# Appendix 9.2: Updated Preliminary Ecological Appraisal Report (2020)





# Liverpool Football Club Anfield Road Stand Expansion

Preliminary Ecological Appraisal

16 January 2020

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Liverpool Football Club and Athletic Grounds Limited

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Preliminary Ecological Appraisal Report

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## **Executive summary**

Mott MacDonald was commissioned by Liverpool Football Club (LFC) to undertake a preliminary ecological appraisal (PEA) to support a planning application for LFC Anfield Road Stand Expansion (here after referred to as the Site).

The purpose of this Preliminary Ecological Appraisal Report (PEAR) (405016-MMD-XX-XX-RP-EN-0001) is to provide an update, where applicable, to the Phase 1 Habitat Survey undertaken in October 2013 and the associated PEAR produced in March 2014 by MM (317415/WTD/MID/002/A). This report (405016-MMD-XX-XX-RP-EN-0001) presents the findings of an assessment of the ecological importance of the Site's habitats and the potential for it to support protected and notable ecological features and species. This comprises a desk study review of ecological data records and an Extended Phase 1 Habitat Survey of the Site on 09 January 2020, in accordance with best practice methodology detailed in the Handbook for Phase 1 Habitat Survey (JNCC, 2010).

Beyond the potential for roosting bats in buildings and scattered parkland trees, which is assessed in a separate report (*Potential Roost Assessment (PRA) for trees and structures Technical Note* produced by Mott MacDonald in 2020, 405016-MMD-XX-XX-FN-EN-0001), all habitats within the Site boundary, including amenity grassland, species-poor defunct hedge, introduced shrub and areas of hardstanding, have been assessed as having negligible ecological importance and no further surveys have been recommended.

Broad-leaved scattered parkland trees and species-poor intact hedges have negligible ecological importance and are of value to support breeding birds in an otherwise urban environment. It is recommended that any vegetation removal is undertaken outside of the breeding bird season (between September and February). Where this period cannot be avoided, a suitably experienced ecologist will carry out a nesting bird check prior to any works commencing, including setup of any temporary site offices and compound areas.

Trees on Site, immediately adjacent to it or overhanging the Site, will be retained where possible and must be protected in accordance with British Standard BS5837:2012 Trees in relation to design, demolition and construction - Recommendations. Protection should be installed prior to the commencement of any works.

It is advised that trees that can't be retained are replaced with native species of local provenance with the long-term objective that there is potential for suitable bat roost features to develop and to provide habitat for nesting birds.

Opportunities for habitat enhancement are detailed in Section 5: Interpretation and Recommendations and summarised in Table 7: Summary of mitigation, compensation and opportunities for biodiversity net gain.

## **1** Introduction

### 1.1 Project Background

Mott MacDonald Limited was commissioned by Legends on behalf of Liverpool Football Club (LFC) to undertake a Preliminary Ecological Appraisal (PEA) of Anfield Football Stadium and the surrounding area in October 2013. The PEA supported an Environmental Impact Assessment (EIA) in relation to the following planning applications:

- For the expansion of the stadium, which comprised the construction of a new Main Stand with associated player, media, conferencing and banqueting facilities and the provision of its surrounds to provide high quality public realm, improved circulation space and an improved public connection between Walton Park Road and Stanley Park, along with additional car parking spaces on the former Anfield Comprehensive School; and
- To hold events at the stadium during off-season.

The Main Stand application was granted planning permission and works completed in 2016 alongside temporary permission to hold six events per annum between mid-May to August.

In 2019/20, Mott MacDonald were commissioned by Legends on behalf of LFC to undertake an updated PEA of Anfield Football Stadium and the surrounding area to support an EIA and planning applications, to be submitted in 2020 for:

- Further expansion of Anfield stadium to increase seating capacity by constructing a new Anfield Road Stand; and
- Amend the existing temporary permission (expires in 2021) to allow for the permanent permission to hold 12 No. concert events and sporting events during the football off-season between May to August inclusive. Current permission is capped at six events a year, between mid-May to June-end.

For the purposes of this report, the Site is considered to be land within the red line boundary, shown in Appendix A.

### 1.2 Scope of the Report

The purpose of this report (405016-MMD-XX-XX-RP-EN-0001) is to provide an update, where applicable, to the Phase 1 Habitat Survey undertaken in October 2013 and the associated Preliminary Ecological Appraisal Report (PEAR) produced in March 2014 (317415/WTD/MID/002/A). This new report reviews the initial assessment of the ecological importance of the Site's habitats and the potential for them to support protected ecological features and species. The scope of this study is to:

- Undertake a desk-top study to identify any additional records, since the initial desk-top study was completed as part of the 2014 PEAR (317415/WTD/MID/002/A), regarding:
  - protected or notable species within a 2km radius of the Site;
  - national and local statutory and non-statutory sites designated for nature conservation within a 2km radius of the Site;
  - Natura 2000 and Ramsar sites within a 10km radius of the Site;
- Carry out an extended Phase 1 habitat survey to provide a description of the current broad habitat types on Site, and to establish the presence or potential presence of any protected or notable species;

- Produce a Preliminary Ecological Appraisal Report (PEAR) detailing the findings of the desktop study, the Preliminary Ecological Appraisal and identifying any key ecological constraints to the Site;
- Provide recommendations for further ecological survey work necessary to produce an ecological baseline for the site;
- Identify any mitigation measures that may be required to offset potential development impacts and any residual impacts; and
- Identify any measures that may be available to enhance biodiversity within the proposed development in line with national and local planning policy.

The results of the desk-top study for bat species, within a 5km radius of the Site, are detailed in the *Potential Roost Assessment (PRA) for trees and structures Technical Note* produced by Mott MacDonald in 2020 (405016-MMD-XX-XX-FN-EN-0001), separate to this report.

### 1.3 Site Description

Anfield Stadium is located between Walton Breck Road and Anfield Road in the Anfield area of Liverpool (British National Grid Reference: SJ 3624 9308).

Anfield Stadium is located approximately 3km north east of Liverpool city centre in a mainly residential area, with terraced housing positioned on three sides of the stadium. Anfield Road runs along the north-east length of the stadium. On the north side of the road lays an area of hardstanding utilised as a car park for stadium users, for food venders and outside broadcasting (OB).

Stanley Park is located north of these facilities with a second, larger car park located along the park's south-east boundary. Stanley Park is a large area of public open space which includes amenity sports pitches, as well as a large lake and mature trees which lie immediately adjacent to Anfield Cemetery. In total the park and cemetery create an area of approximately 80 ha of green space. The north-west boundary of the Site abuts a pedestrian walkway between Stanley Park and houses located on Anfield Road. The south-west boundary abuts the south side of Anfield Road encompassing the existing Anfield Stand and a small area of stadium car parking behind the Shankly gates. The south corner boundary abuts the rear boundary walls of residential properties situated on Skerries Road. The south-east boundary abuts a residential building on the north side of Anfield Road.

A site location plan is provided in Appendix 24A.

### 1.4 **Proposed Development**

The proposed development comprises the expansion and redevelopment of the existing Anfield Road Stand at Anfield Stadium and will include:

An application for full planning permission to increase fan capacity at the Anfield Road Stand through the provision of a new Anfield Road Stand; increasing seating from 8,962 to 16,000, along with the provision of new associated facilities.

### 1.5 Legislative Context and Policy Framework

A summary of legislation and Policy for protected sites and species relevant to the Proposed Scheme is provided in Appendix B.

#### 1.5.1 European Legalisation and International Conventions

The construction and operational activities for the Scheme should comply with International and European legislation. The following EC Directives and international conventions are relevant to the ecological assessment:

- Convention on Biological Diversity 1992;
- Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979);
- Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979);
- Ramsar Convention on Wetlands 1971;
- EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitat Directive 1992) as amended (92/43/EEC); and
- EC Directive on the Conservation of Wild Birds (Birds Directive 1979) as amended (79/409/EEC).

#### 1.5.2 National Legislation

The construction and operational activities must comply with United Kingdom (UK) nature conversation legislation, and with national and local biodiversity policies. The key national policies which influence the ecology and nature conservation assessments are:

- The Conservation of Habitats and Species Regulations 2012 (as amended);
- Wildlife and Countryside Act 1981 (as amended);
- Countryside Rights of Way Act 2000;
- The Natural Environment and Rural Communities (NERC) Act 2006;
- National Planning Policy Framework;
- UK Post-2010 Biodiversity Framework (2012);
- Environment Bill (2019);
- Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011)
- Hedgerow Regulations 1997; and
- Protection of Badgers Act 1992.

