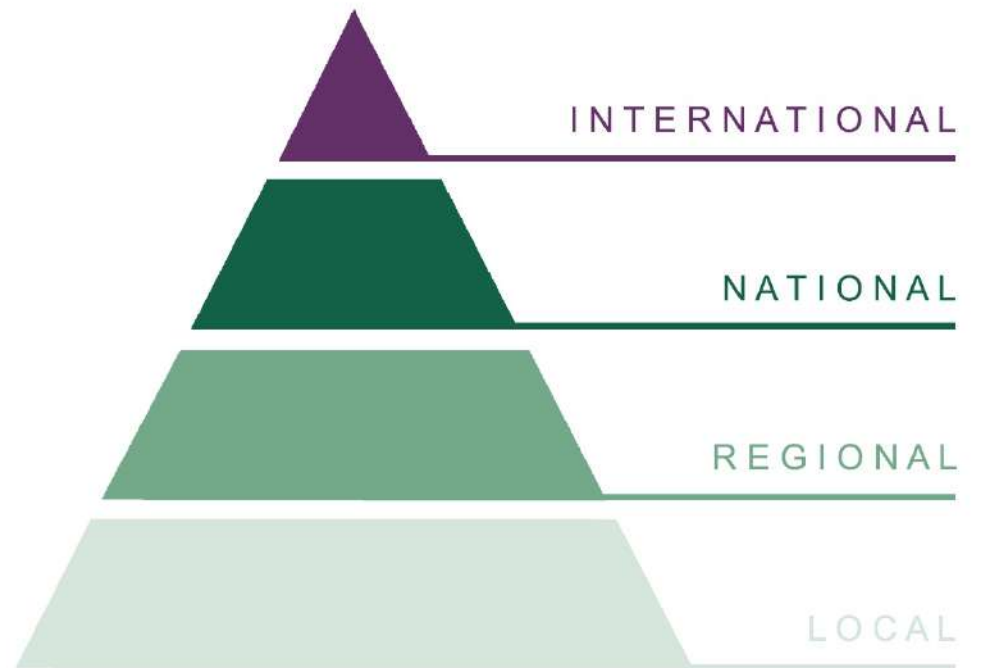
1.26 Further work was undertaken to develop outline actions and next steps. Funding, partnership working, monitoring and review were also explored.

Chapter 2

Policy and Strategic Context

2.1 The following section provides a summary of the relevance of international, national, London (regional) and local planning policy to GBI. **Figures 2.1-2.3** illustrate the structure of this existing policy context.

Figure 2.1: Structure of existing policy context



International Policy

Table 2.1: International policy context

Name of document	Relevance to GBI
EU Water Framework Directive ⁵	Includes an overarching target for all inland and coastal waters to meet 'good ecological status' at the latest by 2027.
The Birds Directive ⁶ Directive 2009/147/EC is a codified version of Directive 79/409/EEC as amended	States that the preservation, maintenance, and re-establishment of biotopes and habitats should include a range of measures. These include the creation of protected areas, the re-establishment of destroyed biotopes and the appropriate management of habitats both inside and outside protected zones.
The Habitats Directive ⁷ Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora	Promotes the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements. The document places an emphasis on the conservation of natural habitats and maintenance of landscape features of importance to wildlife and fauna.
International Convention on Biological Diversity ⁸	Demonstrates an international commitment to biodiversity conservation through national strategies and action plans.
European Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) ⁹	Aims to ensure conservation of species and their natural habitats, to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species).
UN Paris Climate Change Agreement ¹⁰	Establishes an international agreement aimed at ensuring the global temperature rise this century falls below 2°C (based on pre-industrial levels).

Figure 2.2: International policy context



⁵ European Commission (2000) *Water Framework Directive*

⁶ European Commission (2009) *The Birds Directive*

⁷ European Commission (1992) *The Habitats Directive*

⁸ United Nations (1992) *International Convention on Biological Diversity*

⁹ Council of Europe (1979) *European Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)*

¹⁰ United Nations (2015) *Paris Climate Change Agreement*

National Policy

National Planning Policy Framework (NPPF) (2021)¹¹

The NPPF provides the overarching rationale for the strategy, outlining how the network of existing and new GI assets should be strategically planned.

Paragraph 20 states that there should be 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. The document also highlights the duty to cooperate on strategic matters that cross administrative boundaries, including green infrastructure (Paragraphs 24-27).

The importance of open space provision is highlighted in Paragraphs 98 - 99, whilst Local Green Space designation requirements and the protection afforded to these spaces is addressed in Paragraphs 101 - 103. The NPPF also recognises the role GI plays in climate change (Paragraph 154), conserving and enhancing the natural environment (Paragraph 175) and historic environment (Paragraph 189) as well as for air quality (Paragraph 186).

Table 2.2: National policy context

Name of document	Relevance to GBI
<i>A Green Future: Our 25 Year Plan to Improve the Environment</i> ¹²	Outlines a vision to 'green our towns and cities by creating green infrastructure and planting one million urban trees'. The document supports the promotion of access to the natural environment and extension of wildlife corridors into towns and cities using GI networks. <i>Improved</i> provision of GI in new developments, upgrading existing GI and retrofitting new GI into areas of poor provision is also referenced.
	Demonstrates how the principles of 'Environmental Net Gain' will be embedded into housing and infrastructure developments, as well as the creation of 'Nature Recovery Areas' as a part of Ecological Networks.

Name of document	Relevance to GBI
<i>Environment Bill Summer Policy Statement</i> ¹³	When given royal assent, the Environment (Principles and Governance) Bill will give the 25 Year Environment Plan statutory status. The Bill mandates Biodiversity Net Gain (BNG), meaning developers will need to submit a biodiversity gain plan to the local planning authority. This includes intention to provide 'wider natural capital benefits, including flood protection, recreation and improved water and air quality'.
<i>Climate Change Act</i> ¹⁴	As the Act sets a carbon neutrality target by 2050, the Act includes carbon budgeting, trading schemes, waste reduction schemes. Schedule 4 requires an assessment of the risks the UK will face because of climate change to be prepared and how the UK aims to adapt.
<i>Flood and Water Management Act</i> ¹⁵	Schedule 3 of the act requires all new developments of over one dwelling to incorporate SuDS into their development plans. All SuDS must comply with National Standards, however local authorities are encouraged to take further guidance into account e.g. Natural Environment and Rural Communities Act and species of principle importance, to ensure SuDS perform multi-disciplinary functions.
<i>Planning Practice Guidance: Natural Environment</i> ¹⁶	Promotes the establishment of an evidence-based approach, including assessment of current provision, gaps in the network, opportunities for improvement and the need to address cross-boundary issues. Provides guidance on the delivery of GI, including infrastructure delivery plans, Community Infrastructure Levy (CIL) schedules, S106 obligations or Infrastructure Funding Statements.
<i>Natural Environment and Rural Communities Act</i> ¹⁷	Promotes the requirement for maintenance and enhancement of Priority Habitats and Species.
<i>Wildlife and Countryside Act</i> ¹⁸	States that LPAs must further the conservation and enhancement of the flora, fauna, geological or physiological features for which a SSSI is selected.

¹¹ Ministry of Housing, Communities & Local Government (2021) *National Planning Policy Framework*

¹² Her Majesty's Government (2018) *A Green Future: Our 25 Year Plan to Improve the Environment*

¹³ Her Majesty's Government (2019) *Environment Bill Summer Policy Statement*

¹⁴ Her Majesty's Government (2008) *Climate Change Act*

¹⁵ Her Majesty's Government (2010) *Flood and Water Management Act*

¹⁶ Ministry of Housing, Communities & Local Government (2016) *Planning Practice Guidance: Natural Environment*

¹⁷ Her Majesty's Government (2006) *Natural Environment and Rural Communities Act*

¹⁸ Her Majesty's Government (1981) *Wildlife and Countryside Act*

Name of document	Relevance to GBI
<i>National Design Guide</i> ¹⁹	The NPPF highlights the need for creating high quality buildings and places. The National Design Guide illustrates how to create well-designed places which are beautiful, healthy, greener, enduring and successful through the applications of ten characteristics.
<i>National Model Design Code</i> ²⁰	The Code provides detailed guidance on how design codes, guides and policies should be produced to promote successful design, expanding on the ten characteristics set out in the National Design Guide.

Regional Policy

The London Plan (2021)²¹

The new London Plan was published in March 2021 and forms the spatial development strategy for Greater London. The document sets out an integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years. Many of the principles within the new Plan are based upon the Mayor's Environment Strategy which sets out the ambitious commitments for London by 2050.

Policies G1-G9 highlight that boroughs should prepare their own green infrastructure strategies to act as an evidence base for development plans (Policy G1). The threat from development to biodiversity is addressed, with Policy G6 stating that development proposals are to be developed with habitat connectivity, sustainable access to habitat, and biodiversity at the start of the process, with the aim of achieving net biodiversity gain, reducing habitat severance and access deficiencies.

Policies GG2 and GG3 on planning London's future through good growth policies also promote the creation of new green infrastructure and urban greening, with improvements to access including planning sustainable travel options. The development of play and informal recreation strategies (Policy S4) and the regular assessment of the need for sports and recreation facilities at the local and sub-regional level (policy S5) are also included. The development of the network of waterways into an integrated accessible transport network with associated amenity and recreation benefits is promoted as part of Policies S13, S14, S16 and S17.

Table 2.3: Regional (London) policy context

Name of document	Relevance to GBI
The London Plan	Green infrastructure is fundamental to ensuring the delivery of the London's Good Growth objectives. These include <i>GG1: Building Strong and Inclusive Communities</i> , <i>GG2: Making the Best Use of Land</i> , <i>GG3: Creating a Healthy City</i> , <i>GG4: Delivering the Homes Londoners Need</i> , <i>GG5: Growing a Good Economy</i> and <i>GG6: Increasing Efficiency and Resilience</i> . The breadth of

¹⁹ Ministry of Housing, Communities & Local Government (2019) *National Design Guide*

²⁰ Ministry of Housing, Communities & Local Government (2021) *National Model Design Code*

²¹ Mayor of London (2021) *The London Plan: The Spatial Development Strategy for Greater London*

Chapter 2

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Name of document	Relevance to GBI
	green infrastructure and the myriad of functions it performs result in many relevant policies within the Plan.
All London Green Grid (ALGG) Supplementary Planning Guidance on Green Infrastructure and Open Environments ²²	Promotes the design and delivery of green infrastructure across London. It is comprised of three elements: the range of policies from the London Plan on green infrastructure, urban greening, open spaces, trees and woodland, river corridors and biodiversity; ALGG Supplementary Planning Guidance (SPG), and, eleven ALGG Area Frameworks. The ALGG SPG provides guidance on delivering GI to reflect the objectives and policies within the London Plan.
London Environment Strategy ²³	Establishes the approach to tackle the environmental challenges facing the city to ensure that in 2050 the potential of London's environment to support good health and quality of life and to make the city a better place to live, work and do business is realised. The Mayor's aim is for a London that is 'greener', 'cleaner' and 'ready for the future' with the ambitious commitment that <i>'London will be the world's first National Park City, where more than half of its area is green, where the natural environment is protected, and where the network of green infrastructure is managed to benefit all Londoners'</i> .
London Infrastructure Update 2050 Update ²⁴	Provides an overview of the city's infrastructure requirements and sets out how they will be met, including green infrastructure. The document describes how the Green Infrastructure Task Force will develop the evidence base to prove the many benefits of green infrastructure and will work to accelerate its delivery.
Natural Capital: Investing in GI for a Future London ²⁵	Aims to deliver an ambitious vision for GI and reframes its value in tackling issues of governance, management and funding for delivery. In terms of governance, it highlights how fragmentation results in much of the network being considered as a series of individual spaces with local, or at best borough-wide, objectives. There is a need to rectify this and think strategically across administrative boundaries. The report recommends that London Borough's should:

Name of document	Relevance to GBI
	<ul style="list-style-type: none"> ■ Ensure that the concept of green infrastructure is central to a placemaking agenda and properly represented within their placemaking teams. ■ Plan, design and manage the green infrastructure network to deliver strategic functions as well as local needs. ■ Support sub-regional green infrastructure partnerships. These partnerships should be funded by the Greater London Authority and match-funded by the boroughs. ■ Promote the benefits GI has for health and wellbeing to increase investment in future.

²² Mayor of London (2012) *Green Infrastructure and Open Environments: The All London Green Grid: Supplementary Planning Guidance*

²³ Mayor of London (2018) *London Environment Strategy*

²⁴ Mayor of London (2015) *London Infrastructure Plan 2050 Update*

²⁵ Green Infrastructure Task Force (2015) *Natural Capital: Investing in a Green Infrastructure for a Future London*

Chapter 2

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Local Policy

Climate Emergency Action Plan 2020-2030²⁶

The Council declared a climate emergency in June 2019. The Action Plan sets out the Council's response to the declaration with the focus of reducing the Council's own direct emissions to net zero by 2030. There are numerous programmes the Borough will implement to reach this goal, one of which is creating a greener and more resilient Hounslow. This programme will aim to develop and approve biodiversity and greening action plans throughout the Borough which will guide the development of additional green infrastructure.

Table 2.4: Local policy context

Name of document	Relevance to GBI
<u>Hounslow Local Plan</u> ²⁷	Comprises both strategic policies and site allocations, including nine green and blue infrastructure policies.
<u>Great West Corridor Local Plan Review</u> ²⁸	Hounslow's Local Plan commits the Council to conduct two partial area reviews to look in detail at local improvements, investment and development opportunities to provide much needed housing and jobs in Great West Corridor and West of Borough. The Local Plan review for the Great West Corridor sets out the Council's vision and plan for how the area will grow and develop over the next 15 years. This plan includes an environmental quality and open space component that aims to improve the 'overall greenness of the area.'
<u>West of Borough Local Plan Review</u> ²⁹	Like the Great West Corridor Local Plan Review, the West of Borough Local Plan stems from the Hounslow Local Plan agenda to conduct area reviews. This plan will shape the location and scale of development in this part of the Borough up to 2033. The Plan aims to protect and enhance the existing green

Name of document	Relevance to GBI
	infrastructure network, including the grid identified in the All London Green Grid SPG.
<u>Corporate Plan 2019 - 2024</u> ³⁰	Outlines the commitment of the Borough to ensure that residents and visitors see a clean and attractive borough, where Hounslow is a destination people want to visit, an appealing place to spend time in and a borough people are happy to call home. The Council recognise that the environment is crucial to achieving this.
<u>Future Borough Strategy 2018 - 2035</u> ³¹	Establishes a long-term vision to 2035 and develops collective priorities to 'future proof' the borough to the current challenges. The priorities are focused around three main themes: place, people and relationships. A focus of the strategy forms the retention of green and blue infrastructure to strengthen the area's sense of place.
<u>Stimulating a Green Recovery</u> ³²	The document provides a framework for a green recovery within the Borough, supported by ambitious plans for growth of sustainable green industry and local green economy infrastructure. Plans include the creation of a Green Enterprise Zone, Green Skills Academy as the implementation of a network of 'Low carbon neighbourhoods'.
<u>Air Quality Action Plan 2018 - 2033</u> ³³	The Council is committed to reducing the exposure of people in Hounslow to poor air quality in order to improve health. The main priorities of the plan are to provide sustainable transport, reduce peak-time congestion and exposure to harmful roadside pollutants and promote the installation of electric vehicle charging points. Specific actions include the provision of green space and infrastructure in new developments and enhancing green infrastructure for walking and cycling routes.
<u>Creating a Cleaner Borough</u> ³⁴	Establishes a plan to increase recycling, reduce fly tipping and improve the street scene (including maintenance of green spaces) across Hounslow to create a cleaner Borough.
<u>Greener Borough Framework</u> ³⁵	Guides all the activities around creating a more attractive, and environmentally sustainable borough. It sets out the plan to understand the citizens' needs, culture and customs; direct service change and improve delivery; and reset

²⁶ London Borough of Hounslow (2020) *Climate Emergency Action Plan*

²⁷ London Borough of Hounslow (2015) *Hounslow Local Plan (2015-2030)*

²⁸ London Borough of Hounslow (2019) *Great West Corridor Local Plan Review*

²⁹ London Borough of Hounslow (2019) *West of Borough Local Plan Review*

³⁰ London Borough of Hounslow (2019) *Corporate Plan*

³¹ London Borough of Hounslow (2018) *Future Borough Vision, Strategy and Action Plan*

³² London Borough of Hounslow (2021) *Stimulating a Green Recovery*

³³ London Borough of Hounslow (2018) *Air Quality Action Plan*

³⁴ London Borough of Hounslow (2019) *Creating a Cleaner Borough*

³⁵ London Borough of Hounslow (2020) *Greener Borough Framework*

Name of document	Relevance to GBI
	services around a collaborative focus of enabling citizens to join environmental action and reinforce social norms that tackle climate change. The report aims to deliver a high-quality environment and green infrastructure for the residents of the Borough. The plan will focus on greening the urban spaces so that there is an expansion of green infrastructure, planting more trees and carbon capturing plant life, expanding the number and size of wildflower sites and nature resources and other interventions.
Hounslow Infrastructure Delivery Plan ³⁶	Outlines the infrastructure that is necessary to support the growth of the Borough, deliverable within the Plan period, and complimentary to the vision set out by the Local Plan and the West of Borough and Great West Corridor Local Plan Reviews. Sectors included within the IDP include social infrastructure, physical infrastructure and green and blue infrastructure.
Joint Health Wellbeing Strategy ³⁷	The report aims to develop the buildings and infrastructure of the Borough to support health, this includes well planned green infrastructure.
Transport Strategy Third Local Implementation Plan ³⁸	Provides long term goals and transport objectives for the Borough for the next 22 years and the targets and outcomes the borough is seeking to achieve, beginning with a three-year programme of investment, including delivery proposals. The Plan identifies how the Borough will work towards achieving the Mayor's Transport Strategy goals, including healthy streets and healthy people, a good public transport experience and new homes and jobs.
Leisure and Culture Strategy 2016 - 2020 ³⁹	Outlines the Borough's high-level thinking on how best to re-shape leisure and culture services, taking into account the future needs of local residents and the need to deliver services with reducing budgets. This strategy also aims to provide green infrastructure that connects spaces through river corridors, wildlife corridors and other links, including cycling.

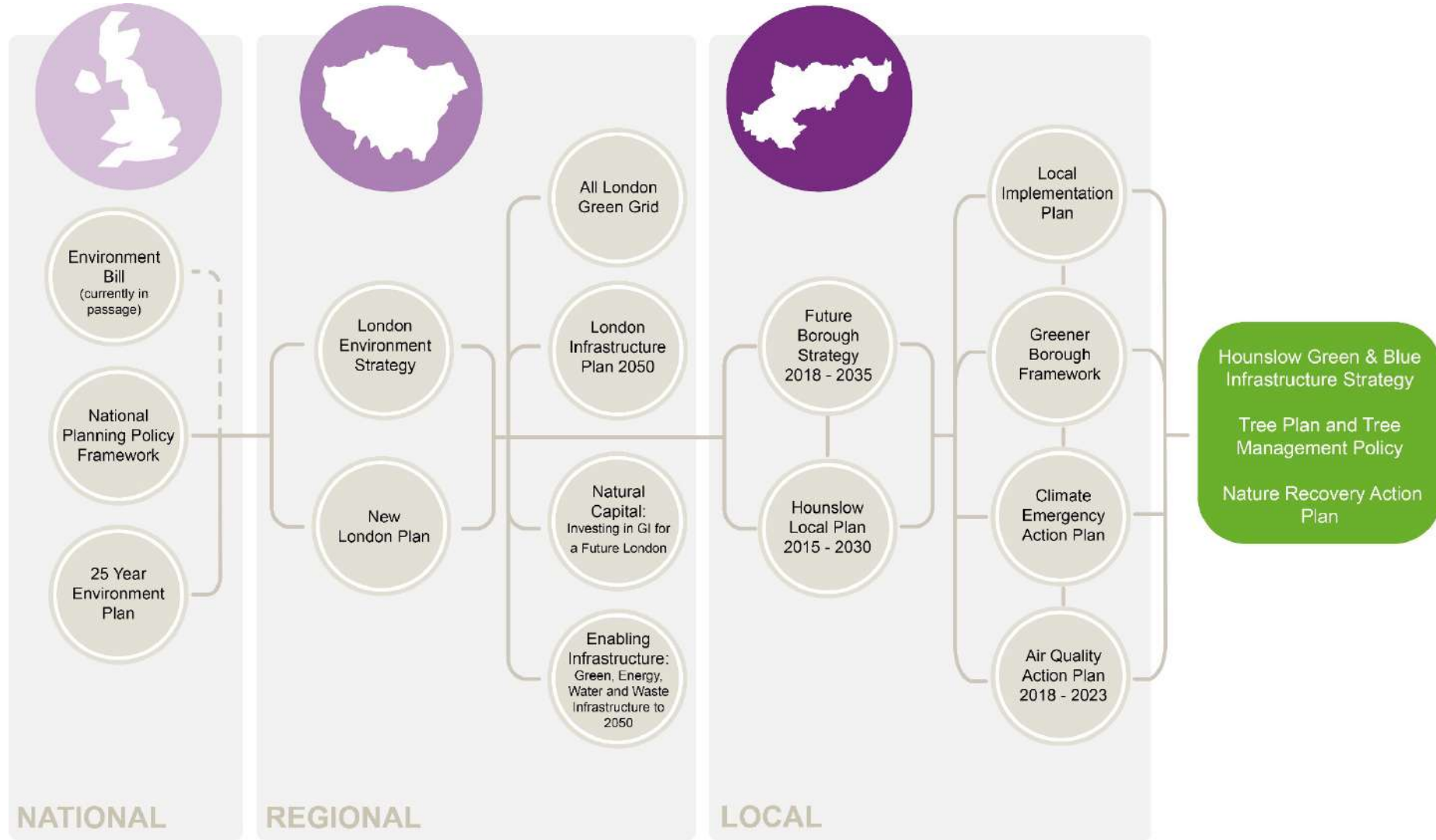
³⁶ London Borough of Hounslow (2019) *Infrastructure Delivery Plan*

³⁷ London Borough of Hounslow (2018) *Joint Health and Wellbeing Strategy*

³⁸ London Borough of Hounslow (2018) *Hounslow Transport Strategy*

³⁹ London Borough of Hounslow (2016) *Leisure and Culture Strategy (2106-2020)*

Figure 2.3: Structure of existing policy context



Chapter 3

Benefits of Green and Blue Infrastructure

Benefits of good quality Green and Blue Infrastructure

3.1 There is a significant and increasing body of evidence highlighting the societal and environmental benefits of green and blue infrastructure, as seen in **Figure 3.1**. Local communities generally recognise and appreciate the benefits afforded by good access to nature and green space. However, there is now a wide range of empirical data to demonstrate the need for GBI and to build a strong case for future investment.

3.2 Taking a strategic approach to GBI across the borough will help to support the Council in many of its priorities in relation to the green recovery and climate emergency.

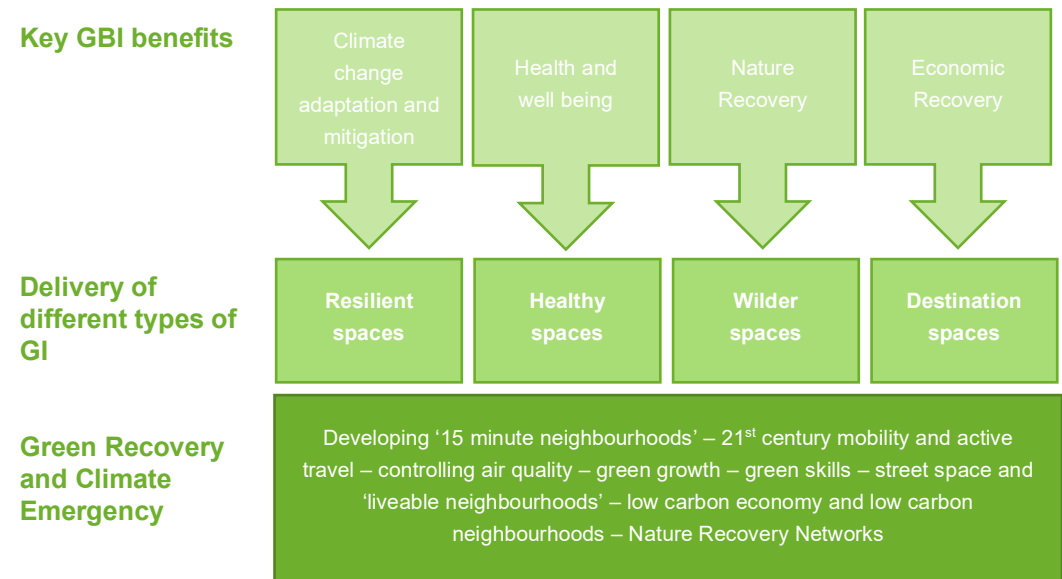


Figure 3.1: Benefits of GBI



Climate emergency adaptation and mitigation – ‘Resilient Spaces’

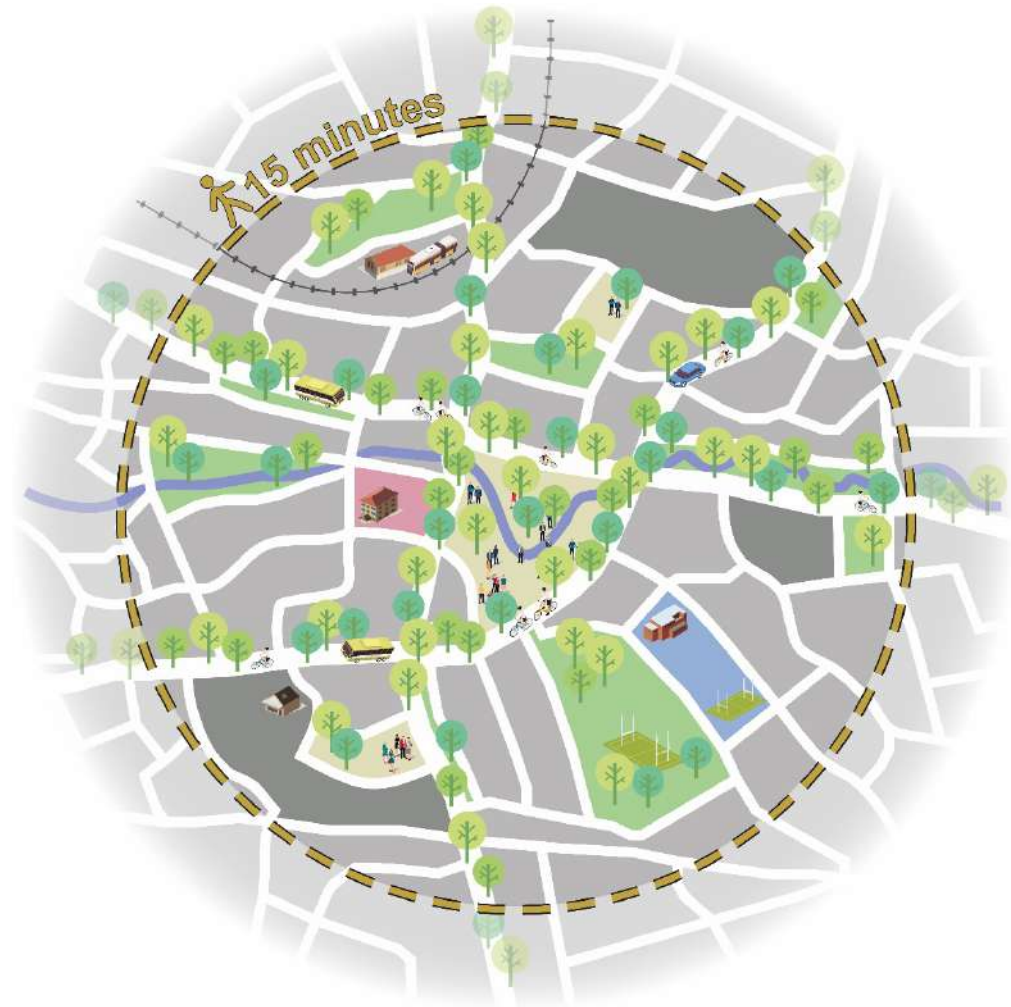
3.3 GBI can help to both **mitigate** against climate change (addresses the causes) and support **adaptation** (address the effects). A key **mitigation** action for the borough is a move towards **net-zero carbon emissions**. Providing a better-connected network of attractive, safe green corridors to promote walking and cycling will help to reduce car use in the borough. Expanding tree cover and protecting open space will ensure potential for carbon storage in the borough is increased.

3.4 GBI can also help in **adapting** to more extreme weather that is being experienced as a result of the climate emergency. Planting and green space within urban areas can reduce surface water runoff and the severity of flooding events. Trees and other forms of urban greening can provide cooling shade for people. Trees, vegetation, green roofs and walls can also reduce energy use for cooling and heating through insulating effects and temperature regulation.

Hounslow’s Green Recovery: ‘15-minute neighbourhoods’

Work undertaken through Hounslow’s Green Recovery Board identified a desire among participants to explore options for developing ‘15-minute neighbourhoods’. The concept is based on providing most of residents’ needs and access to key amenities within a short walk or cycle from their home to improve their quality of life. Consideration of GBI will be essential in successfully implementing the principle of 15-minute neighbourhoods in Hounslow. The key benefits and considerations for GBI relate to:

- Providing safe, attractive streets and a high quality environment through increased tree cover and planting in urban areas;
- Providing access to green space and play space within a short walk from home;
- Reducing car use and facilitating walking, cycling and the use of green corridors;
- Protecting and enhancing key destination green / blue spaces and local heritage to support local economic activity; and
- Ensuring local open spaces are multifunctional and cater for a diverse range of needs, sport and recreation.



Health and wellbeing – ‘Healthy Spaces’

3.5 GBI can help to improve and maintain the health and wellbeing of local communities. Parks and green spaces are estimated to save the NHS around £111 million per year in health care costs.⁴⁰ A 2020 review of evidence ‘Space to Thrive’⁴¹ found that:

- Access to and use of green spaces enhances physical health and mental wellbeing;
- Parks create important opportunities for social integration, including helping migrants establish a sense of belonging in new communities; and
- Parks and green space enable people to connect with nature, which helps in recovering from stress and mental illness.

3.6 The review also found evidence that the quality of green space has a stronger bearing on health outcomes than the quantity of green space. However, the quality of green space is generally worse in areas of lower income. Some research indicates that the risk of cardiovascular disease is lower in areas with higher levels of ‘greenness’.⁴² Some UK studies have also shown that good access to urban green space is associated with a lower likelihood of being overweight or obese.⁴³

3.7 Greening the urban environment, if implemented correctly, can also have significant benefits in relation to air quality through the removal of some forms of air pollution. Better utilising existing green and blue corridors may provide the opportunity for pedestrians and cyclists to travel away from busy polluted roads. In turn, more active travel can also reduce car use and associated pollution.

Nature Recovery – ‘Wilder Spaces’

3.8 If the right principles are adopted, all elements of the GBI network can contribute towards making space for nature. Taking a strategic and coordinated approach to the provision of GBI provides the best opportunity to apply the key principles for conserving and enhancing biodiversity.

- **Bigger:** Habitat areas can be increased in size by ensuring that GBI is delivered alongside new ‘grey infrastructure’ and within new development. Strategic analysis of the GBI network can help to identify where existing habitat areas may be increased in size through habitat creation on low quality sites nearby.

- **Better quality:** Improvements to existing core habitat areas (such as existing designated areas for nature) can be focussed where there will be most benefit. Adopted standards can ensure that new GBI is multifunctional, diverse and provides for a range of species.

- **Better connected:** The provision of high quality green and blue corridors can help to create a more resilient network. Better connections between sites provide the opportunity for some species to move between microhabitats and colonise new areas. Gaps in the network can be strengthened through the provision of tree lined streets and ‘stepping stone’ habitat areas on green roofs, incorporated into the public realm and within existing green spaces.

3.9 Furthermore, the natural capital benefits and ecosystem services which biodiversity provides will become increasingly important as climate change places further pressure on urban environments.

Economic Recovery - ‘Destination Spaces’

3.10 There are several economic benefits to GBI in terms of creating employment, promoting economic activity and encouraging inward investment. Key Destination Spaces that are important for their landscape or heritage value can provide a draw and destination for visitors.

3.11 A recent report for Public Health England has highlighted the potential role green infrastructure plays in improving and regenerating the high street.⁴⁴ Open space provision may result in increased levels of business revenue.⁴⁵ Research by the Office for National Statistics (ONS) and Defra indicates that having areas of green space in close proximity to residential areas can also have a positive effect on house prices.⁴⁶ These benefits can be amplified through adopting modal shifts, such as Low Traffic Neighbourhoods and 15-minute cities.

⁴⁰ Fields in Trust (2018) Revaluating Parks and Green Spaces: Measuring their economic and well-being value to individuals

⁴¹ Dobson, J., Harris, C., Eadson, W., and Gore, T. (2019). Space to thrive: A rapid evidence review of the benefits of parks and green spaces for people and communities. The National Lottery Heritage Fund and The National Lottery Community Fund, London.

⁴² Parliamentary Office of Science and Technology (2016) Green Space and Health

⁴³ Natural England (2011) Green space access, green space use, physical activity and overweight

⁴⁴ Public Health England (2018) Healthy High Streets, Good place making in an urban setting

⁴⁵ The Land Trust (2018) The Economic Value of our Green Spaces

⁴⁶ ONS (2018) Estimating the impact urban green space has on property prices

Chapter 3

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

The value of GBI in Hounslow

3.12 A natural capital approach attempts to assess the monetary value of natural assets. This includes economic, societal and environmental benefits, and ‘ecosystem services’. There are several existing studies that have estimated the monetary value of elements of the GI network in Hounslow and London. Whilst these do not comprise comprehensive natural capital ‘accounts’ for the borough, they do highlight and provide insight into the significant economic benefits afforded by the GBI network.

Natural Capital Account for London’s Parks and Greenspaces⁴⁷

3.13 A 2017 study undertaken for the GLA found that:

- London’s Public Parks have a gross asset value in excess of £91 billion.
- For each £1 spent by local authorities on public parks, residents enjoy at least £27 in value.
- Londoners avoid £950 million per year in health costs due to public parks.
- The value of recreational activities in public parks is estimated to be £926 million per year.

Natural Capital Account for Hounslow

3.14 The 2017 GLA Natural Capital Account for London provides values for the benefits afforded by Hounslow’s parks and open spaces. The assessment is based on an assumption of 1, 568 hectares of publicly accessible parks and open spaces in the borough. The study ranks Hounslow as the third greenest out of the 33 London Boroughs.

3.15 The accounts propose the total value of the borough’s open space network over a 30-year period to be £2.9 billion. This is estimated to represent a cost benefit ratio of 26:1, details of which can be seen in **Figure 3.2**.

Outdoor Recreation Valuation (ORVal)⁴⁸

3.16 The ORVal tool is a web application developed by the LEEP Institute and Defra. The tool provides estimates of the ‘welfare values’ provided by publicly accessible open space for each local authority area in England. Welfare values are based on the monetary equivalent of how much people’s well-being would fall if they could not access green spaces in any given area.

3.17 The values are also based on the estimated visits to green spaces in the borough per annum. Estimated visits are based on the modelling of recreational demand in England and Wales and are not actual counts of visits. The models consider the features present within a green space as well as the availability of other green space within the vicinity and the characteristics of the population.

3.18 ORVal estimates the annual welfare values afforded by publicly accessible open space in Hounslow to be £37,410,254.

Valuing the urban forest

3.19 Several established methods are available to estimate the value of the ecosystem services provided by trees.

London i-tree assessment⁴⁹

3.20 An assessment of London’s urban forest was undertaken during 2015 using the i-Tree Eco method. The assessment found that London’s trees provide £132.7 million in annual benefits, details of which can be found in **Figure 3.2**.

Capital Asset Valuation of Amenity Trees (CAVAT) within the borough

3.21 The CAVAT principle outlines the compensation required to account for the loss of the publicly owned tree stock due to new development. Valuation of the existing stock allows tree management costs to be justified as part of a wider promotion of the borough’s trees. The Tree Plan and Tree Management Policy proposes that all future tree surveys within the borough should collect the data fields required to calculate a basic CAVAT tree value assessment.

⁴⁷ <https://www.london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/green-infrastructure/natural-capital-account-london?source=vanityurl>

⁴⁸ <https://www.leep.exeter.ac.uk/orval/>

⁴⁹ Treeconomics (2015) Valuing London’s Urban Forest. Available at:

https://www.london.gov.uk/sites/default/files/valuing_londons_urban_forest_i-tree_report_final.pdf

Figure 3.2: Value of GBI in Hounslow and London

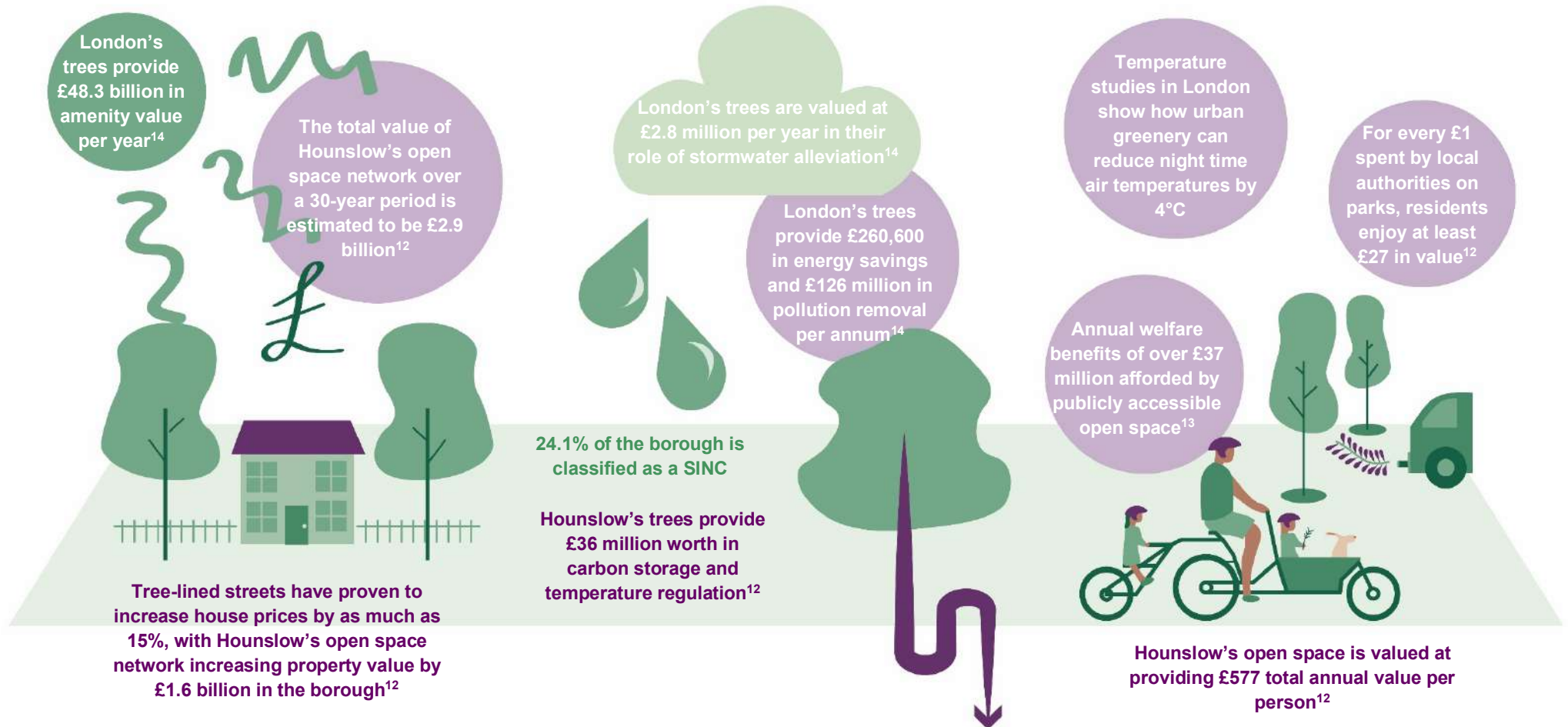


Figure 3.3: Focussed GBI values⁵⁰



1. A typical medium-sized deciduous tree can intercept over 10,000L of rainfall per year.
2. One mature oak can support over 280 different species of insect.
3. ~22kg CO₂ is sequestered in a mature tree every year.
4. Research from the University of Edinburgh shows that one oak tree living for 100 years will uptake 1.5 tonnes of CO₂. An average tree will uptake just under 1 tonne of CO₂ in its lifetime.
5. Particulate levels can be reduced by up to 60% on tree-lined streets when compared to those without.
6. One mature tree has the same cooling effect as 10 room-sized air conditioners, reducing local energy consumption by up to 10%.
7. One mature tree releases enough oxygen into the atmosphere each year to support two human beings.
8. Records of a mature lime tree in Malmo, Sweden consuming ~670 litres of rainfall per day during heavy rainfall events.
9. Apartment blocks surrounded by mature trees experienced 52% fewer reported crimes than those without greenery.

⁵⁰ Center for Urban Forest Research; Garden Organic; One Tree Planted; IMS; and GreenBlue Urban

Chapter 4

Drivers for Green and Blue Infrastructure in Hounslow

4.1 As set out in the previous chapter, the potential benefits of GBI are far reaching. There are many instances where GBI will be able to support the borough's priorities in relation to sustainable growth, development and a Green Recovery.

4.2 The following section sets out the key drivers and 'needs' for GBI that are specific to Hounslow. The drivers essentially answer why Hounslow would benefit from a strategic approach to the provision of GBI. An assessment of the drivers for GBI in the borough can also support:

- Prioritising the types of GBI that need to be delivered or improved in order to derive specific benefits.
- Identification of geographic 'areas of focus' or priority areas.
- High level identification of how new GBI or improvements to existing GBI may best be delivered in Hounslow.

4.3 Drivers for GBI are explored in relation to:

- Hounslow's communities (population and demographics)
- Health and well-being
- Housing growth and infrastructure
- Economic growth and Green Recovery
- The climate emergency and environment
- Biodiversity

4.4 Drivers are generally 'cross-cutting' and often relate to the provision of all types of GBI. This reflects the multi-functionality and range of benefits that may be derived from any given GBI 'asset'.

Chapter 4

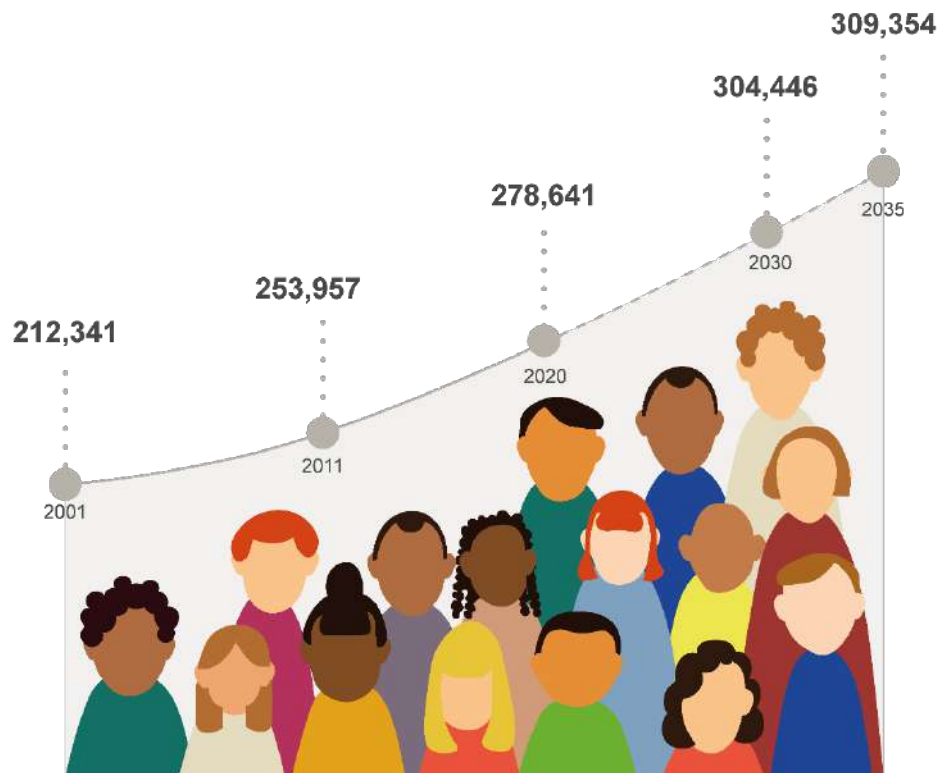
London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Hounslow's communities

4.5 Hounslow has seen some of the most rapid growth when compared to other London boroughs. Between the 2001 and 2011 Census, the population grew by 20%. This compares to an overall 8% increase in England and Wales over the same period⁵¹. GLA population projections indicate that this level of growth is continuing, with an overall growth rate of 26% between 2002 and 2018.



4.6 As our communities change and grow it will be essential to work towards addressing any inequalities in access to green infrastructure and the benefits it can provide.

Current and projected population

4.7 The GLAs 2018-based (Housing Led) population projections estimate the current population of the borough (2020) to be 278,641. Estimates show an increase to 304,446 up to 2030 (the Local Plan period) and 309,354 up to 2035.⁵²

4.8 As of 2017, Hounslow had an average population density of 49 persons per hectare. This is lower than inner London (110 per ha) and London as a whole (56 per ha). Population density is slightly higher than the outer London average (42 per ha)⁵³, as seen on **Figure 4.1**.

4.9 Population density varies throughout the borough. Wards with the highest population density include; Hounslow Central, Hounslow West, Heston Central and Turnham Green. Wards with the lowest population density generally have large areas of open space. This includes Osterley and Spring Grove, and Bedfont.⁵⁴ An increase in overcrowding has previously been recorded in the borough. The 2001 Census recorded 16.2% of households living in overcrowded conditions, which had increased to 21.8% by 2011.⁵⁵

Borough demographics

4.10 The average age of the borough's residents (as of 2017) was 35.8 years old. This is comparable to London as a whole (36) but below the UK average (40.1).

4.11 As of 2015, 67.6% of the population were of working age (16-64 years), compared to London as a whole (73.6%). 21% of the population are under 16; a larger proportion when compared to London as a whole (13.9%).⁵⁶ GLA population projections estimate that the number of people under the age of 16 in the borough is expected to spike in 2021 to 2023 and then level off to 2034.⁵⁷ The proportion of residents aged 65 and over is currently estimated at 12% of the borough's population. This is expected to increase to 14% in 2030, and to around 16% in 2035.⁵⁸

⁵¹ Hounslow Joint Strategic Needs Assessment (2017)

⁵² <https://maps.london.gov.uk/population-projections/>

⁵³ <https://data.london.gov.uk/dataset/london-borough-profiles>

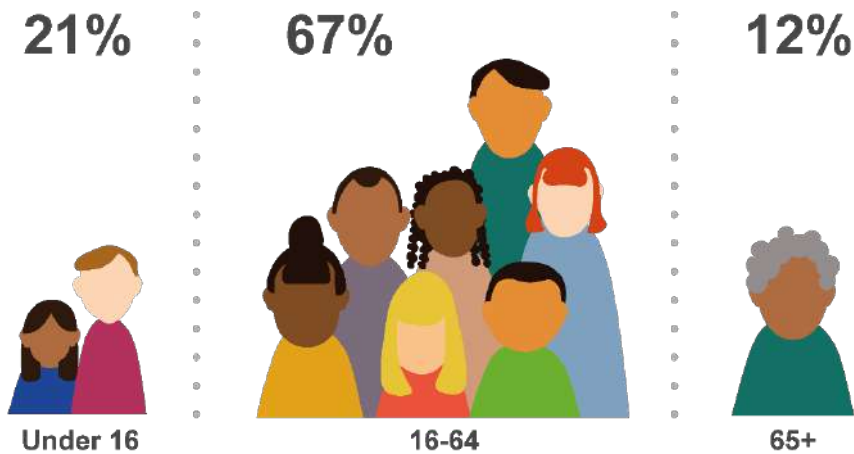
⁵⁴ <https://data.london.gov.uk/dataset/ward-profiles-and-atlas>

⁵⁵ LB Hounslow JSNA (2017)

⁵⁶ <https://data.london.gov.uk/dataset/london-borough-profiles>

⁵⁷ LB Hounslow JSNA (2017)

⁵⁸ <https://maps.london.gov.uk/population-projections/>



4.12 Ethnic minority groups account for 51.6% of the borough's population (2016 data), which is greater than the overall percentage for inner London, outer London and London as a whole. This has increased from 49% in 2011. The 2011 census found the three most common ethnicities in the borough to be white British, Indian and Pakistani. The 2011 Census reports that the wards with the highest percentage population representing ethnic minority groups include Heston Central, Heston East, Heston West, Hounslow West and Cranford.

4.13 It is commonly seen that neighbourhoods with high proportions of minority ethnic groups experience less local green space and it is generally of a poorer quality. A study carried out across England found that wards which were predominantly white had eleven times more public green space when compared to wards with more than 40% of the population coming from ethnic minority groups.⁵⁹ This is reinforced by the recent research carried out by Friends of the Earth which found that persons from an ethnic minority background are twice as likely as a white person to live in England's most green space deprived areas.⁶⁰

4.14 Furthermore, perceptions of green space can vary dramatically across different ethnic groups. This highlights the need for inclusive community engagement alongside enhanced green space provisions within neighbourhoods which may feel cut off or disassociated with their

local open space. **Figure 4.2** displays the relationship between percentage ethnic minority and access to open space.

Summary: Hounslow's communities

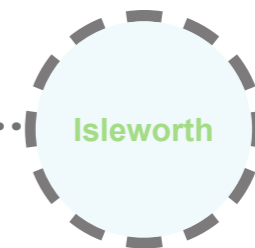
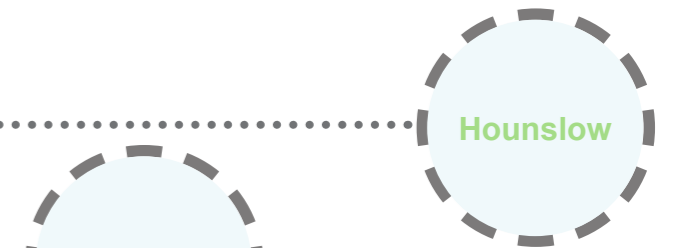
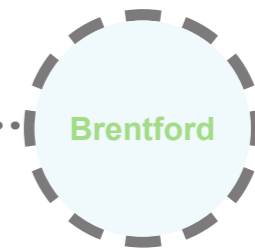
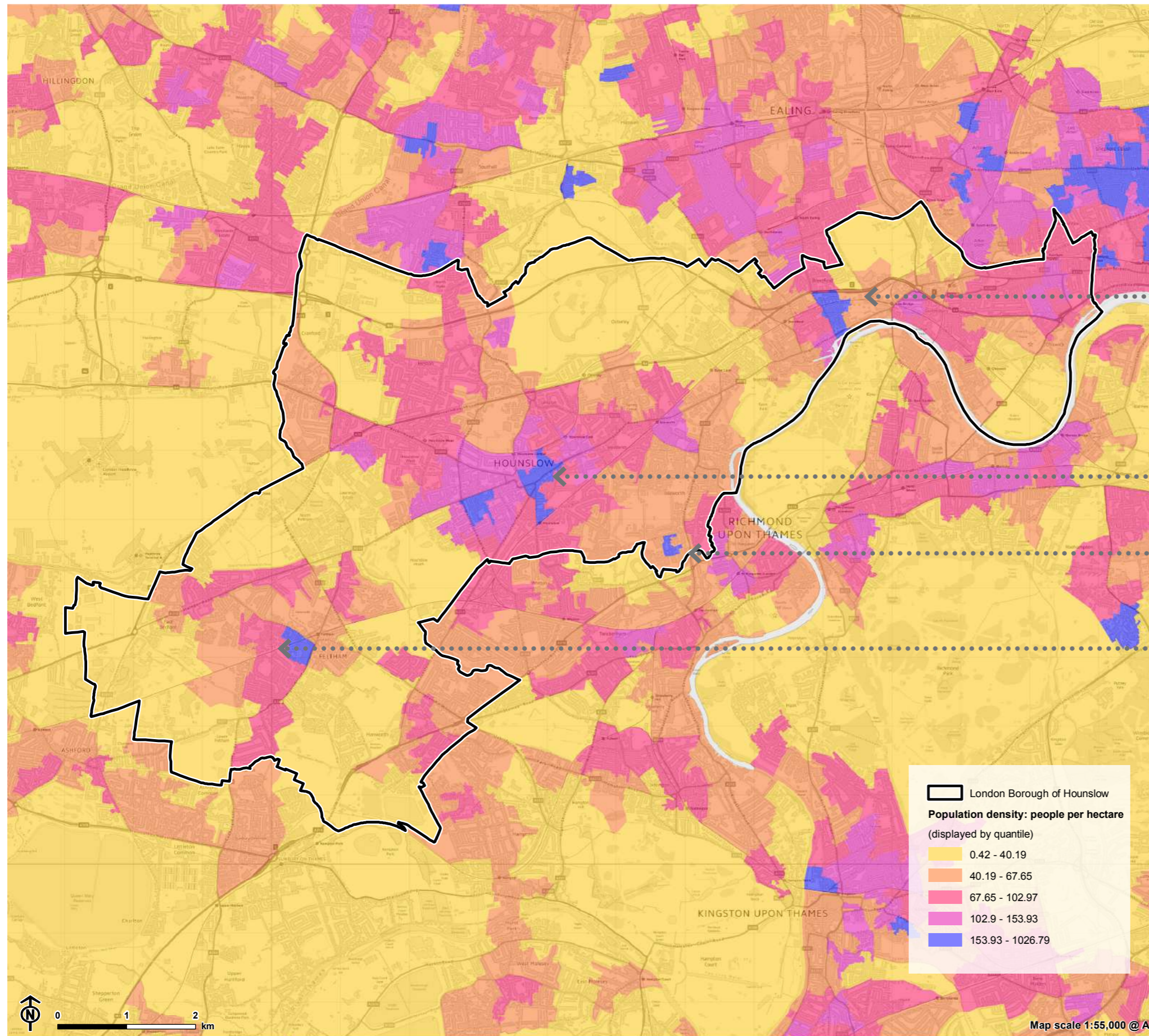
- Hounslow has a growing population and changing demographic.
- GBI in the borough will need to be resilient to increased use and cater for the needs of a wide range of users.

⁵⁹ https://www.designcouncil.org.uk/sites/default/files/asset/document/urban-green-nation-summary1_0.pdf

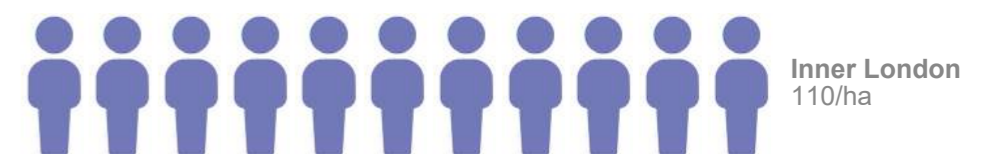
⁶⁰ https://policy.friendsoftheearth.uk/sites/files/policy/documents/2020-09/Green_space_gap_full_report_0.pdf

Figure 4.1 - Population density

When compared to other boroughs across London, Hounslow has a much lower overall population density. However, significant pockets of dense housing can be found around Brentford, Hounslow, Isleworth and Feltham. Due to the large prevalence of Green Belt and Metropolitan Open Land, there are significant areas of the borough which experience extremely low population densities, typical of outer London. However, Hounslow does experience a slightly higher average population than other outer London boroughs.



Average population densities



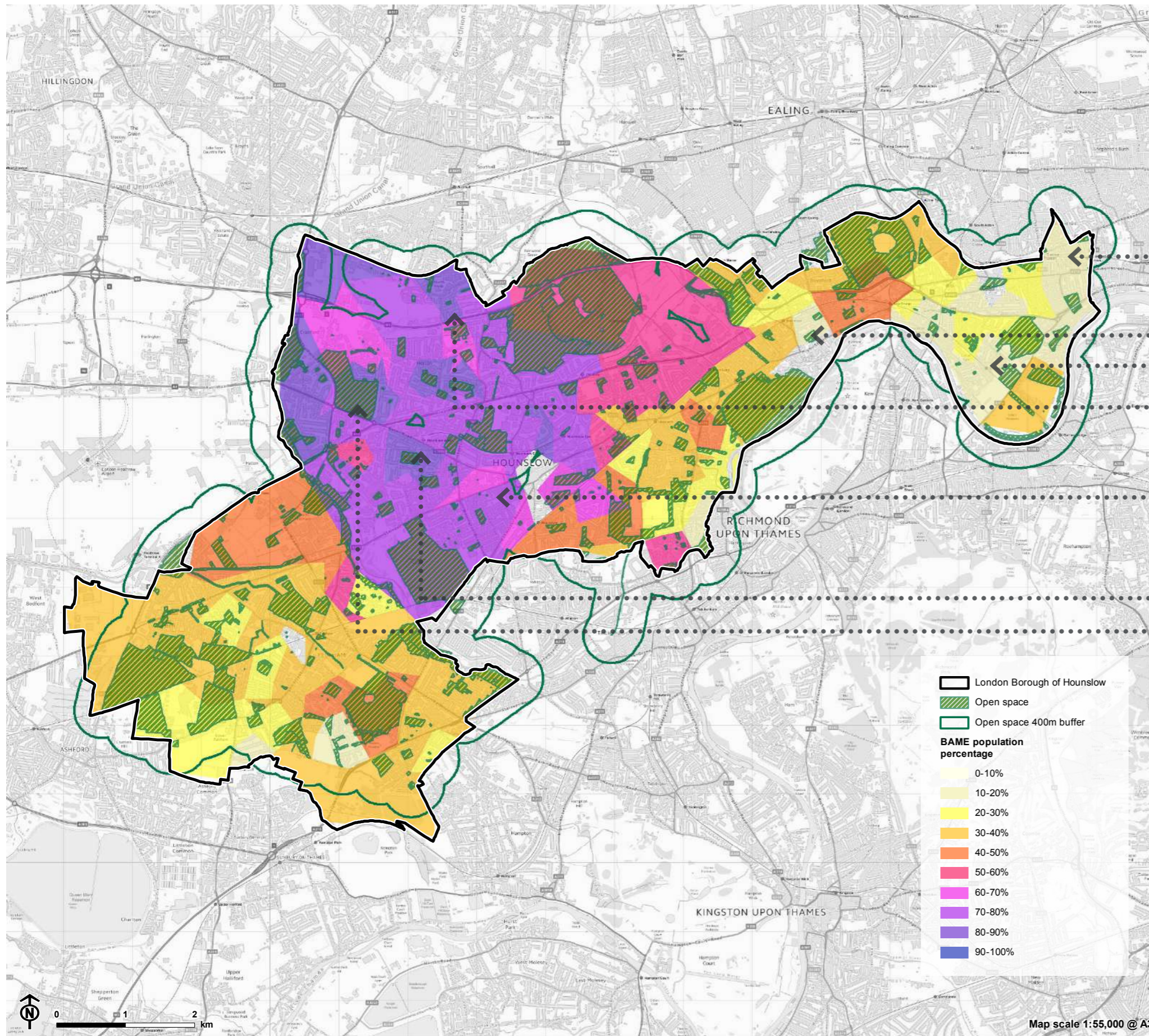
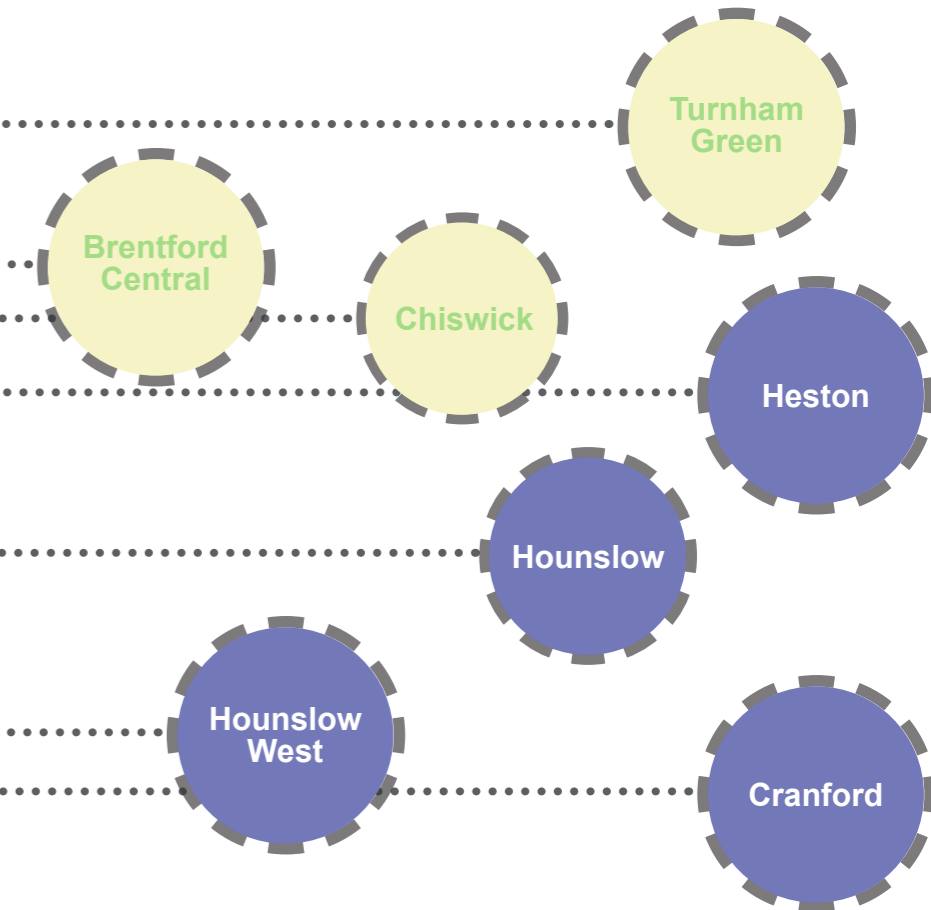
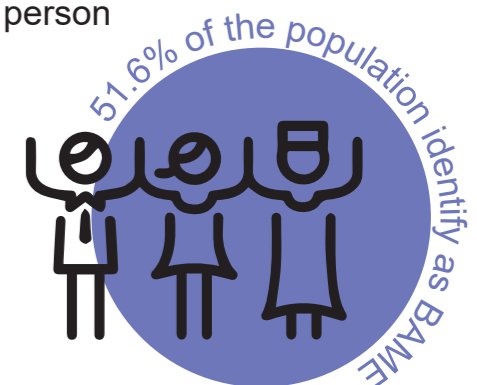


Figure 4.2 - Percentage BAME population and open space access

BAME groups account for 51.6% of the borough's population, taking it above the average for both inner and outer London. The diverse make up of the borough's residents highlights the importance of overcoming inequalities in access to high quality open spaces and the green infrastructure network. Recent research has found that areas where over 40% of the population identify as BAME, there is eleven times less accessible green space when compared to predominantly white neighbourhoods.



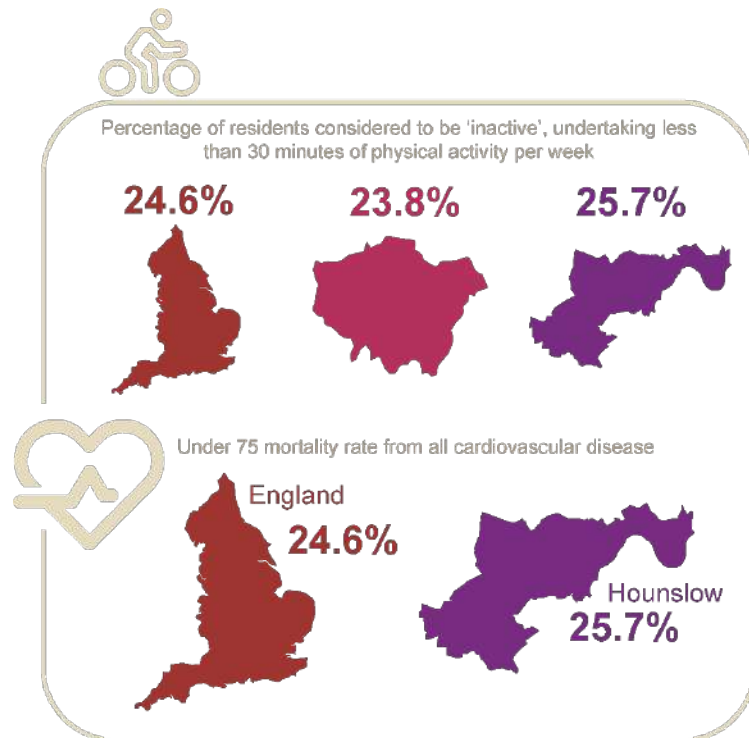
Persons from a BAME background are twice as likely to live in England's most green space deprived areas when compared to a white person



Health and wellbeing

Physical health

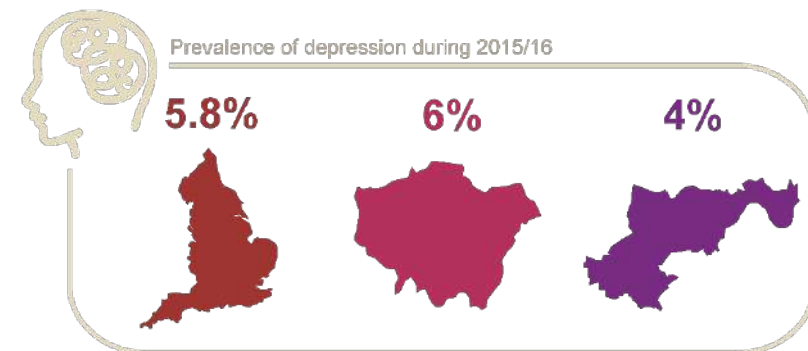
4.15 Several health measures for the borough are worse than the England average. 24% of year six children in the borough are classified as obese, which is worse than the England average. Under 75 mortality rate from all cardiovascular diseases is worse than the England average.⁶¹ Sport England's 2019 Active Lives Survey⁶² indicates that the borough's residents are slightly less active when compared to London and England as a whole.



4.16 Residents living within the borough's most deprived areas are much more likely to be 'inactive' (33.7%), when compared to those living within the least deprived areas (18.6%). Furthermore, 8.9% of residents within the boroughs most deprived areas indicated they did not participate in a sport or physical activity in the last year. This compares to 3.2% in the boroughs least deprived areas.

Mental health

4.17 One in four people will be affected by mental or neurological problems at some point in their lives. It is estimated that 17% of Hounslow's adult population may experience some form mental health problem. However, the recorded prevalence of mental health conditions in the borough is generally lower than London and England.



4.18 9.8% of the registered population in Hounslow suffered from depression with anxiety, compared to 11.7% (London) and 12% (England). The percentage of people with a long-term mental health condition in the borough during 2015/16 was 3.3%, compared to 4.3% (London) and 5.2% (England). Hounslow Joint Strategic Needs Assessment (JSNA) (2017) data suggests lower exposure to risk factors for poor child mental health compared to other areas in

⁶¹ Public Health England Local Authority Health Profile (2019)

⁶² Sport England Active Lives Survey (2019) <https://activelives.sportengland.org/Query/QueryBuilder>

North West London, however there are some key vulnerable groups such as children living in poverty.

Covid-19: well-being and social impacts

The Covid-19 Social Study (undertaken by University College London) explores the social and well-being impact of the virus and social distancing measures on adults in London.

Poor mental health: The prevalence of reported characteristics of poor mental health during June 2020 was higher than pre-pandemic levels (2017-19).

Features of poor mental health during June 2020 were more likely among 16-29 year olds; (40%) compared to 30-49 year olds (34%) and age 50+ (22%).

Loneliness: Younger Londoners were more likely to lack companionship than their older counterparts. 53% of 19 year olds reported feeling they lack companionship 'some of the time', compared to 33% for age 50.

Discrimination: 26% of people say they have experienced some form discrimination during lockdown. Discrimination experiences have been higher among younger adults, women, people from ethnic minority groups and in urban areas.

Air quality

4.19 Poor air quality is a significant public health issue throughout large areas of the UK, caused by the presence of various types of air pollution, carbon monoxide, nitrogen dioxide, particulates and sulphur dioxide. The health effects of air pollution are still not fully understood⁶³, however, a recent study in London has shown links between higher air pollution exposures and reduced lung volume in children⁶⁴ and associations have been found between levels of air pollution and diagnosis of dementia⁶⁵. Furthermore, poor air quality and pollution has been linked to shortened life expectancy of those living in London and leads to up to 9,400 extra deaths per year; with the most recent estimates suggesting air pollution in London

Chapter 4

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

reduces life by about a year⁶⁶. Residents that are particularly at risk include the young, elderly and those with existing illnesses such as respiratory problems. Although the link between COVID-19 deaths and exposure to air pollution is still not fully understood, initial analysis points towards some correlation between the two.⁶⁷ This acts as an important reminder of the detrimental effects long-term exposure to air pollution can have on a population's health and therefore susceptibility to respiratory diseases.

4.20 The entire borough of Hounslow sits within an Air Quality Management Area, with a further eleven Air Quality Focus Areas identified by the GLA. **Figure 4.3** gives more detail on the location of these focus areas and their relation to open space across the borough.

4.21 When utilising GBI to improve air quality, it is important to use interventions which are suitable to the context and space. Narrow urban canyons where the pollution source is at street level should not be lined with dense avenues of trees, as this can trap pollutants at ground level. **Figure 4.4** shows the relationship between air quality and trees across the borough.

Hounslow's Joint Strategic Needs Assessment

4.22 Hounslow's Joint Strategic Needs Assessment (JSNA) (2017) sets out twelve priority health and social care needs for the borough:

- Cardiovascular and respiratory disease
- Falls
- Dementia
- School readiness
- Accidents in children aged 0-14
- Cancer
- Physical activity
- Air quality and noise
- Obesity in children and adults
- Intimate partner violence
- Termination of pregnancy
- Learning disabilities

4.23 The priority needs were selected according to the following criteria: affecting 200 people or more, having a serious impact on personal health, and poorly performing quantitative outcomes.

⁶³ King's College London - London Air Online at: <http://www.londonair.org.uk/LondonAir/General/research.aspx>

⁶⁴ Mudway et al. (2018) Impact of London's low emission zone on air quality and children's respiratory health: a sequential annual cross-sectional study. DOI: 10.1016/S2468-2667(18)30202-0, 10.1016/S2468-2667(18)30202-0

⁶⁵ Carey et al. (2018) Are noise and air pollution related to the incidence of dementia? A cohort study in London, England. DOI: 10.1136/bmjopen-2018-022404

⁶⁶ King's College London - London Air Online at: <http://www.londonair.org.uk/LondonAir/General/research.aspx>

⁶⁷

<https://www.ons.gov.uk/economy/environmentalaccounts/articles/doesexposuretoairpollutionincreasetheriskofdyingfromthecoronaviruscovid19/2020-08-13>

4.24 Providing good quality, accessible GBI throughout the borough can contribute towards addressing several priority health needs in the borough. Both directly and indirectly. Ensuring equal access to green spaces across the borough, should be one of many measures used to promote healthy behaviours.

