

Review of Sites of Importance for Nature Conservation in Richmond upon Thames

Volume 1: Report

Produced for the

London Borough of Richmond upon Thames

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72 Sonning Gardens Hampton
Middlesex
TW12 3PN
T – 020 8979 7810
M – 07813 329396

E - enquiries@salixecology.co.uk

W – www.salixecology.co.uk

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Executive summary

Salix Ecology was commissioned by the London Borough of Richmond upon Thames to undertake a review of existing Sites of Importance for Nature Conservation (SINCs) in the borough, to consider including additional parcels of land as well as new sites for inclusion in the SINC network. The evidence provided by the review will form part of the Evidence Base for the Council's emerging Local Plan.

The study included habitat surveys of 54 sites and a review of previous survey reports for sites not surveyed. Reviews are pending for the following sites as access permission was not obtained: Royal Mid Surrey Golf Course, St Michael's Convent Garden, Hampton Court House School Grounds and The Manor House, Ham. In addition, a report for the London Wetland Centre is to be provided by the Wildfowl and Wetland Trust (the site owners) to allow this site to be reviewed.

Twenty-seven different Phase 1 habitat types (as modified by the GLA) were recorded during the 2021 survey including eight Habitats of Principal Importance for the conservation of biodiversity in England (priority habitats).

A total of 7615 species records were noted (706 individual species). Of these, 326 were London Notable species (106 individual species) and 366 were non-native invasive species (36 individual species). Two species of Principal Importance for the conservation of biodiversity in England (priority species), tower mustard and the stag beetle were also recorded.

In Richmond there are ten Sites of Metropolitan Importance. Sites of Metropolitan Importance for Nature Conservation are those sites which contain the best examples of London's habitats, sites which contain particularly rare species, rare assemblages of species or important populations of species, or sites which are of particular significance within otherwise heavily built-up areas of London. Additional expansion areas have been identified for the River Thames and Tidal Tributaries, the Crane Corridor, Richmond Park and Associated Areas, Ham Lands and Bushy Park and Home Park. It is recommended that Staines Hill and Sunnyside Reservoirs are combined with Hampton Water Treatment Works to form a single Site of Metropolitan Importance: 'Hampton Water Treatment Works and Reservoirs'.

Thirty Sites of Borough Importance are recommended in Richmond. These sites have been recommended where they support at least one habitat of nature conservation value (which may include Habitats of Principal Importance) and/or a population of notable species. New sites have been identified for designation as Sites of Borough Importance and a number of Sites of Local Importance are recommended for upgrade on this basis:

- Whitton Railsides – new site
- Udney Park – new site
- Kew Pond and Kew Green – upgrade from Site of Local Importance
- Portlane Brook & Meadow – upgrade from Site of Local Importance
- Ham Common West – upgrade from Site of Local Importance
- Terrace Field & Terrace Gardens– upgrade from Site of Local Importance
- Trowlock Avenue riverside land, Teddington – new site
- Twickenham Junction Rough - upgrade from Site of Local Importance

- Teddington Cemetery - upgrade from Site of Local Importance
- Twickenham Cemetery - upgrade from Site of Local Importance
- The Cassel Hospital - upgrade from Site of Local Importance

Twenty-two sites of Local Importance have been recommended in Richmond. These sites may already be used for nature study or be run by management committees mainly composed of local people. Three new sites are recommended for selection as Sites of Local Importance:

- Garrick's Lawn
- Townmead Allotments
- St Andrew's Churchyard and environs in Ham.

Kew Meadow Path, formally a site of Borough Importance is recommended for downgrade to a site of Local Importance.

- Old Deer Park was considered as a new SINC but this was rejected. However, part of the site close to the River Thames was recommended for inclusion in the River Thames & Tidal Tributaries Site of Metropolitan Importance.

Recommendations were also made for expanding a number of existing SINC's where additional land acts as a buffer to the existing site, is a link or wildlife corridor to adjacent sites, has nature conservation value in its own right and/or is important for the ecological functioning of the existing site. Expansion areas have been added to the following sites:

- River Thames & Tidal Tributaries
- The Crane Corridor
- Richmond Park and associated areas
- Ham Lands
- Bushy Park and Home Park
- Duke of Northumberland's River, north of Kneller Road
- Occupation Lane, Kew Railway Embankment & Snail Reserve
- The Beverley Brook from Richmond Park to the Thames
- Petersham Lodge Woods and Ham House Meadows
- River Crane at St Margarets
- Twickenham Junction Rough
- Barnes Green and Pond
- North Sheen (Fulham New) & Mortlake (Hammersmith New) Cemeteries

An expansion area to Oak Avenue LNR was considered but rejected.

Some areas were removed from existing SINC's where those areas were of negligible nature conservation value. These include areas within:

- Langdon Park
- Royal Botanic Gardens, Kew
- River Thames & Tidal Tributaries
- Pensford Field

Minor miscellaneous site boundary alterations were also recommended.

1 Introduction

1.1 Background

- 1.1.1 Salix Ecology was commissioned by the London Borough of Richmond upon Thames to undertake a review of existing Sites of Importance for Nature Conservation (SINCs) in the borough and to consider including additional parcels of land for inclusion in the SINC network. The evidence provided by the review will form part of the Evidence Base for the Council's emerging Local Plan (planned adoption is for Spring 2024).
- 1.1.2 This report is provided in 2 volumes. Volume 1 (this volume) provides the background to the project, methods, a summary of results, site analysis and recommendations and Volume 2 provides all supporting information including site survey forms, habitat maps, species lists and updated site citations.
- 1.1.3 The Open Space and Habitat Survey in Greater London survey methodology was employed for identifying SINCs and recommending an appropriate grade of designation. The survey methodology was adopted by the Mayor of London in the Biodiversity Strategy in 2002. It was originally developed in the mid-1980s by the Greater London Council for the first comprehensive survey of wildlife habitats in Greater London. Subsequently the methodology was refined and updated by the London Ecology Unit (LEU) and the Greater London Authority (GLA). The survey methodology was further modified in 2004 to take account of PPG17 open space typology.
- 1.1.4 A London Wildlife Sites Board (LWSB) has been set up which offers guidance on the selection of SINCs. The LWSB ensures that a transparent and consistent approach is applied to the selection and approval of SINCs. It ensures that the designation of new SINCs, and changes to existing SINCs, comply with the National Planning Policy Framework (NPPF), national guidance on the selection of sites, regional policy and regional guidance. The survey methodology employed and presentation of data in this report follows the guidance issued by the LWSB but is modified to allow for the more detailed mapping of habitats.

1.2 Policy context

- 1.2.1 The National Planning Policy Framework (Ministry of Housing Communities and Local Government, 2021) states in Paragraph 174: 'The planning system should contribute to and enhance the natural and local environment by:
- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)
 - recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland
 - maintaining the character of the undeveloped coast, while improving public access to it where appropriate

- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures
- preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate’.

1.2.2 Paragraph 179 of the NPPF (2021) also states that: ‘To protect and enhance biodiversity and geodiversity, plans should:

- identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation and
- promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity’.

1.2.3 Policy G6, Biodiversity and access to nature, of the London Plan (Mayor of London, 2021) states that:

A) ‘Sites of Importance for Nature Conservation (SINCs) should be protected.

B) Boroughs, in developing Development Plans should:

- use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks
- identify areas of deficiency in access to nature (i.e. areas that are more than 1km walking distance from an accessible Metropolitan or Borough SINC) and seek opportunities to address them
- support the protection and conservation of priority species and habitats that sit outside the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans
- seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context’

1.2.4 Policy LP 15 of the adopted interim plan of the London Borough of Richmond upon Thames states that: ‘The Council will protect and enhance the borough's biodiversity, in particular, but not exclusively, the sites designated for their biodiversity and nature conservation value, including the connectivity between habitats. Weighted priority in terms of their importance will be afforded to protected species and priority species and habitats including National Nature Reserves, Sites of Special Scientific Interest

(SSSI) and Other Sites of Nature Importance¹ as set out in the Biodiversity Strategy for England, and the London and Richmond upon Thames Biodiversity Action Plans. This will be achieved by:

- protecting biodiversity in, and adjacent to, the borough's designated sites for biodiversity and nature conservation importance (including buffer zones), as well as other existing habitats and features of biodiversity value;
- supporting enhancements to biodiversity.....'

1.2.5 Paragraph 5.4.1 of the plan states that: 'Biodiversity is promoted through the designation of sites and areas (statutory and non-statutory), including links and corridors, that are of nature conservation and biodiversity value. The aim of this policy is to protect and enhance the biodiversity in, and adjacent to, the borough's designated sites as well as other non-designated existing habitats and features of biodiversity value. The borough's open land and rivers, including the Thames and its islands, the River Crane, Beverley Brook, Duke of Northumberland River, Longford River and Whitton Brook, including the river banks, are vital elements that support the borough's biodiversity. It is important that all these areas, and where possible green linkages between them, are protected.

1.2.6 Paragraph 5.4.2 states that 'The Richmond Biodiversity Action Plan (BAP) sets out the Sites of Metropolitan, Borough and Local Importance for Nature Conservation (SINC) in the borough. The level of weight given to protected sites should be commensurate to their importance and the contribution that they make to wider ecological and green infrastructure networks. The highest protection should be given to sites with existing or proposed international designations, (i.e. Special Areas of Conservation, SACs; Special Protection Areas, SPAs; Ramsar Sites) and national designations (Sites of Special Scientific Interest, SSSIs; National Nature Reserves, NNRs). Strong protection should be given to sites of metropolitan and borough-wide importance, and commensurate protection should be given to sites of local importance'

1.3 SINC in the London Borough of Richmond

1.3.1 A total of 55 sites are currently designated as SINC in Richmond upon Thames. These comprise 10 Sites of Metropolitan Importance, 22 Sites of Borough Importance and 23 Sites of Local Importance.

a) Sites of Metropolitan Importance

Site reference	Site name
M31	River Thames and tidal tributaries
M76	Crane Corridor

¹ 'Other Sites of Nature Importance' include all SINC as well as a number of other undesignated sites within the borough.

Site reference	Site name
M81	Hounslow Heath (1ha within Richmond)
M82	Richmond Park and associated areas
M83	Ham Lands
M84	Bushy Park and Home Park
M85	Stain Hill & Sunnyside Reservoirs
M86	Barnes Common
M87	London Wetland Centre
M154	Royal Botanic Gardens, Kew

b) *Sites of Borough Importance*²

Old Site reference	New Site reference	Site name
RiBI01	RiB01	Royal Mid-Surrey Golf Course
RiBI02	RiB02	Lonsdale Road Reservoir Local Nature Reserve (LBRuT name: Leg 'o' Mutton Reservoir LNR)
RiBI03	RiB03	Hydes Field
RiBI04	RiB04	Duke of Northumberland's River north of Kneller Road
RiBI05	RiB05	Hampton Water Treatment Works
RiBII02	RiB06	Longford River in Richmond
RiBII03	RiB07	Fulwell and Twickenham Golf Courses
RiBII04	RiB08	Duke of Northumberland's River south of Kneller Road
RiBII05	RiB09	Strawberry Hill Golf Course
RiBII06	RiB10	Petersham Meadows
RiBII07	RiB11	Occupation Lane, Kew Railway Bridge
RiBII08	RiB12	Barn Elms Playing Fields
RiBII09	RiB13	Beverley Brook from Richmond Park to the River Thames
RiBII10	RiB14	The Copse, Holly Hedge Field and Ham Avenues
RiBII11	RiL30	Kew Meadow Path
RiBII12	RiB16	Petersham Lodge Wood and Ham House Fields

² Sites of Borough Importance grade I and grade II have now been merged into a single grade. Both old and new site references are given

Old Site reference	New Site reference	Site name
RiBII14	RiB17	Oak Avenue Local Nature Reserve
RiBII15	RiB18	Hatherop Burning Ground (LBRuT name: Hatherop Conservation Area)
RiBII16	RiB19	Hounslow, Feltham and Whitton junctions
RiBII18	RiB20	River Crane at St Margaret's (Richmond side)
RiB21	RiB21	St Michael's Convent Garden (recommended in 2016)
RiB22	RiB22	St Margaret's Residential Grounds (recommended in 2016)

c) *Sites of Local Importance:*

Site reference	Site name
RiL01	St James' Churchyard, Hampton
RiL02	Marble Hill Park and Orleans House Gardens
RiL03	Pensford Field
RiL05	Terrace Field and Terrace Garden
RiL06	East Sheen and Richmond Cemeteries and Pesthouse Common
RiL07	Hampton Court House Gardens
RiL08	Cassel Hospital
RiL09	Old Mortlake Burial Ground
RiL10	Twickenham Junction Rough
RiL11	Kew Pond and Kew Green
RiL12	Barnes Green Pond
RiL13	Ham Common West
RiL15	Churchyard of St Mary with St Alban, Teddington
RiL16	The Copse at Hampton Wick and Normansfield Hospital
RiL17	Twickenham Road Meadow, Old Deer Park
RiL18	Ormand Bank (LBRuT name: Beveree)
RiL19	North Sheen and Mortlake Cemeteries
RiL20	Hampton Cemetery
RiL21	Portlane Brook and Meadow

Site reference	Site name
RiL22	Twickenham Cemetery
RiL23	Hampton Common
RiL24	Teddington Cemetery
RiL25	Moor Mead Recreation Ground

1.3.2 A map showing the location of the borough's current SINC's is shown in figure 1 below.

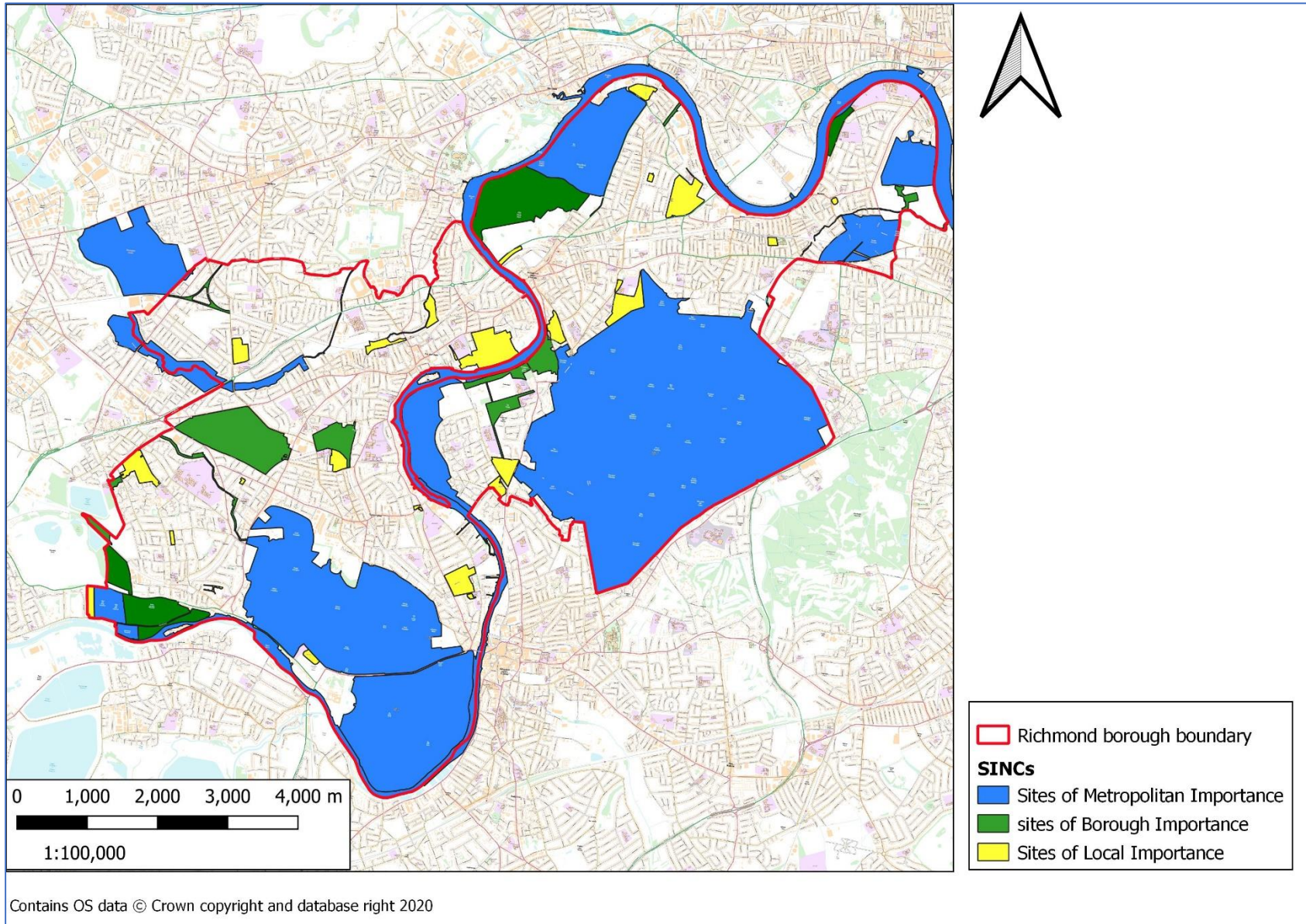


Figure 1: Existing Sites of Importance for Nature Conservation (SINCs) 2021

1.4 Purpose and objectives

1.4.1 The Biodiversity Survey will form part of the borough's Evidence Base for its new Local Plan. It will provide:

- Accurate data for the evidence base for the London Borough of Richmond upon Thames Local Plan
- An assessment of candidate sites and expansion areas of existing sites worthy of SINC designation, recommend changes to those already designated, and provide written evidence to support these recommendations.
- Recommendations for further surveys of additional sites and for priority and protected species.

1.4.2 Objectives

- Identification and classification of habitat types present and assessment of their extent and quality
- Mapping all habitats within selected existing SINCs, proposed SINC expansion areas and candidate SINCs
- Recording of frequent, characteristic and indicator vascular plant species recorded on site and their relative abundance
- Identification of plant species of particular note or rarity
- Making observations about current site conditions, management and how the site's biodiversity value could be enhanced.

1.5 Qualifications and experience of personnel

Personnel

1.5.1 The project manager was Paul Losse BSc (Hons), MSc, MCIEEM, Habitat surveyors were Paul Losse, Dr Mark Spencer PhD and Denis J Vickers BSc (Hons), FLS, CBiol, MSB, MCIEEM. Report author: Paul Losse. Mapping and GIS work: Paul Losse and Denis Vickers.

Experience:

1.5.2 Paul Losse is an ecological consultant specialising in botanical and habitat survey and is a GIS specialist. Paul has undertaken phase one and NVC mapping for a wide variety of clients. He has carried out a range of habitat surveys including a number of phase one surveys using the GLA survey protocol. These include surveys of The Regent's Park and Primrose Hill in 2007, Hyde Park & Kensington Gardens in 2013, The Green Park & St James's Park in 2014 and a full survey of the London Borough of Barking and Dagenham in 2016. Paul has also surveyed the majority of SINCs in the London Borough of Richmond upon Thames.

- 1.5.3 Denis J Vickers is one of the most experienced habitat surveyors in Greater London and particularly skilled in undertaking open space and habitat surveys using the Mayor of London's methodology: Denis carried out his first full London borough survey more than 20 years ago when he completed a survey of Wandsworth in 1992 for the London Ecology Unit. Between 2001 and 2007 Denis worked for the London Wildlife Trust (LWT) including a period as Habitat Survey Manager supervising and carrying out habitat surveys for the Greater London Authority. Whilst working in this capacity he surveyed six complete London boroughs. Denis has also completed a full survey of the London Borough of Barking and Dagenham in 2016
- 1.5.4 Dr Mark A. Spencer is an experienced field botanist and has spent over 30 years studying and recording the British and Irish flora. For 12 years, he worked at the Natural History Museum curating the historic and British & Irish herbariums. He is the BSBI vice-county recorder for Middlesex and the London Natural History Society's vascular plant recorder. Mark also acts as an advisor and consultant on invasive non-native species and forensic botany.

1.6 Quality assurance

- 1.6.1 Salix Ecology's policy is to maintain an effective and efficient quality assurance process planned and developed in conjunction with all associates, sub-contractors and clients, outlined in a series of policies and procedures which are intended to ensure high quality standards (available on request).
- 1.6.2 The assurance of quality is fundamental for all work undertaken by Salix Ecology and will be implemented by all associates and sub-contractors in their work.

2 Methods

2.1 Desktop study

2.1.1 A desktop study was carried out and the following data sourced and reviewed in preparation for the habitat survey and SINC review:

- georeferenced aerial photographs;
- georeferenced Ordnance survey Master Map;
- records of protected and notable species from the last ten years provided by Greenspace Information for Greater London (GiGL);
- details of site ownership;
- previous survey reports of the sites where available;
- Ecology Handbook 21: Nature Conservation in Richmond upon Thames (London Ecology Unit, 1993);
- Records from local 'Friends of' groups.

2.2 Access

2.2.1 Where applicable, access to each site was arranged in advance of each site visit. Where there was no open access provision the Council was approached to attempt to arrange access.

2.3 Open space and habitat survey for Greater London

2.3.1 Existing SINC's were selected for survey where a comprehensive survey of the site had not been carried out within the previous five years or where insufficient information was available to undertake a review of the site's status. Where it was expected that site owners/managers could provide a significant amount of ecological information about a site or where some survey information was available, partial surveys only were undertaken to confirm the status of the site. Potential expansion areas of existing sites as well as candidate sites identified by the client were also surveyed. Table 2 below shows sites selected for survey and figure 2 shows the location of candidate sites and expansion areas.

Table 2: Sites selected for survey

a) Sites of Metropolitan Importance

Site reference	Site name	Survey
M31	River Thames and tidal tributaries	Full. To include potential expansions to the site at Twickenham Riverside, Ham and Old Deer Park
M76	Crane Corridor	Expansion areas only. (Previous survey available for the remainder of the Crane Corridor in Richmond)
M81	Hounslow Heath (1ha within Richmond)	No (Previous survey available)
M82	Richmond Park and associated areas	Richmond Golf course, expansion areas within Palewell Park. Access not granted to expansion areas within the Richmond Park Golf Course (Previous surveys available for Richmond Park and other component sites)
M83	Ham Lands	Full
M84	Bushy Park and Home Park	National Physical Laboratory (NPL) Land expansion area only (Previous survey and data from site owner available. Bushy Park and Home Park assessed as in favourable condition by Natural England)
M85	Stain Hill & Sunnyside Reservoirs	Full
M86	Barnes Common	Full
M87	London Wetland Centre	No (NVC survey report to be provided by site owner)
M154	Royal Botanic Gardens, Kew	Partial (Habitat data to be provided by site owner)

b) Sites of Borough Importance

New Site reference	Site name	Survey
RiBI01	Royal Mid-Surrey Golf Course	No (access not granted)
RiBI02	Lonsdale Road Reservoir Local Nature Reserve (LBRuT name: Leg o' Mutton Reservoir Local Nature Reserve)	No (Previous survey available)
RiBI03	Hydes Field	Full
RiBI04	Duke of Northumberland's River north of Kneller Road	Full
RiBI05	Hampton Water Treatment Works	Full (access not granted to part of site)
RiB06	Longford River in Richmond	Full
RiB07	Fulwell and Twickenham Golf Courses	Full
RiB08	Duke of Northumberland's River south of Kneller Road	Full
RiB09	Strawberry Hill Golf Course	Full
RiB10	Petersham Meadows	Full
RiB11	Occupation Lane, Kew Railway Bridge	Full
RiB12	Barn Elms Playing Fields	Full
RiB13	Beverley Brook from Richmond Park to the River Thames	Full
RiB14	The Copse, Holly Hedge Field and Ham Avenues	No (Previous survey available)
RiB15	Kew Meadow Path	Full
RiB16	Petersham Lodge Wood and Ham House Fields	Full
RiB17	Oak Avenue Local Nature Reserve	Horse paddock expansion area only (previous survey available for the remainder of the site)

New Site reference	Site name	Survey
RiB18	Hatherop Burning Ground (LBRuT name: Hatherop Conservation Area)	No (Previous survey available)
RiB19	Hounslow, Feltham and Whitton junctions	Full
RiB20	River Crane at St Margaret's (Richmond side)	Full
RiB21	St Michael's Convent Garden (recommended in 2016)	No (access not granted)
RiB22	St Margaret's Residential Grounds (recommended in 2016)	Partial (site previously surveyed but not mapped)

c) Sites of Local Importance:

Site reference	Site name	Survey
RiL01	St James' Churchyard, Hampton	Full
RiL02	Marble Hill Park and Orleans House Gardens	Partial for Marble Hill Park (site previously surveyed but site re-landscaped. Previous survey available for Orleans House Gardens)
RiL03	Pensford Field	Full
RiL05	Terrace Field and Terrace Garden	No (Previous survey available)
RiL06	East Sheen and Richmond Cemeteries and Pesthouse Common	Full
RiL07	Hampton Court House Gardens	No (access not granted)
RiL08	Cassel Hospital	Full
RiL09	Old Mortlake Burial Ground	Full
RiL10	Twickenham Junction Rough	Full
RiL11	Kew Pond and Kew Green	Full
RiL12	Barnes Green Pond	Full

Site reference	Site name	Survey
RiL13	Ham Common West	No (NVC survey carried out in 2021)
RiL15	Churchyard of St Mary with St Alban, Teddington	Full
RiL16	The Copse at Hampton Wick and Normansfield Hospital	Full
RiL17	Twickenham Road Meadow, Old Deer Park	Full
RiL18	Ormand Bank (LBRuT name: Beveree)	No (Previous survey available)
RiL19	North Sheen and Mortlake Cemeteries	Full
RiL20	Hampton Cemetery	Full
RiL21	Portlane Brook and Meadow	Full
RiL22	Twickenham Cemetery	Full
RiL23	Hampton Common	Full
RiL24	Teddington Cemetery	Full
RiL25	Moor Mead Recreation Ground	Full

d) Candidate sites

Preliminary Site reference	Site name	Survey
B1	Garrick's Lawn, Hampton	Full
B2	The Manor House, Ham	No (access not granted)
B3	St Andrew's churchyard, Ham and environs	Full
B4	Townmead allotments	Full
B5	Trowlock Avenue riverside land, Teddington	Full
B6	Udney Park Playing Fields	Full
B7	Whitton Railsides	Full