#### 1.5.3 Local Policy

#### 1.5.3.1 Unitary Development Plan

The Liverpool Unitary Development Plan (UDP) is a statutory document that plays a major role in shaping the future of the city and was adopted in November 2002. Under the new planning system, the UDP is a 'saved plan'; the majority of its policies have been 'saved' and continue to carry development plan status. The UDP will eventually be replaced by the new Local Plan. Until then the saved policies of the UDP, together with those of the Merseyside and Halton Waste Local Plan comprise the adopted statutory development plan for making planning decisions in Liverpool.

## 2 Methodology

#### 2.1 Desk Study

A desk study was undertaken in January 2020, as recommended in the Chartered Institute of Ecology and Environmental Management (CIEEM) 'Guidelines for Preliminary Ecological Appraisal' (2013), to determine the presence of any designated nature conservation sites and protected or notable species that have been recorded within a 2km radius of the site. International and European conservation sites including: Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar Sites within 10km were also searched for. The 2km radius for protected or notable species was extended to 5km for bats, as recommended by English Nature's Bat Mitigation Guidelines (Mitchell-Jones, 2004). The results of which are detailed in the *Potential Roost Assessment (PRA) for trees and structures Technical Note* produced by Mott MacDonald in 2020 (405016-MMD-XX-XX-FN-EN-0001), separate to this report. The desk-top study involved consulting the following organisations and ecological databases:

- Joint Nature Conservation Council (JNCC) Special Areas of Conservation website;
- Lancashire and Cheshire Fauna Society (L&CFS);
- Merseyside BioBank (MBB); and,
- Multi Agency Geographical Information for the Countryside (MAGIC) website for statutory conservation sites.

#### 2.2 Field Survey

An extended Phase 1 Habitat Survey was undertaken on the 09 January 2020 by two Mott MacDonald ecologists which comprised standard best practice survey methodology of mapping the broad habitat types present on Site, in accordance with the Handbook for Phase 1 Habitat Survey (JNCC, 2010), and an assessment of those habitats for their potential to support protected, priority and notable species (CIEEM, 2013).

The current guidance on ecological assessments (CIEEM, 2016) recommends that all ecological features that occur within a 'zone of influence' (ZoI) for a proposed development are investigated. The ZoI includes:

- Areas directly within the land take for the proposed development and access;
- Areas which will be temporarily affected during construction;
- Areas likely to be impacted by hydrological disruption; and
- Areas where there is a risk of pollution and noise disturbance during construction and/or operation.

The ZoI is variable depending on the ecological receptors affected. For this assessment, the Phase 1 Habitat field survey was restricted to the Site boundary and the strip of parkland between the two areas. Table 1 below describes where size of the ZoI is varied for the desk study and other ecological receptors.

Table 1: Zone of Influence used for this assessment

Ecological features	Zone of Influence
Nationally and Locally Statutory Designated Sites	2km buffer around site boundary
Internationally Designated Sites	10km buffer around the site boundary
Non-statutory Designated Sites and Protected species records	2km from site boundary
Habitats of principal importance to biodiversity	2km from site boundary
Protected species evidence	Within the site boundary
Water bodies	500m buffer around site boundary

An assessment of the ecological importance for habitats and species within the zone of influence was made, where possible, in accordance with current guidance (CIEEM, 2016). These are as follows: international, national, regional, county, district and local. Negligible is also used to identify features with lower than local importance. An assessment of importance cannot be made where further surveys are required for inform the baseline, for example, where protected species surveys are required. Standard best practice was used to record plant species (Rose, 2016) and their abundance in line with the DAFOR scale detailed in Table 2 (Wheater *et al*, 2011).

The ecological importance of the habitats present on the Site has been assessed against their presence in the UK and Local Biodiversity Action Plans, in Section 41 of the Natural Environment and Rural Communities Act (NERC, 2006) and their ability to support protected or notable species.

DAFOR Scale	Percentage cover
Dominant (D)	>75%
Abundant (A)	51-75%
Frequent (F)	26-50%
Occasional (O)	11-25%
Rare (R)	<11%

#### Table 2 DAFOR scale percentage cover of plant species

### 2.3 Limitations

Ecological surveys are limited to factors which affect the presence of plants and animals, such as time of year, migration patterns and behaviour. With a single visit it is possible that certain species may have been overlooked or under-recorded during the assessment as optimal survey periods vary from species to species. This PEAR as presented is therefore unlikely to present a full and complete assessment of the biodiversity of the site. Whilst the data recorded provides for a robust assessment of the ecological conservation importance and impacts on habitat, any further surveys required for specific protected species are recommended in Mott MacDonald's 2020 *Potential Roost Assessment (PRA) for trees and structures Technical Note* (405016-MMD-XX-XX-FN-EN-0001) and Section 5.3 Protected and Notable Species.

Although the survey was undertaken outside of the Phase 1 Habitat Survey period (core season: April to October), pre-existing knowledge of the general habitat types and surrounding area (built-up urban environment, comprising buildings, hardstanding, amenity grassland and parkland trees) provides confidence that delaying the survey would not provide further information which has the potential to:

- change the habitat types mapped; or
- identify potential species not previously identified; or
- alter the conservation value or importance of receptors on Site.

The Phase 1 Habitat Survey does not identify every plant species on Site, instead the overall abundance, composition and structure of vegetation are recorded to ascertain the habitat type and their potential to support protected, priority and notable species of wildlife.

The biological records obtained from third parties do not represent a full and complete species list for the area. They are mostly given by individuals on an ad hoc basis, often meaning there are areas of deficiency in the data.

Several metal shipping containers were located within the Site, however the fenced food vendors area and the brick building in the OB area were not accessible. This is not considered to have impacted the assessment of the structure for suitability for bats as there were no egress points for bat access. Buildings on the Site and the cluster of shipping containers have been assessed for potential to support bats separately to this report. The results of which can be found in Mott MacDonald's 2020 *Potential Roost Assessment (PRA) for trees and structures Technical Note* (405016-MMD-XX-XX-FN-EN-0001).

## 3 Desk Study Results

#### 3.1 Introduction

All relevant ecological data received from the consultation exercise has been reviewed, the results of which are summarised below in Sections 3.2 and 3.3. Data older than 10 years is considered to be less important than more recent data due to the length of time that has elapsed since being collected and consequently there is a likelihood that habitat, species present and populations sizes have changed. Therefore, data recorded more than 10 years ago (prior to 2010) have been excluded from this report, except where a notable observation has been recorded.

#### 3.2 Designated Nature Conservation Sites

#### 3.2.1 Statutory Sites

Search results on the MAGIC website (Natural England, 2013) and received from MBB indicates that there are six European designated nature conservation sites, four are Special Protection Areas (SPA) with three of them also internationally designated as Ramsar sites. There are an additional two sites designated as marine Special Areas of Conservation (SAC). There are no SACs designated for bats within 10km of the Site (JNCC website, 2020). Further details of these sites are provided in Table 3.