Indices of Multiple Deprivation (IMD)

4.25 The English Indices of Deprivation 2019⁶⁸ are a measure of relative social issues and challenges faced by communities in England. Seven domains of deprivation are measured:



4.26 Each domain contains a number of indicators. The seven domains are also combined to give a multiple deprivation score known as the Index of Multiple Deprivation (IMD). The IMD ranks each small area in England (called Lower-layer Super Output Areas (LSOAs)).

4.27 The IMD is a useful tool in identifying priority areas for GI interventions, particularly when assessing health and living environment deprivation. When compared to other boroughs in London, Hounslow occupies a middle ground when it comes to deprivation. As seen in **Figure 4.5**, the borough experiences pockets of significant deprivation and affluence, however most areas rank within the mid-ranges. It is clear from the map that there is a greater proportion of deprived neighbourhoods which sit over 400m from a publicly accessible open space.

4.28 IMD's Living Environment indicator is calculated from both 'indoor' and 'outdoor' factors. The presence and quality of GI plays an important part in determining the 'outdoor' living environment, which is measured through air quality and road traffic accidents involving pedestrians and cyclists. As seen in **Figure 4.6**, nearly half the borough sits within the top 30% most deprived living environments in the country, meaning a functional and cohesive GBI network could begin to address these issues.

4.29 **Figure 4.7** highlights that much of Hounslow is in fact considered to be relatively healthy when compared to other London boroughs, although significant pockets of poor health still exist. An important way to improve physical and mental health is through access to green space. This provides opportunities for physical activity, active travel, pollutant removal, relaxation, social interactions and sustainable food growth.

4.30 Particular focus should be had on how the GBI network can improve access to green space for those communities with identified health issues and which sit over 400m away from their nearest public open space. The JSNA should be used to identify these neighbourhoods.

Healthy Streets Index 2021

4.31 The Healthy Streets Index⁶⁹ is a spatial dataset which rates every street in Greater London in relation to the ten Healthy Streets Indicators. It provides a score between 0 and 100

⁶⁸ <https://www.gov.uk/government/collections/english-indices-of-deprivation>

⁶⁹ Healthy Streets (2021). New Healthy Streets Index. Weblink: <https://healthystreets.com/home/tools/>

for how healthy each street is and is designed to inform planning and design decisions. The ten indicators include:



4.32 The Healthy Streets Index is all about people's experience of the street. The two main indicators are seeing pedestrians from all walks of life and people choosing to walk, cycle and use public transport, with the other eight indicators considered as essential elements to the delivery of the two main indicators.

4.33 Hounslow performed comparatively poorly within the index with only 0.5% of the borough's streets being in the top 5% of London's Healthy Street Index scores. This puts Hounslow as the third poorest scoring borough in London. A large proportion of the borough's 'healthier' streets are concentrated in the east within the more affluent neighbourhoods of Chiswick. As expected, Hounslow's main roads perform the worst, likely due to their noise, difficulty to cross, uncleanliness and lack of active travel infrastructure.

Summary: Health and wellbeing

- Provision of GBI may be used as part of the mix of measures required to address priority health needs in the borough.
- A high quality GBI network that is easily accessible to all residents is essential to encourage healthy lifestyles for all.
- GBI can play a fundamental role in improving resident's living conditions, particularly in relation to air quality.

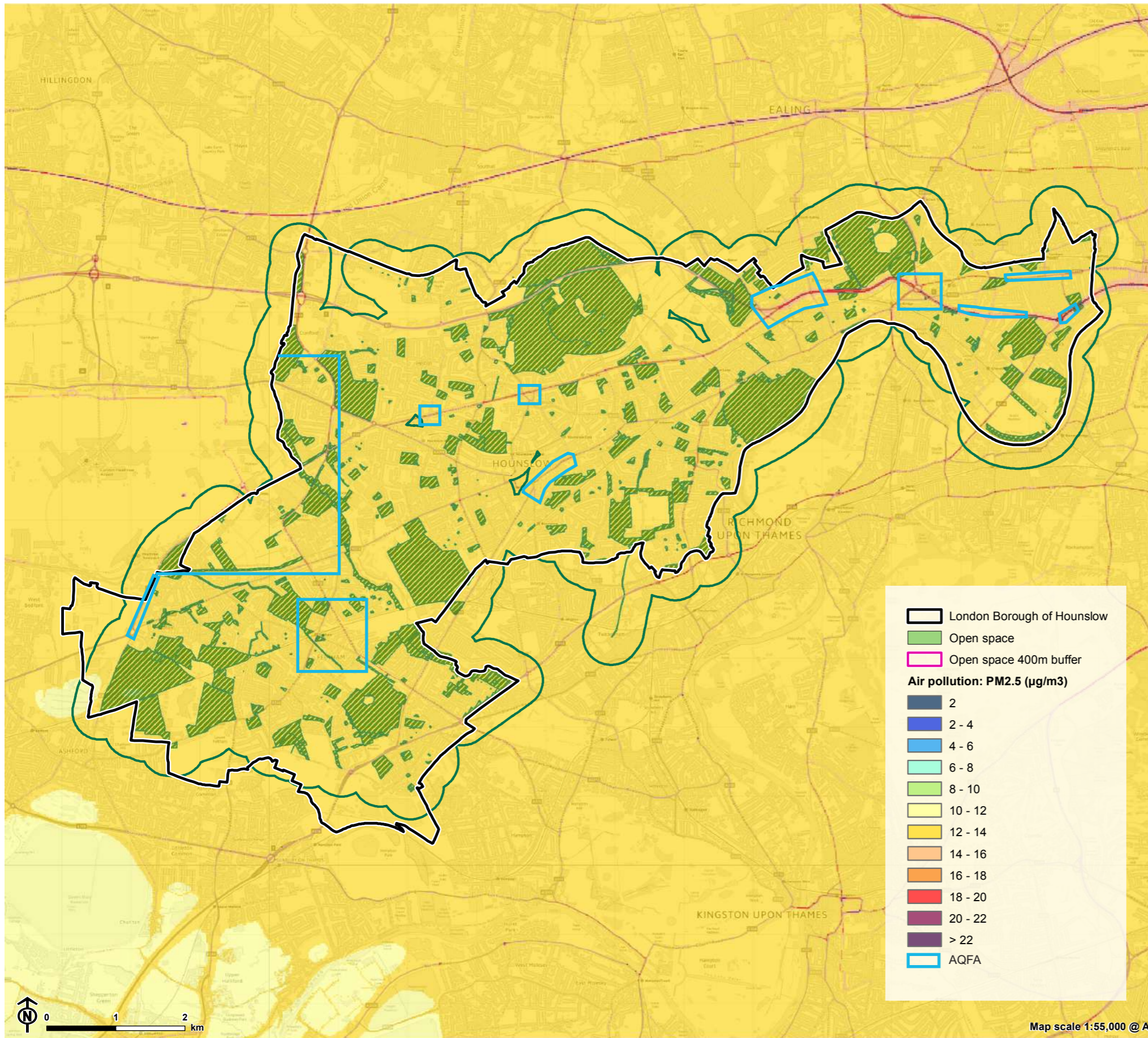


Figure 4.3 - Air quality (PM2.5) and open space

The entire borough of Hounslow sits within an Air Quality Management Area, meaning levels of NO_x in the borough are a cause for concern, particularly in regards to resident's health. There are 11 Air Quality Focus Areas located across the borough, as shown on the map. It can be seen from the map that Hounslow has several major roads dissecting the borough, of particular note are the A4, M4, A30, A316, A312 and A315. Across the borough, mean concentrations of NO₂ follow the major road network. Exceedances are greatest in the north east of the borough along the M4-A4 corridor but also present in the south west towards the A30 and M3.

Green infrastructure, urban greening and tree planting, if implemented correctly, can have significant benefits in relation to air quality through the removal of particulates, release of oxygen, encouragement of active travel and enhancing building energy efficiency, therefore reducing the reliance on polluting building climate systems.



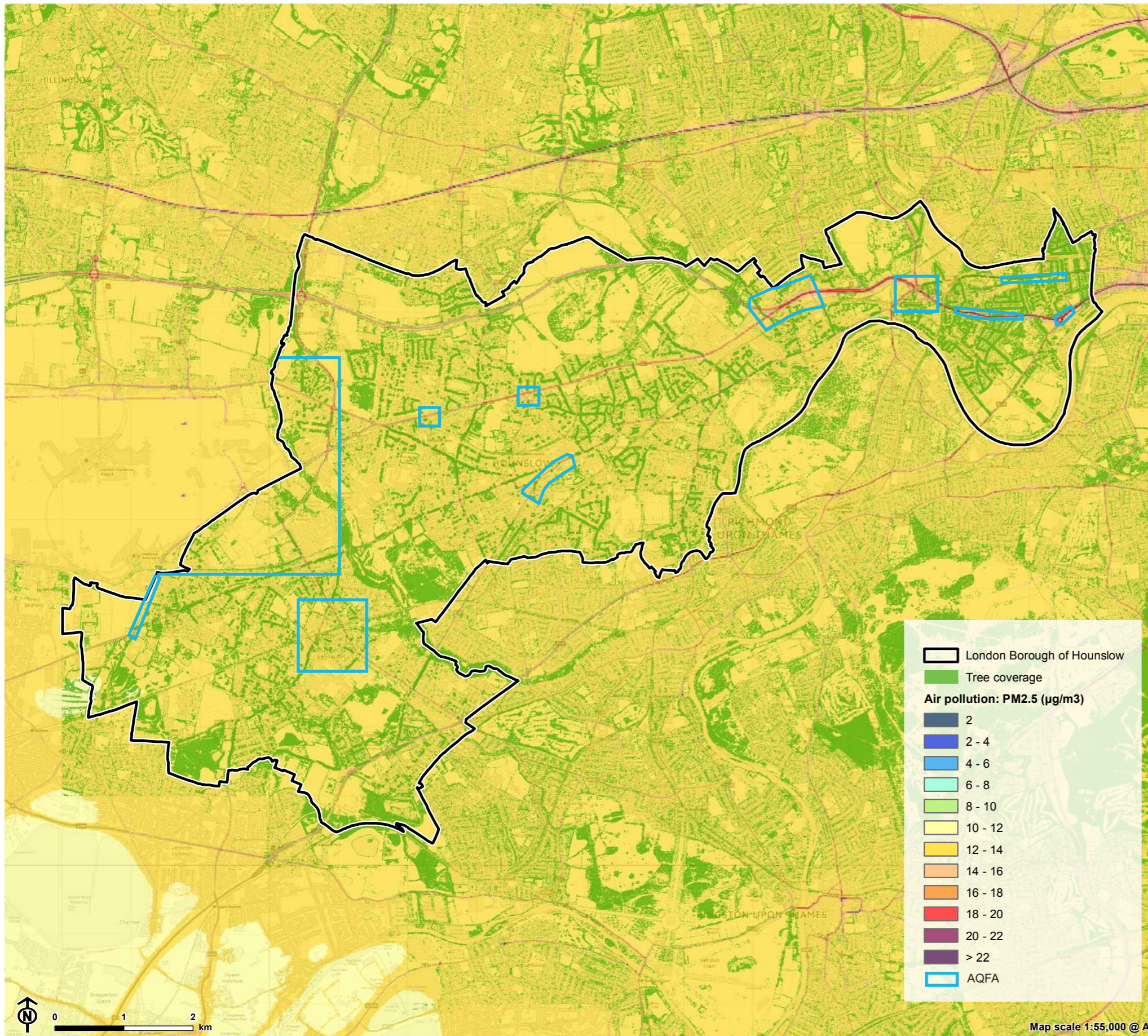


Figure 4.4 - Air quality (PM2.5) and tree coverage

Hounslow has some areas of high tree coverage, for example around Chiswick and in large open spaces such as Hounslow Heath. However, when compared to other outer London boroughs, Hounslow performs quite poorly in tree coverage, particularly within the central areas of Hounslow, Isleworth and Brentford. The benefits of trees is well documented, including providing space for biodiversity, visual amenity, carbon sequestration, shading and reducing flood risk. However, one of the key services trees provide is the filtering of pollutants to enhance air quality.

It can be seen from the map that there are significant stretches of highly polluted major roads which have a low tree coverage, namely the A4 and A315. Furthermore, tree coverage could be greatly improved within some of the borough's Air Quality Focus Areas (AQFA).



Street Canyon where air at street level is more polluted than the air above

In these locations, limiting the movement of air upwards and downwards should be avoided. For example, a dense avenue of trees can trap pollution from vehicles.



Street Canyon where air above the buildings is more polluted than the air at street level

In these locations, a dense avenue of trees can act as a barrier to downward dispersion, therefore creating a pocket of clean air for people below.



Where air pollution is at street level, a vegetated barrier, such as a green screen or hedge between the road and footpath can reduce the level of pollutants reaching people.



An additional taller barrier and open space can protect people within a larger area which are further from the pollution source, for example a school playground.

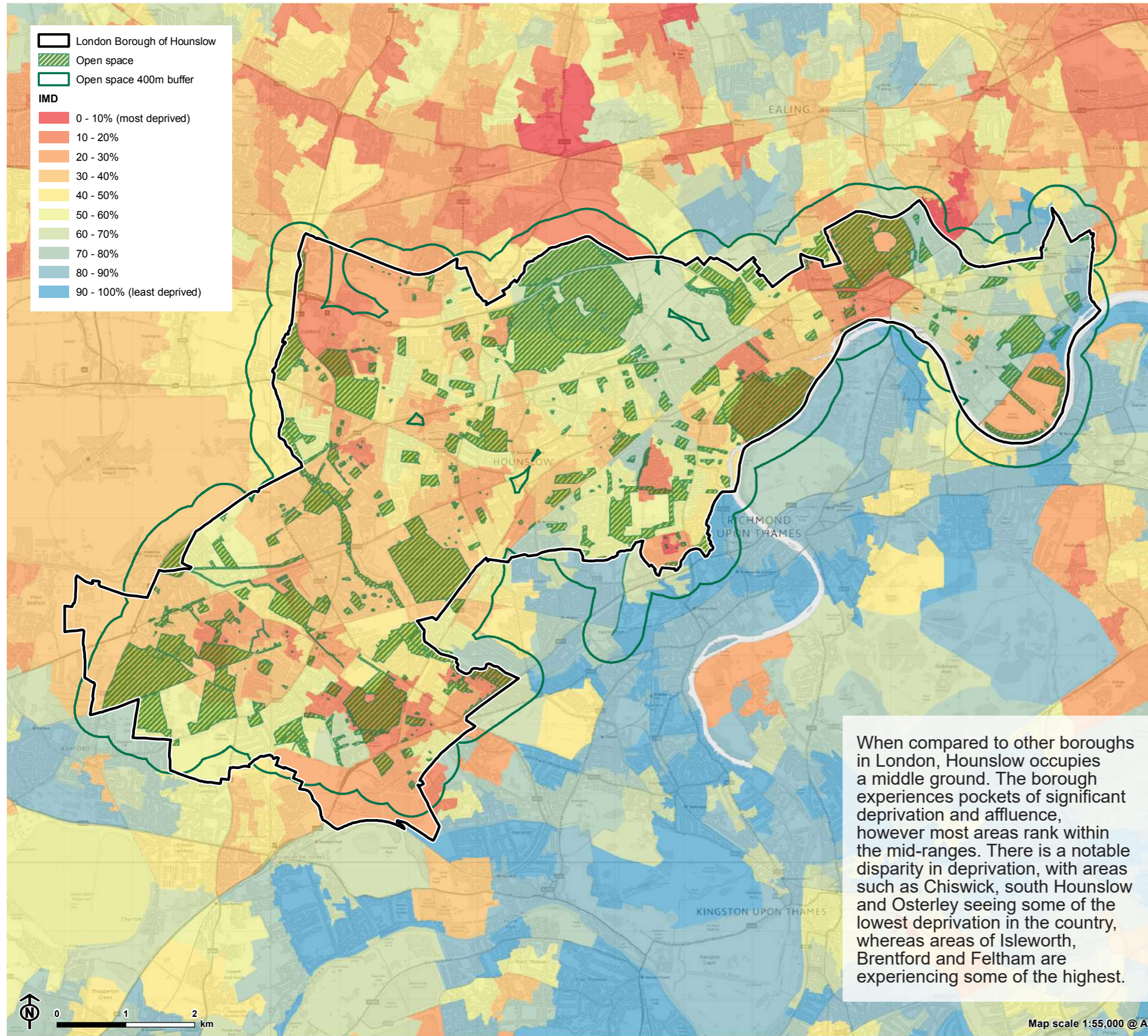
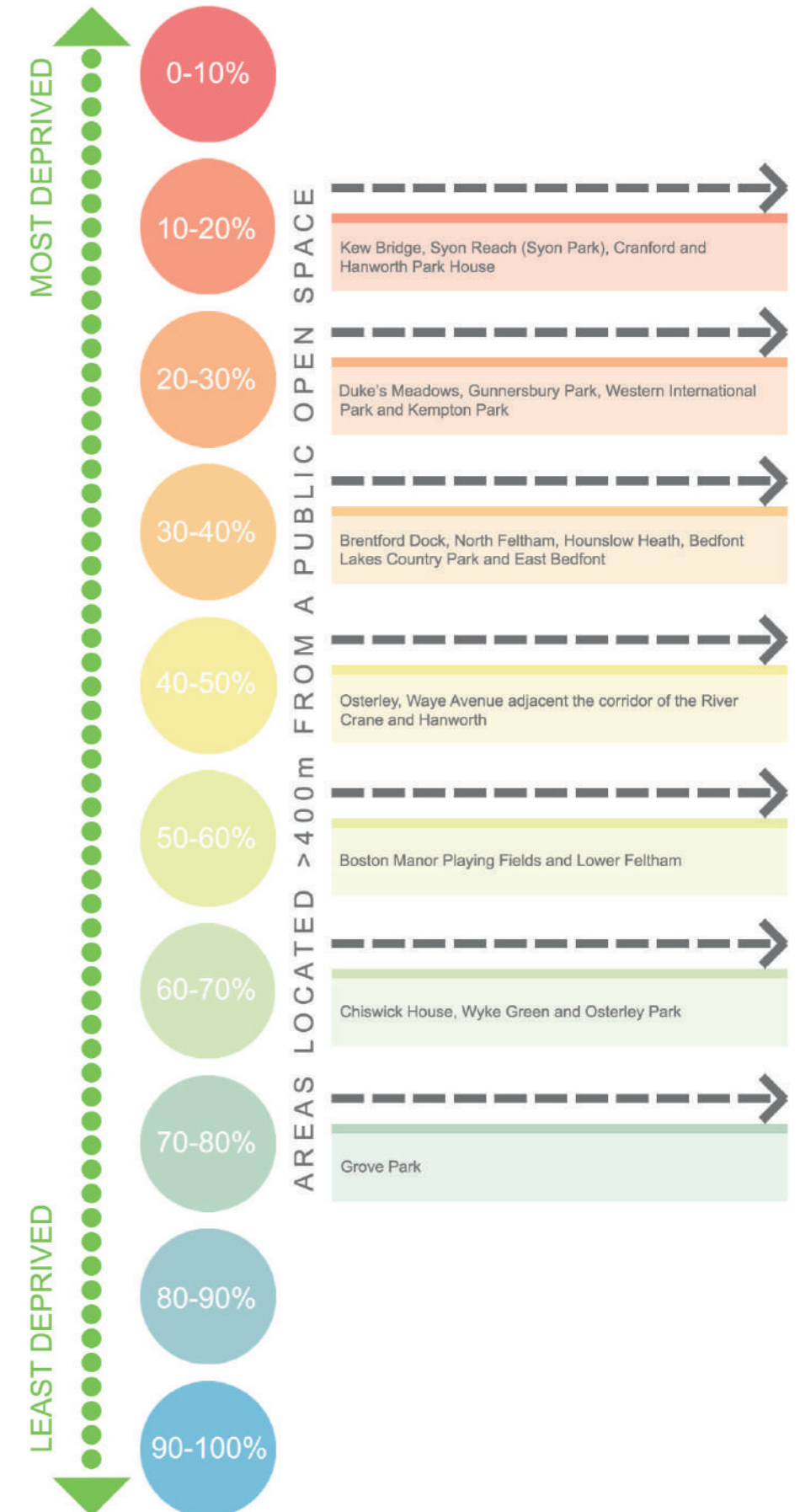
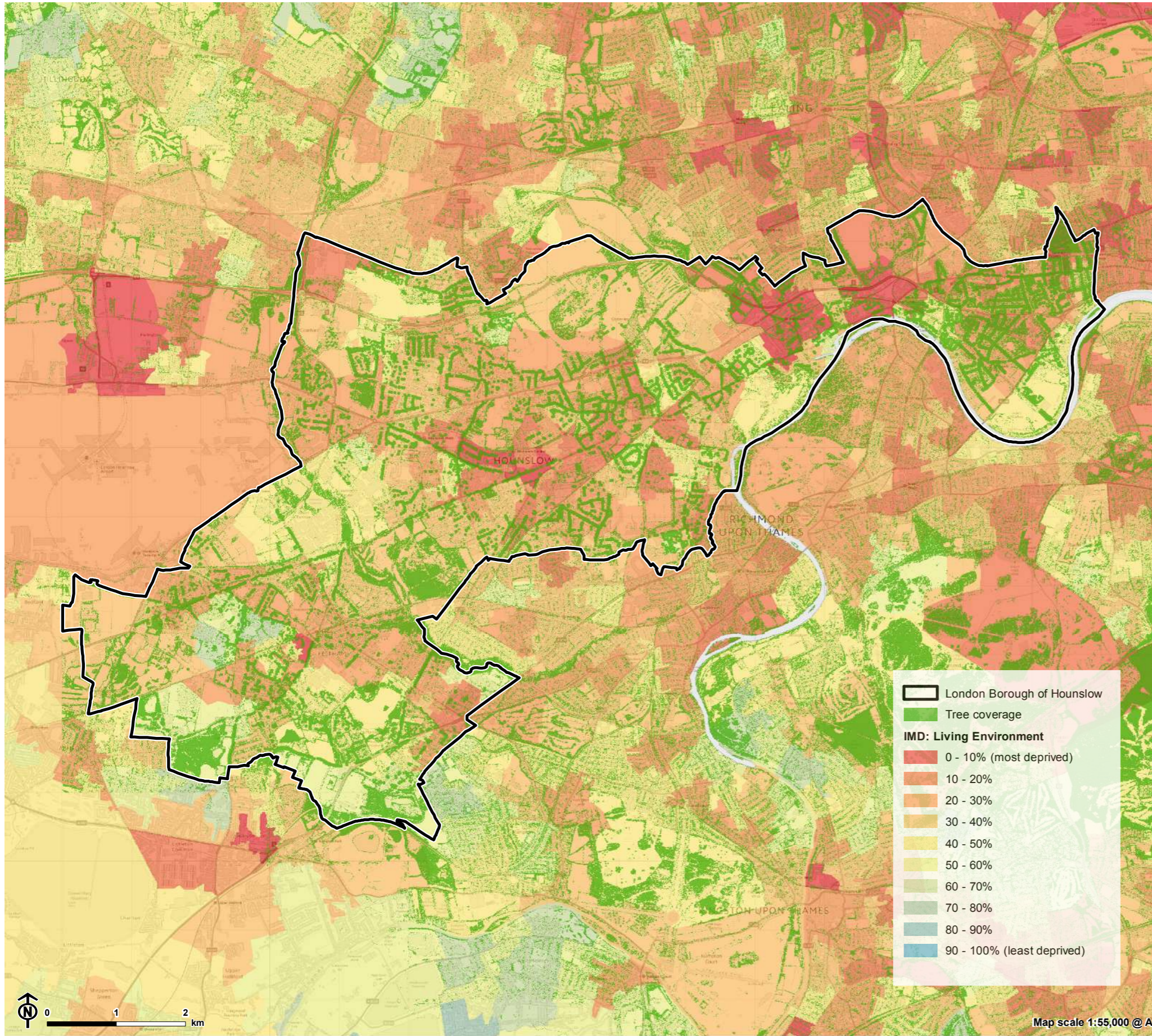


Figure 4.5 - Indices of Multiple Deprivation





Contains Ordnance Survey data © Crown copyright and database right 2021

CB:JI EB:Chamberlain_K LUC FIGX_11210_r0_IMD_Enviro_A3L_22/02/2021 Source: OS, LBH, MHCLG

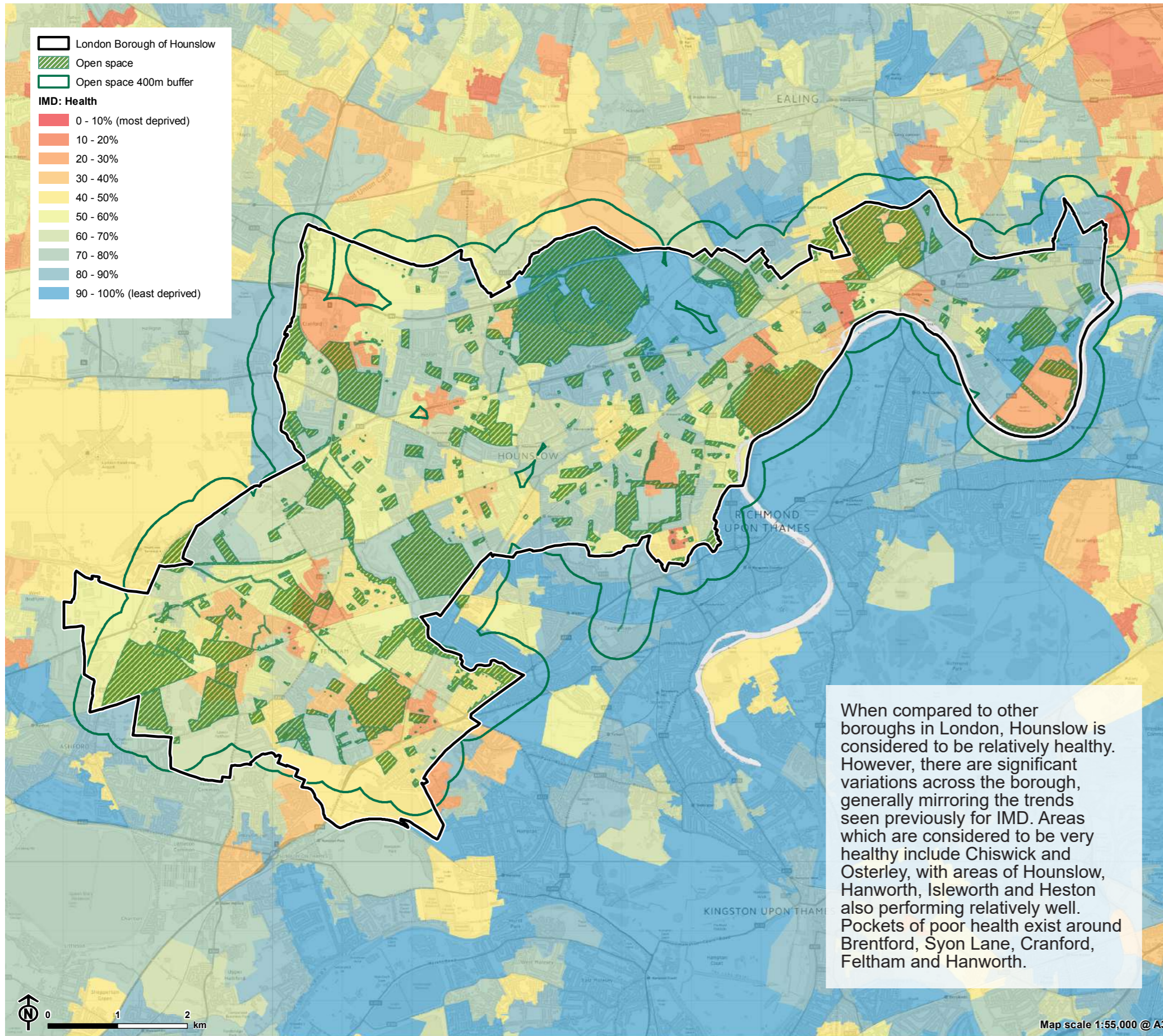
Figure 4.6 - Indices of Multiple Deprivation - Living Environment



Nearly half of Hounslow sits within the top 30% most deprived living environments within the UK. It can be seen in the figure that areas of significantly poor living environments also correspond with neighbourhoods where there is a lack of trees.

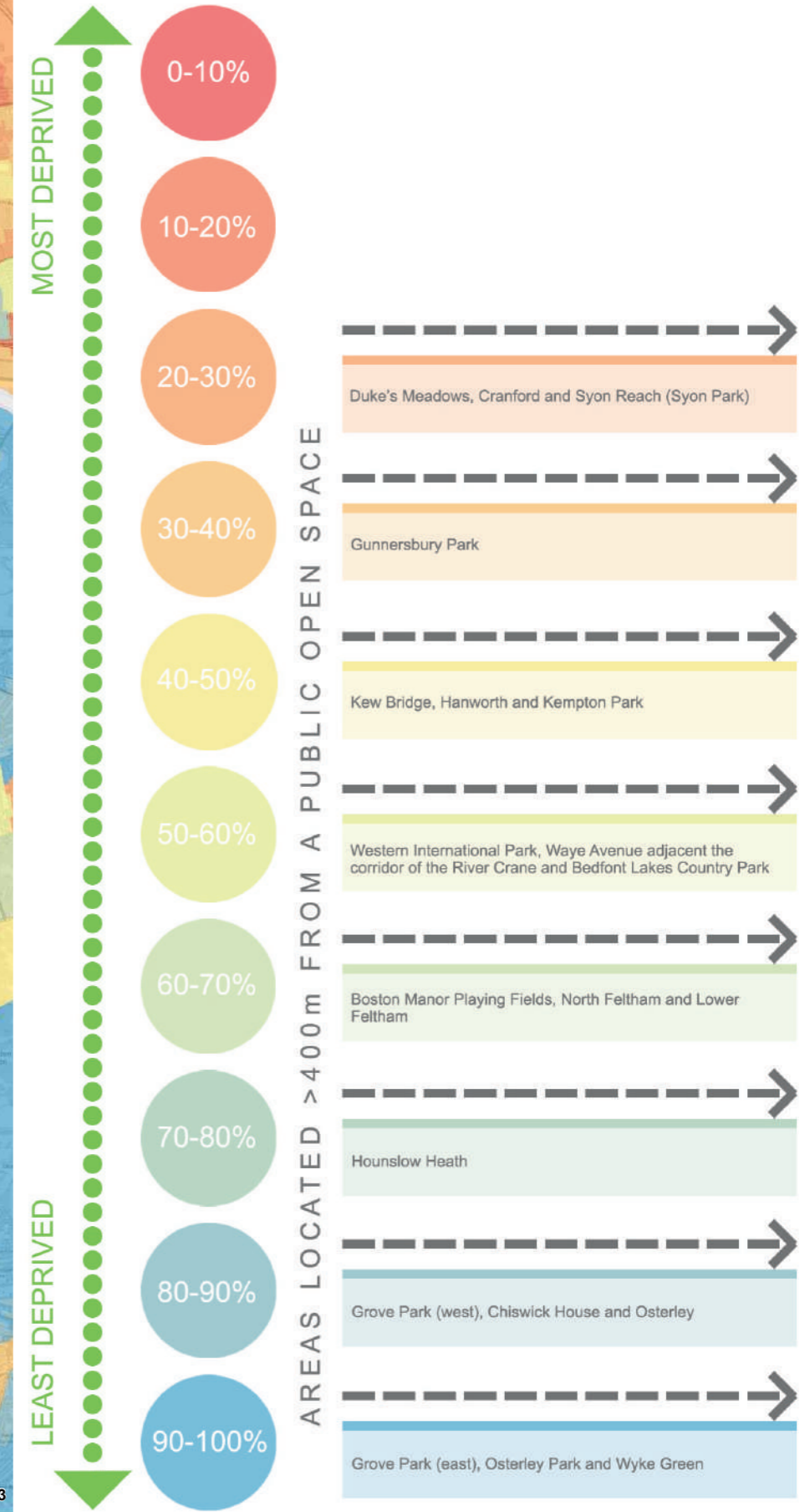
Green infrastructure is an excellent way for enhancing active travel networks, creating safer and more direct routes for people on bike or on foot. Furthermore, when placed appropriately, trees and urban greening features can significantly improve air quality by filtering out pollutants. These will both work to enhance Hounslow's 'outdoor' living environment.

0-10%	Central Feltham, Hounslow Central, Brentford, Kew Bridge, Turnham Green
10-20%	North Hanworth, Hounslow, Hounslow East, Hounslow West, Spring Grove, Isleworth, Boston Manor, Chiswick
60-70%	West Feltham, East Bedfont



When compared to other boroughs in London, Hounslow is considered to be relatively healthy. However, there are significant variations across the borough, generally mirroring the trends seen previously for IMD. Areas which are considered to be very healthy include Chiswick and Osterley, with areas of Hounslow, Hanworth, Isleworth and Heston also performing relatively well. Pockets of poor health exist around Brentford, Syon Lane, Cranford, Feltham and Hanworth.

Figure 4.7 - Indices of Multiple Deprivation - Health



Housing growth and infrastructure

Housing growth

4.34 A significant amount of future development is expected in the borough set out within both Hounslow's Local Plan and the London Plan.



4.35 Work undertaken

as part of Hounslow's Local Plan Reviews has identified the potential to provide an additional 7,500 new homes within the Great West Corridor area. This includes transformation of the 'Golden Mile' into a 21st century employment led mixed use corridor and around 405,000m² of employment and commercial space.

4.36 The West of Borough Local Plan Review sets out opportunities to provide 11,300 new homes focused around Feltham and Bedfont within the Heathrow Opportunity Area, alongside approximately 415,000m² employment and commercial space. Hounslow's Local Plan also establishes both Hounslow and Brentford as areas for significant growth, investment and regeneration. Hounslow's significant growth areas are indicated on **Figure 4.8**. These areas indicate where future development and intensive growth is expected.

Infrastructure and transport

4.37 The focus for physical infrastructure and transport in the borough is on developing alternative options to driving. This will be delivered through improvements to public transport, active travel networks, improving road safety and developing a 'healthy streets' approach.⁷⁰ Improvements for cycling and walking are also being delivered through the borough's 'Streetspace' programme, several 'school streets' and South Chiswick Liveable Neighbourhood.

4.38 Consideration of GBI will be essential in ensuring good access and opportunities for active travel throughout the borough. Some improvements to transport and highways infrastructure will provide opportunities to 'green the grey' and incorporate new GBI into infrastructure schemes. GBI such as trees, green walls and rain gardens can help to define pedestrian areas and linear routes. Improvements to open spaces may also need to be coordinated with transport projects in order to identify future 'Destination Spaces'.

4.39 Hounslow residents are fairly dependent on driving, with 47% of trips made by car daily. However, 42% of households are reported to have no car.⁷¹ Due to several major roads going through the borough there are several points with significant traffic congestion issues. The number of people killed or seriously injured on the borough's roads halved between 2003 and 2016. However, road safety continues to be a significant issue. Collisions on minor roads

⁷⁰ <https://tfl.gov.uk/corporate/about-tfl/how-we-work/planning-for-the-future/healthy-streets>

⁷¹ LB Hounslow JSNA (2017)

increased over the 10 years leading up to 2016. 2016 also saw the highest number of child casualties when compared to the previous ten years.⁷²

4.40 Transport for London's Public Transport Accessibility Level (PTAL) data is a measure of access to the public transport network. PTAL scores range from 0 'very poor' to 6b 'excellent'. PTAL scores vary significantly throughout the borough. Hounslow Town Centre experiences the best access to public transport (PTAL 6a). Areas with poorer access includes Feltham and Hatton Cross (PTAL level 3 & 4). Areas with the poorest access include Bedfont, Feltham West, Hounslow Heath, Cranford and Brentford.

4.41 Rail services are currently focussed on connectivity to central London and there is poor orbital connectivity in the borough. There are three potential major rail links for borough that are supported by the Council and are at various stages of proposal development:

- Southall Rail Link – Connecting Brentford to Southall where it would connect to the Elizabeth Line.
- The West London Orbital – a new overground line connecting Hounslow and Brentford to the Elizabeth Line at Old Oak Common and beyond to Cricklewood and West Hampstead.
- Heathrow Southern Rail Access – a direct connection between Feltham and Heathrow with a potential new station at Bedfont.

4.42 Improvements to road safety and congestion are being delivered via a range of highways and junction improvements focused on traffic hotspots. A borough wide 20mph speed limit on residential roads and areas with high pedestrian footfall is also being implemented.

4.43 The Council's third Local Implementation plan establishes the basis for a Priority Cycle Network. The priority network will link major centres within and out of the borough including Southall, Ealing, Chiswick, Twickenham and Richmond. TFL is also currently implementing phase one of Cycleway 9 (C9) that will run between Chiswick and Hounslow.

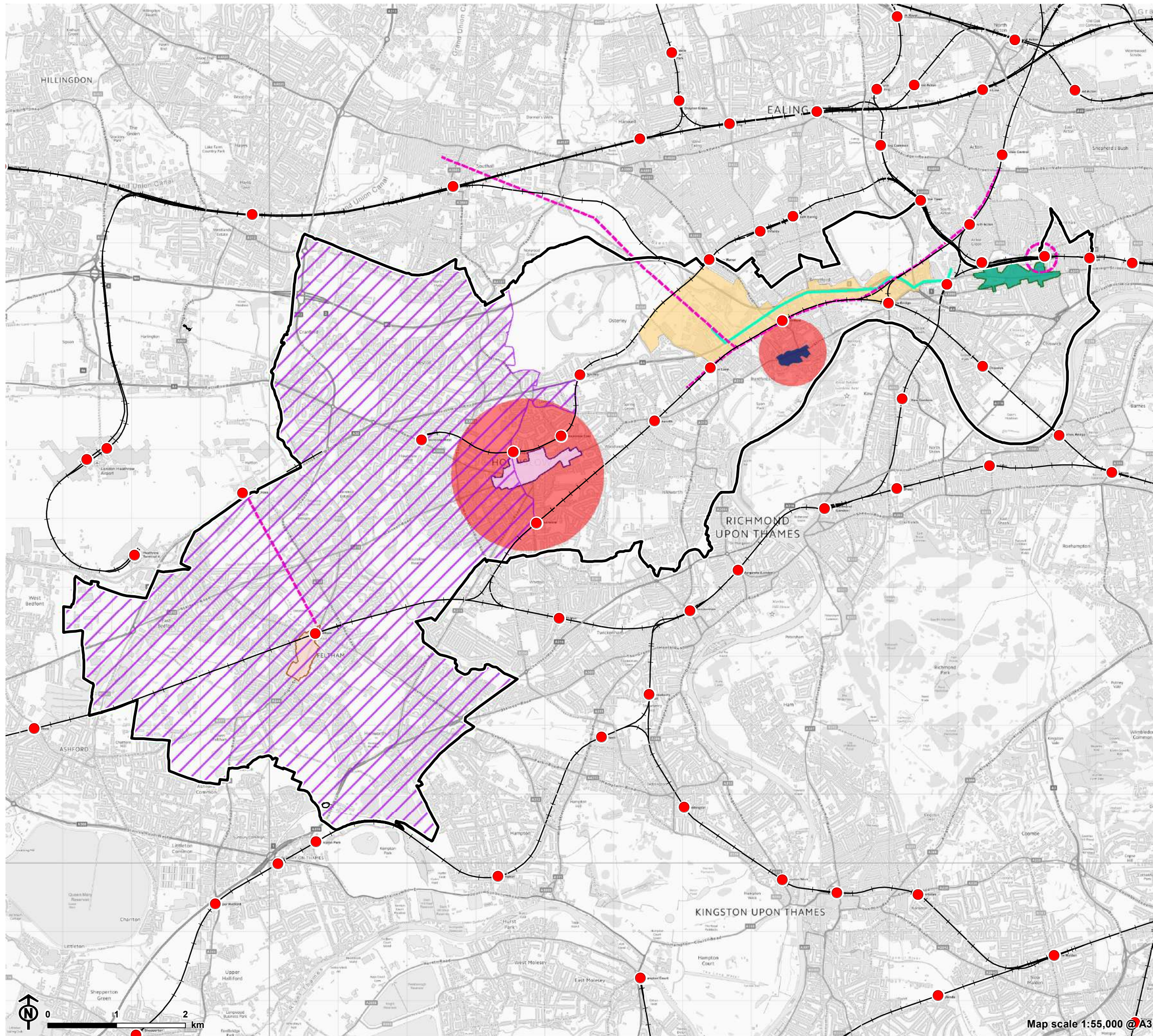
Summary: Housing growth and infrastructure

- Delivery of new development and infrastructure will provide the opportunity for the incorporation of new GBI features in the borough.
- Planning for GBI should be co-ordinated with delivery of housing, infrastructure and transport to ensure maximum benefits are derived. Both in terms of location and long-term functionality of GBI.

⁷² LB Hounslow Third Local Implementation Plan (2019)



Figure 4.8: Planned Growth and New Transport Infrastructure



- London Borough of Hounslow
- Hounslow significant growth area
- West of Borough and Heathrow opportunity area
- Great West Corridor
- Brenford Town Centre
- Chiswick Town Centre
- Feltham Town Centre
- Hounslow Town Centre
- New public transport infrastructure
- Golden mile
- Railway
- Railway station



Map scale 1:55,000 A3

Economic growth and Green Recovery

4.44 Hounslow has one of the largest economies of all the London boroughs. The borough has previously seen significant employment growth (12% between 2008 and 2013). This represents some of the highest growth rates in west London, which are also above London averages.

4.45 2014 data indicates that small and medium sized enterprises (less than 250 employees) account for around 93% of all businesses in the borough. Businesses employing over 250 employees only accounts for 1% of businesses in the borough. The majority of recent business growth has come from micro businesses (fewer than five employees). The east of the borough, and Chiswick in particular, has been identified as a comparatively enterprising place with high levels of self-employment, home working and sole traders.⁷³ To the west of the borough, Heathrow is a major economic stimulus, in terms of employment, tourism and connectivity.

4.46 The town centres of Chiswick, Feltham, Hounslow and Brentford are considered major economic drivers and employment hubs. The Council has previously received over £1.2 million from the Outer London Fund to support the regeneration of Brentford Town Centre. Over £15.6 million has also been received for the regeneration of Feltham Town Centre. Other areas of future economic growth in the borough include Rectory Farm. This allocated mineral extraction site will be re-instated as a public park and industrial development, eventually providing an estimated 1,870 to 2,540 jobs.⁷⁴

Covid-19: Hounslow's economy and Green Recovery

The pandemic has had a major economic impact. Independent research carried out by Oxford Economics predicts that Hounslow will be the second worst impacted London borough economically.

Between February and April 2020, there was 27% increase in Hounslow residents receiving universal credit.⁷⁵ By the third quarter of 2020, 37% of Hounslow's workforce were on furlough; the highest in London based on proportion of the population. 47.7% of jobs in Hounslow are in sectors that are severely impacted by the pandemic. Individuals

most likely to feel the impact include lower skilled, lower paid workers, the young, over 50s, and ethnic minority communities.

4.47 Hounslow's Green Recovery Board has started to explore options for a future low carbon economy and green growth in the borough. Ideas that have been explored that are of most relevance to GBI include:

- Creating a 'green industrial district'; a landmark destination for green businesses;
- Special planning arrangements for implementation of GBI;
- Utilising the London Heat map to identify focus areas for energy saving measures;
- Reskilling' for green skills and green career paths; and
- Low traffic neighbourhoods and developing Hounslow's version of the '15 minute city'.

Summary: Economic growth and green recovery

- Hounslow has a small business economy. Heathrow, as an employer and gateway area, has a significant economic influence on the borough.
- Priorities and focus for the borough's high streets (as key economic hubs) may continue to be influenced by the pandemic.
- GBI has a central role to play in Hounslow's green recovery. The function of GBI such as parks and open spaces may be extended to support local businesses and skills development.

⁷³ LB Hounslow Regeneration and Economic Development Strategy (2016-20)
<https://www.hounslow.gov.uk/info/20061/regeneration>

⁷⁴ <https://rectory-farm.com/proposal/>

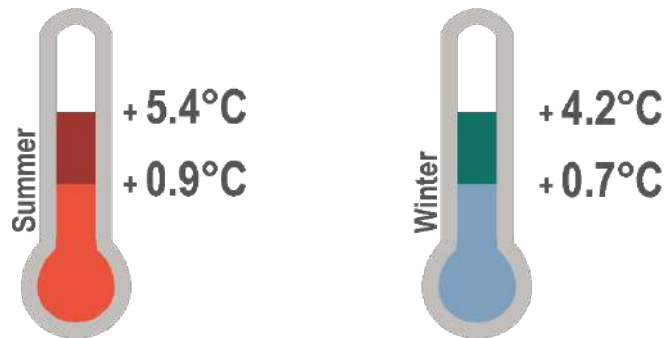
⁷⁵ https://www.hounslow.gov.uk/info/20002/recycling_and_rubbish/2180/hounslow_green_recovery_board_-_blog/4

The climate emergency and environment

The climate emergency

4.48 In June 2019, Hounslow joined many other boroughs across the country in declaring a climate emergency. Since this declaration, the Council has set out the local response to the climate emergency within Hounslow's Climate Emergency Action Plan. The action plan focusses on ways in which the Council can reduce carbon emissions in the borough, for instance, through modal shift to active travel. GBI can both help in adapting to a changing climate and also mitigate the causes of the climate emergency.

4.49 By the end of the 21st century, all areas of the UK are projected to be warmer, more so in summer than in winter consistent with future warming globally. The UK Climate Projections (UKCP) uses probabilistic projections to provide low, central and high changes across the UK corresponding to 10%, 50% and 90%. These are averaged to give a range of seasonal average warming between then the 10% and 90% probability levels. By 2070, in the high emission scenario, this range amounts to 0.9°C to 5.4°C in summer, and 0.7°C to 4.2°C in winter.



4.50 Hot summers in the UK are expected to become more common. The summer of 2018 was the equal-warmest summer of those recorded for the UK along with 2006, 2003 and 1976. Climate change has already increased the chance of seeing a summer as hot as 2018 to between 12-25%. With future warming, hot summers by mid-century could become even more

common, near to 50%⁷⁶. This will be exacerbated by the Urban Heat Island effect within Hounslow's more built-up areas.

Flooding

4.51 Climate change can contribute to increases in local flood risk in several ways. Rising sea or river levels may cause increased flood risk inland due to interactions with drains, rivers and small watercourses. In addition, more intense rainfall events may increase surface water run-off, with subsequent additional risk of sewerage overflow and potential for damage to property and people. As development occurs in the borough the proliferation of hard surfacing and paving has the potential to increase surface water run-off.

4.52 The greatest fluvial risk to Hounslow is from the River Thames during tidal surges, as can be seen in **Figure 4.9**. Smaller-scale flood risk also exists from the borough's other watercourses, including the River Brent and River Crane. GBI can begin to address these risks through the creation of additional flood storage and by slowing the rate at which overland flow reaches watercourses.

4.53 Like much of London, Hounslow also experiences significant pockets of high surface water flood risk, as can be seen in **Figure 4.10**. This risk is expected to increase in the future as extreme rainfall events are coupled with an increased demand for development, and therefore impermeable surfaces, to cater for growing populations. Once again GBI, particularly urban greening in this case, will play a fundamental role in the management of surface water run-off through reducing the proportion of impervious surfaces.

Water quality

4.54 The potential for climate change to result in more intense rainfall during the summer months and a wetter winter season in the UK is likely to affect the borough's water quality. Currently, water quality in London's rivers is assessed as 'moderate' to 'poor' with only a small number of water bodies classed as 'good'⁷⁷.

4.55 Surface water run off can cause sewer overflow to the detriment of water quality in the Thames and its tributaries. The potential for rainwater to carry hydrocarbons, metals, dust, litter

⁷⁶ Met Office (2019) UK Climate Projections: Headline Findings

⁷⁷ Defra and Environment Agency (2015) Thames river basin district River basin management plan

and organic materials into watercourses as it washes the urban streets and buildings poses a threat to the water quality at local watercourses.

4.56 A 2019 Greater London Authority report has set out predictions of the amount of pollution deposited on roads and potential damage to rivers. This work provides a means of identifying key location in the borough to mitigate against damaging road run-off. Stretches of several roads in the borough are included among the top 5% most polluted roads in London, including:

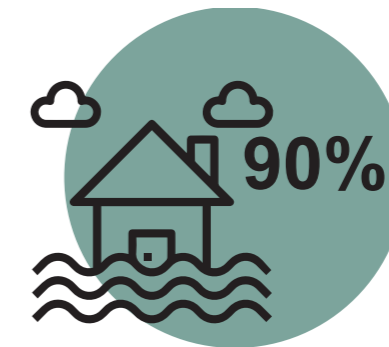
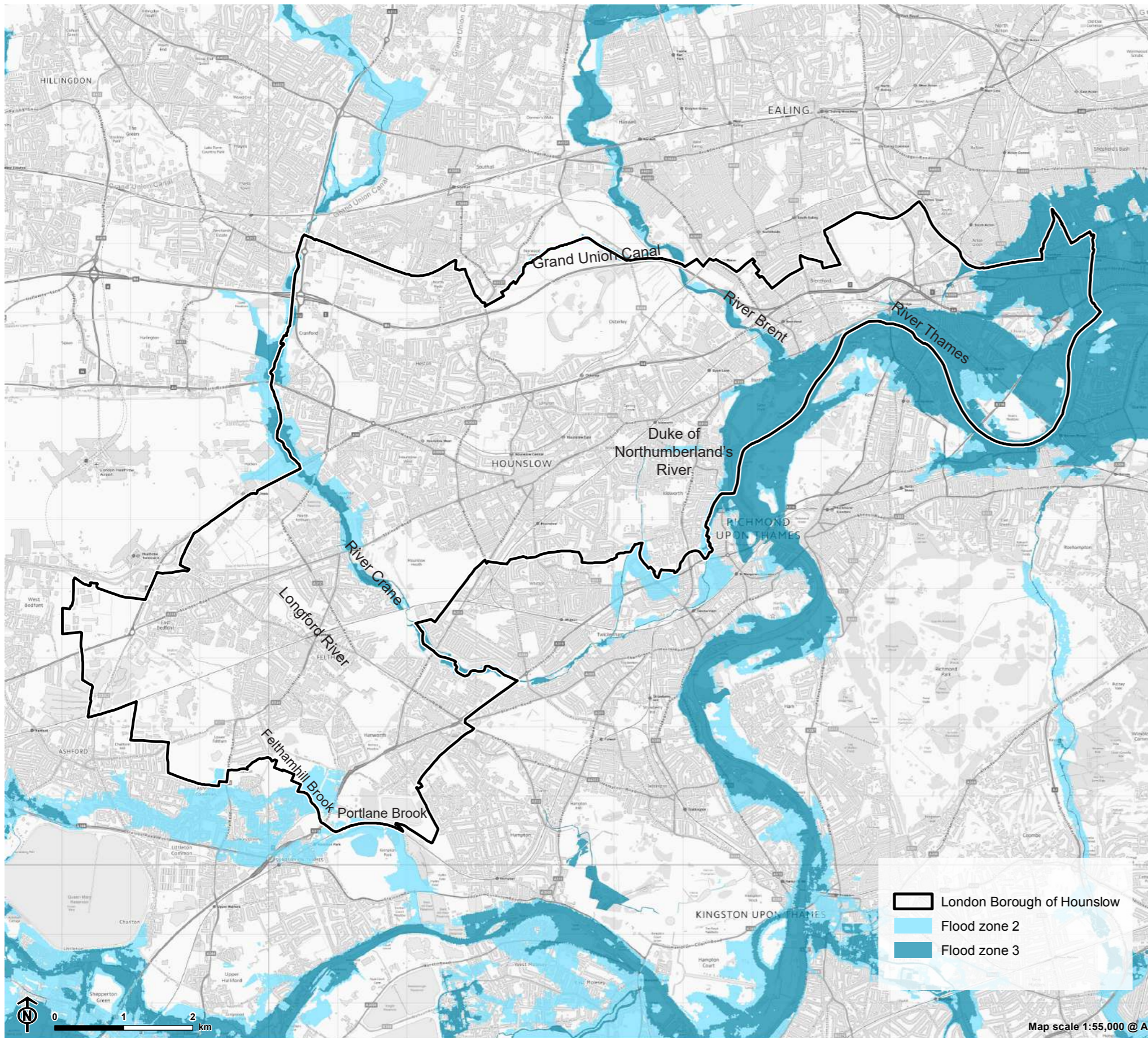
- A315
- A312
- A406
- A205

Summary: The climate emergency and environment

- Hounslow's Climate Emergency Action Plan highlights the role of GBI in mitigating and adapting to the pressures of climate change.
- The borough is at risk of tidal, fluvial and surface water flooding, the magnitude and frequency of which is expected to increase with climate change. GBI offers tools for natural flood management.
- GBI can also be used to enhance the ecological status of the borough's watercourses through the filtering of pollutants.

Figure 4.9 - Fluvial & tidal flood risk

Significant sections of the east and south east of the borough sit within Flood Zone 2 and Flood Zone 3. This equates to a greater than 0.1% and 0.5% chance respectively of flooding from rivers in any one year. The greatest risk to Hounslow is flooding from the River Thames due to tidal surges. This risk is greatly reduced due to significant flood defences, such as the Thames Barrier. However, climate change will cause additional pressure on these defences due to rising sea levels and an increased frequency and magnitude of extreme weather events.



90% of these properties are in Chiswick, Brentford and Isleworth

15% of properties within Hounslow sit within Flood Zone 2. This equates to at least a 0.1% chance of flooding from rivers in any one year

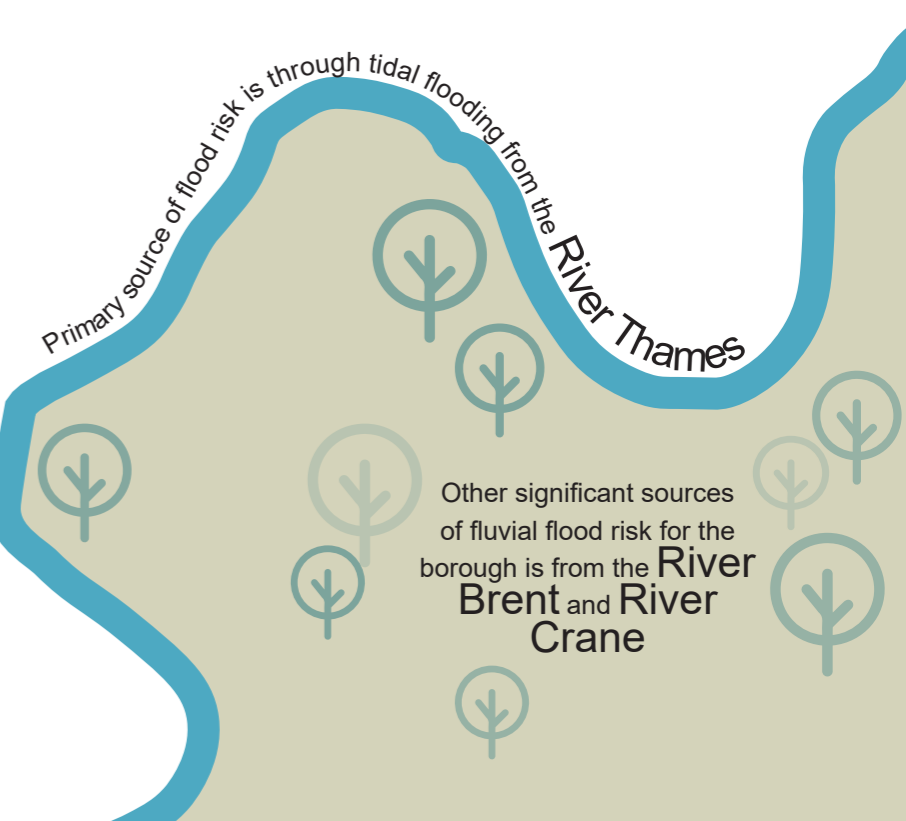
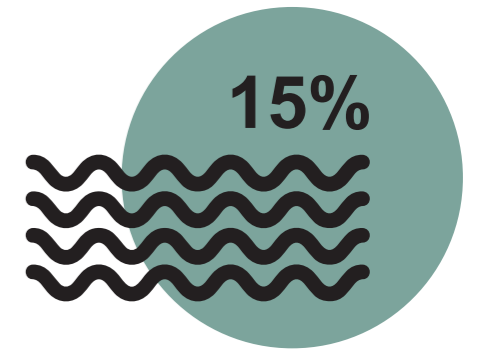
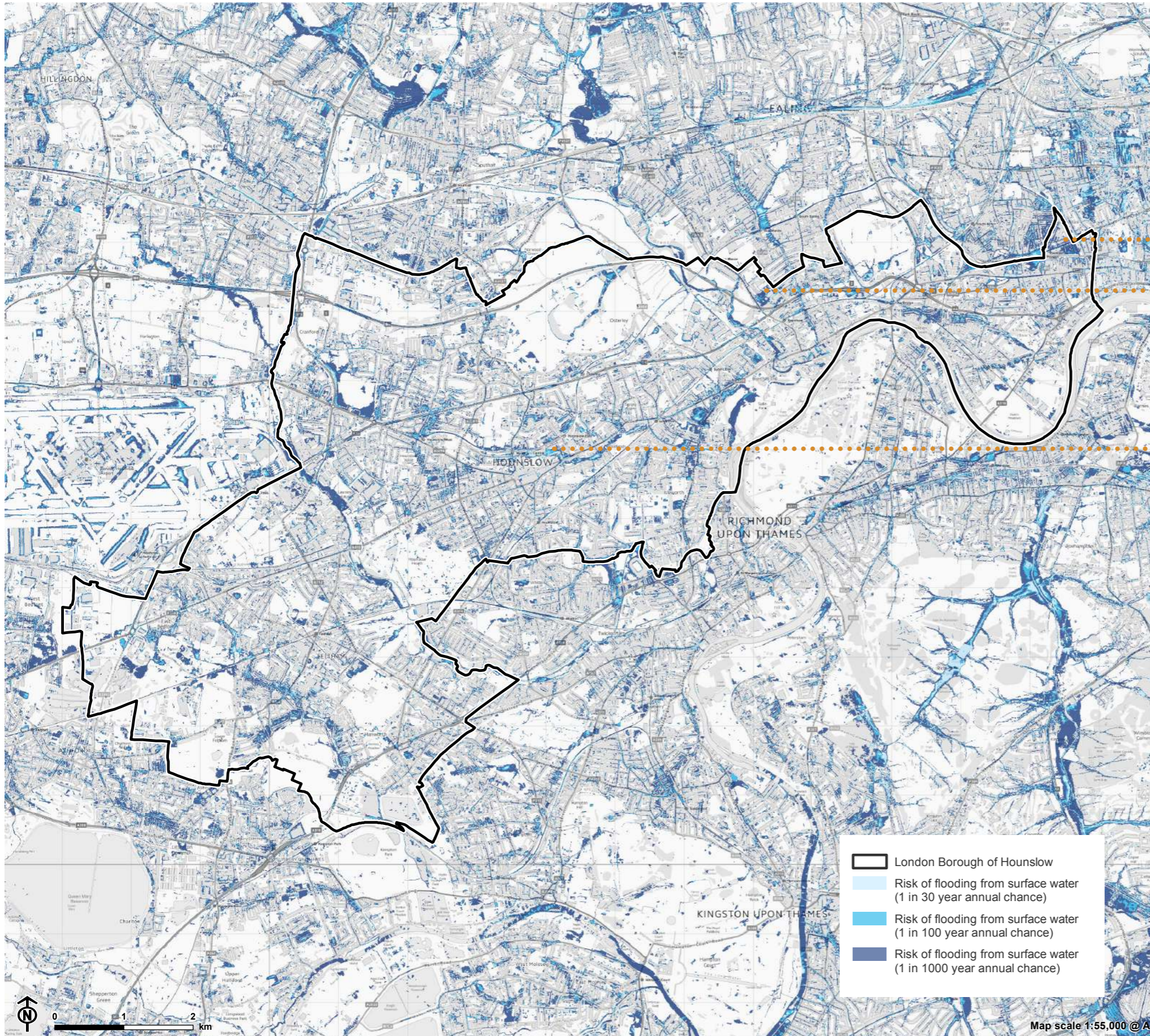


Figure 4.10 - Surface water flood risk

The risk of surface water flooding will intensify alongside climate change, as the likelihood of extreme rainfall events increases. This, when coupled with population growth and the increasing demand for new housing and development, means sustainable surface water management has never been more crucial.

Reducing the proportion of impermeable surfaces across the borough should be a priority, with specific focus on greening areas of greater flood risk, including Chiswick, Brentford and Hounslow.



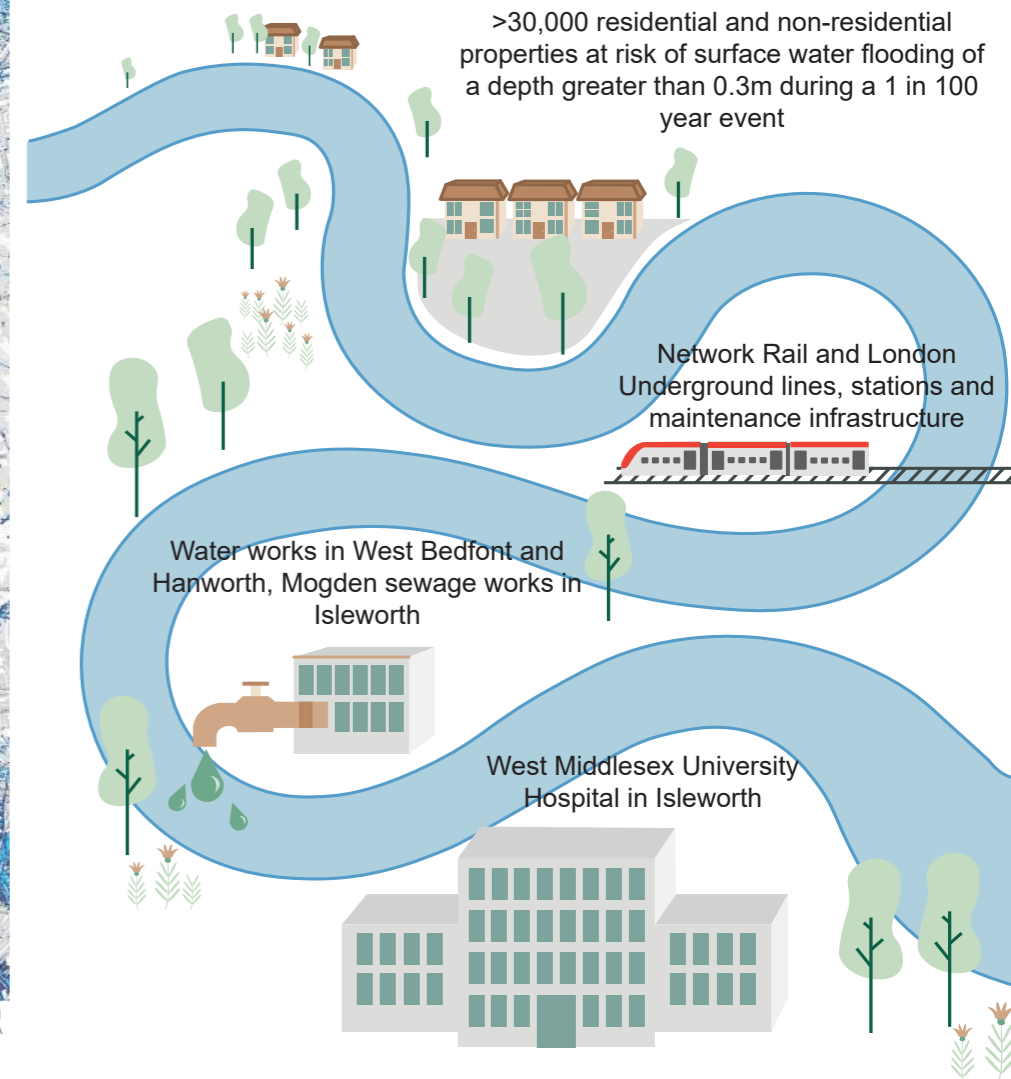
Flanders Road, Turnham Green

Boston Manor Road & Manor Vale, Brentford



There are 12 Critical Drainage Areas (CDA) in Hounslow. These three CDAs have been identified as being at particular risk.

Bridge Road & Pears Road, Hounslow







Biodiversity

4.57 Biodiversity (the variety of all life) is under threat throughout the world. The major threats to biodiversity include habitat loss through urbanisation and agriculture, habitat fragmentation and climate change. Species diversity is declining worldwide. Between 2002 and 2013 53% of UK species were shown to have declined⁷⁸, and the National Ecosystem Assessment has previously indicated that over 40% of priority habitats and 30% of priority species are declining, driven partly by the changing climate⁷⁹. In order to maintain and enhance biodiversity in the borough in the coming years it will be necessary to ensure existing habitats are resilient to the effects of climate change and form a 'coherent ecological network'. Provision of GI in the borough should be informed by the need for habitats to become bigger, better and more joined up; whilst also providing more habitats⁸⁰.

4.58 The loss of biodiversity is a matter of the highest concern since we are totally dependent on the natural richness of our planet for our food, energy, raw materials, clean air and clean water. Biodiversity loss undermines not only the natural environment, but also our economic and social goals. A wide range of European, national, regional and local legislation, policy and guidance has a bearing on biodiversity conservation. Many plant and animal species receive some degree of protection under European Union and United Kingdom laws. However, large areas of the GBI network are 'unprotected' but nevertheless provide (or have the potential to provide) valuable space for nature.

4.59 National priority habitats and species are defined in the list of Habitats and Species of Principal Importance in England⁸¹, identified under Section 41 of the Natural Environment & Rural Communities Act 2006⁸². The multifunctional nature of GI means that other aims such as providing strategic flood storage and areas for recreation can be achieved alongside biodiversity net gains and Hounslow's statutory duty under the NERC Act (2006) to '*have regard... to the purpose of conserving biodiversity.*'⁸³

4.60 Priority habitats⁸⁴ and species⁸⁵ in London have been identified by the London Biodiversity Partnership. There are London action plans in place for the habitats and a few of the species. The London Environment Strategy sets targets for the areas of priority habitats to be created and enhanced in London by 2025 and 2050, as seen below.

Habitat	By 2025	By 2050
 Species-rich woodland	20 ha	200ha
 Flower-rich grassland	50 ha	250 ha
 Rivers and stream enhancement	10 km	40 km
 Reedbeds	5 ha	30 ha

⁷⁸ RSPB (2016) State of Nature

⁷⁹ UK National Ecosystem Assessment, <http://uknea.unep-wcmc.org> (2011)

⁸⁰As set out in Lawton, J. (2010) 'Making Space for Nature: A review of England's Wildlife Sites and Ecological Network.' Submitted to Defra

⁸¹ Habitats and Species of Principal Importance in England (Secretary of State for Environment, Farming & Rural Affairs 2010)

⁸² [Natural Environment and Rural Communities Act 2006](#)

⁸³ Natural Environment and Rural Communities Act (2006)

⁸⁴ [London's BAP priority habitats](#) (London Biodiversity Partnership)

⁸⁵ [London's BAP priority species](#) (London Biodiversity Partnership)

4.61 The table below sets out the potential likely impacts to key habitat types in Hounslow as a result of the changing climate.

Habitat type	Potential climate change impacts ⁸⁶
Semi-natural grasslands	Changes in rainfall patterns likely affect species composition. An increase in summer droughts may lead to a decline in wet grassland communities. Prolonged dry spells increase the risk of fires during summer months.
Lowland heath	Changes in rainfall patterns likely to affect species composition. Prolonged dry spells increase the risk of fires during summer months.
Wetlands	Impacts to water quality and water regimes as a result of changes in rainfall patterns and water table. Reductions in rainfall are likely to particularly affect wetlands in South East England. Reduced habitat quality and suitability for freshwater organisms as a result of sensitivity to increased temperatures.
Freshwater lakes, rivers & ponds	Warmer temperatures increase negative impacts from eutrophication (excess nutrients leading to algal growth). Alternating periods of flood and drought may help to maintain pond diversity and result in more seasonal wetlands.
Woodland	Tree death may occur following periods of extended drought. Many common UK species are particularly susceptible to drought including beech, birch and sycamore. Lowland beech woodland and wet woodland may be more likely to be adversely affected by the changing climate, especially in drier parts of the UK such as the South East. Specific woodland communities such as mosses and ground flora could be affected by changes to rainfall patterns. Ground flora could also be affected by changes in leaf emergence times. Impacts from current and potential future tree pathogens may be increased due to climate related tree stress.

4.62 Biodiversity provides numerous benefits to humans, perhaps one of the most significant of which is its role in determining people's health and well-being. Access to nature is invaluable for both physical and mental health, with the latter being associated with reduced stress, better cognitive function, improved mindfulness and enhanced creativity. Furthermore, encouraging an interaction with nature is an important tool for raising awareness of the value of biodiversity conservation and climate resilience, therefore helping communities to build more sustainable habits. Hounslow performs relatively well in access to nature when compared to the rest of London, with roughly 90% of the borough sitting within 400m of a Site of Importance for Nature Conservation, as seen in **Figure 4.11**. However, there are still significant pockets of the borough which fail to meet access to nature standards.