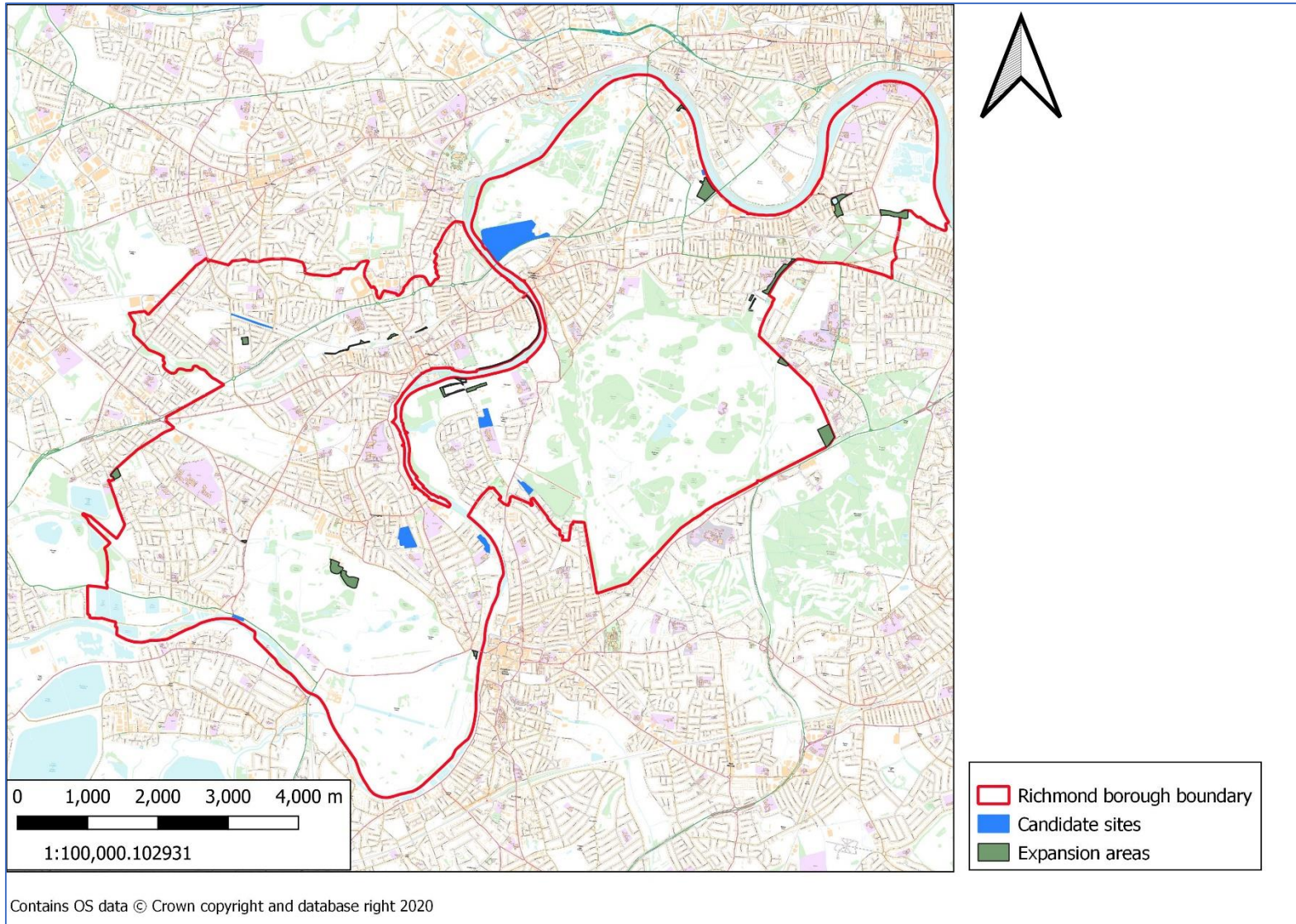


Figure 2: Candidate sites and expansion areas

2.3.2 Each site and composite parcel selected for survey was visited over the survey period from late May to early September and a habitat survey carried out. The survey followed the standard Phase 1 survey methodology (JNCC 2010) as modified by the Open Space and Habitat Survey for Greater London, revised survey specification (Mayor of London, 2004) with the following variations:

- Habitats were mapped in addition to parcels.
- All site access points were mapped with points and the 10-figure grid reference noted
- A minimum mapping unit (MMU) of 25m² or 5m width was used. Habitats larger than these dimensions were mapped using polygons. Any smaller habitats were mapped using points or lines. Hedgerows were mapped as lines as, by definition, they are below the MMU of 5m width.
- Field mapping was over aerial photography to ensure accuracy. Where features could not be easily discerned using aerial photographs, or where these were clearly out of date, a handheld GPS unit was used to measure habitat location and extent.
- Lines of trees were mapped as a line of points (if less than the MMU width). The points do not represent individual trees
- Scattered trees were mapped using points or polygons, depending on extent and density. The points do not indicate the exact location of trees but are indicative only
- Dominant, characteristic, habitat indicator and non-native invasive species were recorded together with an assessment of their abundance using the DAFOR scale (a subjective assessment where D=dominant, A=Abundant, F=frequent, O=occasional, R=rare). Scientific names follow Stace (2019). A species recording form with the 500 most frequent GiGL records for the London area has been developed to allow efficient recording.

2.3.3 The location of the following species was target noted with a 10-figure grid reference:

- Species protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended)
- Nationally rare species
- Nationally scarce species
- Red data book species
- Species of Principal Importance in England. These species were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework (Defra 2012)
- Notable species for the Greater London area. Notable is defined as species which were recorded from 15% or fewer of the 400 two-kilometre recording squares (tetrads) in Greater London in the Flora of the London Area (Burton 1983)
- Trees which are notable because of size or likely antiquity

- Non-native invasive species listed under schedule 9 of the Wildlife and Countryside Act 1981 (as amended).
- 2.3.4 In accordance with best recording practice, each target note for a species included the name of surveyor, determiner, scientific name, parcel reference, grid reference and date.
- 2.3.5 Species listed as species of concern in London (London Invasive Species Initiative, 2013) were recorded to at least parcel level.
- 2.3.6 If a site/habitat was judged to be of particular interest for a taxonomic group (e.g. birds, reptiles, invertebrates and lichens) this was recorded.

2.4 Mapping

- 2.4.1 The QGIS GIS system was used to create all maps. Digitisation was over OS MasterMap and aerial photography to ensure accuracy.
- 2.4.2 The maps included site, SINC, parcel boundaries, habitats, target notes and access points. Where there were new or changed boundaries, these were clearly highlighted.
- 2.4.3 Where there were two adjacent polygons, common boundaries were snapped together exactly so that each boundary had a common node.
- 2.4.4 The maps were used to calculate parcel centroids (8-figure grid references) and accurate habitat areas for percentage cover of each habitat.
- 2.4.5 A map for each site was produced which accompanies the appropriate SINC citation (Volume 2). Each map has a legend, scale and O.S. copyright information. All maps were produced at an appropriate scale to ensure maximum legibility.

2.5 Identification of potential sites

2.5.1 Additional potential SINC sites and sites for future survey were identified by GIS analysis. Habitat parcel data provided by Greenspace Information for Greater London were used to identify parcels of land which were not currently designated as SINC sites and which supported habitats which may be of value for nature conservation.

2.6 Limitations

2.6.1 The habitat survey was undertaken at the optimum period for vegetation survey (regarded as May to September), and therefore most plant species would have been recorded possibly with the exception of a few early flowering plants. This is not considered to be a significant constraint to habitat assessment. This habitat survey does not constitute a full botanical survey.

2.6.2 Access was gained to most sites but there were a few cases where this was not possible either because of the nature of the land e.g. railway operational land and private land where the landowner / manager could not be contacted or was reluctant to provide access. Railway land was surveyed from moving trains, bridges etc. Where access was not forthcoming, the site was viewed from its perimeter with the aid of binoculars where possible and / or past survey information and aerial photographs reviewed.

2.6.3 The Longford River was surveyed by open canoe although the upper reaches were not accessible. A number of the River Thames Islands were also accessed by canoe where no other options existed (Brentford Ait, Corporation Island, the Flower Pot Islands). Where it was not possible to safely land on an island (e.g. Glovers Island), the survey was conducted by paddling around the island.

2.6.4 Extensive stretches of the Beverley Brook were not accessible for survey. The extent and distribution of mapped habitats was estimated using aerial photography and is therefore indicative in many sections.

2.7 Evaluation

2.7.1 Existing and candidate SINC sites were evaluated and the grade of each determined using the criteria (and methodology) detailed in the document *Policy, criteria and procedures for identifying nature conservation sites in London* (London Wildlife Site Board (LWSB) - update March 2019):

- Representation
- Habitat rarity
- Species rarity
- Habitat richness
- Species richness.
- Size

- Important populations of species
- Ancient character
- Re-creatability
- Typical urban character
- Cultural or historic character
- Geographic position
- Access
- Use
- Potential
- Aesthetic appeal
- Geodiversity interest.

2.7.2 These criteria were used with professional judgement and with adequate information regarding each site and its position within the local, borough or metropolitan context. This stage of the evaluation process also included:

- A review of the reasons for assessing a particular site as a SINC and the rationale for the grade suggested
- Why a site was not recommended for designation as a SINC and the reasons for its rejection.

2.7.3 Additionally, where applicable, the evaluation of each site took account of the following:

- The presence of Species and Habitats of Principle Importance
- The presence of other notable species such as London Notable plants, London BAP Priority Species, rare species (red listed species), species protected under the Wildlife and Countryside Act 1981 (as amended) and/or the Conservation (Natural Habitats, &c.) Regulations 2010. These are collectively referred to as 'priority species' in the report
- The impact (where appropriate) of historic and current management and use of each site
- A consideration of the vulnerability and potential threats to the integrity of each site
- Management or capital works required to maintain or enhance biodiversity value of each site
- Habitat or linkage creation/restoration.

2.7.4 When considering whether an existing SINC should be expanded onto adjacent land, the following factors indicate the proposed expansion area is incorporated:

- The expansion area qualifies for SINC designation in its own right **and/or**;

- It acts as a buffer to the existing SINC **and/or**
- It supports the ecological functionality of the existing SINC **and/or**;
- It acts as a wildlife corridor, for example linking two SINC**s**
and
- There is a reasonable expectation that the expansion area will be managed with nature conservation in mind.

2.7.5 If the above do not apply, it is recommended that the expansion area is excluded.

2.7.6 In a few cases, it is recommended that parcels of land within existing SINC**s** are removed from the SINC designation. This is where parts of the SINC no longer qualify for SINC status and do not meet the criteria detailed in para 2.6.4 above.

3 Results

3.1 Overview

- 3.1.1 Detailed results of the surveys carried out in 2021 including site survey forms (including survey information, open space typology, habitat notes, habitat percentage cover, brief management recommendations etc), habitat maps (including site boundaries, parcel boundaries, expansion areas and excluded areas), target notes and updated citations can be found in Volume 2: Supporting information. Full species lists are supplied in an accompanying Excel spreadsheet with summary information (Notable vascular plants and non-native invasive species) in Volume 2. Site photographs are in appendix 3 of this report.

3.2 Summary of results

Species

- 3.2.1 During the 2021 survey a total of 7615 species records were made (706 individual species). Of these, 326 were London Notable vascular plants (106 individual species) and 366 were non-native invasive plants (36 individual species). See volume 2 for a list of notable and non-native invasive species for each site.
- 3.2.2 Four London Borough of Richmond upon Thames Biodiversity Action Plan species were recorded: Tower Mustard (*Turritis glabra*) (Hampton Water Treatment Works and Reservoirs), Mistletoe (*Viscum album*) (Udney Park Playing Fields) and stag beetle (*Lucanus cervus*) (St Margaret's Residential Grounds) and black poplar (*Populus nigra*) (River Thames and Tidal Tributaries). Black Poplar, stag beetle and Mistletoe are also London Biodiversity Action Plan Species. Tower mustard and stag beetle are Species of Principal Importance.

Habitats

- 3.2.3 Twenty-seven different Phase 1 habitat types (as modified by the GLA) were recorded during the 2021 survey. These included the following Habitats of Principal Importance (GLA habitat name in brackets): Lowland mixed deciduous woodland (Native broadleaved woodland), Rivers (Running water), Eutrophic standing waters (Standing water), Reedbeds (Reedswamp), Lowland dry acid grassland (Acid grassland), Native hedgerows and Lowland Meadows (Neutral grassland (herb-rich)), Open Mosaic Habitat on Previously Developed Land (no Phase 1/GLA definition).
- 3.2.4 The following Richmond Biodiversity Action Plan Habitats were also recorded: Ancient and Veteran Trees, Broadleaved Woodland, Hedgerows, Lowland acid grassland, Neutral grassland, reedbeds and Rivers and Streams. Acid grassland, Reedbeds, Rivers & streams, Standing water and Woodland are also London Biodiversity Action Plan Habitats.

3.2.5 The distribution of Habitats of Principal Importance are shown in table 3 below. Habitat percentage cover at each parcel/site is given in the habitat survey forms in volume 2.

Table 3: Distribution of Habitats of Principal Importance

Habitat	SINC
Lowland mixed deciduous woodland	Royal Botanic Gardens, Kew, Barn Elms Playing Fields, Barnes Common, Beverley Brook, Bushy Park and Home Park, Cassel Hospital, Fulwell and Twickenham Golf Courses, Ham Lands, Hampton Common, Hampton Water Treatment Works and Reservoirs, Hydes Field, Langdon Park, Marble Hill Park, Palewell Park, Pensford Field, Petersham Lodge Woods and Ham House Meadow, Richmond Park and Associated Areas, St Andrew's Churchyard, St Margaret's Residential Grounds, Strawberry Hill Golf Course, Thames and Tidal Tributaries, Twickenham Junction Rough, Crane Corridor, Leg 'o' Mutton Reservoir LNR, Terrace Field and Terrace Garden, Beveree Wildlife Site, London Wetland Centre.
Rivers	Beverley Brook, Crane Corridor, River Crane at St. Margaret's, Thames and Tidal Tributaries, Duke of Northumberland River North of Kneller Road, Northumberland River South of Kneller Road, Longford River in Richmond, Portlane Brook and Meadow, Bushy Park and Home Park.
Eutrophic standing waters	Royal Botanic Gardens, Kew, Barn Elms Playing Fields, Barnes Common, Fulwell and Twickenham Golf Courses, Bushy Park and Home Park, Leg 'o' Mutton Reservoir LNR, Hatherop Conservation Area, Richmond Park and Associated Areas, Ham Lands, Hampton Water Treatment Works and Reservoirs, Langdon Park, Pensfold Field, St Margaret's Residential Grounds, The Wilderness, London Wetland Centre.
Reedbeds	Barnes Common, Hampton Water Treatment Works and Reservoirs, Kew Green and Kew Pond, Richmond Park and Associated Areas, Leg O Mutton, Crane Corridor, London Wetland Centre, Ham Lands, Bushy Park and Home Park, Royal Botanic Gardens, Kew.
Lowland dry acid grassland	Barnes Common, Royal Botanic Gardens, Kew, Bushy Park and Home Park, Richmond Park and associated areas, Cassel Hospital, Churchyard of St Mary with St Alban, Kew Green and Kew Pond, Petersham Lodge Wood and Ham House Meadows, Udney Park Playing Fields, Marble Hill Park and Orleans House Gardens, Ham Common West.

Habitat	SINC
Native hedgerows	Barnes Green and Pond, Churchyard of St Mary with St Alban, Hampton Common, Langdon Park, Marble Hill Park, Pensfold Field, Petersham Lodge Wood and Ham House Meadow, Petersham Meadows, Portlane Brook and Meadow, St Margaret's Residential Grounds, Thames and Tidal Tributaries, Crane Corridor, Richmond Park and Associated Areas, Ham Lands, Terrace Field and Terrace Garden.
Lowland Meadows	Petersham Lodge Woods and Ham House Meadows, Royal Botanic Gardens, Kew.
Open Mosaic Habitat on Previously Developed Land	Hampton Water Works and Reservoirs

3.3 Analysis

3.3.1 Tables 4 to 61 below provide a summary of the desktop and survey findings for each site and include an analysis against the SINC selection criteria following London Wildlife Site Board guidance (2013). Important habitats and species for each site are highlighted. The results are based on surveys carried out in 2021 as well as previous surveys. Detailed survey results for the 2021 survey are in Volume 2.

3.3.2 For previous surveys, please refer to the following reports:

- M076 The Crane Corridor: Habitat Survey of Crane Park (Salix Ecology, 2020).
- M082 Richmond Park and Associated areas: Ground Flora Survey of Richmond Park (Salix Ecology, 2016), Palewell Common Preliminary Ecological Appraisal (Salix Ecology, 2019), East Sheen Common Preliminary Ecological Appraisal (Salix Ecology, 2019), Ham Common Woods Preliminary Ecological Appraisal (Salix Ecology, 2019), Condition of SSSI Units for Site Richmond Park SSSI (Natural England, 2010)
- M084 Bushy Park and Home Park: National Vegetation Classification of the Grasslands of Bushy Park (LUC, 2011), Bushy Park, A protocol for grassland monitoring (Salix Ecology, 2017), Condition of SSSI units (Natural England, 2014, 2017)
- M087 London Wetland Centre: Report in preparation.
- M81 Hounslow Heath (1ha in Richmond) Habitat survey of Hounslow Heath extension (Salix Ecology, 2020)
- RiB02 Lonsdale Road Reservoir - Leg 'o' Mutton Reservoir LNR, Lonsdale Road, Barnes. Ecological Appraisal (Salix Ecology, 2019)

- RiB14 The Copse, Holly Hedge Field and Ham Avenues: The Copse, Extended Phase 1 Habitat survey (Salix Ecology, 2019)
- RiB17 Oak Avenue LNR: Habitat Survey of Oak Avenue (Salix Ecology, 2019)
- RiB18 Hatherop Park Conservation Area: Habitat survey of Hatherop Park (Salix Ecology, 2019)
- RiB25 Ham Common West: Report in preparation
- RiB26 Terrace Field & Terrace Gardens: Habitat survey of Terrace Field (Salix Ecology, 2020)
- RiL02 Marble Hill Park and Orleans House Gardens: Habitat survey of Orleans House Gardens (Salix Ecology, 2020)
- RiL18 Beveree Wildlife site (Ormond Bank): Beveree Wildlife Site Beaver Close, Hampton. Ecological Appraisal (Salix Ecology, 2019).

3.3.3 Sites are listed with new recommended status, SINC number and name. Previous designations, numbers and names are given in brackets.

A) Sites of Metropolitan Importance

Table 4: SINC selection criteria – M031 River Thames and tidal tributaries

Criteria	Comments
Representation	Habitats in Richmond: Scattered trees, bare artificial habitat, running water, Intertidal mud, native broadleaved woodland, non-native broadleaved woodland, tall herbs, vegetated walls, amenity grassland, scrub, semi-improved neutral grassland
Habitat rarity	Some rare in London e.g. intertidal mud-flats, shingle beach and river channel. Running water is a priority habitat in London.
Species rarity	<p>Supports many species from freshwater, estuarine and marine communities some of which are rare in London.</p> <p>In Richmond a number of mature black poplar trees were recorded along the towpath and on some islands. London notable species include lesser pond sedge (<i>Carex acutiformis</i>), purple-loosestrife (<i>Lythrum salicaria</i>), marsh ragwort (<i>Jacobaea aquatica</i>), great yellow-cress (<i>Rorippa amphibia</i>), marsh speedwell (<i>Veronica scutellata</i>), vervein (<i>Verbena officinalis</i>), betony (<i>Stachys officinalis</i>) and brooklime (<i>Veronica beccabunga</i>).</p> <p>A large number of protected and priority species returned from the data search for the Richmond section of the Thames including many birds, amphibia (common frog, common toad, great crested newt), mammals, insects (stag beetle, brown argus, brown hairstreak, marbled white, small heath, common sympetrum, hairy hawk, red-eyed damselfly, ruddy sympetrum, small red-eyed-damselfly, long winged conehead, cinnabar, Jersey tiger, rustic, white ermine), mammals (grey seal, common seal, brown long-eared bat, common pipistrelle, Daubenton's bat, lesser noctule, Nathusius's pipistrelle, natterer's bat, serotine, soprano pipistrelle, hedgehog) and reptiles (grass snake)</p>

Criteria	Comments
Habitat richness	Rich
Species richness	Rich
Size	2304.92 ha in London, 243.03 ha in Richmond upon Thames
Important populations of species	Overwintering birds, over 100 species of fish
Ancient character	None in Richmond upon Thames
Re-creatability	Not re-creatable
Typical urban character	Some of the Richmond section of the Thames is flanked by housing but much by semi-natural habitat.
Cultural or historic character	Vitally important to the development of London over the millennia
Geographic position	Runs through the heart of London connecting sea and countryside
Access	Riverside footpath
Use	Remains an important thoroughfare
Potential	Excessive shading alongside much of the towpath inhibits the development of marginal and aquatic vegetation. A program of tree thinning, crown lifting, thinning and reduction is recommended in selected areas
Aesthetic appeal	Varies widely along its length, parts of which will appeal to the majority of the population
Geodiversity interest	None known

Table 5: SINC selection criteria – M076 Crane Corridor

Criteria	Comments
Representation	The site supports broadleaved semi-natural woodland, lines of trees, hedgerows, semi-improved neutral grassland, amenity grassland, tall ruderal vegetation, dense scrub, running water, swamp (including reedbeds) and marginal vegetation.
Habitat rarity	Reedbed. Running water is a priority habitat in London.
Species rarity	<p>Nine London notable plants; lesser pond sedge (<i>Carex acutiformis</i>), common stork's-bill (<i>Erodium cicutarium</i>), small leaved lime (<i>Tilia cordata</i>), alder buckthorn (<i>Frangula alnus</i>), spotted medick (<i>Medicago arabica</i>), small-flowered cranes-bill (<i>Geranium pusillum</i>), great yellow-cress (<i>Rorippa amphibia</i>), red currant (<i>Ribes rubrum</i>) and purple loosestrife (<i>Lythrum salicaria</i>) were recorded in 2020.</p> <p>The data search returned a number of priority species: water vole, hedgehog, common shrew, common and soprano pipistrelle bats, common frog, common toad, grass snake, 22 invertebrate species (including stag beetle) and 34 species of bird.</p>
Habitat richness	High
Species richness	High
Size	30.56 ha (Richmond)
Important populations of species	Variety of bird species
Ancient character	Not known
Re-creatability	Not re-creatable
Typical urban character	Much of the site is bounded by residential housing.
Cultural or historic character	Crane Park is the site of the Hounslow Powder Mills which were built in the 16th century and continued to make gunpowder until 1927. The mills have disappeared, but the Shot Tower still stands nearby.
Geographic position	Between the River Thames at Isleworth to the Richmond borough boundary at Feltham Marshalling Yards
Access	Open, with numerous access points
Use	Public open space. Nature reserve
Potential	<p>Reduce shading of the river in selected areas.</p> <p>Modify grassland mowing regime to diversify sward</p> <p>Thin selected areas of woodland and create glades to promote native tree regeneration and ground flora development.</p>
Aesthetic appeal	Extensive green corridor
Geodiversity interest	None known

Table 6: SINC selection criteria – M081 Hounslow Heath (1ha within Richmond)

Criteria	Comments
Representation	Acid grassland, neutral grassland, Heathland. The portion of Hounslow Heath (Hounslow Heath Extension) within the London Borough of Richmond is primarily dense scrub and a small area of native broadleaved woodland.
Habitat rarity	Acid grassland and Heathland
Species rarity	Hounslow Heath is known to support a number of rare plants of heathland and acid grassland including bell heather (<i>Erica cinerea</i>), dwarf gorse (<i>Ulex minor</i>), petty whin (<i>Genista angelica</i>), dyer's greenweed (<i>G. tinctoria</i>), heath rush (<i>Juncus squarrosus</i>), heath-grass (<i>Danthonia decumbens</i>) and mat-grass (<i>Nardus stricta</i>). No rare species were recorded in the Richmond section
Habitat richness	High
Species richness	High
Size	112.9 ha (0.8 ha in Richmond)
Important populations of species	Important for rare plants, breeding birds and reptiles
Ancient character	Once part of a much more extensive area of heathland.
Re-creatability	Not re-creatable.
Typical urban character	The site is within a heavily built-up area.
Cultural or historic character	Hounslow Heath has had major historical importance, originally crossed by main routes from London to the west and southwest of Britain. Staines Road, the northern boundary of the present heath, was the Roman Road, Via Trinobantes Bronze Age spearheads, axes, and sword and knife fragments from Hounslow, are held at the British Museum, also Celtic badges and amulets discovered in a field at Hounslow in 1864. In 1999, excavations on the former Feltham Marshalling Yards to the south of the heath unearthed remains of an Iron Age furnace and post holes from a round house. There are various remains of former mills and other industrial archaeological features adjoining the River Crane near the heath.
Geographic position	An area of amenity grassland is immediately to the east of the Richmond section with residential housing to the north and south.
Access	Open access
Use	Public open space. Local Nature Reserve
Potential	Woodland thinning and glade creation to promote ground flora colonisation.
Aesthetic appeal	The Richmond section is an integral part of the wider Hounslow Heath which has a countryside feel within an otherwise heavily built-up area.
Geodiversity interest	Not known