Site Name	Designation	Proximity to the Centre of Site	Description
Liverpool Bay / Bae Lerpwl	Marine SPA	2.9km west	Liverpool Bay is one of the most important sea areas around the UK for populations of wintering seabirds, particularly common scoter <i>Melanitta nigra</i> and red- throated diver <i>Gavia stellata</i> , which arrive in large numbers in the autumn from their breeding sites in Northern Europe and sub-Arctic areas.
Mersey Narrows and North Wirral Foreshore	Ramsar / Marine SPA	4.2km west	Mersey Narrows and North Wirral Foreshore is located on the north-west coast of England at the mouths of the Mersey and Dee estuaries. The site comprises intertidal habitats at Egremont foreshore, man-made lagoons at Seaforth and the extensive intertidal flats at North Wirral Foreshore. Egremont is most important as a feeding habitat for waders at low tide whilst Seaforth is primarily a high tide roost, as well as a nesting site for terns. The most notable feature of the site is the exceptionally high density of turnstones <i>Arenaria</i> <i>interpres</i> .
Dee Estuary / Aber Dyfrdwy	Marine SAC	5.1km north-west	The Dee Estuary is of special interest for its total populations of internationally important wintering waterfowl; its populations of individual waterfowl and tern species, whose numbers reach national and, in some cases, internationally important levels. However, birds are not a primary reason or qualifying feature for the selection of this site. The site has been designated a SAC due to its intertidal mud and sandflats, saltmarsh and transitional habitats; the hard rocky sandstone cliffs of Hilbre Island and Middle Eye with their cliff vegetation and maritime heathland and grassland; its assemblage of nationally scarce plants;

### Table 3 Site descriptions for international and European designated sites located within 10km of the Site

Site Name	Designation	Proximity to the Centre of Site	Description
			and its populations of Sandhill rustic moth Luperina nickerlii, a Red Data Book species.
Ribble and Alt Estuaries	Ramsar / Marine SPA	5.7km north-west	A large area including two estuaries which form part of the chain of west coast sites which fringe the Irish Sea. The site is formed by extensive sand and mudflats backed, in the north, by the saltmarsh of the Ribble Estuary and, to the south, the sand dunes of the Sefton Coast. The tidal flats and saltmarsh support internationally important populations of waterfowl in winter and the sand dunes support vegetation communities and amphibian populations of international importance.
Sefton Coast	SAC	6.4km north-west	The Sefton Coast lies between the estuaries of the Mersey and Ribble in north-west England. The sand dunes, beaches and marshes of the Sefton Coast are one of the most important areas for nature conservation in Europe and these habitats are primary reasons for selection of this site. A large population of petalwort <i>Petalophyllum ralfsii</i> is also primary reason for selection of this site. Great crested newt <i>Triturus cristatus</i> is a qualifying feature but not a primary reason for site selection.
Mersey Estuary	Ramsar / SPA	6.6km south-west	The Mersey is a large, sheltered estuary which comprises large areas of saltmarsh and extensive intertidal sand and mudflats, with limited areas of brackish marsh, rocky shoreline and boulder clay cliffs, within a rural and industrial environment. The intertidal flats and saltmarshes provide feeding and roosting sites for large and internationally important populations of waterfowl. During the winter, the site is of major importance for duck and waders. The site is also important during spring and autumn migration periods, particularly for wader populations moving along the west coast of Britain.

The closest national statutory designated site is Mersey Narrows Site of Special Scientific Interest (SSSI) located 4.3km west of the site, on the west side of the River Mersey, outside the search area and as such, will not be discussed further.

#### 3.2.2 Non-statutory Sites

There are three non-statutory nature conservation sites located within 2km of the Site, detailed in Table 4. Proximities to the Site are calculated using the central OS grid reference provided by BioBank for each designated site.

Site Name	Designation	Proximity to Site	Description
Everton Park and nature garden	Local Wildlife Site (LWS)	1.3km south-west	Previously a site of residential buildings, which was grassed over in the 1980s to create the Park. More recently the management of the park has been relaxed and there has been provision of wildflower areas and recent tree planting. There is a ravine at the site and where the vegetation is left untouched and this is particularly good butterfly habitat (a breeding assemblage of 13 qualifying butterfly species). Everton Nature garden is a walled garden including two small lakes, grassland meadow, woodland and exposed rock. The site comprises two habitats of 'principal importance to biodiversity' (S41, NERC Act 2006) which are also regionally important habitats (lowland
			Not zeee) miler are also regionally important habitato (lowiand

Site Name	Designation	Proximity to Site	Description
			mixed broadleaf woodland and standing water). The LWS has a diverse assemblage of 120 species of plant, comprising three regionally important plant species (burnet rose <i>Rosa</i> <i>spinosissima</i> , maidenhair spleenwort <i>Asplenium trichomanes</i> , nettle-leaved bellflower and <i>Campanula trachelium</i> ) and two locally rare species (field scabious <i>Knautia arvensis</i> and water avens <i>Geum rivale</i> ).
Melrose Cutting	LWS	1.6km south-west	A disused railway cutting approximately 750 metres in length and 80 metres wide which supports a range of habitats and plant species typical of ex-industrial land. Narrow strips of silver birch <i>Betula pendula</i> and grey willow <i>Salix cinerea</i> scrub-woodland with a bracken <i>Pteridium aquilinum</i> and bramble <i>Rubus fruticosus agg.</i> understorey are found on both sides of the site for its entire length and these two species are encroaching into other areas. The site's main value is as a habitat mosaic.
Leeds and Liverpool Canal	LWS	1.7km west	It currently supports a very limited range of aquatic plants with only yellow waterlily <i>Nuphar lutea</i> and common duckweed <i>Lemna minor</i> , together with the invasive species parrot's feather <i>Myriophyllum aquaticum</i> and water fern <i>Azolla sp.</i> , recorded in recent years. Its marginal vegetation also lacks diversity, being composed almost entirely of lesser reedmace <i>Typha angustifolia</i> , reed canary-grass <i>Phalaris arundinacea</i> and reed sweet-grass <i>Glyceria maxima</i> , which together form several significant blocks of swamp habitat.

#### 3.3 **Protected and Notable Species**

#### 3.3.1 Badger

The data search returned no records of badger recorded within 2km of the Site.

#### 3.3.2 Bats

The *Potential Roost Assessment (PRA) for trees and structures Technical Note* produced by Mott MacDonald in 2020 (405016-MMD-XX-XX-FN-EN-0001) details the results of the data search, within a 5km radius of the Site, separately to this report.

#### 3.3.3 Birds

There are eight protected or notable bird species recorded breeding within a 2km radius of the Site and 11 bird species recorded wintering within 2km of the Site. Their levels of protection and the peak counts of the wintering birds are captured in Table 5 below. This data, returned by L&CFS, covers years 2011-2018; the year of individual data records are unknown. Additionally, L&CFS records are provided as tetrads (2km x 2km squares) so the exact location of bird species observed is unknown. The centre of the two tetrads are SJ39L (OS British National Grid 335000,393000) located 1.2km south-west of the Site and SJ39R (OS British National Grid 337000,393000) located 0.6km south east of the Site.

Data results from BioBank states that eight species of birds were recorded within 2km pre-2010 (the most recent recorded in 2001) and as such, these records have not been included in the assessment.

## Table 5 Summary of bird species recorded within 2km of the Site between 2008-2011, by L&CFS. Breeding recorded as Proven (Pv), Probable (Pb), Possible (Ps).

	Peak W	/inter count	Bree	ding			Conserva	rd of ation cern	
Species	SJ39L	SJ39R	SJ39L	SJ39R	Schedule 1 of WCA	NERC Section 41	Red	Amber	Local BAP
Black-headed gull Chroicocephalus ridibundus	157	18	-	-				✓	
Black redstart Phoenicurus ochruros	-	-	-	Pb	✓		✓		✓
Common gull Larus canus	3	27	-	-				✓	
Goldeneye Bucephala clangula	-	1	-	-				√	
Herring gull Larus argentatus	7	2	Pv	-	-		$\checkmark$	√	
House sparrow Passer domesticus	31	59	Pv	Pv		V	V		✓
Lesser black-backed gull Larus fuscus	2	3	Pv	-				√	
Linnet Carduelis cannabina	1	-	-	-		√	✓		
Long-tailed tit Aegithalos caudatus	-	4	Pv	Pv					~
Redwing <i>Turdus iliacus</i>	1	-			$\checkmark$		$\checkmark$		
Song thrush Turdus philomelos	2	10	Pv	Pb		$\checkmark$	$\checkmark$		✓
Starling Sturnus vulgaris	12	26	Pv	Pv		V	$\checkmark$		~
Swift Apus apus	-	-	Ps	-				~	$\checkmark$

#### 3.3.4 Herptiles (Reptiles and Amphibians)

There is a lake located approximately 390m north of the Site, in the north area of Stanley Park. No protected or notable species of amphibians or reptiles have been recorded in the last 10 years within a 2km radius of the Site.

#### 3.3.5 Invertebrates

There are four records of the common darter dragonfly *Sympetrum striolatum* within 2km of the Site. The most recent was recorded in 2015 and the closest was recorded 1.3km south-west of the Site. This species is listed on the North Merseyside Local Biodiversity Action Plan (LBAP).