Summary: Biodiversity

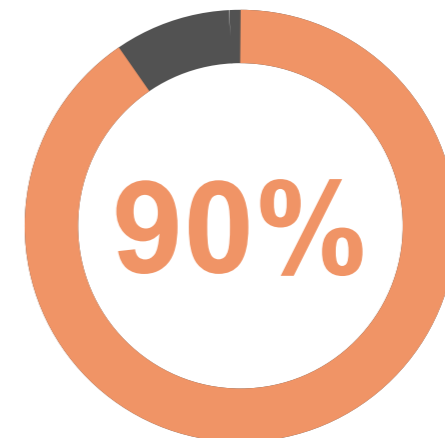
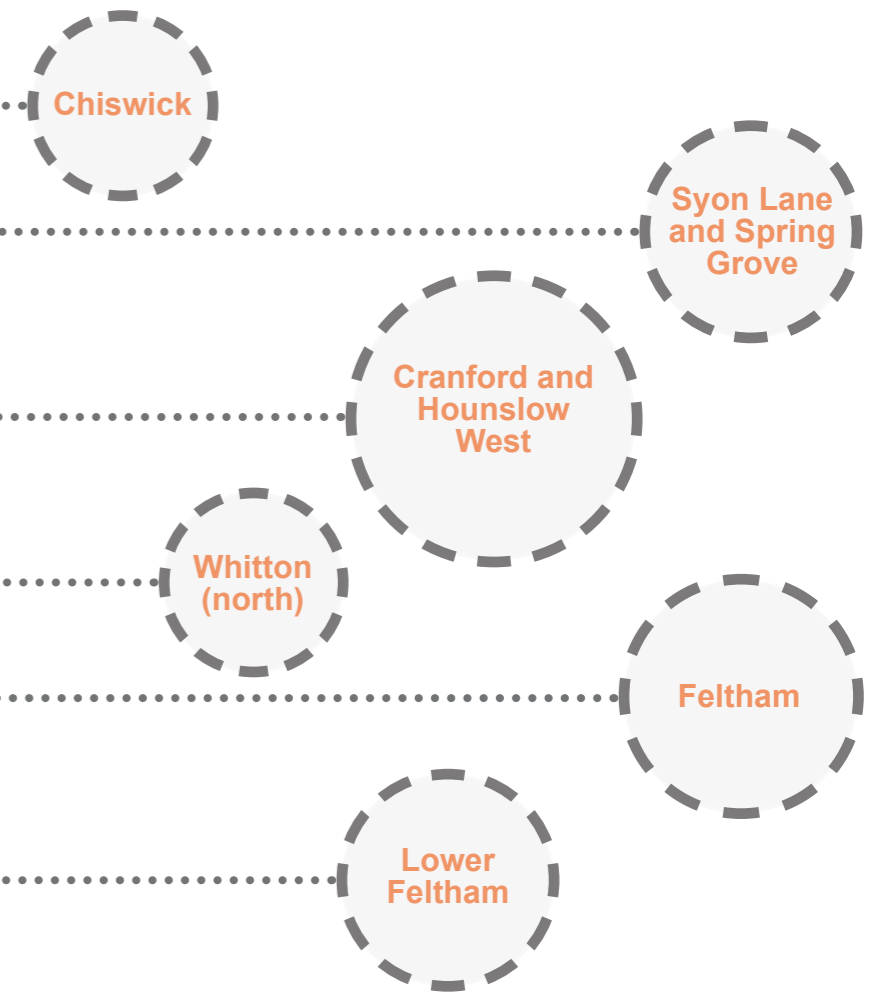
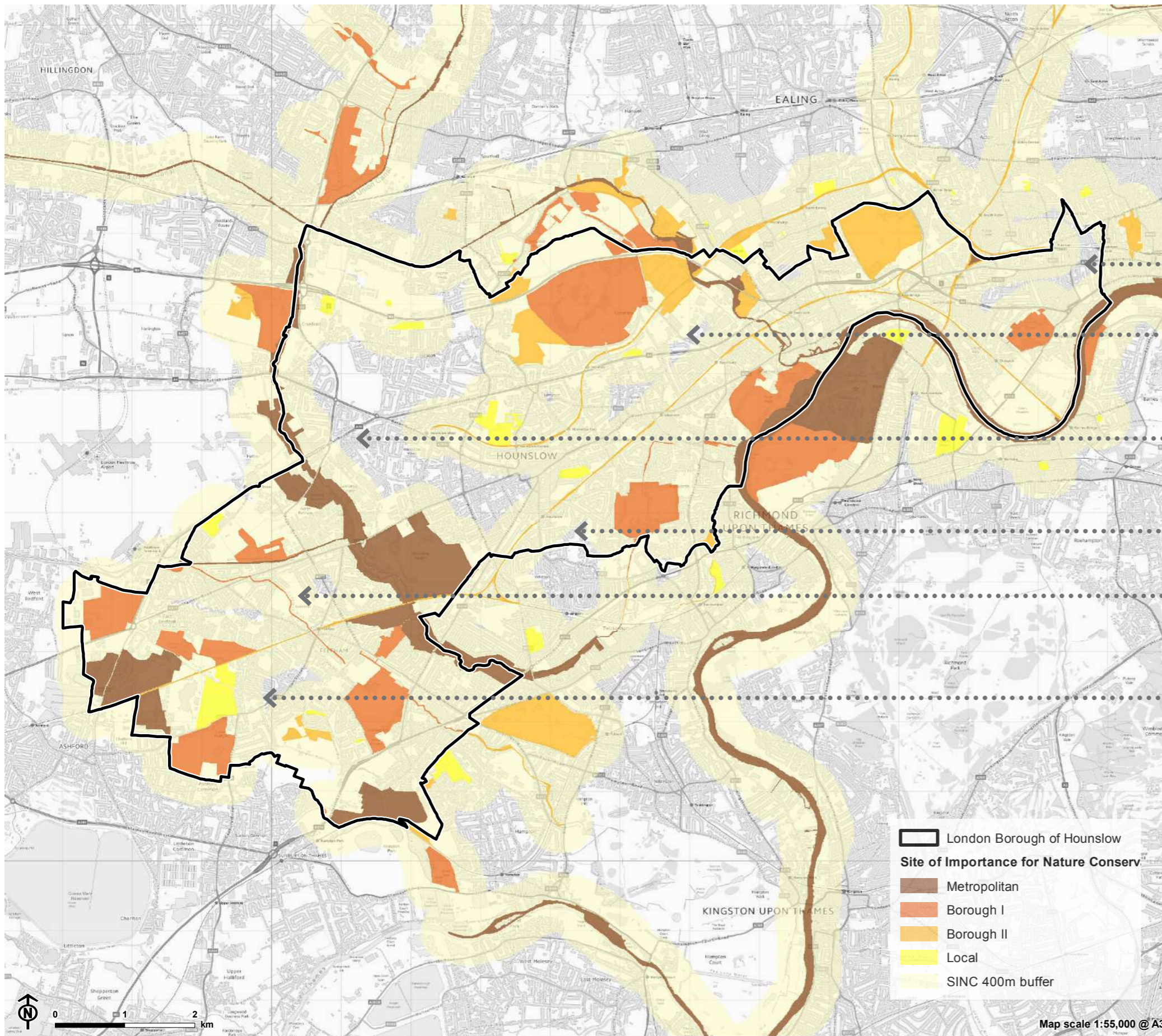
- A coherent ecological network is needed across the borough to ensure climate resilience.
- There should be a desire for 'more, bigger, better and joined up' habitats across Hounslow, with particularly focus on Priority Habitat expansion and enhancement.
- Ensuring borough-wide access to nature is essential for resident's well-being.

⁸⁶ Morecroft,

M.D. & Speakman, L. (2015) Biodiversity Climate Change Impacts Summary Report. Living With Environmental Change. <https://nerc.ukri.org/research/partnerships/ride/lwec/report-cards/biodiversity/>

Figure 4.11 - Access to nature

Areas where there is a deficiency in access to nature should concentrate on how existing green space can be improved to further support biodiversity. Where this is not possible, enhancing connectivity to surrounding SINCs could be an alternative option. Although Hounslow is considered to perform well with access to nature, it is important to remember that many of the larger-scale SINCs within the borough are not publicly accessible or have an entry fee, including Osterley Park, Syon Park and numerous rail corridors.



% of the borough lies within 400m of a SINC site

Chapter 5

Developing a Framework and Vision for Green and Blue Infrastructure in Hounslow

Consultation and community engagement

5.1 The approach to engagement and consultation included a review of existing consultation data included on the Council's Consultation Hub⁸⁷ as well as the provision of the following initiatives:

- Online residents survey to provide insight into the public's use of spaces, nature, connectivity, community engagement and the impacts of Covid-19;
- Stakeholder consultation via telephone calls, video conferences and emails; and
- Three stakeholder workshops (online), one for each project.

5.2 Assets, issues and opportunities were identified as part of the development of the GBI strategy, derived from desk-based research, surveys and wider consultation.

Stakeholder workshops

5.3 Workshop invitations were extended to stakeholder and partners within and outside the Council, a grouping pre-determined by the client. All workshops were held on Zoom and supported by use of *Miro*⁸⁸, an online collaboration tool. **Figure 5.1** shows an example workshop output following the use of this software platform. The sessions were led by members of the LUC and CFP Team and introduced by Wayne Stephenson, Assistant Director of Environmental Services and Culture at the Council. Details of the workshops are outlined below:

- **Workshop 1: Green Infrastructure Strategy** – internal stakeholders and partner organisations only;

⁸⁷ <https://haveyoursay.hounslow.gov.uk/>

⁸⁸ <https://www.miro.com>

- **Workshop 2: Green Infrastructure Strategy** – community groups and the wider public only; and
- **Workshop 3: Nature recovery and urban greening workshop** – open to all.

5.4 The workshops were structured around a series of exercises which focussed on the identification of the following elements:

- Key issues for the strategy;
- Existing / forthcoming projects or initiatives;
- Potential interventions and opportunities; and
- Identification of potential delivery partners.

5.5 Key findings from the various strands of the consultation programme are considered under each of the relevant themes. A summary of all engagement findings is included within **Appendix A**.

Vision

5.6 The vision for the GBI within the borough aims to provide a framework to ensure the borough's network of parks, greenspaces, street trees, rivers and wetlands are planned, designed and managed to ensure the delivery of a range of ecosystem services. This strategic approach to GBI provision aims to deliver a network of green infrastructure which will be regarded as natural capital; assets that provide value that can contribute to a greener economy. Furthermore, the document will support and help to deliver multiple and interconnected work streams and projects associated with the Greener Borough Framework, green recovery and climate emergency.

A 'themed' approach

5.7 In order to establish green and blue infrastructure principles and policy recommendations to achieve the vision, the following section of the report first explores the green and blue infrastructure network in the borough. This has been divided into several 'themes', which provides a useful framework to understand and plan for green and blue infrastructure in the borough (see **Figure 5.2**). The themes are listed below:

Chapter 5

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

- Parks and open spaces: *Provision of easily accessible high quality, well designed multi-functional open spaces.*
- Access and connectivity: *Permeable landscapes for sustainable travel, access to areas for recreation and wildlife.*
- Nature recovery: *Connected and conserved, resilient networks of habitats across the borough.*
- Urban greening: *Vegetation incorporated into the fabric of the urban environment.*
- Blue infrastructure: *Rivers and water bodies considered at a landscape scale.*
- Culture & heritage: *Recognising and considering the historic environment and culture of the borough.*

5.8 The **key assets** relevant to each theme are explored, followed by a summary of key **considerations**. The strategy also identifies **opportunities** across the borough to protect and enhance GI, helping to guide the investment and delivery of GI and its associated benefits.

5.9 Following the exploration of the green and blue infrastructure themes, **principles** for delivery and projects are set out.

Figure 5.1: Example of workshop outputs

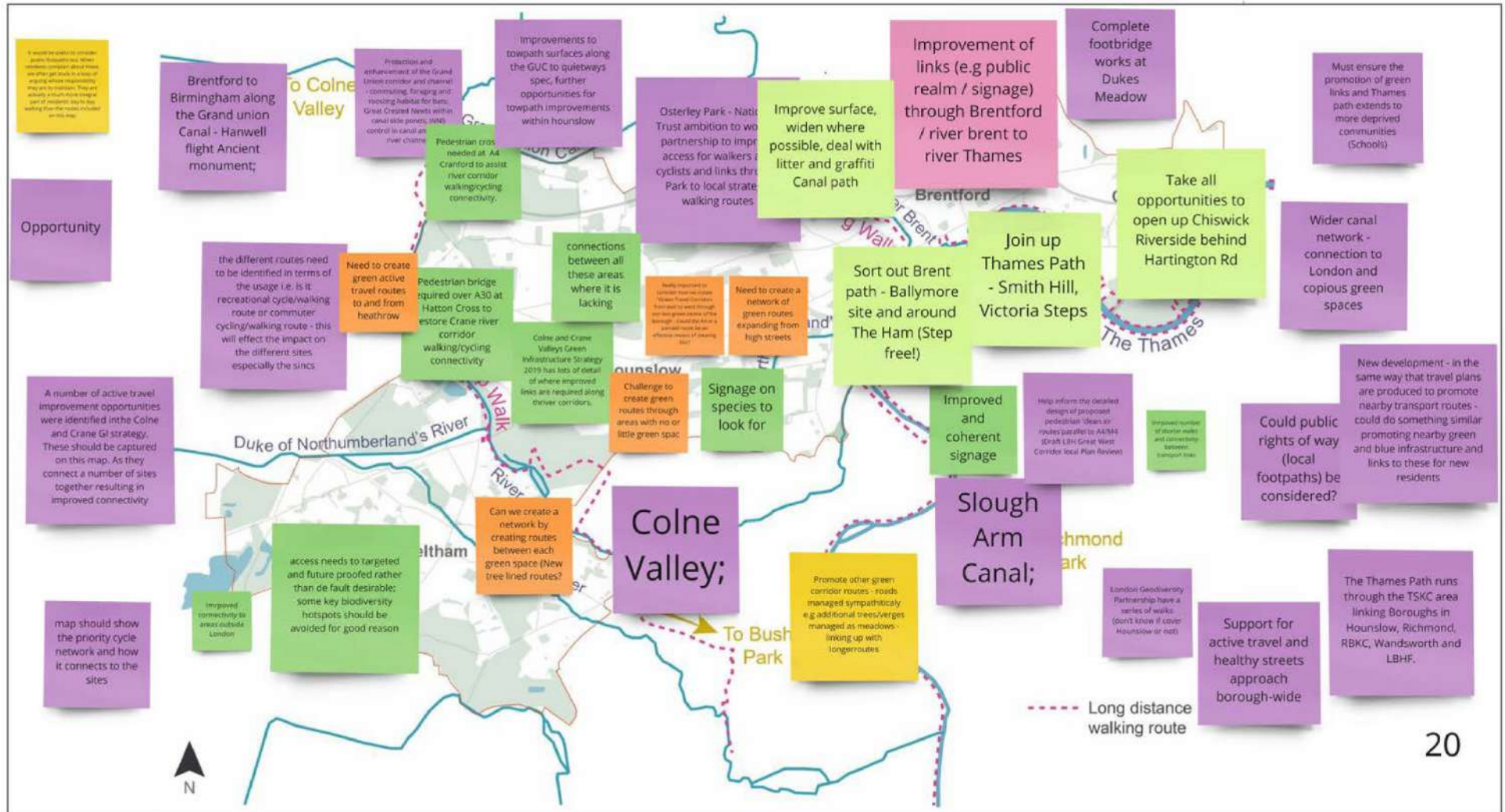
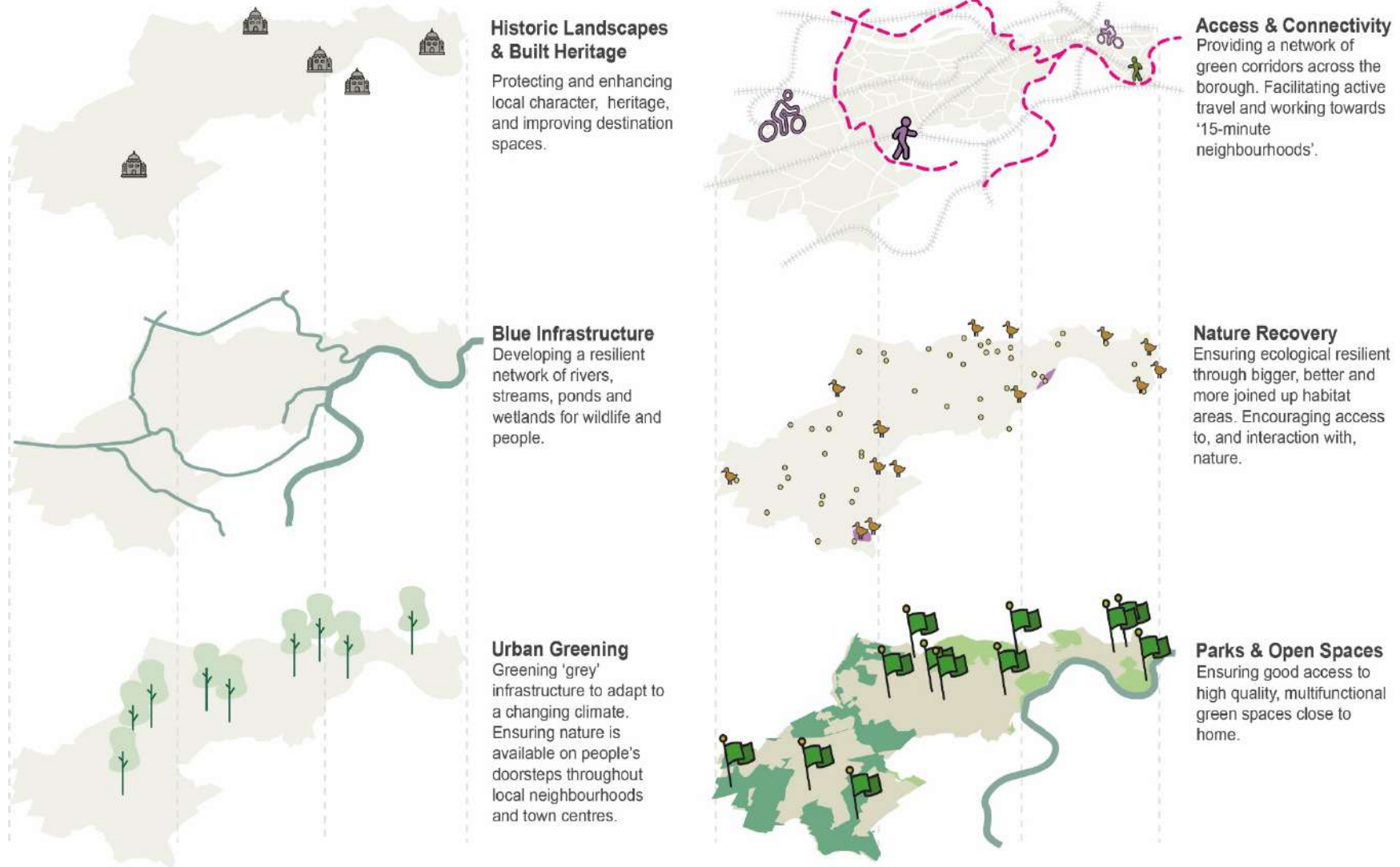


Figure 5.2: Structure of GBI themes



Chapter 6

Theme 1: Parks and Open Spaces



Exploring the assets

6.1 Within the London context, Hounslow has a relatively large amount of green space. 37% of the land area has green coverage, which is 6% above the London borough average. Hounslow is also ranked as having the third highest area coverage of publicly accessible greenspace when compared to the other 33 London boroughs.

6.2 Publicly accessible greenspace in the borough can be divided into several key 'typologies'; recognising the varying characteristics, primary functions and recreation benefits afforded by different types of open space, see **Table 6.1**.

Table 6.1: Open space typologies in Hounslow

Typology	Primary characteristics / functions	Example sites
Parks and gardens	Accessible, high quality opportunities for informal recreation and community events, these areas often act as the borough's Destination Spaces. More multi-functional than other open space, offering opportunities for quiet relaxation as well as a range of amenities and activities for visitors. Parks and gardens in particular often include children's play, youth and/or outdoor sports facilities.	<ul style="list-style-type: none"> ■ Gunnersbury Park ■ Boston Manor Park ■ Redlees Park ■ Feltham Park
Natural and semi-natural greenspace	Wildlife conservation, biodiversity and environmental education awareness. These areas have potential to deliver greater amenity value through visitor engagement	<ul style="list-style-type: none"> ■ Hounslow Heath ■ Bedfont Lakes

Chapter 6

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Typology	Primary characteristics / functions	Example sites
	with nature and conservation activities. They also have potential to act as some of Hounslow's Destination Spaces.	<ul style="list-style-type: none"> ■ Duke's Hollow ■ Gunnersbury Triangle
Amenity greenspace	Opportunities for informal activities close to home or work. Amenity Green Spaces provide a less formal green space experience than parks and gardens, and generally provides fewer habitats.	<ul style="list-style-type: none"> ■ Gainsborough Gardens ■ Farnell Road Open Space ■ Clunbury Avenue
Provision for children and young people	Areas designed primarily for play and social interaction involving children and young people, such as equipped play areas, ball courts, skateboard areas and teenage shelters. Provision for children and young people is frequently located within other typologies.	<ul style="list-style-type: none"> ■ Grantley Road Play Area ■ Biscoe Close Play Area ■ Feltham Park Play Area
Cemeteries and Churchyards	Quiet contemplation and burial of the dead, often linked to the promotion of wildlife conservation and biodiversity.	<ul style="list-style-type: none"> ■ Hatton Cemetery ■ Isleworth Cemetery ■ St. Leonard's Church
Green & blue corridors	Walking, cycling or horse riding, whether for leisure purposes or travel, and opportunities for wildlife migration.	<ul style="list-style-type: none"> ■ Longford River Corridor ■ Dan Mason Drive
Allotments	Opportunities for those people who wish to do so to grow their own produce as part of the long-term promotion of sustainability, health and social inclusion.	<ul style="list-style-type: none"> ■ Glenwood Road Allotments ■ Staveley Road Allotments ■ Chertsey Road Allotments
Outdoor sports provision	Participation in outdoor sports, such as pitch sports, tennis, bowls, athletics, or countryside and water sports.	<ul style="list-style-type: none"> ■ Carville Hall Park North ■ Osterley Sports and Athletics Centre ■ Dukes Meadows

6.3 Parks and gardens are generally recognised as having the highest value to the local community due to the wide range of features, facilities and activities on offer. As part of the wider GI network it is important to recognise the potential for all sites to be multifunctional and, where well-designed and of a high quality, provide a wide range of social, environmental and economic benefits. Such benefits include regulating and mitigating against flooding, carbon storage, temperature regulation, providing space for nature, enhancing landscape character and providing space for social interactions. Some sites may also be well placed to act as Destination Spaces, providing opportunities for income generation and creating a greater offer for visitors travelling from out of the borough.

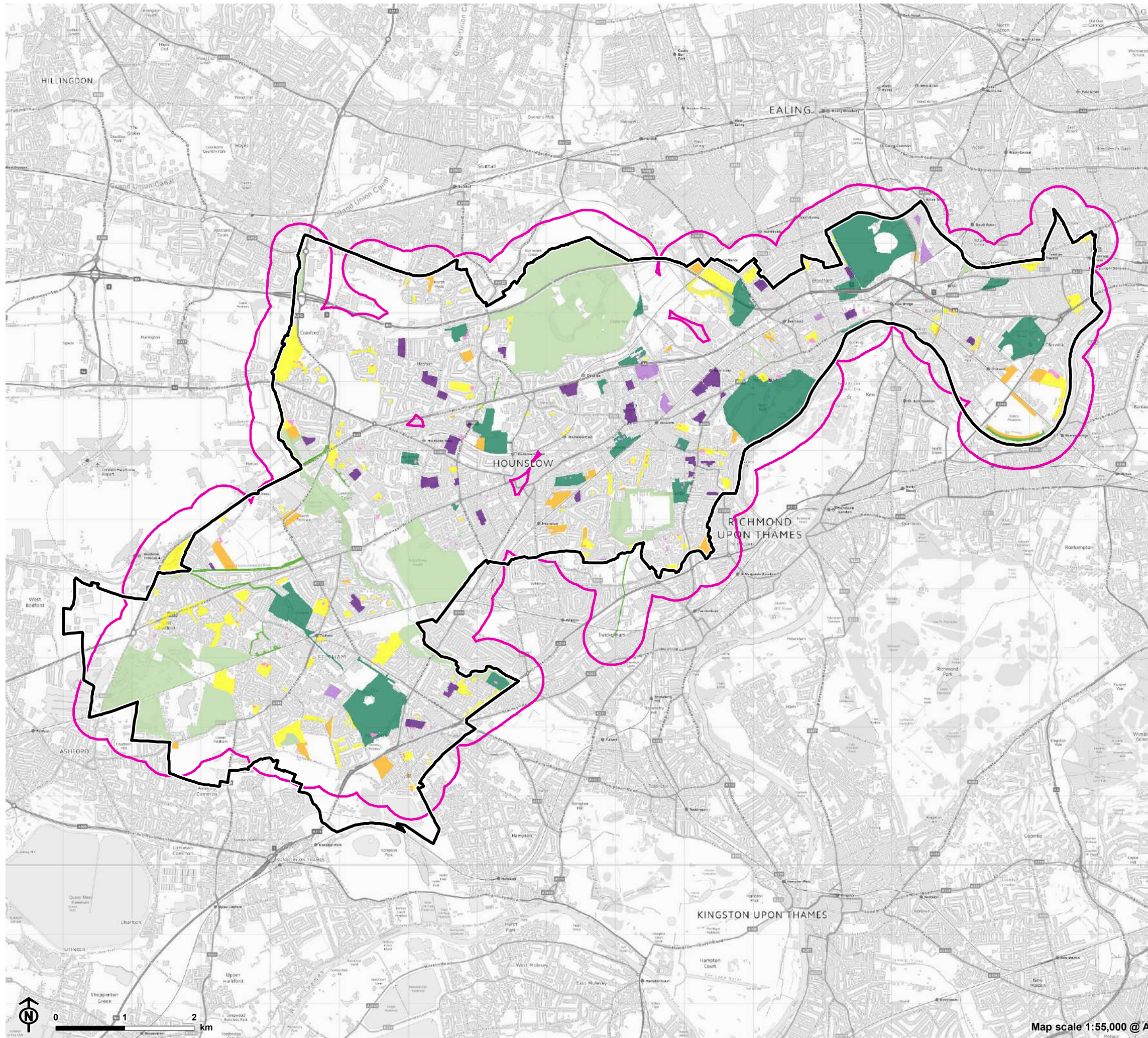
6.4 There are several large, significant open spaces in the borough that are not owned and managed by the London Borough of Hounslow and some type of access restriction applies. Whilst these sites are not considered in detail and do not fall within the definition of public open space, their role as part of the wider network of key Destination Spaces should be recognised. These sites include:

- Osterley Park (National Trust, restricted access: entry fee)
- Syon Park (Private residence, restricted access: entry fee)
- Kempton Nature Reserve (decommissioned Thames Water Reservoir)

6.5 Chiswick House & Gardens is managed by Chiswick House & Gardens Trust which was jointly created by English Heritage and the Council. Entry to the gardens is free and there is a charge to enter Chiswick House.

6.6 Open spaces in Hounslow their typologies and sites with restricted access are shown in **Figure 6.1**:

Figure 6.1: Open Space Typologies with 400m buffer



- London Borough of Hounslow
- Open space 400m buffer
- Open space**
 - Parks and gardens
 - Semi / natural greenspace
 - Amenity greenspace
 - Green corridor
 - Allotment
 - Cemetery
 - Civic space
 - Childrens play area
 - Outdoor sports facility
 - School: outdoor sports facility

Raising the standard

6.7 Strategic management and investment in open spaces across the borough is focused around achieving **Green Flag Award** status. The Green Flag Award is a national benchmark standard and recognises high quality management across several key criteria.

6.8 As of 2020, Hounslow has 16 parks and open spaces that have achieved the Green Flag Award, as seen in **Figure 6.4**. This is a record number for the borough and a notable increase from twelve awards achieved the previous year. Hounslow’s Green Flag sites represent the highest quality and value sites in the borough, these include:

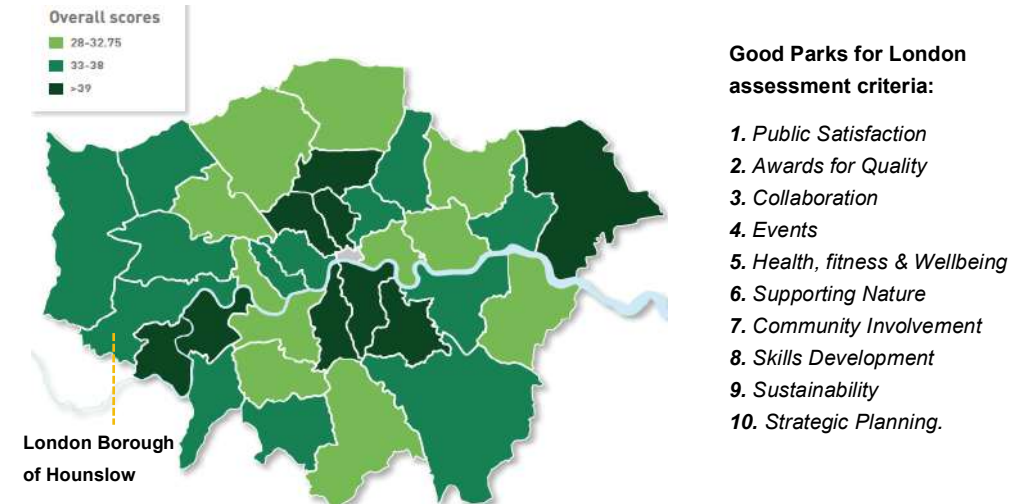
- Beaversfield Park
- Boston Manor Park
- Chiswick Back Common
- Dukes Meadows
- Heston Park
- Lampton Park
- St Dunstan’s Park
- Turnham Green
- Bedfont Lakes Country Park
- Bridge House Pond
- Church Road Allotments
- Feltham Green
- Inwood Park
- Redlees Park
- St John’s Gardens
- All Saints Churchyard

6.9 The annual Good Parks for London report is compiled by Parks for London⁸⁹ and assesses each London borough’s parks service against ten criteria (see **Figure 6.2**). A score is given for each criterion which feeds into an overall score. The assessment allows benchmarking and comparison between boroughs and can support improved performance.

6.10 Hounslow performs relatively well in comparison to other boroughs for 2020, with an overall score of 37.25. This compares to 47.75 for the highest scoring borough and 28 for the lowest scoring borough. The report highlights several potential areas for improvement for the borough when compared to other London boroughs including ‘*Events*’, ‘*Supporting Nature*’, ‘*Community Involvement*’ & ‘*Skills Development*’. Along with many other London borough’s

Hounslow’s scores indicate that there is also potential room for improvement associated with ‘*Sustainability*’ and ‘*Strategic Planning*’.

Figure 6.2: Good Parks for London – overall scores



Sports provision

6.11 Sports provision is considered in detail as part of Hounslow’s Playing Pitch Strategy (2017-2030). The Strategy sets out assessments of need and potential growth in demand for specific playing pitch provision, primarily including cricket, football, hockey, rugby, bowling greens and tennis courts. The PPS was also required to inform the Local Plan Reviews for the Great West Corridor and West of Borough. There are over 50 sports sites in the borough including golf courses, boat houses, grass and artificial pitches and tennis courts, which host a high (and growing) number of sports clubs.

⁸⁹ <https://parksforlondon.org.uk/about/parks-for-london/>

Key considerations

6.12 Several changes have been made to the way the parks service is delivered in recent years. The Council has needed to make savings of several million in the parks and open spaces service, while still maintaining standards of maintenance. Hounslow Council spending on parks is in the lower quartile when compared to other London Boroughs at £7,150 per ha. Further cuts may be required, which will require seeking out opportunities for cost saving and income generation. As of 2018 parks management is now delivered through the Council owned trading company Greenspace 360.

Open space accessibility and barriers

6.13 Local access to all types of open space across the borough is relatively good. However good, local access to high quality multifunctional open spaces and Green Flag standard sites varies throughout the borough. There are also several key physical infrastructure barriers across the borough which may limit good, safe access to open spaces at the local level. Major severance issues likely arise at various locations along:

- Roads: M4, A4, A30, A312 and A315;
- Railways: Southwestern Railway 'Hounslow Loop', London Overground and District Line & The Piccadilly Line; and
- The boroughs extensive network of rivers.

6.14 Several areas have been identified as having limited access to publicly accessible open space as part of the borough's Local Plan Reviews. This includes some locations within the Great West Corridor area.

Deprivation and health

6.15 Areas with particularly high levels of deprivation should be used to indicate priority areas for open space improvement and enhancement. Deprivation varies throughout the borough with some areas are amongst the top 20% most deprived areas in England. The locations with the highest levels of deprivation in the borough include areas within Feltham, Hanworth, Cranford, Brentford and Kew Bridge.

Sports provision

6.16 The demand for playing pitches is expected to increase significantly, requiring improvement, reinstatement and expansion of facilities for several sports:

- Cricket: nine more teams expected by 2030 (a combination of junior and adult teams);
- Football: seven more adult teams and 43 more junior teams expected by 2030;
- Hockey: 34% increase in the number of teams by 2030, requiring an additional AGP;
- Rugby is expected to increase from 72 to just over 100 teams by 2030; and
- Current provision for bowls, tennis, golf, minor sports pitches and netball are deemed sufficient to meet demand to 2030, although ongoing improvement and maintenance is required.

6.17 Several ongoing or planned park regeneration and improvement projects include the development of sports hubs, this includes:

- New sports facilities at Dukes Meadows;
- Major regeneration project at Gunnersbury Park, including a sports hub; and
- Feltham Parks Masterplan.

6.18 Further detail on needs in relation to playing pitches is set out within the borough's Playing Pitch Strategy.

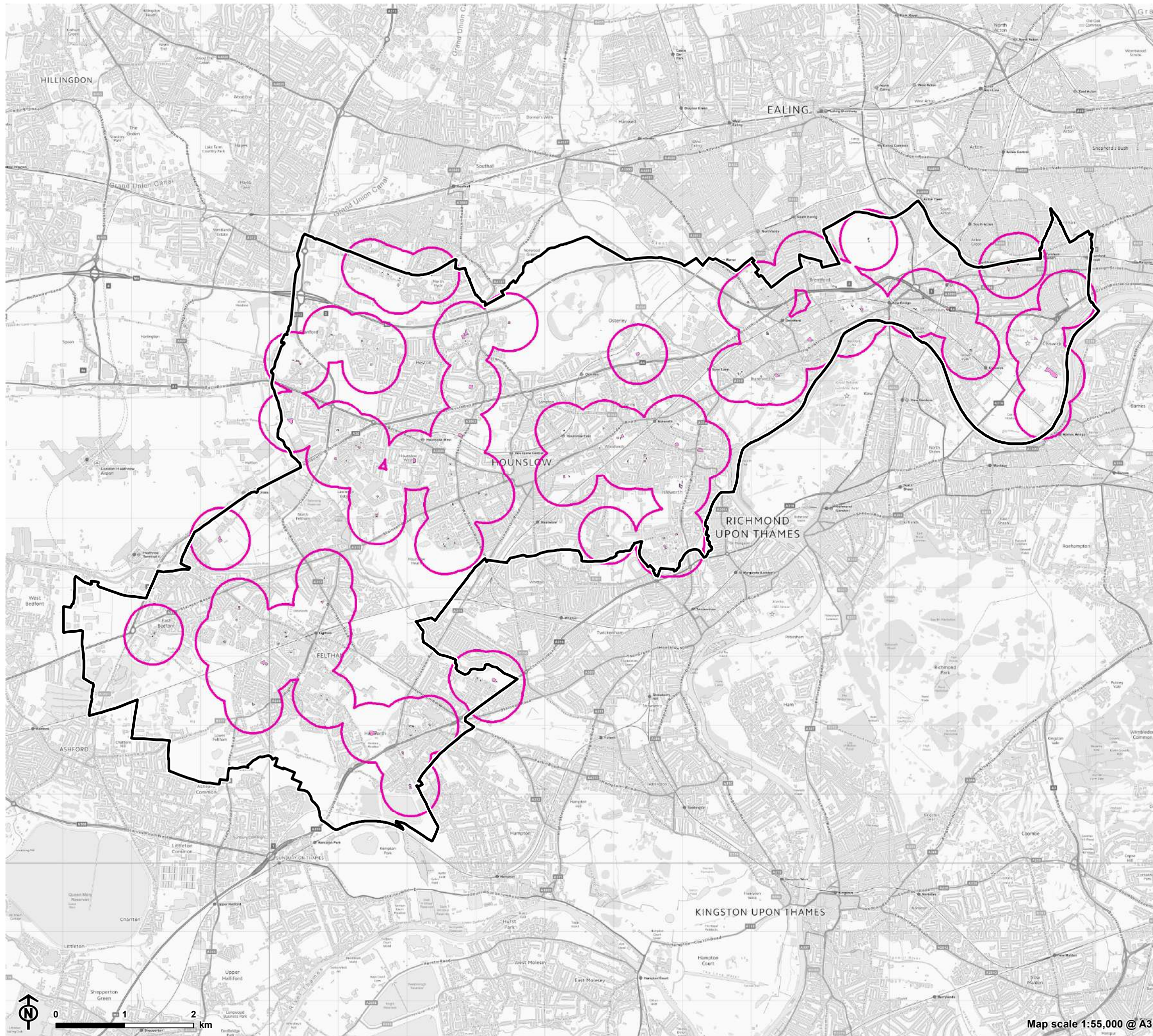
Play

6.19 Access to play spaces can be seen in **Figure 6.3**. There has been a notable programme of improvement and investment across play sites in the borough in recent years, including at:

- | | | |
|------------------------------|--------------------------------|----------------------------------|
| ■ St Dunstan's | ■ Hawthorn Hatch | ■ Carville Hall North |
| ■ Redlees Park | ■ Thornbury Park | ■ South Road Rec |
| ■ Southville | ■ Homefields North | ■ St Paul's Community Playground |
| ■ Inwood Park fitness Trails | ■ Bedfont Lakes Fitness Trails | |

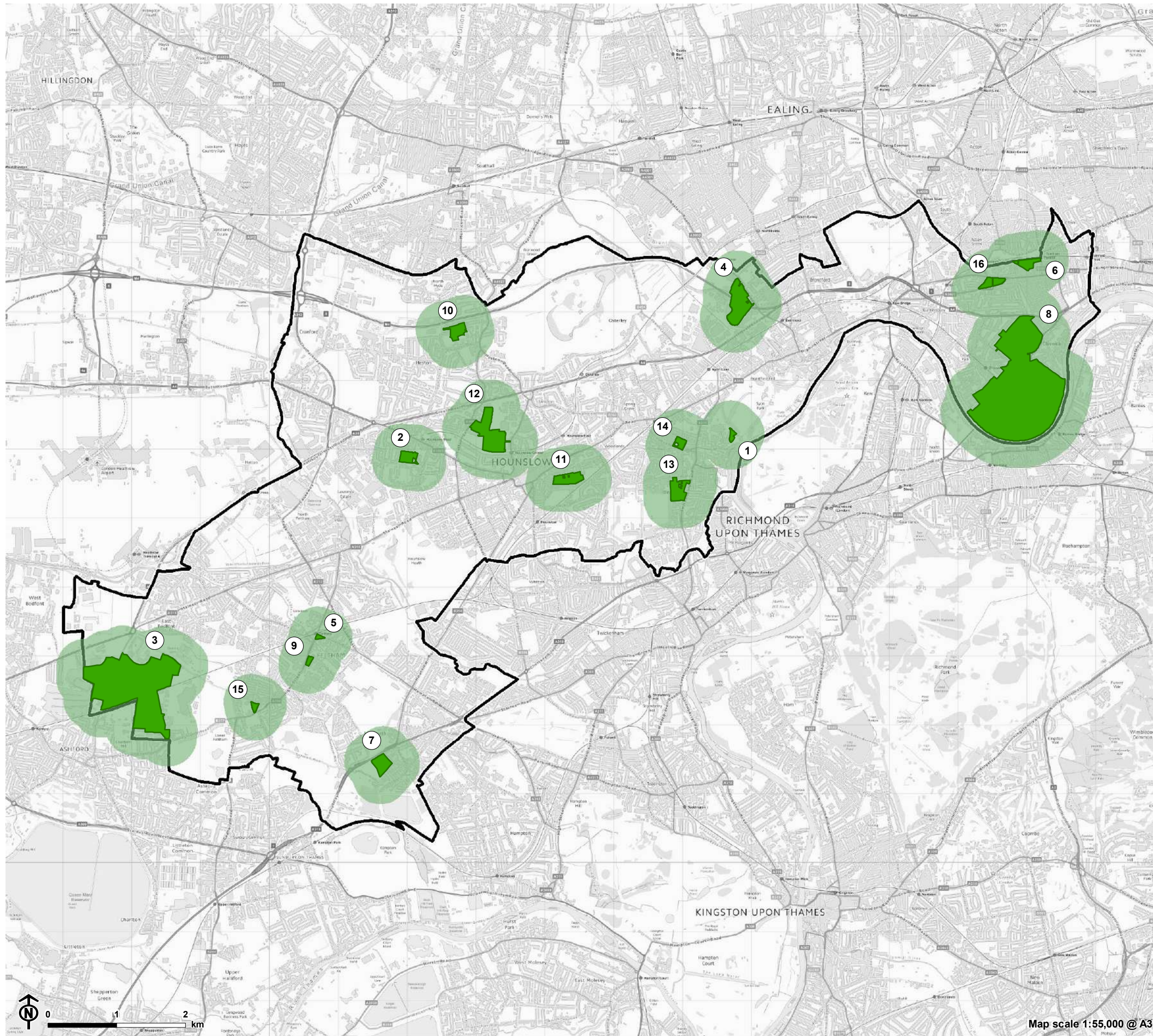


Figure 6.3: Play Spaces with Accessibility Catchments



- London Borough of Hounslow
- Childrens play areas
- Children's play area 400m buffer

Figure 6.4: Accessibility to Green Flag Award parks



- London Borough of Hounslow
- Green Flag Award park
- 400m buffer around park

1. All Saints Churchyard
2. Beaversfield Park
3. Bedford Lakes Country Park
4. Boston Manor Park
5. Bridge House Pond
6. Chiswick Back Common
7. Church Road Allotments
8. Dukes Meadows
9. Feltham Green
10. Heston Park
11. Inwood Park
12. Lampton Park
13. Redlees Park
14. St John's Gardens
15. St. Dunstan's Park
16. Turnham Green

Map scale 1:55,000 @ A3

Allotments & community food growing

6.20 Large areas of the borough have poor access to allotments, as seen in **Figure 6.5**. Broad areas that are not within 800m of an allotment site include Feltham, East Bedfont, Hounslow West, Osterley and east of Brentford. Consultation has highlighted that a shortage of food growing space is notable issue across the borough. At the time of writing, a borough allotment strategy was in development, to cover the period 2020-2025.

6.21 It is estimated that 40% of the borough was once covered by orchards and market gardens before land was taken over by the urban sprawl of Greater London. It is evident that the community are keen to reinstate this traditional source of food and important habitat, with several community orchard projects taking place over the past few years.

6.22 The Isleworth Orchards initiative arose in 2018, led by the Council in partnership with Trees for Cities, to engage community groups in planting fruit and nut trees. The project involved two days of public tree planting within Thornbury Park and Redlees Park, which saw traditional orchard species such as pear, apple, medlar, plum, gage, damson, crab apple, almond and quince trees being planted.

6.23 Other community orchard projects in Hounslow includes the Fruitful Feltham project which was delivered by The Orchard Project as part of the GLA Green Spaces Programme 2019/20. This involved engaging with the local community to plant and care for fruit trees, plants and shrubs within three schools and one public green space. 2019/20 also saw the planting of 16 new fruit trees within Leitrim Park as part of a new community orchard. 51 fruit trees were also planted at the allotments at Waye Avenue in Cranford in 2018/19, working with the elderly, young families and people with disabilities.⁹⁰

Safety

6.24 Public parks and open spaces are often actually and perceptually seen as unsafe locations for significant proportions of the community, especially for women. Particularly when dark, open spaces can be hostile, intimidating and uninviting environments which is emphasised by lack of surveillance and lighting.

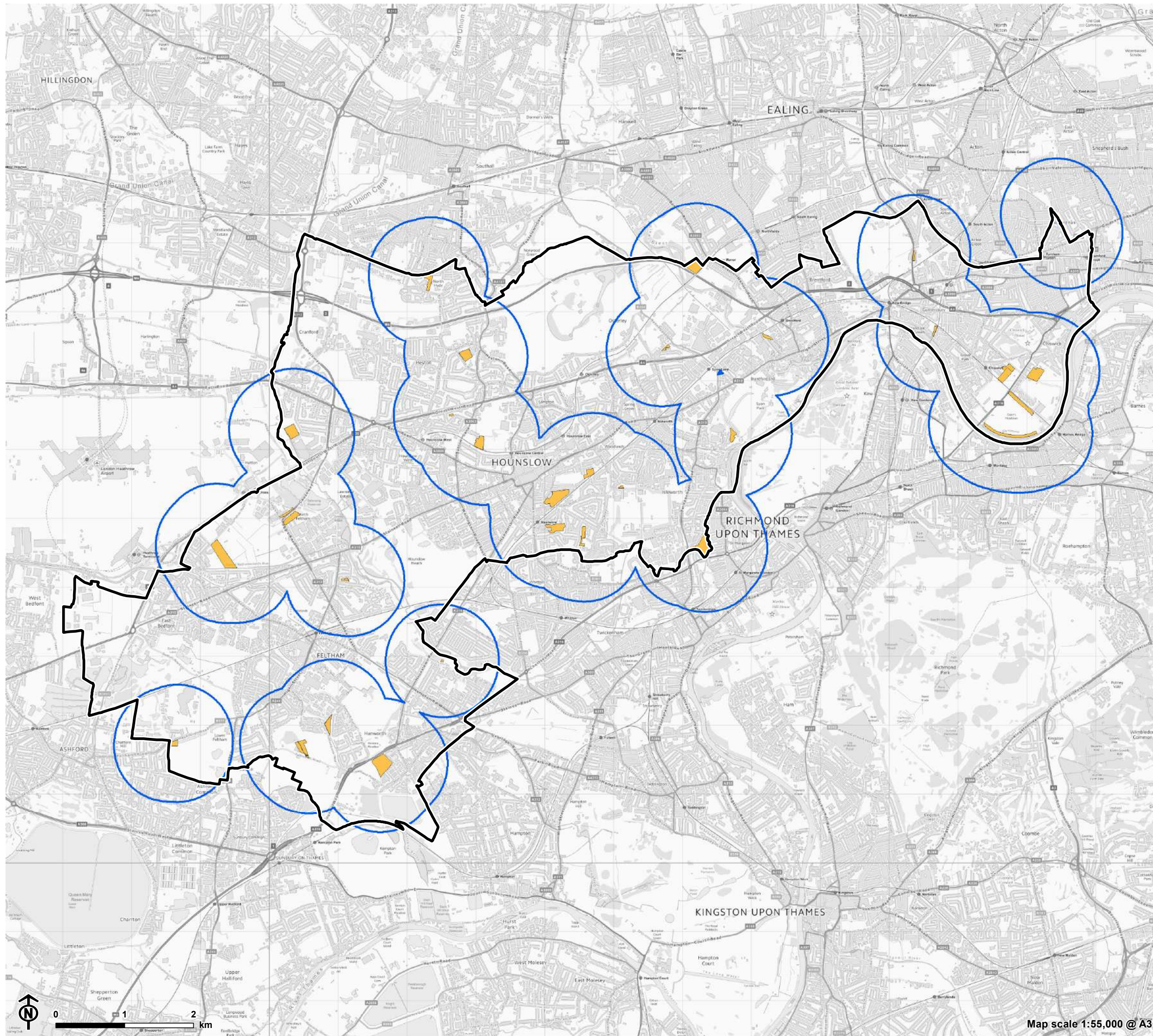
Consultation findings

- A shortage of allotment spaces has been noted a significant issue across the borough.
- More space should be made for community gardens within parks and open spaces.
- Greater opportunities for fitness and wellbeing within parks.
- Deficiency in access to open space needs to be addressed. Future planning should work towards everyone being within a 10-minute walk from their local green space.
- Safety within parks need to be improved, some sites have a reputation for anti-social behaviour, e.g. Lampton Park.
- Enhanced management and maintenance of parks for sustainability and nature has been noted as a priority.
- There is a need for better facilities including toilets, seating, cafes, bins, and shelter from the rain are needed in many parks.
- Better access to open spaces needed for people who don't have cars, for example mini allotments near to town centres.
- More support needed to ensure each open space has a recognised 'Friends Group' to act as an interface with the Council.

⁹⁰ Weblink: <https://apps.london.gov.uk/greener-city/#12.57/51.46271-0.36948/0/45>

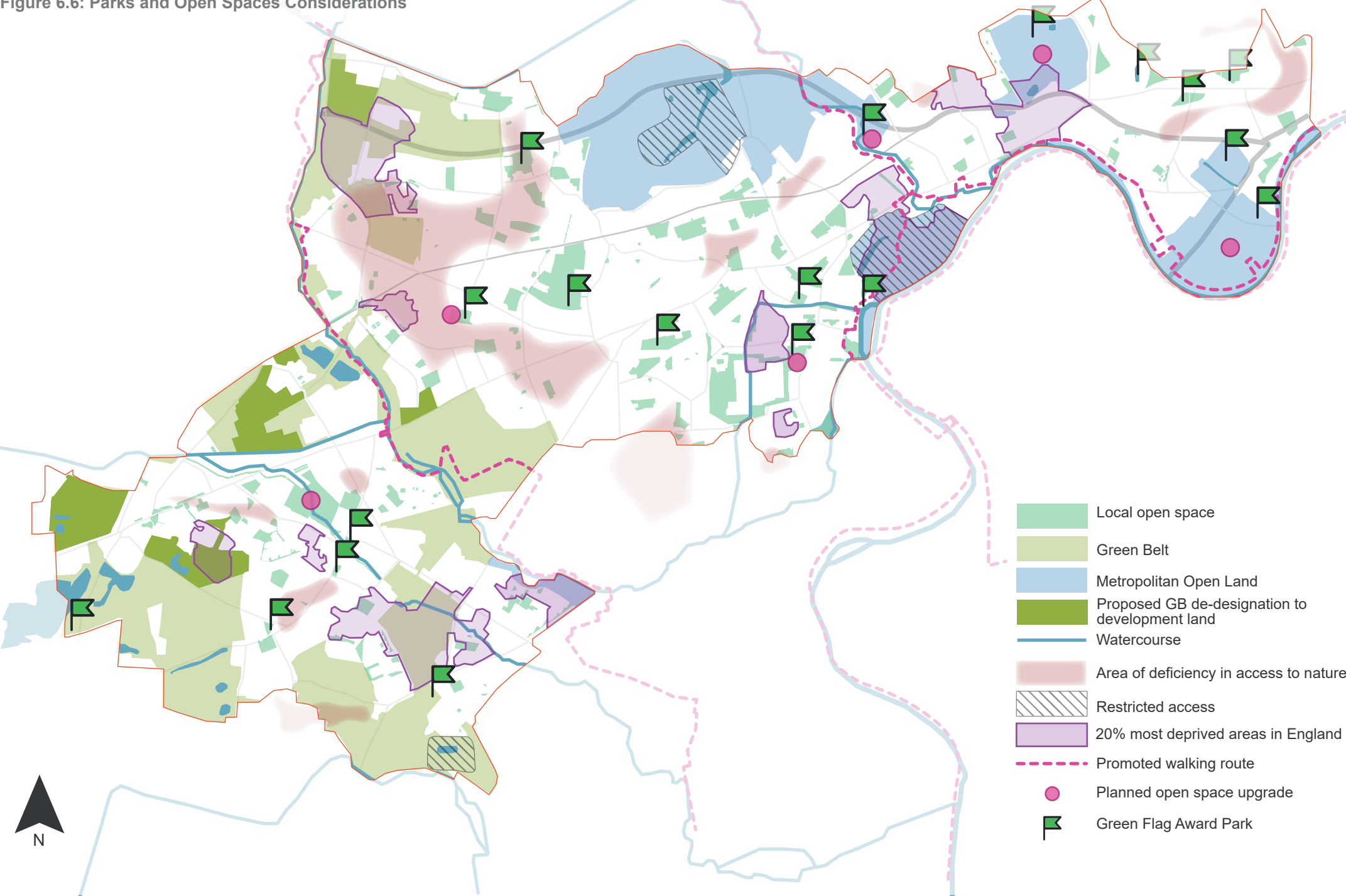


Figure 6.5: Allotments



- London Borough of Hounslow
- Allotments
- Allotment 800m buffer

Figure 6.6: Parks and Open Spaces Considerations



Key Opportunities

Key principles for parks and open spaces

- Parks and open spaces should be seen as a hub for the community, encouraging engagement and social inclusion.
- Parks should have their commercial potential explored, with profit being re-invested into Hounslow's open spaces.
- All parks and open spaces should provide refuge for biodiversity within Hounslow's urban fabric.
- All open spaces should be safe, appropriately lit, inclusive, accessible and feel welcoming to all.

Strategic open space improvement programmes

6.25 Build on the success of the notable increase in the number of Green Flag Award sites in recent years. Strategic improvements programmes should work towards providing good local access to a site of Green Flag standard for all residents.

6.26 There are several significant open space enhancement and regeneration projects which are either in development or in progress. These projects have the potential to deliver additional Destination Spaces for the borough. These includes:

- The **Feltham Parks** masterplan aims to connect the open spaces of Feltham Arena, Blenheim Park, Glebelands Playing Field, Poor's Piece and Feltham Park to function as a single site; improving pedestrian and cycle connectivity, including two new footbridges over the Longford River.
- Following the successful award and implementation of a Stage 1 application, £3,634,600 Stage Two National Lottery funding has been secured to enhance, conserve and reconnect **Boston Manor Park**. The scheme comprises a learning space, community café, landscaping and ecological enhancement which is expected to be completed by 2022. The project will also include an extensive programme of community engagement and activities to run until the end of 2024. Conservation repairs are also ongoing at

Boston Manor House. Funding has been secured from the Mayor of London's Good Growth Fund to upgrade the space under the M4 flyover at Boston Manor Park to host an Arts Market and other small-scale events.

- Major regeneration at **Gunnersbury Park** with the Council working in partnership with Ealing Council. £24 million has already been invested within the park, including the development of the Gunnersbury Park Sports Hub. Further work has been commissioned by Historic England to deliver a revised masterplan for the park which will see enhanced commercial opportunities.
- A masterplan has been developed for **Redlees Park** in Isleworth, which focuses on improved connectivity, play facilities, signage, surfaces, buildings, conservation and heritage.
- An estimated £10 million improvement programme at **Dukes Meadow** has been commissioned to develop major sports and recreation facilities for West London, with potential to reconnect the Thames Path with a new towpath bridge.

6.27 In addition to the above, a new public park has been proposed at Rectory Farm (an allocated minerals site), which will be delivered as part of planning requirements and site re-instatement. The new park will cover around 44 hectares and form a significant District scale open space serving a large area of the borough.

6.28 Sites for improvement should be sought within areas that do not already have good local access to a Green Flag standard site. Sites should be cross referenced with deprivation data to identify specific priority locations. Open spaces identified as potential priority sites for improvement during consultation included:

- Watermans Park
- Avenue Park – address fly tipping issues and enhance;
- Huckerby's Meadows and Crane Valley (including Donkey Wood);
- Hanworth Park; and
- Hounslow Heath.

6.29 Improvement schemes should assess options for incorporating community food growing space, prioritising areas that do not have good local access to existing allotment sites.

Chapter 6

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Addressing barriers to access

6.30 Addressing key barriers to access should be focussed around areas that are not within a 400m walk of surrounding open spaces. Opportunities and mechanisms for addressing barriers to access are considered in more detail under **Chapter 8**. Key mechanisms may include:

- Improved signage, wayfinding and legibility.
- Junction / highway improvements and creation of high-quality public realm.
- Additional crossings and bridges where possible.
- Creation of new entrances to open spaces and entrance improvements.

Green Belt development

6.31 Any development that comes forward and is approved within Green Belt or on de-designated Green Belt land will need to make compensatory improvements within the remaining Green Belt. Compensatory improvements should ensure that local needs are provided with regards to open space, sport and recreation. Where development would also affect a SINC, compensatory improvements in the form of biodiversity offsets should also be investigated in line with the mitigation hierarchy set out in the NPPF and the London Plan. As a mechanism, this may present the main opportunity for the creation of additional multifunctional public open space and new habitats.

Income generation & Destination Spaces

6.32 There are several planned improvements and new outdoor sports facilities under development, some of which will provide opportunities for additional income generation, including Lampton Park / Lampton School (Tennis hub, 3G pitch, MUGA, cycling infrastructure) and Hanworth Park. Further opportunities for additional income generation could be identified as part of a future open space improvement programmes. This may include:

- More events within parks to help bring more residents to the space e.g. outdoor film screenings;
- Farmers markets and concessions;
- Adventure activities such as Go Ape;

- Personal trainer licenses; and
- Restoration and re-use of buildings for commercial purposes.

Nature play

6.33 Hounslow's Green Recovery Strategy has identified the adoption of nature play as a default for green play infrastructure and will be a key project to be delivered within the first year of the Strategy. Further work is needed in order to understand the current provision of nature play across the borough and how this may be delivered within facilities such as schools. Full adoption and rolling out of nature play could include updating relevant planning policies and working towards incorporating opportunities for nature play in all open spaces.

Social prescribing

6.34 Social prescribing is a recognised referral system by the NHS and seeks to address people's health issues in a holistic manner through exploring social, economic and environmental factors. These schemes generally involve a range of activities, such as art groups, gardening, cooking and sports, provided by either a voluntary or community organisation. Opportunities for social prescribing should come as standard within Hounslow's Destination Spaces.

6.35 Parks and open spaces provide excellent opportunities for a range of social prescribing activities and give the added benefits of getting people outdoors and connecting them with nature. Social prescribing activities which could take place in Hounslow's parks and open spaces include yoga and exercise classes, meditation, art classes, gardening, community food growth, habitat and nature conservation, team sports and social walking. Both formal and informal opportunities should exist and be inclusive to everyone's life patterns, including hosting events on weekends, evenings and during lunchtimes.

6.36 Through the analysis of health and deprivation data, the parks which have been identified as being the most suitable for both formal and informal social prescribing activities are:

- St John's Gardens, Isleworth and Syon Park in partnership with West Middlesex Hospital;
- Redlees Park, Isleworth
- Boston Manor Park, Brentford;

Chapter 6

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

- Gunnersbury Park, Brentford;
- Hounslow Heath, Hounslow;
- Lampton Park, Hounslow;
- Hanworth Park, Hanworth;
- Avenue Park or Rectory Farm new open space, Cranford;
- Dukes Meadows, Chiswick;
- Bedford Lakes Country Park, Lower Feltham; and
- Blenheim Park, Feltham.

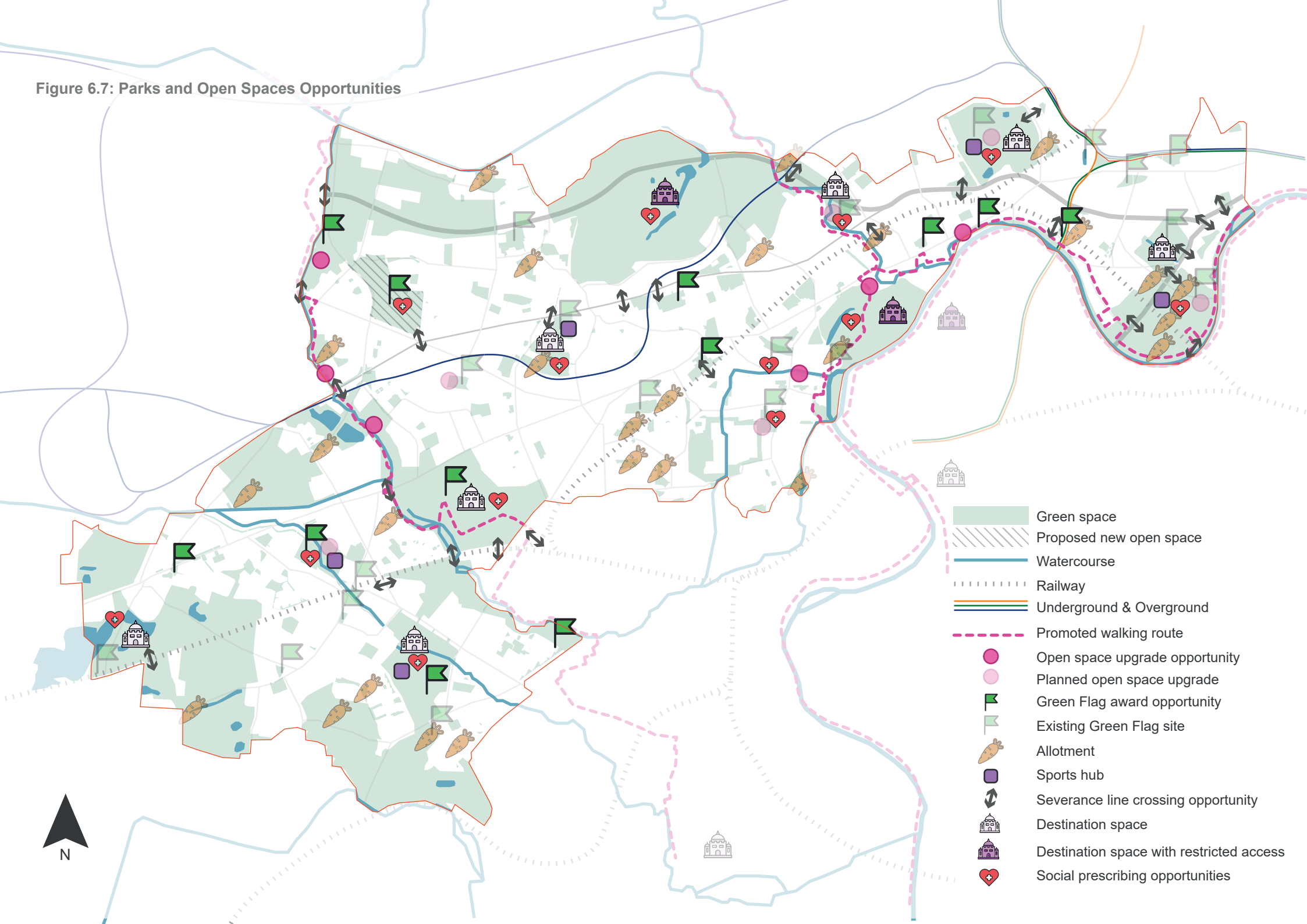
- See improvements focussed in areas with the highest deprivation, poor health and levels of inactivity.

Parks and Open Space & Health and Wellbeing

Hounslow's parks and open spaces are a crucial asset in the effort to become a healthy borough, both physically and mentally. To achieve this, Hounslow's network of parks and open spaces should:

- Provide designated space for social prescribing, including organised formal events and informal opportunities;
- Act as a welcoming space for social interactions;
- Create opportunities for team and individual exercise, including outdoor gyms, team sports, running and walking trails, exercise classes and personal training;
- Provide opportunities for connecting with nature for both adults and children;
- Create spaces for quiet contemplation and relaxing;
- Work in partnership with existing organisations such as The Conservation Volunteers;
- Ensure parks and open spaces are inclusive for people of all abilities and provide facilities which will make the visitor experience more comfortable, such as toilets and regular seating areas;
- Provide space focussed on getting children active, working in partnership with local schools; and

Figure 6.7: Parks and Open Spaces Opportunities



















-  Green space
-  Proposed new open space
-  Watercourse
-  Railway
-  Underground & Overground
-  Promoted walking route
-  Open space upgrade opportunity
-  Planned open space upgrade
-  Green Flag award opportunity
-  Existing Green Flag site
-  Allotment
-  Sports hub
-  Severance line crossing opportunity
-  Destination space
-  Destination space with restricted access
-  Social prescribing opportunities

Table 6.2: Seeds sown: A summary of the principal initiatives and projects identified for parks and open spaces

Opportunity	Scale			Spatial scope	Delivery partners	Life stage			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
Strategic open space improvement programmes	✓	✓	✓	Ensure all residents have good local access to a high quality, multifunctional open space of Green Flag award standard. Support delivery of existing ongoing open space improvement & regeneration schemes.	LB Ealing Friends of groups English Heritage	✓	✓		
Create opportunities for community food growing	✓	✓		Create additional opportunities for community food growing within existing open spaces, new open spaces and as part of new development. Ensure areas that do not currently have good, local access to existing allotments are prioritised. Consider options for mini and 'starter' community growing spaces nearby town centres and blocks of flats to encourage uptake. This should be accompanied by planting of traditional orchard trees.	Friends of groups Community groups	✓	✓		
Connecting open spaces	✓	✓	✓	Improve connectivity and address barriers to access to and between open spaces. Ensure good access to key sports hubs from transport hubs and surrounding open spaces. Improved connectivity could include junction / highway improvements / signage / tree lined streets / entrance improvements. Support the delivery of proposed connectivity projects set out within the Crane Valley Green Infrastructure Strategy. .	TfL Crane Valley Partnership Brent Catchment Partnership	✓			
Creation of new open spaces	✓	✓		Support the delivery of a new district scale open space; including existing schemes at concept stage (e.g. Rectory Farm) and potential future schemes associated with Green Belt Development. Ensure specific open	GLA	✓			

Opportunity	Scale			Spatial scope	Delivery partners	Life stage			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
				<p>space, sport & recreation needs are met within design and layout.</p> <p>Ensure new development addresses open space, play, sport and recreation needs as part of site design and layout. This may include improvements to surrounding open space, creation of pocket parks and high-quality public realm.</p>					
Active Spaces programme	✓			<p>Hounslow's Active Spaces project was developed to encourage children and their families to be more active and to respond to rising figures for childhood obesity. The Council committed £700k to upgrade six play areas during 2018 and a further £300k was made available from capital reserves to support the project.</p>	Sport England NHS		✓	✓	
Signage development project.	✓			<p>The Council has engaged designers to develop innovative new designs for signage in parks and open spaces. Key factors in their design include encouraging healthy lifestyles and the use of the wider parks network and a need to be long lasting, durable and easy to maintain. A pilot project was undertaken at Redlees Park, with the intention of rolling out new signage to other open spaces.</p>	External consultants TfL		✓		
Income generation opportunities in open spaces	✓			<p>Explore a wide range of options for income generation in parks while supporting local businesses. This may include restoration and re-use of buildings in parks, events, developing markets & concessions. This will help to deliver Hounslow's aim of a cohesive network of Destination Spaces.</p>	Historic England	✓	✓		

Opportunity	Scale			Spatial scope	Delivery partners	Life stage			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
Social prescribing	✓	✓		The potential for social prescribing to be used as a method for enhancing resident's mental and physical wellbeing should be explored. This can include delivering physical infrastructure to encourage active lifestyles, including community gardens, orchards and running trails, or facilitating the delivery of a programme of events which will encourage mindfulness and social interactions.	NHS Friends of groups Community groups TCV	✓			

Chapter 7

Theme 2: Nature Recovery



7.1 The climate and ecological emergency has led to accelerated worldwide biodiversity loss in recent years. This is reflected in the loss of priority habitat and species across the UK, mainly fuelled by developmental pressures and habitat fragmentation. To achieve nature recovery across the borough, actions need to be taken to protect, connect, create and enhance, and engage and promote.

7.2 The provision of biodiversity assets on people's doorsteps is an important educational tool for Hounslow's residents. Becoming more engaged with the nature environment and realising the importance of environmental stewardship is an essential tool for encouraging sustainable habits. Furthermore, by making space for biodiversity, a host of human benefits and ecosystem services can also be delivered. Examples include:

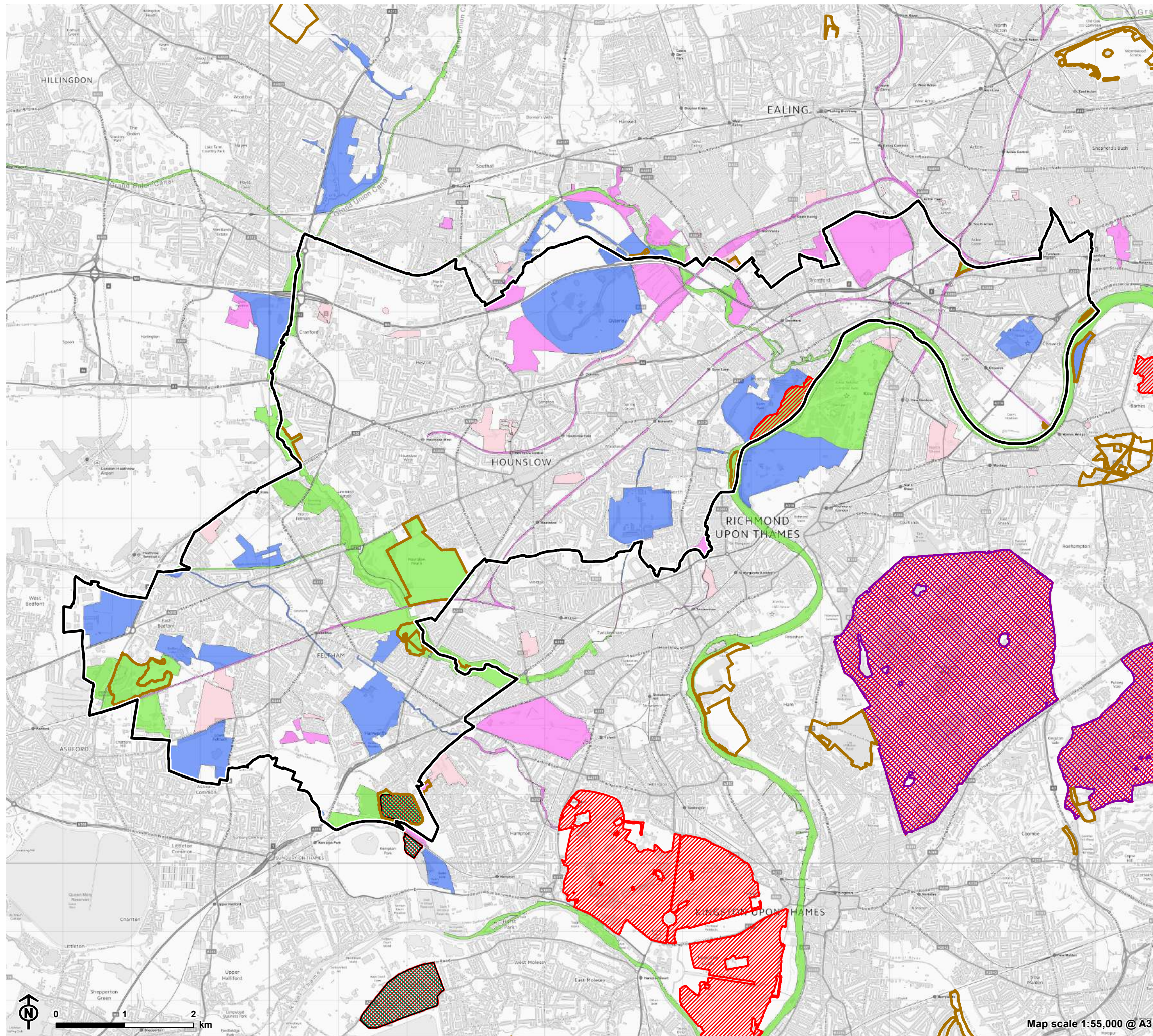
- Providing food for pollinators, which in turn enables crop production;
- Re-naturalising stretches of river corridors, which enhances flood risk management;
- Increasing canopy cover, which increases carbon sequestration, whilst also providing shading and pollutant removal; and
- Access to nature, which is considered to be an excellent tool for enhancing people's physical and mental wellbeing.