Table 7: SINC selection criteria: M082 - Richmond Park and associated areas

Criteria	Comments
Representation	Extensive acid grassland, neutral grassland, amenity grassland, bracken, reedswamp, swamp, wet marginal vegetation, veteran trees, native broadleaved woodland, scrub invertebrate assemblages, wetlands, standing water, running water.
Habitat rarity	Areas of extensive acid grassland, reedswamp, veteran trees, standing open water
Species rarity	<p>The ancient parkland and its associated trees support a nationally significant assemblage of invertebrates. It is one of the prime sites in Britain for beetles associated with dead and decaying wood (lignicolous coleoptera) with over 200 species recorded. Two nationally restricted species occurring in Richmond Park are the click beetles <i>Ampedus cardinalis</i> and <i>Procræus tibialis</i>.</p> <p>The site also supports numerous London Notable plants including the nationally uncommon upright chickweed.</p> <p>Numerous protected and priority species returned from the data search including common toad, common frog, common lizard, 108 species of bird, 10 species of bat, 4 other mammals (hedgehog, badger, common shrew, pygmy shrew), two fish (barbel and European Eel), 12 species of fungi, 39 species of higher plant, 241 invertebrates, 4 species of moss.</p>
Habitat richness	Rich
Species richness	Rich
Size	1082.75 ha
Important populations of species	Saproxylic invertebrates, nesting birds, roosting bats, London notable and nationally scarce plants
Ancient character	Richmond Park: Open parkland since at least 17C
Re-creatability	Not re-creatable
Typical urban character	The site is surrounded by the sub-urban conurbations of Kingston, Richmond, Ham, Roehampton and Sheen
Cultural or historic character	In 1625 Charles I brought his court to Richmond Palace to escape an outbreak of plague in London and turned the area on the hill above Richmond into a park for the hunting of red and fallow deer. Managed as a deer park since 17C
Geographic position	Largest of The Royal Parks to the east of the borough
Access	Open with numerous access points around the site
Use	Public open space, nature reserve, sports pitches, flying field, horse riding
Potential	<p>Diversify the grass sward through continued introduction of cattle grazing Reduce coverage of bracken</p> <p>Thin the woodlands in East Sheen Common, Palewell Park and Ham Common Woods to diversify structure</p>
Aesthetic appeal	Large open spaces with a countryside feel

Criteria	Comments
Geodiversity interest	London Clay underlies the Park with superficial deposits of Glacial and River Terrace Gravels forming higher ground, and Flood Plain Gravels and Alluvium covering part of the lower ground

Table 8: SINC selection criteria – M083 Ham Lands

Criteria	Comments
Representation	Ham Lands is important for it's mosaic of neutral grassland, scrub, wetland and woodland habitats as well as its association with adjacent River Thames
Habitat rarity	Areas of extensive species-rich neutral grassland
Species rarity	<p>A number of London notable species were recorded during the 2021 survey including red Bartsia (<i>Odontites vernus</i>), hare's-foot (<i>Trifolium arvense</i>) clover, dittander (<i>Lepidium latifolium</i>) and chicory (<i>Cichorium intybus</i>).</p> <p>Records from the Friends of Ham Lands also included numerous London Notable species.</p> <p>The data search returned a large number of records of rare and priority species including amphibia (common toad and common frog), 44 species of bird, 7 flowering plant species, 27 invertebrates, 7 species of bat as well as 5 species of other mammals (water vole, hedgehog, badger, dormouse, common shrew)</p>
Habitat richness	Rich
Species richness	Rich
Size	76.46 ha
Important populations of species	Nesting birds and roosting bats. Small populations of dittander and other London Notable species of vascular plant
Ancient character	Not known
Re-creatability	Not re-creatable
Typical urban character	The site is bounded a road and suburban housing to the east and the River Thames to the West
Cultural or historic character	In 1904 the site was leased by the Ham River Grit Co. Ltd for excavation of sand and ballast. They constructed a wharf and processing plant where barges loaded. A canal was constructed through the towpath in the 1920s to create an internal loading lagoon, now the Thames Young Mariners. The gravel pits were then backfilled with soil from different areas of London.
Geographic position	Large public open spaces with suburban development to the east and the River Thames to the west
Access	Open with numerous access points around the site
Use	Public open space
Potential	<p>Diversify the sward through introduction of experimental cattle grazing in Ham Lands North</p> <p>Further reduce scrub cover to restore and expand areas of neutral grassland</p>
Aesthetic appeal	Large open space with a countryside feel
Geodiversity interest	None known

Table 9: SINC selection criteria: M084 - Bushy Park and Home Park

Criteria	Comments
Representation	<p>Bushy Park and Home Park SINC is particularly important for its nationally important saproxylic (dead and decaying wood associated) invertebrate assemblage, population of veteran trees and acid grassland communities.</p> <p>The addition National Physical Laboratory land adds to the interest of the site</p>
Habitat rarity	Areas of extensive acid grassland are rare in London
Species rarity	<p>The site is known to support a substantial number of nationally scarce and otherwise uncommon beetles including <i>Aeletes atomarius</i>, <i>Stenichnus godarti</i>, <i>Trichonyx sulcicollis</i>, <i>Velleius dilatatus</i>, <i>Aplocnemus impressus</i>, <i>Diplocoelus fagi</i>, <i>Teredus cylindricus</i>, <i>Scraptia fuscula</i></p> <p>Several plants which are locally uncommon add to the special interest. These include rough clover (<i>Trifolium scabrum</i>), clustered clover (<i>Trifolium glomeratum</i>), autumn squill (<i>Scilla autumnalis</i>) and crested hair-grass (<i>Koeleria macrantha</i>), upright chickweed (<i>Moenchia erecta</i>), sand spurrey (<i>Spergularia rubra</i>), birdsfoot (<i>Ornithopus perpusillus</i>) and early hair-grass (<i>Aira praecox</i>).</p> <p>The London Notable species heath bedstraw (<i>Galium saxatile</i>), lily-of-the-valley (<i>Convallaria majalis</i>) and lesser hawkbit (<i>Leontodon saxatilis</i>) were recorded on National Physical Laboratory land.</p> <p>Numerous protected and priority species returned from the data search including 3 species of amphibia (common toad, common frog and great crested newt), 99 species of bird, 2 species of fish (European eel and bullhead), 9 fungi, 31 species of higher plant, 326 invertebrates, 10 species of bat and 5 other mammals (water vole, hedgehog, badger, common shrew and pygmy shrew).</p>
Habitat richness	Rich
Species richness	Rich
Size	652.57 ha
Important populations of species	Saproxylic invertebrates, nesting birds and roosting bats
Ancient character	The land was enclosed as a Royal Park in the early 16th Century. The Park boundary and design was altered over time incorporating first Home Park, then Bushy Park and the Home Park paddocks. There remain several ancient trees which predate the enclosure of the site.
Re-creatability	Not re-creatable
Typical urban character	Bushy Park is surrounded by a network of roads and suburban housing to the north and west.
Cultural or historic character	The site was used by Henry VIII as a royal hunting ground, and some oak trees which were planted during his reign to demark boundaries of what was the original Bushy Park boundary still survive.

Criteria	Comments
Geographic position	Large public open spaces with suburban development to the north and east and the River Thames to the south and east
Access	Open with numerous access points around the site
Use	Public open space with sports pitches

Table 10: SINC selection criteria – M085 Hampton Water Treatment Works and Reservoirs (previously M085 Stain Hill & Sunnyside Reservoirs & RiBI05 Hampton Water Treatment Works)

Criteria	Comments
Representation	This network of sites in Hampton supports a range of habitats including large undisturbed water bodies, species-rich neutral grassland and reedbed
Habitat rarity	Areas of extensive open water, open mosaic habitat on previously developed land and reedbed, all Habitats of Principal Importance.
Species rarity	<p>A number of London Notable vascular plants were recorded including: rough hawkbit (<i>Leontodon hispidus</i>), spotted medick (<i>Medicago arabica</i>), vervein (<i>Verbena officinalis</i>), buck's-horn plantain (<i>Plantago coronopus</i>), field scabious (<i>Knautia arvensis</i>), common storksbill (<i>Erodium cicutarium</i>), wild clary (<i>Salvia verbenaca</i>), hare's-foot clover (<i>Trifolium arvense</i>) and tower mustard (<i>Turritis glabra</i>), a red listed - endangered species.</p> <p>The site is also important for nationally significant numbers of shoveler and gadwall as well as other wintering birds.</p> <p>Protected and priority species returned by the data search included 49 species of bird, 6 species of bat and the hedgehog.</p>
Habitat richness	Rich
Species richness	Rich
Size	65.59
Important populations of species	Wintering birds, rare and notable vascular plants
Ancient character	Not known
Re-creatability	Not re-creatable
Typical urban character	The site is bounded roads to the north and the River Thames to the south.
Cultural or historic character	<p>The Hampton Water works were formed in 1852 in response to the London cholera epidemics of the early 19th century. Water was extracted from the Thames up river from the Teddington and Molesey locks, where the water would be protected from the tidal back-wash of the heavily polluted river in the capital.</p> <p>A series of filter beds were created beside the river and three original pumping stations, for three different water companies, bordering Thames Street (now the A308). Water was pumped by steam-powered engines up</p>

Criteria	Comments
	to distant reservoirs and other pumping stations in the capital through large, buried brick culverts and later cast iron pipes.
Geographic position	To the north of the river Thames
Access	No public access to any part of the site
Use	Active and disused water treatment works and reservoirs
Potential	<p>Relax mowing over the summer in selected areas of neutral grassland around reservoirs and in other areas within the operation water treatment works where this would not interfere with Thames Water operations.</p> <p>Create conditions for tower mustard at the Stain Hill reservoir by scraping selected areas of grassland around the reservoirs.</p>
Aesthetic appeal	Industrial and post-industrial site
Geodiversity interest	None known

Table 11: SINC selection criteria – M086 Barnes Common

Criteria	Comments
Representation	Excellent example of a mosaic of semi-natural habitat including extensive areas of acid grassland, native broadleaved woodland and neutral grassland
Habitat rarity	Areas of extensive acid grassland are rare in London
Species rarity	London notable plants recorded included bird's-foot (<i>Ornithopus perpusillus</i>) and heath bedstraw (<i>Galium saxatile</i>). The data search returned a range of protected and notable species including 42 species of birds, amphibia (common frog), 46 invertebrates (including the stag beetle), 9 species of bat, badger and common lizard
Habitat richness	Rich
Species richness	Rich
Size	52.15 ha
Important populations of species	Nesting birds, roosting bats
Ancient character	Common land used for rough grazing for over a thousand years.
Re-creatability	Not re-creatable
Typical urban character	The site is surrounded by a network of roads and suburban housing but abuts Putney Lower Common to the East. A railway line bisects the site
Cultural or historic character	Historically common land for centuries
Geographic position	Large public open space in a largely built-up area.
Access	Open with numerous access points around the site
Use	Public open space with sports pitches
Potential	Further increase areas of acid grassland through scrub control and woodland management. Consider opportunities for heathland restoration
Aesthetic appeal	Feel of large, rural site
Geodiversity interest	None known

Table 12: SINC selection criteria: M087 - London Wetland Centre

Criteria	Comments
Representation	Standing open water and channels and a variety of other wetland habitats
Habitat rarity	Standing water and reedbeds are priority habitats in London
Species rarity	The list of avifauna is impressive with many Red and Amber listed species noted, many overwintering and/or breeding. Records of the protected water vole (<i>Arvicola amphibius</i>) are numerous (previously introduced to the site). Invertebrates include a range of Odonata (some uncommon) and stag beetle (<i>Lucanus cervus</i>)
Habitat richness	Rich
Species richness	Rich
Size	42.29ha
Important populations of species	Nationally important for wintering gadwall and shoveler. Other important bird species include little ringed plover, common tern, reed warbler and Cetti's warbler. It is regionally important to foraging bats, with up to seven species regularly present in numbers unprecedented anywhere in the UK
Ancient character	N/a
Re-creatability	Not re-creatable because of size and location
Typical urban character	Nature reserve with housing on two sides
Cultural or historic character	The site was formerly occupied by four small reservoirs. These were converted into a wide range of wetland features and habitats. The centre opened in May 2000. It was the first urban project of its kind in the United Kingdom.
Geographic position	One of a string of green spaces that lie aside the Thames in this part of London
Access	Public access (entry fee)
Use	Wetland nature reserve
Potential	Habitats are still developing
Aesthetic appeal	Has the feel of a much more rural area
Geodiversity interest	None known

Table 13: SINC selection criteria - M154 Royal Botanic Gardens, Kew

Criteria	Comments
Representation	Kew Gardens holds collections of plants from all over the world, including many globally rare species. Conservation work of global importance is undertaken, and this is reflected in its status as a World Heritage Site. Additionally, an extensive range of semi-natural habitats is also represented including native woodland, acid grassland and lakes and ponds. Several plants uncommon in Greater London also occur. A wide range of fauna is represented including all three woodpeckers, grass snake and three types of amphibians. Additionally, the site hosts several badger setts.
Habitat rarity	The site includes small areas of acid grassland and veteran trees which are uncommon in Greater London
Species rarity	Several uncommon grassland plants occur which include chamomile (<i>Chamaemelum nobile</i>), This is nationally scarce and classified as 'Vulnerable' in the UK plants red data book. Other grassland plants uncommon in London include bird's-foot (<i>Ornithopus perpusillus</i>), mouse-ear hawkweed (<i>Pilosella officinarum</i>), burrowing and knotted clovers (<i>Trifolium subterraneum</i> and <i>T. striatum</i>), fiddle dock (<i>Rumex pulcher</i>), wild clary (<i>Salvia verbenaca</i>), dark mullein (<i>Verbascum nigrum</i>), meadow saxifrage (<i>Saxifraga granulata</i>) and star-of-Bethlehem (<i>Ornithogalum umbellatum</i>). There are several badger setts within the grounds, where they are comparatively safe from the persecution that has affected badgers elsewhere in London
Habitat richness	A good range of habitats are represented e.g., Acid grassland, Amenity grassland, Flower beds, Planted shrubbery, Pond/Lake, Scattered trees, Secondary woodland, Veteran trees
Species richness	Rich
Size	121.79
Important populations of species	Badger, great crested newt, chamomile, burrowing and knotted clovers, fiddle dock, roosting bats and nesting birds
Ancient character	Is not ancient
Re-creatability	Not re-creatable
Typical urban character	Is not typical but is partly enclosed within the urban fabric of Kew and North Sheen
Cultural or historic character	Kew Gardens has its origins in 1759 when Princess Augusta, mother of King George III, founded a nine-acre botanic garden within the site's pleasure grounds.
Geographic position	Is part of a string of green spaces which sit either side of the Thames within this part of London
Access	The gardens are open to the public on payment of an entry fee and is open every day except Christmas Eve and Christmas Day
Use	Botanic gardens
Potential	Different (but appropriate) management regimes for that below open woodland should be considered with a view to increasing biodiversity value
Aesthetic appeal	Is a very attractive site catering for a range of people and uses
Geodiversity interest	None identified

B) Sites of Borough Importance

Table 14: SINC selection criteria – RiB02 (RiBI02) Lonsdale Road Reservoir Local Nature Reserve (LBRuT name: Leg ‘o’ Mutton Reservoir LNR)

Criteria	Comments
Representation	Open water, aquatic marginal vegetation, scattered trees, broadleaved woodland and tall herbs
Habitat rarity	Extensive area of open water
Species rarity	The following London Notable plants were recorded during the 2019 Phase 1 Habitat survey: mistletoe (<i>Viscum album</i>), ploughman’s-spikenard (<i>Inula conyzae</i>) and purple-loosestrife (<i>Lythrum salicaria</i>). The data search returned a large number of priority species including 42 red or amber listed birds, 6 species of bat and the stag beetle.
Habitat richness	High
Species richness	Moderate
Size	8.19ha
Important populations of species	Breeding waterfowl
Ancient character	Not known
Re-creatability	Not readily re-creatable
Typical urban character	The site is to the west of Lonsdale Rd, residential properties and school grounds.
Cultural or historic character	The reservoir was built in 1838 and decommissioned in 1960. Developers proposed to build housing and a shopping centre on the site, but this was strongly opposed by local residents. They suggested that it should become a nature reserve instead, and their proposal was accepted
Geographic position	Immediately adjacent to the River Thames in Barnes
Access	Open access
Use	Public open space.
Potential	Reduce shading of marginal habitats through scrub and tree management. Control of non-native invasive species.
Aesthetic appeal	Large tranquil setting adjacent to the Thames
Geodiversity interest	Not known

Table 15: SINC selection criteria – RiB03 (RiBI03) Hydes Field

Criteria	Comments
Representation	Secondary woodland with scrub. Ruderal/ephemeral habitats and semi-improved neutral grassland
Habitat rarity	None
Species rarity	The London notable species musk mallow, black medick (<i>Medicago arabica</i>) and vervain (<i>Verbena officinalis</i>) were recorded during the survey. The data search returned the following protected and priority species: 71 species of bird as well as common and soprano pipistrelle bats.
Habitat richness	Moderate
Species richness	Moderate
Size	12.29 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Not readily re-creatable
Typical urban character	The site is to the west of sub-urban Hampton. Woodland and grassland habitat lie to the west with Kempton Reservoirs to the north and west.
Cultural or historic character	Not known
Geographic position	West of Hampton. Adjacent to the Kempton Reservoirs
Access	Access by arrangement.
Use	Shooting range, artificial football pitch
Potential	Woodland thinning and glade creation to promote ground flora colonisation.
Aesthetic appeal	Large woodland with a rural feel
Geodiversity interest	Not known

Table 16: SINC selection criteria – RiB04 (RiBI04) Duke of Northumberland’s River north of Kneller Road

Criteria	Comments
Representation	An artificial urban distributary of the River Crane
Habitat rarity	Running water is a priority habitat in London. A fair amount of marginal vegetation along this section
Species rarity	London Notable species recorded during the survey including great yellow cress (<i>Rorippa amphibia</i>) and purple-loosestrife (<i>Lythrum salicaria</i>) The data search included a number of notable and priority species including common frog, stag beetle, hedgehog as well as common and soprano pipistrelle bats.
Habitat richness	Moderate
Species richness	Moderate
Size	0.82 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Not re-creatable short term
Typical urban character	River runs through a heavily built-up area of the borough
Cultural or historic character	This section of the river was built in the time of Syon Abbey, over 100 years before it was inherited, in 1594, by wife of the "wizard earl", Henry Percy, 9th Earl of Northumberland, Dorothy (née Devereux). The river diverts water from the Crane in Kneller Gardens, Whitton, Twickenham, eastward then northward past The Stoop and Twickenham Stadium rugby stadiums, through Isleworth (originally to its mill), then onwards to supply the ornamental ponds in the Duke of Northumberland's estate at Syon Park.
Geographic position	Between Kneller Road and Whitton Dene
Access	Open access along the eastern towpath
Use	Footpath adjacent to the river
Potential	Reduce shading through management of overhanging trees/scrub
Aesthetic appeal	Tranquil river in an otherwise built-up area
Geodiversity interest	None known

Table 17: SINC selection criteria - RiB06 (RiBII02) Longford River in Richmond

Criteria	Comments
Representation	An artificial urban distributary of the River Colne.
Habitat rarity	Running water is a priority habitat in London. An artificial watercourse with some marginal vegetation, scrub and overhanging trees
Species rarity	London Notable species recorded during the survey included marsh woundwort (<i>Stachys palustris</i>), common skullcap (<i>Scutellaria galericulata</i>), lesser pond sedge (<i>Carex acutiformis</i>) and branched bur-reed (<i>Sparganium erectum</i>). The data search included the following priority species: common frog, kingfisher, house sparrow, song thrush, stag beetle, hedgehog and badger
Habitat richness	Low
Species richness	Moderate
Size	5.77 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Not re-creatable short term
Typical urban character	River runs through a heavily built-up area of the borough
Cultural or historic character	Constructed in 1638–39 at the instigation of Charles I, the purpose of the Longford River was to bring water from the River Colne to augment the water supply to the Royal Parks at Bushy Park and Hampton Court.
Geographic position	Between Bushy Park and Richmond borough boundary
Access	No access for most of the length of the river within the London borough of Richmond upon Thames
Use	None
Potential	Reduce shading through management of overhanging trees/scrub
Aesthetic appeal	Tranquil river in an otherwise built-up area
Geodiversity interest	None known

Table 18: SINC selection criteria - RiB07 (RiBII03) Fulwell and Twickenham Golf Courses

Criteria	Comments
Representation	Fulwell and Twickenham Golf Courses contain small areas of semi-improved grassland, ponds, woodland, isolated trees and scrub
Habitat rarity	Areas of semi-improved grassland are increasingly uncommon in London, as are ponds that are not negatively impacted by severe eutrophication.
Species rarity	London rare and notable plants: sand spurrey (<i>Spergularia rubra</i>), mistletoe (<i>Viscum album</i>). Notable invertebrates: marbled white and small heath butterflies, Jersey tiger moth, Stag beetle Protected and priority species returned from the data search include: hedgehog, soprano pipistrelle, stock dove, song and mistle thrushes, redwing, kingfisher, house sparrow, hobby, goldcrest, dunnock, common toad and common frog.
Habitat richness	Moderate
Species richness	Moderate
Size	80.72 ha
Important populations of species	Unknown.
Ancient character	Unknown. The area was urbanised in the early 20 th century, previously the area was largely arable land and hay meadows.
Re-creatability	Not re-creatable
Typical urban character	This site is surrounded by 20 th century housing and trunk roads.
Cultural or historic character	Unknown
Geographic position	Fulwell and Twickenham Golf Courses lies to the north of Hampton Hill.
Access	Limited access, membership. However, there are public footpaths running through Twickenham Golf Course (currently managed by David Lloyd Leisure). Access to the allotments on the northern part of the site is restricted to members.
Use	Golf course and allotments
Potential	Manage grassland margins to increase plant diversity by instigating a seasonal cut regime. Reduction of the application of weedkillers at Fulwell Golf Course is strongly recommended. Several species of invasive non-native plant species, including buddleia (<i>Buddleja davidii</i>), Japanese honeysuckle (<i>Lonicera japonica</i>), false acacia (<i>Robinia pseudoacacia</i>), cherry laurel (<i>Prunus laurocerasus</i>) and New Zealand Pigmy-weed (<i>Crassula helmsii</i>) are present and their management is strongly recommended.
Aesthetic appeal	Large open spaces with mature trees and small ponds

Criteria	Comments
Geodiversity interest	Fulwell and Twickenham Golf Courses sit on the floodplain of the River Thames with the London Clay Formation beneath.

Table 19: SINC selection criteria: RiB08 (RiBII04) Duke of Northumberland's River south of Kneller Road

Criteria	Comments
Representation	An artificial urban distributary of the River Crane
Habitat rarity	Running water is a priority habitat in London. Small amounts of marginal vegetation in the northern section
Species rarity	A number of London Notable species were recorded during the survey including purple-loosestrife (<i>Lythrum salicaria</i>), lesser pond sedge (<i>Carex acutiformis</i>), marsh woundwort (<i>Stachys palustris</i>) and branched bur-reed (<i>Sparganium erectum</i>). The data search included a number of notable and priority species including common frog and common toad, stag beetle, hedgehog and 22 species of bird
Habitat richness	Low
Species richness	Moderate
Size	0.63 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Not re-creatable short term
Typical urban character	River runs through a heavily built-up area of the borough
Cultural or historic character	This section of the river was built in the time of Syon Abbey, over 100 years before it was inherited, in 1594, by wife of the "wizard earl", Henry Percy, 9th Earl of Northumberland, Dorothy (née Devereux). The river diverts water from the Crane in Kneller Gardens, Whitton, Twickenham, eastward then northward past The Stoop and Twickenham Stadium rugby stadiums, through Isleworth (originally to its mill), then onwards to supply the ornamental ponds in the Duke of Northumberland's estate at Syon Park.
Geographic position	Between the Waterloo to Reading railway line and Whitton Rd, Whitton
Access	Open access along the eastern towpath
Use	Footpath adjacent to the river
Potential	Reduce shading through management of overhanging trees/scrub
Aesthetic appeal	Tranquil river in an otherwise built-up area

Criteria	Comments
Geodiversity interest	None known

Table 20: SINC selection criteria - RiB09 (RiBII05) Strawberry Hill Golf Course

Criteria	Comments
Representation	Strawberry Hill Golf Course is a small golf course, and adjacent railway land, with areas of woodland, scrub and acid grassland.
Habitat rarity	Areas of acid grassland are increasingly uncommon in London, as are ditch/streams that are not negatively impacted by severe eutrophication.
Species rarity	London rare and notable plants: curly-leaved pondweed (<i>Potamogeton crispus</i>). Notable invertebrates: Stag beetle Protected and priority species returned from the data search include: hedgehog, soprano pipistrelle, tawny owl, song thrush, house sparrow, dunnock and common frog.
Habitat richness	Moderate
Species richness	Moderate
Size	20.44 ha
Important populations of species	Unknown.
Ancient character	Unknown. The area was urbanised in the early 20 th century, previously the area was largely arable land and hay meadows.
Re-creatability	Not re-creatable
Typical urban character	This site is partially surrounded by 20 th century housing and trunk roads. The south-eastern part of the site is inaccessible railway siding and embankments.
Cultural or historic character	Unknown
Geographic position	Strawberry Hill Golf Course is near Strawberry Hill overground station.
Access	Limited access, membership. The south-eastern part of the site is inaccessible railway siding and embankments.
Use	Golf course, railway.
Potential	Manage grassland margins to increase plant diversity by instigating a seasonal cut regime. Reduction of the application of weedkillers at Fulwell Golf Course is strongly recommended. One species of invasive non-native plant species, buddleia (<i>Buddleja davidii</i>), is present and its management is strongly recommended.
Aesthetic appeal	Large open spaces with mature trees and open grassland
Geodiversity interest	Strawberry Hill Golf Course sits on the floodplain of the River Thames with the London Clay Formation beneath.