#### 3.3.6 Invasive Species

Two species of invasive plants were recorded within 2km of the Site. There are four records of Japanese knotweed *Fallopia japonica*, the most recent was recorded in 2013 and the closest is 1.7km north-west of the Site, along a railway embankment. There are eight records of rhododendron *ponticum*, the most recent was recorded in 2019 and closest is 0.3km north-west of the Site (in the north-west area of Stanley Park).

#### 3.3.7 Other Protected/Notable Species

Two species of mammal and one species of plant classified either as a species of 'principal importance to biodiversity' (NERC S41) or a LBAP species, were identified within 2km of the Site. Details of these records are shown in Table 6.

## Table 6 Summary of other protected or notable species within 2km of the Site, not captured in the subsections above.

Species	No. of records	Most recent record	Proximity of most recent record to Site boundary	NERC Section 41	Local BAP
European water vole ( <i>Arvicola amphibius</i> )	3	2015	1.7km west	√	✓
West European hedgehog ( <i>Erinaceus europaeus</i> )	17*	2018	0.7km north	√	
Bluebell (Hyacinthoides non-scripta)	2	2019	0.4km north-east		✓

\*Two records note the individual was dead or roadkill.

## 4 Field Survey Results

#### 4.1 Introduction

The purpose of this PEAR (405016-MMD-XX-XX-RP-EN-0001) is to provide an update, where applicable, to the Phase 1 Habitat Survey initially undertaken in October 2013 and the associated PEAR produced in March 2014 by MM (317415/WTD/MID/002/A).

The ecological features within the Site were assessed by undertaking an Extended Phase 1 Habitat Survey carried out by a suitably experienced ecologist from Mott MacDonald, on 09 January 2020. All habitats were mapped according to the Handbook for Phase 1 Habitat Survey methodology (JNCC, 2010). The Site's potential to support protected species was recorded along with the presence of any invasive plant species. The Phase 1 Habitat map is provided in Appendix C with associated Target Notes and Photographs in Appendix D (Table 8) and Appendix E respectively. Target Notes are referred to as TN1, TN2 etc. in the following section.

### 4.2 Habitat Descriptions

The following broad habitat types, along with their associated JNCC habitat codes, were recorded within site during the field survey:

- Amenity grassland (J1.2);
- Buildings (J3.6);
- Defunct hedge species-poor (J2.2.2)
- Intact hedge species-poor (J2.1.2)
- Introduced shrub (J1.4);
- Other habitat (J5);
- Parkland scattered trees broad-leaved (A3.1);

These habitats are described below. They are ordered alphabetically, not in order of ecological importance. An accompanying Extended Phase 1 Habitat map is provided in Appendix C.

### 4.2.1 Amenity grassland (J1.2)

There are three main areas of amenity grassland within the site: the field between Anfield Road and Stanley Park (Photo 6) adjacent the LFCTV structure, between the two car parks (Stanley Park Car Park and Anfield Stadium Car Park) intersected by pedestrian park paths (Photo 17), around the car park perimeters (Photo 11) and Stanley Park itself (Photo 19). Stanley Park and the area between the car parks are subject to intensive cutting regimes and as such the grass species present within these swards were unidentifiable. However, the amenity grassland located adjacent to LFCTV consisted of annual meadow-grass *Poa annua*, perennial ryegrass *Lolium perenne* with some Yorkshire fog *Holcus lanatus* also present. A few common forb species were identified within the swards including white clover *Trifolium repens*, creeping buttercup *Ranunculus repens*, greater plantain *Plantago major*, broadleaved dock *Rumex obtusifolius* and dandelion *Taraxacum officinale* agg.

#### 4.2.2 Buildings (J3.6)

Three buildings were assessed for their potential to support protected or notable species (other than bats) as part of the Extended Phase 1 Habitat Survey:

- Building 1: LFC Stadium Anfield Road Stand (TN1, Photo 1)
- Building 2: Electrical substation unit (TN2, Photo 4)
- Building 3: LFCTV structure and merchandise stand (TN3, Photo 8)

Building 1: Red-bricked walls, multi-storey building, comprising metal support and concrete structures. The upper portion of the external structure is clad in corrugated metal sheeting with large glass window, all well sealed. Numerous ground-floor metal doors, several in front of turn styles. Lighting above doors and at the top of the building over windows. Further street lighting on north-east side of Anfield road, opposite the stand.

Building 2: A red-bricked, single-storey building with flat roof and lighting above each metal door. Building potentially houses an electrical substation and is in good condition.

Building 3: Metal, rectangle, single-storey building (merchandise stall) with door and shutter front in good condition, well-sealed. Adjacent are repurposed metal shipping containers (LFCTV), one stacked on top of the other. The upper unit has glass windows on three sides, is furnished inside and a tall lighting column is positioned adjacent.

#### 4.2.3 Defunct hedge – species-poor (J2.2.2)

Defunct species-poor hedge along the south-east perimeter on Stanley Park amenity grassland adjacent Stanley Park Car Park (Photo 20). The hedge is approximately 180m in length and comprises hawthorn *Crataegus monogyna*, rosehip and field maple. A low laying metal rail fence / barrier runs parallel the hedge line.

#### 4.2.4 Intact hedge – species-poor (J2.1.2)

An intact, species-poor hedgerow approximately 95m in length is located along the south-west boundary of Stanley Park Car Park, comprising yew *Taxus baccata* only (Photo 18). It has no connectivity to the wider landscape.

#### 4.2.5 Introduced shrub (J1.4)

An ornamental shrub border (Photo 5) is located between the stone paved path and outside broadcasters (OB) area. Understorey comprises bark chippings with *Viburnum davidii, Skimmia japonica* and non-native dogwood *Cornus* sp. along the most northerly length of the 1.5m high fence line. This bark border comprises of scattered young broadleaved trees thought to be Turkish hazel *Corylus colurna* (as identified by Tree Survey and Constraints Report 2019).

A narrow strip of ornamental planting is located adjacent scattered trees behind the north-east OB fence line (Photo 9) and comprises Oregon grape *Mahonia aquifolium* amongst dogwood, euonymus sp., bramble *Rubus fruticosus agg.*, cleavers *Galium aparine*.

Ornamental planting of unknown species on amenity grassland between the two car parks (TN4, Photo 15).

There is a flower bed within the amenity grassland between the car parks, currently comprising bare soil with a small vegetated border mimicking a hedge (TN5, Photo 16).

#### 4.2.6 Other habitat (J5)

Hardstanding accounts for extensive areas of the Site comprising: two tarmacked, fenced car parks (Photo 14 and Photo 21), a third car park adjacent the Sir Kenny Dalglish Stand backing onto residential boundary wall and fencing along Anfield Road (Photo 22); a fenced area for OB (Photo 3); an area holding numerous metal shipping containers repurposed as food vendors

and covered seating area (Photo13); Anfield Road (Photo 1) and associated pedestrian pavements (Photo 2), as well as footpaths between the two fenced car parks and access to Stanley Park from Arkles Lane (Photo 17). A wide, stone-paved pedestrian path provides access from Anfield Road to Stanley Park (Photo 5).

#### 4.2.7 Parkland scattered trees - broad-leaved (A3.3)

Numerous areas of scattered trees including: a line of six Turkish hazel young trees along the north-east side of Anfield Road parallel to the OB perimeter fence (Photo 2); semi-mature sycamore *Acer pseudoplatanus* and holly *llex* sp. within and adjacent ornamental planting (Photo 10) and along the north-east boundary of the amenity grassland (Photo 7); semi-mature ash *Fraxinus excelsior*, sycamore, cherry laurel *Prunus laurocerasus*, leylandii sp., young holly beech *Fagus sylvatica* along the main pathways into Stanley Park from Arkles Lane (Photo 17) and adjacent the stadium car park north of Anfield road (Photo 12), London plane *Platanus x acerifolia* adjacent Stanley Park Car Park (Photo 17); young beech, blackthorn *Prunus spinosa* and holm oak *Quercus ilex* in amenity grassland where the temporary construction compound is planned to be located (Photo 19).

### 4.3 Protected/Notable Species

#### 4.3.1 Badger

No evidence of badgers on Site or in any of the accessible areas immediately adjacent to the Site was observed. The Site is unsuitable for badgers and provides limited foraging opportunities. Stanley Park is of low ecological value for badgers, offering limited opportunities for foraging as it comprises predominantly amenity grassland. The most densely wooded area of the park around the lake has a fence boundary enclosing the park from two busy roads (Walton Lane, a two-lane carriageway in both directions, and Priority Road). However, the wooded area is exposed to regular and substantial disturbance by park users (including dog walkers) making it highly unlikely that setts will be present.