Exploring the assets

7.3 Hounslow's location as an outer London borough means it has a diversity of land cover, and therefore habitat types. The large expanses of wooded and open Green Belt and Metropolitan Open Land in the west offers a substantial contrast to the dense urban fabric of the neighbourhoods of Chiswick and Brentford in the east. The borough's GBI network acts as an important framework for ensuring habitat opportunities are provided within these urban environments, as well as creating connections to, from and between larger habitat patches. The borough's major ecological assets can be seen in **Figure 7.1**.



Figure 7.1: Designated Nature Conservation Sites



- London Borough of Hounslow
 - Special Area of Conservation
 - Ramsar & Special Protection Area
 - Site of Special Scientific Interest
 - Local Nature Reserve
- Sites of Importance for Nature Conservation**
- Metropolitan
 - Borough I
 - Borough II
 - Local



Map scale 1:55,000 @ A3

Chapter 7

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Geodiversity

7.4 Hounslow Gravels cover much of the western extents of the borough, giving rise to a large-scale mosaic of heathy grassland, scrub and secondary woodland. This is traversed by a series of streams and river corridors, most significant of which is the River Crane.

7.5 Moving eastwards, the geology becomes more diverse, seeing a range of low-level gravels, loam, clay and floodplain soils. The shallow River Brent valley houses the meandering watercourse which is straddled by a diverse floodplain including meadows and wet woodland. The eastern boundary with the River Thames is characteristic of the Upper Thames, with expanses of floodplain soils and low-level gravels.

Designations

7.6 Kempton Nature Reserve, situated in the south western corner of the borough, forms part of the South West London Waterbodies, which is a designated Special Protection Area (SPA) and RAMSAR site. It is also recognised as a Site of Special Scientific Interest (SSSI), providing it with international and national protection.

7.7 These designations have been awarded due to the site's role in providing refuge for overwintering wildfowl, which is particularly successful due to its limited public access. Recorded species include the Great White Egret, Bittern, Spoonbill, Marsh Harrier, Hen Harrier and Osprey.⁹¹ Other important wildlife includes grass snakes, slow-worms and a diversity of invertebrates, including dragonflies, butterflies and moths.

7.8 Syon Park Tide Meadow is the borough's other SSSI. Its ecological importance stems from it being the last remaining section of the River Thames within Greater London, which is unbanked, meaning the meadows flood twice daily with the tide. The area also holds historic significance as it forms part of the Capability Brown landscape at Syon Park with vistas across the river towards Kew Gardens. The tide meadows host a variety of significant flora and fauna, most notably the German Hair Snail.

⁹¹ Thames Water (2018). Kempton Nature Reserve. Available at: <https://cycles.thameswater.co.uk/Corporate/Corporate/about-us/community/great-days-out/recreational-sites/Kempton-nature-reserve> (Last accessed: 27.11.2020).

7.9 Hounslow is home to ten Local Nature Reserves (LNR) located across all corners of the borough, as seen in **Figure 7.1**, equating to 163ha.⁹² These include:

- Isleworth Ait
- Chiswick Eyot
- Crane-bank Water Meadows
- Pevensey Road
- Crane Park Island
- Bedfont Lakes
- Kempton Waterworks
- Hounslow Heath
- Dukes Hollows
- Gunnersbury Triangle

7.10 A further four LNRs can be found just past the Hounslow boundary.

7.11 A total of 47 Sites of Importance for Nature Conservation (SINCs) are currently identified within Hounslow, as seen on **Figure 7.1**. A breakdown of their grade can be found in **Table 7.1**.

Table 7.1: Summary of SINCs within Hounslow

SINC Grade	Number in Hounslow
Sites of Metropolitan Importance The best examples of London's habitats, rare species or species populations. These sites can also be of particular significance within heavily built-up areas and should have the highest priority for protection	11
Sites of Borough Importance Important at the borough scale and would pose a significant loss to Hounslow if they were damaged. Protection and management is important to ensure enjoyment of the site is done so sustainably. Sites of a similar importance will be found across London.	25
Sites of Local Importance Sites of particular significance to residents nearby and provide important access to nature opportunities. These sites can be found across the borough and should also be protected in planning.	11

⁹² London Borough of Hounslow (2013). Hounslow Biodiversity Action Plan 2011 – 2016. Available at: <https://democraticservices.hounslow.gov.uk/documents/s85102/FinalHBAPamendedoctober2013.pdf> (Last accessed: 27.11.2020).

Chapter 7

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Priority Habitats

7.12 The borough supports a range London BAP and Natural England Priority Habitats which are managed and protected within a series of Hounslow Habitats Action Plans, as shown in **Figure 7.2** and **Table 7.2**. The large majority of these habitats are found within Hounslow's historic parks and gardens, including Chiswick House, Syon Park, Hanworth Park and Osterley Park. Other significant patches can be found along the River Brent and Crane valleys, Hounslow Heath and Bedfont Lakes Country Park. It is the role of the GBI network to optimise the functionality of the Priority Habitat network and to create opportunities for its expansion and enhancement.

7.13 A Priority Habitat of particular note in Hounslow is its lowland dry acid grassland, which can be found across Hounslow Heath, Hanworth Park and De Brome Playing Fields. Within Greater London this habitat type is extremely rare, with just 80ha remaining. Hounslow Heath hosts the 8th largest area of the habitat in London at 5ha.

7.14 Flagship species which can be found within each of Hounslow's Priority Habitats can also be seen in **Table 7.2**.

Table 7.2: Broad correlation of BAP and priority habitat types recorded within Hounslow

Hounslow Habitat Action Plan	London BAP	NE Priority Habitats	Flagship species in Hounslow
Lowland heath and acid grassland	Acid grassland Heathland	Good quality semi-improved grassland Lowland dry acid grassland Lowland heathland	Ling, bell heather, dwarf goose Adder Stonechat
Neutral grassland	Meadows and pastures	Good quality semi-improved grassland Lowland meadows	Common spotted orchid, pepper saxifrage Skylark, meadow pipit
Wet woodland	Woodland	Deciduous woodland	Common spotted orchid, pepper saxifrage Skylark, meadow pipit

Hounslow Habitat Action Plan	London BAP	NE Priority Habitats	Flagship species in Hounslow
Reedbeds	Standing water Reedbeds	-	Bitter, reed warbler Wainscot moth
Gardens, allotments & orchards	Private gardens Orchard	Traditional orchard	House sparrow, bullfinch Slow worm Frog Hedgehog Mistletoe
Built environment	Wasteland Built structures	-	House sparrow, peregrine falcon Pipistrelle bat
Hedgerows	-	-	Song thrush, house sparrow Pipistrelle bat
Parkland & veteran trees	Open landscapes with ancient / old trees Parks & urban spaces	Wood pasture and parkland	Stag beetle Pipistrelle bat, common noctule bat Little owl
Rivers & streams	Rivers & streams Canals	-	Kingfisher Banded damselfly Water vole Barbel Alder
The tidal Thames	Tidal Thames	Lowland fens	Common tern, grey heron, great crested grebe, sand martin

Chapter 7

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Hounslow Habitat Action Plan	London BAP	NE Priority Habitats	Flagship species in Hounslow
		Coastal and floodplain grazing marsh	Two lipped door snail, German hairy snail, depressed river mussel Flounder, salmon Daubenton's bat Purple loosestrife, common reed

Wildlife corridors

7.15 A series of wildlife corridors traverse the borough, provisionally identified as river and rail green corridors. These can be defined as a network of natural and semi-natural habitats which connect wildlife populations in areas which are separated by human activity, such as development and farming. Hounslow's railways largely run from east to west, as they serve central London, whereas the major river corridors of the Brent and the Crane are orientated north to south as they feed the Thames.

Key considerations

Development

7.16 As Hounslow's population increases, this demand for housing and infrastructure is set to increase. It is important to ensure all new development does not affect the integrity of a designated site. The Kempton Park East Reservoir, which forms part of the South West London Waterbodies SPA and Ramsar, has its accessibility controlled through the Friends of Kempton Nature Reserve group. Therefore, an increase in population within Hounslow is not considered to result in significant additional recreational pressure on the site as access can be managed in a way which maintains its ecological integrity.⁹³

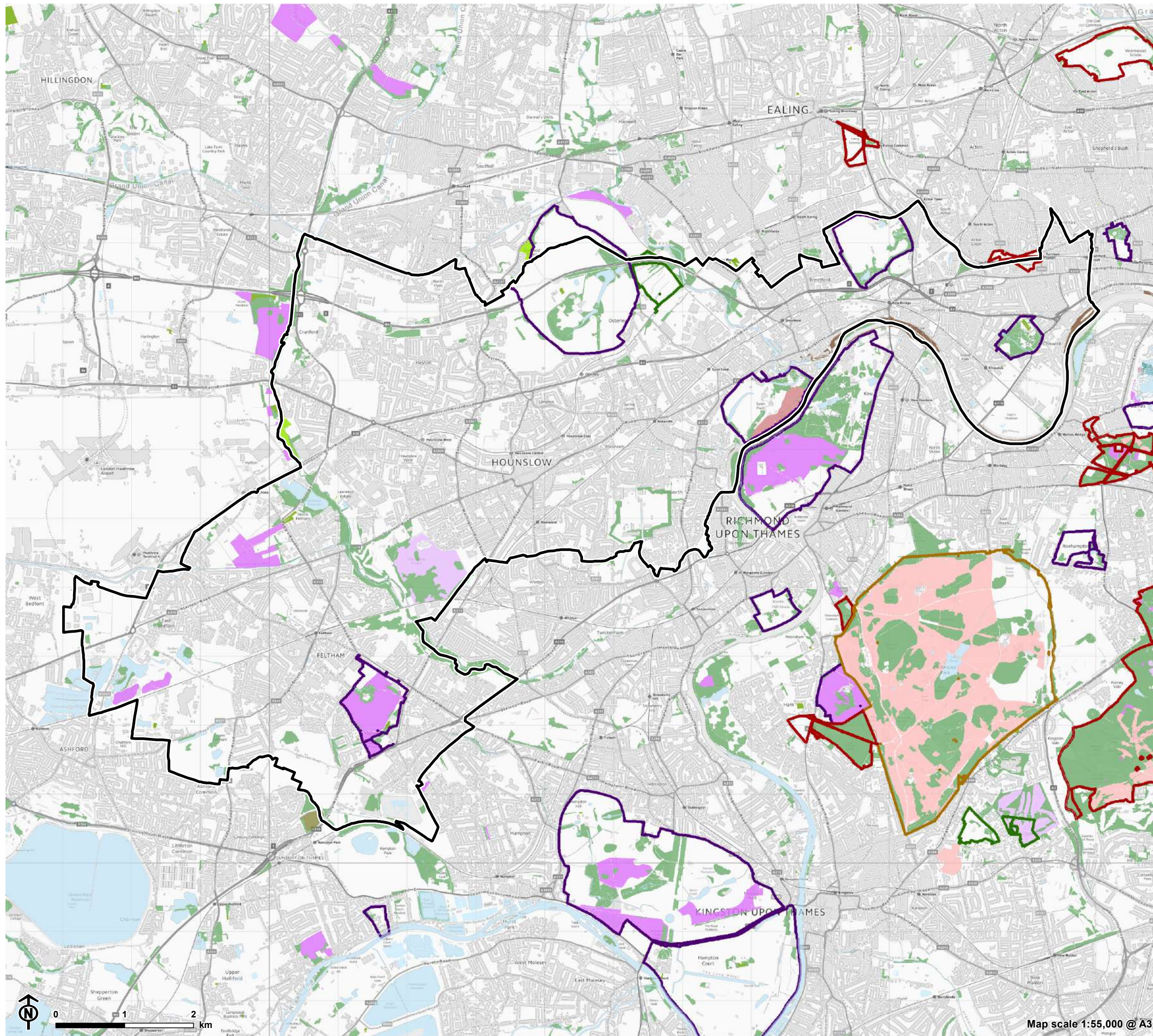
7.17 Development affecting SINCs or areas hosting priority habitat or species should only be permitted where:

- The mitigation hierarchy has been applied in line with the London Plan. Where harm to a SINC is unavoidable, and where the benefits of the development proposal clearly outweigh the impacts on biodiversity, the following mitigation hierarchy should be applied to minimise development impacts:
 1. Avoid damaging the significant ecological features of the site;
 2. Minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site; and
 3. Deliver off-site compensation of better biodiversity value.
- The development will protect, restore, enhance and provide appropriate buffers around the site whilst strengthening ecological networks; and
- The benefits of the development clearly outweigh the adverse impacts.
- A BNG of 10% is applied as per the (emerging) policies of the Great West Corridor and the West of Borough Local Plan Reviews.

7.18 It is essential that all new development across the borough contributes to an overall Biodiversity Net Gain, primarily through habitat expansion and enhancement. This can be achieved by applying the Lawton Principle of 'more, bigger, better and joined', which is reflective of the overall values of a cohesive and multifunctional GBI and nature recovery network.

⁹³ GLA (2018). London Plan Habitats Regulations Assessment Update. Available at: https://www.london.gov.uk/sites/default/files/london_plan_hra_update_report_july_2018.pdf (Last accessed: 27.11.2020).

Figure 7.2: Notable and Priority Habitat Types



- London Borough of Hounslow
- Surface water
- Priority habitat**
 - Deciduous woodland
 - Good quality semi-improved grassland
 - Lowland calcareous grassland
 - Lowland dry acid grassland
 - Lowland fens
 - Lowland heathland
 - Lowland meadows
 - Mudflats
 - Reedbeds
 - Traditional orchard
- Priority habitat: wood pasture and parkland**
 - Parkland
 - Wood pasture
 - Wood pasture in park
 - Wooded common

Figure 7.3: Notable Habitat Types: Natural Forestry Inventory



London Borough of Hounslow

National Forest Inventory

- Agriculture land
- Assumed woodland
- Bare area
- Broadleaved
- Conifer
- Coppice
- Felled
- Grassland
- Ground prep
- Low density
- Mixed mainly broadleaved
- Mixed mainly conifer
- Open water
- Other vegetation
- Road
- Shrub
- Urban
- Windblow
- Young trees
- Canopy cover

Access to nature

7.19 As seen in **Figure 4.11**, only 10% of the borough is classified as having a deficiency in access to nature. This relates to any area which does not sit within 400m of a SINC. Areas identified as having a deficiency in access to nature include north east Chiswick, Syon Lane, Spring Grove, Whitton (north), Feltham centre and lower Feltham. It is important to consider that many of the borough's SINC's are not publicly accessible, namely the railway lines, and therefore **Figure 4.11** represents a best-case scenario.

7.20 The largest area which is experiencing a deficiency in access to nature is around Heston, Hounslow West and Cranford. In the centre of this zone sits a significant plot of land which has gained planning permission for a new public park, Rectory Farm, following the extraction of gravel. Designs for this park should strive towards a Borough grade SINC designation and therefore significantly enhance access to nature for the west of the borough.

Barriers to movement

7.21 Although Hounslow has a series of provisional river and rail green corridors and green spaces traversing the borough, significant human barriers exist which impede the movement of wildlife (see **Figure 7.4**). These are predominantly composed of busy roads and areas of intense development. Major severance issues exist at the M4, A4, A30, A312 and A315.

7.22 Most of the borough's watercourses have been deemed to be of 'poor' or 'moderate' ecological status and therefore are not delivering their full functionality as a wildlife corridor.

Management

7.23 The National Forest Inventory estimates that none of Hounslow's 331ha of woodland is being actively managed.⁹⁴ With the borough's woodland being in a state of non-management, it may not be delivering its full range of benefits, including space for biodiversity, reducing flood risk and carbon sequestration. Of this 331ha, only 25ha is owned by London Borough of Hounslow, therefore it is more difficult to implement management plans and landowner engagement will be required.

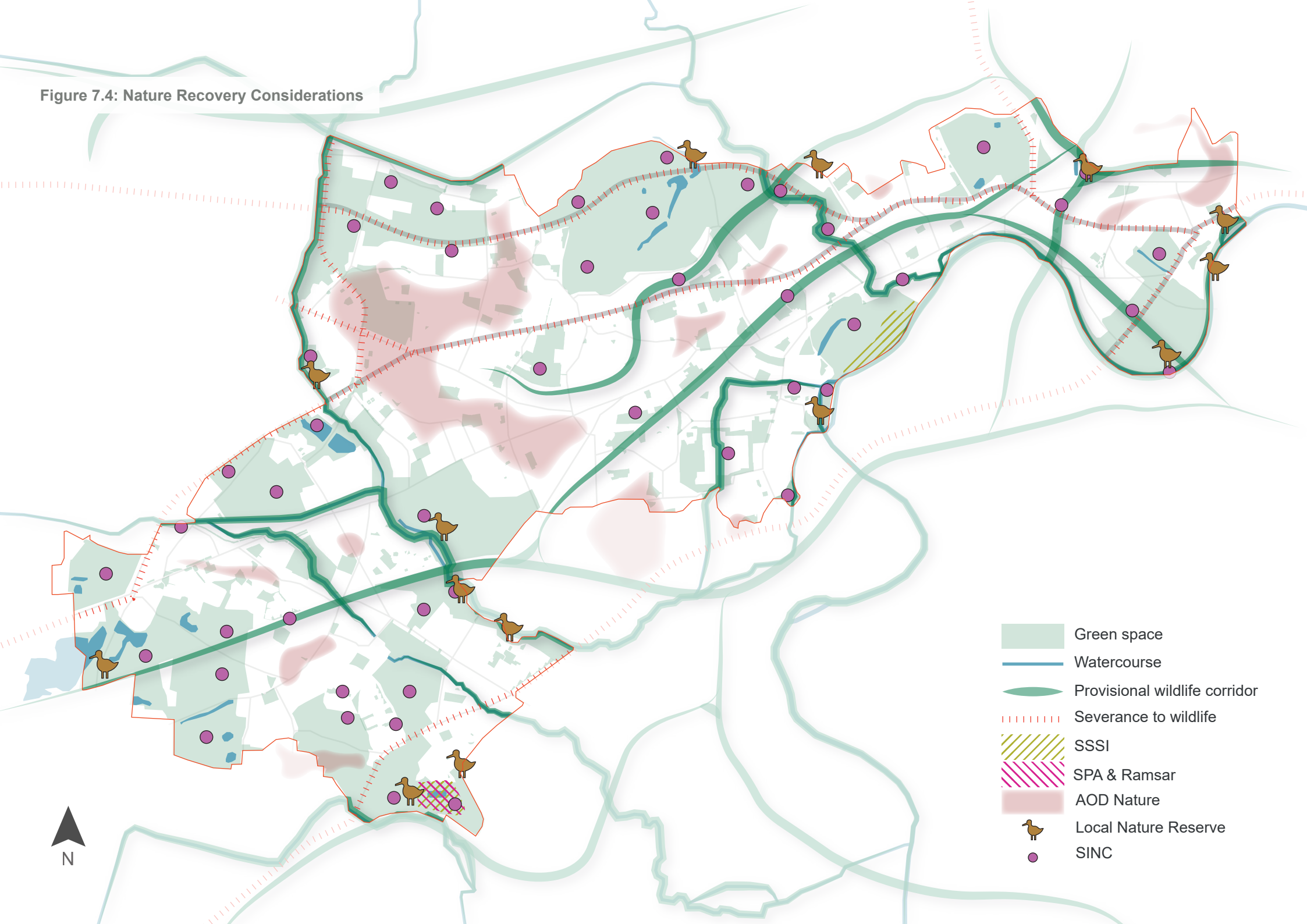
7.24 In 2019, it was estimated that 72% of Hounslow's SINC's were considered to be in a state of 'beneficial management'. For the borough's SINC network to be performing to its best ability then all designated sites need to be within a state of positive active management, ideally accompanied by an ecological management plan.

Consultation findings

- Consider enhancements to amenity grass areas to provide space for wildlife or allotments.
- Empower residents more through the provision of information, such as what species are present and their significance, as well as providing materials such as beehives.
- Support local recorders and encourage the long-term monitoring of biodiversity following project delivery.
- Spatial and cross-boundary habitat networks needed, including corridors to enable adaptation. Existing network is fragmented.
- Set an appropriate minimum biodiversity net gain target which is ambitious yet achievable.
- Trampling and pressure on grassland affecting ground-nesting birds.
- Bat-safe lighting, buffer zones and dark spaces, Bat Conservation Trust guidance.
- Water quality should be improved to be in line with WFD targets.
- Re-wilding of rivers and woodland.
- Creation of a functioning BAP group to go alongside the BAP review, as well as the appointment of an Ecology Officer.
- The tidal Crane where it meets the Thames is an important habitat for breeding fish and should be properly understood and protected.
- Continue the programme of reducing the use of herbicides.

⁹⁴ Lantern & Forestry Commission (2017). Making London's Woodlands Work. Available at: <https://www.london.gov.uk/sites/default/files/171130-londonwoodlandevidencereport.pdf> (last accessed: 30.11.2020).

Figure 7.4: Nature Recovery Considerations



- Green space
- Watercourse
- Provisional wildlife corridor
- Severance to wildlife
- SSSI
- SPA & Ramsar
- AOD Nature
- Local Nature Reserve
- SINC

Key opportunities

Key principles

- All nature conservation sites, including SINCs, should be actively managed with an ecological management plan in place.
- A shift in the default of verges and amenity space from short mown grass to wildflower meadows, grassland and trees. Biodiverse SuDS features should be delivered where space permits.
- Enhance the functionality of wildlife corridors, particularly provisional river and rail green corridors, to improve connectivity between green spaces and the wider Green Belt / countryside.
- Increase the diversity of habitat provisions through meadow restoration, riparian habitat creation, tree planting and wetland creation.
- Understand the baseline of the borough's assets to measure progress against.

Wildlife corridors

7.25 By providing space for wildlife to move freely through nature recovery networks, it will enhance the ability of the borough's species to be climate resilient. This is particularly relevant to native species which will need to make use of various microclimates and microhabitats to best adapt to a changing climate. These climatic pressures also make the control of non-native and invasive species important to ensure they do not out-compete the more fragile natives.

7.26 The Environment Agency's Working with Natural Processes (WWNP) dataset has identified several locations which would be suitable for floodplain woodland planting. This includes the Crane valley at Hatton and Cranford, and the Brent Valley at Boston Manor Park and London Playing Fields, seen on **Figure 7.5**.

7.27 Riparian habitat in these locations would enhance the connectivity of the river valley corridors. This will provide opportunities for wildlife to move freely across the nature network, therefore enhancing the strategic functionality of the Crane and Brent Valleys and they cross the borough and join the River Thames. By offering an additional habitat type for species to

occupy, it enhances their resilience to changing conditions, whilst also delivering other benefits such as enhanced flood storage capacity.

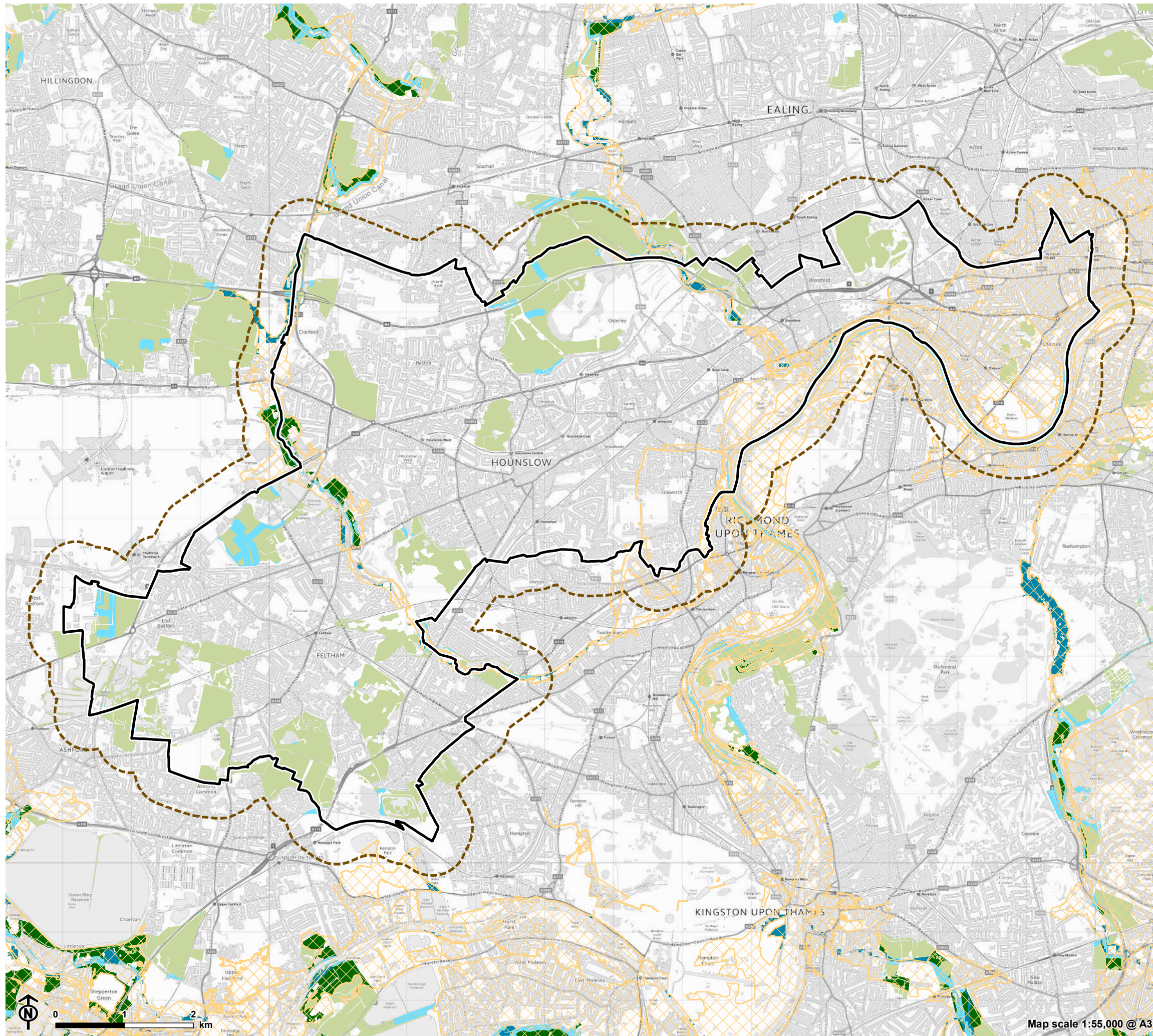
7.28 As the borough's water quality is considered to be poor, efforts to enhance the ecological status of these waterways should be pursued. The introduction of wetlands and reedbeds is an excellent way of filtering pollutants from waterbodies, whilst also providing important wildlife refuges. More information on specific location opportunities can be found in Theme 5: Blue Infrastructure. Furthermore, fish ladders and passages should be installed at certain locations to encourage the migration of fish and eels, for example along the River Brent downstream of Osterley Park and at Brentford Island.

7.29 Railway lines provides excellent corridors for wildlife movement, particularly within Hounslow's heavily urbanised centres such as Chiswick and Brentford. Enhanced management along these lines is advised to improve their functionality. This could include the removal of invasive and over-competitive species, such as buddleia, to create space for a greater diversity of vegetation. Engagement with Transport for London and Network Rail would be essential for carrying out these type of projects.

7.30 Local wildlife corridors can be created between green spaces through the enhancement of highway verges using native pollinator-friendly planting schemes which can also features log piles and invertebrate "hotels". It is also recommended that plots within existing parks and amenity spaces are transformed into biodiverse meadows. Furthermore, more traditional formal / annual planting within parks can be upgraded to host native biodiverse plant mixes which will create a succession of seasonal aesthetic and wildlife interest. This not only provides foraging opportunities for pollinators and other wildlife but has also shown to improve resident's mental wellbeing as they experience the change in colours and seasons.

7.31 The seeding of over 20 urban wildflower meadows covering 10,000m² has already taken place across the borough. Although each location has its own individual identity, there is a recurring theme of native wildflowers including Common Poppy, Cornflower, Corncockle, Corn Marigold, Knapweed, Catchfly, Self-Heal and Musk Mallow. These are excellent species for pollinators and should therefore continue to be used across the borough.

Figure 7.5: Pre-existing Strategic Habitat Opportunity Mapping



- London Borough of Hounslow
- London Borough of Hounslow 500m buffer
- WWNP* floodplain reconnection potential
- WWNP riparian woodland potential
- WWNP floodplain woodland potential
- WWNP wider catchment woodland potential
- Flood alert area

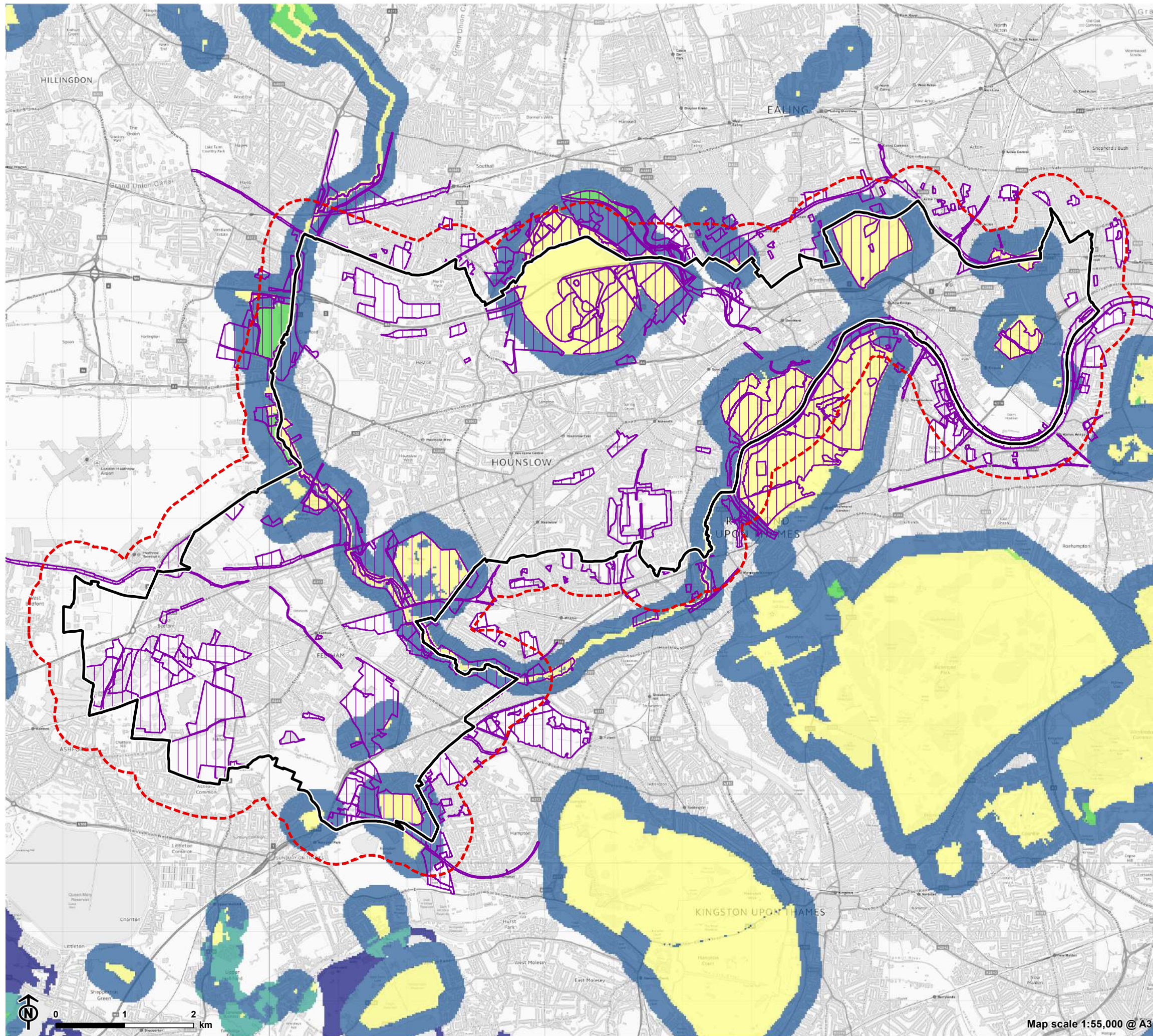
*Working with Natural Processes

Note: Airport Business Park, South Bedfont and Bedfont Gardens are proposed for de-designation from Green Belt for residential development, therefore new Strategic Habitat Opportunities may not be feasible to deliver



Map scale 1:55,000 @ A3

Figure 7.6: Pre-existing Strategic Habitat Opportunity Mapping



- London Borough of Hounslow
- London Borough of Hounslow 500m buffer
- GiGL BAP habitat suitability area
- Habitat network**
- Habitat
- Fragmentation action zone
- Habitat restoration-creation
- Network enhancement zone 1
- Network enhancement zone 2
- Network expansion zone

Note: Highways soft estate and housing soft estate to be added if council can provide

Chapter 7

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Access to nature and SINC designations

7.32 Plans for a new public park at Rectory Farm in Heston will not only significantly enhance access to open space within the west of the borough, but also holds the potential to improve access to nature within a large deficiency spot. The size of this new park means it could potentially deliver a SINC of borough grade and therefore designs should be heavily biodiversity-focussed. Special consideration should be had for how this new space will connect with the wider nature network through features such as wildlife crossings and greenways.

7.33 Additional public green space and land parcels should have their SINC potential considered and, where possible, have their design or management enhanced to allow for further designations (see **Figure 7.7**). Priority should be given to any spaces which sit in an area of access to nature deficiency. Examples of provisional SINCS include:

- Feltham Park, Feltham;
- Grosvenor Park, Feltham;
- Southville Road amenity space, East Bedfont;
- Gainsborough Gardens, Whitton;
- Heston Park, Heston;
- Beaversfield Park, Hounslow West;
- Thornbury Park, Osterley;
- Homefield Recreation Ground, Chiswick;
- Chiswick Common, Chiswick;
- Stamford Brook Common, Stamford Brook; and
- Turnham Green, Chiswick.

7.34 Criteria which will help to identify provisional SINC designations are:

- | | |
|--------------------|----------------------------------|
| ■ Habitat rarity | ■ Typical urban character |
| ■ Species rarity | ■ Cultural or historic character |
| ■ Habitat richness | ■ Geographic position |

- | | |
|------------------------------------|-------------------------|
| ■ Species richness | ■ Access |
| ■ Size | ■ Use |
| ■ Important populations of species | ■ Potential |
| ■ Ancient character | ■ Aesthetic appeal |
| ■ Recreatibility | ■ Geodiversity interest |

7.35 All the borough's SINCS should be under positive active management, ideally with ecological management plans in place. The potential exists to promote enhanced management at key sites across the borough. Sensitively maintained public access should be the preferred approach, ensuring access to nature is achieved, whilst not harming the integrity of the nature designation.

7.36 Where new SINC designations are not possible, enhanced connectivity for both people and wildlife should be delivered within areas of deficiency. This can be achieved through public footpaths, blue corridors and green streets with reduced traffic.

Habitat enhancement and extension

7.37 The Natural England Combined Habitat Networks Map, as seen in **Figure 7.6**, has identified a series of areas across the borough which would be suitable for network enhancements. Areas surrounding major habitat assets, such as Osterley Park, Syon Park, the River Crane corridor, Hounslow Heath, Hanworth Park, Kempton Park, Gunnersbury Park and Chiswick House, have all been designated as Network Enhancement Zone 2. This signifies areas which are close to existing priority habitats but are unlikely to be suitable for habitat re-creation. Therefore, other types of habitat may be created, including through the delivery of suitable GI. This will therefore contribute to the expansion of the nature network.

7.38 Improved land management is another technique for habitat enhancement within Network Enhancement Zone 2 and further afield. The opportunity exists to consider managing woodland under a Forestry Commission approved management plan. A programme of landowner engagement should be adopted to encourage the same management practices across the borough's privately owned woodland.

7.39 The potential for habitat creation should also be explored within areas identified by GiGL in their BAP suitability areas. Particular attention should be given to the management of the

Chapter 7

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

borough's areas of lowland dry acid grassland found at Hounslow Heath, De Brome Playing Fields and Hanworth Park. Connectivity between these three sites for both people and wildlife should be enhanced. Particular focus should be had where the railway line passes over the River Crane at the south west corner of Hounslow Heath and the crossing of the A312. When managing grassland, special consideration should be given to the disturbance of ground-nesting birds.

7.40 The Council's commitment to a Cleaner Greener Hounslow has seen a significant decrease in the use of chemicals and herbicides for the treatment of weeds, therefore promoting a greater diversity of plant species. Specific herbicides are only used when it is considered there is no non-chemical alternative, for example in the treatment of invasive species such as Japanese Knotweed and Giant Hogweed. The continued promotion and development of these methods is encouraged.

Green Belt de-designating

7.41 To offset the loss of Green Belt within the west of the borough, compensatory improvements to the surrounding designations should be made. Areas proposed to be de-designated include:

- Bedfont Lakes Neighbourhoods (Land east of Bedfont Road / Lower Feltham West);
- Airport Business Park (Land South of Hatton Cross/Hatton Road);
- Land South of Western International Market (WIM);
- Heathrow Gateway (Land north-west of Clockhouse Roundabout / Mayfield Farm);
- Land at Central Park Trading Estate/Ron Smith Recycling; and
- Land East of Dick Turpin Way.

7.42 Biodiversity improvements within the surrounding Green Belt through Priority Habitat extension and enhancement should be explored. This would require engagement and partnership with farmers and landowners within the Green Belt to encourage interventions such as tree planting, hedgerow restoration and wetland creation. The new public park proposals at Rectory Farm offer a significant opportunity for Priority Habitat creation within the Green Belt.

Community involvement

7.43 Hounslow already has an active and engaged resident base who understand the importance and fragility of the borough's biodiversity assets. The delivery of multiple projects to date has been down to community-led schemes. This approach should be developed and encouraged as volunteer-led projects are likely to install a sense of community-ownership and therefore improve the longevity of the scheme. Tasks such as tree planting, wildflower plug planting and scrub removal can all be done by volunteers at the community level. Communities should also be encouraged to continue recording and monitoring biodiversity following the delivery of projects.

7.44 Furthermore, partnership working should be encouraged between both statutory groups, Council-led teams, organised groups (such as 'Friends of' groups and The Conservation Volunteers) and the community. This can also be applied across allotments, engaging with tenant groups to enhance biodiversity on their site and to implement more sustainable management practices. This can be achieved through the delivery of information and materials such as bird boxes and seeds for creating wildflower meadows.

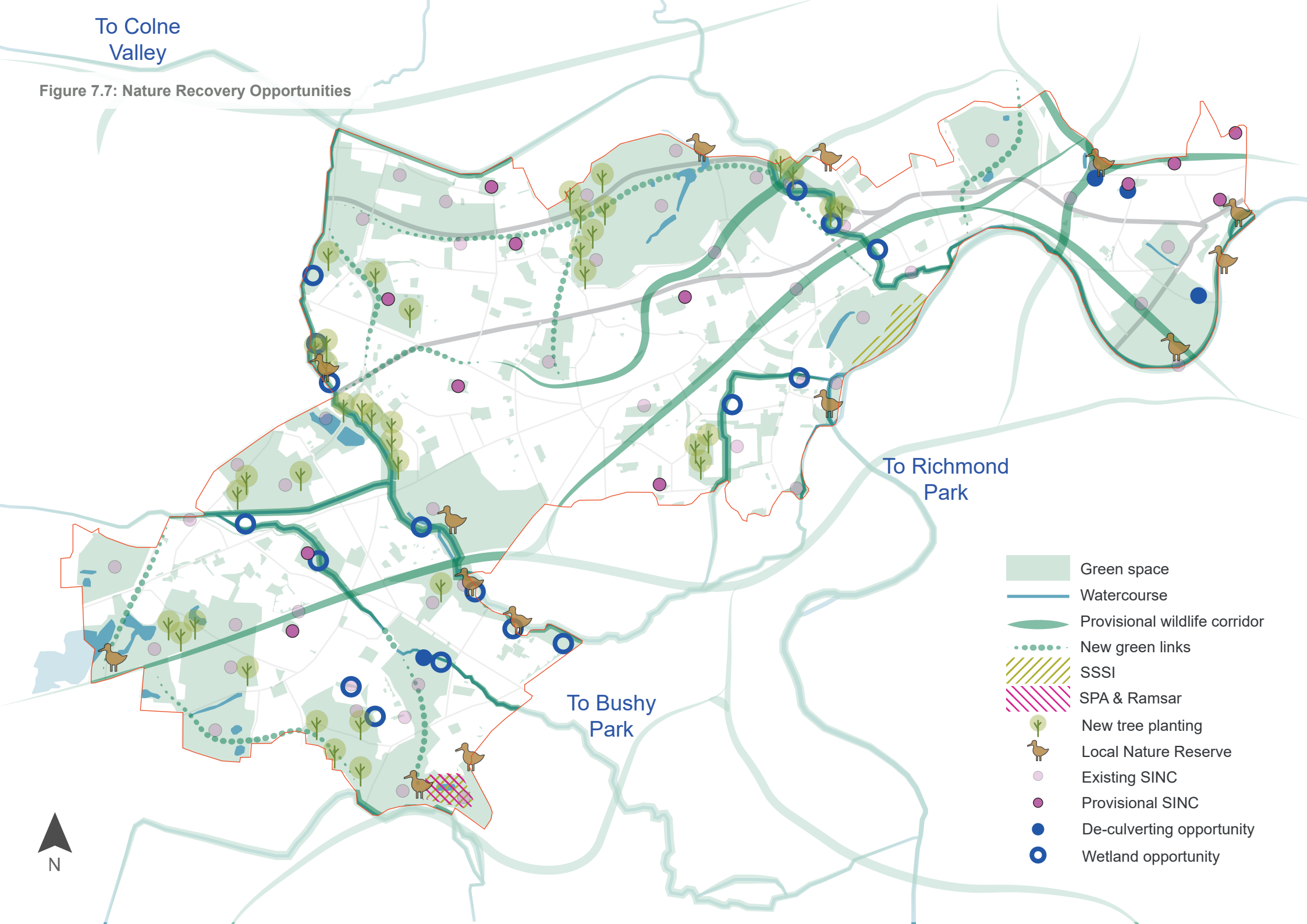
Nature Recovery & Health and Wellbeing

Biodiversity and access to nature plays a significant role in enhancing people's mental and physical wellbeing, with the former being associated with reduced stress and enhanced mindfulness. To ensure nature can provide Hounslow with its optimal health and wellbeing benefits, it should:

- Aspire to eliminate any areas of deficiency in access to nature through enhanced management, habitat creation and SINC designation, especially surrounding West Hounslow and Cranford;
- Encourage social prescribing techniques which also deliver nature conservation benefits, through partnerships with organisations like The Conservation Volunteers;
- Raise public awareness of Hounslow's wildlife, including a campaign to inspire resident's to welcome nature into their garden; and
- Create 'nature' walks within some of Hounslow's key Destination Spaces which provides opportunities for education as well as space for quiet contemplation and relaxation.

To Colne Valley

Figure 7.7: Nature Recovery Opportunities






To Richmond Park





To Bushy Park

- Green space
- Watercourse
- Provisional wildlife corridor
- New green links
- SSSI
- SPA & Ramsar
- New tree planting
- Local Nature Reserve
- Existing SINC
- Provisional SINC
- De-culverting opportunity
- Wetland opportunity



Table 7.3: Seeds sown: A summary of the principal initiatives and projects identified for nature recovery

Opportunity	Scale			Spatial scope	Delivery partners	Life stage			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
Active SINC management	✓	✓		<p>Ensure all of Hounslow's SINCS are in a state of positive active management to achieve the greatest wildlife value. This should be accompanied by an ecological management plan for each SINC.</p> <p>Consider managing woodland under a Forestry Commission approved management plan.</p>	London Wildlife Trust Friends of groups TCV CVP	✓	✓		
Re-naturalisation of the borough's river corridors	✓	✓	✓	<p>Work with all relevant stakeholders to identify and deliver projects to naturalise rivers, prioritising areas that will deliver the biggest impact for nature recovery and development of coherent ecological networks. This could be achieved through the delivery of wetlands, de-channelising, creation of reedbeds, planting of riparian habitat and allowing natural river profiles to develop.</p>	EA Crane Valley Partnership London Wildlife Trust Thames21	✓			
New SINC creation	✓	✓		<p>The creation of new open space should be a priority for the borough, particularly within areas of open space deficiency, for example Rectory Farm. This open space should deliver new habitats and be in a state of positive ecological management, therefore enhancing its potential for designation as a SINC. This will reduce access to nature deficiencies. In addition, enhanced management of non-SINC sites is encouraged to create new designations. New SINC creation can also be</p>	London Wildlife Trust Friends of groups TCV Thames21	✓			

Opportunity	Scale			Spatial scope	Delivery partners	Life stage			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
				undertaken as part of compensatory improvements from development on de-designated Green Belt land.					
Wildflower verges	✓	✓		<p>Maximise use of highways verges and patches of underused grass as wildflower meadows or meadow grassland, ultimately reducing management costs in the long-term. To increase the benefits these verge deliver, they could be retrofitted to act as SuDS.</p> <p>Additional wildlife features including bug hotels and log piles could also be included in project delivery.</p>	<p>TfL TCV London Wildlife Trust Friends of groups</p>	✓	✓		
Railway wildlife corridors		✓	✓	Enhanced ecological management along railway lines could help these corridors perform a greater role for surrounding wildlife. This could include the removal of invasive or dominant species and the planting of wildflowers. Engagement with TfL and Network Rail would be essential.	<p>TfL TCV Network Rail</p>				
Herbicide use	✓			The shift from herbicide and chemical use in all Council-led management has now been completed. Specific herbicides should only be allowed if there is non-chemical alternative, for example in the spot treatment of Japanese Knotweed and Giant Hogweed.				✓	
Community engagement	✓	✓		Empowering Hounslow's already active resident base to become more involved in ecological management and improvement projects including tree planting, scrub clearance and wildflower planting. Information about the biodiversity benefits of gardens and what residents can do to encourage particular species into their private plots should be distributed. This could also be extended to allotment sites and include the provision of materials such as bird boxes and wildflower seeds. The	<p>Friends of groups Local community groups LWT</p>	✓	✓		

Opportunity	Scale			Spatial scope	Delivery partners	Life stage			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
				opportunity exists to work with a range of landowners (e.g. churches, homeowners, landlords and businesses) to educate or incentivise action to support nature recovery networks.					

Chapter 8

Theme 3: Access and Connectivity



8.1 Improved opportunities for cycling and walking have the potential to bring significant benefits including a reduction in road traffic congestion and emissions, better local air quality, improved personal health and mental wellbeing. Improving links to strategic regional and national promoted routes also has the potential to increase tourism, spending and economic growth and the social benefits associated with GBI corridors and strategic Destination Spaces. Good cross boundary access and connectivity will be part of the mix of measures that will be needed to bring forward a Green Recovery in the borough following the Covid-19 pandemic. The development of active and sustainable travel are also a key theme in the Council's Transport Strategy (Local Implementation Plan) as well as the Mayor of London's Transport Strategy.

8.2 Key themes explored as part of Hounslow's Green Recovery Board include the introduction of a strategic approach to active travel, '21st century mobility', Low carbon neighbourhoods and the development of the concept of the '15-minute city'. The Council's Streetspace programme also includes reference to a number of initiatives; including Liveable Neighbourhoods, Low Traffic Neighbourhoods, School Streets and other improvements to promote active and sustainable travel.

8.3 Improving access, connectivity and promotion of active travel across the borough primarily requires consideration of 'hard' or 'grey' infrastructure. However, GBI should also be planned alongside these measures for the purposes of:

- Ensuring routes are safe, attractive, well defined and legible to encourage use. Routes should also be direct where possible.
- Developing appropriate off-road routes within open spaces and along green and blue corridors.
- Maximising opportunities for SuDS and the creation of linear wildlife corridors through tree planting and other urban greening measures; improving environmental quality.

- Ensuring routes are prioritised to improve access to green space in areas with poor open space provision and to ensure route alignments take account of strategic, destination or locally important sites.
- Ensuring urban greening and GI interventions are incorporated into all highways and transport schemes, where feasible.

Exploring the assets

8.4 Assets related to access and connectivity that are considered within the Strategy are largely associated with path networks for cycling and walking, associated wayfinding features and signage (see **Figure 8.1**).

8.5 There are several promoted routes through the borough, most of which are part of Transport for London's Walk London network. This includes:

- The **Thames Path**, which runs nearby the southern borough boundary between the River Brent and Isleworth. Due to the location of the River Brent and Syon Park, the majority of the route within the borough does not run directly adjacent to the Thames. The whole route runs for 128km between Teddington Lock/Hampton Court in the west to the River Darent in the east.
- The **Capital Ring**, a circular walk around London covering 126km. With Hounslow the route runs through Syon Park from the Thames Path, joining the River Brent at Brentford Bridge, crossing the borough boundary nearby the M4/River Brent to the north.
- The **London Loop**, which runs roughly north-south within the west of the borough. The route follows sections of the River Crane, via Crane Park and Hounslow Heath, and runs along the borough boundary up to the Grand Union Canal in the north west.
- The riverside paths along the River Brent are also included as part of the **Grand Union Canal Walk**.
- The **Longford Corridor** forms a major link from Feltham to Bushy Park and the River Thames.

8.6 The Public Right of Way network in Hounslow is fragmented. The most significant stretches run through Osterley Park, along the River Brent, adjacent to Duke's Meadows. There

Chapter 8

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

are few bridleways in the borough. Short stretches of bridleway occur at Kempton Park Reservoir and Osterley Park.

8.7 Stretches of some of the borough's river also provide opportunities for cycling and walking. This includes a shared use path which runs alongside several stretches of the Duke of Northumberland's River between the A312 and the borough boundary at Heathrow.

8.8 Major strategic highway cycle infrastructure includes the partial implementation of Cycleway 9. This route is initially proposed to extend from the Hammersmith border, towards Chiswick and Brentford. However, the long-term plan is for the route to include Hounslow town centre. Other sections of permanent segregated cycle routes also incorporate Staines Road, Bedfont Road, sections of the A4 and various routes within Hounslow town centre.

8.9 The South Chiswick Liveable Neighbourhood is a TfL scheme where a range of traffic measures and access restrictions have been introduced or are planned across the Grove Park, Dukes Meadows areas. This aims to increase the number of journeys made by foot, bike or public transport within the neighbourhood. There are also plans for Feltham town centre.

8.10 A number of traffic reduction schemes have been introduced on a trial basis as a result of the Covid-19 pandemic. However, initiatives introduced as part of the temporary Streetspace scheme will all be subject to review before a decision is made as to whether to make them permanent or not as part of Hounslow's Streetspace Programme. Measures range from pop up cycle lanes (barriers / markings), parking restrictions, partial road closures and footway widening at Hounslow Town Centre. Key Streetspace programmes to improve access for pedestrians and cyclists include:

- **Schools Streets:** Areas excluding traffic on roads surrounding schools to improve safety and air quality. These are either controlled by physical barrier or Automatic Number Plate Recognition cameras (ANPR). There are currently 21 sites in operation, with approximately seven other sites being explored.

Chapter 8

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

- Low Traffic Neighbourhoods (LTNs): Areas which manage traffic flow in order to reduce the number of through trips made on residential roads, therefore improving safety, reducing pollution and supporting more trips made by foot or bike. Proposals include:⁹⁵

1. Brentford North LTN

Reduce traffic between Windmill Road and Ealing Road.

2. Brentford East LTN

Reduce traffic between Ealing Road and A4 via Clayponds Avenue. School Street around Lionel Primary School.

3. Bedfont East LTN

Colonial Road area, aiming to reduce traffic between Bedfont Lane and Stained Road.

4. Lower Feltham LTN

Reduce traffic passing between Grosvenor Park area and Raleigh Road. School Street around Feltham Infants School.

5. Heston East LTN

Restrict through traffic using east-west roads in the neighbourhood bounded by Heston Road, New Heston Road, Vicarage Road and the A4.

6. Heston West LTN

Linked to the Heston East LTN, seeking to reduce through traffic in the roads around Springwell Avenue, including Burns Way / Browning Way.

7. Isleworth North LTN

Restrict through traffic between the A4 and A315 in the area bounded by Thornbury Road and Wood Lane.

8. Northumberland Avenue LTN

Reduce through traffic in these two residential estates by restricting eastbound traffic from passing along Northumberland Avenue east of Roxborough Avenue.

9. Hounslow South LTN

Seeks to reduce traffic outside Chatsworth Primary School. Closure of Heath Road at junction with Central Avenue.

10. Gunnersbury Garden Estate LTN

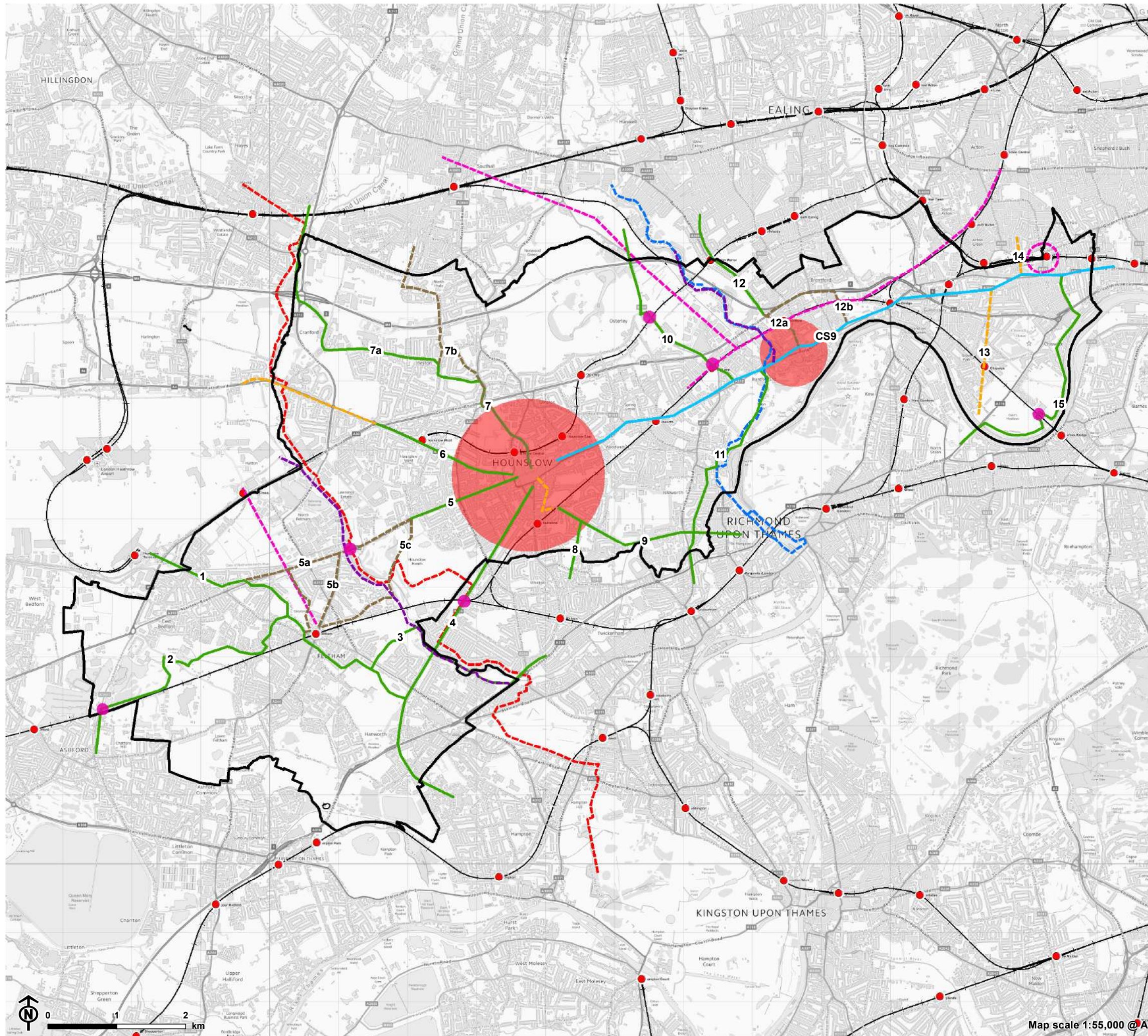
Seeks to reduce through traffic using these residential roads between Gunnersbury lane and Gunnersbury Avenue.

11. Prebend Gardens LTN

Reduce southbound traffic between Stamford Brook Road and Chiswick High Road. Closure of Prebend Gardens at its northern end and an access only zone.

⁹⁵ Weblink: <https://democraticservices.hounslow.gov.uk/documents/s162585/Appendix%201%20-%20Phase%202b%20Project%20details.pdf>

Figure 8.1: Access and Connectivity



- London Borough of Hounslow
- Hounslow significant growth area
- Major barrier to cycling
- Capital Ring walk
- London Loop walking route
- New public transport infrastructure
- Identified desire line
- Off highway leisure routes
- Proposed priority cycle network - Identified route option
- Proposed cycle superhighway
- Proposed priority cycle network
- Railway
- Railway station

Chapter 8

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Key considerations

Severance

'The separation of people and places due to a physical barrier that presents limited or inconvenient crossing points.'

8.11 The major causes of severance in the borough are major roads which cross the borough, the most significant being the M4/A4, A316, A312 and A406 (see **Figure 8.2**). However, smaller roads, railway lines and rivers also impede good connectivity in some locations. Major roads, industrial areas and Heathrow airport may also act as detracting features and impinge on some of the recreational and health and wellbeing benefits that may be derived from active travel routes and open spaces in the borough including providing space for quiet contemplation, rest and relaxation.



Chiswick Flyover



Chiswick to Kew Bridge railway

Condition and safety of the network

8.12 Whilst there is some good access along river corridors, they are not used to their full potential. Stretches may be fragmented by roads/rail and changes in land ownership, and paths are narrow in places; limiting good access for a range of users. The sense of safety along some

accessible stretches of the Grand Union Canal, Duke of Northumberland's River, River Crane and Longford River is poor.

8.13 A lack of segregated on-street cycle paths and poor sense of safety along some key routes & junctions will limit the potential for an increase in modal shift (see **Figure 8.2**). Several key commuter routes have notable road safety and air quality issues including east west routes towards Heathrow.

8.14 Surfacing and path width along some leisure routes, such as the Grand Union Canal, could be improved in places. Consultation highlighted that surfacing, connectivity, promotion and wayfinding are specifically needed to encourage cyclists and users of prams and wheelchairs.

Future growth in transport infrastructure

8.15 There are three potential major rail links for borough that are supported by the Council and are at various stages of development. These may influence the future focus of priority access routes and improvements to connectivity:

- Southall Rail Link – Connecting Brentford to Southall where it would connect to the Elizabeth Line.
- The West London Orbital – a new overground line connecting Hounslow and Brentford to the Elizabeth Line at Old Oak Common and beyond to Cricklewood and West Hampstead.
- Southern Access to Heathrow – a direct connection between Feltham and Heathrow with a potential new station at Bedfont.

8.16 There are also several proposed Transport for London schemes that are due to come forward in the coming years, including:

- Cycleway 9: Segregated route connecting Brentford to Hammersmith (phase 1) – potential to expand to Hounslow Town Centre
- Gunnersbury Ave – walking and cycling improvements: A406 between Chiswick Roundabout and Popes Lanes, provision of segregated cycle lane.
- Bulls Bridge roundabout – improvements to pedestrian facilities

Chapter 8

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

8.17 Hounslow's Local Implementation Plan sets out a number of short, medium and long term projects, some of which aim to enhance connectivity across the borough, particularly for pedestrians and cyclists. Some of these include:

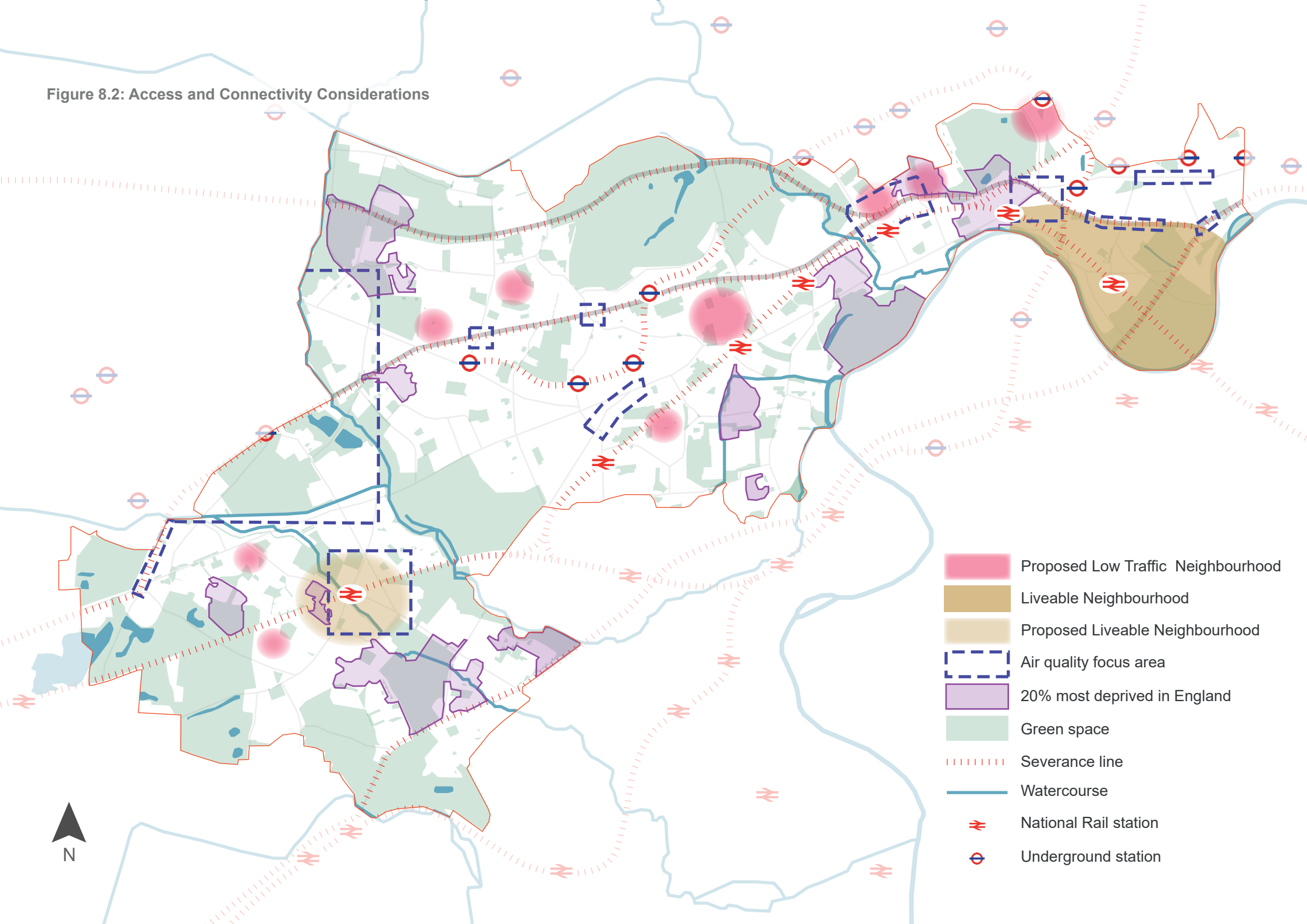
- Provision of on and off-street residential cycle parking across the borough;
- Submission of Liveable Neighbourhood bids for Dukes Meadows and Feltham Town Centre;
- Feasibility and outline design for Hounslow priority Cycle Network linking the borough's town centres and key employment sites; and
- Proposed Golden Mile rail station.

Consultation findings

- Within Bedfont, Feltham and Hanworth, ease of accessibility, entrances and paths were deemed to create significant barriers to local residents using nearby green spaces. This was also an issue, although to a lesser extent, within Brentford and Isleworth.
- Connectivity of the Thames Path should be improved, particularly within Brentford.
- The borough's river corridors should be better utilised for connectivity by foot and bike. Better crossings should be put in place across main roads to ease the use of these paths where possible.
- A green active travel corridor is needed from east to west, preferably a quiet way.
- The A4 could be greened using trees, hedges and wildflower verges. Better pedestrian crossings will help to create a route between Hammersmith and Heathrow.
- Enhanced connectivity between Syon Park and Brentford.
- Improved sense of safety required in many places, could be achieved through community art projects, enhanced lighting and paths.
- Better promotion of routes and wayfinding needed., could be linked in with heritage interpretation opportunities.
- More secure bike storage across the borough.

- Consideration needed for the additional pressure put on Chiswick and Great Chertsey Road due to the closure of Hammersmith Bridge.
- Consider green active travel routes along old railway corridors e.g. between Brentford High Street and the north of the borough.

Figure 8.2: Access and Connectivity Considerations



Key opportunities

Key principles

- Improvements to access and connectivity for active travel should be considered from the outset of all new development, public realm and open space enhancements, and highway infrastructure works.
- The design and layout of all routes should ensure all opportunities to incorporate greening is maximised.
- Active travel routes should be direct and safe.
- Trails and leisure routes should provide spaces for sitting and resting as well as facilities such as toilets.
- Routes should directly connect with transport hubs.

Priority cycle network

8.18 A key aim of Hounslow’s third Local Implementation Plan (2019) is to achieve the 2041 targets for modal shift to cycling and walking set out in the London Mayor’s Transport Strategy. The borough LIP 3 identifies a priority cycle network in the borough that will be developed in the coming years, which may be delivered alongside improvements to pedestrian facilities where needed. A summary of Hounslow’s priority routes is set out in **Table 8.1**. The priority cycle network may be used as a framework which additional priority routes may be linked to. The design and layout of all routes should ensure all opportunities to incorporate greening such as street tree planting and rain gardens are maximised; this is considered in more detail within **Chapter 9: Urban Greening**.

Table 8.1: Hounslow’s Priority Cycle Network routes

Route	Description
1. Heathrow T4 / Feltham to Twickenham	2.5km route, linking existing greenways, approximately following the Longford River from Feltham.

Route	Description
2. Feltham to Ashford	Primarily traffic-free, making use of existing greenways through Bedfont Lakes.
3. Hanworth Park to Twickenham via River Crane	Linking up existing shared use paths starting in Hanworth Park and running along the River Crane. A pedestrian and cycle crossing is required to cross the A312.
4. Hounslow to Hanworth/Hampton	Hounslow to Hanworth/Hampton.
5. Hounslow to Feltham Town Centre	Would serve as a western extension of Cycleway 9, with several possible alignments – such as through Hounslow Heath connecting through Sparrow Farm.
6. Hounslow to Heathrow via Bath Road	Hounslow to Heathrow via Bath Road.
7. Hounslow to Southall and Hayes	Aligned to make use of existing cycle links through Lampton Park.
8. Hounslow to Whitton quietway	Hounslow to Whitton Quietway.
9. Hounslow to Richmond	Hounslow to Richmond.
10. Syon Lane to Ealing	Aligned to connect the future CS9 to Ealing via Osterley.
11. Twickenham to CS9	To including cycle access through Syon Park.
12. Boston Manor Road extension to CS9	Boston Manor Road extension to CS9.
13. Chiswick Bridge link to CS9 via Grove Park	Not defined but identified as key desire line.
14. Chiswick CS9 to Acton	Chiswick CS9 to Acton.
15. Chiswick Bridge to CS9 via Dukes Meadows	Chiswick Bridge to CS9 via Dukes Meadows.

Chapter 8

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Potential key links

8.19 Key opportunities for improved access and connectivity are shown in **Figure 8.3**. Improvements to access and connectivity for active travel should be considered as part of all new development, highway infrastructure works and open space improvements. Future work should also support the delivery access proposals set out as part of the Crane Valley Green Infrastructure Strategy and projects identified by other key partners such as Brent Catchment Partnership.

8.20 Future work could link with outline proposals for the development of a 12-mile green active travel loop for walking, cycling and wildlife proposals as part of the airport expansion. Consultation also highlighted opportunities to green stretches of the A4, creating more attractive routes between Hammersmith and Heathrow and to develop greener travel corridors running east to west, for example along the A315.

8.21 Improved connectivity along river corridors may include pedestrian / cycle bridges over key barriers and traffic calming measures. Such measures could be considered over the A30 at Hatton Cross and across the railway at Feltham Marshalling Yards to restore the Crane corridor link and to open routes along the Longford River, connecting Feltham and Hanworth. Traffic calming measures / crossings could be considered in multiple locations, for instance to better connect the Duke of Northumberland's River across Hatton Road. In many instances such interventions would be strengthened by delivering improved signage and improving entrances to linear routes.

Addressing severance and barriers to access

8.22 There are several key locations across the borough where installing additional crossing features for pedestrians, cyclists and those with disabilities will create a much more usable and direct network of cohesive routes. Examples include:

- Crossing the railway between the northern and southern sites of Bedfont Lakes Country Park;
- Harlington Road East at Queens Road, connections with Feltham Marshalling Yard;
- Railway underpass at the south west of Hounslow Heath;
- A316 at Hartington Road; Chiswick School and Chiswick House;

- Railway line at Dukes Hollow;
- Railway line at Thornbury Park;
- A406 at Gunnersbury Park
- Longford River at Feltham parks
- M4 at River Crane;
- A30 at the River Crane; and
- A4 at River Crane, Henley's Roundabout, Lampton Park, Osterley Underground, Carville Hall Park, Hogarth Roundabout and Homefield Recreation Ground.

Digital promotion and engagement

8.23 Improved understanding and awareness of the wider active travel network could be considered. This could be developed via the creation of comprehensive online walking and cycling mapping and interpretation of the access network throughout the borough. This may be developed in partnership with other groups working on improved access in the wider region such as Brent Catchment Partnership and Crane Valley Partnership. A platform could be developed in a way that would help facilitate consultation for new proposals and provide information on the development of projects.

15-minute neighbourhoods

8.24 The desire for developing 15-minute neighbourhoods has already been expressed within Hounslow's Green Recovery Board. The concept is based on residents being able to meet all their needs within 15 minutes' walk or cycle from their own homes. This includes:

- Providing safe, attractive streets and high quality public realm using urban greening features;
- Providing access to green space and play facilities within a short walk from home;
- Reducing car use through the encouragement of walking and cycling, using traffic-free green corridors where possible;
- Protecting and enhancing key green / blue spaces and local heritage to support local economic activity; and

- Ensuring local open spaces are multifunctional and cater for a diverse range of needs, sports and recreation.