Table 21: SINC selection criteria - RiB10 (RiBII06) Petersham Meadows

Criteria	Comments
Representation	Damp semi-improved to wet grassland (with tendencies towards MG9 neutral grassland)
Habitat rarity	This type of traditionally managed (grazed) damp grassland is uncommon in Greater London. Site also includes an orchard area with trees between 10 and 80 years old
Species rarity	Includes several species uncommon in Greater London including marsh ragwort (<i>Jacobaea aquatica</i>), brooklime (<i>Veronica beccabunga</i>), ivy broomrape (<i>Orobanche hederaceae</i>) and cotton thistle (<i>Ornithopus acanthus</i>).
Habitat richness	Moderate
Species richness	Moderate
Size	14.61ha
Important populations of species	Ivy broomrape
Ancient character	None
Re-creatability	Not re-creatable
Typical urban character	Is not typical but lies next to the busy Petersham Road
Cultural or historic character	Petersham Meadows were a part of the estate attached to Ham House from the early 17th Century until the latter years of the 19th Century
Geographic position	Is part of the string of green spaces which sits either side of the River Thames
Access	There is access to Petersham Meadows and Buccleuch Gardens, Petersham Farm is private.
Use	Informal recreation, walking cycling etc & equestrian centre
Potential	The quality of the sward at the south-eastern edge of the meadow could be improved if supplementary mowing were to be applied to hold back tall herb and scrub invasion
Aesthetic appeal	A picturesque landscape situated next to the River Thames
Geodiversity interest	None known

Table 22: SINC selection criteria - RiB11 (RiBII07) Occupation Lane, Kew Railway Bridge

Criteria	Comments
Representation	Suitable Thameside habitat for the rare two-lipped doorsnail
Habitat rarity	Not rare
Species rarity	Two-lipped doorsnail (<i>Balea biplicata</i>) a priority species in London and ivy broomrape (<i>Orobanche hederarum</i>) a species rare in Greater London.
Habitat richness	Moderate
Species richness	Moderate
Size	2.23ha
Important populations of species	Two-lipped doorsnail and ivy broomrape
Ancient character	N/a
Re-creatability	The habitats present are re-creatable over several decades but the location next to the Thames is not
Typical urban character	In a densely urbanised part of L B Richmond upon Thames including a railway embankment and a small nature reserve which is part of a housing estate
Cultural or historic character	N/a
Geographic position	Next to the River Thames
Access	To Occupation Lane only
Use	Private Nature reserve, railway embankment and walking & cycling route
Potential	Nature conservation assessment and management plan for snail reserve. Potential workdays for local wildlife groups within the reserve
Aesthetic appeal	Occupation Lane as a characteristic urban area only, the snail reserve lies next to the Thames and is more aesthetically pleasing
Geodiversity interest	N/a

Table 23: SINC selection criteria - RiB12 (RiBII08) Barn Elms Playing Fields

Criteria	Comments
Representation	The site includes a fine biodiverse example of standing water and secondary woodland
Habitat rarity	Lakes / Ponds and woodland are priority habitats in London
Species rarity	The site includes purple loosestrife (<i>Lythrum salcaria</i>) and yellow loosestrife (<i>Lysimachia vulgaris</i>) which are uncommon in Greater London. Water dock (<i>Rumex hydrolapathum</i>) is of limited distribution in London
Habitat richness	Rich
Species richness	Rich
Size	3.53ha
Important populations of species	Includes breeding populations of waterbirds e.g., mallard, moorhen and coot. Odonata is abundant
Ancient character	N/a
Re-creatability	Not re-creatable
Typical urban character	Lies within an urban sports complex
Cultural or historic character	Barn Elms was originally the manor house of Barnes and was for centuries the property of the dean and chapter of St Paul's Cathedral. Elizabeth I bought the lease in 1579 for Sir Francis Walsingham, as a reward for services rendered to the Crown. The old London plane dates back possibly to the 1680s
Geographic position	SINC forms part of the wider Barn Elms Playing Fields area and adjoins the Beverley Brook. Lies immediately south of the London Wetland Centre
Access	Membership requirements for northern part of lake used for fishing
Use	Fishing, forest school, nature area
Potential	The biodiversity of the site could be enhanced by formulating and following an appropriate management plan.
Aesthetic appeal	Has the feel of a more rural location
Geodiversity interest	None known

Table 24: SINC selection criteria – RiB13 (RiBII09) Beverley Brook from Richmond Park to the River Thames

Criteria	Comments
Representation	The Beverley Brook from Richmond Park to the River Thames is a variable stretch of stream, with natural banks and good vegetation in places. Some parts are heavily artificially embanked.
Habitat rarity	Semi-natural streams are uncommon in London, especially stretches that are not negatively impacted by severe eutrophication or road run-off pollution.
Species rarity	<p>London rare and notable plants: none were recorded during the current survey period; formerly, broad-leaved pondweed (<i>Potamogeton natans</i>) and unbranched bur-reed (<i>Sparganium emersum</i>) were observed.</p> <p>Notable invertebrates returned from the data search include: Common Sympetrum, Emerald Damselfly, Hairy Hawker, Ruddy Sympetrum, Long-winged Cone-head, Small Heath, White-letter Hairstreak, Green Hairstreak, Marbled White, Tanner Beetle, Brown Argus, Black-headed Cardinal Beetle, Cramp-Ball Fungus Weevil, Hawthorn Jewel Beetle, Stag Beetle, Brown Tree Ant, Bryony Mining Bee, Buff-tailed Mining Bee, Lathbury's Nomad Bee, Orange-horned Nomad Bee, Ornate Tailed Digger Wasp, Pantaloon Bee, Red Banded Sand Wasp, Reticulate Blood Bee, <i>Pseudotrichia rubiginosa</i>, Thames door snail (<i>Balea biplicata</i>), <i>Amphipoea oculea</i>, Jersey tiger moth (<i>Euplagia quadripunctaria</i>), <i>Synaphe punctalis</i>, <i>Watsonalla binaria</i>, <i>Pediasia contaminella</i>, <i>Ero aphana</i>, <i>Nigma walckenaeri</i>, <i>Argiope bruennichi</i>, <i>Pediopsis tiliae</i>, <i>Asiraca clavicornis</i>, <i>Volucella inanis</i>, <i>Hedychrum niemelai</i>, <i>Hedychridium roseum</i>, <i>Auplopus carbonarius</i>, <i>Astata boops</i>, <i>Stigmus pendulus</i>, <i>Platyderus depressus</i>, <i>Euryusa sinuate</i>, <i>Uleiota planatus</i>, <i>Synchita separanda</i>, <i>Nephus quadrimaculatus</i>, <i>Tomoxia bucephala</i>, <i>Neliocarus faber</i></p> <p>Protected and priority vertebrate species returned from the data search include: hedgehog, badger, common, soprano and Nathusius's pipistrelles, noctule, lesser noctule, Daubenton's, brown long-eared and serotine bats, willow warbler, widgeon, grey and yellow wagtails, tree sparrow, tree pipit, tawny and short-eared owls, stock dove, starling, snipe, mistle and song thrushes, redwing, meadow pipit, linnets, lesser redpoll, kestrel, hobby, kingfisher, house sparrow, grey heron, dunnock, common frog, and barbel.</p>
Habitat richness	Rich (Barnes Common section). Unfortunately, the lower reaches (especially east of the A306) are negatively impacted by pollution, probably primarily run-off from roads.
Species richness	Rich
Size	8.845 ha
Important populations of species	Unknown, but the diversity of invertebrates and number of bird and bat spp. indicate the site is important for a wide range of species.
Ancient character	Unknown. The area was urbanised in the late 19 th and early 20 th centuries, previously the stream passed through heathland, parkland, arable land and hay meadows.
Re-creatability	Not re-creatable

Criteria	Comments
Typical urban character	This site is partially surrounded by late 19 th and early 20 th century housing, light industry, schools, and trunk roads. Three sections adjoin seminatural vegetation & open habitat, namely – Palewell Park and Hertford Rd. allotments, Barnes Common and the final section east of the A306 before the stream meets the tidal Thames.
Cultural or historic character	Various due to the range of landscapes it passes through.
Geographic position	This section of the Beverley Brooks runs from the NE of Richmond Park, through Barnes before it meets the Thames just south of the Wetland Centre.
Access	Limited access in parts due to physical inaccessibility. Three sections are more accessible, namely: Palewell Park and Hertford Rd. allotments, Barnes Common and the final section east of the A306 before the stream meets the tidal Thames.
Use	Various, largely recreational
Potential	<p>Create 'light-wells' in some sections to improve light levels and encourage the development of submerged aquatics (none seen during the current survey).</p> <p>Several species of invasive non-native plant species, including tree-of-heaven (<i>Ailanthus altissima</i>), buddleia (<i>Buddleja davidii</i>), Himalayan balsam (<i>Impatiens glandulifera</i>), Japanese knotweed (<i>Reynoutria japonica</i>) and false acacia (<i>Robinia pseudoacacia</i>) are present and their management is strongly recommended.</p> <p>Identify causes of pollution and remedy, if possible.</p>
Aesthetic appeal	Semi-natural stream and woodland habitat.
Geodiversity interest	This section of the Beverly Brook runs across the floodplain of the River Thames with the London Clay Formation beneath.

Table 25: SINC selection criteria - RiB14 (RiBII10) The Copse, Holly Hedge Field and Ham Avenues

Criteria	Comments
Representation	Acid grassland, neutral grassland and native broadleaved woodland
Habitat rarity	Acid grassland
Species rarity	The following London Notable plants were recorded during the 2019 Phase 1 Habitat survey: hare's-foot-clover (<i>Trifolium arvense</i>) and meadow saxifrage (<i>Saxifraga granulata</i>). The data search returned a number of priority species including house sparrow, redwing, song thrush, stag beetle and hedgehog.
Habitat richness	Moderate
Species richness	Moderate
Size	11.92 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Not readily re-creatable
Typical urban character	Residential housing is to the south of the site with Ham polo club and school grounds to the north
Cultural or historic character	Not known
Geographic position	Within Ham to the west of Richmond Park
Access	Open access
Use	Public open space.
Potential	Modify grass cutting regime to reduce dominance of coarse grasses and restore acid grassland in western section of the site
Aesthetic appeal	Large open space with a range of habitats
Geodiversity interest	Not known

Table 26: SINC selection criteria – RiB15 Whitton Railsides (previously candidate site B7)

Criteria	Comments
Representation	Habitats typical of railway tracksides
Habitat rarity	Not rare
Species rarity	A number of species have been recorded in the vicinity by GiGL. Most notable are stag beetle (<i>Lucanus cervus</i>), hedgehog (<i>Erinaceus europaeus</i>), house sparrow (<i>Passer domesticus</i>) and song thrush (<i>Turdus philomelos</i>)
Habitat richness	Moderate
Species richness	Moderate
Size	0.87 Ha
Important populations of species	Not known
Ancient character	N/a
Re-creatability	Not re-creatable
Typical urban character	Urban railsides
Cultural or historic character	The railway in this location was constructed in 1848
Geographic position	Extends the railway green corridor from Hounslow Heath into the heart of Whitton
Access	None
Use	Railway green corridor
Potential	n/a
Aesthetic appeal	Makes rail journey more pleasant
Geodiversity interest	None known

Table 27: SINC selection criteria - RiB16 (RiBII12) Petersham Lodge Wood and Ham House Fields

Criteria	Comments
Representation	Petersham Lodge Wood and Ham House Meadows consists of a small wood and two grassy fields beside the River Thames. Parts of these flood on high spring tides, introducing an important wetland element to the habitat at this site.
Habitat rarity	Semi-natural wet woodlands and grassland adjacent to the Thames are rare in London, especially those that are not negatively impacted by eutrophication or road run-off pollution.
Species rarity	<p>London rare and notable plants: wild garlic (<i>Allium vineale</i>), meadow crane's-bill (<i>Geranium pratense</i>; a rare native in London but fairly frequently planted, this site is may be a native one), marsh ragwort (<i>Jacobaea aquatica</i>; nationally uncommon and declining and considered at risk of extinction in England; largely restricted to the Thames in London), corky-fruited water-dropwort (<i>Oenanthe pimpinelloides</i>; rare but gradually increasing in London) and the 'Thames buttercup' (<i>Ranunculus repens</i> var. <i>glabratus</i>) a rare ecotype of creeping buttercup associated with the tidal Thames.</p> <p>Notable invertebrates: silver-wash fritillary and marbled white butterflies, cinnabar moth, stag beetle and black-headed cardinal beetle</p> <p>Protected and priority vertebrate species returned from the data search include: hedgehog, common shrew, badger, soprano pipistrelle, noctule, lesser noctule, Natterer's, Daubenton's and brown long-eared bats, willow warbler, tawny owl, song and mistle thrushes, kingfisher, grey wagtail, house sparrow, grey heron, goldcrest and common frog.</p>
Habitat richness	Rich
Species richness	Moderately rich
Size	8.81
Important populations of species	Unknown, but the diversity of habitats indicate the site is important for a wide range of species.
Ancient character	This site is part of the ancient landscape centred around Ham House and the adjacent river Thames.
Re-creatability	Not re-creatable
Typical urban character	The site retains an un-urbanised feel.
Cultural or historic character	This site is part of the historic landscape centred around Ham House. The woodland forms part of a former parkland planted with ornamental trees, some of which survive, notably three very large plane trees (<i>Platanus</i> sp.)
Geographic position	Alongside the Thames at Ham
Access	Largely open access (except for some horse paddocks). Some areas inaccessible due to flooding at high tides.
Use	Various, largely recreational

Criteria	Comments
Potential	<p>Continue managing grassland to increase plant diversity by instigating a seasonal cut regime.</p> <p>Several species of invasive non-native plant species, including buddleia (<i>Buddleja davidii</i>) and Himalayan balsam (<i>Impatiens glandulifera</i>) are present and their management is strongly recommended.</p>
Aesthetic appeal	Semi-natural, grassland, riverside and woodland habitat.
Geodiversity interest	Petersham Lodge Wood and Ham House Meadows is situated on the floodplain of the River Thames with the London Clay Formation beneath. Parts of the site flood on high spring tides, this creates bare shingle under the trees.

Table 28: SINC selection criteria - RiB17 (RiBII14) Oak Avenue Local Nature Reserve

Criteria	Comments
Representation	A mosaic of neutral grassland and scrub with a small woodland area
Habitat rarity	None
Species rarity	Four London Notable plants: red bartsia (<i>Odontites vernus</i>), salad burnet (<i>Poterium sanguisorba</i>), vervein (<i>Verbena officinalis</i>) and the wayfaring tree (<i>Viburnum lantana</i>) were recorded during the Phase 1 habitat survey of 2019 In addition, the Friends of Oak Avenue and Hatherop Park have recorded additional London Notable plants: yellow rattle, cowslip, field scabious and guelder rose.
Habitat richness	Moderate
Species richness	Moderate
Size	1.6 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Not re-creatable
Typical urban character	The site is bounded by suburban housing to the south, horse paddocks to the north, church grounds to the west and a road to the east.
Cultural or historic character	This site previously had greenhouses for local nursery gardens and was re-landscaped by local groups and volunteers
Geographic position	North Hampton in a largely built-up area.
Access	Open, with two access points
Use	Public open space. Local Nature Reserve
Potential	The semi-improved neutral grassland should be managed by cutting at least twice a year. A new hedge should be planted along the northern boundary of the site with native species of known UK provenance Scrub should be reduced to cover a maximum of 20% of the site
Aesthetic appeal	Pleasant flower-rich open space
Geodiversity interest	None known

Table 29: SINC selection criteria - RiB18 (RiBII15) Hatherop Conservation Area (previously Hatherop Burning Ground)

Criteria	Comments
Representation	A mosaic of neutral grassland, scrub, native broadleaved woodland and a small pond
Habitat rarity	None
Species rarity	<p>Two London Notable plants: red bartsia (<i>Odontites vernus</i>) and Hare's-foot clover (<i>Trifolium arvense</i>) were recorded during the Phase 1 habitat survey of 2019</p> <p>In addition, the Friends of Oak Avenue and Hatherop Park have recorded additional London Notable plants: columbine (<i>Aquilegia vulgaris</i>), agrimony (<i>Agrimonia eupatoria</i>), wild onion (<i>Allium vineale</i>), pyramidal orchid (<i>Anacamptis pyramidalis</i>), black mustard (<i>Brassica nigra</i>), marsh marigold (<i>Caltha palustris</i>), small-flowered crane's-bill (<i>Geranium pusillum</i>), great lettuce (<i>Lactuca virosa</i>), spotted medick (<i>Medicago arabica</i>), bee orchid (<i>Ophrys apifera</i>) and wild pear (<i>Pyrus communis</i>).</p> <p>The Friends group has also recorded a good variety of birds using the site</p> <p>The data search returned a number of priority species: 6 species of bat, 24 bird species and 13 invertebrates.</p>
Habitat richness	Moderate
Species richness	Moderate
Size	4.3 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Not feasibly re-creatable
Typical urban character	The site is adjacent to Kempton Park Reservoirs and a railway line
Cultural or historic character	The site is shown as farmland on the 1885 OS one inch map. It was more recently a council burning ground.
Geographic position	North Hampton adjacent to the Kempton Park reservoirs
Access	Open, with two access points
Use	Public open space. Nature reserve
Potential	<p>The semi-improved neutral grassland should be managed by cutting at least twice a year.</p> <p>Scrub should be reduced to cover a maximum of 20% of the site</p>
Aesthetic appeal	Pleasant flower-rich open space

Criteria	Comments
Geodiversity interest	None known

Table 30: SINC selection criteria - RiB19 (RiBII26) Hounslow, Feltham and Whitton Junctions

Criteria	Comments
Representation	The site includes a large area of wildlife habitat which, unusually for railside land, is not dominated by woodland.
Habitat rarity	Habitats are not rare in a borough context. However large expanses of semi-improved neutral grassland are uncommon for railsides
Species rarity	Several species have been recorded in the vicinity by GiGL. Most notable are stag beetle (<i>Lucanus cervus</i>), hedgehog (<i>Erinaceus europaeus</i>), house sparrow (<i>Passer domesticus</i>) and song thrush (<i>Turdus philomelos</i>)
Habitat richness	Average
Species richness	More
Size	4.65ha
Important populations of species	Common lizard (<i>Zootoca vivipara</i>) and slow-worm (<i>Anguis fragilis</i>) are noted by GiGL in the locality. Habitat on site is suitable for these species
Ancient character	N/a
Re-creatability	Not re-creatable
Typical urban character	Urban railsides enclosed by housing
Cultural or historic character	Part of railway infrastructure constructed between 1840 and 1860
Geographic position	Connects with Hounslow Heath and Whitton Railsides
Access	No access, view from bridges, adjacent roads and moving trains
Use	Railway junction green corridor
Potential	Maintaining the area chiefly as grassland will maximise species permeability with Hounslow Heath and complement the habitats present in the two sites
Aesthetic appeal	Is unlikely to be universal
Geodiversity interest	None found

Table 31: SINC selection criteria - RiB20 (RiBII18) River Crane at St Margaret's (Richmond side)

Criteria	Comments
Representation	Remarkably fish and bird rich section of river given its concrete constraints
Habitat rarity	Running water is a priority habitat in London
Species rarity	Several species have been recorded in the vicinity by GiGL. Most notable are stag beetle (<i>Lucanus cervus</i>), hedgehog (<i>Erinaceus europaeus</i>), house sparrow (<i>Passer domesticus</i>) and song thrush (<i>Turdus philomelos</i>) and kingfisher (<i>Alcedo atthis</i>)
Habitat richness	Poor
Species richness	Rich
Size	1.23 ha
Important populations of species	Includes important populations of fish
Ancient character	N/a
Re-creatability	Not re-creatable
Typical urban character	Typical urban river in concrete channel
Cultural or historic character	The River Crane has had a profound impact on the landscape and development of this part of old Middlesex since at least Roman Times
Geographic position	Links M31 The Tidal Thames and its tributaries site and M076 The Crane Corridor
Access	Bridges and view through fence from western side of Moor Meads Recreation Ground. No access Whitton Brook
Use	River
Potential	River could be freed from its concrete constraints in Moor Meads Recreation Ground
Aesthetic appeal	The concrete channel detracts from an aesthetic appeal
Geodiversity interest	None known

Table 32: SINC selection criteria - RiB22 St Margaret's Residential Grounds

Criteria	Comments
Representation	Three large urban gardens with scattered mature trees and a small lake
Habitat rarity	A number of old trees present including veteran pedunculate oak (<i>Quercus robur</i>), copper beech (<i>Fagus sylvatica</i>), cherry (<i>Prunus avium</i>), sweet chestnut (<i>Castanea sativa</i>), London plane (<i>Platanus x hispanica</i>) and hornbeam (<i>Carpinus betulus</i>).
Species rarity	Stag beetle (<i>Lucanus cervus</i>) recorded during survey. The data search returned records of common frog, house sparrow, song thrush, stag beetle and hedgehog.
Habitat richness	Low
Species richness	Low
Size	0.18 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Not re-creatable short term
Typical urban character	Located within the St Margaret's Estate and surrounded by residential properties
Cultural or historic character	The gardens were created as part of the historic estate designed in 1854
Geographic position	Within the St Margaret's Estate close to the River Thames
Access	Access restricted to key holders
Use	Gardens for residents of St Margaret's Estate
Potential	Relax mowing regime in selected areas to benefit invertebrates. Cut these areas twice per year and remove arisings. Periodically plant native trees of known UK origin as future veterans. Avoid non-native invasive species such as false- acacia or evergreen oak. Provision of additional stag beetle habitat e.g. half buried logs in dappled shade Recommend no further planting and possible of trees adjacent to the lake to reduce leaf fall resulting in excessive eutrophication and shading of the lake margins.
Aesthetic appeal	Tranquil gardens with mature trees
Geodiversity interest	None known

Table 33: SINC selection criteria - RiB23 (RiL11) Kew Pond and Kew Green

Criteria	Comments
Representation	Kew pond is an artificial pond supporting reedbed and marginal vegetation Kew green is a mix of amenity grassland and degraded acid grassland with lines of mature boundary trees
Habitat rarity	Acid grassland (in degraded state)
Species rarity	The London notable species subterranean clover (<i>Trifolium subterraneum</i>), buck's-horn plantain (<i>Plantago coronopus</i>) and small-flowered crane's-bill (<i>Geranium pusillum</i>) were recorded on Kew Green and purple loose-strife (<i>Lythrum salicaria</i>), marsh yellow-cress (<i>Rorippa palustris</i>) and pellitory-of-the-wall (<i>Parietaria judaica</i>) were recorded during the survey. The data search returned a number of priority species including 18 species of bird and a number of notable plants including wild clary, meadow saxifrage and clustered clover. Invertebrates included stag beetle and red-tailed mason bee. There were also records of hedgehog.
Habitat richness	Low
Species richness	Moderate
Size	0.56 ha
Important populations of species	Meadow saxifrage and rare clovers
Ancient character	Not known
Re-creatability	Not re-creatable in short term
Typical urban character	Residential buildings to north east and south and Kew Gardens to the west. Bisected by Kew Road
Cultural or historic character	Mentioned in a Parliamentary Survey of Richmond taken in 1649, and is there described as 'a piece of common or unenclosed ground called Kew Green, lying within the Township of Kew.' Kew Green was in use as a venue for cricket by the 1730s and was used for a match between London and a Middlesex XI in 1732
Geographic position	Adjacent to the River Thames and Kew Gardens
Access	Open access
Use	Open space with cricket pitch.
Potential	Relax mowing in selected areas of grassland Control common reed in pond through summer cutting and remove arisings
Aesthetic appeal	Large open space for recreation
Geodiversity interest	None known

Table 34: SINC selection criteria – RiB24 (RiL21) Portlane Brook and Meadow

Criteria	Comments
Representation	A large area of neutral grassland, mature scrub, mature hedgerow and small brook
Habitat rarity	None
Species rarity	The following London Notable species were recorded during the survey: vervain (<i>Verbena officinalis</i>), guelder-rose (<i>Viburnum opulus</i>), hart's-tongue (<i>Asplenium scolopendrium</i>) and common centaury (<i>Centaurium erythraea</i>). The data search returned the following priority species: pipistrelle bat
Habitat richness	Moderate
Species richness	Moderate
Size	4.3ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Not re-creatable in the short term
Typical urban character	The site is bounded by residential housing to the west and Stain Hill Reservoir to the east. The A308 runs along the northern boundary and Lower Hampton Rd along the southern boundary
Cultural or historic character	Not known
Geographic position	To the North of the River Thames and adjacent to the Thames Water reservoirs and water treatment works, Hampton
Access	No public access
Use	Horse grazing
Potential	Grazing pressure should be reduced and no fertilizer should be added to the site. Some scrub removal is recommended e.g. by reducing the large block of scrub to the south of the site.
Aesthetic appeal	Large area of undisturbed grassland
Geodiversity interest	None known

Table 35: SINC selection criteria - RiB25 (RiL13) Ham Common West

Criteria	Comments
Representation	Acid grassland, amenity grassland scattered trees and pond
Habitat rarity	Extensive area of Acid grassland (degraded)
Species rarity	No notable species were recorded during the 2021 NVC survey The data search returned the following priority species: song thrush, house sparrow, stag beetle and hedgehog.
Habitat richness	Low
Species richness	Low
Size	8.53 ha
Important populations of species	None known
Ancient character	The map drawn up for Charles I by Nicholas Lane prior to the enclosure of Richmond Park in 1637 shows that the common land of Ham extended from its current area eastwards as far as Beverley Plains and Beverley Brook and the boundary with Roehampton.
Re-creatability	Not readily re-creatable.
Typical urban character	The site is within sub-urban Ham with residential housing to the north and west and Ham Common Woods to the East.
Cultural or historic character	Common land protected Metropolitan Commons Acts 1866 to 1878.
Geographic position	Ham, to the west of Ham Common Woods and Richmond Park.
Access	Open access.
Use	Public open space. Cricket pitch.
Potential	Restore acid grassland in selected areas through a relaxation in mowing regime.
Aesthetic appeal	Open Common with views across to Ham Common Woods giving a countryside feel.
Geodiversity interest	Not known.

Table 36: SINC selection criteria – RiB27 (RiL08) Cassel Hospital

Criteria	Comments
Representation	Cassel Hospital consists of pleasant hospital grounds, with lawns of acid grassland, a fringe of woodland with some fine veteran trees.
Habitat rarity	The site supports a relatively large area of acid grassland and several veteran trees; both of which are rare habitats in London.
Species rarity	<p>London rare and notable plants: bird's-foot (<i>Ornithopus perpusillus</i>) and sand spurrey (<i>Spergularia rubra</i>).</p> <p>Notable invertebrates species returned from the data search include: stag beetle and ruddy symptetrum; however, due to the inaccessibility of this site, other notable invertebrate species are likely to occur.</p> <p>Protected and priority vertebrate species returned from the data search include: house sparrow and common frog; however, due to the inaccessibility of this site, other notable invertebrate species are likely to occur.</p>
Habitat richness	Average
Species richness	Moderately rich
Size	3.42
Important populations of species	Unknown.
Ancient character	This site is part of the ancient landscape centred around Ham Common.
Re-creatability	Not re-creatable
Typical urban character	The site retains a semi-urbanised feel.
Cultural or historic character	This site is part of the historic landscape centred around Ham Common.
Geographic position	Cassel House is situated on the southern edge of Ham Common
Access	Inaccessible to the public but used by hospital residents and staff.
Use	Recreational
Potential	<p>Continue managing grassland to increase plant diversity by instigating a seasonal cut regime.</p> <p>Two species of invasive non-native plant species are present, buddleia (<i>Buddleja davidii</i>) and rhododendron (<i>Rhododendron ponticum</i>) are present and their management is strongly recommended.</p>
Aesthetic appeal	Acid grassland, open habitat and woodland.
Geodiversity interest	Cassel Hospital is situated on the floodplain of the River Thames with the London Clay Formation beneath.