#### 4.3.2 Bats

The *Potential Roost Assessment (PRA) for trees and structures Technical Note* produced by Mott MacDonald in 2020 (405016-MMD-XX-XX-FN-EN-0001), assesses the Site for its potential to support bats separately to this report.

#### 4.3.3 Birds

Magpie *Pica* and wood pigeon *Columba palumbus* were noted during the survey. The buildings introduced shrub and young trees within the Site have negligible potential to support nesting birds. There are several semi-mature broadleaved scattered trees along the entire fence line between the car park and Stanley Park that have suitability for nesting birds. Stanley Park comprises numerous scattered trees with potential to support nesting birds adjacent the Site.

#### 4.3.4 Herptiles

No evidence of any amphibians or reptiles were observed during the survey and the Site offers negligible potential for both taxonomic groups as habitat comprises of broadleaved scattered parkland trees on short swards of amenity grassland with intersecting paths (hardstanding) with high levels of disturbance (frequented by dog-walkers and pedestrians) in an urbanised area. The introduced shrub and intact species-poor hedgerow have low ecological value for amphibians and reptiles. These habitats are isolated and provide no connectivity to the surrounding landscape including to Stanley Park lake, which is used for recreational fishing.

#### 4.3.5 Invertebrates

The habitats found on Site are generally of poor quality and of low ecological value for invertebrates due to be over-managed habitats and predominantly hard standing, with most of the Site unsuitable for anything other than common invertebrate species. Stanley Park lake has a greater potential to support invertebrates. However, due to the common habitats which are heavily managed, it is unlikely that notable assemblages of invertebrates will be present.

#### 4.3.6 Invasive Species

No invasive species were observed or adjacent to the Site.

#### 4.3.7 Other Protected/Notable Species

No habitat suitable for water vole *Arvicola amphibius* was noted on Site. Hedgehogs *Erinaceus europaeus* are limited to forage and take shelter in introduced shrub borders and the intact hedge. However, the Site and surrounding area is 'kept tidy' of natural debris that could be used by hedgehogs for shelter, and due to the level of disturbance it is unlikely that individuals would inhabit the Site and instead remain in more secluded areas. No protected or notable plant species were noted on Site or immediately adjacent.

## **5** Interpretation and Recommendations

#### 5.1 Designated Nature Conservation Sites

There are six European nature conservation sites within 10km of the Site, three of which are additionally designated internationally as Ramsar sites and there are no international protected sites designated for bats within 10km of the Site. These sites are designated for their important assemblages of various species of waterfowl and seabirds including populations of over-wintering seabirds. Liverpool Bay SPA, the closest European statutory site (located 2.9km west of the Site), is designated for its large numbers of red-throated diver and common scoter. These species are sensitive to disturbance and noise (Garthe and Huppop, 2004).

There are no national or local statutory nature conservation sites within 2km of the site, although there are three non-statutory sites: Everton Park and Nature Garden Local Wildlife Sites (LWS) (1.3km south-west), Melrose Cutting LWS (1.6km south-west) and Leeds and Liverpool Canal LWS (1.7km west).

Given the distance between these receptors and the Site, absence of hydrological links and habitat connectivity, the presence of other industry (along the docks) and existing potential sources of disturbance, it is considered that the Proposed Scheme will not directly impact any of the statutory or non-statutory nature conservation sites.

The zone of influence of likely impacts during construction and operation (visual and noise disturbance) is likely to be limited to the Site and its immediate surroundings, except for visitors on event days which will extend to public transport links and road networks. The vast majority of movement to and from Anfield Stadium will be from the city centre or the motorway network (north-east of the Site), with concentrated movement along Great Homer Street and A59 Everton Valley. An increase in the number of people, frequency of crowds and therefore a slight increase in pollution (due to potential congestion along routes to car parks and from trains station to Anfield Stadium) are not anticipated to indirectly impact the populations of species and habitats for which the protected areas have been designated.

Therefore, no recommendations are made with respect to any of the statutory and non-statutory nature conservation designations.

#### 5.2 Habitats

There are no S41 habitats of principal importance to biodiversity or UK BAP priority habitats present on the Site. All habitats within the Site, including amenity grassland, species-poor defunct hedge, introduced shrub and areas of hardstanding, have been assessed as having negligible ecological importance. However, a Habitat Action Plan (HAP) for urban trees is detailed in the North Merseyside BAP, a habitat which is present on the Site. Therefore, urban scattered trees are considered to be of local importance. This HAP focuses on the retention of existing native trees in the urban environment and the increase in overall numbers of native trees of local provenance. This habitat is recognised for its contribution to biodiversity (potential for roosting bats and nesting birds) and non-biodiversity functions, such as to reduce noise and air pollution, screening of urban views and benefits to well-being.

Trees on, immediately adjacent to, or overhanging the Site, will be retained where possible and must be protected in accordance with British Standard *BS5837:2012 Trees in relation to design, demolition and construction - Recommendations.* Protection should be installed prior to the

commencement of any works, such as physical barriers around the base of trees to prevent damage to the root protection area resulting from soil compaction by vehicles.

It is advised that trees that can't be retained are replaced with native species of local provenance with the long-term objective that there is potential for suitable bat roost features to develop and to provide habitat for birds. It is recommended the trees are replaced at a ratio of 2:1 where space allows and in line with current recommendations in the Amenity Tree Care (2019) (Report ref: 8367 Stanley Park Tree Constraints 25.11.19-V1-SB). Implementation of this best practice will result in a biodiversity net gain in accordance with the Environment Bill (2019).

It is recognised that Stanley Park has potential to improve its ecological value through simple habitat enhancements, resulting in biodiversity net gain. It is recommended that collaboration with Liverpool City Council is sought, to agree on how landscaping on Site can be designed to tie in with habitat enhancements to Stanley Park to benefit biodiversity in the wider landscape. Such enhancements to Stanley Park could include supplement planting along the species-poor defunct hedgerow to transform it into a species-rich, continuous hedgerow, thicker and slightly taller than it is at present (without obscuring views into the park from the car park, to ensure the security of the area is maintained). This would provide suitable habitat for foraging and nesting urban birds and would strengthen the linear pathway for bats to commute along to trees at the opposite side of Stanley Park and potentially improve connectivity to the treeline in Anfield Cemetery adjacent to the back of houses along Ince Avenue. The treeline in the cemetery joins the vegetated railway embankments to the north, allowing bats to commute to greenspaces in the wider landscape, such as Newsham Park and Garden located approximately 1.5km south east of the Site.

Furthermore, if it could be agreed to allow some areas of the amenity grassland to 'naturalise', for instance a minimum of a metre-wide strip of long sward of grassland along the hedge line, these areas would attract invertebrates, which both birds and bats could forage. Such areas would be initially enhanced with a native species-rich seed mix of local provenance to attract a variety of invertebrates, whilst making the long sward visually more appealing and looked-after, to reduce fly-tipping and littering. The addition of an interpretation display, whilst aesthetically pleasing and informative about the park and history of the area, could also inform park uses about the partnership between LFC and the council to improve local biodiversity. This often encourages local residents and park users to take pride in looking after the area, which can promote visitors.

See Potential Roost Assessment (PRA) for trees and structures Technical Note produced by Mott MacDonald in 2020 (405016-MMD-XX-XX-FN-EN-0001) for recommendation of further surveys, mitigation, compensation or habitat enhancement with regards to bats.

### 5.3 **Protected and Notable Species**

Please refer to species specific legislation in Appendix B for legal requirements which drive the recommendations listed below.

#### 5.3.1 Badger

There are no records of badger or evidence of badgers on Site or in any of the accessible areas immediately adjacent to the Site, inferring that badgers are absent from the Site.

The Site and surrounding habitats are unsuitable for badgers and therefore there are no recommendations with regards to badgers.

#### 5.3.2 Bats

The Site is being assessed for its potential to support roosting bats separately and the interpretation and details of recommendations relating to bats can be found in the Mott MacDonald *Potential Roost Assessment (PRA) for trees and structures Technical Note* produced in 2020 (405016-MMD-XX-XX-FN-EN-0001). Compensation for the loss of urban trees is captured below in Table 7, with a holistic view to also benefit bat species.