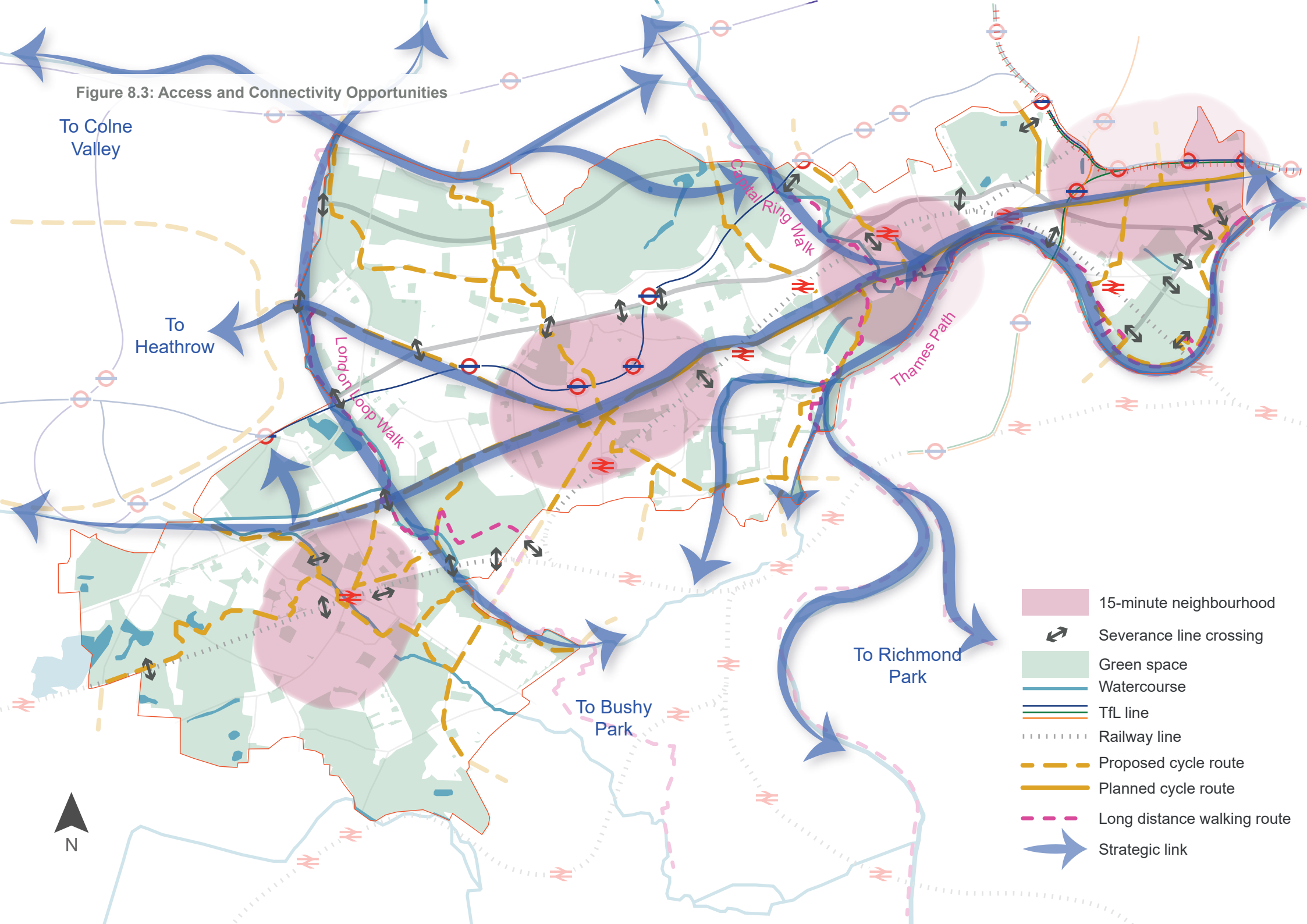
8.25 Within Hounslow, the town centres of Hounslow, Brentford, Chiswick and Feltham have the potential to provide 15-minute neighbourhoods due to their amenities, businesses and the transport provisions available.

Access and Connectivity & Health and Wellbeing

A safe, direct and accessible active travel network is essential to getting Hounslow moving. This is not only essential for achieving climate resilience, but also for the benefit to resident's physical and mental health. Ways which the borough's active travel network can provide the most benefits to health and wellbeing include:

- Providing safe and direct cycle links with Heathrow which integrate urban greening features to reduce the harm caused by pollutants. Where possible, off-road links should be explored;
- Ensuring Hounslow's Priority Cycle Network delivers safe routes which avoid areas of high pollution and traffic;
- Working to reduce obesity in children through the creation of safe walking and cycling links between schools and surrounding neighbourhoods;
- Working in partnership with schools to encourage more active travel, including through the use of safe cycling lessons;
- Create local walking trails within areas of open space which will encourage physical activity and interactions with nature. Include interpretation and education boards to make it appealing for all ages; and
- Ensure pedestrianised routes are accessible to all, including wheelchairs and prams. When creating more naturalistic trails and Destination Spaces, ensure there are opportunities for people who are less abled, including regular seating and facilities such as toilets.

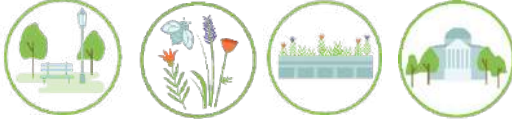


Figure 8.3: Access and Connectivity Opportunities






- 15-minute neighbourhood
- Severance line crossing
- Green space
- Watercourse
- TfL line
- Railway line
- Proposed cycle route
- Planned cycle route
- Long distance walking route
- Strategic link



Table 8.2: Seeds sown: A summary of the principal initiatives and projects identified for access and connectivity

Opportunity	Scale			Spatial scope	Delivery partners	Life stage			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
Delivering Hounslow's Priority Cycle Network		✓	✓	Support the delivery of Hounslow's Priority Cycle Network. Focus other access improvements on linking into the priority network, creating connections between local neighbourhoods, community hubs, transport hubs and open spaces. Ensure opportunities to incorporate urban greening are maximised through appropriate configuration and design.	TfL Hounslow Highways	✓	✓		
Addressing severance and barriers to access	✓	✓		Provide additional crossings and implement traffic calming measures where possible to address severance at strategic locations across the network. Measures should be implemented alongside entrance and access improvements at green / blue corridors and open spaces.	TfL Hounslow Highways Crane Valley Partnership Brent Catchment Partnership	✓			
Promoting the network	✓	✓	✓	Develop a digital platform to promote and interpret the wider network, to include promoted routes, cycle networks and low traffic areas. Consider options to widen scope and enable consultation and data capture to prioritise future projects.	TfL Hounslow Highways Crane Valley Partnership Brent Catchment Partnership	✓			

Opportunity	Scale 			Spatial scope	Delivery partners	Life stage 			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
15-minute neighbourhoods	✓	✓		Exploring the potential for creating 15-minute neighbourhoods across Hounslow's town centres, including Hounslow, Feltham, Chiswick and Brentford. Particular focus should be had on providing safe and direct active travel routes for nearby residents to reduce the dependency on cars and to tie in with the Priority Cycle Network. The scheme could also extend to other local centres such as Heston, Kew Bridge, Isleworth, Cranford and Bedfont.	TfL Hounslow Highways	✓			



Chapter 9

Theme 4: Urban Greening

9.1 Urban greening forms an essential part of the GBI network by ensuring its continued functionality and delivery of benefits within densely built-up areas. Where provisions of green and open space are limited, for example within town centres, greening the 'grey' infrastructure is an excellent method of providing both human and environmental benefits.

9.2 Examples of urban greening features which are considered within this study include:

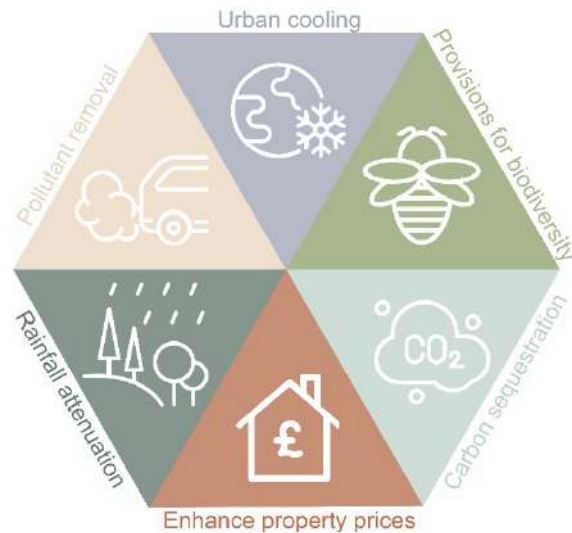
- Green walls;
- Green / brown roofs;
- Street trees;
- Pocket parks;
- Community gardens;
- Rain gardens; and
- Raised planters.

9.3 Having declared a climate emergency and committing to achieve net zero carbon by 2030, urban greening will form an essential part of London Borough of Hounslow's strategy to achieve a Green Recovery. Furthermore, the benefits of urban greening, such as stormwater attenuation, enhancing air quality, carbon sequestration and urban cooling, will enable communities to become more climate resilient.

Exploring the assets

Trees

9.4 Trees act as a fundamental building block of any GBI network. The Council owns and manages a large proportion of the borough's tree population. This provides an excellent opportunity to ensure the tree stock is achieving its full potential of benefits, as shown below.



9.5 Trees owned and managed by the Council include:

- Street trees
- Trees in parks and open spaces
- Trees in housing estates
- Woodlands
- Trees in cemeteries & churchyards
- Trees around sports grounds
- Trees within Council-owned allotments
- Trees on other Council-owned sites

9.6 The Council is responsible for over 100,000 trees, which are predominantly managed by Greenspace360.⁹⁶ 11,400 of these are street trees which are managed by both Greenspace360 and Hounslow Highways.

9.7 The borough is already working closely with residents, community groups and schools to enhance tree planting and longevity through long-term management. In November 2019, the Council worked in partnership with community groups to deliver over 800 native tree specimens

at Harvard Hill Park and De Brome Open Space. Furthermore, there are plans for 140 street trees and 125 park trees to be planted over the next year, alongside a rapidly developing proposal for the planting of 1,000 new trees in partnership with local businesses. A future aim of the borough also includes improvements in the standard of planting, including the provision of establishment support to reduce failure and any potential conflicts with existing infrastructure. The specification of larger species wherever possible to maximise the long-term benefits of urban tree planting is also proposed.



London plane trees, Chiswick High Road

Pocket parks and community gardens

9.8 Feltham Green will receive government funding to turn the underused plot into a new pocket of green life within the town centre, enhancing Feltham's sense of identity and local pride. The funding will go towards the Friends of Feltham Green group who will enhance the management of the Green, the Duck Pond and create the Freddie Mercury Community Garden.

⁹⁶ London Borough of Hounslow (2020). Greener borough. Available at: https://www.hounslow.gov.uk/info/20006/environment/2229/greener_borough (Last accessed: 24.11.2020)

Chapter 9

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Recent improved management of the Green by Greenspace360 and local residents has led to the reinstatement of the site's Green Flag Status.

9.9 Bridge House Pond in Feltham is also an example of a pocket park, situated opposite Feltham station. The site is partially managed by Friends of Feltham House Pond, a dedicated community group.

9.10 The Salopian Garden in Isleworth and the nearby Thornbury Park community orchard are further examples of Hounslow's residents taking action to create healthy, sustainable and socially cohesive spaces within the borough's existing underused plots.

9.11 Plans for future projects are continually emerging across the borough to help realise the aims of the Greener Borough Framework. An example of this includes plans for a community garden at Sutton Playing Fields, as proposed by the Heston Action Group. The aims of the garden will be to grow fruit and vegetables, whilst also enhancing social cohesion, horticultural learning, personal development skills and sharing food knowledge between a diversity of cultures.

Green and brown roofs

9.12 In 2017, there was nearly 19,000m² of green roofs within the borough, formed of over 25 individual roofs. This equates to roughly 0.06m² of green roof per member of Hounslow's population.⁹⁷ Many of these roofs are focused across Hounslow's town centres, for example Brentford, Hounslow and Chiswick, and can generally be found within new residential developments.

9.13 The pace at which new green roofs are being delivered is growing exponentially and therefore it is expected that these figures will be much higher at present and continue to grow into the future.

Green walls

9.14 Hounslow is home to what is considered to be the UK's longest green wall at St Mary's School, Chiswick. The 400-foot Chiswick Oasis wall is mainly composed of easy-to-maintain

ivy, which is an excellent species for pollution removal and air filtration. The wall also houses an educational section which provides a greater variety of herbs and pollinator-friendly species.

9.15 St Mary's School was considered to be one of the top 50 polluted schools in London, predominantly due to its location adjacent to the busy A4 dual carriageway which sees an average of 100,000 vehicles pass each day. The wall was unveiled in the summer of 2019 following harmful levels of air pollution being measured within the playground.

9.16 The initiative was part funded by the Mayor of London's 'Crowdfund for London' project, as well as donations from businesses and the community. This raised a total of £100,000 and highlights the benefits of partnership working and funding.

⁹⁷ Living Roofs (2017). Green Roof Map: London Borough of Hounslow. Available at: <https://livingroofs.org/wp-content/uploads/2019/04/london-borough-of-hounslow.pdf> (Last accessed: 24.11.2020).

Figure 9.1: Canopy Cover



London Borough of Hounslow
Canopy cover

Key considerations

Development

9.17 The borough's population is growing rapidly and therefore additional demand will be had for housing and infrastructure. It is important to ensure that all new development makes space for greening whilst balancing the priorities and needs of future communities.

Trees

9.18 Although Hounslow has a significant tree population, there is a disparity in their abundance across the borough, as seen in **Figure 9.1**. Pockets of street tree deficit exist across Hounslow and in many cases mirror the pattern of deprivation, with industrial areas performing particularly poorly. It is generally within these areas where other issues such as surface water flooding, air pollution and a lack of biodiversity provisions are prevalent, and therefore the addition of greening would be most beneficial.

9.19 Neighbourhoods which experience a deficiency in street and housing estate trees, whilst also experiencing high levels of deprivation include:

- Hanworth Trading Estate
- Feltham Industrial Estate
- Grove Village, Bedfont
- Feltham town centre
- Brentford town centre
- Great West Road
- Cranford Trading Estate
- Hounslow town centre
- Woodlands, Isleworth
- Kew Bridge Station

Within the dense urban and industrial fabric of these areas, street tree planting may not be the most appropriate solution for greening due to conflict with infrastructure and services. Therefore, carefully planned urban greening solutions should be retrofitted or designed into new development.

9.20 Hounslow's tree stock is formed predominantly of native species. Although this poses significant benefits for biodiversity, it can put the population at a greater risk to climate change. It is estimated that London's climate in 2050 will mirror Barcelona's at present,⁹⁸ therefore native trees within the borough may struggle to adapt to the warmer and more extreme conditions. Furthermore, an influx of invasive species, pests and diseases, which are better suited to the changing conditions, may out-compete or severely effect the health of Hounslow's tree stock.

9.21 Finding the space, funding and delivery team to plant new trees is just the initial stage of a tree's life cycle. An ongoing programme of management and care is needed to ensure tree longevity, and therefore the delivery of multifunctional benefits. The average life expectancy of a London street tree is just ten years.⁹⁹ There are several potential reasons for this, including:

- **Poor installation** – this is generally caused by poor construction of the root zone and drainage infrastructure.
- **Inappropriate placing** – which can cause conflict with nearby services and infrastructure.
- **Poor management** – which is often a result of insufficient watering during the summer months. It can also be as a result of tree stakes and ties not being adjusted frequently enough during the establishment period. As a specimen grows and ages, tree guards and grilles need to be replaced to ensure the tree does not outgrow them.
- **Unsuitable risk management** – which results in removal.

Carbon sequestration

9.22 Since declaring a climate emergency in June 2019, Hounslow Council has committed to becoming carbon neutral by 2030. To achieve this goal, the Hounslow Climate Emergency Action Plan (2020-2030) has set out plans for a substantial programme of urban greening and tree planting. Although carbon sequestration through urban greening is not the single solution to the problem, it will play an integral role in the delivery of many of the borough's climate-related targets. For example, it is estimated that over 40 years, one tree will sequester one tonne of

⁹⁸ Bastin *et al.* (2019). Understanding climate change from a global analysis of city analogues. Available at: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0217592> (Last accessed: 24.11.2020).

⁹⁹ <https://land8.com/street-tree-survival-guide/#:~:text=It%20is%20perhaps%20shocking%20then,500%2C000%20street%20trees%20in%20London.>

carbon dioxide. Should ~20,000 trees be planted across the borough it will sequester the equivalent of the current annual emissions from fleet and employee transport over 10 years.¹⁰⁰

Air quality

9.23 The entirety of Hounslow sits within an Air Quality Management Area (AQMA), alongside London's other boroughs, meaning there are concerns regarding the level of pollutants and particulates within the borough. It is estimated that more than 100 premature deaths within the borough can be attributed to poor air quality each year.¹⁰¹ This extends to premature deaths annually across London as a whole.¹⁰²

9.24 It can be seen on **Figure 4.3** that there are significant pollution hotspots along major roads such as the A4, M4, A312, A315, A316, A406 and A205. Many of these roads fall within the eleven Air Quality Focus Areas (AQFA) which have been identified by the GLA across the borough (see **Figure 9.3**). These relate to areas which regularly exceed EU standards for air quality and therefore experience potentially dangerous levels of NO₂, PM2.5 and PM10. Hounslow's AQFAs include the following:¹⁰³

- Hounslow A4: Great West Road / Vicarage Farm Road junction
- Heston A4: Great West Road / Heston Road / Lampton Road junction
- Chiswick Roundabout: M4 J1 / A4 / A406 / Chiswick High Road / Kew Bridge
- Chiswick High Road: from Heathfield Terrace to Chiswick Lane
- Hogarth Roundabout: Great Chertsey Road / Dorchester Grove
- Chiswick A4: Cedars Road / Ellesmere Road from M4 J1 to Dukes Avenue junction
- Brentford M4: J2 and Boston Manor Road / A4 junction
- Hounslow Grove Road: London Road / High Street junction

Chapter 9

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

- Feltham High Street: Hounslow Road / Harlington Road / Uxbridge Road / Hanworth Road junction
- Clockhouse Roundabout: Great Southwest Road / A30 to Terminal 4
- Heathrow: Colnbrook A4 / M4 J4a / Bath Road / Parkway / Staines Road / Stanwell Moor Road / Park Road



Chiswick Roundabout Air Quality Focus Area

9.25 Urban greening and tree planting are both excellent methods for enhancing air quality through the deposition of particulates on vegetation leaves and by managing air flow at street level. However, it is important to ensure the correct GBI interventions are used which reflect the urban fabric and context of the site.

Surface water flooding and water quality

9.26 The issue of surface water flooding is widespread across the borough, with hotspots at Flanders Road (Turnham Green), Boston Manor Road & Manor Vale (Brentford) and Bridge

¹⁰⁰ London Borough of Hounslow (2020). Climate Emergency Action Plan. Available at: <https://democraticservices.hounslow.gov.uk/documents/s162188/Climate%20Emergency%20Action%20Plan%20-%20Appendix%20A%20-%20Action%20Plan.pdf> (Last accessed: 25.11.2020).

¹⁰¹ London Borough of Hounslow (2018). Air Quality Action Plan 2018-2023.

¹⁰² King's College London (2015). Understanding the Health Impacts of Air Pollution in London. Available at: https://www.london.gov.uk/sites/default/files/hia_in_london_kingsreport_14072015_final.pdf (Last accessed: 25.11.2020).

¹⁰³ GLA (2013). Air Quality in Hounslow: A Guide for Public Health Professionals

Chapter 9

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Road & Pears Road (Hounslow). This is expected to worsen in the future as the pressure for housing and development increases and the effects of climate change bring about an enhanced magnitude and frequency of extreme rainfall events. Urban surface run-off has also led to watercourses in the Brent and Crane catchment as having either a 'poor' or 'moderate' ecological status.

Private gardens

9.27 Private gardens provide an invaluable tool for enhancing resident's health, providing space for biodiversity and reducing the impacts of surface water flooding, if greened correctly. Where access to a private green space is not possible, easy access to a high quality public open space is necessary for community wellbeing. As can be seen in **Figure 9.2**, most of the borough falls within 400m of a public open space, however the size and amenities available within these spaces means not all provisions are created equal. For example, residents living within 400m of a Green Flag Award Park will have a different experience to residents living within 400m of a small amenity open space. Where this is the case, the provision of private gardens is essential to create opportunities for relaxation and activities in nature.

9.28 Generally, the size and density of gardens radiates away from central London and therefore private garden provisions are greater in the west of the borough. In recent years, the paving-over of front gardens has become more frequent as people's desire for off-street parking increases. This is potentially having a negative effect on the risk of local surface water flooding, urban heating and biodiversity. Furthermore, recent research shows the importance of front gardens in people's health and well-being through the socio-cultural benefits which can be derived from planted up spaces which frame the street.

Consultation findings

- More pocket parks should be delivered within Hounslow's urban areas / where new large open spaces are not possible.
- Increase the quality of trees within public spaces to provide year-round interest. Could work in partnership with Kew Gardens.
- Urban greening required in Brentford Dock.
- More wildflowers on verges and within open spaces, incorporating features such as bug hotels.

- Ensuring right tree in right place.
- Setting an appropriate urban greening factor target with the possibility for a 'zonal' approach if supported by evidence.
- Help residents within dense estates to utilise small green spaces. Urban greening should be prioritised in areas of social housing.
- Continue and expand good sustainable design principles. Green features should be the focus of development.
- Planning policy needed for front gardens, the impact of parking policies on converting gardens to parking needs to be considered.
- More planting at the feet of street trees.

Institutional

9.29 The responsibility for urban greening does not sit within a single department. Instead it is delivered across various teams including Hounslow Housing, Hounslow Highways, Caolo, Lampton Greenspace360, Facilities Management, property developers, private landowners and others. This can often lead to a disjointed approach which does not achieve the full potential of benefits, particularly in relation to habitat provisions and the interlinking of biodiversity corridors.

Hounslow Tree Plan and Tree Management Policy

The Council aims to consolidate current tree management processes across the various departments within the borough with the intention of ensuring security, preservation and enhancement of the borough's tree canopy cover. Consequently, the document outlines a vision to protect the borough's existing tree stock and support the delivery of a comprehensive tree expansion programme. Covering the time period from 2021-2025, an emergency tree plan is proposed which addresses issues such as existing policy, management databases, tree risk assessment and the practicalities of tree planting.

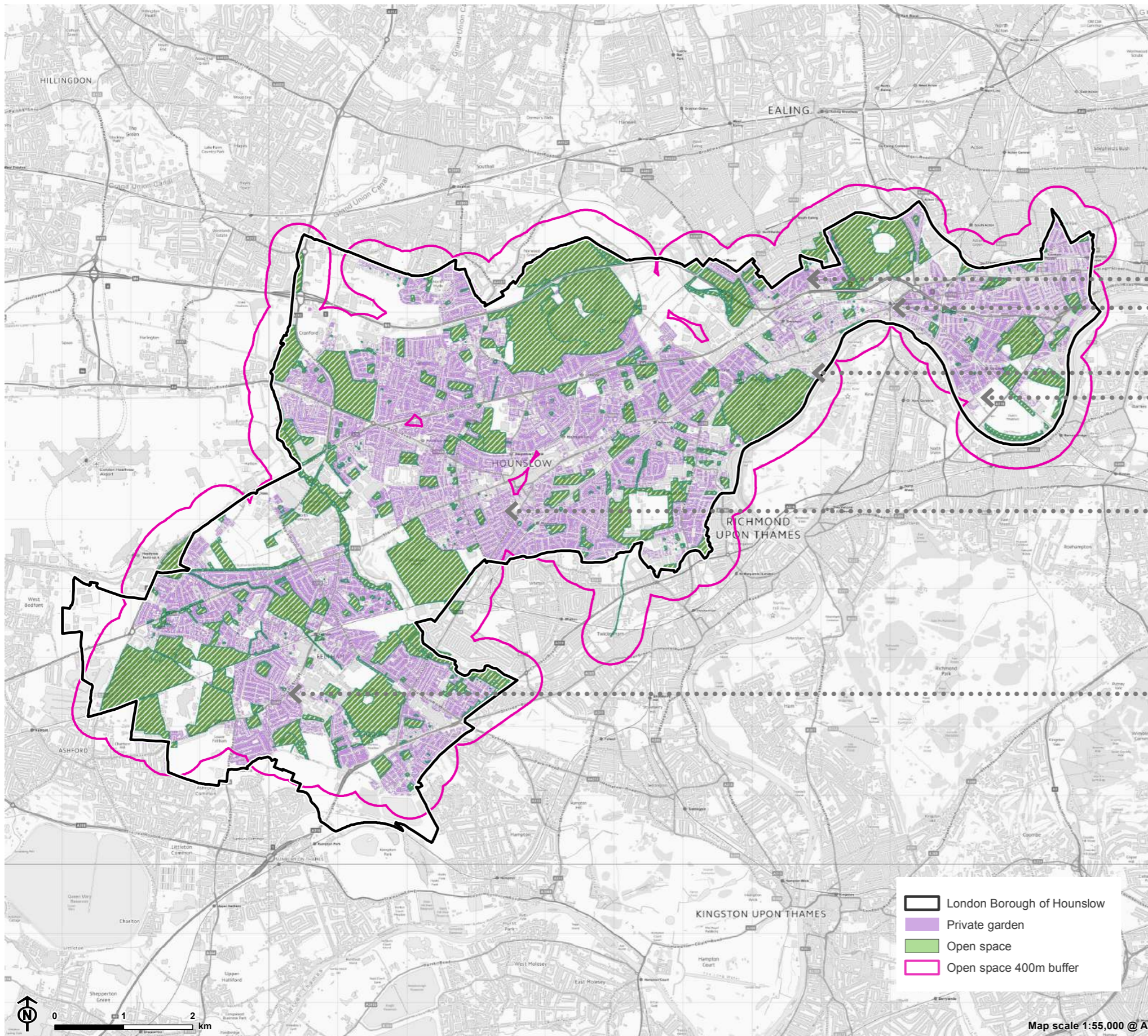
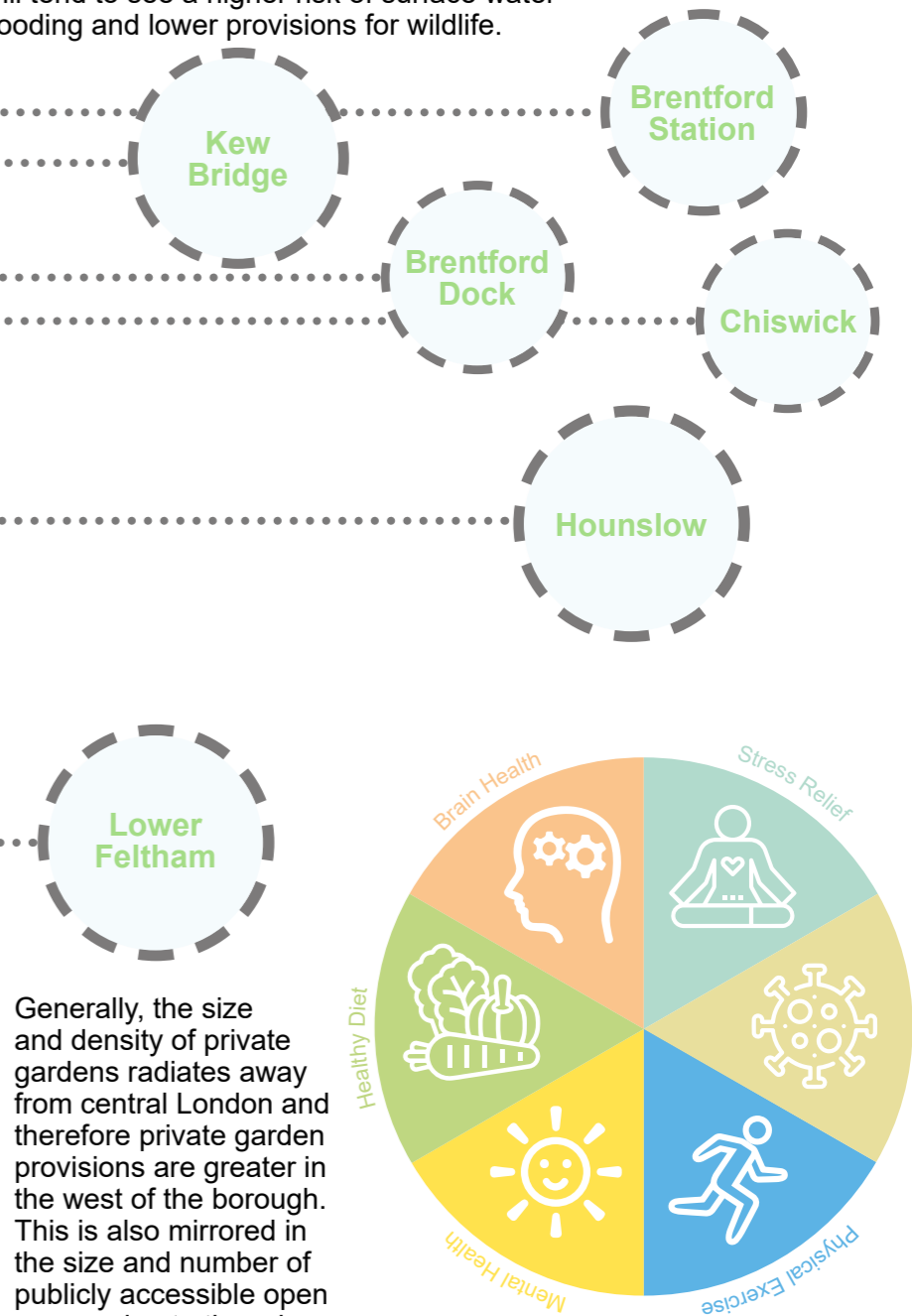


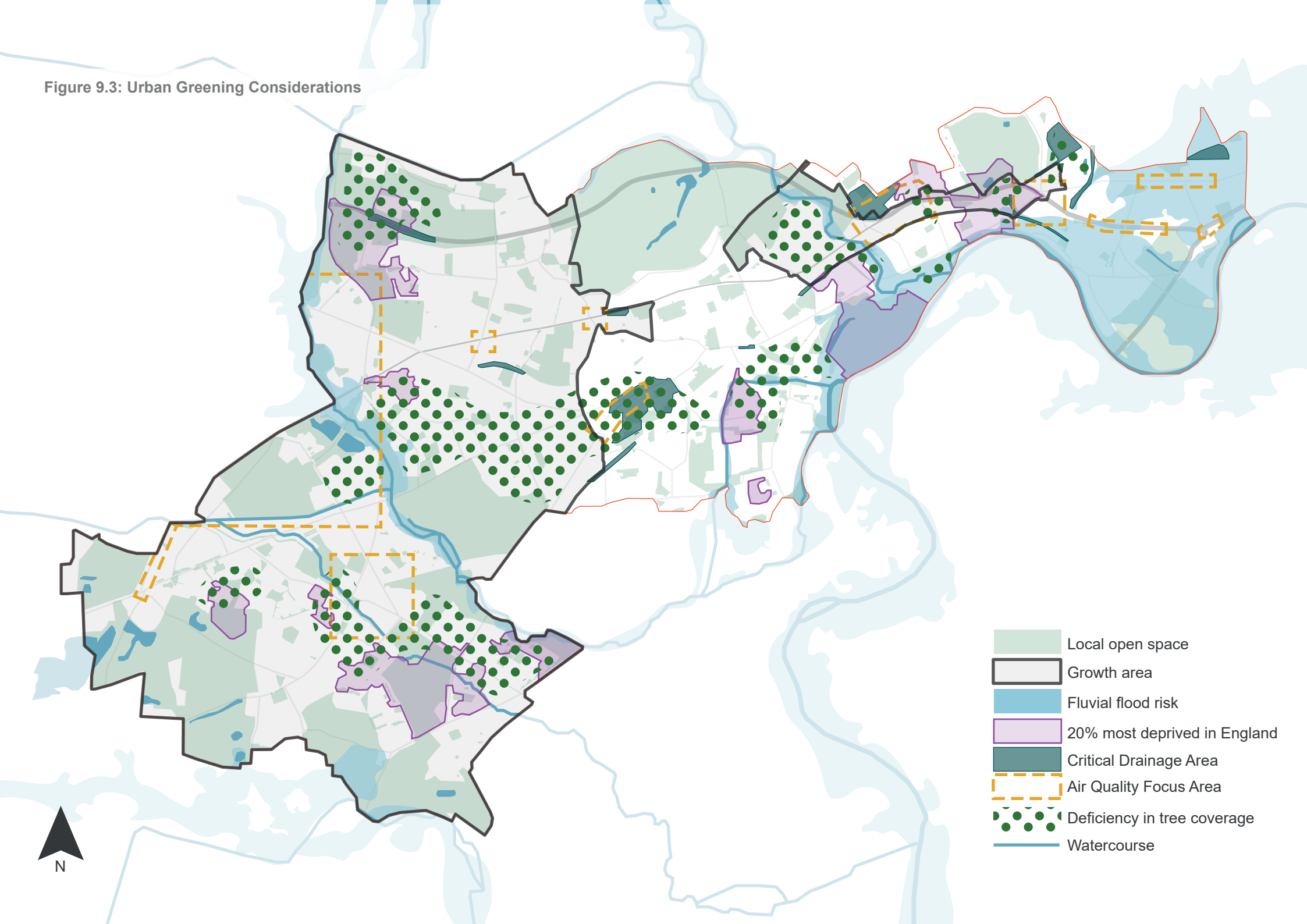
Figure 9.2 - Access to private gardens and open space

Access to a private garden has a significant influence on the mental and physical wellbeing of residents. Where access to a private outdoor space is not available, the provision of high quality nearby green space is essential. Although the majority of Hounslow falls within 400m of a public open space, the size and amenities available within these spaces vary, meaning not all accessibility is created equal. A deficiency in access to high quality open space, alongside limited provisions in personal gardens, can have significant implications on community well-being and mental health. Furthermore, areas which have smaller gardens and a greater prevalence of 'paving -over', will tend to see a higher risk of surface water flooding and lower provisions for wildlife.



Generally, the size and density of private gardens radiates away from central London and therefore private garden provisions are greater in the west of the borough. This is also mirrored in the size and number of publicly accessible open spaces due to the urban fabric placing limitations on the amount of space available. The east of the borough, around Chiswick, Brentford, Gunnersbury and Turnham Green, also tend to see smaller gardens, which is expected. Brentford performs particularly poorly within both private gardens and public open space, particularly in the area directly north of Brentford Station.

Figure 9.3: Urban Greening Considerations



- Local open space
- Growth area
- Fluvial flood risk
- 20% most deprived in England
- Critical Drainage Area
- Air Quality Focus Area
- Deficiency in tree coverage
- Watercourse

Chapter 9

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Key opportunities

Key principles

- To plant one carbon capturing tree for every child born in the borough (~5,000 specimens each year).
- Achieve compliance with EU limit values for clean air as soon as possible.
- Achieve net zero emissions by 2030 through enhanced carbon sequestration and reduced dependence on polluting modes of travel.
- Achieve an Urban Greening Factor of 0.4 within all new residential development and 0.3 in all commercial development.
- Enhance access to GBI through greening the 'grey' within Hounslow's most green space deficient and deprived areas.

9.30 The overarching opportunities for urban greening within Hounslow can be seen on **Figure 9.4**.

Development

9.31 Much of Hounslow's strategic growth areas are limited in their ability to provide significant new open and green space. In these cases, urban greening should be utilised to address deficiencies in access to GBI and nature. Areas where intensive growth is expected includes:

- Brentford town centre;
- Hounslow town centre;
- Great West Corridor (including the 'Golden Mile'); and
- West of Borough (part of the Heathrow Opportunity Area).

9.32 Policy G5 within the London Plan sets out the requirement for all major and strategic developments to apply the urban greening factor (UGF) calculation to achieve a certain

standard of greening, as set out by each borough council. At the time of writing, emerging policy outlined in two area based local plan reviews require development to achieve a UGF score of 0.4 for predominantly residential developments, 0.3 for predominantly commercial and mixed employment, and 0.2 for predominantly industrial development. The emerging West of Borough and Great Western Corridor Development Plan Documents (DPDs) are still to be tested at examination, however if sound this policy will apply in the areas covered by the DPDs upon adoption. There is the potential to achieve more ambitious, yet achievable, UGF targets through adopting a zonal approach borough-wide, as part of a future local plan review. This will ensure sufficient urban greening is provided where space permits.

9.33 In accordance with the London Mayor's draft UGF SPG¹⁰⁴, a borough's GI Strategy should be used to determine and evidence local UGF targets. A future iteration of this GI Strategy will therefore be required to gather evidence of sufficient scope and detail to support future ambitious zonal UGF target setting. A comprehensive local needs assessment should be undertaken to gain an updated baseline understanding of the GI network, environmental issues or challenges and demographic data.

The Meadow, Elephant & Castle



The Meadow, Elephant & Castle

Source: B|D Landscape Architects

¹⁰⁴ Mayor of London (2021) *London Plan Guidance: Urban Greening Factor (Consultation Draft)*

Chapter 9

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

The Meadow is a biodiverse and playful temporary landscape within the heart of Elephant & Castle. The plot comprises of pollinator-friendly meadow and grass planting which is interspersed with sculptures, natural play features and spots for sitting. The area forms part of the Elephant Park regeneration project, with this plot of land not coming forward for development for a few years. Therefore, the transformation into “the Meadow” means the space is being well-used by residents and visitors in the meantime.

9.34 Hounslow’s ambitious climate and biodiversity goals for the future means it could set UGF targets which above the expectations set out in the London Plan. It’s location as an outer London borough also means it may be able to accommodate large greening schemes.

9.35 The UGF takes into account the quantity of greening required by developers, however it is also important to ensure the quality of these schemes. Therefore, utilising standards such as the ‘Building with Nature’ accreditation should be encouraged to be included within planning applications from developers. Applications should also include management plans to ensure the longevity of any GBI features.

9.36 Should a site be awaiting development for an extended period of time, the potential for ‘meanwhile landscapes’ should be explored. This typically involves the transformation of brownfield sites into spaces of biodiversity refuge using wildflowers and grassland. If safe to do so, public access into the site is desirable to create a temporary pocket park.

Trees

9.37 There is a growing demand within Hounslow’s resident and community groups for more tree planting, especially along streets and within public realm. Although a lot of the planting and major management tasks relies on Hounslow Highways and Greenspace360, this proactive and enthusiastic resident base should be utilised for the long-term management of new trees.

9.38 Where possible, residents should be directly involved in the planting of new trees through volunteer planting events. This could be done in partnership with Friends of Groups, The Conservation Volunteers, schools and local businesses. Once planted, the longevity of trees can be ensured by residents undertaking everyday management tasks such as:

- Watering during dry months;
- Mulching;
- Adjusting tree straps and stakes;
- Removing temporary tree guards; and
- Reporting damaged, hazardous or dead trees to the Council.

9.39 More specialist tasks, such as pruning, can also be undertaken at the community level with some supervision by experts. By encouraging community ownership of projects, not just in tree planting, it will increase their chance of long-term success.

9.40 Over the next five years there are extensive plans for Hounslow Highways to re-surface many of the borough’s roads and pavements. The planting of new street trees should be delivered alongside this work where possible. High quality tree pits which can accommodate large root systems and drainage capacity should be utilised to ensure the long-term survival of the tree.

9.41 Mixed native, deciduous woodland planting should be encouraged where space and conditions permit, with wet-loving species concentrated along the Crane and Brent Valleys (see Chapter 7 for more detail on floodplain woodland potential). New woodland blocks and strips should be sensitive to the existing habitats and species occupying the space, as well as the character and views which it might impose on.

9.42 Tree species should be carefully selected, utilising native species for biodiversity, but also ensuring climate resilience through a diverse tree stock. To appropriately decide on site-specific species, it is recommended that the Forestry Commission’s Ecological Site Classification Decision Support System¹⁰⁵ and the Trees & Design Action Group’s Tree Species Selection for Green Infrastructure guide¹⁰⁶ is used on a site-by-site basis. Using a mix of evergreen trees should also be considered as it is the leaves which are required for pollution deposition.

¹⁰⁵ Forestry Commission (2020) ESC-DSS. Available at: <http://www.forestdss.org.uk/geoforestdss/> [Accessed: 04.12.2020].

¹⁰⁶ Trees & Design Action Group (2019). Tree Species Selection for Green Infrastructure: A Guide for Specifiers. Available at: http://www.tdag.org.uk/uploads/4/2/8/0/4280686/tdag_treespeciesguidev1.3.pdf [Accessed: 04.12.2020].

Table 9.1: Summary of priority tree planting types and locations

Type of location	Tree typology	Description	Example location
Green Belt and MOL	Deciduous woodland, parkland & hedgerow trees	Reforestation of public and private green spaces within the Green Belt and Metropolitan Open Land (landowner engagement may be required).	Rectory Farm Green Belt at Hatton & Bedfont Southville amenity space, Bedfont Feltham Marshalling Yard
Dense urban areas	Street trees (+ other greening features)	These areas generally have a deficiency in access to nature, coupled with a lack of potential space for greening. Therefore, street trees, along with other greening features, should be used to create urban boulevards which frame some of the borough's most intensively used active travel routes and areas of public realm.	A315 & A314, Hounslow Central Bath Road Harlington Road East Heston Road Boston Manor Road Wellesley Road Sutton Court Road
Housing estate land	Street trees, specimen trees and orchards	Housing estate land provides an underused asset of green space which can host large tree specimens to provide significant biodiversity and amenity value.	Redwood Estate, Cranford Heston Farm Estate, Heston
Strategic growth areas	Street trees, specimen trees, woodland blocks and orchards	Working with developers to provide a variety of tree typologies across new development which should be planned into designs from the outset.	Great West Corridor (particularly to the west of Boston Manor Park) Hounslow Central Brentford town centre
Major roads	Street trees	Upright and small specimens should be used along Hounslow's busiest roads to create more pleasant environments for pedestrians and cyclists. Designs should ensure upward movement of air is not impeded by trees.	A4 A30 A312 A314 A315 A316

Type of location	Tree typology	Description	Example location
Active travel routes, particularly school routes	Street trees (+other greening features)	Using street trees and urban greening features to frame safe and direct active travel routes between schools and major transport hubs.	Kingsley Academy Hounslow Town Primary School St Pauls Church of England School St Marys RC School
River corridors	Riparian habitat	Utilising the WWNP dataset to identify locations suitable for riparian planting along Hounslow's river valleys.	Avenue Park Waye Avenue Park London Playing Fields
Historic landscapes	Veteran and specimen trees	Work with landowners to establish a veteran tree planting programme using original genotypes.	Osterley Park Boston Manor Park Gunnersbury Park Syon Park

9.43 The long-term management of new woodland should be costed and budgeted for before implementation to ensure their longevity and the ongoing delivery of benefits. For more information regarding the opportunities for tree planting across the borough, see Hounslow's Tree Plan and Tree Management Strategy.

9.44 For efficient and informed planning of suitable tree planting in the future, a more exhaustive tree data set for the entire borough would be useful. This could include a characterisation of the borough's tree typologies, including species and form of planting. This would allow an 'urban forest' management approach to be adopted where different character areas could have their own programme of planting, management and replacement. This would also ensure landscape, townscape and wildlife characters are retained, whilst achieving optimum carbon sequestration and amenity value.

9.45 The base of street trees provide a ready-made environment for greening and should ideally be planted up with native, pollinator-friendly species. Where possible, communities should be engaged and empowered to green street trees outside their houses, as has been done within the London Borough of Hammersmith & Fulham. Guidance should be given on how to achieve this, with special focus on not disturbing tree routes or impeding movement.

Enhancing air quality

9.46 Trees and GBI features should be installed as pollution barriers between pollutant sources and vulnerable receptors, such as schools and residential development. The benefits of placing vegetated screens around school playgrounds is significant, as seen at St Mary's School Chiswick. It has been found that simple ivy screens can reduce particulate matter by up to 41% in playgrounds and should therefore their potential implementation should be explored across all schools in the borough.¹⁰⁷

9.47 As well as on-site urban greening features, GBI features, including street trees, green walls and rain gardens, should be used off-site to create a framework for active travel. Major school routes would benefit the most from these interventions as it would cut the reliance on polluting vehicles and idling time outside school gates. The same treatment on major routes into town centres would also cut back on pollution sources.

9.48 Particular schools which would benefit from urban greening features both on and off-site can be found in **Table 9.2**.

Table 9.2: Focus schools for air quality enhancements

Area	School
Chiswick	Belmont Primary School The William Hogarth School St Mary's RC Primary School Cavendish Primary School Chiswick School
Brentford	Our Lady & St John's Catholic Primary School Floreant Brentford Primary School Kew House School International School of London Heathfield House School and Infant School

Area	School
	St Paul's CoE Primary School
Syon	The Green Schools for Girls The Green School for Boys
Osterley	The de Lacey Montessori School Oaklands School Isleworth & Syon School
Isleworth	Isleworth Town Primary School St Mary's Catholic Primary School Bolder Academy
Hounslow Town	Hounslow Town Primary School Oak Heights School Kingsley Academy
Hounslow West	Wellington Primary School Lampton School
Cranford	Cranford Primary, Infant and Nursery School The Cedars Primary School Cranford Community College
Bedfont	Bedfont Primary School
Feltham	Cardinal Road Infant and Nursery School St Lawrence Catholic Primary School Victoria Junior School

¹⁰⁷ London Air (2017). Green screen Study: St Cuthbert with St Matthias Primary School. Available at: <http://www.londonair.org.uk/london/asp/news.asp?newsid=NKGreenscreen2017> (Last accessed: 25.11.2020).

Chapter 9

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

Area	School
	Sparrow Farm Junior, Infant and Nursery School

9.49 An area which experiences significant issues with air quality is beneath the Chiswick Flyover, a route which is important for pedestrians and cyclists accessing some of the borough's major green spaces, such as Gunnersbury Park and Boston Manor Park. Innovative methods of greening should be adopted here to enhance its grey appearance, whilst mitigating pollution. Pilot areas should be tested to assess the success of different species, with ivy screens being a focus for its hardiness and pollutant removal value.

9.50 The Great West Road is another pollution hotspot and should be greened in a careful manner. The planting of street trees may not be suitable along the road due to space restrictions, however a hedge between the road and pedestrian and cyclist receptors could reduce the level of pollution experienced by users of the route.

The Millbrook Roundabout and flyover in Southampton is an excellent example of the City Council utilising innovative urban greening features to enhance air quality around the busy junction. The vertical green walls not only work to remove pollutants from the air, but significantly enhance the visual appearance of the concrete flyover and its supporting columns.

SuDS and public realm

9.51 Urban greening features not only have a functional role in enhancing air quality and reducing surface flood risk, but they also improve the aesthetics of an area, helping to improve its sense of place. SuDS features, such as linear rain gardens, are excellent ways of framing a street to make it more pedestrian and cyclist-friendly, as well as acting as a traffic-calming measure. They are also easily retrofitted into existing highways and can be located in most locations where there is a surface drain. These interventions should be focussed along pedestrian-heavy streets, for example high streets, major school and cycle routes, and key gateways into the borough, for example stations.

9.52 Specific streets which would benefit from urban greening features such as green screens, urban boulevards and linear rain gardens include:

- Grove Road, Staines Road and Kingsley Road, Hounslow Town Centre
- Feltham High Street and Harlington Road East, Feltham
- Staines Road, East Bedfont
- Bath Road, Hounslow West
- Bath Road, Cranford
- Great West Road at Osterley Underground Station, Jersey Parade, junction with Sutton Lane and junction with Vicarage Farm Road
- A406, Gunnersbury
- Chiswick High Road, Chiswick
- A205 and A315, Kew Bridge
- Brentford High Street, Boston Manor Road, Brentford

Millbrook Roundabout, Southampton



Millbrook Roundabout, Southampton

Source: Biotecture

Chapter 9

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

- Twickenham Road and London Road, Isleworth

9.53 Priority locations for SuDS retrofits should be concentrated within Critical Drainage Areas where there is an existing risk of surface water flooding. They should also be prioritised within areas where major roads run adjacent to watercourses. By capturing road run-off before entering waterways, the SuDS features will contribute to water quality improvements. Example locations include:

- Great South West Road where it crosses the River Crane
- Great South West Road at Duke of Northumberland's River and Longford River
- Bath Road where it crosses the River Crane
- Causeway where it crosses the River Crane
- Great West Road where it crosses the River Brent
- Worton Road where it crosses the Duke of Northumberland's River
- Hounslow Road where it crosses the Longford River
- Tachbrook Road where it crosses the Longford River
- Staines Road where it crosses the Longford River
- Hatton Road at Duke of Northumberland's River and Longford River

9.54 Green bus stops provide an excellent opportunity for creating green stepping-stones throughout the borough, whilst engaging people with biodiversity, reducing surface water flood risk and providing refuge for pollinators. Their installation is relatively cheap and simple using supplier-grown sedum and wildflower matting. Providing shelters are structurally sound enough, this can be retrofitted onto existing stops. Should existing shelters have insufficient capacity to support a green roof, their installation could be rolled out alongside the cycle of shelter upgrades across the borough.

Community gardens and sustainable food growth

9.55 Encouraging food sustainability and reducing the consumption of meat has been highlighted as an aim of the Greener Borough Framework and is also largely supported by residents. This type of action requires a shift in people's daily habits and can start through the

increased local growth of food in community gardens and allotments. As well as being a climate positive step, community food growth helps to improve social cohesion and provide a variety of physical and mental health benefits. Therefore, any existing plots of underused land which sits within an engaged community or active resident association should have its potential explored.

9.56 Less-traditional and smaller-scale interventions for food growth should be delivered within areas of limited space, for example town centres and the east of the borough. This could include features such as raised planters, green roofs, edible walls and balcony planters which can be managed individually or as a community. Encouraging school and business partnerships for these projects would enhance opportunities for funding and education.

9.57 It was recently announced that Hounslow Council will be undertaking a major regeneration programme for its housing estates over the next 20 years. Although the focus of this project is to deliver more high quality, energy efficient and affordable homes, the opportunity for individual and community-scale food growth and urban greening should be included within all regeneration projects.

9.58 Food growing projects should be particularly focussed within areas of existing health deprivation as the physical and mental benefits of gardening and healthy eating is well recognised. Priority neighbourhoods include:

- East of Kew Bridge Station
- Haverfield Estate, Brentford
- Around Syon Lane and Syon Park
- Woodlands, Isleworth
- Summerwood Road Housing Estate, Isleworth
- Redwood Estate, Cranford
- Heston Farm Estate, Heston
- Highfields Estate and Feltham Town Centre, Feltham
- Oriel Estate, Hanworth

9.59 Hounslow could adopt a 'parklet permit' scheme, similar to Hackney Council, where residents can apply for a permit to create a parklet on their street in the same way they would

apply for a parking permit. This has been extremely successful within Hackney which saw the creation of six parklets within two months and has allowed residents to reclaim their streets which have previously been dominated by parked cars.

Private gardens

9.60 Residents of Hounslow should be encouraged to make the most of their gardens through de-paving (both front and back) to bridge the gap between the public and private realm whilst enhancing social interactions and community cohesion. This will create an opportunity for residents to welcome wildlife into their private space, as well as reduce the risk of surface water flooding. Furthermore, the mental and physical health implications of gardening will be felt, leading to a healthier Hounslow.

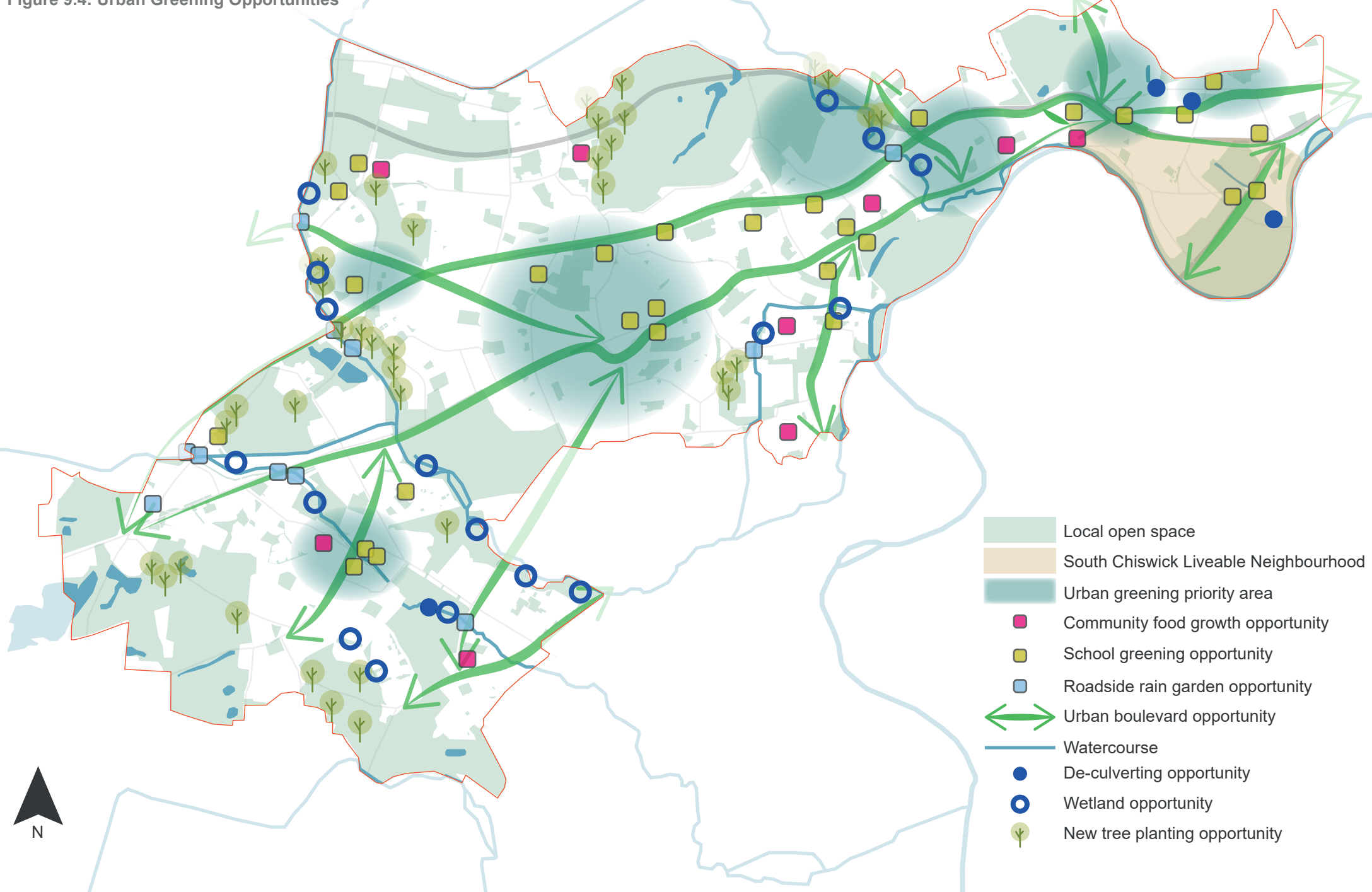
- Encourage residents to de-pave their front gardens and help green the streets.

Urban Greening & Health and Wellbeing

Urban greening features provide essential services in terms of health and wellbeing in areas of the borough which could not traditionally host green space and vegetation due to their dense urban fabric. It is generally these areas of high density living which experience the greatest level of deprivation and poor health. Therefore, urban greening has a crucial role to play in delivering health benefits to these communities and it can be done through:

- Setting ambitious standards for urban greening within new developments through the use of the Urban Greening Factor and design codes;
- Encouraging all new developments to provide community gardens and private growing space where space permits;
- Retrofitting existing housing estates with community gardens, edible green walls, green roofs, flower-rich grassland and raised planters to encourage community cohesion and social interactions;
- Using appropriate urban greening interventions within areas of poor air quality to remove pollutants; and

Figure 9.4: Urban Greening Opportunities



- Local open space
- South Chiswick Liveable Neighbourhood
- Urban greening priority area
- Community food growth opportunity
- School greening opportunity
- Roadside rain garden opportunity
- Urban boulevard opportunity
- Watercourse
- De-culverting opportunity
- Wetland opportunity
- New tree planting opportunity



Table 9.3: Seeds sown: A summary of the principal initiatives and projects identified for urban greening

Opportunity	Scale			Spatial scope	Delivery partners	Life stage			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
Urban Greening Factor target	✓	✓		In accordance with the London Mayor's draft UGF SPG, a borough's GI Strategy should be used to determine and evidence local UGF targets. A future iteration of this GI Strategy will therefore be required to gather evidence of sufficient scope and detail to support future ambitious zonal UGF target setting. A comprehensive local needs assessment should be undertaken to gain an updated baseline understanding of the GI network, environmental issues or challenges and demographic data.	GLA Developers	✓	✓		
One tree per child each year	✓	✓	✓	Hounslow is currently in the process of developing a new Tree Management Strategy and Tree Plan which should inform the location and typologies of tree planting across the borough ranging from woodland to street trees. This should enable the Council to deliver their policy of planting one tree per child each year. Special consideration should be had for species selection, adopting an ethos of 'right tree, right place'. Furthermore, a diverse should be achieved to allow for climate resilience.	Forestry Commission TCV Friends of groups Private landowners	✓	✓		
Greening schools	✓	✓		Urban greening features, particularly green screens and hedges should be adopted as a method for tackling poor air quality in the borough's schools. These can also be used as educational tools. Additional greening should be delivered to extend these healthy environments past the school gates and enabling safe and sustainable travel to and from school.	Local schools Community groups GLA	✓	✓		

Opportunity	Scale			Spatial scope	Delivery partners	Life stage			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
Urban boulevards		✓	✓	Urban greening features including street trees, pocket parks, linear rain gardens, raised planters and parklets are all methods for greening Hounslow's streets. Routes which are particularly popular with pedestrians and cyclists, i.e. around town centres and towards stations, should be transformed into urban boulevards using GBI. This should encourage the uptake of active travel whilst providing space for biodiversity, improving mental wellbeing, managing surface water and reducing the urban heat island effect. Furthermore, urban greening features can be utilised as a method of wayfinding and could be an important tool for enhancing connectivity between the borough's Destination Spaces.	TfL Local businesses	✓			
Sustainable food growth	✓	✓		Community gardens should be delivered as standard within new development and retrofitted into the borough's housing estates. Where space permits, new allotments, both full-size and 'starter' plots, should be delivered as part of new development to help tackle the long waiting lists seen across Hounslow. Private growing space should also be delivered within new development, for example through raised beds in gardens and planters on balconies. Campaigns to encourage sustainable food growth should be explored. This could include workshops, information on growing and providing tools and seeds.	Friends of groups Community groups	✓	✓		
De-paving gardens	✓			Encourage the de-paving of gardens through consultation, particularly front gardens which have been taken over by parked cars. Education on the importance of front gardens for biodiversity, social cohesion, reducing the urban heat island and managing surface water should be distributed. This campaign should go hand in hand with the upgrade of active travel networks.	Community groups	✓			

Chapter 10

Theme 5: Blue Infrastructure



10.1 Blue infrastructure (BI) forms a fundamental part of the GI network through its role in managing flooding, providing for biodiversity and enhancing the overall amenity of the landscape. Climate change is predicted to bring with it a heightened frequency and magnitude of extreme weather events, therefore increasing the likelihood of localised fluvial and surface water flooding. Furthermore, the increased risk of storm surges and rising sea levels will see a greater risk of tidal flooding from the River Thames. Consequently, the need for a functional cross boundary GBI network has never been greater.

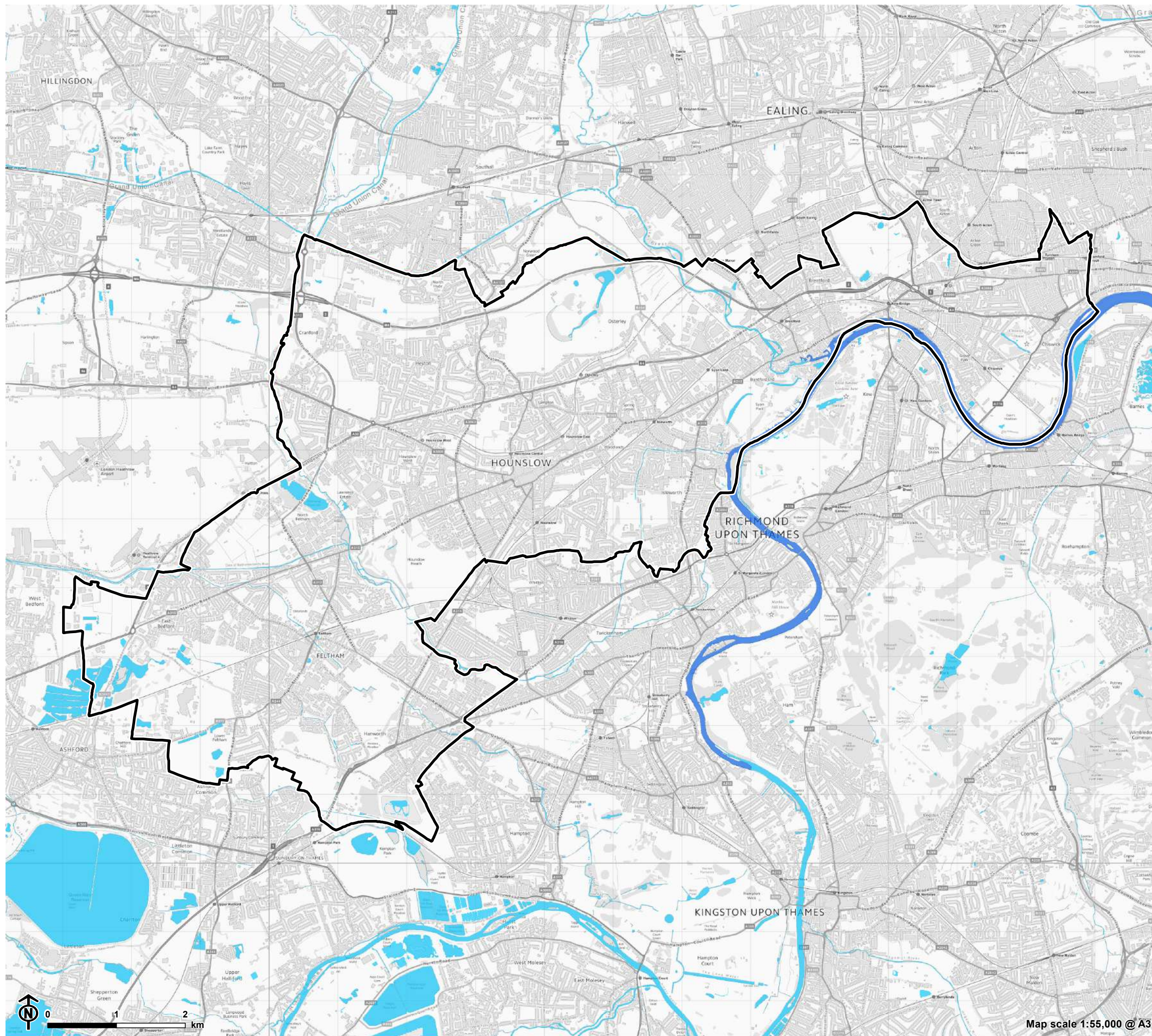
10.2 Hounslow's blue corridors will also play a crucial role in the nature recovery network, hosting a variety of species and habitats of national, regional and local importance. **Figure 10.1** shows the extent of the borough's blue infrastructure.

Exploring the assets

10.3 Blue infrastructure in the borough comprises watercourses (rivers, tributaries, canals), ditches, lakes, reservoirs, ponds and wetlands. The borough's watercourses form key linear landscape features which contribute towards good ecological connectivity and in some instances, opportunities for active travel. Watercourses within the borough are included within London's 'Blue Ribbon Network' (as set out in the current and London Plan). Understanding the borough's blue infrastructure as a 'network' is of particular significance as waterbodies are interconnected natural and semi-natural systems that physically link other GI assets both within and outside the borough.



Figure 10.1: Blue Infrastructure



- London Borough of Hounslow
- Tidal water
- Surface water



Map scale 1:55,000 @ A3

10.4 The River Thames forms the southern boundary in the eastern section of the borough between Isleworth and Chiswick. This stretch is included within the Arcadian Thames ALGG Area Framework. Several key open spaces are directly adjacent to the Thames, for example Syon Park and Duke’s Meadow. The river receives treated effluent and urban run-off from the borough. The Thames Path National Trail runs alongside.

10.5 Water spaces form a key element of Colne Valley Regional Park, a significant green corridor located in close proximity to the borough boundary in the west. It covers an area of around 43 square miles and includes over 200km of rivers and canals and over 60 lakes.

10.6 Key water courses within the borough are shown in the table below.

Table 10.1: Key watercourses in LB Hounslow

Watercourse	Description	Classification & management
Brent Catchment		
River Brent	Flows for approximately 3km through the borough between Osterley Lock near the M4, via Boston Manor, entering the Thames at Brentford. Sections of the river within the borough are canalised, with several locks, forming part of the old Grand Union Canal.	Main River Environment Agency
Grand Union Canal	Runs along the northern boundary and is considered part of the River Brent as it travels south to the Thames. This section is canalised in places with associated locks and moorings. Connects London to Birmingham and provides opportunities for active travel to west and north London. The canal is a notable heritage asset to the borough and west London.	Ordinary Watercourse LB Hounslow
Crane Catchment		
River Crane	Flows through the borough across several areas. Crossing the borough boundary from Hillingdon (near the Grand Union Canal - Hayes), and at Crane Park (by the A316).	Main River Environment Agency

Watercourse	Description	Classification & management
	The river forms the borough boundary between Cole Park (near Twickenham) and then enters the Thames upstream of Isleworth Ait. The upper section comprises a relatively natural landscape with wooded and meadow river margins, seasonal ponds and ditches which accept water during high flows. Some sections of the riverbank have been canalised (e.g. timber revetments at Cranford Park). The Crane connects the Thames Path National Trail to the south of Isleworth.	
Duke of Northumberland’s River	Flows through the west of the borough and at Isleworth. Artificial waterbody (constructed 1530s) created to divert water from River Colne to power flour mills at Isleworth. The river is a notable heritage asset to the borough.	Main River Environment Agency
Longford River	Artificial waterbody (constructed 1630s) to provide water to fountains at Bushy Park and the lake at Hampton Court Park. The river is a notable heritage asset to the borough.	Ordinary Watercourse LB Hounslow
Other watercourses		
Feltham Hill Brook	Located nearby and along the south west boundary and nearby Kempton Park Water Treatment Works.	Main River Environment Agency
Lower Feltham Brook/ Portlane Brook	Located nearby the south west boundary. Adjacent to Feltham Brook Way, Poplar Way.	Main River Environment Agency
Watercourse through Hounslow West	This may be at Kempton Park Water Treatment Works.	Ordinary Watercourse LB Hounslow

Chapter 10

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

10.7 There are numerous lakes, ponds and reservoirs in the borough, including at:

- Gunnersbury Park
- Osterley Park
- Lakeside Sports Ground
- Bedfont Lakes
- Syon Park
- Boston Manor Park
- Kempton Park Water Treatment Works
- Chiswick House
- Hounslow Heath
- Balancing Pond – Heathrow

10.8 There are also numerous large reservoirs to the west of the borough including Staines Reservoirs, Wraysbury and Queen Mary Reservoir.

Key considerations

10.9 Assets included within the borough's blue infrastructure network are either heavily modified or constructed (artificial) water bodies.

10.10 Under the European Union Water Framework Directive (WFD), waterbodies need to be restored to 'good ecological health'. The status of rivers in both the Brent and Crane Catchments is currently mixed; with Ecological Potential either considered 'poor' or 'moderate'.

10.11 Issues affecting water quality and ecological value of the borough's blue infrastructure are similar to those experienced in many urban areas:

- River channelisation including widening, straightening, bank re-enforcement and loss of meanders. Effecting landscape character, access and habitat quality.
- Man-made barriers that prevent fish migration
- Surface water runoff impacting water quality through contaminants such as petrol, herbicides and fertilisers. This includes glycol run off from Heathrow (an anti-freeze agent).
- Sewage misconnections resulting in untreated sewage entering rivers.

- Restricted access due to private developments, land abandonment and unmanaged spaces adjacent to rivers.

- Invasive species

10.12 River communities are an important management consideration on some part of the blue infrastructure network, such as the moorings at Brentford Lock.

10.13 There are numerous stakeholder groups associated with the blue infrastructure network, including statutory consultees and engaged community groups.

10.14A A 2019 Greater London Authority report has set out predictions of the amount of pollution deposited on roads and potential damage to rivers, providing a means of identifying key location in the borough to mitigate against damaging road run-off. Stretches of several roads in the borough are included among the top 5% most polluted roads in London, including:

- A315
- A406
- A312
- A205¹⁰⁸

10.15 Habitats associated with the borough's blue infrastructure network make a significant contribution to the borough's ecology and biodiversity. Kempton Nature Reserve is designated as a Special Protection Area (SPA) and is of national importance for wintering gadwall.

10.16 Management of flood risk is a consideration for future management of the borough's blue infrastructure network. Detail on how the Hounslow Council fulfil their obligations as a local flood authority are set out in several documents including:

- Hounslow Surface Water Management Plan (2011)
- West London Strategic Flood Risk Assessment resource hub (Level 1 - 2018)
- Hounslow Local Flood Risk Management Strategy (2015)
- Hounslow Strategic Flood Risk Assessment Level 2 (2019)

¹⁰⁸ https://www.london.gov.uk/sites/default/files/road_runoff_water_quality_study_exec_summary_dec_19.pdf

Chapter 10

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

10.17 Any management needs to take into account the opportunities and constraints of cross boundary management, for example at Crane Park.

10.18 Hounslow is working with the Canal and River Trust to identify the funds that would be required to deliver towpath and access improvements along the Grand Union Canal and River Brent.

Consultation findings

- Greater access and wayfinding to the riversides needed, particularly along the Duke of Northumberland's River.
- More natural flood management techniques, potential to link this with recreation.
- Better water quality is needed to enable safe recreation, for example open water swimming, and enhance wildlife value.
- Restoring natural features along river valleys.
- Greater landowner engagement needed to improve access to riversides.
- Lifesaving infrastructure needed along riversides.
- Longworth River should be de-culverted through Hanworth Park.

Significant projects/ initiatives/ developments in Hounslow

All London Green Grid

10.19 Several projects included within the borough as part of the ALGG. ALGG Area Frameworks are focused around river corridors. ALGG is currently being reviewed and updated. Status of projects should be reviewed and further consideration given to those not yet delivered.