Table 37: SINC selection criteria - RiB28 Trowlock Avenue Riverside Land (previously candidate site B5)

Criteria	Comments
Representation	Trowlock Avenue riverside land, Teddington
Habitat rarity	The site supports a relatively large area of acid grassland and several veteran trees; both of which are rare habitats in London.
Species rarity	Unknown, due to the inaccessibility of this site, other notable invertebrate species are likely to occur.
Habitat richness	Average
Species richness	Unknown
Size	1.69
Important populations of species	Unknown.
Ancient character	The site is largely 20 th century in origin; however, there may be elements of earlier Thames-side marginal vegetation and riverbanks within the site.
Re-creatability	Not re-creatable
Typical urban character	The site is typical of the suburban Thames in west London.
Cultural or historic character	Unknown.
Geographic position	Trowlock Avenue riverside land is situated in Teddington, upstream of Teddington Lock .
Access	Inaccessible to the public but used by local residents.
Use	Recreational
Potential	Unknown.
Aesthetic appeal	Riverside habitat and views with mature, non-native woodland.
Geodiversity interest	Trowlock Avenue riverside land is situated on the floodplain of the River Thames with the London Clay Formation beneath.

Table 38: SINC selection criteria – RiB29 (RiL10) Twickenham Junction Rough

Criteria	Comments
Representation	Wildlife habitat developed on railway associated land
Habitat rarity	None
Species rarity	Wall-rue (<i>Asplenium ruta-muraria</i>), maidenhair spleenwort (<i>A. trichomanes</i>) and black spleenwort (<i>A. adiantum-nigrum</i>) are rare London species. GiGL report song thrush (<i>Turdus philomelos</i>) and slow-worm (<i>Anguis fragilis</i>) as occurring on site which are priority London species.
Habitat richness	Average
Species richness	Average
Size	4.72 ha
Important populations of species	Ferns on embankment walls
Ancient character	N/a
Re-creatability	Not re-creatable
Typical urban character	In urban area in and around railway junction
Cultural or historic character	In 1848 the London and South West Railways Windsor Line was constructed, the land that now forms the Junction Rough was once leased to the Pouparts as farmland.
Geographic position	Is part of the string of green spaces adjoining or associated with the River Crane
Access	To northern part only
Use	Railway land, nature area, walking/cycling route
Potential	Open vista to River Crane via careful management and planting
Aesthetic appeal	Pleasant cycling/walking route
Geodiversity interest	None known

Table 39: SINC selection criteria - RiB30 (RiL24) Teddington Cemetery

Criteria	Comments
Representation	Mature Victorian Cemetery with good range of habitats
Habitat rarity	Small pockets of Acid grassland – a priority habitat in London
Species rarity	Mouse-ear hawkweed (<i>Pilosella officinarum</i>) and pyramidal orchid (<i>Anacamptis pyramidalis</i>) are rare in Greater London
Habitat richness	Average
Species richness	Rich
Size	5.49ha
Important populations of species	Wide range of common birds present
Ancient character	N/a
Re-creatability	Not re-creatable
Typical urban character	Urban cemetery
Cultural or historic character	Victorian cemetery opened in 1879
Geographic position	Adjoins Strawberry Hill Golf Course via Strawberry Hill Railway Junction
Access	Free
Use	Cemetery
Potential	Careful ecological management sympathetic with use as a cemetery could maximise the site's biodiversity potential
Aesthetic appeal	Attractive Victorian cemetery, a place for quiet reflection
Geodiversity interest	None known

Table 40: SINC selection criteria – RiB31 (RiL22) Twickenham Cemetery

Criteria	Comments
Representation	Biodiverse urban cemetery
Habitat rarity	Includes areas of acid grassland a priority habitat in London
Species rarity	Mouse-ear hawkweed (<i>Pilosella officinarum</i>) and common storksbill (<i>Erodium cicutarium</i>) are uncommon in Greater London.
Habitat richness	Rich
Species richness	Rich
Size	6.91ha
Important populations of species	Mouse-ear hawkweed and old yew trees
Ancient character	N/a
Re-creatability	Not re-creatable
Typical urban character	Urban cemetery
Cultural or historic character	The cemetery was constructed in 1867 and expanded in 1880. It contains a number of war graves from both world wars
Geographic position	A green oasis with the urban fabric of Whitton
Access	Free
Use	Cemetery
Potential	An ecological management plan sympathetic to the site's use as a cemetery should be formulated with the intention of maximising biodiversity value
Aesthetic appeal	A place for peaceful reflection
Geodiversity interest	None known

C) Sites of Local Importance

Table 41: SINC selection criteria - RiL01 St James' Churchyard, Hampton

Criteria	Comments
Representation	St James's Churchyard, Hampton Hill is a pleasant Victorian churchyard with shady woodland and colourful, flowery grassland.
Habitat rarity	The site consists of a typical churchyard with mixed habitats of grassland, tall herbs, shrubbery, tombstones, and specimen trees. Overall, this is not a rare habitat in London.
Species rarity	London rare and notable plants: wild strawberry (<i>Fragaria vesca</i>) Notable invertebrate species returned from the data search include: stag beetle. Protected and priority vertebrate species returned from the data search include: hedgehog, bat spp., song and mistle thrushes, redwing, house sparrow and common frog.
Habitat richness	Average
Species richness	Average
Size	0.87
Important populations of species	Unknown.
Ancient character	This site is Victorian in origin.
Re-creatability	Not re-creatable
Typical urban character	The site is situated within a suburban landscape.
Cultural or historic character	This site is a typical Victorian churchyard
Geographic position	St James's Churchyard is in Hampton Hill
Access	Fully accessible, with limited entry points.
Use	Recreational and religious
Potential	Continue managing grassland to increase plant diversity by instigating a seasonal cut regime. Two species of invasive non-native plant species present, buddleia (<i>Buddleja davidii</i>) and cherry laurel (<i>Prunus laurocerasus</i>) are present and their management is strongly recommended.
Aesthetic appeal	A typical Victorian churchyard landscape with mature trees.
Geodiversity interest	St James's Churchyard is situated on a gradual rise in the floodplain of the River Thames with the London Clay Formation beneath.

Table 42: SINC selection criteria - RiL02 Marble Hill Park and Orleans House Gardens

Criteria	Comments
Representation	Marble Hill Park: Large expanses of amenity grassland with mixed woodland and ancient trees. Orleans House Grounds: Predominantly secondary woodland with small areas of acid grassland and amenity grassland.
Habitat rarity	None
Species rarity	Marble Hill Park: None recorded during survey Orleans House Grounds: Three London Notable plants were recorded during a Phase One Habitat survey (2020): Small-flowered Crane's-bill (<i>Geranium pusillum</i>) wild service tree (<i>Sorbus torminalis</i>) and wood speedwell (<i>Veronica montana</i>) The data search returned protected and priority species records as follows: common frog and common toad, 18 species of birds, 7 species of bat, stag beetle, badger and hedgehog
Habitat richness	Moderate
Species richness	Moderate
Size	29.88 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Not re-creatable
Typical urban character	These sites are bounded by roads and urban development to the north and west, private land to the east and the River Thames to the south.
Cultural or historic character	Marble Hill Park surrounds Marble Hill House, a Palladian villa originally built for Henrietta Howard, the mistress of King George II in 1724–29. Orleans House Gardens: Orleans House was a Palladian villa built by the architect John James in 1710 for the politician and diplomat James Johnston. It was subsequently named after the Duc d'Orléans who stayed there in the early 19th century. The gardens and grounds of Orleans House were transformed and reconfigured by each occupant of the 18th century house.
Geographic position	Immediately adjacent to the River Thames, Middlesex side
Access	Open, with a number of access points
Use	Public open space. Sports pitches at Marble Hill Park.
Potential	Marble Hill Park: Remove non-native species e.g. false acacia from woodland areas. Remove saplings from areas of semi-improved neutral grassland. Modify mowing regime within areas of semi-improved neutral grassland to 2 cuts/annum and remove arisings.

Criteria	Comments
	Orleans House: Woodland thinning and glade creation. Removal of horticultural shrubs and non-native invasive species
Aesthetic appeal	Large open spaces for recreation
Geodiversity interest	None known

Table 43: SINC selection criteria - RiL03 Pensford Field

Criteria	Comments
Representation	A small site supporting neutral grassland, small orchard and secondary woodland.
Habitat rarity	None.
Species rarity	The London notable species field scabious (<i>Knautia arvensis</i>), prickly lettuce (<i>Lactuca serriola</i>) and musk-mallow (<i>Malva moschata</i>) were recorded during the survey. The data search included common frog, house sparrow, song thrush, stag beetle, grizzled skipper as well as the noctule and soprano pipistrelle bats.
Habitat richness	Moderate.
Species richness	Moderate.
Size	0.56 ha
Important populations of species	None known.
Ancient character	Not known.
Re-creatability	Not re-creatable in short term.
Typical urban character	The site is surrounded by suburban residential properties.
Cultural or historic character	Not known
Geographic position	In a built-up area of Kew.
Access	Access by arrangement.
Use	Open space for quiet contemplation.
Potential	Manage grassland areas by rotational cutting 2x per year and remove arisings. Raise cutting height of frequently cut areas.
Aesthetic appeal	Small quiet open space in another wise built-up area.
Geodiversity interest	None known

Table 44: SINC selection criteria - RiL05 Terrace Field and Terrace Garden

Criteria	Comments
Representation	Neutral grassland, scrub, native broadleaved, introduced shrubs, hedgerows, tall ruderal vegetation and flower beds
Habitat rarity	None
Species rarity	<p>Four London notable plants; wild onion (<i>Allium vineale</i>), musk mallow (<i>Malva moschata</i>), ivy broomrape (<i>Orobanche hederaceae</i>) and small leaved lime (<i>Tilia cordata</i>) were recorded during the Phase 1 habitat survey of 2019.</p> <p>The data search returned a number of priority species: common and soprano pipistrelle bats, hedgehog, yellow-legged mining bee, cinnabar moth, stag beetle and 9 species of bird.</p>
Habitat richness	Moderate
Species richness	Moderate
Size	6.72 ha
Important populations of species	None known
Ancient character	Not known.
Re-creatability	Not feasibly re-creatable.
Typical urban character	Residential housing lies to the north and east with Buccleuch Gardens and the River Thames to the west and The Petersham Hotel to the south.
Cultural or historic character	Terrace Gardens is a public park laid out in the mid to late-19th century, incorporating ornamental elements of a private estate laid out in the 18th century.
Geographic position	South of Richmond Town Centre adjacent to the River Thames
Access	Open, with numerous access points
Use	Public open space. Gardens
Potential	<p>The semi-improved neutral grassland should be managed by cutting at least twice a year.</p> <p>Removal of non-native invasive trees from woodland areas</p>
Aesthetic appeal	Pleasant open space with views over the Thames
Geodiversity interest	None known

Table 45: SINC selection criteria - RiL06 East Sheen and Richmond Cemeteries and Pesthouse Common

Criteria	Comments
Representation	East Sheen and Richmond Cemeteries and Pesthouse Common have a good range of grassland habitats, secondary wood/hedgerow and a diverse range of ornamental trees.
Habitat rarity	The site consists of a typical churchyard with mixed habitats of grassland, tall herbs, shrubbery, tombstones and specimen trees. Overall, this is not a rare habitat in London.
Species rarity	<p>London rare and notable plants: a hawkweed species (<i>Hieracium</i> sp.), mistletoe (<i>Viscum album</i>) and black poplar (<i>Populus nigra</i> subsp. <i>betulifolia</i>). In addition, the rare and notable oak polypore (<i>Buglossoporus quercinus</i>) and mealy oyster (<i>Ossicaulis lignatilis</i>) have also been reported.</p> <p>Notable invertebrates species returned from the data search include: stag beetle. Mother Shipton, mottled rustic and September thorn, ear, feathered gothic, hedge rustic, cinnabar, dusky thorn, and Jersey tiger moths. Small heath, brown argus, marbled white and white admiral butterflies and the beetle <i>Aphodius coenosus</i>.</p> <p>Protected and priority vertebrate species returned from the data search include: hedgehog, badger, bat spp., song thrush, house sparrow, dunnock, common lizard, common toad and common frog.</p>
Habitat richness	Average
Species richness	Average
Size	16.63
Important populations of species	Unknown.
Ancient character	This site is largely Victorian in origin with a 20 th century cemetery.
Re-creatability	Not re-creatable
Typical urban character	The site is situated within a suburban landscape. However, on it's SE border is Richmond Park, an ancient landscape
Cultural or historic character	This site is a typical Victorian churchyard and 20th century cemetery.
Geographic position	East Sheen and Richmond Cemeteries and Pesthouse Common are situated to the north of Richmond Park.
Access	Fully accessible, with limited entry points.
Use	Recreational and religious
Potential	<p>Continue managing grassland to increase plant diversity by instigating a seasonal cut regime.</p> <p>Two species of invasive non-native plant species present, buddleia (<i>Buddleja davidii</i>) and cherry laurel (<i>Prunus laurocerasus</i>) are present and their management is strongly recommended.</p>
Aesthetic appeal	A typical Victorian churchyard and 20 th century cemetery landscape with mature trees.

Criteria	Comments
Geodiversity interest	East Sheen and Richmond Cemeteries and Pesthouse Common are situated on a gradual rise above the floodplain of the River Thames with the London Clay Formation beneath.

Table 46: SINC selection criteria - RiL09 Old Mortlake Burial Ground

Criteria	Comments
Representation	Old Mortlake Burial Ground is a small cemetery with mature trees and flowery grassland.
Habitat rarity	The site consists of a typical cemetery with mixed habitats of grassland, tall herbs, shrubbery, tombstones and specimen trees. Overall, this is not a rare habitat in London.
Species rarity	London rare and notable plants: least pepperwort (<i>Lepidium virginicum</i>) Notable invertebrate species returned from the data search include: stag beetle. Protected and priority vertebrate species returned from the data search include: hedgehog, bat spp., song thrush, house sparrow, and common frog.
Habitat richness	Average
Species richness	Average
Size	1.480
Important populations of species	Unknown.
Ancient character	This site is largely Victorian in origin.
Re-creatability	Not re-creatable
Typical urban character	The site is situated within a suburban landscape and is largely surrounded by Victorian era housing. A railway track is nearby.
Cultural or historic character	This site is a typical Victorian cemetery.
Geographic position	Old Mortlake Burial Ground is situated in Mortlake.
Access	Fully accessible, with limited entry points.
Use	Recreational and religious
Potential	Continue managing grassland to increase plant diversity by instigating a seasonal cut regime. Two species of invasive non-native plant species present, buddleia (<i>Buddleja davidii</i>) and Himalayan giant blackberry (<i>Rubus armenaicus</i>) are present and their management is strongly recommended.
Aesthetic appeal	A typical Victorian cemetery landscape with mature trees.
Geodiversity interest	Old Mortlake Burial Ground is situated on the floodplain of the River Thames with the London Clay Formation beneath.

Table 47: SINC selection criteria - RiL12 Barnes Green and Pond (Previously Barnes Green Pond)

Criteria	Comments
Representation	A good example of a well-managed urban pond and surrounding parkland
Habitat rarity	None
Species rarity	London notable plants recorded included field scabious (<i>Knautia arvensis</i>) and yellow-rattle (<i>Rhiananthus minor</i>) although these are likely to have been planted The data search returned a range of protected and notable species including 15 species of birds, stag beetle and the ruddy sympetrum dragonfly.
Habitat richness	Moderate (pond).
Species richness	Low-moderate. Good range of marginal vegetation around pond. Barnes green was species-poor.
Size	0.66 ha
Important populations of species	None known
Ancient character	Common land used for rough grazing for over a thousand years.
Re-creatability	Not feasibly re-creatable
Typical urban character	The site is surrounded by a network of roads and suburban housing
Cultural or historic character	Historic open space and pond shown on late 19 th Century OS maps
Geographic position	Public open space in a largely built-up area but connections to Barnes Common to the south
Access	Open with numerous access points around the site
Use	Public open space
Potential	Increase cutting height in amenity grassland areas to allow herbs to flower. Pond is currently well managed. Install signs to reduce feeding of wildfowl.
Aesthetic appeal	A pleasant urban pond set in a village green
Geodiversity interest	Not known

Table 48: SINC selection criteria - RiL15 Churchyard of St Mary with St Alban, Teddington

Criteria	Comments
Representation	Churchyard of St Mary with St Alban, Teddington is an attractive churchyard with colourful, flowery grassland and some large trees.
Habitat rarity	The site consists of a typical churchyard with mixed habitats of grassland, tall herbs, shrubbery, tombstones and specimen trees. Overall, this is not a rare habitat in London.
Species rarity	London rare and notable plants: wild strawberry (<i>Fragaria vesca</i>) and early hair-grass (<i>Aira praecox</i>) Notable invertebrate species returned from the data search include: stag beetle. Protected and priority vertebrate species returned from the data search include: hedgehog, soprano and common pipistrelles, noctule, lesser noctule, Daubenton's and serotine bats, song thrush, house sparrow and common frog.
Habitat richness	Average
Species richness	Average
Size	0.519
Important populations of species	Unknown.
Ancient character	This site dates to at least the 17 th century, probably considerably older.
Re-creatability	Not re-creatable
Typical urban character	The site is situated within an urban landscape adjacent to two busy roads
Cultural or historic character	This site is a typical 17 th century, probably considerably older burial ground.
Geographic position	St Mary with St Alban is in Teddington
Access	Fully accessible, with limited entry points.
Use	Recreational and religious
Potential	Continue managing grassland to increase plant diversity by instigating a seasonal cut regime. One species of invasive non-native plant species present, buddleia (<i>Buddleja davidii</i>) is present and its management is strongly recommended.
Aesthetic appeal	A typical ancient churchyard landscape with mature trees.
Geodiversity interest	St Mary with St Alban is situated on the floodplain of the River Thames with the London Clay Formation beneath.

Table 49: SINC selection criteria - RiL17 Twickenham Road Meadow, Old Deer Park

Criteria	Comments
Representation	Urban nature area with significant areas of created habitat
Habitat rarity	Not rare
Species rarity	Wall-rue (<i>Asplenium ruta-muraria</i>), maidenhair spleenwort (<i>A. trichomanes</i>) found on railway viaduct are rare in Greater London. GiGL report song thrush (<i>Turdus philomelos</i>) and stag beetle (<i>Lucanus cervus</i>) from the area
Habitat richness	Average
Species richness	Average
Size	2.8ha
Important populations of species	Ferns on railway viaduct
Ancient character	N/a
Re-creatability	Not easily re-creatable outside of current location
Typical urban character	Sandwiched between a railway embankment and the busy Twickenham Road
Cultural or historic character	It was formerly part of the Old Deer Park, but is now cut off from the park by the main road
Geographic position	Next to River Thames
Access	Free
Use	Nature area
Potential	GiGL indicate stag beetle is found in the area – more decay wood and loggeries required to cater for this globally threatened insect. Provide more nesting and roosting opportunities by providing appropriate bird and bat boxes
Aesthetic appeal	A green oasis next to the busy Twickenham Road
Geodiversity interest	None known

Table 50: SINC selection criteria - RiL18 Beveree Wildlife Site (previously Ormand Bank)

Criteria	Comments
Representation	Neutral grassland and native broadleaved woodland
Habitat rarity	None
Species rarity	The data search returned the following priority species: bluebell, house sparrow and stag beetle.
Habitat richness	Low
Species richness	Low
Size	0.6 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Recreation possible
Typical urban character	The site is surrounded by residential properties except for Hampton Football ground which lies to the east of the site
Cultural or historic character	Not known
Geographic position	South Hampton
Access	Open
Use	Public open space
Potential	Diversify grass sward through a modified cutting regime Remove non-native invasive trees and shrubs.
Aesthetic appeal	Pleasant open space in an otherwise built-up area
Geodiversity interest	None known

Table 51: SINC selection criteria - RiL19 North Sheen and Mortlake Cemeteries

Criteria	Comments
Representation	North Sheen and Mortlake Cemeteries are two large cemeteries that have a good range of grassland habitats, and a diverse range of ornamental trees.
Habitat rarity	The site consists of a typical churchyard with mixed habitats of grassland, tall herbs, shrubbery, tombstones and specimen trees. Overall, this is not a rare habitat in London.
Species rarity	London rare and notable plants: none Notable invertebrate species returned from the data search include: stag beetle, Jersey tiger moth, Small heath butterfly. Protected and priority vertebrate species returned from the data search include: hedgehog, soprano pipistrelle and noctule bats, song thrush, starling, tawny owl, house sparrow, and common frog.
Habitat richness	Average
Species richness	Average
Size	24.76
Important populations of species	Unknown.
Ancient character	This site is largely Victorian and early 20 th century in origin.
Re-creatability	Not re-creatable
Typical urban character	The site is situated within an urban landscape and is partially surrounded by light industry and housing
Cultural or historic character	This site is a typical Victorian and early 20 th century cemetery with a more recent crematorium.
Geographic position	North Sheen and Mortlake Cemeteries are situated to the south-east of Kew Gardens train and underground station.
Access	Fully accessible, with limited entry points.
Use	Recreational and religious
Potential	Continue managing grassland to increase plant diversity by instigating a seasonal cut regime. Several species of invasive non-native plant species are present including: tree-of-heaven (<i>Ailanthus altissima</i>), buddleia (<i>Buddleja davidii</i>), false acacia (<i>Robinia pseudoacacia</i>) and cherry laurel (<i>Prunus laurocerasus</i>) are present and their management is strongly recommended.
Aesthetic appeal	A typical late Victorian and 20 th century cemetery landscape with mature trees.
Geodiversity interest	North Sheen and Mortlake Cemeteries on the floodplain of the River Thames with the London Clay Formation beneath.

Table 52: SINC selection criteria - RiL20 Hampton Cemetery

Criteria	Comments
Representation	A cemetery with neutral grassland, vegetated tombstones and scattered trees
Habitat rarity	None
Species rarity	The following London Notable species were recorded during the survey: wild onion (<i>Allium vineale</i>), remote sedge (<i>Carex remota</i>) and white stonecrop (<i>Sedum album</i>) The data search returned the following priority species: house sparrow, song thrush, swift, stag beetle, and hedgehog.
Habitat richness	Low
Species richness	Moderate
Size	1.07ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Not re-creatable
Typical urban character	The site is surrounded by suburban housing with roads at the northern and southern ends of the site
Cultural or historic character	Sir Francis Mark Farmer (1866–1922) was a dental surgeon and lecturer on dental surgery and pathology at the London Hospital who made contributions on facial restoration. There is a memorial to William Hodson (1821–1858) who was a British leader of irregular light cavalry during the Indian Mutiny; he is buried in Lucknow. His widow, Susan Annette Hodson (died 4 November 1884), who had a grace-and-favour apartment at Hampton Court Palace, is buried here.
Geographic position	In a largely built-up area of Hampton
Access	Open with two entrances. Opening hours restricted
Use	Cemetery
Potential	Modify grass cutting regime in selected areas to 2 cuts per annum with arisings removed. Control non-native invasive species three-cornered leek and green alkanet
Aesthetic appeal	Quiet cemetery
Geodiversity interest	None known

Table 53: SINC selection criteria - RiL23 Hampton Common

Criteria	Comments
Representation	A large common with amenity grassland, scattered trees, scrub native and non-native hedgerows and a small native broadleaved woodland
Habitat rarity	None
Species rarity	The London notable species, spotted medick (<i>Medicago arabica</i>) and small-flowered crane's-bill (<i>Geranium pusillum</i>) were recorded within the grassland. The data search returned the following protected and priority species: common frog, 10 species of bird, stag beetle, hedgehog and slow worm.
Habitat richness	low
Species richness	Low
Size	13.9 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Potential to recreate habitats present
Typical urban character	The site is surrounded by residential properties with Oak Avenue to the west and Buckingham Road to the East
Cultural or historic character	Previously the site of nurseries
Geographic position	North Hampton
Access	Full access
Use	Passive and active recreational use: outdoor gym, play area and football pitch
Potential	Increase cutting height of grassland to encourage flowering of low growing plants for pollinators
Aesthetic appeal	Large open common with a countryside feel in an otherwise sub-urban landscape
Geodiversity interest	Not known

Table 54: SINC selection criteria - RiL25 Moormead Recreation Ground

Criteria	Comments
Representation	Urban park
Habitat rarity	None
Species rarity	GiGL data shows several notable species have been recorded in the locality e.g., house sparrow (<i>Passer domesticus</i>), songthrush (<i>Turdus philomelos</i>), hedgehog (<i>Erinaceus europaeus</i>) and stag beetle (<i>Lucanus cervus</i>)
Habitat richness	Poor
Species richness	Poor
Size	4.99ha
Important populations of species	Important nesting and foraging site for common birds
Ancient character	N/a
Re-creatability	Not re-creatable
Typical urban character	Surrounding area is heavily urbanised
Cultural or historic character	The land north of the railway line was vested in the Parochial Schools whose trustees agreed to sell the land for the purposes of a public recreation ground. Initially, the River Crane needed to be diverted to the west side. By 1898 the park was listed in the local council's bylaws.
Geographic position	Next to the River Crane
Access	Free
Use	Recreation ground
Potential	To reinstate a more natural River Crane within Moor Meads
Aesthetic appeal	Has the character of a village green
Geodiversity interest	None known

Table 55 SINC selection criteria: RiL26 Garricks Lawn, Hampton (previously candidate site B1)

Criteria	Comments
Representation	A small area of amenity grassland, planted shrubbery and scattered trees
Habitat rarity	None
Species rarity	The London notable species, spotted medick (<i>Medicago arabica</i>) was recorded within the grassland. Nearby bat records included serotine, Natterer's bat, Noctule, common and soprano pipistrelle bats.
Habitat richness	low
Species richness	Low
Size	0.305 ah
Important populations of species	None known
Ancient character	Not known
Re-creatability	Potential to recreate habitats present
Typical urban character	The site is bounded a road to the north and the River Thames to the south.
Cultural or historic character	Garrick's Temple by 18th century actor-manager David Garrick in 1756 to celebrate the genius of William Shakespeare.
Geographic position	Immediately adjacent to the River Thames
Access	Full access during daylight hours
Use	Passive recreational use
Potential	Increase cutting height of grassland to encourage flowering of low growing plants for pollinators
Aesthetic appeal	Views of the River Thames
Geodiversity interest	None known

Table 56: SINC selection criteria - RiL 27 B4 Townmead Allotments (previously candidate site B4)

Criteria	Comments
Representation	A small active allotment site
Habitat rarity	None
Species rarity	No rare species recorded
Habitat richness	low
Species richness	Native species diversity was low. However, there were wide range of exotic plants providing a rich nectar source for invertebrates
Size	0.18 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Potential to recreate habitats present
Typical urban character	Not in an urban setting
Cultural or historic character	None known
Geographic position	Immediately adjacent to the River Thames
Access	Access restricted to key holders
Use	Allotment
Potential	No recommendations
Aesthetic appeal	Flower rich site
Geodiversity interest	None known

Table 57: SINC selection criteria - RiL28 The Wilderness (previously part of RiL16 The Copse at Hampton Wick and Normansfield Hospital)

Criteria	Comments
Representation	A small broadleaved secondary woodland with pond
Habitat rarity	None
Species rarity	The following London Notable species were recorded during the survey: purple loosestrife (<i>Lythrum salicaria</i>) and hemp agrimony (<i>Eupatorium cannabinum</i>). The data search returned the following priority species: stag beetle
Habitat richness	Low
Species richness	Moderate
Size	0.52 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Not re-creatable
Typical urban character	The site is surrounded by suburban housing to the south and west, with Hampton Wick Infant School to the east and Normansfield Avenue to the north.
Cultural or historic character	Not known
Geographic position	In a largely built-up area of Teddington
Access	Restricted for school use
Use	Adventure area for Hampton Wick Infant School
Potential	Remove non-native invasive species. Thin sycamore to reduce shading.
Aesthetic appeal	Small secluded woodland
Geodiversity interest	None known

Table 58: SINC selection criteria - RiL29 St Andrew's churchyard, Ham (previously candidate site B3)

Criteria	Comments
Representation	St. Andrew's churchyard, Ham
Habitat rarity	The site consists of a typical churchyard with mixed habitats of grassland, tall herbs, shrubbery, tombstones, and specimen trees. Overall, this is not a rare habitat in London.
Species rarity	<p>London rare and notable plants: wild strawberry (<i>Fragaria vesca</i>), field scabious (<i>Knautia arvensis</i>), meadow saxifrage (<i>Saxifraga granulata</i>) and hybrid violet (<i>Viola x scabra</i>)</p> <p>Notable invertebrate species returned from the data search include: stag beetle.</p> <p>Protected and priority vertebrate species returned from the data search include: hedgehog, badger, bat spp., song thrush, house sparrow, and common frog.</p> <p>Considering its proximity to Ham Common, it is probable that there are significantly more notable invert and bird species on the site.</p>
Habitat richness	Average
Species richness	Rich
Size	0.87
Important populations of species	Unknown.
Ancient character	This site is largely Victorian in origin but is situated within an older landscape.
Re-creatability	Not re-creatable
Typical urban character	The site is situated within an suburban landscape but is largely surrounded by wooded common land.
Cultural or historic character	This site is a typical Victorian churchyard.
Geographic position	St. Andrew's churchyard is located on Ham Gate Avenue, Ham
Access	Fully accessible, with limited entry points.
Use	Recreational and religious
Potential	<p>Continue managing grassland to increase plant diversity by instigating a seasonal cut regime.</p> <p>One species of invasive non-native plant species is present, buddleia (<i>Buddleja davidii</i>), its management is strongly recommended.</p>
Aesthetic appeal	A typical Victorian graveyard partially embedded within a larger block of wooded common.