#### 5.3.3 Birds

Despite the Site providing limited bird breeding habitat, urban birds could still be adversely impacted by vegetation clearance and disturbance during construction (and demolition) activities of Anfield Stand. It is therefore recommended that:

- Any vegetation clearance work or building demolition is undertaken outside of the bird breeding season where possible (i.e. clearance activities are best carried out between September and February).
- If vegetation clearance work or building demolition is planned between March and August, vegetation and buildings will be checked immediately prior to removal or works, by a suitably experienced ecologist.
- Any active nests identified must be retained with a 5m buffer, until the nest is deemed by a suitably qualified ecologist to be inactive (i.e. no longer support dependent young).
- Construction lighting to be directed away from trees containing active bird nests.

#### 5.3.4 Herptiles

There are no records of great crested newts (GCN) within 2km of the Site but aerial photography and OS mapping showed there is a lake within 500m of the Site. Angling is permitted, meaning it is highly unlikely that GCN will successfully breed in this waterbody. Habitat between the Site and the Stanley Park lake is unsuitable for GCN and other amphibians, comprising of broadleaved scattered parkland trees on short swards of amenity grassland with intersecting paths (hardstanding), an area well-used by dog-walkers and other pedestrians. Introduced shrub and intact hedgerow are of low ecological value to GCN and other amphibians, however these habitats are isolated and provide no connectivity to the surrounding landscape.

It is therefore considered that great crested newts and any other amphibians will be absent from the Site and therefore there are no recommendations with regards to amphibians.

#### 5.3.5 Invertebrates

The habitats found on Site are generally of poor quality and of low ecological value for invertebrates (amenity grassland, introduced shrub) with most of the Site unsuitable for anything other than common invertebrate species. It is therefore recommended that:

- To increase invertebrate diversity, habitat enhancement is undertaken on Site and in the adjacent Stanley Park. Enhancement of amenity grassland is detailed in Section 5.2 Habitats above.
- It is recommended that native flowering species of local provenance are considered in the Site's landscape design of introduced shrub borders to provide a higher ecological value for invertebrates.

#### 5.3.6 Invasive Species

No evidence of invasive plant species was found on Site, while the desk study results showed two species with 2km of the Site. Due to the location and distance of Japanese knotweed from the Site, it is unlikely that it could be transported onto the Site. Due to the proximity of rhododendron, its method of spreading (wind dispersal of seeds) and the amount of fly-tipping that occurs in urban areas, which often include invasive species, it is recommended that:

 All open areas of the Site, particularly made ground, are secured and routinely checked for fly-tipped waste to ensure that invasive species do not get transported on to the Site and establish.

#### 5.3.7 Other Protected/Notable Species

The Site is unsuitable for water vole and hedgehogs and no protected or notable species of plant will be impacted during operation or construction due to the distance from Site. Therefore, there are no recommendations with regards to these species.

#### 5.3.8 Summary of Recommendations

Recommended mitigation, compensation and opportunities detailed above are summarised in Table 7 below, except for bats (refer to the independent *Potential Roost Assessment (PRA) for trees and structures Technical Note* produced by Mott MacDonald in 2020 (405016-MMD-XX-XX-FN-EN-0001) for these details).

Habitat/Species	Location	Relevant Legislation/Policy	Recommendation
Bats and birds	Broadleaved scattered trees on and adjacent the Site	North Merseyside BAP Habitat	<ul> <li>Trees lost will be replaced at a 2:1 ratio by native species of local provenance, suitable to develop bat roosting features over time.</li> </ul>
			Enhance existing defunct species-poor hedgerow.
			<ul> <li>Also see 'Urban trees' and 'Urban grassland' in Table 7 in this PEAR (405016-MMD-XX-XX-RP-EN-0001) and the separate Mott MacDonald 2020 Potential Roost Assessment (PRA) for trees and structures Technical Note (405016-MMD-XX-XX-FN-EN-0001).</li> </ul>
Invasive Plants	Not currently found on the Site	Schedule 9 of the Wildlife and Countryside Act. 1981	• All open areas of the Site, particularly the areas of bare ground, are secured and routinely checked for fly-tipped waste to ensure that invasive species do not get transported on to the Site and establish.
Urban birds	Buildings, broadleaved scattered trees and introduced shrub	Wildlife and Countryside Act. 1981	<ul> <li>Undertake vegetation clearance (tree felling or pruning work) or building demolition outside of the bird breeding season (September and February inclusive), where possible.</li> </ul>
			<ul> <li>Where works cannot avoid the bird breeding season (March to October inclusive), a suitably experience ecologist will provide ecological clerk of works (ECoW) in the form of a nesting bird check immediately prior to vegetation clearance and building demolition activities.</li> </ul>
			• Any active birds nest identified must be retained with a 5m buffer, until the ECoW deems the nest to be inactive i.e. fledglings have left the nest and are no longer considered dependant young.
			<ul> <li>Also see Urban trees in Table 7 in this PEAR (405016-MMD-XX-XX-RP-EN-0001).</li> </ul>

#### Table 7 Summary of mitigation, compensation and opportunities for biodiversity net gain

Habitat/Species	Location	Relevant Legislation/Policy	Recommendation		
Urban grassland	Amenity grassland in Stanley Park adjacent to the car park	North Merseyside BAP Habitat	<ul> <li>Create a minimum of a metre-wide strip of long swar of grassland along the hedge line adjacent Stanley Park Car Park, to increase invertebrate biodiversity and therefore foraging wildlife.</li> </ul>		
			<ul> <li>Incorporate a transition of this improved habitat, between Stanley Park and the Site, through the Site's landscape design.</li> </ul>		
Urban trees	Broadleaved scattered trees on the Site and adjacent, in	North Merseyside BAP Habitat	<ul> <li>Retain any semi-mature and mature trees on-, immediately adjacent to- or overhanging the Site, where possible.</li> </ul>		
	between the car parks		<ul> <li>Retained tree are to be protected in accordance with British Standard BS5837:2012 Trees in relation to design, demolition and construction - Recommendations. Protection should be installed prior to the commencement of any works, including but not limited to, a physical barrier around the root protection area to prevent compaction of tree roots.</li> <li>Trees lost will be replaced at a 2:1 ratio by native species of local provenance, suitable to develop bat</li> </ul>		
			roosting features over time.		

## 6 Conclusions

A PEA was undertaken to assess the potential presence of protected and notable habitats and species (excluding bats) within the Site. Desk top studies and survey work have identified that most habitats on Site are of negligible ecological importance. Scattered parkland trees and ornamental planting are of low ecological importance and have potential to support nesting birds, whilst trees and buildings have potential to support roosting bats.

The results of the Extended Phase 1 Habitat Survey and bat surveys completed for the expansion of the Main Stand prompted the need for an internal inspection of Anfield Stadium and a ground level assessment of tree for bats with regards to the new Anfield Stand Expansion. These bat surveys were subsequently undertaken on the same day as the Extended Phase 1 Habitat survey in 2020, which informs this PEAR (405016-MMD-XX-XX-RP-EN-0001). The 2020 survey results of building and tree inspections are detailed in the *Potential Roost Assessment (PRA) for trees and structures Technical Note* produced by Mott MacDonald in 2020 (405016-MMD-XX-XX-FN-EN-0001) and recommend further surveys for bats.

The recommendations described in *5 Interpretation and Recommendations* of this report should be followed in order to comply with current UK legislation and policy, and provide a net gain to biodiversity for the Site proposals.

No further ecological surveys are recommended beyond the aforementioned bat surveys.

## 7 References

Amenity Tree Care (2019). Tree Survey and Constraints Report: Stanley Park.

CIEEM (2013). Guidelines for Preliminary Ecological Appraisal. Institute of Ecology and Environmental Management, Winchester.

Department for Environment, Food and Rural Affairs (DEFRA) (2019). The Environment Bill Policy Statement website. [Online]. [Accessed 10 January 2020]. Available from: https://www.gov.uk/government/publications/environment-bill-2019/environment-bill-policy-statement

Garthe, S. and Huppop, O. (2004). Scaling possible adverse effects of marine windfarms on seabirds: developing and applying a vulnerability index. Journal of Applied Ecology, 41, 724-734.

JNCC (2010). Handbook for Phase 1 Habitat Survey: A technique for environmental audit (reprint). Joint Nature Conservation Committee, Peterborough.