Colne and Crane Valleys Green Infrastructure Strategy

10.20 The borough has worked with several partners to support the preparation of the Colne and Crane Valleys Green Infrastructure Strategy. A key focus of this work is to ensure positive

outcomes for the Crane Valley as part of major nationally significant infrastructure projects such as HS2 and Heathrow expansion, and also the consideration of the cumulative impact of major developments. A large section of the borough is included within sub-area five of the strategy (Lower Crane) and several water / wetland focused opportunities have been identified within Hounslow. The overall objective for the area is to create a continuous corridor along the Crane, Longford River and Lower Duke of Northumberland's River (DNR) for people and wildlife; better connecting areas of the borough with regional promoted routes and destination sites such as Kew Gardens. Key opportunities identified in the borough include:

- Upper DNR and Longford River re-naturalised and improved walking/cycling corridor (also potential opportunity for natural flood management)
- Improvements and maintenance to the Lower DNR, access improvements and marginal planting
- Restore/reinstate the historic landscape at Hanworth Park
- Improvements to access at major infrastructure barriers and improved pedestrian safety
- Creating/enhancing pedestrian/cycle links with better access to communities in Hounslow, Feltham and East Bedfont.
- Enhancing wildlife value and creating public open space adjacent to the river channel (including Hounslow Heath, Bedfont Country Park, Brazil Mill Wood and Donkey Woods).
- London Borough of Hounslow has previously worked in partnership with the London Wildlife Trust to undertake an improvement programme along sections of the Duke of Northumberland's River and Riverside Walk, including access, amenity and biodiversity improvements.
- Proposals being developed as part of Feltham Arena Parklands includes two new footbridges over the Longford River.¹⁰⁹

Crane Valley Partnership

10.21 A partnership formed of five London Boroughs, public, voluntary and private stakeholders. They have managed several initiatives across the catchment including river improvements

¹⁰⁹ <https://dev.gwkqds.org.uk/portal/apps/webappviewer/index.html?id=8b8494b835554adf8d297a651d47d686>

along the Lower Crane and DNR and 'citizen science' projects. The primary role for the partnership is to 'fill gaps and add value to the work done by its partner bodies'.

10.22The organisation developed the Crane Valley Partnership Strategy for the Crane Catchment 2018-2028. The strategy provides a Vision for the catchment for 2028 and 'Ambition' for 2022. Several actions are set out, among which are to put together a portfolio of future projects and re-evaluate the relevant ALGG area framework and identify mechanisms to deliver them.

10.23A Water Framework Directive Catchment Plan was developed for the Crane Valley (2013) which defines seven objectives that are used to manage the River Crane as part of a catchment wide approach.¹¹⁰

Brent River Catchment Partnership

10.24Formed of several organisations and local authorities working to improve and enhance the River Brent Catchment, with an overall ambition of 'catchment wide thinking with local action'.

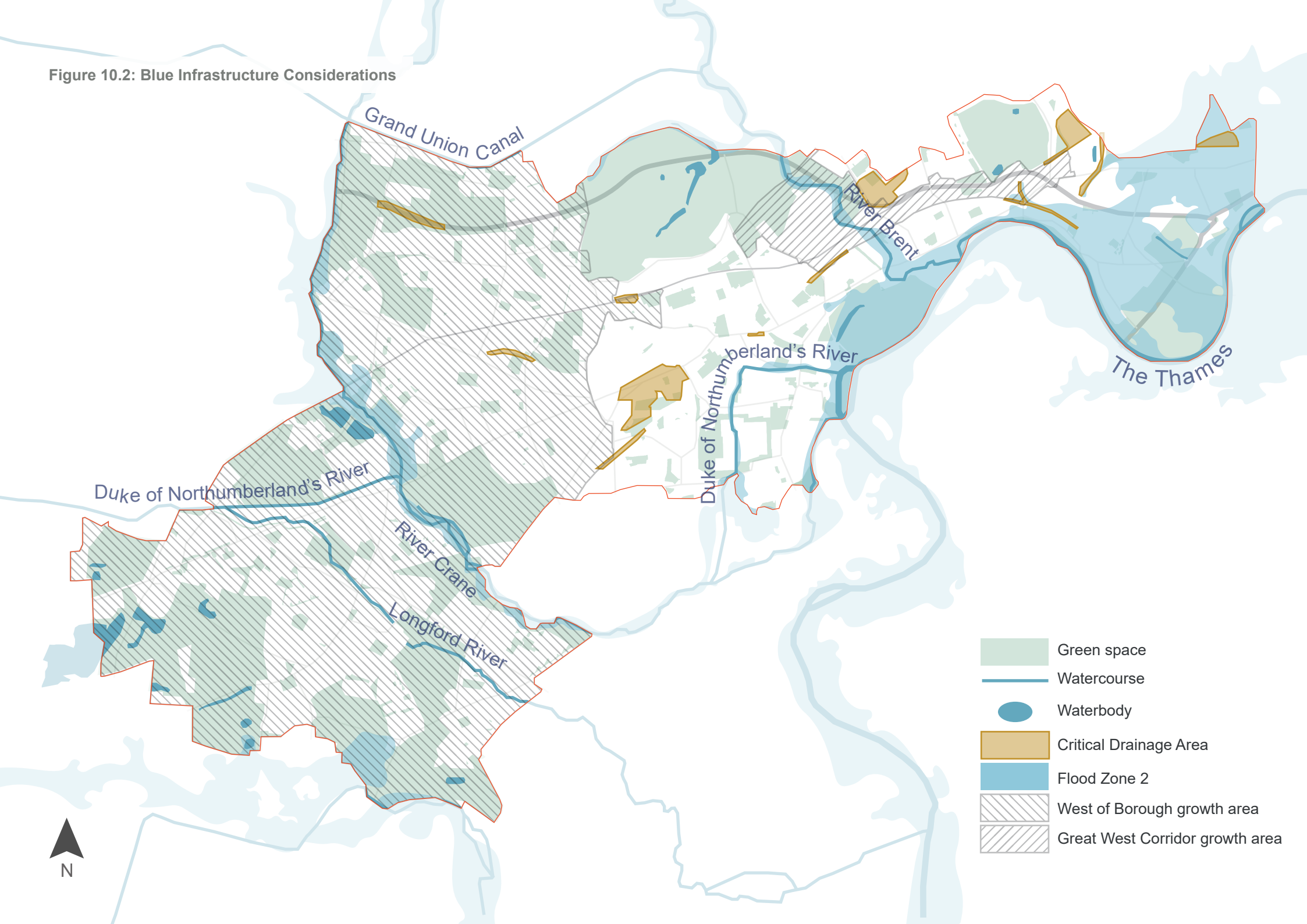
10.25The partnership has developed a catchment wide management plan (2014), which sets out several objectives under four themes; 'Reducing Pollution', 'Making Rivers More Natural', 'Tackling Non-native Species', and 'Creating Better Opportunities for Access and Recreation'. The partnership is now due to review and update the priority themes and objectives. Several potential projects that are outlined are located in the borough (project 14 and 19) and relate to the following objectives:¹¹¹

- Completing a 24-mile riverside trail from Barnet to Brentford on the Thames
- By 2027, it (the catchment) will have a 'good' ability to support wildlife
- Transforming up to 10km of heavily modified river to a more natural condition by 2021
- Creating or improving 12 miles of riverside access for walking, cycling and the disabled throughout the catchment

¹¹⁰ http://www.cranevalley.org.uk/documents/catchment_plan_2013.pdf

¹¹¹ <http://www.brentcatchmentrivers.org.uk/index.php/river-brent-cmp/projects>

Figure 10.2: Blue Infrastructure Considerations



- Green space
- Watercourse
- Waterbody
- Critical Drainage Area
- Flood Zone 2
- West of Borough growth area
- Great West Corridor growth area

Key opportunities

Improve catchment management

10.26 River basin management forms a key component in the implementation of a collaborative catchment-based approach to the management of the water environment. The opportunity exists for GBI to address water management issues to help deliver further improvements to ensure the sustainability and resilience of the water environment.

- Ensure alignment with the third cycle of the draft River Basin Management Plan during the implementation of future proposals.
- Explore the feasibility of undertaking borough wide catchment-based flood modelling to inform future flood management decisions.
- Address river catchment process to prevent localised erosion e.g. at Chiswick Eyot at Dukes Meadow Park, Chiswick.
- Engage with Thames 21 and the GLA to identify locations for wetland creation to address issues of water quality.
- Work with partners to develop and deliver schemes for flood risk management within the borough's parks and open spaces and deal with site specific drainage issues through multifunctional SuDS design.
- Seek opportunities for inclusion of SuDS schemes where highways works are taking place.

Improve access

10.27 Hounslow's waterways provide a framework for the movement of both people and wildlife across the borough. Where possible, riverside cycling and walking routes should be created which will provide scenic and traffic-free active travel opportunities. Improvements to existing provisions should be made to ensure these routes are accessible to all abilities and users, including wheelchairs and prams.

10.28 The enhancement of riverside economies through development opportunities means many of these improvements could occur alongside construction and could also be funded

through developer contributions including section 106 and Community Infrastructure Levy. This includes in and around Brentford Dock.

10.29 These riverside routes should be promoted as opportunities for commuting via active travel, particularly for allocated employment locations alongside the Grand Union Canal and River Brent. Commuting opportunities for workers at Heathrow should also be explored through links with the Grand Union Canal, the Longford River, the Duke of Northumberland's River and the River Crane.

Enhance the riverside environment and strategic GBI

10.30 Green infrastructure should be delivered as part of development to provide an appropriate 'buffer' along river corridors, therefore providing space for biodiversity as well as allowing for natural flood alleviation.

10.31 The creation of wetlands, ponds, reedbeds and naturalised river edge habitats should be delivered where possible. In particular, wetland creation should be explored in all locations where a watercourse flows below or adjacent to an open space. Potential locations where de-culverting of watercourses could create wetlands includes:

- **Bollo Brook** at Gunnersbury Triangle and Turnham Green (needs further mapping to ensure suitable route)
- **Longford River** at Hanworth Park and DPD depot,

10.32 Watercourses which run adjacent to or through open spaces and which have the potential for naturalised wetland edges include:

- **River Brent** at open space south of Brentford Railway Bridge, Boston Manor Park and London Playing Fields
- **River Crane** at Crane Park, Pevensey Road Nature Reserve, Hounslow Heath, Cranebank Nature Reserve, Huckerby's Meadows Nature Reserve, Waye Avenue Park and Avenue Park.
- **Longford River** at Feltham Park, Blenheim Park, Glebelands Playing Fields, land between Longford River and Duke of Northumberland's River
- **Duke of Northumberland River** at open space on Unwin Road and Octavia Road, Silverhall Park

- **Lower Feltham Brook** at Poplar Way open space
- **Portlane Brook** at Feltham Brook Way
- **Felthamhill Brook** at land south of Kempton Park Water Treatment Works

Case study: Firs Farm, Enfield



The Firs Farm project was completed in 2017 and saw the de-culverting of the Moore Brook through one of Enfield's underused green spaces. The new wetland now provides up to 30,000m³ of additional flood storage and protects 140 properties nearby and parts of the adjacent A10. The exposure of 500m of previously culverted watercourse has not only created valuable wetland habitats but has also played a significant role in enhancing water quality.¹¹²

¹¹² Thames21 (2016). Improvements in water quality by integrated constructed wetlands in the Moore Brook catchment. Available at: http://www.thames21.org.uk/wp-content/uploads/2017/07/Enfield-Spot-sampling-Final-Report_DRAFT.pdf (Last accessed: 25.11.2020).

Chapter 10

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

10.33As set out in the NPPF, development in the Green Belt may provide the opportunity for compensatory improvements. This is of particular relevance in the west of the borough and could be supportive of projects set out in the Colne and Crane Valley GI strategy.

Reinvigorate riverside economies

10.34Improvements to the borough's blue infrastructure network should be carried out in conjunction with enhancements to riverside access and forthcoming adjacent development. The creation of a high quality water environment is key to encourage its use, including the integration of gateways, habitat areas and bespoke interpretation. This will also create the opportunity for developer contributions in funding the improvements.

Blue Infrastructure & Health and Wellbeing

Blue infrastructure provides a framework for the movement of both people and wildlife across the borough. Therefore, it is essential in delivering a healthy Hounslow due to its role in connecting people with nature and getting people active. This can be furthered through:

- Enhancing the sense of safety along river corridors through improved CCTV and the reinvigoration of riverside economies;
- Promoting the long distance walking routes such as the Thames Path, Capital Ring and London Loop to Hounslow's residents, particularly through enhanced wayfinding and signage;
- Utilising community labour and resources when implementing projects such as wetland creation which will enhance the sense of community ownership of a scheme; and
- Promote accessibility along river corridors.

Figure 10.3: Blue Infrastructure Opportunities

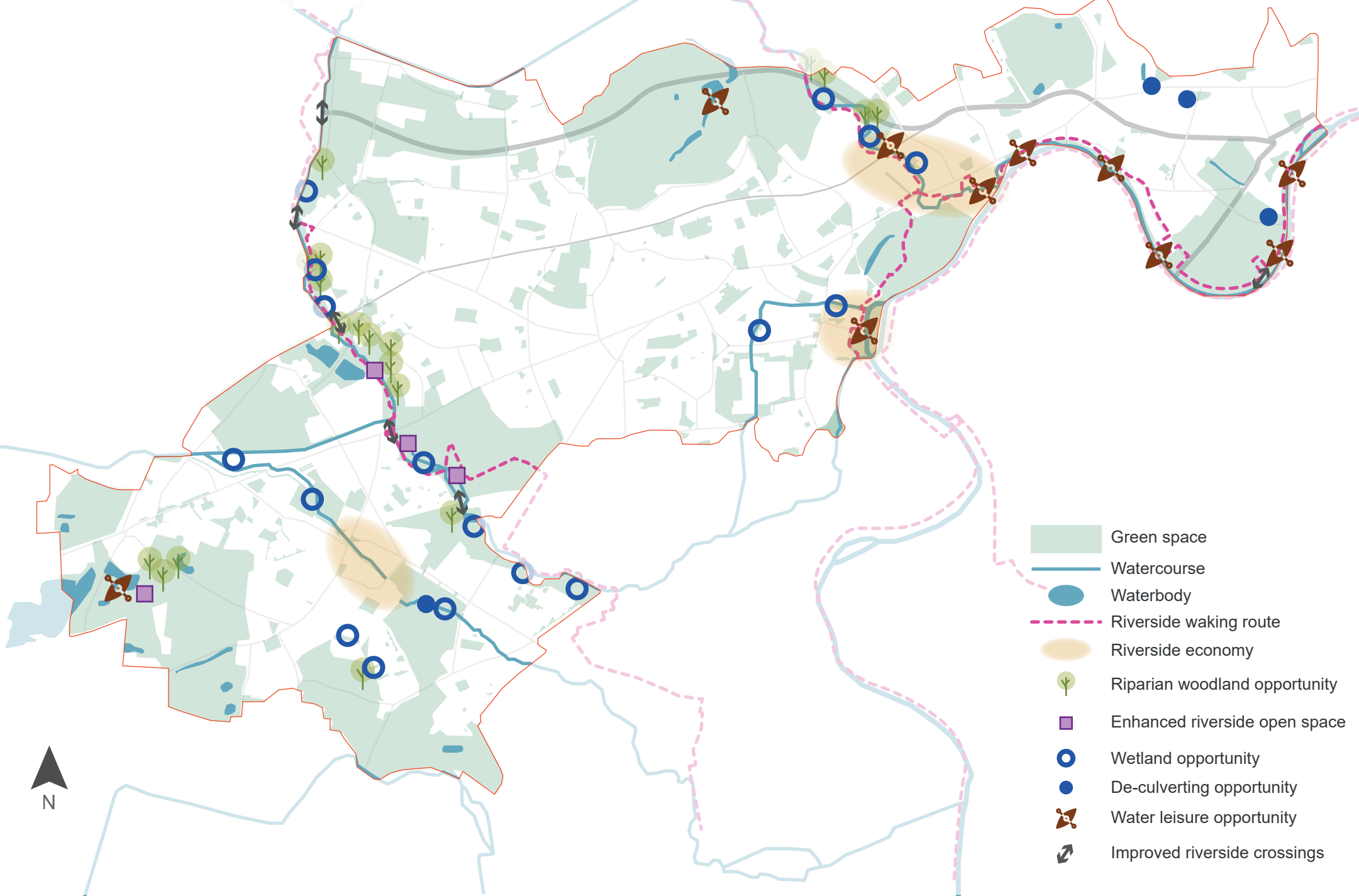













Table 10.2: Seeds sown: A summary of opportunities and projects identified for blue infrastructure

Opportunity	Scale			Spatial scope	Delivery Partners	Life stage			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
Improve catchment management		✓	✓	Identify opportunities to improve the quality of GBI assets through urban greening and appropriate land use within river catchments. Implement natural surface water runoff treatment through the creation of suds, swales and wetlands adjacent to highly polluted roads.	EA Crane Valley Partnership	✓	✓		
Improve access	✓	✓	✓	<p>Improve access for cycling, walking and the disabled along river corridors. Several development schemes within and adjacent to river corridors may provide the opportunity to deliver some of this through planning. The opportunity also exists to enhance access to waterways for recreation, including the River Thames.</p> <p>Several allocated employment locations are located alongside the Grand Union Canal and River Brent including Brentside Business Park, A4 Great West Corridor, and outside the borough in Hanwell, Ealing Hospital, Southhall, North Hyde, Hayes, Stockley Park, Heathrow.</p> <p>Access improvements shall aim to connect up existing open spaces, prioritising areas with poor existing open space provision.</p>	Crane Valley Partnership Canal and Rivers Trust London Wildlife Trust Thames 21	✓	✓		
Develop strategic GBI			✓	Identify locations for strategic scale multifunctional green infrastructure that increases and enhances the blue network through the creation of wetlands, ponds and naturalised river edge habitat. As set out in the NPPF, development in the Green Belt may provide the opportunity for compensatory improvements to remaining green belt through planning. This is of particular relevance in the west of the borough and could be supportive of projects set out in the Colne and Crane Valley GI strategy.	EA Crane Valley Partnership Canal and Rivers Trust London Wildlife Trust	✓			

Opportunity	Scale			Spatial scope	Delivery Partners	Life stage			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
Enhance the riverside environment	✓	✓		Green infrastructure delivered as part of development to provide an appropriate 'buffer' along the river corridor to provide improvements for biodiversity and allow for natural flood management measures.	EA Crane Valley Partnership London Wildlife Trust Thames 21	✓	✓		 
Reinvigorate riverside economies			✓	Plan improvements to the blue infrastructure network to co-ordinate with priorities for access/connectivity and to maximise opportunities for economic growth. Recognise the importance of a high quality environment to encourage use of the blue network through the creation of gateways, habitat areas and well managed interpretation in destination areas. Several schemes that may come forward within and adjacent to river corridors may provide the opportunity to deliver some of this alongside new development, such as along the Grand Union Canal, River Brent & River Thames. These areas could provide opportunities for riverside Destination Spaces.	Canal and Rivers Trust Thames 21	✓	✓		   
Consider river re-naturalisation	✓	✓		Work with all relevant stakeholders to identify and deliver projects to naturalise rivers, prioritising areas that will deliver the biggest impact for nature recovery and development of coherent ecological networks.	EA London Wildlife Trust Thames 21	✓			 

Chapter 11

Theme 6: Historic Landscapes and Built Heritage



11.1 Heritage assets can be directly or indirectly integrated into the borough's GBI network and naturally form some existing Destination Spaces. In Hounslow this includes the remnants nationally significant landed estates and designed landscapes. The borough also has a wide range of built heritage assets including listed buildings and Conservation Areas, which recognise locations with special historic character. Whilst built features cannot be considered as GBI; elements of the network (including parks, open spaces, street trees and incidental vegetation) contribute towards their settings, enhance their value as key visitor destinations and help to interpret the borough's historic development, heritage, culture and changes in land use over time.

Exploring the assets

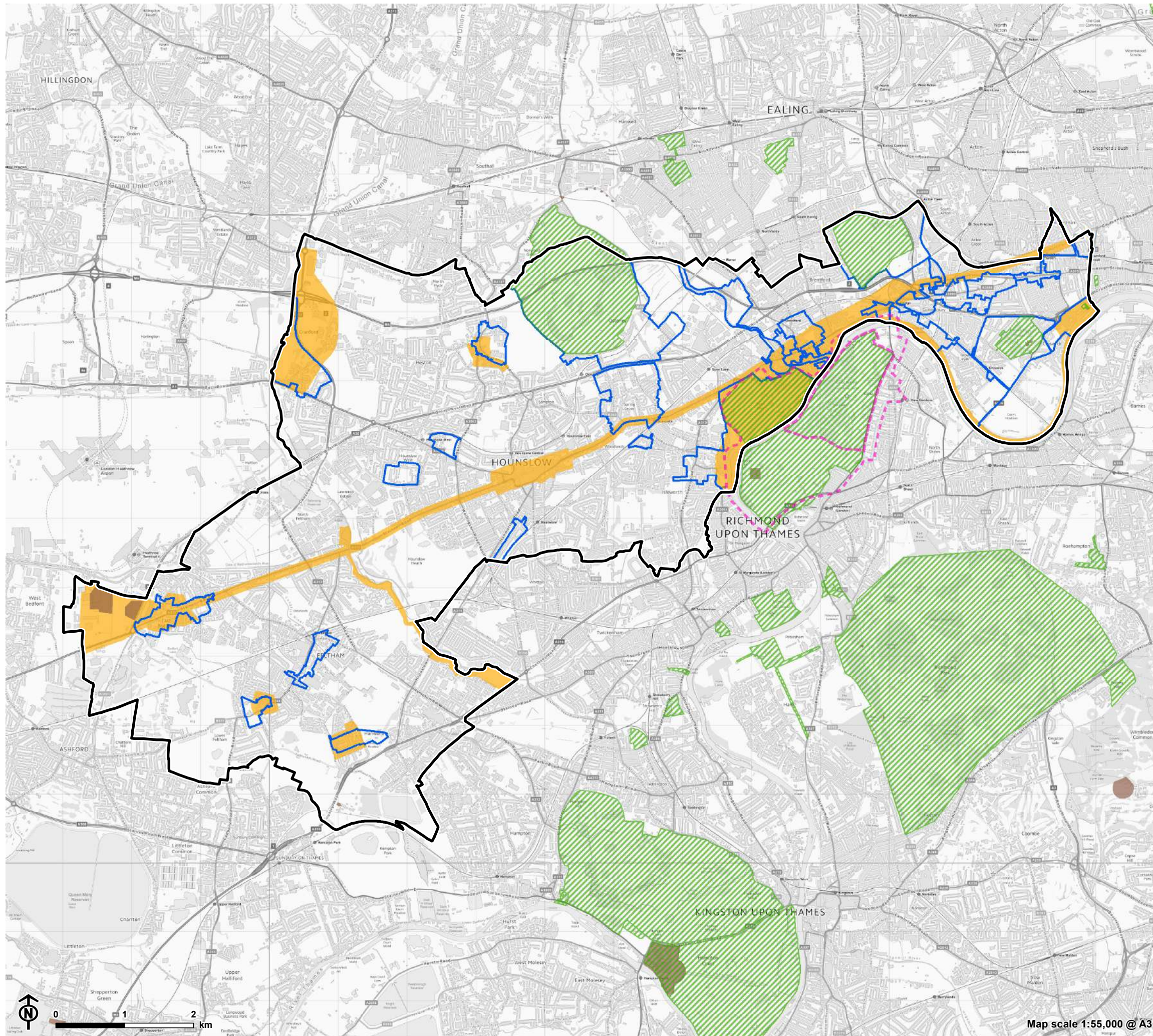
11.2 High profile historic landscapes in the borough are displayed on **Figure 11.1** and listed below:

- Osterley Park - Grade II* Registered Park and Garden
- Syon Park - Grade I Registered Park and Garden
- Gunnersbury Park - Grade II* Registered Park and Garden
- Boston Manor House and Park
- Chiswick House and Gardens - Grade I Registered Park and Garden

11.3 Kew Gardens, Grade I Registered Park and Garden and UNSECO World Heritage site is located outside the borough boundary to the east, adjacent to the River Thames.

11.4 The Grand Union Canal crosses the borough, running from Osterley Lock on the northern boundary and joining the Thames at Brentford, also acting as a canalised stretch of the River Brent. The Canal runs adjacent to Boston Manor Park and has several built heritage assets associated with it, including Gallows Bridge (over Brentford Canal) and Toll House at Brentford Lock (both Grade II listed) (see **Figure 11.2**).

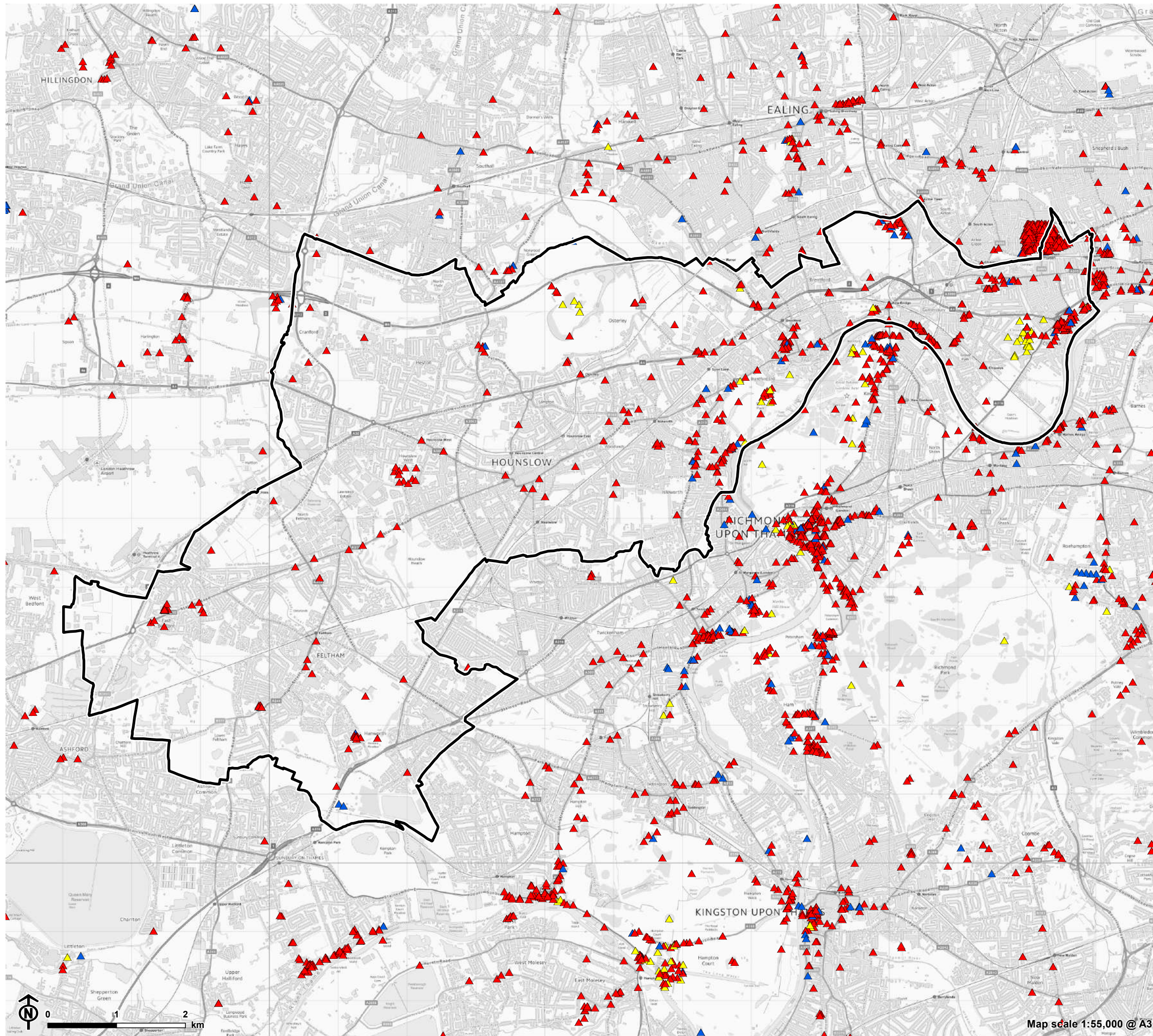
Figure 11.1: Historic Landscapes



- London Borough of Hounslow
- Archeological Priority Area
- Conservation Area
- Registered parks and gardens
- Scheduled monument
- World Heritage Site

Map scale 1:55,000 @ A3

Figure 11.2: Built Heritage Features



- London Borough of Hounslow
- Listed building
 - Grade I
 - Grade II*
 - Grade II

11.5 The borough currently has **28 conservation areas**, which are mainly concentrated in the east of the borough. These designated areas are defined as *'an area of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance'*. The designation of conservation areas results in additional planning controls to preserve or enhance the character of the area. Trees in conservation areas are afforded the same protection as those subject to a Tree Preservation Order (TPO). Conservation Areas Appraisals have been undertaken for all areas, which are currently being updated. The appraisals set out the extent of the areas, describe historic and architectural character / appearance, and identify positive features to be conserved.

11.6 There are 531 entries on the national heritage list, including commercial and domestic sites (individual or groups of buildings).

Key considerations

11.7 Some of the borough's heritage assets are in poor condition. There are 24 heritage sites within Hounslow that are identified with Historic England's Heritage at Risk (HAR) Register (see **Figure 11.3**). The register includes listed buildings and conservation areas which are assessed as vulnerable through poor condition. Assets within Hounslow included on the HAR register include some of the buildings within Gunnersbury Park, Hanworth Park House and Boston Manor House.

11.8 Several key destination heritage sites in the borough are not freely accessible and have an entry fee.

11.9 Hounslow was identified as a Priority Development Area for investment by the Heritage Lottery Fund up to 2016 and has already benefitted from £21.8 million of HLF grants. This has included grants related to:

- Chiswick House and Gardens;
- Hogarth's House;
- Boston Manor House;
- The Museum of Water and Steam; and
- Gunnersbury Park and Museum.

11.10 Recent and ongoing works at key heritage sites include:

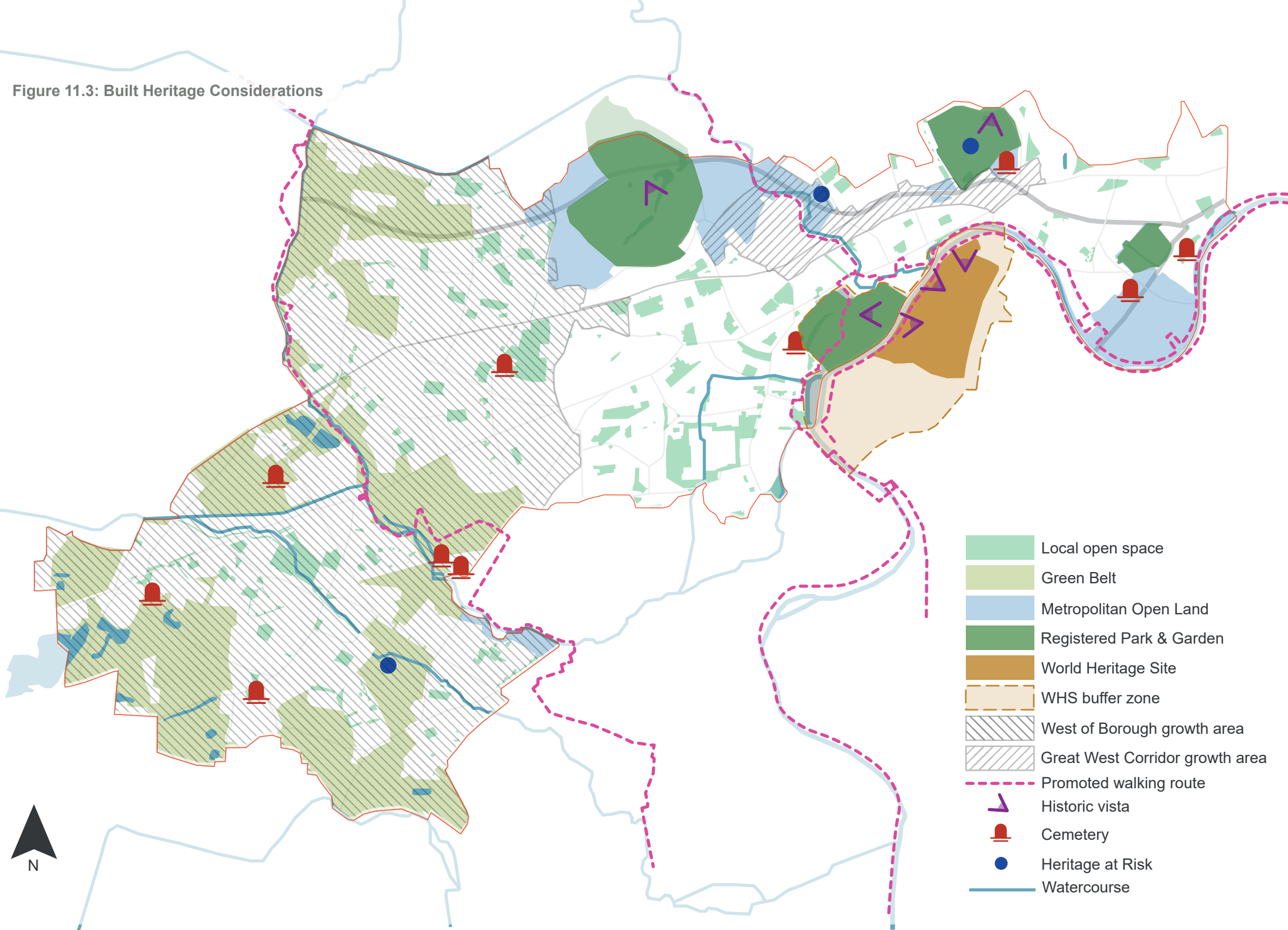
- 'Reconnecting Boston Manor Park': £3,634,600 Stage Two National Lottery funding has been secured to enhance and conserve the site. The scheme comprises a learning space, community café, landscaping, ecological enhancement and extensive community engagement. The space under the M4 flyover at Boston Manor Park is also being improved to host small scale events.
- The Council has supported major regeneration at Gunnersbury Park; working in partnership with Ealing Council and Historic England.

11.11 There are limited resources within the Council to conserve, protect and improve heritage assets and alternative approaches to funding and management are needed. Future ambitions include further exploring the role of voluntary and private sector groups, and the development of income generating opportunities. The Council uses the HAR register grading system (A=highest priority to F=lowest priority) to assist in prioritising work and assist in attracting partners and sources of external funding.

Consultation findings

- Improved access to Osterley Park as well as landscape and biodiversity enhancements.
- Greater awareness of the historic landscape is needed, this is seen as an excellent way to engage people in open spaces through innovative interpretation. Particularly important for hard to reach groups – ethnic minority and young people.
- More culture and heritage needed in Hounslow's parks.
- More thought is needed in planning around historic vistas.
- Greater protection of ancient woodland needed.
- Promote the wildlife value of cemeteries.

Figure 11.3: Built Heritage Considerations



Key opportunities

11.12 Key landscapes and built heritage opportunities are displayed on **Figure 11.4** and listed below:

- Identifying further opportunities relating to historic opportunities for the re-use and commercialisation of buildings in parks to protect assets, create additional revenue streams and develop sites as key Destination Spaces. The Council aims to remove buildings from the HAR register by finding and supporting bids for funding to restore buildings.
- Developing heritage trails and promoted routes between key heritage sites and Destination Spaces. This could include linking the landscapes of Hanworth Park and Hampton Court Palace along the Longford River, and improving links to out of borough sites such as Cranford Park. Heritage trails could be used to raise awareness and engagement with the borough's historic assets. Innovative methods of interpretation could be explored using technology (e.g. mobile phone applications etc.).
- Continue to identify opportunities to work with partners to secure funding to enhance and protect sites. The Council is looking to update and expand the list of local heritage assets to be protected. There are opportunities to explore additional interpretation and enhancement at several sites with heritage interest such as Hanworth Park.
- Promote positive community management of landscapes around Listed and locally listed buildings such as disused cemeteries and churchyards to enhance their settings, biodiversity value and create community interest.
- Ensure GBI interventions are considered as part of planning decisions within Conservation Areas. Seek opportunities to facilitate community tree planting and tree care within Conservation Areas to enhance the landscape setting where appropriate.
- Secure Green Heritage Site Accreditation at several sites to celebrate successes and highlight the borough's commitments to positive management of heritage sites.

Historic Landscapes and Built Heritage & Health and Wellbeing

The heritage and culture of Hounslow plays an essential role in forming a strong sense of identity, belonging and pride within its nearby residents. *'It connects us, provides a sense of rootedness and place, and is vital to understanding who we are and what we would like to become'*.¹¹³ The borough's numerous heritage landscapes and assets provide considerable recreational opportunities. These can further provide for Hounslow's resident's health and wellbeing through:

- Enhancing inclusivity of heritage and Destination Spaces which may currently exclude certain demographic groups. This could be achieved through enhanced promotion and the hosting of cultural events within the spaces;
- Work with partners to review barriers to participation for Hounslow residents or residents from disadvantaged or minority backgrounds;
- Increased volunteering and apprenticeship opportunities for Hounslow's residents within Destination Spaces, learning key conservation skills; and
- Encourage partnership working between schools and Destination Spaces to increase exposure and education regarding Hounslow's heritage from a young age.

¹¹³ The Heritage Alliance (2020). Heritage, Health and Wellbeing. Weblink: https://www.theheritagealliance.org.uk/wp-content/uploads/2020/09/Heritage-Alliance-AnnualReport_2020_Online.pdf

To Colne Valley

Figure 11.4: Built Heritage Opportunities

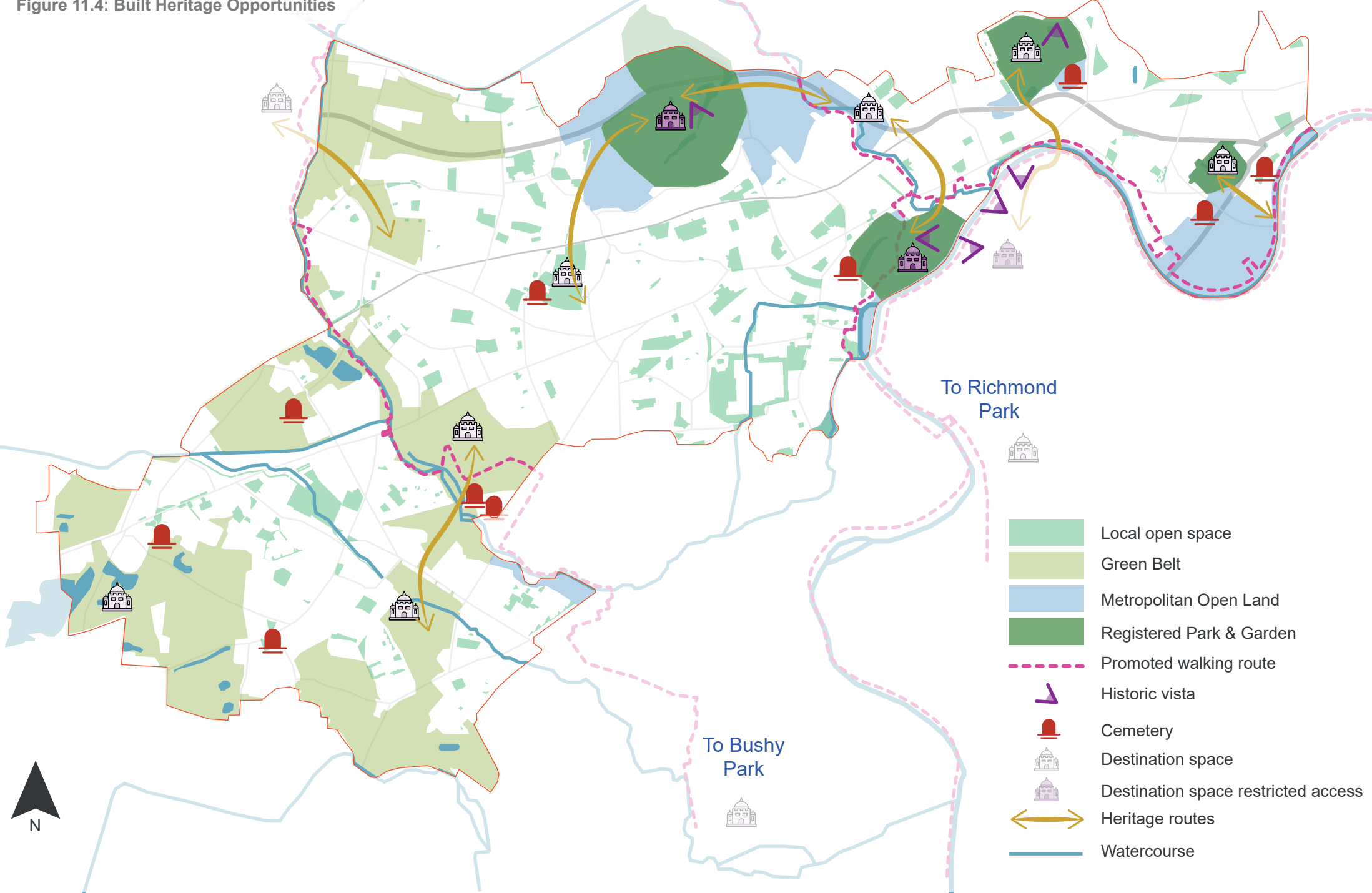














Table 11.1: Seeds sown: A summary of the principal initiatives and projects identified for Historic Landscapes and Built Heritage

Opportunity	Scale 			Spatial scope	Delivery Partners	Life stage 			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
Diversifying income generating opportunities and developing destination sites		✓	✓	Collate data on all buildings within open space and assess opportunities for income generation, future use and commercialisation. Scope potential schemes for income generation at heritage sites such as themed markets, concessions, events and on-site public donation to protect and enhance specific assets.	Historic England	✓	✓		
Heritage trails and promoted heritage routes			✓	Develop trails linking heritage sites and Destination Spaces, including additional interpretation, within and out of the borough. Interpretation could also be linked with urban greening opportunities. Potential sites may include Hanworth Park, Cranford Park and Hampton Court Palace, with potential links along the Longford River.	Surrounding Boroughs Hounslow Highways	✓			   
Working with partners to protect and secure key assets	✓			Build on previous successes and continue to consider options for enhancement and development of sites as key Destination Spaces. Potential sites for enhancement and additional interpretation may include the landscape at Hanworth Park associated with the adjacent Hanworth House.	Friends Groups Historic England Surrounding boroughs	✓	✓		
Maximise opportunities for additional GBI within Conservation Areas.		✓		Ensure appropriate options for GBI within Conservation Areas is addressed within planning policy, providing guidance as necessary. Explore options for community tree planting within Conservation Areas for urban greening and to enhance historic character where appropriate.	Planning Teams Community Organisations / groups	✓	✓		

Opportunity	Scale			Spatial scope	Delivery Partners	Life stage			Key cross-compatible themes
	Site	Local	Landscape			In concept	In progress	Complete	
Promote positive landscape management around Listed and locally listed assets to enhance settings	✓			Work with local groups and provide guidance to enhance the setting of listed and locally listed features and promote local interest, ownership and pride through sensitive landscape management. Potential sites may include existing community facilities, disused churchyards and cemeteries. Interventions should support nature recovery.	Friends Groups / Interest Groups	✓			
Celebrate, measure and promote success by working towards achieving Green Heritage Site accreditation at key sites.	✓			Build on previous successes of significantly increasing the number of Green Flags in the borough, by working towards Green Heritage Site accreditation across several sites. Green Heritage Site accreditation is a mark of excellence for heritage management and could support the development of key Destination Spaces across the borough.	Friends Groups	✓			
Promoting historic landscapes within disadvantaged and minority demographics	✓	✓		Working with Hounslow's local historic landscapes to promote its heritage and culture within communities and demographics which may currently feel excluded from visiting and using the assets. This could include providing tickets for Hounslow's residents, or those from a disadvantaged or minority background, which are at a reduced price. Furthermore, enhanced opportunities for volunteering and apprenticeships should be promoted within these demographics. An enhanced sense of inclusivity could be achieved through the hosting of a wide variety of cultural events within the grounds of these historic landscapes through partnership working with local community groups.	The National Trust Historic England Chiswick House and Gardens Syon Park	✓			

Chapter 12

Hounslow's Strategic Opportunities and Priorities

Strategic Opportunities and Priority Areas

- Healthy spaces - priority sites for improving health and well-being outcomes
- Resilient spaces – priority sites for climate adaptation interventions
- Wilder spaces – priority sites for ecological improvements
- Destination Spaces- priority sites for recreation, income generation and regeneration.

Strategic Programmes

12.1 Strategic programmes have been identified to deliver a host of multifunctional benefits across the borough through the GBI network. These programmes will guide the direction of the borough's GBI and set a framework for sustainable growth and development in the borough. Each programme will have its own vision which will be realised through a series of project locations. It is envisaged that these projects will be delivered on a rolling basis, with priority locations being identified within this report and emerging potential locations being updated on a regular basis through the Infrastructure Delivery Plan. The NRAP and Tree Plan will help to set out the delivery requirements and timeframes for some of these programmes.

12.2 As well as ensuring the borough's GBI network is multifunctional and performing to the best of its ability, delivering the strategic programmes will also ensure healthy, resilient, wilder and Destination Spaces are delivered across the borough, whilst also tackling areas of deficiency. The strategic programmes should not be an alternative for all the opportunities recommended within this report, but instead act as a framework for their delivery.

1 - Re-wilding Hounslow's Rivers



Vision

To restore Hounslow's natural watercourses to deliver significant biodiversity benefits by creating a diversity of habitat types, therefore increasing the connectivity of the nature network. Furthermore, the re-wilding of Hounslow's rivers will help to achieve better water quality, whilst also reducing the risk of surface and downstream fluvial flooding.

Programme scope

12.3 This programme will see the restoration of Hounslow's watercourses, including the River Brent, River Crane, Longford River, Duke of Northumberland's River, River Thames and Grand Union Canal, through wetland and reedbed creation, riparian habitat and riverbank naturalisation.

12.4 Works will include the creation of new wetlands within existing open spaces where open or culverted watercourses pass through or adjacent to. Where waterways are culverted or channelised, breaking out of concrete riverbanks will be done to create a more natural river profile with marginal planting. Wetlands and reedbeds should be created at locations where significant pollutant sources are present, for example where busy roads pass by rivers or where sewage overflows enter watercourses. Floating reedbeds are an alternative in locations where wetland construction is not possible.

12.5 Riparian planting should be delivered along the major river valleys of the Brent and Crane, where space permits. This will not only create valuable habitat, but also help to reduce the peak flow of rivers during heavy rainfall events, therefore delivering **wilder** and more **resilient** spaces. Furthermore, the well-being benefits of nature-based assets such as wetlands within parks will help to deliver **healthier** spaces within Hounslow.

Programme objectives

- To achieve 'good' ecological status within all of Hounslow's watercourses.

Priority projects & initiatives

- De-culverting of the Longford River at **Hanworth Park** to create a linear stretch of wetlands, pools and reedbeds interspersed with riparia habitat.
- Assess the de-culverting of the **Bollo Brook**.
- Assess the de-culverting of the River Crane at **Feltham**.
- Improved management of the Duke of Northumberland's River at **Silverhall Park**;
- Assess the potential for wetland creation at **Poplar Way**, along the Lower Feltham Brook.
- Assess the potential for riparian habitat and wetland creation at **Avenue Park** and **Waye Avenue Park**, Cranford, along the River Crane.
- Improve wetland management at **Boston Manor Park** through park restoration works funded by the HLF.
- Work with the Royal Parks to improve the management of the **Longford River**.

Delivery partnerships

Thames21, Environment Agency, Thames Water, 'Friends of' groups, TCV, London Borough of Ealing, London Borough of Hillingdon, London Borough of Richmond upon Thames, Crane Valley Partnership, Brent Catchment Partnership

Funding

Thames Water, Environment Agency, Defra, GLA, developer contributions

2 - Restoring and connecting Hounslow's historic landscapes



Vision

To enhance resident connectivity with Hounslow's heritage assets through improvements to the condition, interpretation and accessibility of the borough's historic landscapes.

Programme scope

12.6 This programme will work to enhance resident and visitor connectivity with the heritage assets located across the borough. Whether the heritage landscape exist behind a pay barrier or are freely accessible to the public, active travel and gateway enhancements will help to strengthen their role as **Destination Spaces**.

12.7 Particular focus areas for improvement include Gunnersbury Park, Boston Manor Park and Hanworth Park due to their inclusion on the Heritage at Risk register. Within public landscapes, enhanced interpretation and amenity infrastructure including education boards, trails, public art, kiosks, toilets and play areas will help to encourage visitors.

Programme objectives

- Remove Gunnersbury Park, Hanworth Park House and Boston Manor House from the Heritage at Risk register.
- Have Conservation and Ecological Management Plans in place for all historic landscapes across the borough.

Priority projects & initiatives

- Interpretation boards, public art and trails within Gunnersbury Park, Boston Manor Park and Hanworth Park.

- Hanworth Park gateway from Feltham town centre, including traffic-free route along Longford River and enhancements to entrance to Hanworth Park House.
- Work collaboratively with the police to discourage anti-social behaviour.
- Green active travel routes between stations and Destination Spaces, namely Syon Lane Station and Syon Park; Osterley Park Underground and Osterley Park; Chiswick Station and Chiswick House; and Kew Bridge and Kew Gardens.
- Improve the condition of built structures at Hanworth Park House and Boston Manor House.
- Provide an updated Conservation Management Plan for Hanworth Park.

Delivery partnerships

Historic England, 'Friends of' groups, TCV, landowners

Funding

Big Lottery Fund (Parks for People), Historic England, Natural England, Heritage of London Trust, developer contributions

3 - Strategic riverside routes



Vision

For Hounslow's watercourses to provide a framework to create safe, accessible and direct active travels routes which are used for both recreational and commuting journeys at both the local and strategic scale.

Programme scope

12.8 This programme of projects will utilise Hounslow's blue infrastructure assets to create a framework for strategic and local active travel. By delivering safe and direct active travel routes which are accessible to people of all abilities, it is hoped to increase the uptake of active travel. Furthermore, rivers offer traffic-free corridors for movement, making them a **healthy** and more pleasurable alternative to roadside cycle lanes. The opportunity also exists to enhance the use of waterways for recreation. Furthermore, it will reinforce the idea of naturalistic assets, such as the Crane Valley, being **Destination** Spaces within themselves.

12.9 Many of the priority projects include upgrades to existing infrastructure encompassing the Walk London routes of the Capital Ring Walk, the London Loop and the Thames Path. These existing routes predominantly follow the courses of the major river channels in the borough, the Crane, the Brent and the Thames. However, these are fragmented in places and have resulted in some stretches being diverted along busy roads.

Programme objectives

- To re-route the London Loop so that it can follow the River Crane as it crosses the entirety of the borough, reducing the need for on-street links.
- To encourage more of Heathrow's employees to use active travel routes to commute to work (who currently employ 10% of the borough).

Priority projects & initiatives

- Enhanced wayfinding at Grand Union Canal and River Crane junction to promote access to the Colne Valley Regional Park.
- Enhanced wayfinding and signage to and from the London Loop and Capital Ring Walk, emphasising the strategic importance of the River Thames.
- Enhanced urban greening and tree planting along street-based sections of Walk London routes, for example:
 - **London Loop:** Hanworth Road
 - **Capital Ring Walk:** Richmond Road and Syon Park to River Brent along the A315
 - **Thames Path:** Harrington Road
- Improve active travel links with Heathrow Airport utilising the River Crane, Duke of Northumberland's River and Longford River.
- Enhance access between Crane Park and Hounslow Heath with path upgrades, wayfinding and an improved railway underpass. Potential to re-direct the London Loop to follow this route.
- Create direct route following the River Crane between Huckerby's Meadows and Avenue Park.

Delivery partnerships

Canal and Rivers Trust, Sustrans, TfL, GLA, Natural England, Environment Agency, 'Friends of' groups, Network Rail, London Borough of Ealing, London Borough of Hillingdon, Crane Valley Partnership, Brent Catchment Partnership, Port of London Authority (PLA).

Funding

Canal and Rivers Trust, Sustrans, TfL, GLA, Big Lottery Fund, developer contributions

4 - Breaking down barriers to people and wildlife



Vision

To reduce the fragmentation of the nature and active travel network caused by man-made infrastructure. It is hoped that this will enhance the resilience of wildlife to a changing climate as they are able to occupy new microhabitats. For people, it is envisaged that more direct active travel routes will encourage the uptake of walking and cycling.

12.10 How the programme helps to achieve healthy, resilient, wilder, destination

Programme scope

12.11 Hounslow is traversed by a series of man-made and natural barriers to the movement of people and wildlife, including railways, main roads and watercourses. Increasing the numbers of crossing points for pedestrians and cyclists will enhance the efficiency of travel for these modes, therefore encouraging their uptake. Where possible, provisions for wildlife crossings should also be made. This could be in the form of capital-intensive wildlife overpasses and green bridges, or more simple wildlife stepping-stones by using street trees and pollinator-friendly highway verges.

12.12 Enhancing the ability for wildlife to move between different habitats and microclimates will increase their capacity to adapt to climate change, therefore creating more **resilient** spaces. Furthermore, the enhanced uptake of active travel will reduce carbon emissions and move towards the target of net zero carbon by 2030, whilst providing **healthy** spaces.

Programme objectives

- Increase access to pedestrians and cyclists.

Priority projects & initiatives

- Enhance the underpass / Cavalry Tunnel which crosses beneath the national rail line to link Pevensey Road Nature Reserve and Hounslow Heath. The existing subway is intimidating, unlit and unmaintained, however hosts historic significance from the former Feltham Marshalling Yards. Du-culverting the River Crane here would enhance wildlife connectivity with Hounslow Heath.
- Enhanced pedestrian and cyclist crossings with signage along the River Crane route at the M4, A4, the A30 and Piccadilly Line and Staines Road.
- Enhanced accessibility for cyclists, wheelchairs and prams crossing the A316. Current bridge beneath the road provides poor headroom and accessibility.
- Enhanced permeability for pedestrians and cyclists beneath the Chiswick Flyover and connecting Carville Hall Park North and South.
- Enhanced pedestrian crossing of the A4 between Lionel Road North and Lionel Road South (see plans for pedestrians and cyclist access between Kew Bridge and Gunnersbury Park in strategic programme 9 – Sports and recreation hubs)
- Using linear swales and street trees along Riverside Drive to connect people and wildlife between The Thames, Dukes Meadow and central Chiswick.
- Pedestrian and cyclist crossing of the A4 at Lampton School and Clarke Way. Transforming the green Thames Water strip of land which runs between Clarke Way and Heston Community School into a wildlife and active travel corridor would create a direct route between Hounslow Central and the MOL in the north, including Osterley Park.
- Wildlife, pedestrian and cyclist overpass to connect the areas of Bedfont Lakes Country Park which sit north and south of the rail line.

Delivery partnerships

Network Rail, TfL, GLA, Sustrans, Canals and Rivers Trust

Funding

Network Rail, TfL, GLA

5 - Cycle Hounslow



Vision

For Hounslow's residents to have access to their everyday needs, including employment, education, green space, recreation and shops, within a safe and direct 15-minute walk or cycle from home.

Programme scope

12.13 By providing direct, safe and attractive cycle routes across the borough, the uptake of active travel for commuting and leisure will increase. This will help to create **healthy** spaces as residents feel the benefits on their physical and mental wellbeing, as well as creating more **resilient** spaces, as the need for polluting sources of transport is reduced. Creating active travel opportunities surrounding town centres and major employment hubs, such as Heathrow, through employing the 15-minute neighbourhood model should be a priority for the borough.

Programme objectives

- Increase the percentage of trips by foot or bike from primary and secondary schools.
- Increase the percentage of commuting trips by foot or bike to Heathrow.

Priority projects & initiatives

- Deliver the proposed routes and options identified within the Hounslow Priority Cycle Network, with precedence given to Cycleway 9, Staines Road, Bath Road, Feltham High Street and Cranford Lane. This should encourage commuting by bike between West Hounslow and Heathrow, including new employment opportunities being created on the outskirts of the airport. Furthermore, permanent infrastructure should be installed where 'pop-up' cycle lanes have been a success, for example along Twickenham Road.

- When constructing Priority Cycle routes, ensure green segregation features such as rain gardens, vegetation, raised planters and street trees are also delivered alongside the scheme. Producing a cycle infrastructure design guide, such as Waltham Forest's Mini-Holland Design Guide, will help to ensure high quality routes are delivered across the borough which also incorporate GBI opportunities.
- Continue the trial of school streets across the borough to reduce vehicle usage outside schools. Where possible, extend successful schemes onto nearby cycle routes, utilising urban greening features to create healthy and safe environments.
- Continue the delivery of Hounslow's 'Streetspace' projects, including road closures, restricted access and parking suspensions. Projects which are deemed to be successful should be made permanent through the installation of GBI features.
- Develop the South Chiswick Liveable Neighbourhood as a pilot scheme for Low Traffic Neighbourhoods which can be applied across the borough.
- Using methods adopted across London's Mini-Holland schemes, create safe and direct routes for cyclists and pedestrians whilst reducing accessibility for vehicles.
- Provide enhanced cycle parking within town centres, Destination Spaces and transport interchanges. This should include the opportunity for secure parking within cycle hubs, as well as more neighbourhood provisions, such as the Cyclehoop Bikehangar.
- Provide safer pedestrian and cyclist crossings within areas of heavy usage, particularly within town centres and near schools.

Delivery partnerships

Highways England, TfL, GLA, Heathrow Airport, local schools

Funding

Highways England, TfL (Local Implementation Plans), GLA (Greener City Fund & Good Growth Fund), Heathrow Airport, developer contributions

6 - Greening the Grey



Vision

For green to take precedence over grey infrastructure across Hounslow, creating healthy, aesthetic and multifunctional urban spaces.

Programme scope

12.14 This programme of projects aims to transform Hounslow's grey urban fabric into a green and sustainable townscape utilising urban greening features such as green walls, green roofs, rain gardens, street trees, raised planters, parklets and pocket parks. Setting an ambitious Urban Greening Factor will ensure a suitable quantity of greening is seen within new development. However, it is the retrofitting of the existing urban environment which requires careful consideration.

12.15 Particular focus for urban greening should be within areas where there are existing identified issues, such as poor air quality, surface water flooding, limited biodiversity provisions, an inadequate uptake of active travel, or a lack of access to green space. Tackling these issues through urban greening will help to create **healthy** and **resilient** spaces.

Programme objectives

- All new residential developments to achieve an Urban Greening Factor of at least 0.4 and 0.3 for predominantly commercial development (excluding B2 and B8 uses).

Priority projects & initiatives

- London Borough of Hounslow to set their own ambitious Urban Greening Factor which can be applied to all new developments.

- Develop a standard specification for rain gardens and tree pits which can be rolled out across all Council-led and developer projects which incorporates best practice guidance.
- Encourage communities to help in the implementation and maintenance of tree planting.
- Create green gateways into the borough's town centres. Most notably at:
 - Feltham bus station, New Road
 - Hounslow station car park
 - Isleworth station
 - Brentford station car park
 - Hatton Cross station
 - Gunnersbury station
- Green screens formed of ivy (a shade tolerant plant) grown up trellis or the pillars underneath the Chiswick Flyover. This will not only create a significant improvement for air quality but will enhance the aesthetic of the predominantly grey structure.
- Begin a programme of greening bus shelters, starting at major hubs across the borough.
- Urban greening and green screens outside schools identified as being the most vulnerable to air pollution, similar to the green wall delivered at St Mary's Catholic Primary School. Priority locations include:
 - The William Hogarth Primary, Chiswick
 - Belmont Primary, Chiswick
 - Cavendish Primary, Chiswick
 - St Mary's Primary, Isleworth

Delivery partnerships

GLA, TfL, Thames21, Hounslow Highways, local community groups

Funding

GLA (Greener City Fund and Good Growth Fund), TfL, developer contributions

7 - Habitat creation in Hounslow's Green Belt and MOL



Vision

Utilising Hounslow's large expanses of Green Belt and Metropolitan Open Land to create, enhance and extend areas of priority habitat, helping to re-connect fragmented habitat parcels and deliver a more cohesive nature network.

Programme scope

12.16 Most of Hounslow's Green Belt and MOL host considerable parcels of Natural England Priority Habitat, much of which falls within the Natural England habitat network enhancement zones. The creation of new priority habitat, including deciduous woodland, traditional orchards, good quality semi-improved grassland and lowland meadows, would help to enhance the functionality of the Priority Habitat Network. This will help to create **wilder** and **resilient** spaces for Hounslow's biodiversity, as it gives species the ability to move and adapt to the changing climate.

12.17 Creating new priority habitat with areas of public accessibility will also help to increase access to nature in some of Hounslow's most deficient areas, a feature which is considered to be integral to the provision of **healthy** spaces. Where possible, the creation of new habitat should be accompanied by new / provisional SINC designations or upgrades.

Programme objectives

- Maximise opportunities to create new Borough grade SINCs, new woodlands and semi-improved grassland.

Priority projects & initiatives

- Promote the delivery of significant habitat assets and increase the number of SINC sites.

- Engage with landowners and farmers within the Green Belt to determine the potential for enhanced land management and habitat creation, with particular focus in areas surrounding Green Belt de-designation. Consideration should be had for the treatment of field margins and how they can be improved to perform a more functional role in the network. If possible, areas for re-wilding through tree planting should be considered.
- Explore the creation of riparian habitat along the Crane Valley, particularly Avenue Park and Waye Avenue Park (see Re-wilding Hounslow's Rivers programme).
- Explore the opportunity for ecological enhancements to the Heathrow Balancing Ponds including additional floating reedbeds which would also work to enhance water quality. Engagement would be needed with Heathrow Airport for this project.
- Work with the National Trust to extend parkland and wood pasture extension where possible at Osterley Park with a programme of veteran tree planting using original genotypes. Engage with nearby tenant farmers.
- Explore the opportunity to create willow carr and periodically flooded wet meadows at Dukes Meadows.
- Ensuring datasets, including species and habitats, are kept up to date. Where possible work with partners and wider London organisations to share and update, e.g. GiGL.

Delivery partnerships

National Trust, Environment Agency, private landowners, farmers, GLA, Thames21, Environment Agency, Forestry Commission, Natural England, developers

Funding

GLA, Forestry Commission, Thames Water, Defra, Natural England, developer contributions

8 – Growing Hounslow



Vision

For sustainable food growth to be at the heart of Hounslow's Green Recovery, whether it be community-led, within community gardens and public planters, or individual-led, within allotments and private gardens.

Programme scope

12.18 The COVID-19 pandemic has seen a surge in the uptake of at-home food growth, with the demand for allotments matching this trend. By encouraging people to uptake sustainable food growth practices, it will help to build a sense of community, therefore enhancing social cohesion. Furthermore, the benefits which gardening can have on people's physical and mental well-being will help to deliver **healthy** spaces.

12.19 Most of Hounslow's allotment sites are at full capacity and experience considerable waiting lists. Therefore, new and inventive methods of delivering food growing options needs to be sought out. This could include community-led schemes, small-scale projects and new partnerships. The potential role spaces such as allotments can play in providing wildlife refuge through habitat creation and ecological management should also be explored.

Programme objectives

- Reduce the allotment waiting lists.
- Encourage community led food growing as per Hounslow's Allotment Strategy.

Priority projects & initiatives

- Work in partnership with primary schools to deliver food growing opportunities and to include sustainable food growth as part of the curriculum.
- Work with developers to ensure sufficient community and private food growing space is delivered across new development. Where possible, the provision of new allotment plots to meet demand should be included within plans. Where space does not permit this, developers can make a contribution to creating additional provisions elsewhere. In accordance with Hounslow's Allotment Strategy, priority locations for new allotments should be in:
 - Feltham West
 - Heston West
 - Syon
 - Hounslow Heath
 - Hounslow West
 - Turnham Green
- Community gardens and orchards should be created within new developments, where possible, and pre-constructed raised beds suitable for food growing installed within new private gardens.
- Community food growing opportunities should be delivered across the borough, implemented over the next 20 years during the major regeneration programme. This could also include small-scale growing such as window boxes and balcony planters.
- Encourage ecological management practices and habitat creation within allotments through deliverables set out in the Nature Recovery Action Plan.

Delivery partnerships

Allotment tenant groups, community groups, schools, developers

Funding

CIL, Big Lottery Fund, GLA (Greener City Fund and Good Growth Fund), Section 106

9 - Sports and recreation hubs



Vision

Enhancing the physical and mental wellbeing of Hounslow's residents by providing free to use, and easily accessible via active travel, sports and recreation facilities within some of the borough's most deprived neighbourhoods.

Programme scope

12.20 This programme of projects will deliver a diversity of **healthy** and **Destination** Spaces across the borough through enhanced sporting provisions. Although some of these will be pay-to-play, it is hoped that the majority will be freely accessible to Hounslow's residents, therefore enhancing physical and mental health and wellbeing. Improvements could also be in the way of enhanced active travel to the site, therefore reducing the reliance on cars.

Programme objectives

- Promote the use of parks and open spaces for physical activity.
- Reduce car usage to reach sports facilities.
- Implement sporting provision in line with the Hounslow Playing Pitch Strategy. Aim to improve the infrastructure within parks to increase the activities available for improved health and wellbeing. Aiming these activities at young people using the open space to provide freely accessible sports provisions could help to improve physical and mental wellbeing in the area.
- Work with partners, community groups and clubs to increase access to sport and recreational provision across Hounslow.
- Work with developers to improve sport and recreational provision across Hounslow.

Priority projects & initiatives

- Feltham Parks development, plans for a new multifunctional sporting and recreation hub is currently underway, delivering a diversity of indoor and outdoor sports.
- Hanworth Park is one of the most deprived areas in the borough. Aim to improve the park infrastructure to increase the update of activities for health and wellbeing. Targeting these activities at young people could help to reduce the prevalence of anti-social behaviour in the area. The facilities could form an extension of the Hanworth Air Park Leisure Centre.
- Consider upgrades and improvements to existing tennis courts.
- Explore opportunities to improve the travel routes to the new Gunnersbury Park Sports Hub, including:
 - The continued closure of Lionel Road South to vehicles following the construction of the new Brentford Community Stadium, creating a green pedestrianised street connecting Kew Bridge Station with Gunnersbury Park.
 - Enhanced pedestrian experience crossing the A4 at Lionel Road North and Lionel Road South. Re-opening of the gatehouse entrance to pedestrians and cyclists at this junction to act as a gateway to Gunnersbury Park.
 - Removing pavement parking along Lionel Road North and substituting for street trees, linear rain gardens and a new cycle lane.
 - New cycle lanes and footpath along A406 using existing verge to house linear rain gardens and street trees which would act as a barrier between pedestrians and cars.
- Increase the availability of freely accessible informal and formal sports provisions across the borough.

Delivery partnerships

Sport England, TfL, GLA, 'Friends of' groups, Football Association

Funding

Sport England (Community Asset Fund), Big Lottery Fund, developer contributions

10 - A tree for every child



Vision

To plant one new tree for every child born in Hounslow each year.

Programme scope

12.21 Trees play an integral part to the successful delivery of Hounslow's **resilient, wilder, healthy** and **Destination** Spaces. Without careful planning of tree species, form, typology and maintenance, the delivery of tree programmes may fail or be underperforming in benefits. More guidance on tree planting can be found in the Hounslow Tree Plan.

Programme objectives

- Plant a new tree for each new born until 2030.

Priority projects & initiatives

Type of location	Tree typology	Description	Example location
Green Belt and MOL	Deciduous woodland, parkland & hedgerow trees	Reforestation of public and private green spaces within the Green Belt and Metropolitan Open Land (landowner engagement may be required).	Rectory Farm Hatton Farm, Bedfont Southville amenity space, Bedfont Feltham Marshalling Yard, Feltham
Dense urban areas	Street trees (+ other greening features)	These areas generally have a deficiency in access to nature, coupled with a lack of potential space for greening. Therefore, street trees, along with other greening features, should be used to create urban boulevards which frame some of the borough's most intensively used active travel routes and areas of public realm.	A315 & A314, Hounslow Central Bath Road Harlington Road East Heston Road Boston Manor Road Wellesley Road Sutton Court Road

Type of location	Tree typology	Description	Example location
Housing estate land	Street trees, specimen trees and orchards	Housing estate land provides an underused asset of green space which can host large tree specimens to provide significant biodiversity and amenity value.	Redwood Estate, Cranford Heston Farm Estate, Heston
Strategic growth areas	Street trees, specimen trees, woodland blocks and orchards	Working with developers to provide a variety of tree typologies across new development which should be planned into designs from the outset.	Great West Corridor (particularly to the west of Boston Manor Park) Hounslow Central Brentford town centre
Major roads	Street trees	Upright and small specimens should be used along Hounslow's busiest roads to create more pleasant environments for pedestrians and cyclists. Designs should ensure upward movement of air is not impeded by trees.	A4 A30 A312 A314 A315 A316
Active travel routes, particularly school routes	Street trees (+other greening features)	Using street trees and urban greening features to frame safe and direct active travel routes between schools and major transport hubs.	Kingsley Academy Hounslow Town Primary School St Pauls Church of England School St Marys RC School
River corridors	Riparian habitat	Utilising the WWNP dataset to identify locations suitable for riparian habitat along Hounslow's river valleys.	Avenue Park Waye Avenue Park London Playing Fields
Historic landscapes	Veteran and specimen trees	Work with landowners to establish a veteran tree planting programme using original genotypes.	Osterley Park Boston Manor Park Gunnersbury Park Syon Park

Delivery partnerships

'Friends of' groups, local landowners, TfL, GLA, community and resident groups

Funding

Defra, Forestry Commission, GLA, TfL, developer contributions

11 – Destination Spaces



Vision

To create a network of high quality and inclusive Destination Spaces across Hounslow which are a regionally significant asset used by a diversity of residents and visitors.

Programme scope

12.22An essential part of enhancing Hounslow's image as a destination for both residents and visitors will be in the delivery of Destination Spaces which host a compelling and diverse events programme. Improving the facilities and activities available within some of Hounslow's key parks and green spaces will be vital for creating a 'pull' of visitors. This could be achieved through additional sports infrastructure, cafes, play and leisure facilities, and cultural assets. Furthermore, an extensive programme of events which explore a diversity of cultures and appeal to a variety of demographics will provide additional income and use of the spaces. The regeneration of existing assets will be an essential tool in the delivery of this strategic programme.

Programme objectives

- Identify key green space and improve infrastructure to become a destination space.

Priority projects and initiatives

- Enhance facility provisions on Hounslow Heath to create a regional Destination Space which promotes the highest levels of biodiversity conservation. This could include nature trails, volunteering opportunities and basic amenities.

- Work to improve areas highlighted within the Good Parks for London report within Hounslow's Destination Spaces, including events, supporting nature, community involvement and skills development.
- Update the borough's events programme to deliver a busier schedule which will increase income generation. This could include outdoor film screenings, farmers markets, flower shows, music festivals, art classes, exercise classes and other cultural events.
- Explore the restoration and re-use of buildings within parks, particularly historic assets, to provide space for additional commercial activities.
- Deliver a series of riverside Destination Spaces through waterside economies.
- Utilise urban greening features to provide wayfinding opportunities between Destination Spaces.
- Deliver a new marketing campaign which will promote Hounslow and its Destination Spaces to both local residents and the surrounding region.

Delivery partnerships

'Friends of' groups, Historic England, National Trust, Chiswick House and Gardens, Syon Park, Arts Council England, local businesses

Funding

Arts Council England, developer contributions, The National Lottery Heritage Fund, Heritage of London Trust, local businesses

12 – Achieving a Healthy Hounslow



Vision

Creating a Healthy Hounslow for all ages and demographics, where residents benefit from enhanced mental and physical wellbeing thanks to the borough’s innovative and inclusive network of open spaces which provide an extensive programme of activities.