Criteria	Comments
Geodiversity interest	St. Andrew's churchyard is on the floodplain of the River Thames with the London Clay Formation beneath.

Table 59: SINC selection criteria - RiB 32 Udney Park Playing Fields (previously candidate site B6)

Criteria	Comments
Representation	Udney Park Playing Fields, Teddington is a small urban park that was until recently largely used for sports recreation.
Habitat rarity	The site is largely dominated by former sports pitches. However, some of the grassland is acid in character and appears to be reverting to a semi-natural state.
Species rarity	London rare and notable plants: common cudweed (<i>Filago germanica</i>) and mistletoe (<i>Viscum album</i>). Retrieved from the data search: small heath butterfly, song thrush and a pipistrelle sp.
Habitat richness	Average
Species richness	Average
Size	5.199
Important populations of species	Unknown.
Ancient character	This site is largely early 20 th century in origin
Re-creatability	Not re-creatable
Typical urban character	The site is situated within a suburban landscape and is largely surrounded by housing.
Cultural or historic character	This site was a typical 20 th century sports field; however, it is now reverting to a semi-natural state.
Geographic position	Udney Park Playing Fields is located just to the north of Bushy Park in Teddington
Access	Fully accessible, with limited entry points.
Use	Recreational
Potential	Continue managing grassland to increase plant diversity by instigating a seasonal cut regime. One species of invasive non-native plant species is present, buddleia (<i>Buddleja davidii</i>), its management is strongly recommended.
Aesthetic appeal	An open landscape of value to the local community for light recreation.
Geodiversity interest	Udney Park Playing Fields is on the floodplain of the River Thames with the London Clay Formation beneath.

Table 60: SINC selection criteria - RiL 30 (RiBII11) Kew Meadow Path

Criteria	Comments
Representation	unremarkable-looking public footpath noted for harboring a population of rare two-lipped doorsnail
Habitat rarity	Common
Species rarity	Two-lipped doorsnail (<i>Balea biplicata</i>) is very rare in Britain being found in just a handful of sites
Habitat richness	Poor
Species richness	Poor
Size	0.11ha
Important populations of species	Two-lipped doorsnail (<i>Balea biplicata</i>)
Ancient character	N/a
Re-creatability	Re-creatable with sufficient time (say 10 years)
Typical urban character	Walking route between houses
Cultural or historic character	Not known
Geographic position	Just north of Mortlake Cemetery but separated from it by the busy Mortlake Road
Access	Free
Use	Walking route
Potential	Two-lipped doornail survey required to assess current population and adjust site management and SINC status accordingly.
Aesthetic appeal	Some
Geodiversity interest	None known

Table 61: SINC selection criteria – RiL 28 Langdon Park (previously RiL16 The Copse at Hampton Wick and Normansfield Hospital)

Criteria	Comments
Representation	A large area of neutral grassland with scrub, a small artificial pond, amenity grassland and non-native broadleaved woodland
Habitat rarity	None
Species rarity	The following London Notable species were recorded during the survey: hare's-foot-clover (<i>Trifolium arvense</i>), small-flowered crane's-bill (<i>Geranium pusillum</i>) and lesser hawkbit (<i>Leontodon saxatilis</i>) The data search returned the following priority species: common toad, common frog, house sparrow, song thrush, stag beetle and hedgehog
Habitat richness	Low
Species richness	Moderate
Size	3.89 ha
Important populations of species	None known
Ancient character	Not known
Re-creatability	Not re-creatable
Typical urban character	The site is surrounded by suburban housing with the old Normansfield Hospital and grounds to the south.
Cultural or historic character	Previously part of the Normansfield Hospital grounds. The Normansfield Hospital was founded at the White House in Teddington as an institution for mentally handicapped children by John Langdon Down, after whom Down syndrome was named. It was opened as the Normansfield Training Institution for 'Imbeciles' in May 1868
Geographic position	In a largely built-up area of Teddington
Access	Open, with two access points
Use	Open space
Potential	The semi-improved neutral grassland should be managed by cutting at least twice a year. Arisings should be removed. Advice should be obtained for control of Australian stonecrop in the pond The non-native woodland should be progressively thinned and native species allowed to regenerate and be recruited to the canopy.
Aesthetic appeal	Large open area in a predominantly built-up part of Teddington.

Criteria	Comments
Geodiversity interest	None known

4 Discussion

4.1 Overview

- 4.1.1 The following section gives an explanation of tiers of sites and Areas of Deficiency (AoD) and provides recommendations regarding the appropriate grade of designation for each site.

Tiers of sites

- 4.1.2 Three tiers of sites of importance for nature conservation are recognised in the London Borough of Richmond upon Thames:

Sites of Metropolitan Importance for Nature Conservation

- 4.1.3 Sites of Metropolitan Importance for Nature Conservation are those sites which contain the best examples of London's habitats, sites which contain particularly rare species, rare assemblages of species or important populations of species, or sites which are of particular significance within otherwise heavily built-up areas of London. There are ten Sites of Metropolitan Importance in Richmond.
- 4.1.4 In Richmond, these sites have been selected as they support a regionally significant extent of at least one Habitat of Principal Importance including ponds, rivers, lowland dry acid grassland, open mosaic habitats on previously developed land, reedbeds, wet woodland and Lowland Mixed deciduous woodland.
- 4.1.5 Sites are also selected if they support significant populations of notable species i.e. legally protected species, London Notable Plants, London BAP priority species, London Species of Conservation Concern or red data book species. Sites have been recommended for upgrade where a site of borough importance meet these criteria. Expansion areas have been added where these provide connectivity to another site, act as a buffer to the Site of Metropolitan Importance or are important for its ecological functionality.

Sites of Borough Importance

- 4.1.6 Sites of Borough Importance are important at a borough level in the same way as the Metropolitan sites are important to the whole of London. Although sites of similar quality may be found elsewhere in London, damage to these sites would mean a significant loss to the borough. As with Metropolitan sites, while protection is important, management of borough sites should usually allow and encourage their enjoyment by people and their use for education. Thirty Sites of Borough Importance are recommended for selection in Richmond. These sites have been recommended where they support at least one habitat of nature conservation value (which may include Habitats of Principal Importance) and/or a population of notable species. A number of Sites of Local Importance are recommended for upgrade on this basis.

Sites of Local Importance

- 4.1.7 A Site of Local Importance is one which is, or may be, of particular value to people nearby (such as residents or schools). These sites may already be used for nature study or be run by management committees mainly composed of local people. Where a Site of Metropolitan or Borough Importance may be so enjoyed it acts as a Local site, but further sites are given this designation in recognition of their role. This local importance means that these sites also deserve protection in planning. Local sites are particularly important in areas otherwise deficient in nearby wildlife sites. To aid the choice of these further local sites, Areas of Deficiency (see 4.1.8 below) are identified. Further Local sites are chosen as the best available to alleviate this deficiency; such sites need not lie in the Area of Deficiency, but should be as near to it as possible. Where no such sites are available, opportunities should be taken to provide them by habitat enhancement or creation, by negotiating access and management agreements, or by direct acquisition. Only those sites that provide a significant contribution to the ecology of an area are identified. Twenty-two sites of Local Importance have been recommended for selection in Richmond.

Areas of Deficiency

- 4.1.8 Areas of Deficiency are defined as built-up areas more than one-kilometre actual walking distance from an accessible Metropolitan or borough site. These aid the choice of Sites of Local Importance.

5 Recommendations

5.1 Review of existing and candidate SINCS

- 5.1.1 Each existing / candidate SINC was re-evaluated / evaluated using LWSB criteria. A citation, habitat map and species list was produced for each site (Volume 2) highlighting key habitats, species and other characteristics which indicate the proposed tier of designation.
- 5.1.2 Each site map shows the SINC boundary, parcel boundaries, areas that are recommended to be added to the SINC (expansion areas) and removed from it. Habitat maps show the extent and distribution of each habitat together with target notes highlighting features of nature conservation importance, particularly London Notable species and non-native invasive species.
- 5.1.3 The section below provides recommendations for existing SINC and candidate site grading. Justification for the proposed grading of new SINCS or the regrading of existing SINCS is provided. Recommendations for the inclusion of expansion areas for selected SINCS are also made.

5.2 SINCS – No Changes recommended

Sites of Metropolitan Importance for Nature Conservation:

- M0 87 London Wetland Centre (pending survey results)
- M081 Hounslow Heath

Sites of Borough Importance

- RiB01 Royal Mid-Surrey Golf Club (pending survey)
- RiB03 Hydes Field
- RiB07 Fulwell and Twickenham Golf courses
- RiB08 Duke of Northumberland River, south of Kneller Road
- RiB09 Strawberry Hill Golf Course
- RiB14 The Copse, Holly Hedge Field and Ham Avenues
- RiB17 Oak Avenue LNR (proposed expansion area – recommend rejection)
- RiB19 Hounslow, Feltham and Whitton Junctions
- RiB21 St Michael's Convent Garden (pending survey)

Sites of Local Importance

- RiL01 St James's Churchyard, Hampton Hill
- RiL02 Marble Hill Park and Orleans House Gardens
- RiL07 Hampton Court House School Grounds (pending survey)

- RiL09 Old Mortlake Burial Ground
- RiL15 Churchyard of St Mary with St Alban
- RiL20 Hampton Cemetery
- RiL23 Hampton Common
- RiL25 Moor Mead Recreation Ground

5.3 SINCs – Changes recommended

5.3.1 The following provides recommendations for re-grading existing SINC

s, incorporation of additional land (expansion areas), exclusion of land from existing SINCs and other miscellaneous changes.

M086 Barnes Common

5.3.2 Incorporate a small additional area of woodland (0.2 ha) immediately to the east of Rocks Lane Sport Centre. The woodland is contiguous with woodland at Barnes Common to the south.

M031 River Thames & Tidal Tributaries

5.3.3 Incorporate additional land at Old Deer Park. This area includes the London notable species purple-loosestrife (*Lythrum salicaria*) and a solitary spike of betony (*Stachys officinalis*). Wet grassland such as this is an unusual habitat in Greater London. The remainder of Old Deer Park is of low nature conservation value and is not recommended for inclusion in the Site of Metropolitan Importance.

5.3.4 The river bank at Twickenham riverside is to be included. Although not of great nature conservation value, there are lines of mature trees and bankside habitat which provide some continuity of semi-natural vegetation, act as a wildlife corridor and a link to adjacent sites such as Marble Hill Park.

5.3.5 A small area of grassland at Ham is also to be included which ensures a link to the adjacent Ham Lands SINC.

M076 The Crane Corridor:

5.3.6 A number of additional parcels to be added to the site. The River Crane at Mereway (parcel 24201/01) is in a concrete channel with overhanging trees and scrub with no obvious aquatic vegetation. However, this section is likely to be of value for fish and foraging waterbirds.

5.3.7 Parcel 24045/03, the section west of London Road, Twickenham River is also constrained in concrete culvert with steep vertical walls. This section is generally less densely shaded than the River Crane at St Margaret's section and full of fish.

- 5.3.8 Parcel 24045/07 is a wooded triangle in Craneford Way Park. This area is contiguous with the River Crane and is likely to provide nesting sites and foraging habitat for common birds.
- 5.3.9 The above expansion areas also act as wildlife corridors/buffers and are contiguous with the River Crane Site of Metropolitan Importance.

M082 Richmond Park and Associated Areas:

- 5.3.10 Add in additional land, including areas of amenity grassland and a small allotment at Palewell Park to ensure continuity of Semi-natural habitat and a wildlife corridor to the Beverley Brook SINC. Include additional areas at the Richmond Park Golf course as a buffer/additional semi-natural habitat to the site.
- 5.3.11 Adjust the site boundary adjacent to Petersham Meadows.

M083 Ham Lands

- 5.3.12 Add in areas of amenity grassland (playing fields) to the north of the site. Although not particularly species-rich, inclusion of this area will act as a buffer to the rest of the site and provide opportunities for enhancement of edge habitats through a change in management.

M084 Bushy Park and Home Park

- 5.3.13 Incorporate National Physical Laboratory (NPL) land into the SINC. NPL land holdings include extensive areas of acid grassland, a habitat of Principal Importance. Whilst this is currently closely mown, a change of management of selected areas to enhance this habitat may be possible. There is a large area of unmanaged woodland with mature oaks. Although there is understory of rhododendron and other non-native invasive species, restoration to parkland or native woodland habitat is feasible.

M085 Hampton Water Treatment Works and Reservoirs:

- 5.3.14 It is recommended that Hampton Water Treatment Works SINC is upgraded to a Site of Metropolitan Importance and amalgamated with Stain Hill and Sunnyside Reservoirs to create 'Hampton Water Treatment Works and Reservoirs' Site of Metropolitan Importance. The water treatment works support areas of species-rich grassland which include a number of London Notable plants. In addition, the disused filter beds adjacent to the Thames have developed into extensive reedbeds with adjacent previously developed land becoming species-rich habitat. Further protection and appropriate management of this land will add a significant nature conservation resource to the borough.

M154 Royal Botanic Gardens, Kew

5.3.15 The staff yard and nursery has been removed from the SINC as these areas have negligible value for nature conservation.

RiB04 Duke of Northumberland's River, north of Kneller Road

5.3.16 A small area of the river, which falls within the London Borough of Hounslow, at the northern end to be added to the site as this is an integral part of the existing SINC.

RiB06 Longford River in Richmond

5.3.17 Pantile Bridge Open Space, at the junction of Uxbridge Road and High Street Hampton Hill to be added to the existing SINC. Whilst not of high nature conservation value, this small area of amenity grassland acts as a buffer to the SINC.

RiB10 Petersham Meadows

5.3.18 Adjustments to the site boundary are required (see habitat map, volume 2).

RiB11 Occupation Lane, Kew Railway Embankment & Snail Reserve

5.3.19 An expansion area, parcel 24517/04, to be added to the site. This wooded area is a known habitat for the two-lipped door snail (*Balea biplicata*) The species is rare in England and is found almost exclusively along the River Thames. Ivy broomrape (*Orobanche hederæ*), a London Notable plant was also recorded in this area.

RiB12 Barn Elms Playing Fields

5.3.20 Boundary changes to the site are required. The boundary was previously incorrectly drawn and is updated to exclude areas of amenity grassland which are of low nature conservation value.

RiB13 The Beverley Brook from Richmond Park to the Thames

5.3.21 Add the Hertford Avenue allotments (parcel 24341/09) and Smoky Wood & Barn Elms Playing Fields (parcel 24046/05) to the existing SINC. The allotments offer diverse habitat for a range of organisms. The parcel runs alongside a long stretch of the Beverley Brook thus providing greater habitat connectivity and diversity. The playing fields are of limited conservation value, however its proximity to Beverley Brook provides considerable opportunity for enhancement.

RiB15 Whitton Railsides

5.3.22 Designate as a Site of Borough Importance. The site comprises railway banks with scattered trees, scrub and a zone of roughland down to the tracks. This habitat provides Relatively undisturbed habitat for birds, invertebrates and possibly reptiles.

RiB16 Petersham Lodge Woods and Ham House Meadows

5.3.23 Add an expansion area to the south-west of the site. This area is a complex mixture of seasonally mown, species rich grassland, tall herbs, scrub and wet woodland. This diverse habitat matrix will support a wide range of organism groups. The presence of the regionally scarce meadow crane's-bill (*Geranium pratense*) and corky-fruited water dropwort (*Oenanthe pimpinelloides*) is notable. This additional expansion area supports acid grassland, a Habitat of Principal Importance.

5.3.24 Remove football pitches to the west of Petersham Lodge Woods. These are of low biodiversity value.

RiB17 Oak Avenue LNR

5.3.25 No change is recommended to the existing SINC. The proposed expansion area; horse paddocks to the north of the site are recommended to be excluded. Both paddocks are heavily over-grazed and consequently in poor condition although, with a change in management, there is potential for an improvement in quality.

RiB18 Hatherop Conservation area

5.3.26 A change in name from 'Hatherop Burning Ground' to 'Hatherop Conservation Area' is recommended to better reflect the current use of the site. No other changes are recommended.

RiB02 Leg 'o' Mutton Reservoir LNR

5.3.27 A change in name from Lonsdale Road Reservoir Local Nature Reserve to Leg o' Mutton Reservoir Local Nature Reserve is recommended to reflect the name in common use.

RiB20 River Crane at St Margaret's

5.3.28 Expansion area (24653/03) added to site. This area comprises a strip of sycamore dominated woodland 'wasteland' next to railway. It is of some value for common birds for nesting also presents breeding and foraging habitat for invertebrates. The parcel runs alongside a long stretch of the River Crane thus providing greater habitat

connectivity and diversity. Part of this site to the west of London Road to be removed and added to the Crane Corridor Site of Metropolitan Importance.

RiB23 Kew Pond and Kew Green

5.3.29 Upgrade from Site of Local Importance to Site of Borough Importance. The site to the west of Kew Road supports a large area of acid grassland. Whilst very degraded, the grassland has potential for restoration with appropriate management. In addition, a number of rare species of clover and the London Notable species meadow saxifrage (*Saxifraga granulata*) has been recorded.

RiB24 Portlane Brook & Meadow

5.3.30 Upgrade from Site of Local Importance to Site of Borough Importance. This area of extensive species-rich neutral grassland supports London Notable plants including vervein (*Verbena officinalis*) and common centaury (*Centaureum erythraea*). There is potential for further enhancement with a change in management. The site is also immediately adjacent to the Hampton Water Treatment Works and Reservoirs Site of Metropolitan Importance and therefore has good connectivity to that site for a range of organisms.

RiB25 Ham Common West

5.3.31 Upgrade from a Site of Local Importance to a Site of Borough Importance. The site supports a large area of acid grassland. Whilst degraded, the grassland has potential for restoration with appropriate management.

RiB26 Terrace Field & Terrace Gardens

5.3.32 Upgrade from a Site of Local Importance to a Site of Borough Importance. Terrace Field is an extensive species-rich neutral grassland supporting a number of London Notable plants including wild onion (*Allium vineale*), musk mallow (*Malva moschata*) and ivy broomrape (*Orobanche hederæ*).

RiB27 The Cassel Hospital

5.3.33 Upgrade from a Site of Local Importance to a Site of Borough Importance. There is a relatively extensive area of acid grassland, a Habitat of Principal Importance. This grassland is of good quality and has ant mounds and notable species such as bird's-foot (*Ornithopus perpusillus*). There is also a very fine veteran sweet chestnut (*Castanea sativa*) that is probably several hundred years old. The woodland is also of high value to a wide range of organisms.

RiB28 Trowlock Avenue riverside land, Teddington

5.3.34 Designate as a site of Borough Importance. The site adjoins the Thames and has significant stands of large trees and scrub it is therefore likely to be of conservable value to birds, bats and invertebrates.

RiB29 Twickenham Junction Rough

5.3.35 Upgrade from a Site of Local Importance to a Site of Borough Importance with the addition of an expansion area. The site was previously incorrectly graded as a Site of Local Importance. The addition of the expansion area adjacent to the River Crane further increases the value of the site. The habitats and plant species present in the new expansion area will be attractive to a range of common birds and invertebrates for shelter, breeding and foraging.

RiB30 Teddington Cemetery

5.3.36 Upgrade from a Site of Local Importance to Site of Borough Importance. The grassland at this site is species-rich and there are a number of mature trees supporting a range of birds.

RiB31 Twickenham Cemetery

5.3.37 Upgrade from a Site of Local Importance to a Site of Borough Importance. Add in expansion area. This site supports areas of extensively managed grassland with a variety of wildflowers present including the London Notable species, pyramidal orchid (*Anacamptis pyramidalis*). The expansion area is predominantly amenity grassland, however there are areas of wildflower seeding that supports a good variety of insects.

RiB32 Udney Park Playing Fields

5.3.38 Designate as a Site of Borough Importance for Nature Conservation. The site supports some acid grassland, a Habitat of Principal Importance. Although the grassland is currently severely degraded, with appropriate management, the site has the potential to be a valuable and locally significant grassland habitat. The presence of common cudweed (*Filago vulgaris*), a nationally uncommon and regionally rare (but gradually increasing) species is notable. A number of species of bat have been recorded at the site.

RiL03 Pensford Field

5.3.39 Recommend removal of tennis courts from existing SINC as they have negligible nature conservation value.

RiL06 East Sheen and Richmond Cemeteries and Pesthouse Common

5.3.40 Add additional expansion areas to Pesthouse Common (parcel 24006/07) and Grove Road Gardens adjacent to the old cemetery (parcel 24006/06). These areas of scattered trees over amenity grassland are contiguous to the existing site and will act as a buffer and provide additional habitat.

RiL12 Barnes Green and Pond

5.3.41 Add Barnes Green to the Barnes Pond SINC. Recommended new name to be 'Barnes Green and Pond'. The expansion area, Barnes Green is amenity grassland with scattered trees and of only moderate nature conservation value. However, it is contiguous with the pond and provides a link and wildlife corridor to the adjacent Barnes Common Site of Metropolitan Importance.

RiL16 Langdon Park

5.3.42 Remove much of the southern part of the site from the SINC. Much of this area has been developed and is managed as amenity grassland. Although there are some areas of moderately rich semi-improved neutral grassland, this is not, and is unlikely to be, managed for nature conservation. Change the name of the site from 'The Copse at Hampton Wick and Normansfield Hospital' to 'Langdon Park' to better reflect the location of the site. Separate the small woodland adjacent to Hampton Wick Infant School (parcel 24519/02) from Langdon Park and designate as a separate Site of Local Importance 'The Wilderness'.

RiL28 The Wilderness

5.3.43 Create a new Site of Local Importance, 'The Wilderness' (see Langdon Park above).

RiL17 Twickenham Road Meadow

5.3.44 Expand the site to the north of the existing SINC. The expansion area is effectively a continuation of the existing site.

RiL18 Beveree Wildlife Site (Ormond Bank)

5.3.45 Formally change the name of the site to 'Beveree Wildlife Site' to reflect the name in everyday use.

RiL19 North Sheen (Fulham New) & Mortlake (Hammersmith New) Cemeteries

5.3.46 Add expansion area to the north of the site (parcel 24504/03). Although this area is largely amenity grassland, it does link the site to the River Thames and Tidal Tributaries Site of Metropolitan Importance and may act as a wildlife corridor for certain species.

RiL26 Garrick's Lawn

5.3.47 Designate site as a Site of Local Importance for Nature Conservation. The site is immediately adjacent to Thames and Tidal Tributaries Site of Metropolitan Importance and has a number of bankside trees as well as marginal vegetation which are likely to be of value to a variety of species using the Thames.