Joint Nature Conservation Council (JNCC) (n.d). Special Areas of Conservation website. [Online]. [Accessed 10 January 2020]. Available from: <u>https://sac.jncc.gov.uk/#</u>

Merseyside Biodiversity Group (2008). North Merseyside Biodiversity Action Plan website. [Online]. [Accessed 10 January 2020]. Available from: <u>http://www.merseysidebiodiversity.org.uk/</u>

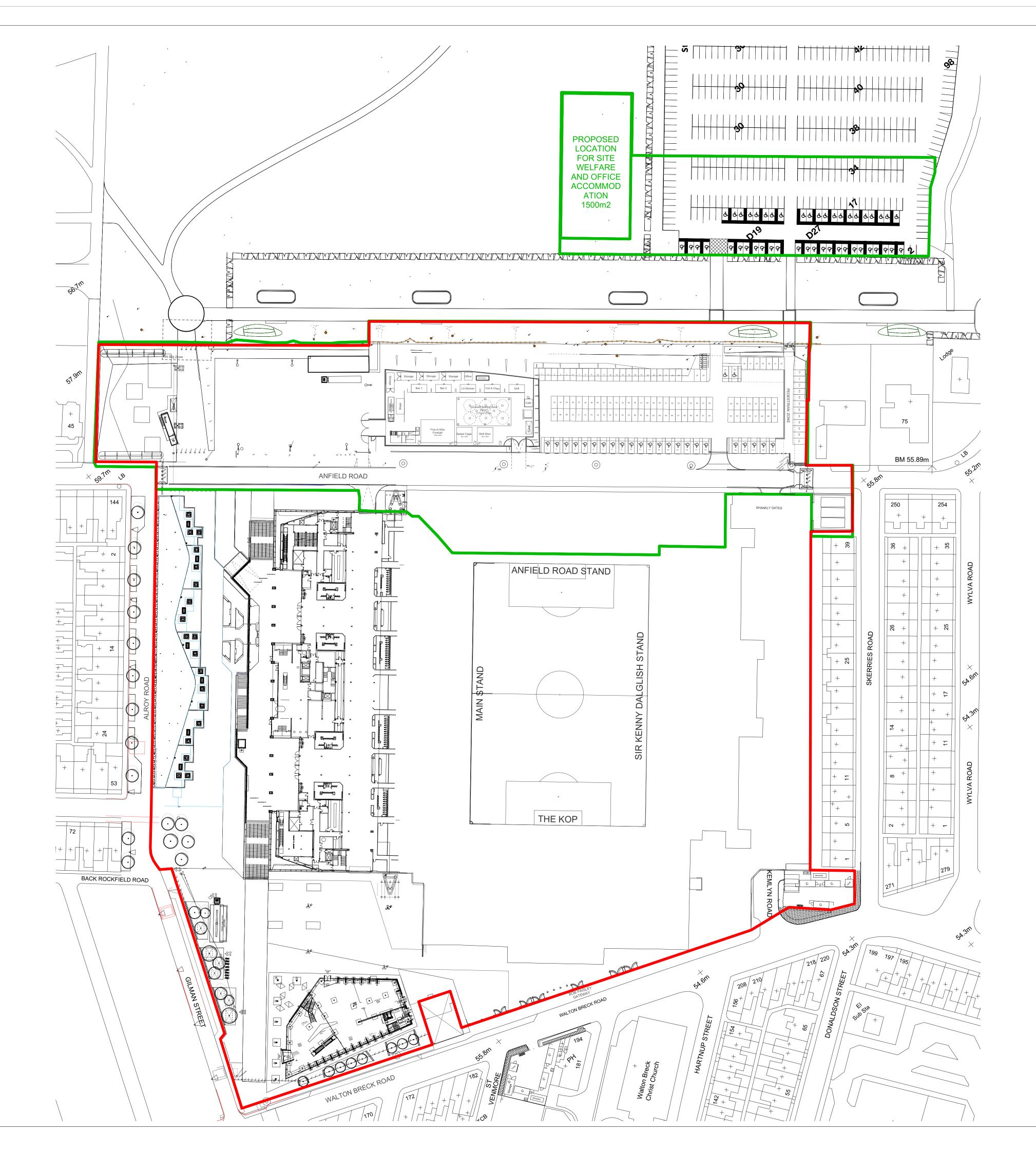
Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

Natural England (2013). Multi-Agency Geographic Information for the Countryside (MAGIC) website. [Online]. [Accessed 10 January 2020]. Available from: <u>http://magic.defra.gov.uk/</u>

Rose, F. (2006). The Wild Flower Key. How to identify wild plants, trees and shrubs in Britain and Ireland (Revised Edition). Penguin Books Ltd. London.

Wheater, C. P., Bell, J. R., Cook, P. A. (2011). Practical Field Ecology: A Project Guide. John Wiley & Sons Ltd, Chichester.

## A. Site Location Plan



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 Always work to noted dimensions. 3. All dimensions are in millimetres unless otherwise stated. All setting out, levels and dimensions to be agreed on site.
 The dimensions of all materials must be checked on site before being laid out. 6. This drawing must be read with the relevant specification clauses and detail drawings.7. Order of construction and setting out to be agreed on site. <u>KEY</u> CONSTRUCTION WORKS AREA 2.64 ha APPLICATION BOUNDARY 6.73 ha Total area 7.34 ha S1-P04 19.03.20 MINOR AMENDMENTS JTO GB AT GB S1-P03 17.03.20 COMMENT S1-P03 10.12.19 AT GB COMMENT S1-P02 10.12.19 AT GB COMMENT S1-P01 10.12.19 AT GB COMMENT Revision Date Description Drawn Apprvd. \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ Planit I.E. Limited Û · İE E: info@planit-ie.com W: planit-ie.com MANCHESTER 2 Back Grafton St , Altrincham, WA14 1DY T: 0161 928 9281 LONDON Unit 6 Waterside, 44-48 Wharf Road, London, N1 7UX T: 0207 253 5678 LIVERPOOL Tempest 5.3, 12 Tithebarn Street, Liverpool, L2 2DT T: 0151 363 1230 Client Liverpool FC **Project** Anfield Road Stand Expansion Drg Title Application and construction boundaries -----Created on Created by Approved by 21.10.19 GΒ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ Scale Size Workstage 1:750 A1 RIBA 02 \_ Suitability Revision Drg No. ARS-PLA-XX-XX-DR-L-0006 S1 P04 © Planit I.E. Limited

## **B. Legislation and Policy**

### **B.1** National Legislation and Policy

#### The Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law.

The Regulations place duty upon the relevant authority of the UK government to identify sites which are of importance to the habitats and species listed in Annexes I and II of the Habitats Directive. Those sites which meet the criteria are, in conjunction with the European Commission, designated as Sites of Community Importance, which are subsequently identified as Special Areas of Conservation (SAC) by the European Union member states. The regulations also place a duty upon the UK government to maintain a register of European protected sites designated as a result of EC Directive 79/409/EEC on the Conservation of Wild Birds (The Birds Directive). These sites are termed Special Protection Areas (SPA) and, in conjunction with SACs, form a network of sites known as Natura 2000.

The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild populations of the species concerned.

#### The Wildlife and Countryside Act (WCA) 1981 (as amended)

The WCA, as amended, consolidates and amends pre-existing national wildlife legislation to implement the Bern Convention and the Birds Directive. It complements the Conservation of Habitats and Species Regulations 2010 (as amended) offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSIs). Schedules of the Act provide lists of protected flora and fauna species and detail the possible offences that apply to these species. All relevant species-specific legislation is detailed later in this Appendix.

#### The Countryside and Rights of Way (CRoW) Act 2000

The CROW Act, introduced in England in 2000, amends and strengthens existing wildlife legislation detailed in the WCA. It places a duty on government departments to have regard for biodiversity and provides increased powers for the protection and maintenance of SSSIs. The Act also contains lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

#### Natural Environment and Rural Communities Act (NERC) 2006

The Natural Environment and Rural Communities (NERC) Act 2006 requires public bodies, including local authorities, 'to have regard to the conservation of biodiversity in England' when carrying out their normal functions. Section 41 of this Act lists of habitats and species of 'principal importance to biodiversity within England', also known as S41 habitats and species of 'principal importance to biodiversity'. The list acts as an aid to guide public bodies in implementing their duty. The enhancements recommended within the recommendations section of this report illustrate ways in which this Biodiversity Duty can be met.