Programme scope

12.23 Hounslow’s parks and green spaces will act as a framework for the delivery of a healthy borough. Through a series of project interventions and a new programme of activities, **healthy spaces** will be delivered within Hounslow which will benefit both resident’s physical and mental wellbeing. These spaces will encourage physical activity within all age groups and demographics, as well as providing opportunities for social interactions and community activities.

Programme objectives

- Work with Public Health and key partners to deliver programmes to reduce obesity and increase health and wellbeing.

Priority projects and initiatives

- Explore a programme of formal and informal social prescribing opportunities within Hounslow’s open spaces; for example community gardening, nature conservation

volunteering, team sports, social walking, guided wildlife walks, meditation, yoga and art classes. Special focus should be on areas where health deprivation is an existing issue, including:

Hanworth Park	Gunnersbury Park	Avenue Park
Blenheim Park	Hounslow Heath	Dukes Meadows
Redlees Park	Lampton Park	Bedfont Lakes Country Park

- Develop additional opportunities for physical activity within Hounslow’s parks including running and walk trails, as well as further team sports which are community-led. The use of innovative technology and signage should be explored, for example virtual fitness classes which can be incorporated into existing outdoor gyms.
- Work in partnership with schools to encourage the use of open spaces for activities and sports, progressing the work carried out during the Hounslow’s Active Spaces project.
- Explore partnerships with schools to develop a scheme to provide safe cycling lessons. This should be delivered alongside cycling infrastructure and urban greening outside schools to enhance both safety and air quality.
- Explore the benefits of nature on people’s mental and physical wellbeing through providing nature trails and space for quiet contemplation, alongside opportunities for volunteering through nature conservation and the creation of additional SINC’s.

Delivery partnerships

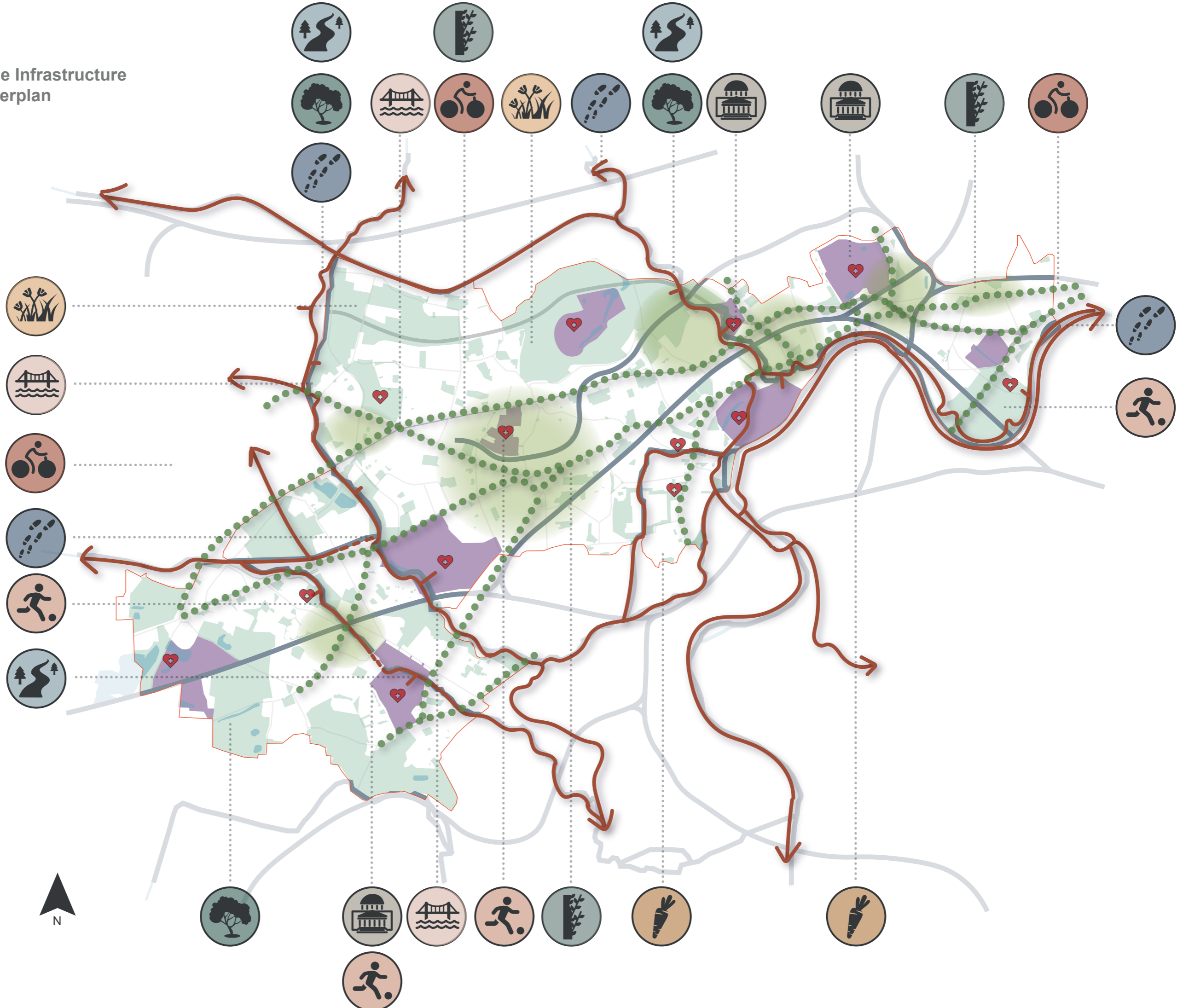
‘Friends of’ groups, TCV, NHS, community groups, local sports teams, local schools

Funding

Heathrow Community Trust, Sport England, Football Foundation, developer contributions, Groundwork, Arts Council England, Trust for London

Figure 12.1: Green and Blue Infrastructure Strategic Programme Masterplan

-  1. Re-wilding Hounslow's rivers
-  2. Restoring and connecting Hounslow's historic landscapes
-  3. Strategic riverside routes
-  4. Breaking down barriers to people and wildlife
-  5. Cycle Hounslow
-  6. Greening the grey
-  7. Habitat creation in Hounslow's GB and MOL
-  8. Growing Hounslow
-  9. Sport and recreation hubs
-  10. A tree for every child
-  11. Destination Spaces
-  12. Achieving a Healthy Hounslow
-  Riverside routes
-  Urban boulevards
-  Wildlife corridor
-  Local green space
-  Urban greening



Chapter 13

Delivering the Strategy

13.1 The following chapter outlines some of the options which may be pursued by London Borough of Hounslow to help deliver the Green and Blue Infrastructure Strategy. Opportunities highlighted here will also apply to the series of delivery documents which support the strategy. The Nature Recovery Action Plan and Tree Plan should be seen as the next steps in delivering the overarching aims and opportunities highlighted within the strategy. They should be updated annually and incorporated into the borough's Infrastructure Delivery Plan.

Funding

13.2 As is the case for many Local Planning Authorities, budgets for delivering infrastructure projects has been reduced in recent years and intensified by the ongoing COVID-19 pandemic. There are a range of different funding and governance 'alternatives' which could be applied to green and blue infrastructure projects, such as Community Development Trusts, Asset Transfers and Hypothecated Taxes, however not all of these will be suitable for the borough.

13.3 Strategic-scale projects will need to undertake significant scoping and viability assessments to identify any 'alternative' delivery models which requires significance in-house capacity to undertake such work. Therefore, it is likely that funding for a lot of green and blue infrastructure enhancements within Hounslow will be secured through developer contributions.

Securing funding through development

13.4 Funding for green and blue infrastructure through developer contributions will likely be achieved through the setting of planning obligations as part of the planning application process. The specifics of the interventions can be negotiated between Hounslow Council and developers, often with stakeholder consultation as a method of informing projects with the greatest benefits for the people most affected by the development. Developers should also provide evidence of ongoing maintenance of the new green and blue assets.

13.5 If a developer is unable to deliver on-site green and blue infrastructure as part of the planning application process, they could be required to provide financial contributions. These

can be used to fund on-site and off-site enhancements, as well as strategic schemes which require a pooling of capital or for ongoing maintenance costs. For large developments, developers could be expected to provide both on-site green and blue infrastructure and financial contributions.

13.6 There are two main mechanisms for securing developer contribution through the planning process; the Community Infrastructure Levy (CIL) and section 106 (of the Town and Country Planning Act), and it is recommended that Hounslow continues to utilise these mechanisms for ongoing investment. The Council should also be aware of the proposed reforms, which are laid out in the Planning White Paper, which will see the abolition of s106 and an extension of the CIL scheme. Hounslow should therefore be prepared to adapt to these changes once the reforms come into play.

Section 106

13.7 Section 106 (s106) are planning obligations which are intended to 'make a development acceptable in planning terms which would otherwise not be acceptable'. Agreements must relate to the development and be 'fairly and reasonably related in scale and kind to the development'.

13.8 S106 can be applied in several ways, including restricting the development or use of land in a specified way, as well as paying a financial contribution to the local authority. Site specific mitigation could be delivered through financial contributions towards green and blue infrastructure, which can include infrastructure such as cycle lanes.

Compensatory improvements to the Green Belt

13.9 The NPPF requires that the impact of removing land from the Green Belt is offset through compensatory improvements. Paragraph 175 of the NPPF also requires that a strategic approach is used to ensure that, within a plan area, networks of habitats and GI are maintained, and that planning is undertaken for the enhancement of natural capital at a catchment, or landscape scale. The various schemes and principles outlined in this Strategy offer the potential to form the basis for such compensatory improvements.

13.10 Contained within paragraph 142, the revised NPPF states that where it has been concluded it is necessary to release Green Belt land for development, plans should:

"set out ways in which the impact of removing land from the Green Belt can be offset through compensatory improvements to the environmental quality and accessibility of remaining Green Belt land."

13.11 In addition, Paragraph 145 of the NPPF goes on to state that:

"Once Green Belts have been defined, local planning authorities should plan positively to enhance their beneficial use, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land."

13.12 Further guidance is provided in National Planning Policy Guidance (NPPG) which states that

"Where it has been demonstrated that it is necessary to release Green Belt land for development, strategic policy-making authorities should set out policies for compensatory improvements to the environmental quality and accessibility of the remaining Green Belt land. These may be informed by supporting evidence of landscape, biodiversity or recreational needs and opportunities including those set out in local strategies, and could for instance include:

- *new or enhanced green infrastructure;*
- *woodland planting;*
- *landscape and visual enhancements (beyond those needed to mitigate the immediate impacts of the proposal);*
- *improvements to biodiversity, habitat connectivity and natural capital;*
- *new or enhanced walking and cycle routes; and*
- *improved access to new, enhanced or existing recreational and playing field provision".*

Community Infrastructure Levy

13.13 The Community Infrastructure Levy (CIL) was introduced through the Planning Act (2008) as a way for local authorities to raise funds to pay for supporting infrastructure, including green and blue, where there are new developments. In Hounslow this applies to any development

Chapter 13

London Borough of Hounslow

Green and Blue Infrastructure Strategy

October 2021

which adds over 100 square metres of new development or a new dwelling. The funding can then be used to help deliver features such as transport facilities, schools, health amenities, sporting / recreational features and open space. It is down to the local authority to decide how the funding will be spent; however, it must be used to enhance infrastructure and support development within the locality. As stated in National Planning Practice Guidance:

'The levy can be used to increase the capacity of existing infrastructure to repair failing existing infrastructure, if that is necessary to support development.'

13.14 CIL in London is different to the rest of England in that the Mayor of London also sets a levy. Therefore, local authorities and the Mayor need to work in close partnership.

13.15 CIL will remain a key mechanism for delivering green and blue infrastructure across the borough, particularly following the anticipated planning reforms. As development proposals come forward in the borough, it will be necessary to assess the predicted level of impact on specific assets and receptors to best determine the enhancements which are required.

13.16 As of September 2019, restrictions were lifted which saw planning authorities being able to 'pool' an unlimited number of s106 sources (before then payments from no more than 5 developer contributions were permitted for one project). This reform now means councils can use a larger combination of both CIL and s106 funding for one project, meaning additional possibilities are provided to deliver funding for strategic green and blue infrastructure projects.

Other funding streams

Grant funding

13.17 Grant funding may be secured through a number of different sources but is generally used for the initial implementation of projects, as opposed to their ongoing maintenance. Therefore, it is essential to ensure maintenance provisions are in place before project delivery.

13.18 The borough has already benefitted from major funding initiatives such as the National Lottery Heritage Fund. Several grant funding streams are also periodically available from the Mayor of London, for example the 'Crowdfund for London' programme which helped to raise the funds needed to implement the Chiswick Oasis green wall project.

13.19A significant opportunity for grant funding within Hounslow is from the Heathrow Community Trust, an independent charity which funds projects within the communities surrounding the airport. This includes funding schemes which improve the environment through projects such as increasing the provision of green space, improving the sustainability of community buildings and raising awareness of environmental issues.

13.20 Grant funding provides an excellent opportunity to deliver smaller-scale and community-led projects across the borough. Where possible, the Council should provide support to community groups through making them aware of the various funding streams and assisting with applications. See **Table 13.1** for more detail on grant funding opportunities.

Business levies

13.21 Business Improvement Districts (BIDs) are rapidly emerging across London and comprise of a specific geographic area, generally a town centre, where a consortium of businesses make financial contributions to make improvements to the surrounding neighbourhood. Early feasibility analysis for their potential success in Chiswick, Feltham and Brentford town centres has already been carried out and there is a local desire for one in Hounslow centre.

13.22 Green and blue infrastructure, particularly in the form of urban greening and active travel features, may be included within the BID's overall objectives. Although funding will be limited to local areas, its use is unrestricted and can go towards ongoing maintenance.

Events and commercial activity in open spaces

13.23 The borough already holds numerous events within open spaces, with some of these generating significant amounts of income, such as Lovebox in Gunnersbury Park. It should be ensured that part of the income from these events is re-invested into assets within the open space. These funds will be unrestricted and therefore could be used for maintenance. These events spaces should be built into the borough's ambitions to create a regionally significant network of Destination Spaces.

Table 13.1: Additional funding opportunities for both Council and community-led projects

Organisation	Type of funding	Indicative amount available
Department of Transport	Funding for Low Traffic Neighbourhoods which encourage the uptake of walking and cycling whilst discouraging the use of cars.	Project dependent
Highways England	For projects which will see enhanced street schemes for active travel which can deliver greening and increased space for public realm alongside it.	Project dependent
Mayor of London / Greater London Authority	Investing in the regeneration of London's high streets, aiming to boost local trade and economic activity. Various grant schemes exist including 'Crowdfund for London', 'Greener City Fund' and 'Good Growth Fund'.	Project dependent
Transport for London	TfL Streetspace Fund supports London Councils to identify and deliver projects which help people to safely walk, cycle and use public transport during the COVID-19 pandemic. Transport for London Road Network (TLRN) streetscape maintenance and improvements could be a source of funding for public realm improvements. Streetscape enhancements around transport hubs could be delivered in partnership with TfL.	Project dependent
Local businesses	Private funding from businesses across Hounslow may offer financial resources for certain projects if they align with their business needs and aspirations. This can be pooled through the creation of a Business Improvement District.	Project dependent
Section 106 / Community Infrastructure Levy	CIL and s106 provides funding opportunities from developers to improve the infrastructure, environment or community provisions within the locality of a new development. Due to reforms in September of 2019, these two sources of funding can be pooled together to fund larger projects.	Project dependent
Arts Council England	This provides open access funding for individuals, art organisations and people who use the arts in their work. Eligible projects range from dance, visual arts, literature, theatre, music and combined arts. The scheme invests money from the government and the National Lottery into arts and culture across England. Within Hounslow this could be used to help commercialise open spaces into Destination Spaces.	£1,000 - £100,000
The National Lottery Heritage Fund	National Lottery Grants for Heritage – is a programme open to all types of projects that focus on heritage in the UK. Given Hounslow's incidence of heritage assets, a number of which are on the Heritage at Risk Register, this provides significant opportunities for the borough.	£3,000 - £5,000,000
The National Lottery Community Fund	Reaching Communities – is a programme which offers flexible funding over £10,000 for up to five years to voluntary and community organisations which plan to take action on issues that really matter to people. It can fund project activities, operating costs, organisational development and capital costs.	£10,000+ £300 - £10,000

Organisation	Type of funding	Indicative amount available
	National Lottery Awards for All England – this offers funding to all types of projects which matter to people and their communities.	
Sport England	Sport England Small Grants – this programme aims to fund projects involving adults and young people aged 14 and over to meet one or more of the aims of our 'Towards an Active Nation' strategy. Community Asset Fund – funding targeted towards supporting the aims of the 'Towards an Active Nation' strategy and the five outcomes of physically wellbeing, mental wellbeing, individual development, social and community development, and economic development.	£300 - £10,000 £1,000 - £150,000
Football Foundation	Football Foundation grants are designed to help grassroots clubs purchase essential equipment and kits, as well as create or upgrade pitches. Any clubs, local associations, football businesses and educational establishments can apply for funding.	Project dependent
Groundwork	The Community Spaces programme helps groups in England to create or improve green and open spaces, therefore improving quality of life in their neighbourhood.	£10,000 - £50,000
Spacehive	Using 'crowdfunding' to help deliver local projects for improving accessible public space. Projects are generally identified and set up by the community.	No min. or max.
idverde	The idverde Community Investment Fund aims to empower local people to deliver sought after projects that enhance the local environment, including green space and public realm, boosting the wellbeing of local people.	Up to £40,000
Postcode Society Trust	Funds available for not-for-profit organisations and charities to promote human rights, combat discrimination and prevent poverty.	£500 - £20,000
BBC Children in Need	For disadvantages children; any kind of disability, living in poverty or situations of deprivation. Seeking to improve their social and physical environments.	£20,000 max. for building projects
Greggs Foundation	Grants for programmes which deliver at least one of the following outcomes: improved nutrition, increased exercise, improved mood, improved inclusion, and increasing volunteering opportunities.	£2,000
The Morrisons Foundation	Grant funding for charity projects which make a positive difference in local communities.	£25,000 max.
Trusthouse Charitable Foundation	Grants for running costs or one-off capital costs to charities and not-for-profit organisations working with residents in deprived urban areas. Focus on themes of community support and arts, education and heritage.	Small (£7,500 max.) and major (£7,500 - £60,000)
Heritage of London Trust	A grant scheme for the restoration of historic buildings or monuments which are in community or public use of some kind.	Project dependent

Organisation	Type of funding	Indicative amount available
Trust for London	Seven funding programmes for 2018-2022 aimed to tackle poverty and inequality including good homes and neighbourhoods, better work, decent living standards, shared wealth, pathways to settlement, stronger voices, connected communities. Most grants are over two or three years.	Up to £150,000
Heathrow Community Trust	Funding schemes which improve the environment for communities surrounding the airport, such as increasing the provision of green space, improving the sustainability of community buildings and raising awareness of environmental issues.	£200 - £25,000

Partnership working

13.24 The delivery of green and blue infrastructure projects will generally always require a partnership approach, particularly when engaging with the relevant stakeholders in the public, private and voluntary sectors. Partnership working will always be necessary when it comes to strategic scale projects due to the need to pool resources and draw on specialist skills. In the case of statutory consultees and neighbouring authorities (under the Duty to Cooperate), this may be a legal duty. There are significant benefits to partnership working and therefore its possibility should be explored throughout all projects.

13.25 A number of relevant partners have been identified within each strategic programme and theme projects, including organisations such as Thames Water, Sustrans, Canals and Rivers Trust, Forestry Commission, Environment Agency, Historic England, Natural England and surrounding boroughs or authorities.

Alternative governance

13.26 There are several options which may be explored for projects which provides alternatives to ongoing Council management.

Community engagement and delivery

13.27 The Localism Act (2011) and Assets of Community Value Regulations (2012) provides opportunities for the transfer of land from statutory bodies to communities through the

Community Right to Bid. This approach relies on active and motivated communities to take ownership of projects and therefore will require significant community engagement.

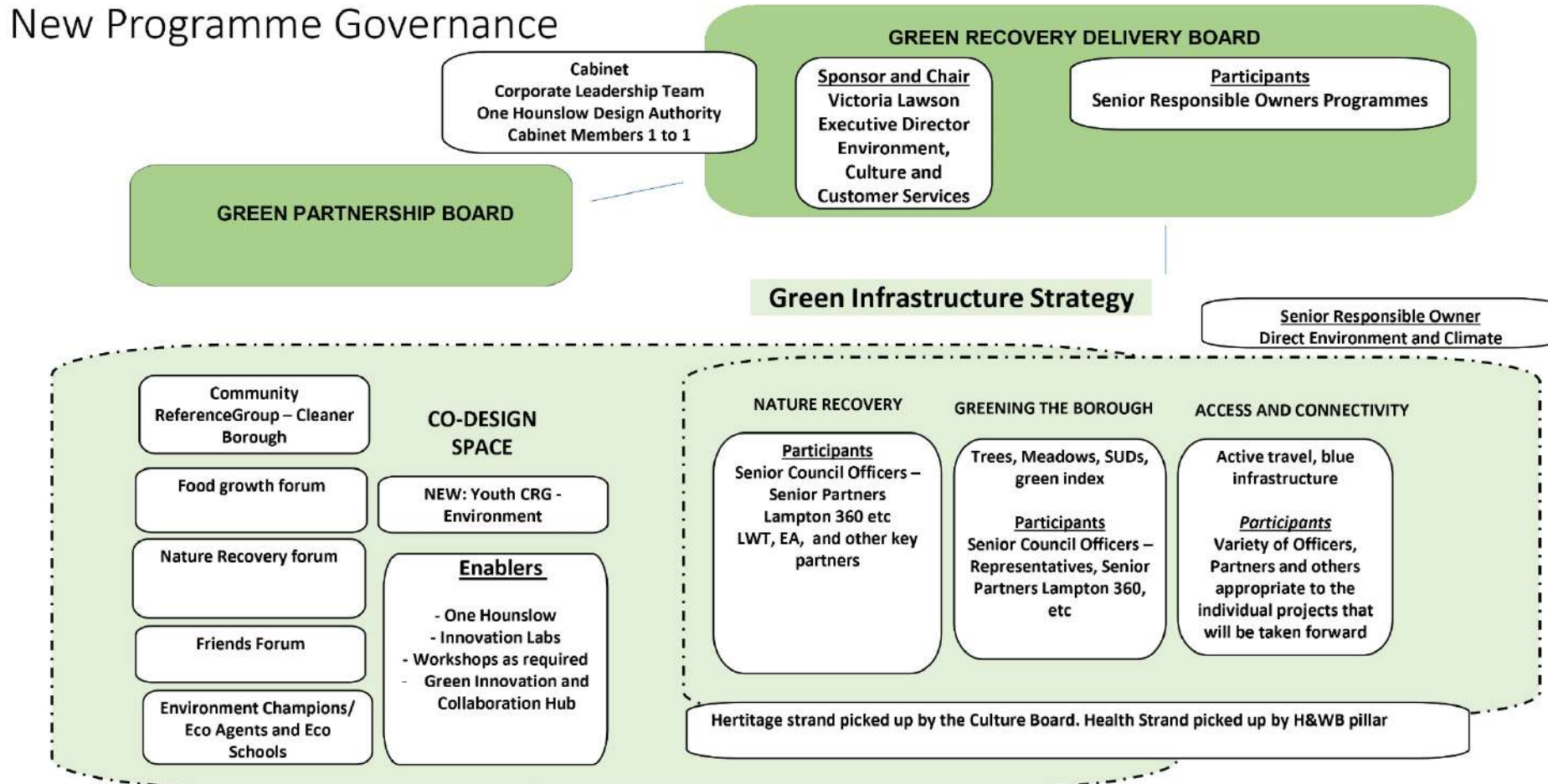
13.28 Community Asset Transfer is another option which could be explored to enable the delivery of projects. This could either be in the form of a long-term lease arrangement, generally paid at low rental prices, or by the way of a service level agreement which will give the community ongoing management responsibility.

13.29 Hounslow already has a significant level of community engagement, primarily through the creation of Community Reference Groups. These include the Climate and Clean Air Community Reference Group, the Cleaner Borough Community Reference Group and the Greener Borough Community Reference Group. All of these groups are relevant and should feed into the delivery of Hounslow's green and blue infrastructure. The opportunity also exists to work with the Youth Council to increase representation of young people as part of strategy implementation. **Figure 13.1** illustrates a method of engagement with communities and other groups with the aim of enhancing the potential for implementation by the Council.

Trusts

13.30 This approach involves the transferring of assets, generally an open space, into a trust. This would hand over its management responsibility to a social enterprise which could also fund its ongoing costs through commercial activity. These models are generally costly and complex to set up and therefore may not be suitable for many projects.

Figure 13.1: Potential method of engagement with communities and other local groups



Design Guides and Codes

13.31 The recently published National Design Guide and National Model Design Code highlights the importance of using these tools in achieving high quality, sustainable and beautiful design. Hounslow’s emerging design guidance should be an enabling tool in the delivery of the opportunities highlighted within this strategy. **Table 13.2** highlights some of the green and blue infrastructure aspirations which can be delivered through the borough’s design guidance.

Table 13.2: Green and blue infrastructure aspirations to be realised through borough design guidance

Improving green spaces
New open space should deliver a diversity of habitats including provisions for meadow restoration, riparian habitat creation, tree planting and wetland creation.
Deliver better facilities in open spaces including toilets, seating, cafes, bins and rain shelters.
Improve safety within parks.
Deliver community gardens within new development and retrofit into existing housing estates. Deliver allotments where space permits.
Making existing green and blue infrastructure wildlife-friendly
Naturalising rivers through wetland creation, de-channelising, reedbed creation, riparian habitat and allowing natural river profiles to develop.
Ecological management along railway lines through the removal of invasive species and the planting of wildflowers.
All verges and underused grass should be shifted from mown turf to wildflowers, species-rich grassland and trees, including SuDS features where possible.
Enhance wildlife corridors, particularly using provisional river and rail green corridors to improve connectivity between green spaces.
Green infrastructure should be delivered as a buffer along watercourses to provide biodiversity enhancements.

Active travel and reducing pollution
Using green screens and hedges to improve poor air quality around schools and other public nodes.
Support the delivery of Hounslow’s Priority Cycle Network.
Better utilisation of river corridors for active travel.
Better crossings of main roads with developments to provide entrances.
Improving connectivity to the Thames Path and Brentford.
Secure bike storage
Greening the grey
Encourage the de-paving of gardens, particularly front gardens.
Transform pedestrian routes into urban boulevards through the use of street trees, pocket parks, parklets, linear rain gardens and raised planters.
Achieve an appropriate urban greening factor which could vary by neighbourhood.
Implement natural surface water run-off treatment through SuDS and wetlands adjacent to highly polluted roads.

Maintenance and stewardship

13.32 The requirements for ongoing maintenance and stewardship of green and blue infrastructure assets needs to be considered carefully prior to project implementation. This is essential to ensure the ongoing functionality and therefore benefits of an asset are reached. Where possible, assets should be designed to minimise costs of ongoing maintenance, therefore promoting their longevity.

Chapter 14

Monitoring and Review

Approach to delivery

14.1 The implementation of the strategy, alongside its delivery documents, should be monitored to measure its success, as well as identifying any amendments which may be required due to changing circumstance and priorities. Going forward, the strategy and its associated delivery documents will need to be reviewed annually to ensure it aligns with the Council's core objectives and any other emerging initiatives.

14.2 The Strategy and Action Plans are designed to cover the next ten years. However, it is recommended that regular reviews of the actions and projects is carried out within this timeframe. This review would ideally comprise the following steps:

- Dates actions and projects which are completed;
- Any required changes to the timescale of actions and projects;
- A record of any measurable targets or outcomes; and
- Details of any major new actions that arise out of the existing list of actions and projects.

Measurable standards

14.3 Measurable standards will often provide the most robust way of monitoring the success of green and blue infrastructure projects, as well as ensuring development within the borough is adhering to policy requirements. New standards which relate to the delivery of specific types of infrastructure are updated frequently and therefore the Council should ensure they remain in touch with these. Emerging updates include Natural England's access to open space and green infrastructure standards and the new Biodiversity Net Gain Metric 3.0.

14.4 Table 14.1 provides some examples of different types of measurable standards which can be adopted across the borough to ensure the successful implementation of green and blue infrastructure which provides sufficient benefits for its surrounding communities and wildlife.

Table 14.1: Examples of measurable standards relating to green and blue infrastructure

Example standards	Notes / considerations
<p>Urban Greening Factor (UGF)</p> <p>Policy G5 Urban Greening within the London Plan provides a planning policy tool that sets a standard for assessing the amount of urban greening that is included within a development proposal.</p> <p>The policy states:</p> <ul style="list-style-type: none"> A. Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage. B. Boroughs should develop an Urban Greening Factor (UGF) to identify the appropriate amount of urban greening required in new developments. The UGF should be based on the factors set out in Table 8.2 but tailored to local circumstances. In the interim, the Mayor recommends a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development. <p>The UGF is applied by assigning a factor of between 0 and 1 for various surface cover types, with sealed surfaces given 0 and the most natural cover (semi-natural vegetation e.g. woodland, flower rich grassland), 1.</p> <p>The Urban Greening Factor for a proposed development is calculated in the following way: (Factor A x Area) + (Factor B x Area) + (Factor C x Area) etc. divided by Total Site Area.</p>	<p>The policy within the London Plan provides an opportunity for Hounslow to develop an UGF which is tailored to local circumstances. As an outer London borough, Hounslow may be able to accommodate larger greening schemes and therefore the Council should be ambitious in their targets. At present a UGF target of 0.4 has been set for development comprising of predominantly residential, 0.3 when comprising of predominantly commercial or employment space, and 0.2 for predominantly industrial. A zonal approach may be suitable for the borough to ensure maximum urban greening is achieved where space permits.</p> <p>Where there is little opportunity for additional vegetation at ground level, the UGF will promote the incorporation of green walls and green / brown roofs.</p>
<p>Biodiversity Net Gain</p> <p>The principle of Biodiversity Net Gain (BNG), seeks to ensure that development creates a net gain for biodiversity (around 10%) by providing off site habitat creation or improvements when necessary.</p> <p>The BNG principle is a hierarchal approach, negative impacts to biodiversity should:</p> <ul style="list-style-type: none"> – In the first instance be avoided; – Then reduced, or mitigated; – Finally reduced through compensation or 'offsetting', only after avoidance and mitigation measures have been applied to proposals. <p>Natural England has developed a Biodiversity Metric (2.0), which is a quantitative metric to calculate the biodiversity of a site before and after development. Where biodiversity loss is calculated, and consideration has been given to avoidance and mitigation measures, there may be opportunities to secure developer contributions for strategic habitat restoration/creation projects offsite.</p>	<p>Application of BNG is most relevant to the development of greenfield sites and should be of particular consideration for any Green Belt release within Hounslow.</p> <p>The Government's 25 Year Environment Plan aspires to strengthen the requirements relating to the application of BNG and it has been announced that BNG will be mandated in the Environment Bill. The Council should be aware of Defra's forthcoming Biodiversity Metric 3.0, as well as the emergence of Environmental Net Gain as a new approach to delivering sustainable developments.</p> <p>BNG may be applied to secure contribution towards implementing principles set out in the Green and Blue Infrastructure Strategy.</p>

Example standards	Notes / considerations
<p>Green Infrastructure accreditation schemes</p> <p>Several accreditation schemes have been developed that set standards for the quality of green infrastructure within developments.</p> <p>Building with Nature is a green infrastructure accreditation scheme which was developed out of a collaboration with Gloucestershire Wildlife Trust and the University of the West of England and has been tested and refined in collaboration with Local authorities and private sector developers.</p> <p>Developers can apply to have schemes tested at any stage in the development process and planners can have policy documents accredited. The scheme provides a framework of standards against which proposals and developments can be tested, which are divided into several themes; Core Standards, Well-being, Water and Wildlife. Schemes can achieve one of three levels of accreditation.</p>	<p>This approach is voluntary and is only likely to be taken up by developers who have a desire to go beyond the statutory minimum or planning requirements.</p> <p>Unlike the UGF, which focuses on the quantity of greening, Building with Nature ensures a certain level of quality is provided within the scheme's green infrastructure provisions. This will therefore ensure the maximum number of benefits and ecosystem services is achieved.</p> <p>Several accreditation schemes may be suitable to promote for large scale developments that require comprehensive master planning or a more coordinated approach between stakeholders. Proposals which undergo a recognised accreditation process should be considered positively.</p>
<p>Healthy Streets Index</p> <p>The Healthy Streets Index was updated in 2021 and rates each street across London in accordance to how 'healthy' it is. The Index combines a series of datasets including noise, air quality, traffic dominance, pavement space, tree cover, street network and public transport connectivity, land use, population and attractors to give an overall score. The key factors of a 'healthy' street is that everyone feels welcome and people choose to walk and cycle. Other indicators include easy to cross, shade and shelter, places to stop and rest, not too noisy, people feel safe, things to see and do, people feel relaxed and clean air.</p> <p>The Index is a useful tool for monitoring the success of projects highlighted within this strategy, including enhanced active travel links and urban greening.</p>	<p>Updated in 2021, the Healthy Streets Index is calculated using curated datasets which are weighted in accordance with their role in create healthy and attractive streets. As further high quality and pertinent data becomes available, the Index will be updated to improve its accuracy.</p> <p>There are some limitations to the dataset, primarily due to the experience of the street being different for each individual and varying through time. Granular details such as cleanliness are not included and therefore the Index only gives a general indication of how healthy a street is.</p>

Appendix A
Consultation findings



**London Borough
of Hounslow**



Green Infrastructure strategy, Tree Plan, Urban Greening and Nature Recovery Action Plan

Workshops Report

November 2020

Issue number: 1

Status: Final

Date: 08/12/2020

Prepared by: Emily Keenan

Authorised by: Adrian Spray

Green Infrastructure strategy, Tree Plan, Urban Greening and Nature Recovery Action Plan

November 2020

Contents

1	Workshops Approach.....	4
2	Green Infrastructure Workshops	5
2.1	Key Issues for the Strategy	5
2.2	Existing / forthcoming projects or initiatives of relevance	18
2.3	Areas Delivering Well and Opportunities.....	22
2.3.1	Parks and Open Spaces	22
2.3.2	Nature and Wildlife	28
2.3.3	Green and Blue Corridors.....	34
2.4	Nature on the Doorstep/ Urban Greening Interventions	41
2.5	Working in partnership to delivery the strategy	45
3	Nature Recovery and Urban Greening Workshop	51
3.1	Key Issues	51
3.2	Existing / forthcoming projects or initiatives of relevance	53
3.3	Opportunities	56

3.3.1	Nature Recovery.....	56
3.3.2	Urban Greening.....	58
3.4	Ecosystem service priorities in Hounslow.....	60
3.5	Working in Partnership to deliver the strategy.....	60
4	Next Steps.....	62

1 Workshops Approach

London Borough of Hounslow have appointed LUC and CFP to develop a Green Infrastructure Strategy, Tree Plan, Urban Greening and Nature Recovery Action Plan. As part of this process workshops have been held to gather insight from stakeholder and partners within and outside of the organisation.

Workshop invitations were extended to a grouping determined by the client. All workshops were held on Zoom and supported by use of Miro and online collaboration tool. The sessions were led by members of the LUC and CFP Team and were introduced by Wayne Stephenson, Assistant Director of Environmental Services and Culture, London Borough of Hounslow. Details of the workshops held are as below.

Workshop Name	Audience	Date	Time	Attendee Number
Green Infrastructure Strategy Workshop 1	Internal Stakeholders and Partner Organisations	November 10 th 2020	9 am to 11 am	38
Green Infrastructure Strategy Workshop 2	Community Groups and the Wider Public	November 10 th 2020	5.30 pm to 7.30 pm	33
Nature Recovery and Urban Greening Workshop	All	November 18 th 2020	9 am to 11 am	22

Table 1 Workshop Structure

2 Green Infrastructure Workshops

2.1 Key Issues for the Strategy

Workshop participants were asked to indicate which of the six strategy areas they felt were most important for the Green Infrastructure Strategy, by indicating their top three priority areas. The responses are shown below.

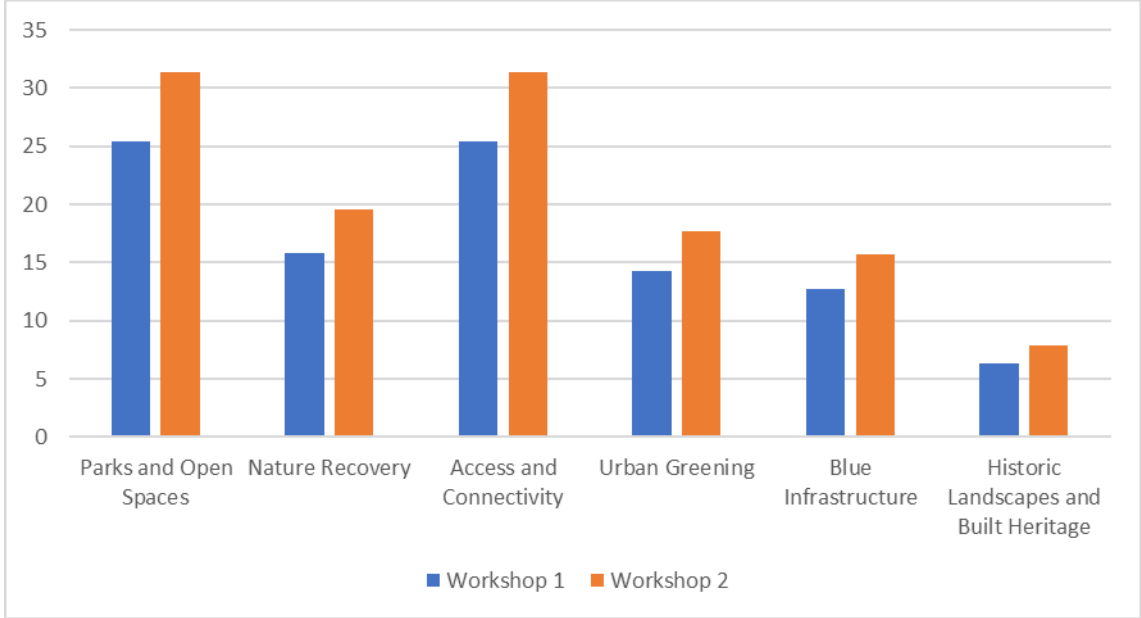
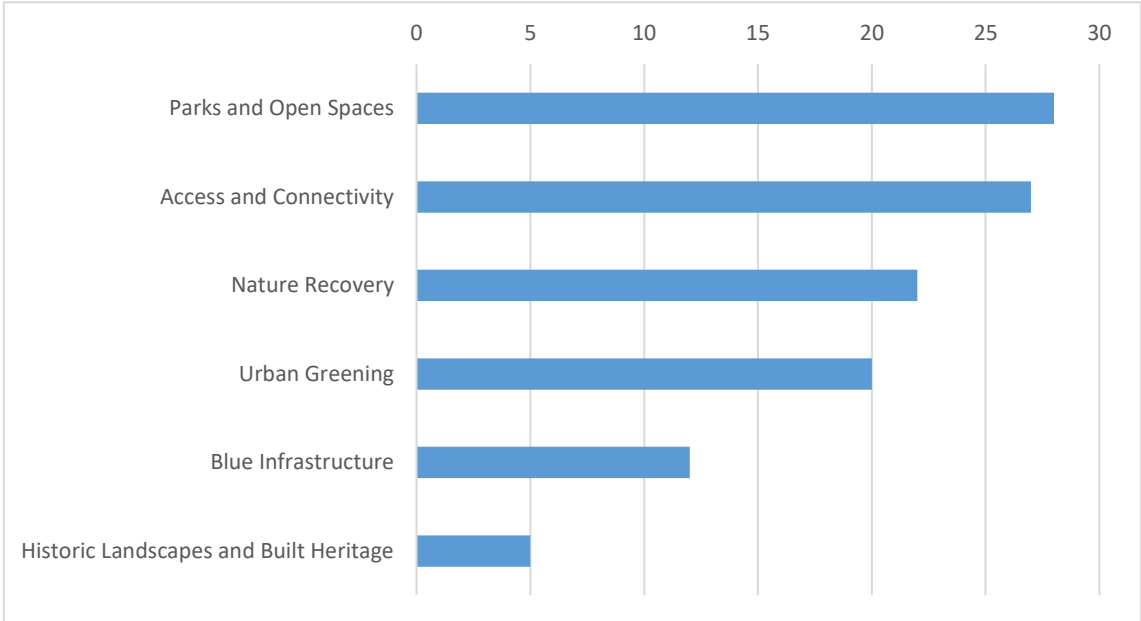


Fig 1 Key Issues for each Workshop

Across the two workshops the highest ranked areas were Parks and Open Space, Access and Connectivity and Nature Recovery.

Fig 2 Key Issues Workshops Combined



Participants were asked what they saw as being the key cross cutting issues for the strategy relating to each of these areas. Responses are shown below.

Parks and Open Spaces
Shortage of allotment space
Space for community gardens in parks and open spaces
More events in parks to attract residents e.g. Free film screenings, Halloween events, foraging walks etc
Pressure on green belt in west
Engage with schools and get them to use nature sites
Community ownership is key to support long term maintenance and project delivery - link into multitude of community groups in the borough with opportunities to get involved - building green skills and sustainability
Use of apps/augmented reality to help engage young people/children with open spaces - e.g. Nature trails with characters at different locations? Points for sightings?
Access to diff typologies, i.e. Play, pitches etc
Maximising the opportunity for people to use the parks for fitness and wellbeing
Alleviating deficiency in access to public open space
Forest school talks
Promotion of links between different open space areas
Review of parks use - what do residents want and use them for?
Art in parks and along public realm
Ensure parks are part of the travel network
Promotion of the boroughs green and blue spaces
Improving quality of existing open space for nature and people
Explore revenue opportunities (not just cafes)
Protect the portfolio of parks and green spaces
Art/exhibitions in parks
Empower residents - give permission to plant and maintain
How to balance commercial/events usage
Engaging people in the parks that may not currently use them
Activities in parks
Work towards everyone being within a 10-minute walk of a park
Spaces for entertainment
Ensuring new development contributes to the enhancement and promotion of parks and open spaces
Keeping people safe in our parks - some have bad reputation for muggings e.g. Lampton
Spaces to reflect
Sustainable plan for maintenance and management of parks

Involve groups in developing and creating areas of parks
Pocket parks
Making parks accessible all year
Ensuring permanent protection of at least key parks and spaces
Give ownership to residents in pockets
Plan to capitalise on their mental wellbeing benefits
Ensuring appropriate typology mix
Need to ensure provision through planning
Using the resource as inspiration and education
Transform grass areas into allotments, wildlife quality spaces
Safety; maintenance; disability; toilets; refreshments; transport to; seating for rests; rain shelters; litter clearance;
Safety and accessibility
Safety and wellbeing facilities (Toilets, benches etc) are key themes
Community activities should be promoted more
Better access to open spaces for those without cars --mini allotments within WALKING distance of Town Centre populations. Barriers to movement are hugely disruptive for people. These can be perceived as well as actual.
Inconsistent management of these locations
The sense of safety can be measured by seeing the proportions of men to women in visitor numbers. We find that as this moves towards 1:1 the space is seen as safer
Lack of promotion to locals
Misuse of small spaces (or not full utilisation)
Every open space needs a friend's group as a local interface with the council. More Support needed to make this happen
Create spaces for reflection
Protect the existing greenbelt and open spaces - previous 'greenbelt review was flawed and came to very strange conclusions, and needs to be redone through open and transparent process
Improve the collaboration between GS360 and community groups/organisations
Pride and ownership in creativity of these places
Increase the quality of trees so that there is year-round interest, maybe help from Kew Gardens
Cleanliness of spaces
Behaviours need to change as resources are finite so we all need to play our part to encourage behaviour change

Table 2 Parks and Open Spaces Issues

More emphasis on cycling and walking
Improving routes - low level lighting etc
Wayfinding/greenway maps
Crossing the A4
Cycle infrastructure that joins up, especially at major junctions
Green 'corridors' to connect around the borough
Creating/promoting 'green corridors to improve connectivity of open/green spaces
Wayfinding from green and blue corridors to tangible and intangible heritage
Adequate, maintained paths
Improve access to promote use of blue - promote exercise
Pedestrian crossing over A30 at Hatton Cross and other major roads required to link up river corridor for walkers and cyclists
Connectivity along river corridors
Enhancement of Thames Path including links to the path
Make paths and walkways wider
Canals have great potential to link key areas - such as Great West Corridor and Brentford Town centre - and the Thames
The new signed "Lit Route" from Barnes Bridge up to Hammersmith is a very good idea.
Cars are everywhere, very hard to avoid roads makes cycling and walking hard as areas where competing with traffic
Improve lighting on pavements & footpaths, particularly since they are full of broken slabs
Roads act as barriers to walking - create a walking map of the borough similar to the Footways Map created for central London recently
Safety of walking alone
More secure bike storage to help people use clean ways of travelling
There is huge scope for improving access between LBH and other boroughs along green corridors - to the Thames and the Colne all the way to the Chilterns Barr
Overcome barriers at key locations to complete routes. Often roads, sometimes railways.
More diversity along the way
Safety for women and children
Stop drug dealing on Heston to Osterley paths
Moving from brown spaces to green spaces
Feltham Marshalling Yards walking route - underpass

Table 3 Access and Connectivity Issues

Do residents know what species we have that should be protected?
Digital engagement - broaden awareness and engagement?
Landscape scale habitat connectivity
Important to establish how this can be measured - community wildlife counts etc
Beyond borough boundary thinking for species movement and habitats across London
Landscape scale recovery
Wildlife corridors to allow adaptation
Seek to broaden adder gene pool through targeted dispersal
Net gain
INNs
High public pressure on grasslands affecting ground-nesting birds
Adopt zero pesticide targets an IPM approaches
Bat safe lighting; vegetated buffer zones between green/ blue infrastructure; connecting nature pathways with diverse native planting; dark spaces; aquatic habitat creation and rehabilitation (grand union canal)
Assess the baselines from which we measure progress
Habitat enhancements
Protection / enhancement of existing mooring locations
Fish passage through the borough
Reducing pollution
Tackling invasive species
Better connected Habitats
Connectivity along river corridor
Animal migration built in
Net Gain for river developments
Climate resilience
Ensuring water quality is improved in line with WFD targets
Nature for human well-being and mental health
Wildlife is fragmented, there are areas where there is little connectivity
New trees planted with micorryzal fungi on roots
Not using pesticides in our parks or streets
Biodiversity
An updated biodiversity action plan and a functioning BAP group with wide based engagement would make a big positive difference - as would an ecology officer!
Lack of integration of nature recovery into development plans
Rewilding
Mitigating air pollution

Public realm improvements
Putting nature at the heart of development and infrastructure
Use more/better design in urban greening
Managing grass Verges as rough grassland/meadow
Incorporating wildlife benefits (i.e. Bug hotels)
Greening of existing development and ensuing better design of future development
Access to green spaces for people without access to a garden or park nearby
Ensuring right trees in right places
Setting an appropriate local UGF target (including possible 'zonal' approach if supported by evidence)
Potential to improve air quality
More wildflowers
Projects to support the residents of densely populated estates to utilise small green spaces
Planning legislation ensuring min % of green coverage
Tree canopy cover in streets
UGF targets should be agreed and achievable
Green/natural features as a focus to development
Urban greening to emphasise social housing areas as priority
Great potential to continue and expand good sustainable design principles - both in public realm and housing/building developments
Important to bring major landowners on board
Flower/shrub beds
Green walls and roofs
Rain gardens
Greening riverwalls
Suds
Incorporating enhancements to development
Planning policy for front gardens / consider impact of parking policies on converting gardens to parking
See the Devonshire Road micro Nature Reserve cared for by local resident with agreement from Hounslow council who agreed to stop mowing beside the flats https://www.devonshireroadnaturereserve.org/
Place importance on small pockets of greenery on streets
Promote the scale and contribution of gardens towards the overall green cover of Hounslow
Encourage planting at foot of street trees
Providing funding or kits or challenges for people to take their own action in their own gardens - help them understand how important it is
More wildflower meadows, adding colour to nature engages more with public
Sidewalks & verges in Town centres get businesses to buy-in to greening.

Blue infrastructure
River clean ups affecting rare Thames molluscs?
Connecting open spaces along the River Crane corridor
Access to riverside
Natural Flood management
Water voles
Successfully allying flood management/drainage with recreation
Biodiversity improvements along river walls
Appropriate low lux lighting along aquatic environments (Bat conservation trust guidance); Increasing the amount of habitat for aquatic species such as marginal planting/ reed beds; education/ signage explaining the environment and wildlife interactions; non-native invasive species affecting biodiversity and ecosystem function.
Better water quality (to enable safe recreation and thriving nature)
Restoring natural features on rivers
Wayfinding along river corridors
Blue Infrastructure is Green Infrastructure! Don't make a distinction!
Support increased sports and recreation in appropriate riverside locations
Enhance and promote blue offer
Need to work with key landowners along the Thames and other blue routeways to provide access and develop habitats
Consider need for appropriate riparian
Explaining the importance of streams and rivers, creating a sense of pride, so much fly tipping on riversides
Lifesaving infrastructure along riverside areas
Great use of open water swimming for engaging people with nature sites in new ways - e.g. Bedfont Lakes
The rivers are integral to the green spaces - or at least they should be. In some places they are cut off which could be resolved
More activities in our canals
Clear the waterways, the Crane has large tree blocking the channel which are collecting rubbish and litter
Waterside access must trump Developers' profit
Clubs and support to get more people using the blue spaces. See SHARKS in Osterley Park as great example
Open better access to River Longford banks

Table 6 Blue Infrastructure Issues

Protecting ancient woodland. AWI currently being updated - work to ensure aw in borough accurately represented and supported by evidence

Use intangible heritage to animate blue and green paths

Raising awareness with hard to reach groups - BAME and Young People

Information on history of LBH, cemetery

Promote the wildlife and nature value of cemeteries and graveyards to help people appreciate them as places they can use

Tudor landscape linking Hanworth Park/Palace and Hampton Court palace - Longford River, but also routes through Kempton. Could be marketed

Table 7 Historic Landscapes and Built Heritage Issues

Fig 8 Historic Landscapes and Built Heritage Issues



2.2 Existing / forthcoming projects or initiatives of relevance

Workshop 1 attendees were asked to contribute any projects or initiatives of relevance to the Green Infrastructure Strategy and the responses are shown below. Those known to be forthcoming are italicised.

Parks and Open Spaces

Site based	Borough-wide	London-wide	Regional/ National
Park Friends groups initiatives	Art in the park	London invasive species initiative	30 days wild (wildlife trusts)
Sutton Playing Fields community garden	Barking and Dagenham Tomorrow Today Streets	Colne and crane valleys green infrastructure strategy 2019	Green Flag Awards
Gunnersbury regeneration	Walthamstow Arts Trail		
Dukes Meadows improvements			

Table 8 Parks and Open Spaces Projects or Initiatives

Access and Connectivity

Site based	Borough-wide	London-wide	Regional/ National
Osterley Park - National Trust ambition for tree planting & improved access for all	Surrey CC collaboration with All Trails app to create a series of walks around Surrey https://www.surreycc.gov.uk/culture-and-leisure/countryside/walking/alltrails-collection	<i>Green loop proposals developed by Heathrow as part of the expansion programme</i>	Estuary edges guidance
	Active travel network as set out in the Hounslow Transport Strategy and	TFL - quietways	

how it can be integrated in these plans.
Keep it Local campaign to encourage people to shop local and London Plan consultation documents on public spaces

Table 9 Access and Connectivity Projects or Initiatives

Nature Recovery

Site based	Borough-wide	London-wide	Regional/ National
	Hounslow Micro Gardens	London update of the Ancient Woodland Inventory	Green Recovery Fund
	Hounslow climate emergency action plan		Agri-environment schemes
	LB Hounslow Climate Change Adaptation Action Plan (name TBC)		Keeping it Wild (London WT)
			Brilliant Butterflies (LWT, NHM, Butterfly Conservation Trust)
			Skylark recovery plan
			30by30 (Wildlife Trusts)
			Nature Recovery network
			Action for Insects (Wildlife Trusts)
			Govts 25 Year environment plan

Table 10 Nature Recovery Projects or Initiatives

Urban Greening

Site based	Borough-wide	London-wide	Regional/ National
Trees for Cities (Gunnersbury)	Urban Tree Festival https://urbantreefestival.org/	London Urban Woodland Strategy	Woodland Trust - Woodland Trust Tree of the Year Competition
	Hounslow urban gardens project	Climate vulnerability mapping (GLA)	National Tree Week -
	GI research/mitigation work by HAL connected with 3rd Runway /expansion project	London National Park City	Environmental Land MANAGEMENT - PUBLIC MONEY FOR PUBLIC GOODS
	Councils work on flood alleviation and Suds following TW bid		
	West of the Borough and GWC Local Plan Reviews		
	Town centre visioning and master planning - underway now		

Table 11 Urban Greening Projects or Initiatives

Blue Infrastructure

Site based	Borough-wide	London-wide	Regional/ National
IWA & Canal and River Trust - Hanwell flight heritage and ecology partnership		Thames Strategy Kew to Chelsea. Much of this is still relevant.	
Fish passage on Brent within Boston Manor Park		<i>River Basin Management Plans Cycle 3</i>	PLA A Safer Riverside - guide for riverside dev (2020)

Brentford Bridge enhancements (LBH, LWT, C&RT)	Crane Valley Partnership projects	PLA Vision for the Tidal Thames (2016)
	Thames Vision (PLA)	<i>MMO south east marine plan (adoption expected early 2021)</i>
	Thames Water Smarter Water Catchments - Crane	South-East Inshore Marine Plan
	Water company drainage and wastewater management plans (DWMP)	
	Canal and River Trust - Grand Union Canal access and green blue infrastructure improvement's	
	Thames-side mollusc survey and recovery plan	

Table 12 Blue Infrastructure Projects or Initiatives

Historic Landscape and Built Heritage

Site based	Borough-wide	London-wide	Regional/ National
Cranford Park HLF project			
Boston Manor House restoration and Boston Manor Park Regeneration			
Urban Orchard Trail - Grand union Canal			

Table 13 Historic Landscape and Built Heritage Projects or Initiatives

2.3 Areas Delivering Well and Opportunities

Workshop 1 participants were asked to identify spatial opportunities under the following three themes while Workshop 2 participants were asked about areas delivering well and those with potential for improvement.

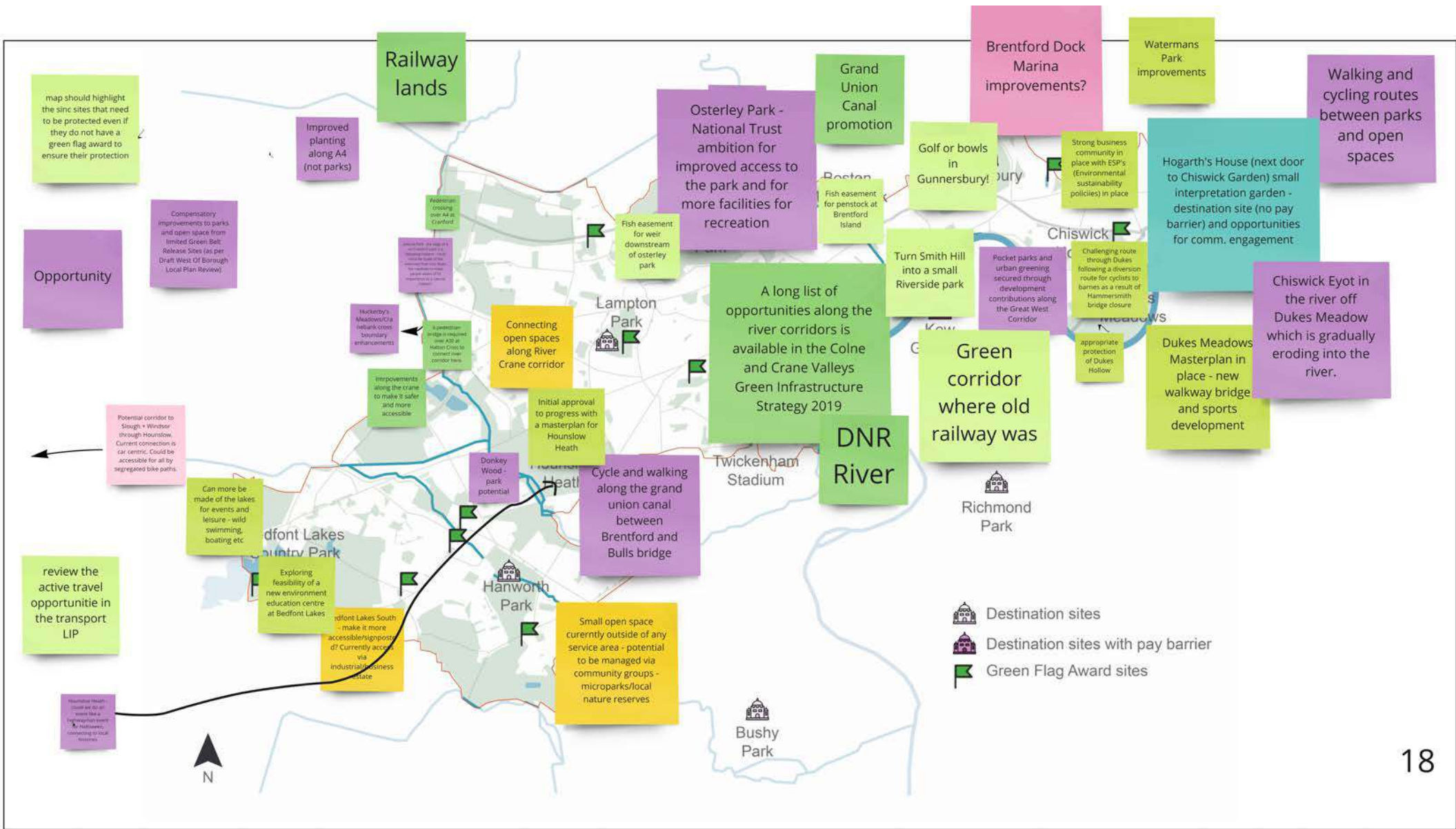
2.3.1 Parks and Open Spaces

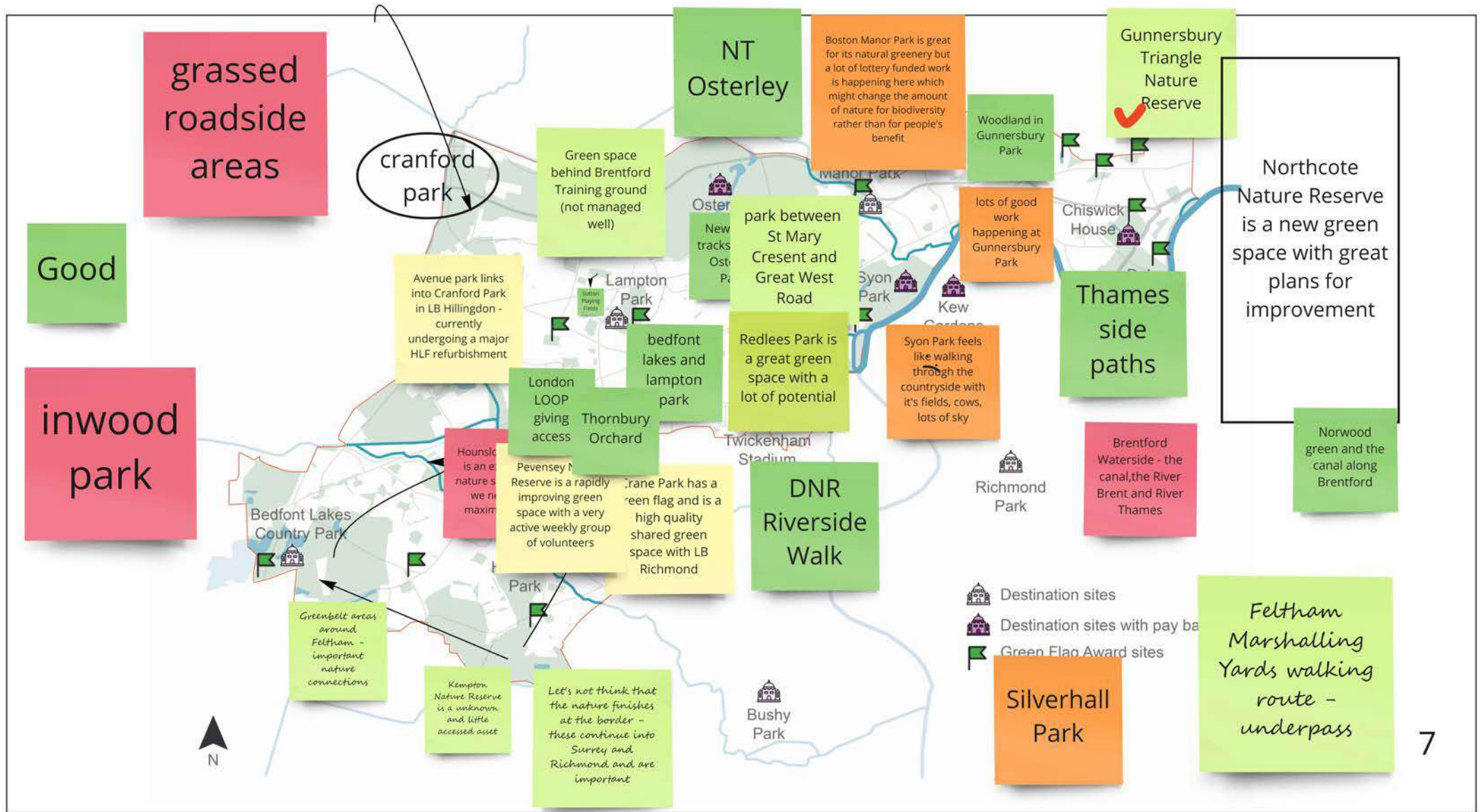
Parks and Open Spaces Delivering Well
Lots of good work happening at Gunnersbury Park
NT Osterley
Gunnersbury triangle nature reserve
Boston Manor Park is great for its natural greenery
Woodland in Gunnersbury Park
Cranford park
Park between St Mary Crescent and Great West Road
New cycle tracks within Osterley Park
Avenue park links to Cranford Park in LB Hillingdon - currently undergoing a major HLF refurbishment
Thames side paths
Sutton playing fields
Redlees Park is a great green space with a lot of potential
Syon Park feels like walking through the countryside with its fields, cows, lots of sky
Bedfont lakes and Lampton park
Inwood park
London Loop giving access
Thornbury orchard
Northcote Nature Reserve is a new green space with great plans for improvement
Norwood green and the canal along Brentford
Brentford Waterside - the canal, the River Brent and River Thames
Hounslow Heath is an excellent nature space and we need to maximise this
Pevensey Nature Reserve is a rapidly improving green space with a very active weekly group of volunteers
DNR riverside walk
Crane Park has a green flag and is a high quality shared green space with LB Richmond

Feltham Marshalling Yards walking route - underpass
Greenbelt areas around Feltham - important nature connections
Silverhall park
Kempton Nature Reserve is an unknown and little accessed asset

Table 14 Parks and Open Spaces Delivering Well

Parks and Open Spaces Opportunities
Brentford Dock Marina improvements
Grand Union Canal promotion
Osterley Park - National Trust ambition for improved access to the park and for more facilities for recreation
Hogarth's House (next door to Chiswick Garden) small interpretation garden - destination site (no pay barrier) and opportunities for comm. Engagement
Golf or bowls in Gunnersbury!
Watermans Park improvements
Fish easement for weir downstream of Osterley park
Turn Smith Hill into a small Riverside park
Green corridor where old railway was
Avenue Park - the edge of it on Cranford Lane is a fly tipping hotspot - could more be made of the waterway that runs down the roadside to make people aware of its importance as a natural habitat?
Pocket parks and urban greening secured through development contributions along the Great West Corridor
Fish easement for penstock at Brentford Island
Challenging route through Dukes following a diversion route for cyclists to Barnes as a result of Hammersmith bridge closure
Chiswick Eyot in the river off Dukes Meadow which is gradually eroding into the river.
Protect access to Brentford Dock
Huckerby's Meadows/ Crane bank cross boundary enhancements
Skatepark improvement
Dukes Meadows Masterplan in place - new walkway bridge and sports development
Appropriate protection of Dukes Hollow
Initial approval to progress with a masterplan for Hounslow Heath
Connecting open spaces along River Crane corridor
Donkey Wood - park potential
Can more be made of the lakes for events and leisure - wild swimming, boating etc
Exploring feasibility of a new environment education centre at Bedfont Lakes
Bedfont Lakes South - make it more accessible/signposted? Currently access via industrial/business estate
Hounslow Heath - could we do an event like a highwayman event for Halloween, connecting to local histories





All trees should have TPO

Hedges, more longer hedges along major roads, ie A4

I repeat Inwood park; elms lost. Also adjacent derelict ?allotments

Agreed, TPOs for mature historic trees in Boston Manor Park

Maybe linking from Brentford High Street up to Boston Manor Park and along to Gunnersbury Park in terms of adding more greenery.

Connect Gunnersbury Park down to the river

Encourage residents to green up front gardens

there used to be allotments behind burns way, the land is now derelict and has been for many years. This area can be developed. The area is known as Henley's alley.

Improvement

Really restrict crossovers and paving gardens

The A30 is a major barrier to movement along the Crane corridor

working with National Trust to improve and share green spaces

improve controls on dumping, misuse of spaces

Big one - Greening under the M4 flyover, even trying out some test areas to begin with to see what will grow there. Apparently mosses will grow well in that environment. Work with Highways England.

Use railway edges to connect green spaces for example between Turnham green and Chiswick business park

Henley's roundabout

Agree, railway embankments

The upper Duke's corridor should be a high value green corridor link between the Crane and Colne. However at present it is in a disgraceful condition overgrown and virtually inaccessible, parts are also locked off

The Longfords is potentially a great riverside corridor linking to Bushy Park and the Thames - again it does not work well at present

Feltham Marshalling Yards - wild - but needs formal access through (and path under railway)

There is potential to create more allotments in the borough

Keep mature trees as priority in planning

Again Redlees Park could be improved

Rewilding

Resistance to green walls from developers

A4 need to make it more welcoming to go under and over it to get to the river

Feltham Marshalling Yards walking route - underpass

school fields - if any left!

There are seven key spaces proposed for development as part of the WoBP.

Hanworth Park does not function very well at present and needs more biodiversity features as well as public engagement

roundabouts can be better managed and presented

Destination sites

Destination sites with pay barrier

Green Flag Award sites

Disused railway embankment from A4 to London Road, Brentford

Address litter in open spaces

Leave park areas uncut - allow scrub and trees in some areas

Footpaths / Bridlepath at Kempton - just finishes.

there are bridges, but pretty inaccessible. Longford River route and Hanworth Park routes offer possibilities

Potential for footpath / signed route to Hampton Common / Heatherop Park Hampton

Brazil Mill and Donkey Woods are great spaces but run down. FORCE has submitted a major CIL bid to improve these spaces working with Lampton and LBH

Generally there is a need to change behaviours particular tackling ASB in parks and open spaces

Ensure that developers maintain trees/replace dead trees planted in new developments

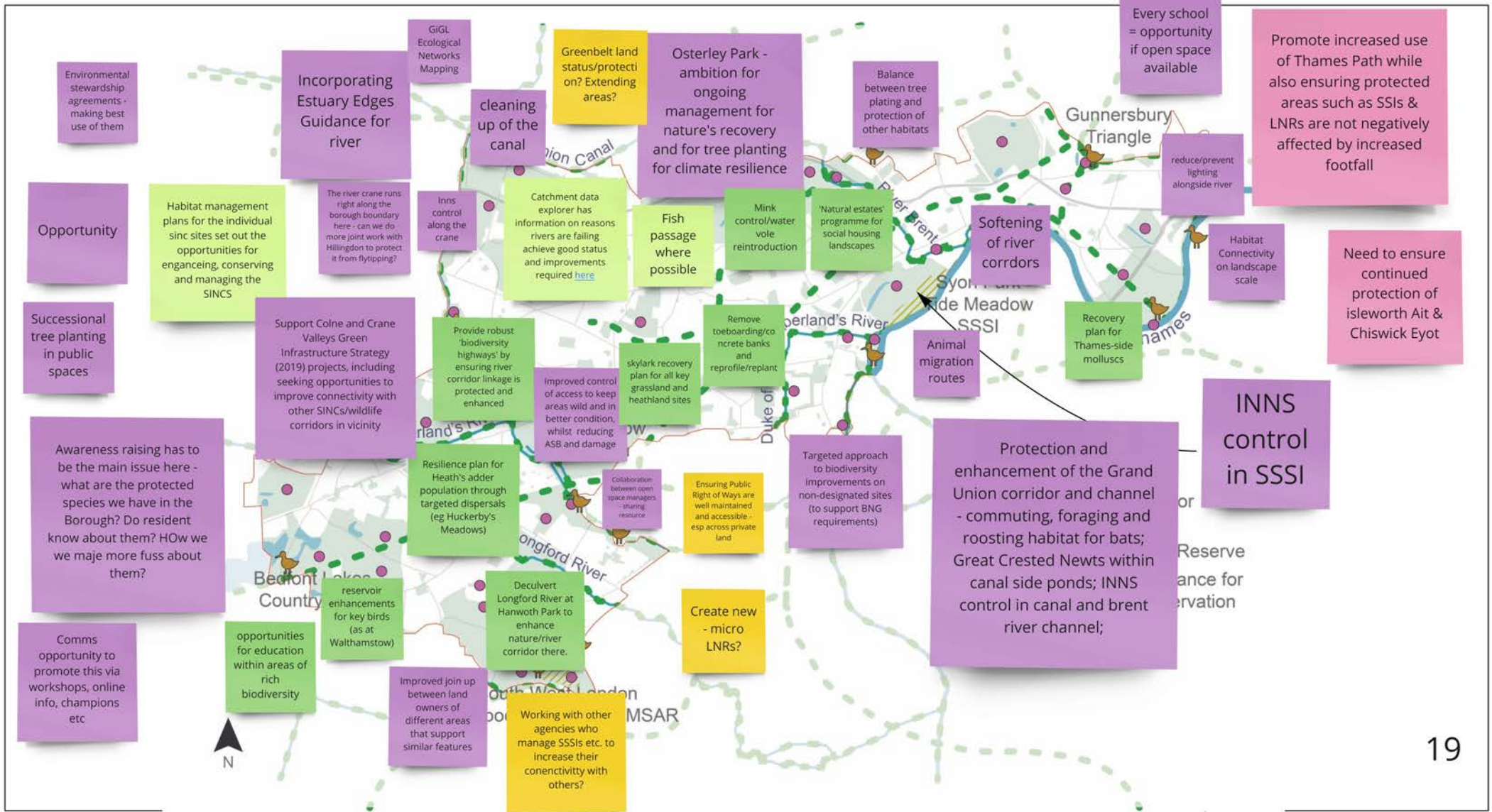
2.3.2 Nature and Wildlife

Nature and Wildlife Sites Delivering Well
Junction 2 supported a project to do with hedgehogs in Boston Manor Park
Golf courses are ecologically important
Use places such as Gunnersbury Triangle as hubs / seeds from which can spread biodiversity outwards. Create micro sites in the area around the Triangle to help raise awareness of its existence
Reed beds at Brentford Lock
Habitats link upstream through LB Hillingdon to the top of the Crane catchment in LB Harrow
Heronry on opposite bank. Celebrated with the Dukes Meadow heron sculpture
We have seen many red kites
Brentford waterside - little egrets, kingfishers etc.
Sparrowhawks seen in Cranford park,
Banks of Longford
Great habitat for water voles but none present at the moment - possibly due to mink incursion in 2018
Potential to enhance habitat link to the Colne catchment
Feltham Marshalling Yard - remaining site needs protecting for nature
Longford links to Bushy Park and Thames
Church / Bull's field on edge of Feltham - by FYOI -needs protecting

Table 16 Nature and Wildlife Sites Delivering Well

Nature and Wildlife Opportunities
Promote increased use of Thames Path while also ensuring protected areas such as SSIs & LNRs are not negatively affected by increased footfall
Osterley Park - ambition for ongoing management for nature's recovery and for tree planting for climate resilience
Cleaning up of the canal
Reduce/prevent lighting alongside river
The river crane runs right along the borough boundary here - can we do more joint work with Hillingdon to protect it from fly tipping?
Habitat management plans for the individual SINC sites set out the opportunities for enhancing, conserving and managing the SINCS
Mink control/water vole reintroduction

'Natural estates' programme for social housing landscapes
Inns control along the crane
Fish passage where possible
Need to ensure continued protection of Isleworth Ait & Chiswick Eyot
Support Colne and Crane Valleys Green Infrastructure Strategy (2019) projects, including seeking opportunities to improve connectivity with other SINC/wildlife corridors in vicinity
Remove toe boarding/concrete banks and reprofile/replant
Provide robust 'biodiversity highways' by ensuring river corridor linkage is protected and enhanced
Animal migration routes
Skylark recovery plan for all key grassland and heathland sites
INNS control in SSSI
Protection and enhancement of the Grand Union corridor and channel - commuting, foraging and roosting habitat for bats; Great Crested Newts within canal side ponds; INNS control in canal and brent river channel;
Resilience plan for Heath's adder population through targeted dispersals (e.g. Huckerby's Meadows)
Ensuring Public Right of Ways are well maintained and accessible - especially across private land
De-culvert Longford River at Hanwoth Park to enhance nature/river corridor there.
Reservoir enhancements for key birds (as at Walthamstow)
Create new - micro LNRs?
Promote awareness of ecological value of domestic gardens
Line the M4/A4 with green infrastructure to mitigate the harmful effects of air pollution
For all the trees being chopped down at Boston Manor Park there should be at least 2 trees planted to replace them.
Perhaps adding more greenery to river bed to improve water quality
Brentford Waterside - a rich ecology. Management of river banks for wildlife
Major problems with Japanese knotweed and Giant hogweed in these parts of the Crane.
Underpasses for amphibians and hedgehogs near all busy roads, creation of many ponds or wetland areas, tidal flood plain at Dukes Meadows? Rain gardens near all hard structures across the borough.
Community Garden. Tree planting events, Sutton Playing Fields
Extend the river restoration work along the DNR
River restoration opportunities along the Crane
The tidal Crane is a very important habitat for fish breeding -one of the few on the tidal Thames and is not properly understood or protected
Donkey wood and Brazil Mill project includes biodiversity improvements - wet woodlands etc if funding provided
More ponds! Yes! See Gunnersbury Triangle for a fantastic local example with his board walk
Brent lea park



Environmental stewardship agreements - making best use of them

Incorporating Estuary Edges Guidance for river

Greenbelt land status/protection? Extending areas?