RiL 27Townmead Allotments

5.3.48 Designate as a Site of Local Importance for Nature Conservation. The allotment offers a range of flowering plants which are likely to provide a range of habitats, particularly for invertebrates including a rich variety of nectar sources.

RiL29 St Andrews Churchyard

5.3.49 Designate as a Site of Local Importance for Nature Conservation. The main part of the site is dominated by relatively species rich grassland and tall herbs between the memorials although there are smaller areas of finer quality/shorter grassland. The site also contains a strip of regenerating secondary native woodland with a badger set in the SE corner.

RiL30 Kew Meadow Path

5.3.50 Downgrade the site from a site of Borough Importance to a Site of Local Importance for Nature Conservation pending a survey for the two-lipped door snail (*Balea biplicata*). If this species is absent, the site is of low value and down-grading can be confirmed.

5.3.51 See table 59 below for a summary of recommendations and Appendix 1 for a map of recommended SINCS.

Table 62: SINC status: Summary of recommendations

Old ref.	New ref.	Name	Recommendations
M031	M031	River Thames & Tidal Tributaries	No change to status recommended. Expansion areas added
M076	M076	Crane Corridor	No change to status recommended. Expansion areas added

Old ref.	New ref.	Name	Recommendations
M082	M082	Richmond Park and associated areas	No Change to status. Expansion areas added
M083	M083	Ham Lands	No change to status recommended. Expansion areas added
M084	M084	Bushy Park and Home Park	No change to status recommended. Expansion areas added
M085/RiB05	M085	Hampton Water Treatment works and Reservoirs	Stain Hill and Sunnyside Reservoirs and Hampton Water Treatment works to be amalgamated. New name: Hampton Water Treatment Works and Reservoirs Site of Metropolitan Importance
M086	M086	Barnes Common	No change to status recommended. Expansion area added
M087	M087	London Wetland Centre	No change to status recommended pending survey results
M154	M154	Royal Botanic Gardens, Kew	No change to status recommended. Some areas excluded
MO81	MO81	Hounslow Heath (Richmond Section)	No change to status recommended.
RiBI01	RiB01	Royal Mid-Surrey Golf Club	No change to status pending survey
RiBI02	RiB02	Lonsdale Road Reservoir - Leg 'o' Mutton Reservoir LNR	No change to status recommended. Recommend change of name to Leg 'o' Mutton Reservoir LNR.
RiBI03	RiB03	Hydes Field	No change to status recommended.
RiBI04	RiB04	Duke of Northumberland's River, north of Kneller Road	No change to status recommended.
RiBII02	RiB06	Longford River in Richmond	No change to status recommended.
RiBII03	RiB07	Fulwell and Twickenham] Golf Courses	No change to status recommended.
RiBII04	RiB08	Duke of Northumberland's River, south of Kneller Road	No change to status recommended.
RiBII05	RiB09	Strawberry Hill Golf Course	No change to status recommended.

Old ref.	New ref.	Name	Recommendations
RiBII06	RiB10	Petersham Meadows	No change to status recommended
RiBII07	RiB11	Occupation Lane, Kew Railway Embankment & Snail Reserve	No change to status recommended. Expansion area added
RiBII08	RiB12	Barn Elms Playing Fields	No change to status recommended. Boundary changes to exclude some areas
RiBII09	RiB13	The Beverley Brook from Richmond Park to the Thames	No change in status recommended. Expansion areas added
RiBII10	RiB14	The Copse, Holly Hedge Field and Ham Avenues	No change to status recommended.
B7	RiB15	Whitton Railsides	Recommend designation as Site of Borough Importance
RiBII12	RiB16	Petersham Lodge Woods and Ham House Meadows	No change to status recommended. Expansion area added. Some areas to be excluded.
RiBII14	RiB17	Oak Avenue LNR	No change to status recommended. Proposed expansion area (horse paddocks) to be excluded i.e. remain unclassified
RiBII15	RiB18	Hatherop Burning Ground	No change to status recommended. Change of name recommended to Hatherop Conservation Area
RiBII16	RiB19	Hounslow Feltham and Whitton Junctions	No change to status recommended
RiBII18	RiB20	River Crane at St Margarets	No change to status recommended. Expansion area added to site.
RiB21	RiB21	St Michael's Convent Garden	No change to status pending survey
RiB22	RiB22	St Margaret's Residential Grounds	No change to status recommended.
RiL11	RiB23	Kew Pond and Kew Green	Recommend Upgrade to Site of Borough Importance
RiL21	RiB24	Portlane Brook & Meadow	Recommend Upgrade to Site of Borough Importance
RiL13	RiB25	Ham Common West	Recommend upgrade to Site of Borough Importance

Old ref.	New ref.	Name	Recommendations
RiL05	RiB26	Terrace Field & Terrace Gardens	Recommend upgrade to Site of Borough Importance
RiL08	RiB27	Cassel Hospital	Recommend upgrade to Site of Borough Importance
B5	RiB28	Trowlock Avenue riverside land, Teddington	Recommend designate as Site of Borough Importance
B6	RiB32	Udney Park Playing Fields, Teddington	Recommend designate as a Site of Borough Importance.
RiL10	RiB29	Twickenham Junction Rough	Recommend upgrade to Site of Borough Importance
RiL24	RiB30	Teddington Cemetery	Recommend upgrade to Site of Borough Importance
RiL22	RiB31	Twickenham Cemetery	Upgrade to Site of Borough Importance. Expansion area added to site.
RiL01	RiL01	St James's Churchyard, Hampton Hill	No change to status recommended.
RiL02	RiL02	Marble Hill Park and Orleans House Gardens	No change to status recommended.
RiL03	RiL03	Pensford Field	No change to status recommended. Boundary change to exclude tennis courts
RiL06	RiL06	East Sheen and Richmond Cemeteries and Pesthouse Common	No change to status recommended.
RiL07	RiL07	Hampton Court House School Grounds	No change to status pending survey
RiL09	RiL09	Old Mortlake Burial Ground	No change to status recommended.
RiL12	RiL12	Barnes Green and Pond	No change to status recommended. Amalgamate with Barnes Green. New name: Barnes Green and Pond Site of Local Importance.
RiL15	RiL15	Churchyard of St Mary with St Alban, Teddington	No change to status recommended.

Old ref.	New ref.	Name	Recommendations
RiL16	RiL16	Normansfield Hospital	No Change to status recommended. Change name to Langdon Park. Substantial reduction in SINC area due to development. Recommend that The Wilderness forms a separate site of Local Importance
RiL17	RiL17	Twickenham Road Meadow, Old Deer Park	No Change to status recommended. Expand to the north of site
RiL18	RiL18	Beveree Wildlife site	No change to status recommended. Formal adoption of name 'Beveree Wildlife site' recommended.
RiL19	RiL19	North Sheen (Fulham New) & Mortlake (Hammersmith New) Cemeteries	No change to status recommended. Expansion area added to site.
RiL20	RiL20	Hampton Cemetery	No change to status recommended.
RiL23	RiL23	Hampton Common	No change to status recommended.
RiL25	RiL25	Moormead Recreation Ground	No change to status recommended
B1	RiL26	Garrick's Lawn, Hampton	Publicly accessible part to west recommend as Site of Local Importance. Private area unclassified
B4	RiL27	Townmead allotments	Recommend designation as Site of Local Importance.
RiL16	RiL28	The Wilderness	Recommend designate as a stand-alone Site of Local Importance.
B3	RiL29	St Andrew's churchyard, Ham and environs	Recommend designate as Site of Local Importance.
RiBII11	RiL30	Kew Meadow Path	Recommend reclassify as a Site of Local Importance.
B2		The Manor House, Ham	Unclassified pending survey

5.4 Survey recommendations

- 5.4.1 Additional, specialist, surveys are recommended for a number of the sites surveyed. Although it may be desirable to carry out a wide range of surveys at every site, key surveys have been identified which will provide further insight into the site's value and, in particular, inform future management. Table 63 overleaf lists surveys recommended for selected sites.

Table 63: Recommended surveys

Site	Recommended survey	Justification
River Thames & Tidal Tributaries	Habitat survey of the tidal Thames foreshore by boat	Marginal vegetation is likely to have been under-recorded during the 2021 survey due to difficulty accessing the foreshore in many areas. A survey for marginal vegetation will highlight floral hotspots as well as areas with deficient vegetation and inform future management
	Rare snail surveys in selected areas	Sections of the tidal Thames are known to support rare species of snail including the two-lipped door snail and German hairy snail
	Bat surveys	Bat surveys should be conducted to establish key commuting corridors to inform tree management on the Thames bankside. In addition, bat surveys should precede any proposed tree works.
The Crane Corridor	Water vole and mink	Continue water vole and mink surveys to establish status of water vole in the Crane corridor
Richmond Park and associated areas	Rapid Preliminary Invertebrate Habitat Potential survey (IHP) survey* at Richmond Golf Club & Palewell Common	Survey will identify important habitats for invertebrates and inform future management

Site	Recommended survey	Justification
Ham Lands	Reptile survey Rapid Preliminary Invertebrate Habitat Potential survey (IHP) survey*	Both of these surveys will identify important habitats for these taxa and inform future management
Hampton Water Treatment Works and Reservoirs	Breeding bird surveys within reedbed areas of disused filter beds Tower mustard – monitoring Ground flora - monitoring	These surveys will further inform the importance of the newly formed reedbeds Annual monitoring of tower mustard at Stain Hill reservoir to establish effects of management for the species Monitor ground flora in selected grassland areas to establish impacts of changing management
Barnes Common	Rapid Preliminary Invertebrate Habitat Potential survey (IHP) survey*	Survey will identify important habitats for invertebrates and inform future management
Occupation Lane, Kew Railway Embankment & Snail Reserve	Survey for two-lipped door snail	Survey needed to confirm presence of species
The Copse, Holly Hedge Field and Ham Avenues	Ground flora monitoring	Monitoring will establish effects of changing management
Petersham Lodge Woods and Ham House Meadows	Rapid Preliminary Invertebrate Habitat Potential survey (IHP) survey* at Ham House Meadows	Survey will identify important habitats for invertebrates and inform future management
Kew Pond and Kew Green	Ground flora monitoring at Kew Green	Monitoring will establish effects of changing management
Ham Common West	Ground flora monitoring	Monitoring will establish effects of changing management

Site	Recommended survey	Justification
The Cassel Hospital	Rapid Preliminary Invertebrate Habitat Potential survey (IHP) survey*	Survey will identify important habitats for invertebrates and inform future management
Teddington Cemetery	Ground flora monitoring	Monitoring will establish effects of changing management
Twickenham Cemetery	Ground flora monitoring	Monitoring will establish effects of changing management
East Sheen and Richmond Cemeteries and Pesthouse Common	Rapid Preliminary Invertebrate Habitat Potential survey (IHP) survey*	Survey will identify important habitats for invertebrates and inform future management
St Andrew's churchyard, Ham and environs	Rapid Preliminary Invertebrate Habitat Potential survey (IHP) survey* at Ham House Meadows	Survey will identify important habitats for invertebrates and inform future management
Kew Meadow Path	Survey for two-lipped door snail	Survey needed to confirm presence of species to inform site status
Road verges (selected)	Ground flora monitoring	Monitoring will establish the effects of changing management

*A 'Rapid Preliminary Invertebrate Habitat Potential survey (IHP) survey (aka 'Phase I for Bugs') is a technique which allows trained non-specialists to make an initial general assessment of the potential value of sites/survey parcels for invertebrates (Dobson, 2014). It is based on a walk-through survey where no species records are collected, but instead employs basic scoring (absent/negligible, low, medium or high) of ten features of known value to invertebrates. Experience has shown that this can highlight (often unregarded) invertebrate habitat features, as well as revealing possible deficiencies. It is therefore capable of providing, on the basis of a short (Phase I type) survey, a range of data which can be fed into site management and forward planning such as prioritising further invertebrate surveys.

5.5 Additional site surveys

- 5.5.1 Additional sites are identified for survey to further inform/confirm the SINC review. This includes a) sites/parts of sites which could not be surveyed in 2021 (or were only partially surveyed) where access permission could not be obtained or where physical access was difficult and b) new sites identified through GIS analysis. These are sites which are thought to support habitats of nature conservation value as well as allotments which have the potential to support a variety of taxa. Tables 64 & 65 lists sites recommended for survey and figure 4 appendix 2 shows the location of these sites.
- 5.5.2 In addition to those sites listed below, a scoping survey is recommended for road verge habitat across the borough to identify the most biodiverse verges. This will help to inform the borough's management of these habitats. A monitoring scheme for selected road verges is also recommended to establish the effects of changing management.

Table 64: Existing SINC's which were not surveyed in 2021

No	Site	Area (Ha)	6figGR
1	Tidal Crane	0.72	TQ164750
2	Petersham Common	6.41	TQ183736
3	Trowlock Island	0.58	TQ175710
4	Glover's Island	0.19	TQ178736
5	Hampton Court House Grounds	2.31	TQ153689
6	Hydes Field, Dump	3.54	TQ124696
7	Hampton Water Treatment Works, Eastern Filter beds	4.48	TQ136693
8	Royal Mid-Surrey Golf Course	90.72	TQ174758
9	River Crane at St Margaret's (Richmond side)	1.18	TQ162740
10	Trowlock Abenue riverside land	1.51	TQ175709

Table 65: Additional sites/areas recommended for survey (Candidate sites)

No	Site	Area (Ha)	6figGR
11	St Mary Barnes - Churchyard	0.92	TQ221765
12	Barnes Common, Barnes Common Woodland	0.23	TQ221755
13	St Mary Magdalene's Church	0.4	TQ208758
14	Collis Primary School	0.11	TQ164706
15	St Mary's College Strawberry Hill	2.96	TQ159722
16	Grotto Road Open Space	0.25	TQ158728
17	Chertsey Road Meadow	2.7	TQ148736
18	Hounslow Cemetery	2.74	TQ126737
19	Bridge Farm Nursery, Powder Mill Lane Cemetery	3.99	TQ130735

No	Site	Area (Ha)	6figGR
20	St Michaels Convent	1.82	TQ177722
21	The Manor House, Ham	2.94	TQ173726
22	Sunnyside Reservoir NW plot	0.15	TQ125691
23	Thames Middlesex bank, St Margaret's	0.74	TQ167751
24	Challenge Court open space	0.85	TQ152736
25	Heathfield Nature Park & corridor	2.17	TQ132735
26	Kneller Hall	2.48	TQ148743
27	St Mary the Virgin, Mortlake	0.3	TQ208759
28	The American University	0.77	TQ184740
29	Grey Court School	4.51	TQ175723
30	Lensbury Riverside	0.55	TQ171712
31	Barn Elms Riverside	0.99	TQ233764
32	School House Lane Orchard	0.09	TQ169701
33	Oak Lane Cemetery	0.62	TQ163735
34	St Mary the Virgin, Twickenham	0.28	TQ164733
35	St Mary Magdalene, Richmond	0.26	TQ179748
36	St Mary's, Hampton	0.39	TQ140695
37	Sheen Common	2.55	TQ199745
38	Broom Road Rec	2.25	TQ177705
39	Ham Polo Club boundary	1.88	TQ174730
40	Hampton Court Green	6.7	TQ153688
41	Kew Riverside	3.82	TQ197769
42	Kneller Gardens	4.89	TQ148733
43	Udney Hall Gardens	1.04	TQ165711
44	Radnor Gardens	1.86	TQ160725
45	Carlisle Park	4.32	TQ136703
46	Nursery Green, Linear Walk & Partridge Green	2.08	TQ128707
47	Orleans Gardens	1.52	TQ170733
48	York House Gardens	1.63	TQ166733

6 References

- Burton R. (1983) *Flora of the London Area*. London Natural History Society, London.
- Dobson, J. R. (Consultation Draft, 2014). *A Methodology for rapid preliminary assessment of Invertebrate Habitat Quality Potential in the course of Extended Habitat Surveys*.
- JNCC. (2010) *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit*. Joint Nature Conservation Committee, Peterborough.
- London Borough of Richmond Upon Thames (2018) *Local Plan*
- London Ecology Unit (1993) *Nature Conservation in Richmond upon Thames Ecology Handbook 21*
- London Wildlife Site Board,(2019) The London Wildlife Site Board (LWSB) Advice Note: *Process for selecting and confirming Sites of Importance for Nature Conservation (SINCs) in Greater London*. Available from:
https://www.london.gov.uk/sites/default/files/sinc_selection_process_2019_update_.pdf
- LUC (2011) *National Vegetation Classification of the Grasslands of Bushy Park*. Available from The Royal Parks
- Ministry of Housing Communities and Local Government (2021) *National Planning Policy Framework*
- Natural England (2010) *Condition of SSSI Units for Site Richmond Park SSSI*. Available from:
<https://designatedsites.naturalengland.org.uk/ReportUnitCondition.aspx?SiteCode=S1002388&ReportTitle=Richmond%20Park%20SSSI>
- Natural England (2014, 2017) *Condition of SSSI Units for Site Bushy Park and Home Park SSSI*. Available from:
<https://designatedsites.naturalengland.org.uk/ReportUnitCondition.aspx?SiteCode=S2000738&ReportTitle=Bushy%20Park%20and%20Home%20Park%20SSSI>
- Salix Ecology (2017) *Bushy Park, A protocol for grassland monitoring*
- Salix Ecology (2016) *Ground Flora Survey of Richmond Park*. Available from The Royal Parks
- Salix Ecology (2016) *Palewell Common Preliminary Ecological Appraisal*. Available from The London Borough of Richmond upon Thames
- Salix Ecology (2019) *East Sheen Common Preliminary Ecological Appraisal*. Available from The London Borough of Richmond upon Thames
- Salix Ecology (2019) *Ham Common Woods Preliminary Ecological Appraisal*. Available from The London Borough of Richmond upon Thames
- Salix Ecology (2019) *Leg of Mutton Reservoir, Londsedale Road, Barnes. Ecological Appraisal*. Available from The London Borough of Richmond upon Thames
- Salix Ecology (2019) *The Copse, Extended Phase 1 Habitat survey*. Available from The London Borough of Richmond upon Thames
- Salix Ecology (2019) *Habitat Survey of Oak Avenue*. Available from The London Borough of Richmond upon Thames

Salix Ecology (2019) *Habitat survey of Hatherop Park*. Available from The London Borough of Richmond upon Thames

Salix Ecology (2020) *Beveree Wildlife Site Beaver Close, Hampton. Ecological Appraisal*. Available from The London Borough of Richmond upon Thames

Salix Ecology (2020) *Habitat survey of Terrace Field*. Available from The London Borough of Richmond upon Thames

Salix Ecology (2020) *Habitat survey of Orleans House Gardens*. Available from The London Borough of Richmond upon Thames

Salix Ecology (2020) *Habitat Survey of Crane Park*. Available from The London Borough of Richmond upon Thames

Salix Ecology (2020) *Habitat survey of Hounslow Heath extension*. Available from The London Borough of Richmond upon Thames

Stace, C.A. (2019). *New Flora of the British Isles* (4th Ed.). Cambridge University Press, Cambridge.

Mayor of London (2002) *Connecting with London's Nature: The Mayor's Biodiversity Strategy, Appendix 4 – Open Space and Habitat survey for London*.
https://www.london.gov.uk/sites/default/files/biodiversity_strategy.pdf

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

Appendix 1: Recommend SINCS - location map

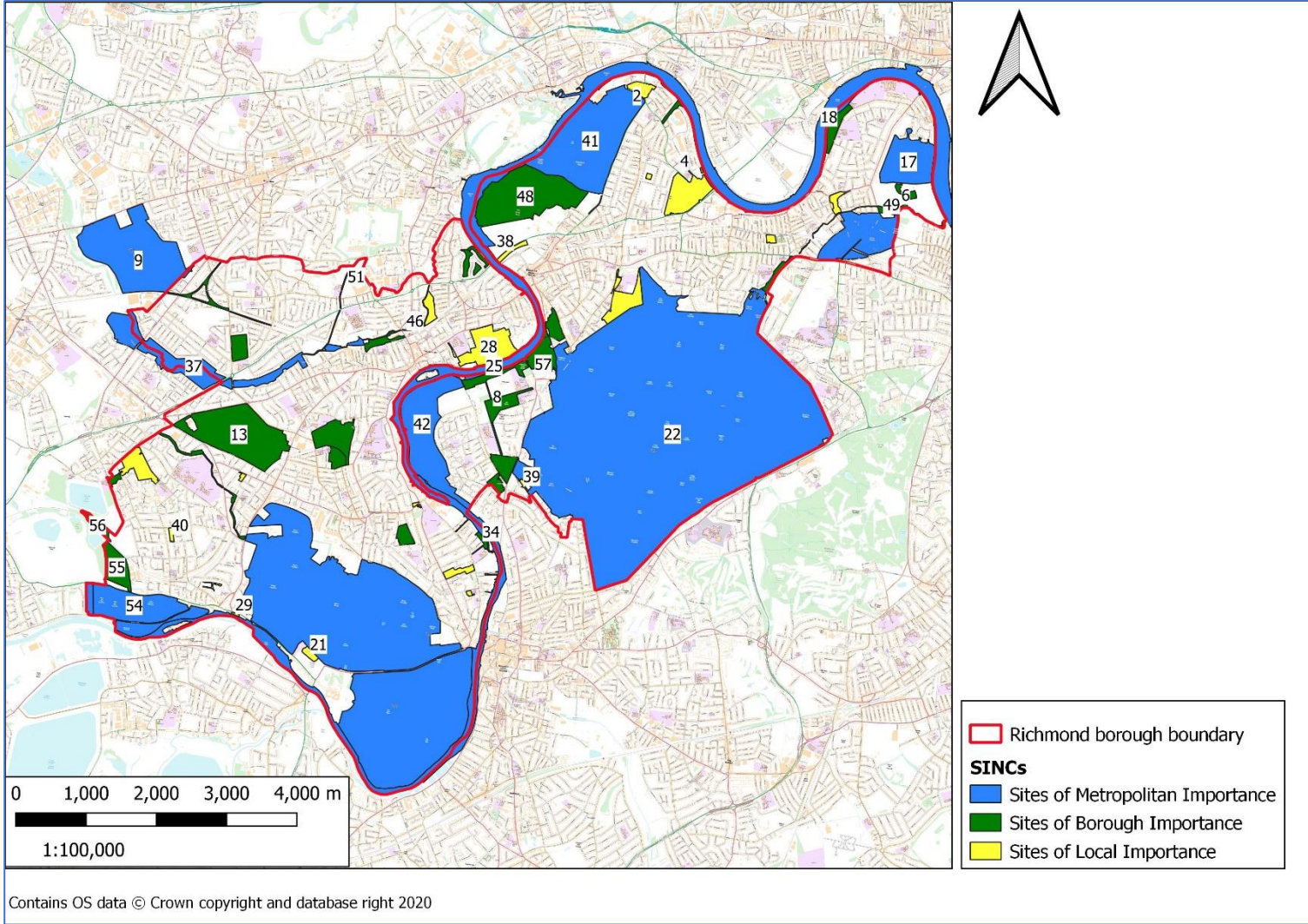
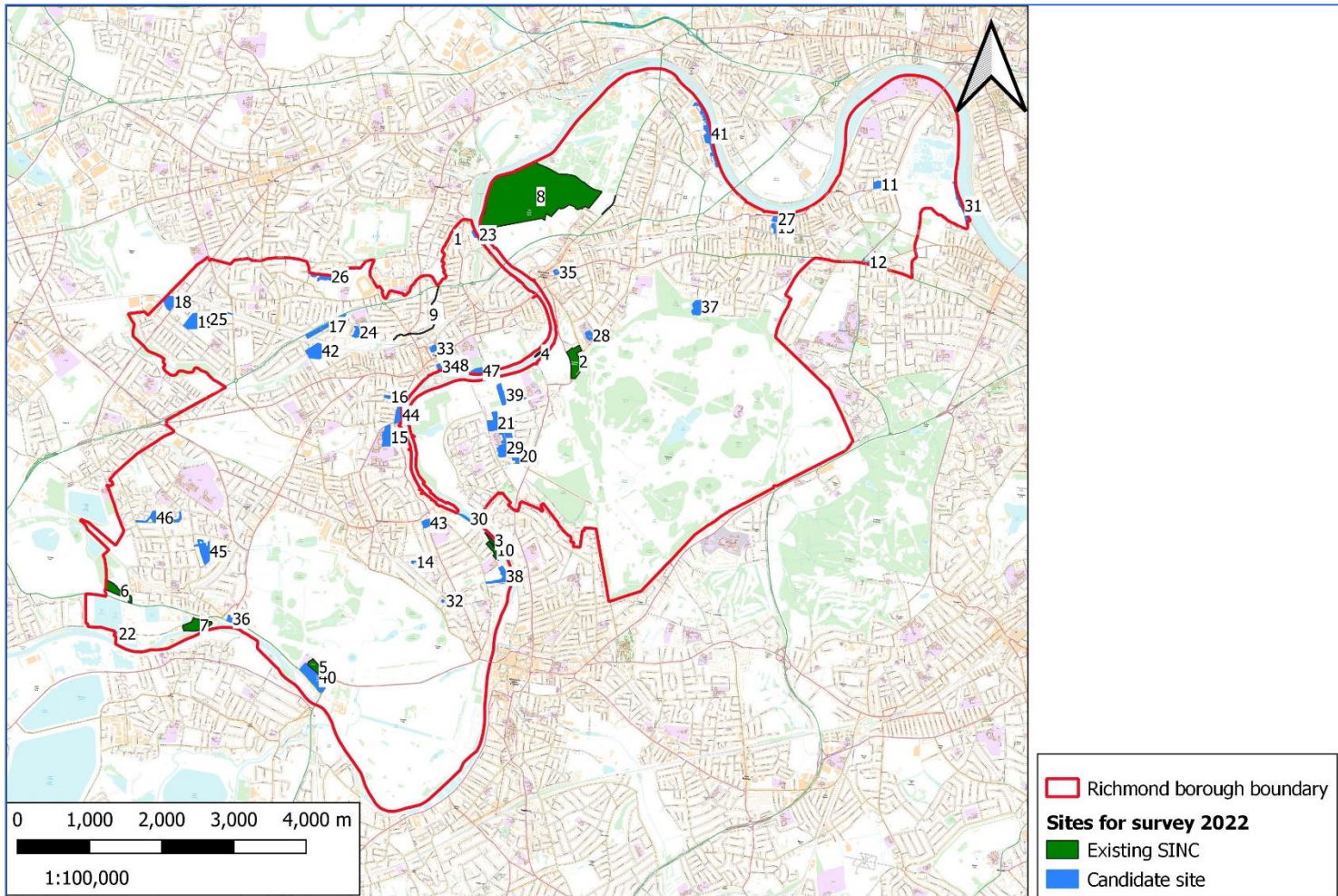


Figure 3: Map to show locations of recommended SINCS

No	Site Ref	SiteName
1	RiB27	Cassel Hospital
2	RiB23	Kew Pond and Kew Green
3	RiL09	Old Mortlake Burial Ground
4	RiL30	Kew Meadow Path
5	RiL15	Churchyard of St Mary with St Alban, Teddington
6	RiB12	Barn Elms Playing Fields
7	M084	Bushy Park and Home Park
8	RiB17	The Copse, Holly Hedge Field and Ham Avenues
9	M081	Hounslow Heath
10	RiB26	Terrace Field and Terrace Garden
11	RiB22	St Margarets Residential Grounds
12	RiL25	Moormead Recreation Ground
13	RiB07	Fulwell and Twickenham Golf Courses
14	RiB25	Ham Common west
15	RiL27	Townmead Allotments, Kew
16	RiL03	Pensford Field
17	M087	London Wetland Centre
18	RiB02	Leg 'o' Mutton Reservoir LNR
19	RiL18	Beveree Wildlife Site
20	RiB15	Whitton Railsides
21	RiL07	Hampton Court House Grounds
22	M082	Richmond Park and Associated Areas
23	RiL28	The Wilderness
24	RiB31	Twickenham Cemetery
25	RiB16	Petersham Lodge Wood and Ham House Meadows
26	RiB08	Duke of Northumberland's River south of Kneller Road
27	M031	River Thames and tidal tributaries
28	RiL02	Marble Hill Park and Orleans House Gardens
29	RiL26	Garricks Lawn
30	RiB30	Teddington Cemetery
31	RiL19	North Sheen and Mortlake Cemeteries
32	RiL01	St James' Churchyard, Hampton Hill
33	RiB09	Strawberry Hill Golf Course
34	RiB28	Trowlock Avenue riverside land, Teddington
35	RiB24	Portlane Brook and Meadow
36	RiL16	Langdon Park
37	M076	Crane Corridor
38	RiL17	Twickenham Road Meadow
39	RiL29	St Andrews Churchyard
40	RiL20	Hampton Cemetery
41	M154	Royal Botanic Gardens, Kew

No	Site Ref	SiteName
42	MO83	Ham Lands
43	RiB19	Hounslow, Feltham and Whitton junctions
44	RiL06	East Sheen and Richmond Cemeteries and Pesthouse Common
45	RiB06	Longford River in Richmond
46	RiB20	River Crane at St Margarets
47	RiL23	Hampton Common
48	RiBI01	Royal Mid-Surrey Golf Course
49	RiB13	Beverley Brook from Richmond Park to the River Thames
50	RiB32	Udney Park
51	RiB04	Duke of Northumberland's River north of Kneller Road
52	RiB17	Oak Avenue Local Nature Reserve
53	RiB29	Twickenham Junction Rough
54	M085	Hampton Water Treatment Works and Reservoirs
55	RiB03	Hydes Field
56	RiB18	Hatherop Conservation Area
57	RiB10	Petersham Meadows
58	RiB11	Occupation Lane, Kew Embankment & Snail Reserve
59	RiL12	Barnes Green and Pond
60	M086	Barnes Common

Appendix 2: Recommend sites for survey - location map



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Figure 4: Sites recommend for survey

no	Site	Area (Ha)	Type	6figGR
1	Tidal Crane	0.72	Existing SINC	TQ164750
2	Petersham Common	6.41	Existing SINC	TQ183736
3	Trowlock Island	0.58	Existing SINC	TQ175710
4	Glover's Island	0.19	Existing SINC	TQ178736
5	Hampton Court House Grounds	2.31	Existing SINC	TQ153689
6	Hydes Field, Dump	3.54	Existing SINC	TQ124696
7	Hampton Water Treatment Works, Eastern Filter beds	4.48	Existing SINC	TQ136693
8	Royal Mid-Surrey Golf Course	90.72	Existing SINC	TQ174758
9	River Crane at St Margaret's (Richmond side)	1.18	Existing SINC	TQ162740
10	Trowlock Avenue riverside land	1.51	Existing SINC	TQ175709
11	St Mary Barnes - Churchyard	0.92	Candidate site	TQ221765
12	Barnes Common, Barnes Common Woodland	0.23	Candidate site	TQ221755
13	St Mary Magdalene's Church	0.4	Candidate site	TQ208758
14	Collis Primary School	0.11	Candidate site	TQ164706
15	St Mary's College Strawberry Hill	2.96	Candidate site	TQ159722
16	Grotto Road Open Space	0.25	Candidate site	TQ158728
17	Chertsey Road Meadow	2.7	Candidate site	TQ148736
18	Hounslow Cemetery	2.74	Candidate site	TQ126737
19	Bridge Farm Nursery, Powder Mill Lane Cemetery	3.99	Candidate site	TQ130735
20	St Michaels Convent	1.82	Candidate site	TQ177722
21	The Manor House, Ham	2.94	Candidate site	TQ173726
22	Sunnyside Reservoir NW plot	0.15	Candidate site	TQ125691
23	Thames Middlesex bank, St Margaret's	0.74	Candidate site	TQ167751
24	Challenge Court open space	0.85	Candidate site	TQ152736
25	Heathfield Nature Park & corridor	2.17	Candidate site	TQ132735
26	Kneller Hall	2.48	Candidate site	TQ148743
27	St Mary the Virgin, Mortlake	0.3	Candidate site	TQ208759
28	The American University	0.77	Candidate site	TQ184740
29	Grey Court School	4.51	Candidate site	TQ175723
30	Lensbury Riverside	0.55	Candidate site	TQ171712
31	Barn Elms Riverside	0.99	Candidate site	TQ233764
32	School House Lane Orchard	0.09	Candidate site	TQ169701
33	Oak Lane Cemetery	0.62	Candidate site	TQ163735
34	St Mary the Virgin, Twickenham	0.28	Candidate site	TQ164733
35	St Mary Magdalene, Richmond	0.26	Candidate site	TQ179748
36	St Mary's, Hampton	0.39	Candidate site	TQ140695
37	Sheen Common	2.55	Candidate site	TQ199745
38	Broom Road Rec	2.25	Candidate site	TQ177705
39	Ham Polo Club boundary	1.88	Candidate site	TQ174730
40	Hampton Court Green	6.7	Candidate site	TQ153688
41	Kew Riverside	3.82	Candidate site	TQ197769

no	Site	Area (Ha)	Type	6figGR
42	Kneller Gardens	4.89	Candidate site	TQ148733
43	Udney Hall Gardens	1.04	Candidate site	TQ165711
44	Radnor Gardens	1.86	Candidate site	TQ160725
45	Carlisle Park	4.32	Candidate site	TQ136703
46	Nursery Green, Linear Walk & Partridge Green	2.08	Candidate site	TQ128707
47	Orleans Gardens	1.52	Candidate site	TQ170733
48	York House Gardens	1.63	Candidate site	TQ166733

Appendix 3: Photographs

M031 River Thames & Tidal Tributaries



Figure 5: Platt's Eyot Woodland



Figure 6: Semi-improved neutral grassland near Teddington Lock



Figure 7: Woodland on Teddington Lock Island



Figure 8: Woodland on Eel Pie Island



Figure 9: Mature Plane trees along the Twickenham tow path



Figure 10: Tall herb vegetation at Ham



Figure 11: Glover's Island



Figure 12: Western 'Flower Pot' Island, Richmond



Figure 13: Black Poplars along the Kew Gardens section



Figure 14: Extensive stands of Himalayan balsam on Brentford Ait

M076 The Crane Corridor (expansion area)

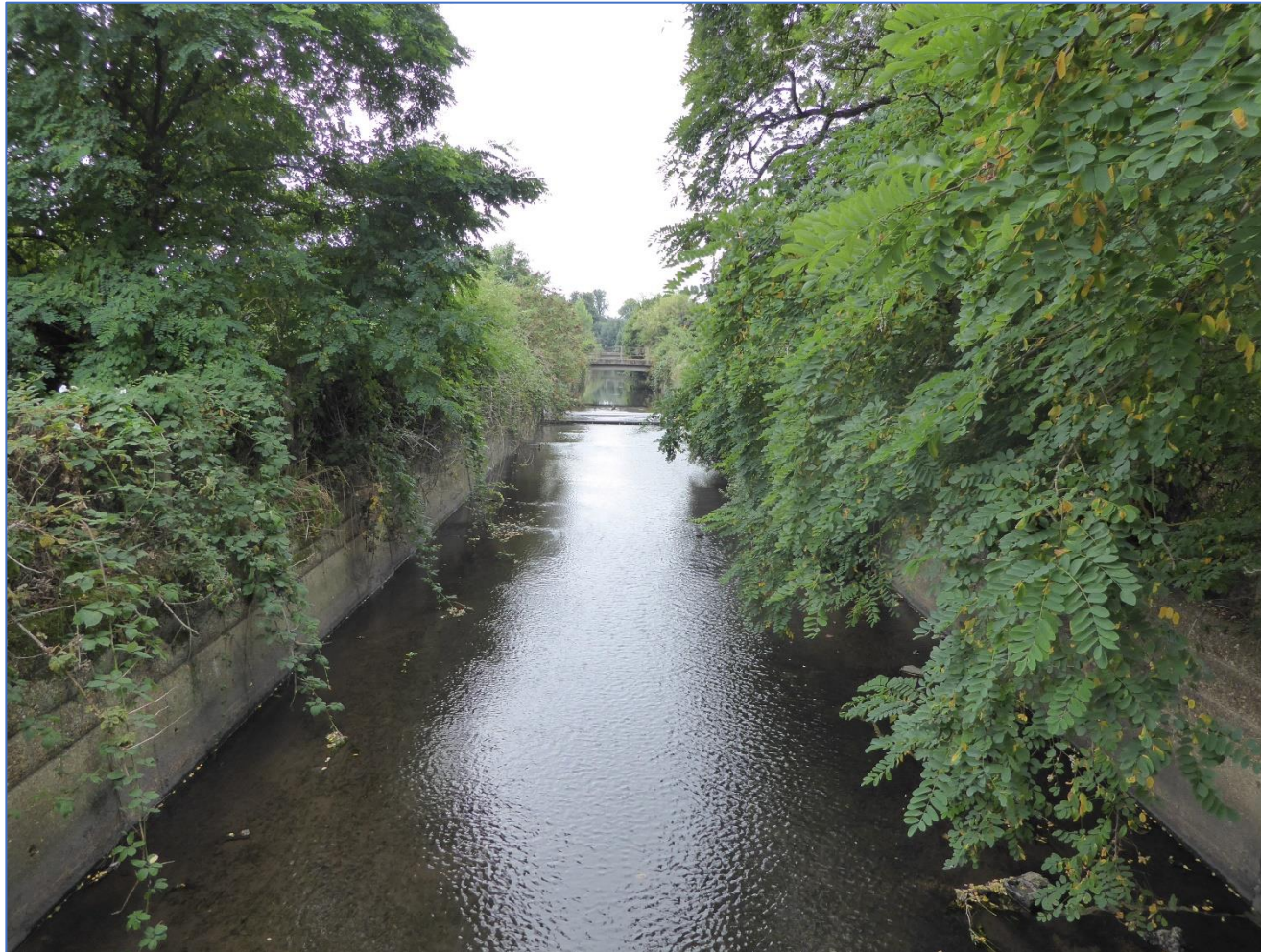


Figure 15: The Crane within concrete channel

M083 Ham Lands



Figure 16: Tall herb vegetation to the North of the site



Figure 17: Hare's-foot clover at Ham Lands North



Figure 18: Species-rich neutral grassland at Ham Lands South



Figure 19: Dittander at Ham Lands South

M084 Bushy Park and Home Park (National Physical Laboratory Land)



Figure 20: Standard oak with Rhododendron understorey



Figure 21: Extensive regularly mown acid grassland



Figure 22: Veteran oak



Figure 23: Semi-improved neutral grassland at Hampton Water Treatment Works



Figure 24: Grassland developing over post-industrial land at Hampton Water Treatment Works



Figure 25: Extensive reedbed developing in disused filter beds



Figure 26: Vegetated reservoir walls at Stain Hill reservoir



Figure 27: Species-rich grassland at Sunnyside Reservoir



Figure 28: Tower mustard at Stain Hill reservoir - a nationally rare species

M086 Barnes Common



Figure 29: Extensive acid grassland with abundant sheep's sorrel



Figure 30: Species-rich neutral grassland



Figure 31: Acid grassland/scrub mosaic



Figure 32: Acid grassland



Figure 33: Dark mullein - a London Notable species



Figure 34: Ancient meadow

RiB01 Royal Mid-Surrey Golf Club



Figure 35: Hare's foot clover - a London notable species



Figure 36: Dense sycamore-dominated woodland

RiB04 Duke of Northumberland's River, north of Kneller Road



Figure 37: Rich marginal vegetation

RiB08 Duke of Northumberland's River, south of Kneller Road



Figure 38: Rich marginal vegetation in the northern section

RiB06 Longford River in Richmond



Figure 39: Good marginal vegetation at the southern end of the river



Figure 40: Marginal vegetation and scrub at the western end of the river



Figure 41: General view of the golf course



Figure 42: Main grassland area



Figure 43: Ivy broomrape - a London notable species



Figure 44: Occupation Lane



Figure 45: Kew Embankment



Figure 46: Ancient London Plane



Figure 47: Fishing lake

RiB13 The Beverley Brook from Richmond Park to the Thames



Figure 48: View of the brook - limited aquatic vegetation

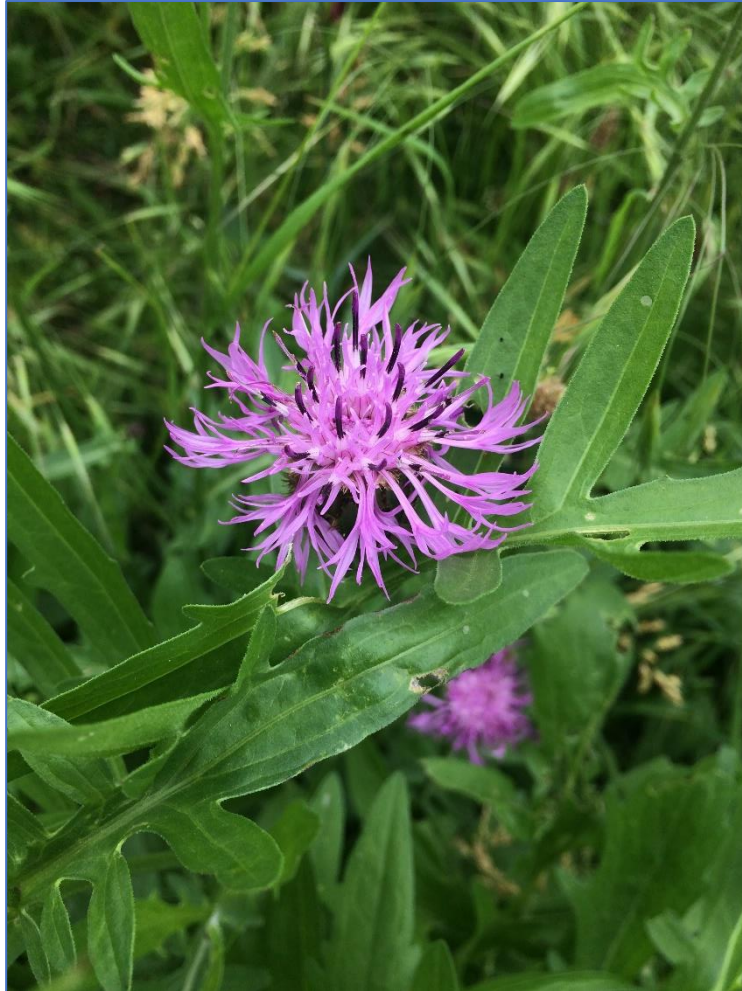


Figure 49: Greater knapweed - a London notable species



Figure 50: Ham House Meadows



Figure 51: Petersham Lodge Woods at high tide



Figure 52: Rail junction



Figure 53: River Crane showing concrete channel



Figure 54: Veteran oak at the River Grounds



Figure 55: Mature cherry at the River Grounds



Figure 56: Stag beetle at the Lake Grounds

RiB23 Kew Pond and Kew Green



Figure 57: Kew pond with good marginal vegetation



Figure 58: Kew Green - regularly mown degraded acid grassland



Figure 59: Extensive species-rich neutral grassland



Figure 60: Acid grassland in the hospital grounds



Figure 61: Bird's- foot - A London Notable species



Figure 62: A general view of the habitats at the riverside land

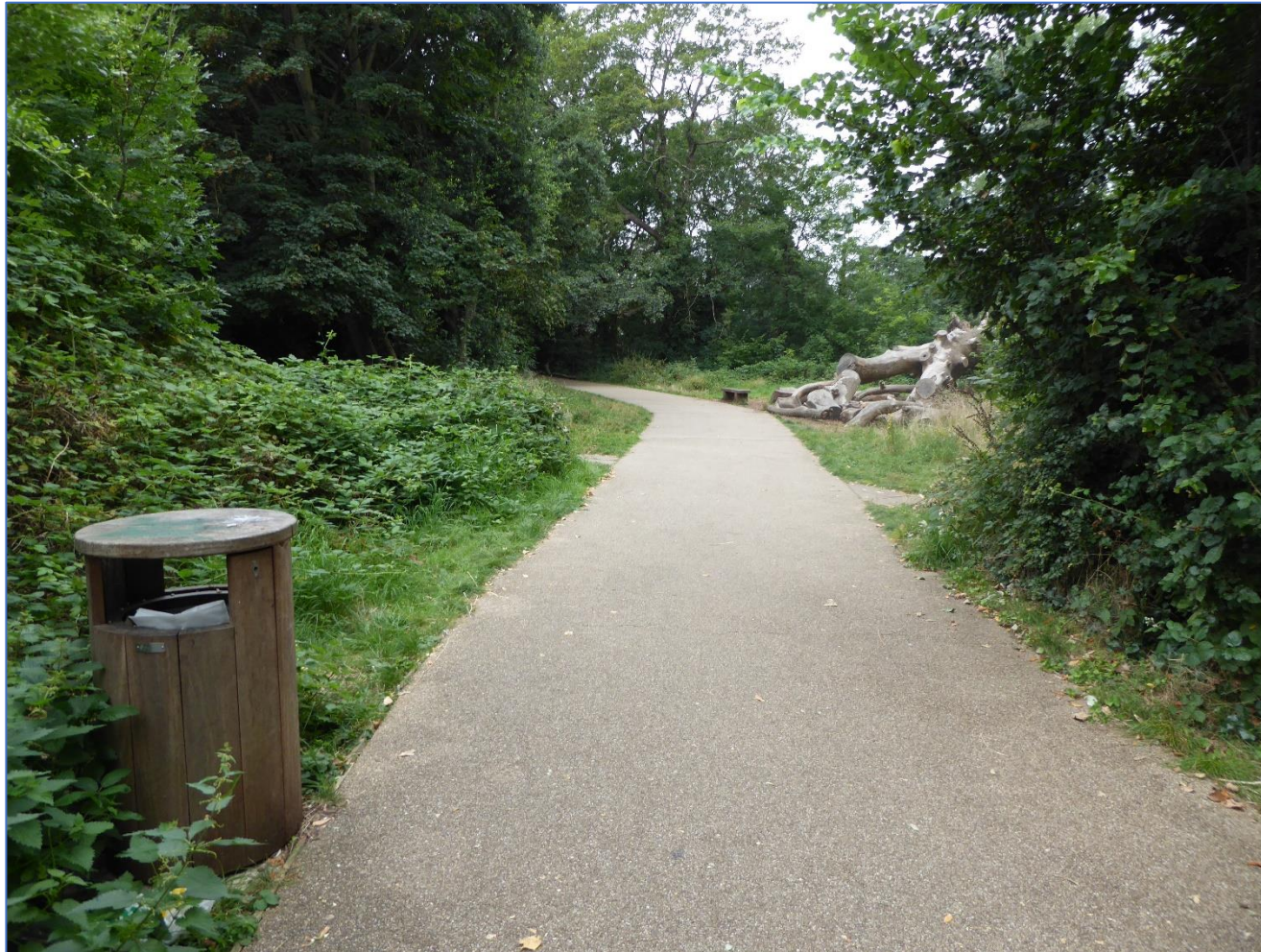


Figure 63: Footpath through Twickenham Junction Rough

RiB30Teddington Cemetery



Figure 64: Pyramidal orchid and mouse-ear hawkweed



Figure 65: Natural burial area

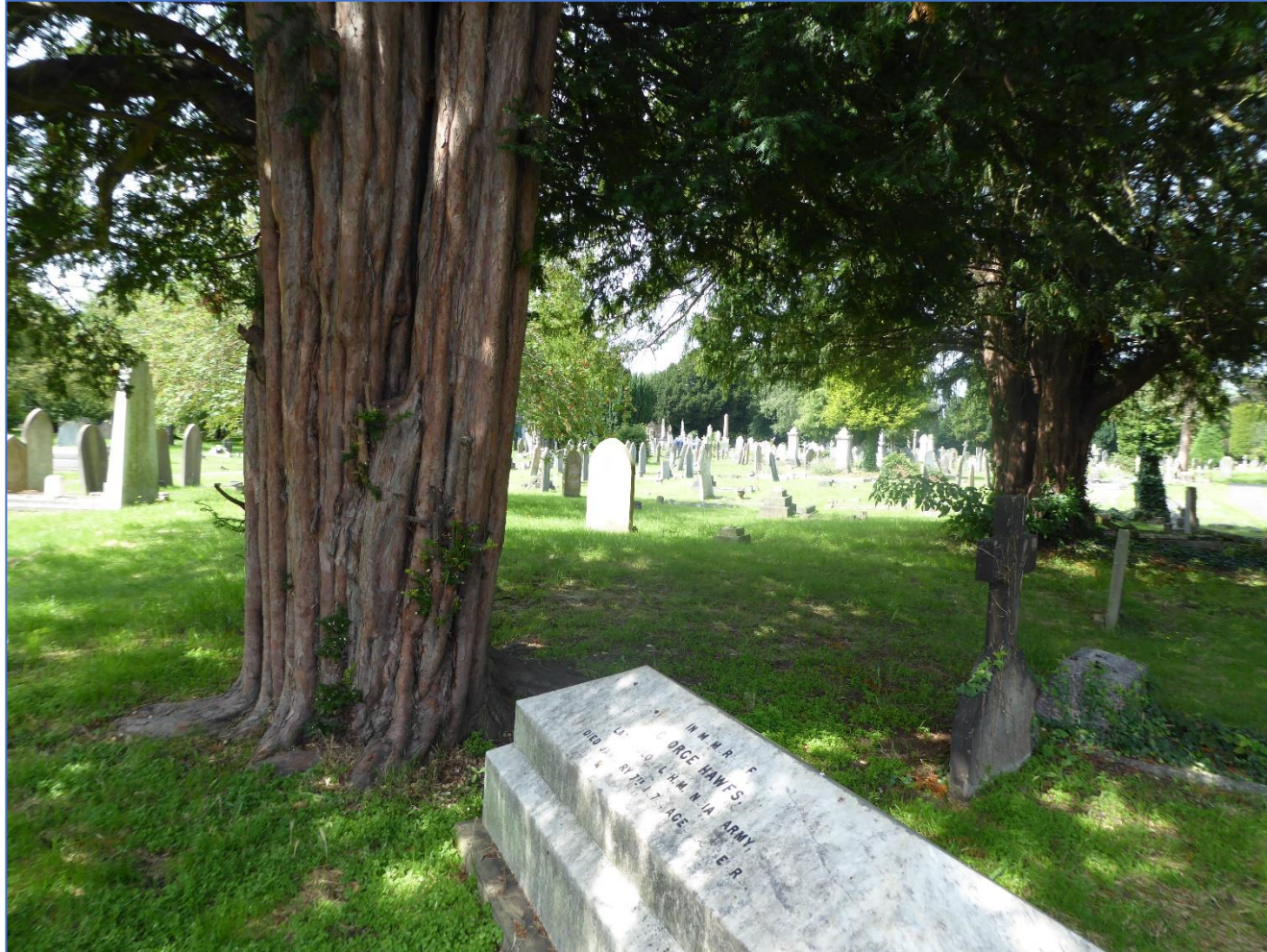


Figure 66: Old yew trees

RiL01 St James's Churchyard, Hampton Hill



Figure 67: A view of the churchyard



Figure 68: Ancient black walnut at Marble Hill Park



Figure 69: Ancient London plane trees at Marble Hill Park



Figure 70: neutral grassland under threat from planted trees



Figure 71: Neutral grassland in the centre of the site



Figure 72: Small pond supporting dragonflies



Figure 73: Grassland habitat around the old cemetery

RiL12 Barnes Green and Pond



Figure 74: Good marginal vegetation around the pond



Figure 75: Barnes Green - amenity grassland with scattered trees

RiL16 Langdon Park



Figure 76: Neutral grassland



Figure 77: Small pond dominated by the non-native invasive Australian stonecrop

RiL17 Twickenham Road Meadow, Old Deer Park



Figure 78: Twickenham Road Meadows

RiL20 Hampton Cemetery



Figure 79: Species rich grassland among the tombstones



Figure 80: Large stand of the non-native invasive 3-cornered garlic



Figure 81: Extensive areas of amenity grassland



Figure 82: Good scrub habitat towards the south of the site



Figure 83: The recreation ground



Figure 84: Amenity grassland with scattered trees



Figure 85: Rich assortment of exotic plants

RiL28 The Wilderness



Figure 86: Small secondary woodland at the Wilderness



Figure 87: Small pond in the centre of the woodland

RiL29 St Andrew's churchyard, Ham and environs



Figure 88: Recently cut neutral grassland at the churchyard



Figure 89: common cudweed - a London Notable species



Figure 90: The Kew Meadow Path