Osterley Park - ambition for ongoing management for nature's recovery and for tree planting for climate resilience

Balance between tree planting and protection of other habitats

Every school = opportunity if open space available

Promote increased use of Thames Path while also ensuring protected areas such as SSSIs & LNRs are not negatively affected by increased footfall

Opportunity

Habitat management plans for the individual sinc sites set out the opportunities for engaging, conserving and managing the SINC

The river crane runs right along the borough boundary here - can we do more joint work with Hillingdon to protect it from flytipping?

Catchment data explorer has information on reasons rivers are failing achieve good status and improvements required [here](#)

Fish passage where possible

Mink control/water vole reintroduction

'Natural estates' programme for social housing landscapes

Softening of river corridors

reduce/prevent lighting alongside river

Need to ensure continued protection of isleworth Ait & Chiswick Eyot

Successional tree planting in public spaces

Support Colne and Crane Valleys Green Infrastructure Strategy (2019) projects, including seeking opportunities to improve connectivity with other SINC/wildlife corridors in vicinity

Provide robust 'biodiversity highways' by ensuring river corridor linkage is protected and enhanced

Improved control of access to keep areas wild and in better condition, whilst reducing ASB and damage

skylark recovery plan for all key grassland and heathland sites

Remove toeboarding/concrete banks and reprofile/replant

Animal migration routes

Recovery plan for Thames-side molluscs

Habitat Connectivity on landscape scale

Awareness raising has to be the main issue here - what are the protected species we have in the Borough? Do resident know about them? How we we make more fuss about them?

Resilience plan for Heath's adder population through targeted dispersals (eg Huckerby's Meadows)

Collaboration between open space managers sharing resource

Ensuring Public Right of Ways are well maintained and accessible - esp across private land

Targeted approach to biodiversity improvements on non-designated sites (to support BNG requirements)

Protection and enhancement of the Grand Union corridor and channel - commuting, foraging and roosting habitat for bats; Great Crested Newts within canal side ponds; INNS control in canal and brent river channel;

INNS control in SSSI

Reserve space for conservation

Comms opportunity to promote this via workshops, online info, champions etc

opportunities for education within areas of rich biodiversity

reservoir enhancements for key birds (as at Walthamstow)

Deculvert Longford River at Hanwoth Park to enhance nature/river corridor there.

Create new - micro LNRs?

Working with other agencies who manage SSSIs etc. to increase their connectivity with others?

Improved join up between land owners of different areas that support similar features



Good

banks of Longford need opening up

Habitats link upstream through LB Hillingdon to the top of the Crane catchment in LB Harrow

What can LBH do with REctory park

WE have seen many red kites

I think Junction 2 supported a project to do with hedgehogs in Boston Manor Park

Golf courses are ecologically important

Too much green space has been lost to development in Gunnersbury Park

Reed beds at Brentford Lock

Along the railway lines and embankments

Heronry on opposite bank. Celebrated with the Dukes Meadow heron sculpture

Brentford waterside - little egrets, kingfishers etc.

sparrowhawks seen in Cranford park,

Potential to enhance habitat link to the Colne catchment

Great habitat for water voles but none present at the moment - possibly due to mink incursion in 2018

Uxbridge Heath

It's important to show how these corridors link through LB Harmond

Feltham Marshalling Yards walking route - underpass

Wildlife Corridor SSSI Local Nature Site of Importance Nature Conservation

Use places such as Gunnersbury Triangle as hubs / seeds from which can spread biodiversity outwards. Create micro sites in the area around the Triangle to help raise awareness of its existence

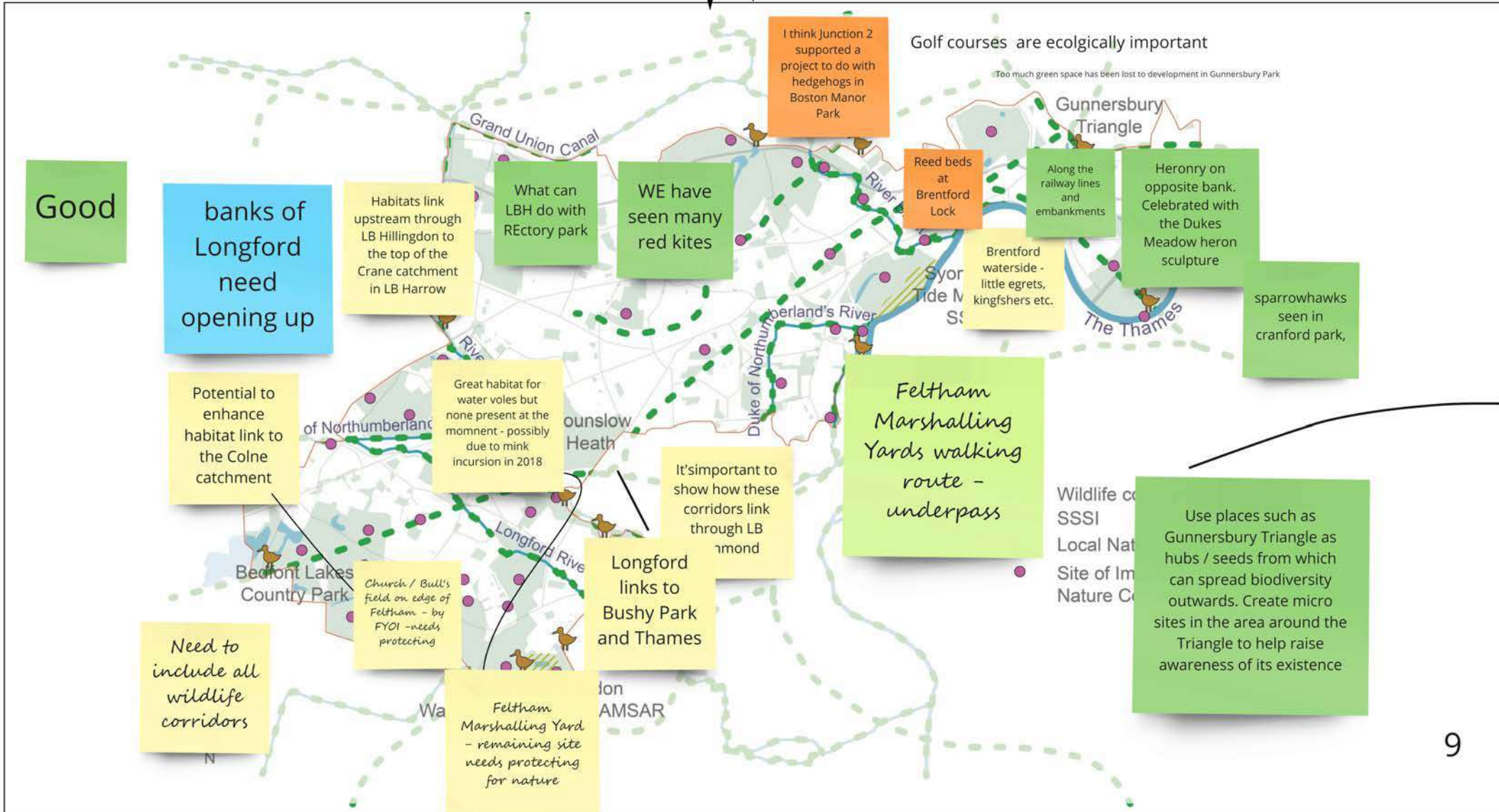
Need to include all wildlife corridors

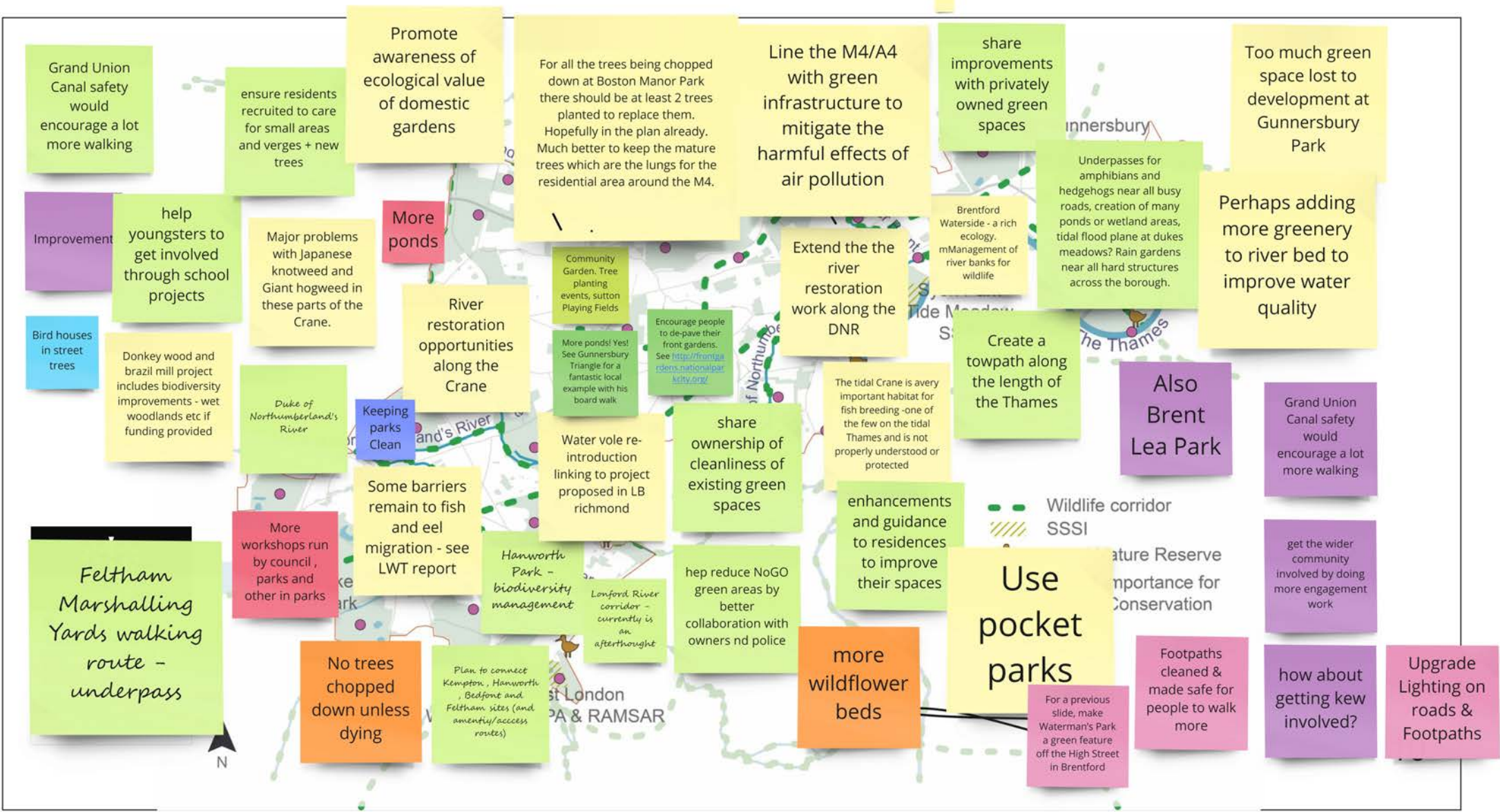
Bedfont Lakes Country Park

Church / Bull's field on edge of Feltham - by FYOI - needs protecting

Longford links to Bushy Park and Thames

Feltham Marshalling Yard - remaining site needs protecting for nature





Grand Union Canal safety would encourage a lot more walking

ensure residents recruited to care for small areas and verges + new trees

Promote awareness of ecological value of domestic gardens

For all the trees being chopped down at Boston Manor Park there should be at least 2 trees planted to replace them. Hopefully in the plan already. Much better to keep the mature trees which are the lungs for the residential area around the M4.

Line the M4/A4 with green infrastructure to mitigate the harmful effects of air pollution

share improvements with privately owned green spaces

Too much green space lost to development at Gunnersbury Park

Improvement

help youngsters to get involved through school projects

Major problems with Japanese knotweed and Giant hogweed in these parts of the Crane.

More ponds

Community Garden, Tree planting events, Sutton Playing Fields

Extend the river restoration work along the DNR

Brentford Waterside - a rich ecology. Management of river banks for wildlife

Underpasses for amphibians and hedgehogs near all busy roads, creation of many ponds or wetland areas, tidal flood plane at dukes meadows? Rain gardens near all hard structures across the borough.

Perhaps adding more greenery to river bed to improve water quality

Bird houses in street trees

Donkey wood and brazil mill project includes biodiversity improvements - wet woodlands etc if funding provided

Duke of Northumberland's River

Keeping parks Clean

River restoration opportunities along the Crane

More ponds! Yes! See Gunnersbury Triangle for a fantastic local example with his board walk

Encourage people to de-pave their front gardens. See <http://frontgardenplants.nationalparkcity.org/>

The tidal Crane is a very important habitat for fish breeding - one of the few on the tidal Thames and is not properly understood or protected

Create a towpath along the length of the Thames

Also Brent Lea Park

Grand Union Canal safety would encourage a lot more walking

Feltham Marshalling Yards walking route - underpass

More workshops run by council, parks and other in parks

Some barriers remain to fish and eel migration - see LWT report

Hanworth Park - biodiversity management

Lonford River corridor - currently is an afterthought

Water vole re-introduction linking to project proposed in LB richmond

help reduce NoGO green areas by better collaboration with owners and police

enhancements and guidance to residences to improve their spaces

Use pocket parks

Nature Reserve importance for Conservation

get the wider community involved by doing more engagement work

No trees chopped down unless dying

Plan to connect Kempton, Hanworth, Bedfont and Feltham sites (and amenities/access routes)

St London SPA & RAMSAR

more wildflower beds

For a previous slide, make Waterman's Park a green feature off the High Street in Brentford

Footpaths cleaned & made safe for people to walk more

how about getting kew involved?

Upgrade Lighting on roads & Footpaths

Wildlife corridor
SSSI



2.3.3 Green and Blue Corridors

Green and Blue Corridors Delivering Well
Canal side from Brentford - starts well but then you get a bit lost as head north!
Heston Village to Osterley Park corridor is beautiful
From Chiswick High Road down to the river along Dukes Avenue and through Chiswick House avenue, works well mostly but not well sign posed at high road and you get stuck / lose way at the pedestrian crossing at south side of Chiswick House on Burlington Lane. Link through to Corney Road
From Hammersmith bridge around to Duke Meadows and onto Chiswick Bridge (will be better with the under-railway bridge pedestrian link)
Riverside is a good option for walking rather than the High Street
Duke's River walk works well and creates a three-river loop with the Thames and the Crane
Routes through North Feltham to Bedfont. These areas at risk of development proposals
The route through Crane Park Pevensey and Hanworth Park now works well - though it could do with some maintenance
Brentford Syon Pk, Isleworth Riverside good for active travel varied, green and blue
Hanworth Park to Kempton footpath via Church lane and footbridge
Hanworth Park to Ludlow Road open space and on to Bull's / Church field and Bedfont Lakes

Table 18 Green and Blue Corridors Delivering Well

Green and Blue Corridor Opportunities
Complete footbridge works at Dukes Meadow
Improvement of links (e.g. Public realm / signage) through Brentford / river Brent to river Thames
Improvements to towpath surfaces along the GUC to Quietway's spec, further opportunities for towpath improvements within Hounslow
Protection and enhancement of the Grand Union corridor and channel - commuting, foraging and roosting habitat for bats; Great Crested Newts within canal side ponds; INNS control in canal and Brent river channel;
Must ensure the promotion of green links and Thames path extends to more deprived communities (Schools)
Brentford to Birmingham along the Grand Union Canal - Hanwell flight Ancient monument;
Osterley Park - National Trust ambition to work in partnership to improve access for walkers and cyclists and links through Park to local strategic walking routes
Improve surface, widen where possible, deal with litter and graffiti Canal path
Pedestrian crossing needed at A4 Cranford to assist river corridor walking/cycling connectivity.
Take all opportunities to open up Chiswick Riverside behind Hartington Rd
Wider canal network - connection to London and copious green spaces
Join up Thames Path - Smith Hill, Victoria Steps

The different routes need to be identified in terms of the usage i.e. Is it recreational cycle/walking route or commuter cycling/walking route - this will affect the impact on the different sites especially the sins

Sort out Brent path - Ballymore site and around The Ham (Step free!)

Need to create green active travel routes to and from Heathrow

Pedestrian bridge required over A30 at Hatton Cross to restore Crane river corridor walking/cycling connectivity

Really important to consider how we create "Green Travel Corridors from east to west through our less green centre of the borough - Could the A4 or a parallel route be an effective means of creating this?

Need to create a network of green routes expanding from high streets

Colne and Crane Valleys Green Infrastructure Strategy 2019 has lots of detail of where improved links are required along thriver corridors.

Help inform the detailed design of proposed pedestrian 'clean air routes' parallel to A4/M4 (Draft LBH Great West Corridor Local Plan Review)

A number of active travel improvement opportunities were identified in the Colne and Crane GI strategy.

Slough arm canal;

Colne valley;

The Thames Path runs through the TSKC area linking Boroughs in Hounslow, Richmond, RBKC, Wandsworth and LBHF.

London Geodiversity Partnership have a series of walks (don't know if cover Hounslow or not)

Improved planting along A4

Pedestrian crossing over A4 at Cranford

A pedestrian bridge is required over A30 at Hatton Cross to connect river corridor here.

Improvements along the crane to make it safer and more accessible

Potential corridor to Slough + Windsor through Hounslow. Current connection is car centric. Could be accessible for all by segregated bike paths.

Cycle and walking along the grand union canal between Brentford and Bulls bridge

The A30 is a major barrier to movement along the Crane corridor

Great West Corridor/A4 - need to green the corridor

The upper Duke's corridor should be a high value green corridor link between the Crane and Colne. However, at present it is in a disgraceful condition overgrown and virtually inaccessible. Parts are also locked off

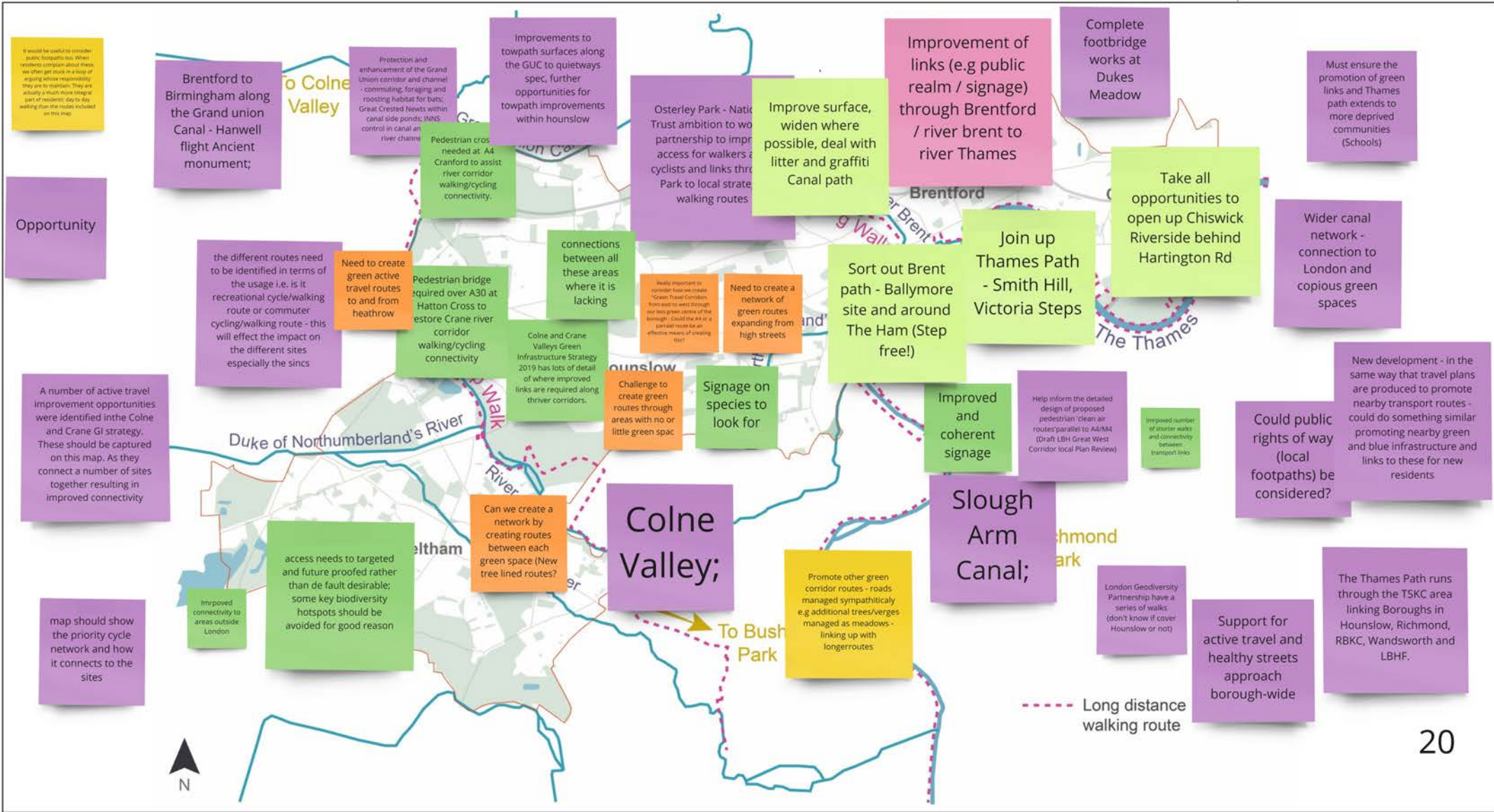
The link through Feltham Marshalling Yards has been an issue for at least a decade. It is a key link between the lower and middle Crane. Supposedly there is an agreement to resolve it between LBH and Network Rail but not yet seen by FORCE

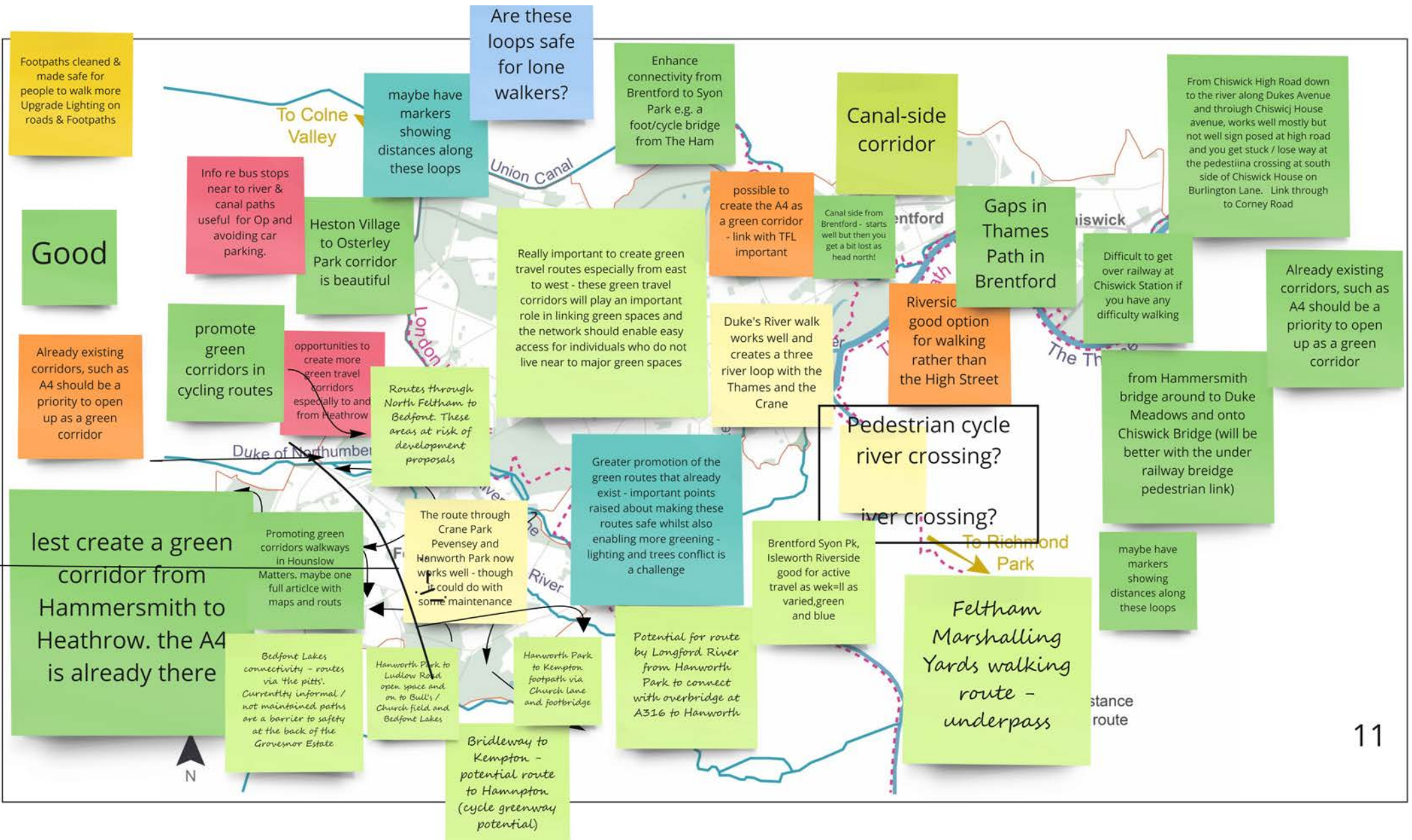
Feltham Marshalling Yards walking route - underpass

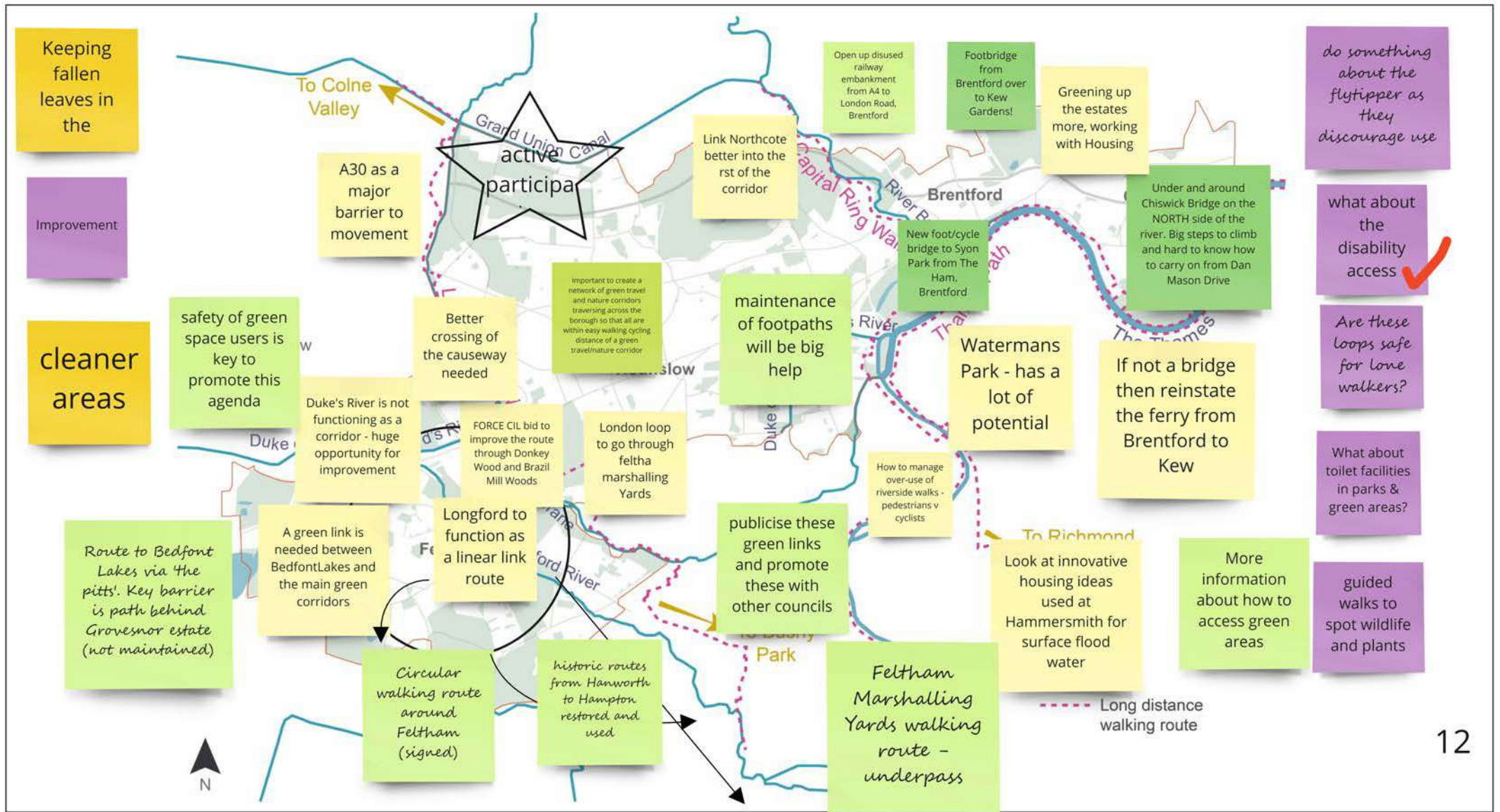
A4 need to make it more welcoming to go under and over it to get to the river

Crossing of A312 - there are bridges, but pretty inaccessible. Longford River route and Hanworth Park routes offer possibilities
Footpaths / Bridlepath at Kempton - just finishes.
Potential for footpath / signed route to Hampton Common / Heathrow Park Hampton
Already existing corridors, such as A4 should be a priority to open up as a green corridor
Possible to create the A4 as a green corridor - link with TFL important
Gaps in Thames Path in Brentford
Enhance connectivity from Brentford to Syon Park e.g. A foot/cycle bridge from The Ham
Best create a green corridor from Hammersmith to Heathrow. The A4 is already there
Difficult to get over railway at Chiswick Station if you have any difficulty walking
Opportunities to create more green travel corridors especially to and from Heathrow
Already existing corridors, such as A4 should be a priority to open up as a green corridor
Potential for route by Longford River from Hanworth Park to connect with overbridge at A316 to Hanworth
Bedfont Lakes connectivity - routes via 'the pitts'. Currently informal / not maintained paths are a barrier to safety at the back of the Grosvenor Estate
Bridleway to Kempton - potential route to Hampton (cycle greenway potential)
Feltham Marshalling Yards walking route - underpass

Table 19 Green and Blue Corridor Opportunities







2.4 Nature on the Doorstep/ Urban Greening Interventions

In Workshop 2 participants were asked about potential for urban greening initiatives in their area.

Urban Greening Potential
Green area around Hatton Cross station
Green under the M4 flyover
Encourage foraging. Help groups to collect and harvest fruit tree collection
Encourage bats in Boston Manor Park and hedge hogs
Change turf for wildflowers
Make residents aware of SINCS in the borough and encourage them to access them
Brentford estates could be greened a lot more
More trees in parks, more street trees
TPOs for the mature historic trees esp. In Boston Manor Park
Encourage allotments
Use bus stops roofs as green roofs
M4 overpass is a grey polluting blight cutting through Brentford, needs more collaboration to green it
Green along Brentford High Street. We did a planting project at the Square this summer already so more to tie in with that.
Allotments on estates, like Golden Baggers in Tower Hamlets, allotment spaces in garden bags, very good
Encourage driveways owners to keep de-pave. Council incentive
Adopt a tree, a verge, a hedge scheme
Leave fell trees in nearby green spaces
Great West Hedge along the Great West Road
Dedicated days for neighbours to meet up, like Street Play but Planting Play or Tree Play
Plant bulbs next to trees
Water harvesting in public areas and parks to help summer watering
Add plants and flowers in small spaces
Reduce overgrowth and weeds with local participation
Green roofs
Grow more fruit trees along the roadside there is the Thames Water strips of land running through the borough these areas could be converted to gardens
Large scale development proposed for North Feltham - easy answer is stop it! Harder answer is ensuring all have zero impact on landscape
Weeds are not all bad - it is important to help people understand what is acceptable around public spaces, paving etc. See @morethanweeds as example of weeds as good things

Better education of residents of the positives of trees
Hedgehog tunnels/walkways in garden fences!
Generate more collaboration with privately owned landscapes
Plant new trees with no SAP to save our cars
Improvement of route by railway line through to pits
Work with TFL around A312 in this area
Put more fruit trees so children can enjoy
These SINC sites are earmarked for development under the West of Borough Plan. You may need to change your evaluation for this area
Crack down on damage to verges by drivers
What about bird boxes on street trees for small birds e.g. Robins
More fragrant bushes and plants
Protect Hanworth Park from overdevelopment - Council proposing building flats on park
More trees & roadside flower beds along High Streets /Main Roads
Keep existing trees and not just focus on planting (and monitor those that are planted)
Starter Allotments and supporting new starters with allotments with local very small areas very close to apartments
More front gardens, rather than paved-over for carparking
Greatly boost number of small, manageable mini-allotments for flat-dwellers to be able to grow their own food -- especially in lockdown scenario.
Right tree, right place

Table 20 Urban Greening Potential

2.5 Working in partnership to delivery the strategy

Workshop 2 were asked to identify partners to help deliver the strategy and add them to a Matrix to show spatial relevance and whether an established or new potential partner.

Established Partner	New Partner
Air Quality Brentford	Businesses to give something back near their venue
Friends of Verges	Sky and GSK
Watermans Arts Centre	Environmental champions across the borough
Heston Action Group	Schools
Lampton 360, Hounslow Highways	Potential for new projects in partnership with TCV
Feltham in Bloom	Brentford FC
Equalities Groups	Hounslow Singh Sabha gurdwara
FORCE	Chiswick business park
Social media groups - e.g. wildlife in Hounslow Borough	Arts and music groups using open spaces more to bring more people to those spaces
Friends of Boston Manor Park	
Friends of Inwood & other Parks.	
In Bloom competitions	
South West London Environment Network	
Thames 21	
Crane Valley Partnership - LBH are members	
SWR - station adoption and greening	
Heathrow airport	
Northumberland Estate	
London Underground stations	
Neighbouring attractions - e.g. Kew Gardens / Hampton Court	
National Park City Foundation and NPC Rangers	
GiGL to help measure and publish change	
All of the surrounding boroughs	
TfL	
Highways England	
Friends of the Earth	
Network Rail	
Canal and Rivers Trust	

National Trust	
----------------	--

Table 21 Established and new partners

Participants of both workshops were asked to consider partnerships working well in Hounslow, they kinds of barriers they faced to deliver and how they can be overcome.

Partnerships Working Well
Groups in 3-Town area of Feltham / Hanworth/ Bedfont work well together.
Cultivate London is also a great group who work across the Borough
LGOAL (Let's go outside and learn) do amazing work in engaging refugee groups and others in open spaces in LB Hounslow and elsewhere
Council and residents, in recent couple of years has improved no end because they are listening and working plans into actions
Crane valley partnership works very well on a very limited budget
The friends group partnership is working well after a very sticky period - due at least partly to the use of SWLEN as a supportive and independent chair
Heston Action Group and other resident associations with council working well. Council show they are listening and consult. This translates into positive actions.
Abundance London working well in local projects when supported by council
HAG does great work. Recently they planted fruit trees in Heston were stolen We have to overcome these challenges
Air Quality Brentford have worked with Hounslow Council, Parks and Leisure, Hounslow Highways, TfL, South Western Railway, but probably at capacity now
Friends groups and forum
Thames Vision (PLA)
Heston Action Group
Cranford Action Group
Green Recovery Board
Parks Team and WOC Lampton360 (GreenSpace360)
Community Reference Groups - Climate, Greener and cleaner
Green Flag Award site development with Friends and Community Groups
Residents Associations
LEDNeT
West London Climate Emergency Group
London Boroughs Biodiversity Forum

HSPG
London Green Infrastructure Partnership (GLA)
GIGL
London Urban Forest P'ship (FC/GLA), boroughs only represented through LTOA
The TSKC partnership with 5 Boroughs including Hounslow is working well
West London River Group (up to 30 local community groups along the River)

Table 22 Partnerships working well

Barriers to more effective partnership working
Not having the necessary infrastructure to support our activities such as storage, facilities for the volunteers or green spaces not being accessible for everyone
Lack of consultation
It is proving very difficult to engage with St Mungos on the issue of people living in local open spaces
Lack of funding
Too much reliance on Heathrow airport - West Area Plan was dominated by Heathrow's wish list for development / 3rd runway
Lack of green space and gardens available in and for schools so harder to engage young people early
LBH funding
Lack of consistent management
Someone to take leadership role and coordinate partners and raise awareness
Lack sharing of plans and contributions
Planning consent
TFL need to be more accountable to local communities especially in the management of routes such as A4
COVID-19 has been a barrier as good has had to be halted.
Issues where responsibilities are shared between stakeholders
Brexit - impact on whether EU environmental legislations will continue
Funding
Barriers to delivery
Lack of resident buy-in to some green infrastructure projects - need to ensure residents are properly consulted/engage with
Competition between delivery partners
Core revenue funding
Funding mechanisms
Commercial pressures/affordable housing pressures on land use
Uncertainties over annual grant funding

Local priorities can conflict with regional priorities
COVID19 - reducing the perceived importance/media coverage and political will to address climate change emergency
Contradictory objectives relating to future land use in the Borough
Increasingly crowded market of delivery partners
Political pressures - how central will environmental policy be with future governments
Too many partnerships working in isolation with shared vision
Finance
Lack of space for community projects
Poor website - doesn't promote engagement
Skills barrier in communities
Need to form Community Reference Groups to lead on equalities in the public realm and a young persons CRG - some early interactions have started this creation process through the green recovery
Lack of public understanding
Over-reliance on a single form of engagement, e.g. Community reference groups, can mean that a small number of residents have all the voice, with the majority not being heard
Resource limited both financial, people and materials
Lack of strong political commitment backed by action
Concerns regarding historic community control issues and agendas - barriers to engagement
Too many partnerships to be effective on
Lack of truly representative community capital
Maintenance and management costs/time scales
Balancing the views of communities and achieving consensus
Lack of trust
Need to make grant funding for small projects more easily accessible - not just 2/3 grant rounds a year
Timing of development - & S106 / CIL funding
Differing agendas LBH/EA/PLA/CRT
Tensions between strategic and local priorities

Table 23 Barriers to effective delivery

Overcoming barriers
Use local community rather than external contractors for tasks - far more cost-effective
Need to ensure representation from across the borough and embrace diversity
Small groups can seek funding that the council can't so working in partnerships is important

I should like to see more disaffected groups involved e.g. Refugees and asylum seekers, homeless and offenders.

Thriving Communities Funding needs to focus on benefits to people

We really need a biodiversity group to work on the BAP and have this linked to planning policy

Collaboration with local residents of the streets

Recognise and award what individuals and businesses do. Celebrate their actions and their contributions to specific strategy goals

Perceptions of councils being limited in where they can influence. Need to make sure not just presented as Public space actions - must include PRIVATE SPACES as well

A clear link or website that combines that good work that is already out there

Clear guidance/guidelines for residents to work within

Insurance assistance for resident groups

Need a joined-up approach within LB Hounslow re land use objectives

Identifying the full range of funding option and the most appropriate organisation to apply

Working with community groups to help design and deliver initiatives and secure funding within their local environments

Closer links on GI planning with neighbouring Boroughs e.g. Hillingdon and LBRuT

Need to gain a full understanding of Return on investment (ROI) to generate greater investment opportunities

Keep CVP informed about projects so partners can support

Hounslow Highways management of street trees

Innovative finance

Set up inter-departmental working group with semi-regular meetings to keep everyone updated on strategy development/ implementation

Need to tackle GI provision at a cross-Borough landscape scale, not parochial Borough level.

Need to create opportunities for whole neighbourhood engagement to improve local representation

Give residents 'tools' e.g. Seeds, bulbs, bee boxes and other materials

Empower communities to take action without barriers

We need to be open to working with residents and giving them opportunities to take decisions on things that affect their area

Respectful dialogue

Revenue opportunities: cafes, workshops, exhibitions, events, marketing

Design competitions - schools, college, university

Tighter planning conditions to ensure good work not undone

CIL funding

Creating a Hounslow Green Bonds process

Need to ensure there is a joined-up approach between different developments / developers along the same link to make sure opportunities are taken with regard to green infrastructure improvements
Take advantage of the Crane and Colne B&G infrastructure strategy
Using COVID-19 and the evidence of the importance of green space and nature to harness movement forward and to enhance funding
Ensure provision and quality standards are well-known and honoured
Permanent protection of space (with fit) can ensure questions on future land use are answered
Ensure strategy feeds in to next Local Plan review (and Infrastructure Delivery Plan) to ensure developers contribute to GBI improvements
Bureaucracy reduction
SLAs for friends groups
Look at merging some partnerships

Table 24 Overcoming barriers

3 Nature Recovery and Urban Greening Workshop

3.1 Key Issues

Workshop participants were asked to which of the below seven issues facing Nature Recovery were most pertinent in Hounslow, by indicating their top three priority areas. The responses are shown below.

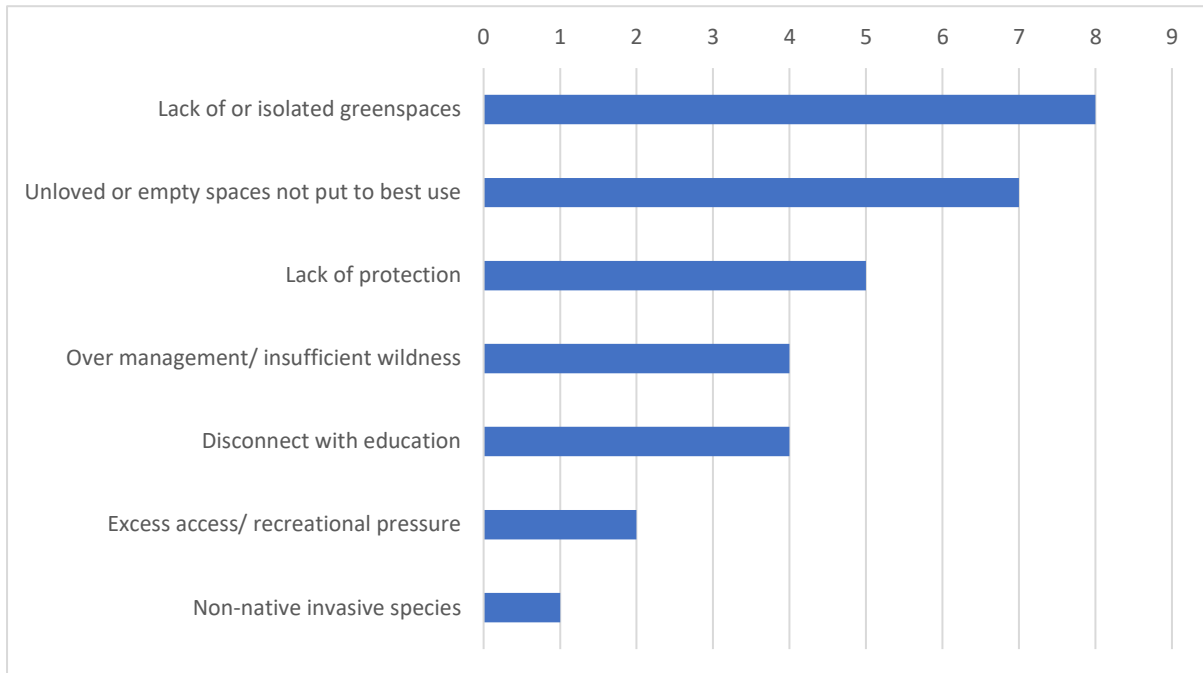


Fig 13 Key Issues facing Nature Recovery

Participants were further asked to identify key actions of the Action Plan under these headings.

The responses are shown below.

Grasslands	Woodland and Parkland	Trees	Enclosed beds, borders and shrubs	Wetlands and open water	Green architecture
Use areas for education - e.g. Forest schools	Attractive and safe woodland to encourage use	Use felled trees as natural play/barriers/benches etc	Sustainable planting, moving away from annual formal bedding. Use of hedges to	Don't forget wet woodland in River Corridors.	Require in planning policy when new developments are being drawn up, that green

			create 'biodiverse' corridors		infrastructure (SUDS, pollinator pathways, green walls, roofs,
Leave longer grass around the edges of spaces	Leave dead wood in situ	Proactive management of pest and disease	Public realm strategies need to include well designed GI, and this should be included in the Infrastructure Delivery Plan to ensure planning contributions are secured to this end	Please refer to Colne and Crane Valleys Green Infrastructure Strategy 2019	Ensure that the Local Plan policies are updated to reflect the UGF and BNG. Would the council will be willing to set higher targets then those set out in the emerging London Plan
	Making better use of felled trees as lop piles for invertebrates	Protecting mature and veteran trees is more important for biodiversity than planting new trees.	Lack of collaboration/ integration e.g. Opportunities for street greening when highway works take place	Lack of Deadwood and laid wood in rivers - good for fish & inverts	Build in green infrastructure into street projects
		Key to plant right tree in right place with tree planting, some scrubby areas are key to wildlife		Wetlands and open water important to our society	Ensuring developers include urban greening measures early on in the design of schemes, in line with UGF policy

		Ensure all development land includes a minimum 30% tree canopy cover.		Sympathetic management of surrounding habitats to benefit waterways	Improving connectivity along river corridors is crucial for wildlife
		Use best trees for carbon capture etc at most polluted sites			Water quality issues - unresolved misconnections
		Aftercare plan for trees important in trees surviving, especially if part of a school or community or other project			

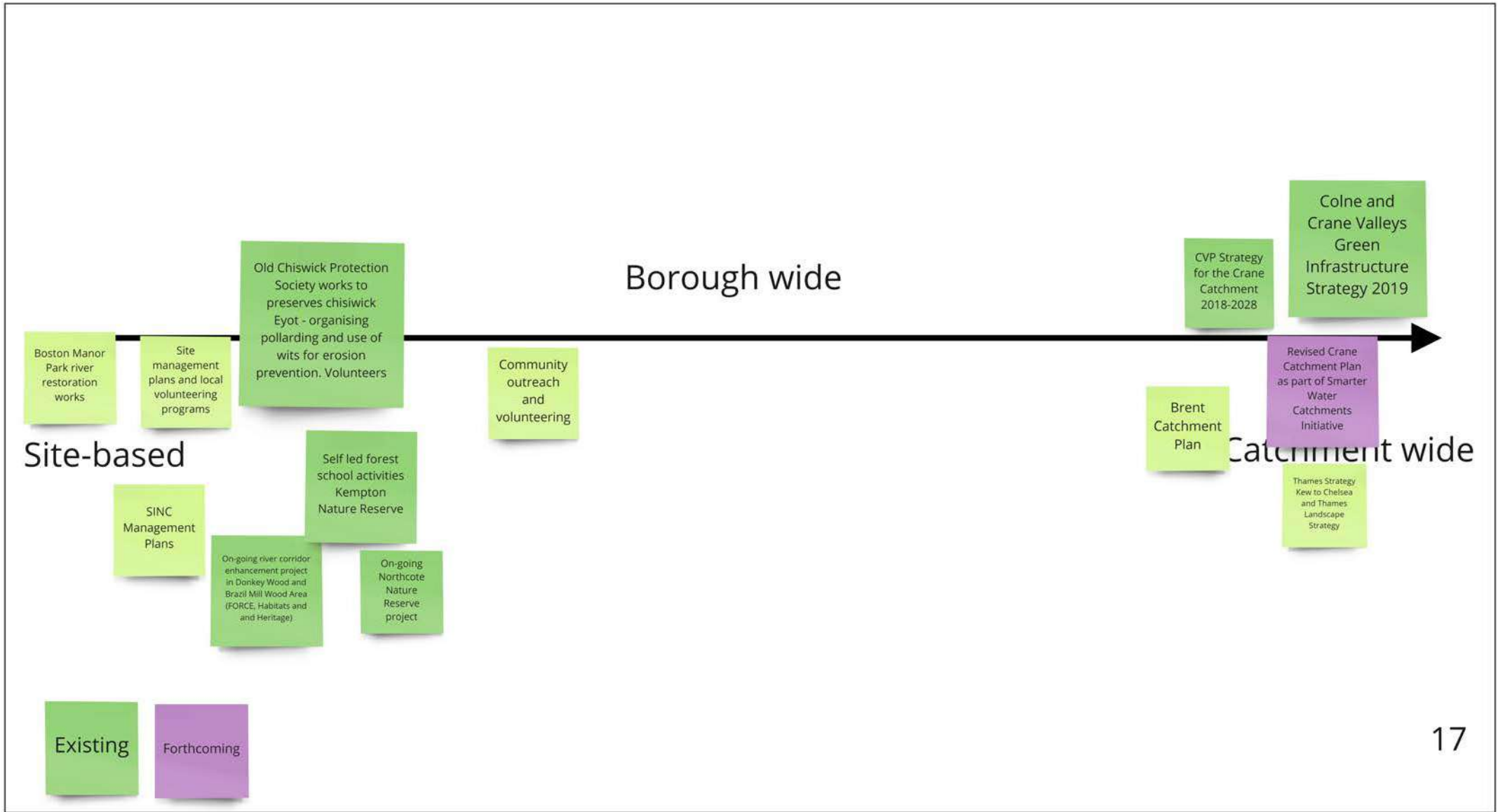
Table 25 Key Issues by habitat

3.2 Existing / forthcoming projects or initiatives of relevance

Existing	Forthcoming
Colne and Crane Valleys Green Infrastructure Strategy 2019	Revised Crane Catchment Plan as part of Smarter Water Catchments Initiative
Old Chiswick Protection Society works to preserves Chiswick Eyot - organising pollarding and use of wits for erosion prevention. Volunteers	
CVP Strategy for the Crane Catchment 2018-2028	

Boston Manor Park river restoration works	
Site management plans and local volunteering programs	
Community outreach and volunteering	
Brent Catchment Plan	
Self-led forest school activities Kempton Nature Reserve	
Thames Strategy Kew to Chelsea and Thames Landscape Strategy	
SINC Management Plans	
On-going river corridor enhancement project in Donkey Wood and Brazil Mill Wood Area (FORCE, Habitats and another Heritage)	
On-going Northcote Nature Reserve project	

Table 26 Existing / forthcoming projects or initiatives of relevance



3.3 Opportunities

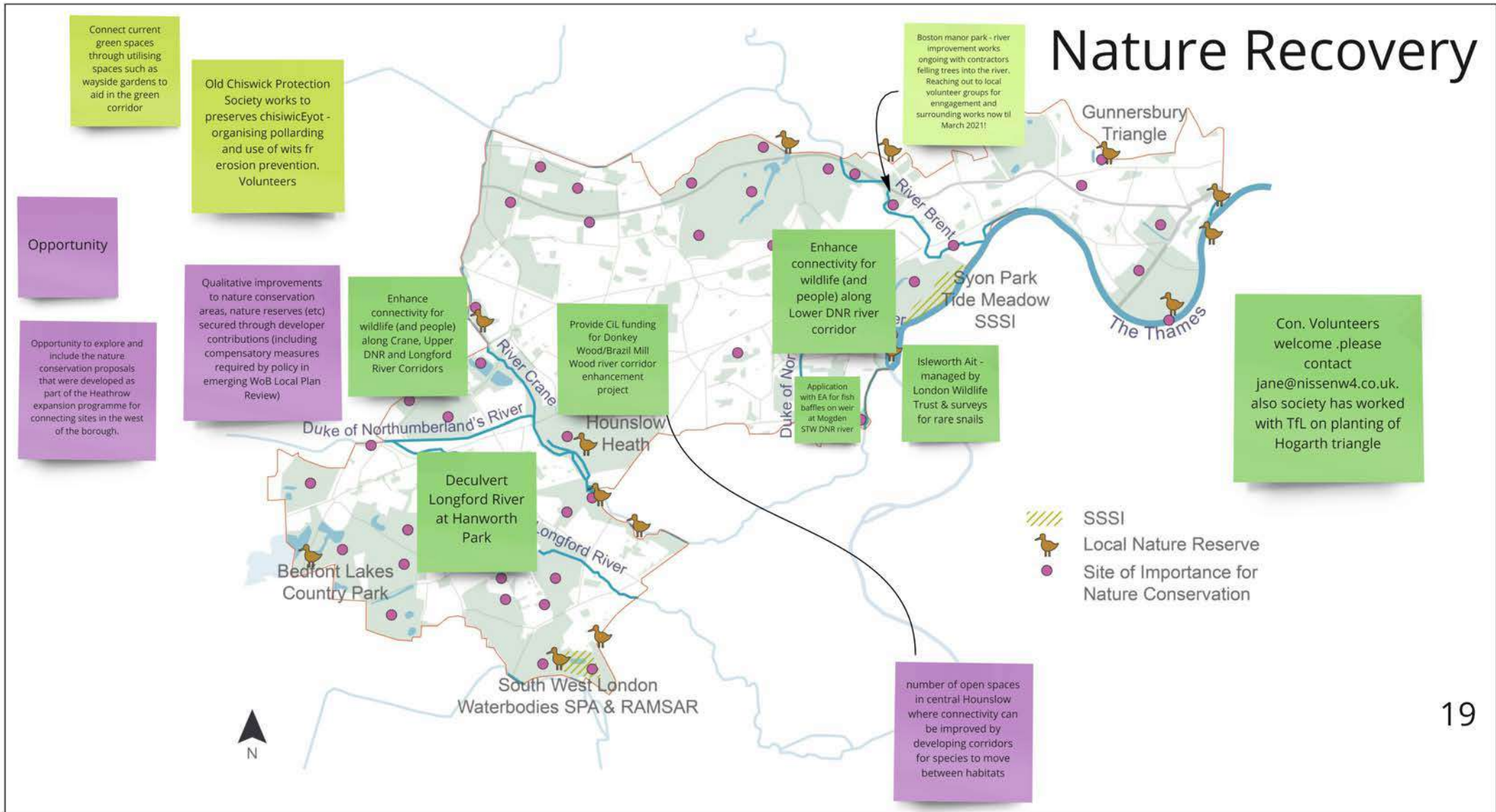
Participants were asked to identify opportunities for nature Recovery and Urban Greening on a spatial basis. Responses were as shown.

3.3.1 Nature Recovery

Opportunities
Connect current green spaces through utilising spaces such as wayside gardens to aid in the green corridor
Boston manor park - river improvement works ongoing with contractors felling trees into the river. Reaching out to local volunteer groups for engagement and surrounding works now until March 2021!
Old Chiswick Protection Society works to preserves Chiswick Eyot - organising pollarding and use of wits for erosion prevention. Volunteers
Enhance connectivity for wildlife (and people) along Lower DNR river corridor
Qualitative improvements to nature conservation areas, nature reserves (etc) secured through developer contributions (including compensatory measures required by policy in emerging WoB Local Plan Review)
Enhance connectivity for wildlife (and people) along Crane, Upper DNR and Longford River Corridors
Provide CiL funding for Donkey Wood/Brazil Mill Wood river corridor enhancement project
Opportunity to explore and include the nature conservation proposals that were developed as part of the Heathrow expansion programme for connecting sites in the west of the borough.
Isleworth Ait - managed by London Wildlife Trust & surveys for rare snails
Application with EA for fish baffles on weir at Mogden STW DNR river
Deculvert Longford River at Hanworth Park
Number of open spaces in central Hounslow where connectivity can be improved by developing corridors for species to move between habitats

Table 27 Nature Recovery Opportunities

Nature Recovery



Connect current green spaces through utilising spaces such as wayside gardens to aid in the green corridor

Old Chiswick Protection Society works to preserves chiswicEyot - organising pollarding and use of wits fr erosion prevention. Volunteers

Boston manor park - river improvement works ongoing with contractors felling trees into the river. Reaching out to local volunteer groups for engagement and surrounding works now til March 2021!

Opportunity

Qualitative improvements to nature conservation areas, nature reserves (etc) secured through developer contributions (including compensatory measures required by policy in emerging WoB Local Plan Review)

Enhance connectivity for wildlife (and people) along Crane, Upper DNR and Longford River Corridors

Provide CIL funding for Donkey Wood/Brazil Mill Wood river corridor enhancement project

Enhance connectivity for wildlife (and people) along Lower DNR river corridor

Application with EA for fish baffles on weir at Mogden STW DNR river

Isleworth Ait - managed by London Wildlife Trust & surveys for rare snails

Opportunity to explore and include the nature conservation proposals that were developed as part of the Heathrow expansion programme for connecting sites in the west of the borough.

Con. Volunteers welcome .please contact jane@nissenw4.co.uk. also society has worked with TfL on planting of Hogarth triangle

Deculvert Longford River at Hanworth Park

-  SSSI
-  Local Nature Reserve
-  Site of Importance for Nature Conservation

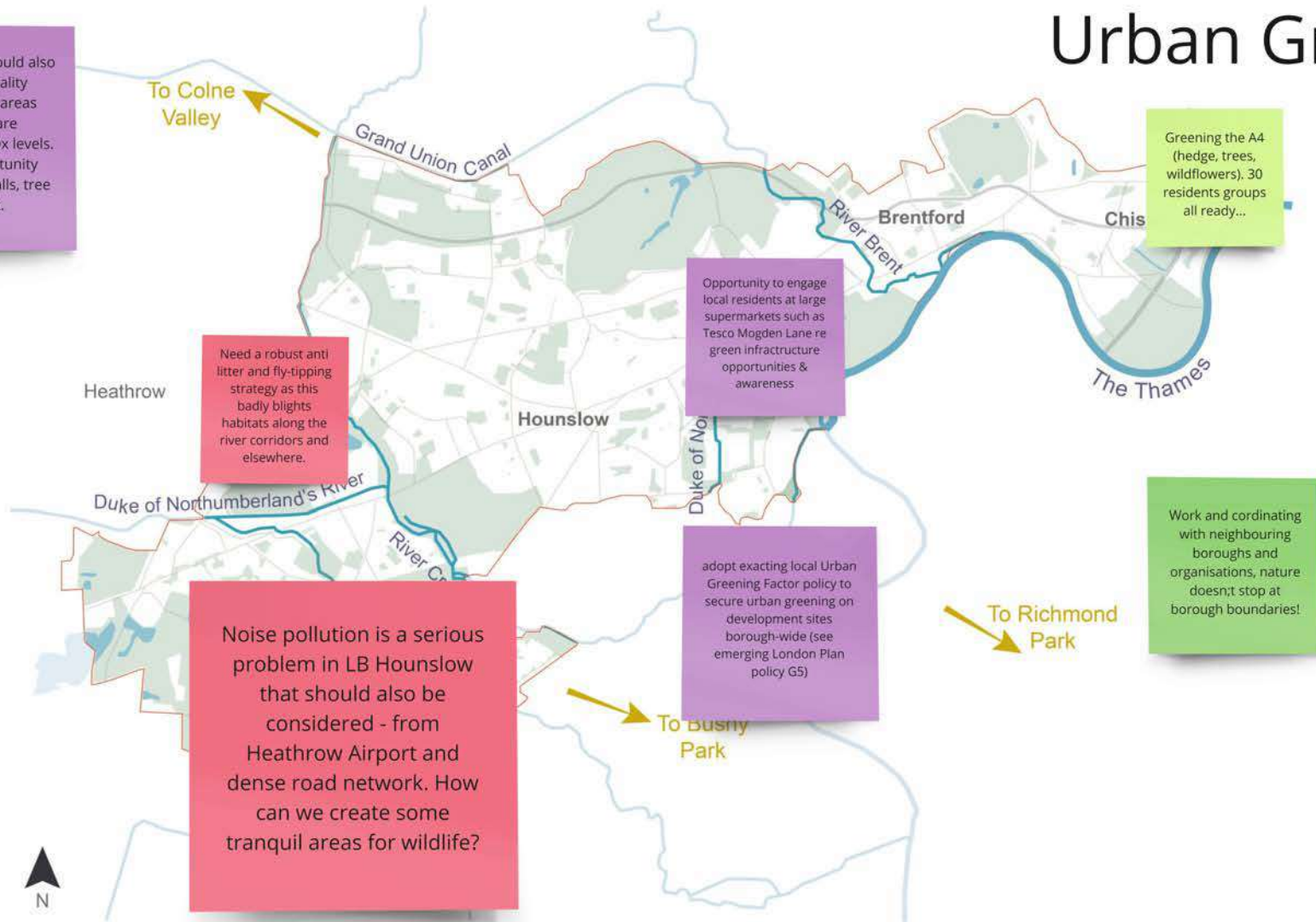
number of open spaces in central Hounslow where connectivity can be improved by developing corridors for species to move between habitats

3.3.2 Urban Greening

Opportunities
Urban greening should also consider air quality especially those areas where there are exceedances in NOx levels. These are opportunity areas for green walls, tree planting etc.
Greening the A4 (hedge, trees, wildflowers). 30 residents' groups already...
Opportunity to engage local residents at large supermarkets such as Tesco Mogden Lane re green infrastructure opportunities & awareness
Need a robust anti-litter and fly-tipping strategy as this badly blights habitats along the river corridors and elsewhere.
Engaging with residents and promoting the save it, don't pave it campaign.
Work and coordinating with neighbouring boroughs and organisations, nature doesn't stop at borough boundaries!
Adopt exacting local Urban Greening Factor policy to secure urban greening on development sites borough-wide (see emerging London Plan policy G5)
Noise pollution is a serious problem in LB Hounslow that should also be considered - from Heathrow Airport and dense road network. How can we create some tranquil areas for wildlife?
Education and awareness raising on the simple measures residents with private gardens can take to green their environment

Table 28 Urban Greening Opportunities

Urban Greening



urban greening should also consider air quality especially those areas where there are exceedances in NOx levels. These are opportunity areas for green walls, tree planting etc.

Opportunity

Greening the A4 (hedge, trees, wildflowers). 30 residents groups all ready...

Opportunity to engage local residents at large supermarkets such as Tesco Mogden Lane re green infrastructure opportunities & awareness

Need a robust anti litter and fly-tipping strategy as this badly blights habitats along the river corridors and elsewhere.

engaging with residents and promoting the save it, don't pave it campaign.

education and awareness raising on the simple measures residents with private gardens can take to green their environment

Noise pollution is a serious problem in LB Hounslow that should also be considered - from Heathrow Airport and dense road network. How can we create some tranquil areas for wildlife?

adopt existing local Urban Greening Factor policy to secure urban greening on development sites borough-wide (see emerging London Plan policy G5)

Work and coordinating with neighbouring boroughs and organisations, nature doesn't stop at borough boundaries!

3.4 Ecosystem service priorities in Hounslow

Workshop participants were asked to indicate which of six ecosystem services they felt were most pertinent in Hounslow by indicating their top three priority areas. The responses are shown below.

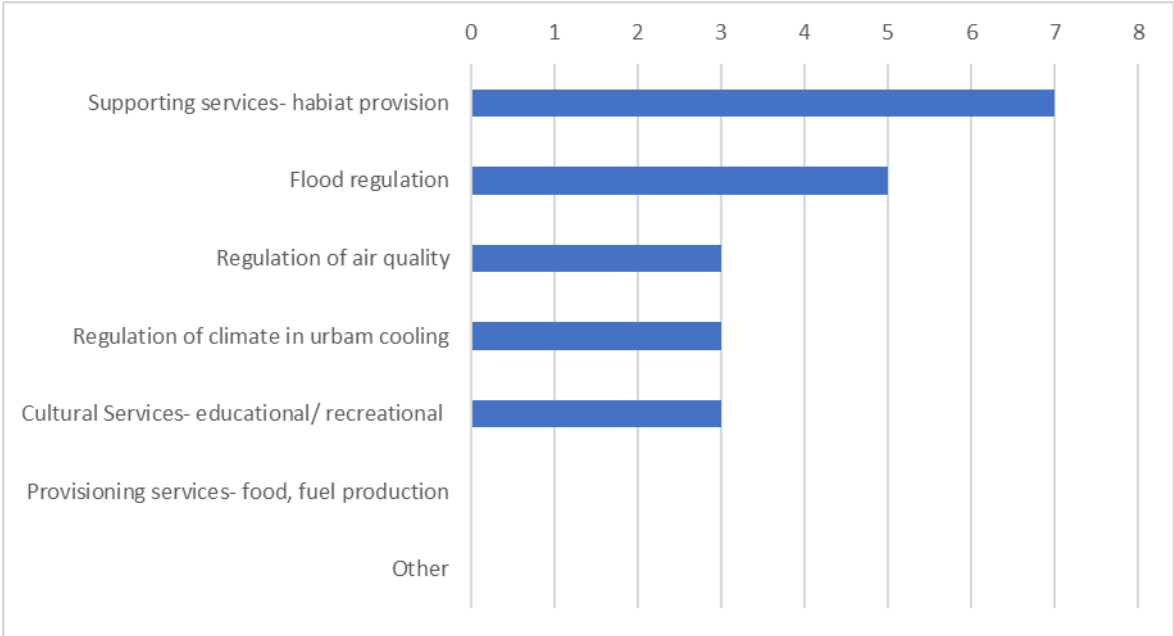


Fig 14 Ecosystem service priorities

3.5 Working in Partnership to deliver the strategy

Participants of both workshops were asked to consider partnerships working well in Hounslow, the kinds of barriers they faced to deliver and how they can be overcome.

Partnerships working well	Barriers to delivery	Overcoming Barriers
Crane valley partnership	Shortage of core funding	Cross-boundary working is required. Need to see lb Hounslow in the wider crane catchment context not as a standalone entity.
LBH v helpful in providing our Society with replacement street tree	Contradictory objectives in GI Strategy and Local Plans re proposed land use (especially WRT Green Belt/mol)	Political support

T21, LBH and greener cities working together in Brent catchment	COVID-19 has halted delivery for most of the year!	G&BIS should help inform projects which are then set out in the Infrastructure Delivery Plan in order to secure funding
	Intense development pressure in the borough requires a joined up, multiple stakeholder-led policy approach to nature recovery and protection, in order to ensure harm is prevented/mitigated and benefits are secured	Has Hounslow had a Hounslow biodiversity network/forum for organisations & community groups to regularly monthly e.g. Kingston and many other boroughs have one?
	Funding! Incl. Ongoing maintenance	As a large Borough - way of coordinated communication of all subjects today
	Timescales and conflicting departmental deadlines making collaboration harder	
	Higher council priority to 'development' - which means pouring concrete. Exemplified by de-designating Green Belt.	
	How will LB Hounslow increase green cover by 14% given current intention (in draft Local Plans) to develop some of the existing open spaces?	
	Planning policy	
	Development of areas taking over green space	

Table 29 Partnerships delivering well, barriers and overcoming barriers

4 Next Steps

Contributions to all three workshops will provide key information to inform the development of the Green Infrastructure strategy, Tree Plan, Urban Greening and Nature Recovery Action Plan.

A summary of workshop findings will be circulated to participants.