#### **National Planning Policy Framework**

At national level, Section 11 of the National Planning Policy Framework (NPPF), which relates to conserving and enhancing the natural environment, requires Local Authorities in England to take measures to:

- Protect the habitats of these species from further decline;
- Protect the species from the adverse effect of development; and,
- Refuse planning permission for development that harms these species unless the need for, or benefit of, the development clearly outweighs that harm.

Planners must ensure that they comply with wildlife legislation by fully assessing the potential impacts on protected species and habitats from the proposed development. This assessment must be finalised prior to planning permission and must be submitted with the planning application. The Planning Authority can then ensure that the necessary protected species and habitats surveys have been completed.

#### UK Post-2010 Biodiversity Framework (2012)

The UK Post-2010 Biodiversity Framework covers the period 2011 to 2020 and replaces the UK Biodiversity Action Plan (UKBAP) 1994 – 2010. Its aim is to address the underlying causes of biodiversity loss and improve and enhance biodiversity and ecosystem services. The UKBAP contains a list of Priority Habitats and Species of conservation concern in the UK, and outlines biodiversity initiatives designed to enhance their conservation status. The UKBAP Priority Habitats and Species background information is still widely used at country level, as a material consideration in the planning process and is used to help draw up statutory lists of habitats and species of 'principal importance to biodiversity within England', as required under Section 41 of the NERC Act 2006. Local BAPs (LBAPs) are also still widely used which complement the UKBAP targeted towards species of conservation concern characteristic of each county.

#### **Environment Bill (2019)**

During 2019 the Government produced the Environment Bill Policy Statement which, when the legislation comes into effect, will legally require developers to ensure habitats for wildlife are enhanced, with a 10% increase in habitat for wildlife compared with the pre-development baseline. This means the Councils across England will have a duty to ensure that any plans or projects provide biodiversity net gains, as opposed to 'no net loss'. Although the legislation is not currently in place, it is expected to become a legal requirement imminently and clients are advised to plan accordingly.

#### Biodiversity 2020: A strategy for England's wildlife and ecosystem services

A biodiversity strategy for England that builds on the Natural Environment White Paper and provides a comprehensive picture of the county will implement its international and EU commitments. It sets out the strategic direction for biodiversity policy for the next decade on land (including rivers and lakes) and at sea to halt overall biodiversity loss, support healthy well-

functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people.

#### **Hedgerow Regulations 1997**

The Hedgerow Regulations protects hedgerows in England and Wales through designation of 'important' hedgerows, stating prohibited and permitted work, what constitutes an offence and when a hedgerow must be replaced. The term hedgerow in these regulations excludes those within, or marking the boundary of, the curtilage of a swelling-house.

# **B.2 Local Policy**

## **Unitary Development Plan**

The Liverpool Unitary Development Plan (UDP) is a statutory document that plays a major role in shaping the future of the city. It was adopted in November 2002. Under the new planning system, the UDP is a 'saved plan'; the majority of its policies have been 'saved' and continue to carry development plan status. The UDP will eventually be replaced by the new Local Plan. Until then the saved policies of the UDP, together with those of the Merseyside and Halton Waste Local Plan comprise the adopted statutory development plan for making planning decisions in Liverpool

Within the current UDP, the following policies are relevant to the development:

## **OE5 – Protection of Nature Conservation Sites and Features**

The City Council will seek to protect the nature conservation interest of open land and the water environment in the City by not permitting development which would:

- Destroy, fragment or adversely affect directly or indirectly a designated or proposed Special Protection Area (SPA), Ramsar site, or Site of Specific Scientific Interest (SSSI), unless the City Council is satisfied that there is no alternative solution and there are imperative reasons of overriding public interest;
  - Destroy, fragment or adversely directly or indirectly affect a site of Nature Conservation Value as identified by the City Council unless it can be clearly demonstrated that there are reasons for the proposal including benefits to the community, which outweigh the need to safeguard the substantive nature conservation value of the site;
  - Destroy, fragment or adversely directly or indirectly affect a Regionally Important Geological/Geomorphological Site (RIGS) unless it can be demonstrated that the benefits of the proposal to the community outweigh the need to safeguard the geological value of the site; or,
  - Have an adverse effect on legally protected wildlife species.

## **OE6 – Development and Nature Conservation**

In the circumstances where development is permitted on or adjacent to any sites covered by policy OE5, which in the case of the Mersey Estuary will be subject to the most rigorous examination, the City Council will seek to minimise potential damage by:

- 1. Requiring developers to undertake a site investigation to identify the nature conservation interest of the site;
- 2. Requiring developers to set out proposals for the protection and management of the nature conservation value of the site; and,

3. Considering the use of conditions and/or planning obligations to safeguard the nature conservation interest and/or provide compensatory measures for any nature conservation interest damaged or destroyed during the development process.

Encouraging and supporting community groups, schools and other organisations to work in partnership with the City Council on habitat creation and enhancement initiatives.

#### **OE12 – Enhancement of Green Space**

The City Council will seek to enhance the overall stock of publicly accessible green space by:

- 1. Improving the quality and management of existing parks, playing fields, golf courses and cemeteries;
- 2. Pursuing opportunities for new recreational provision in areas of local open space deficiency as identified in this Plan, particularly on green spaces surplus to the City Council requirements for other purposes; and,
- 3. Providing new parks as identified on the Proposals Map.

## **OE7 – Habitat Creation and Enhancement**

The City Council will seek to enhance the nature conservation interest of open land and water courses in the City by:

- Supporting and initiating proposals for habitat creation and enhancement particularly within Sites of Nature Conservation Value and those other sites which, although do not meet the criteria required to be designated as an SNCV, are considered to be of value for nature conservation;
- 2. Supporting proposals which strengthen and enhance wildlife corridors in the City;
- 3. Managing its own land, and particularly the City's parks, in a manner more positively beneficial to wildlife and encouraging other landowners to do the same where appropriate;
- 4. Encouraging the reopening of culverted water courses where opportunities arise and supporting the Alt 2000 initiative;
- 5. Encouraging developers to undertake landscaping in an ecologically sensitive manner; and,
- 6. Encouraging and supporting community groups, schools and other organisations to work in partnership with the City Council on habitat creation and enhancement initiatives.

## **OE12 – Enhancement of Green Space**

The City Council will seek to enhance the overall stock of publicly accessible green space by:

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- 3. Providing new parks as identified on the Proposals Map.

## **Liverpool Local Plan**

Liverpool City Council commenced preparation of a Core Strategy to replace the strategic policies of the adopted UDP. While that plan reached an advanced stage of preparation it was not submitted for examination and has now been abandoned in favour of producing a city-wide

Local Plan. The draft strategic policies of the Core Strategy will be used to inform the emerging Local Plan.

The draft Core Strategy recognises that Liverpool has a significant green infrastructure resource which contributes to the character and environmental quality of the City. Green infrastructure is described in the Liverpool Green Infrastructure Strategy as "the network of natural environmental components and green and blue spaces within and around Liverpool which provides multiple social, economic and environmental benefits." This network includes land in both public and private ownership, comprising the City's Green Wedges, parks, local wildlife sites, allotments, street trees, hedges, cemeteries and private gardens, and its water spaces, including the River Mersey, the Leeds Liverpool canal, park lakes and water courses.

The document includes a number of draft policies that may be included in the emerging Local Plan. These set out the broad framework for protecting and enhancing green infrastructure in Liverpool and specific priorities for different areas of the City.

#### Strategic Policy 26 – Protecting and Enhancing Green Infrastructure

#### Protection

- 1. Liverpool's green infrastructure resource will be protected from inappropriate development. Specifically, protection will be afforded to:
  - a. Sites that provide a high number of green infrastructure functions/benefits or a function/benefit in an area of need;
  - b. Strategically important open spaces, comprising Green Belt, Green Wedges and the Mersey Estuary SSSI/SPA/Ramsar Site;
  - c. The network of City, District, Neighbourhood and Local Parks;
  - Biodiversity assets, including Local Wildlife Sites (LWS) and Local Nature Reserves (LNR);
  - e. Regionally Important Geological/Geomorphological Sites (RIGS);
  - f. Locally important open spaces and water courses, including amenity spaces, allotments, playing fields and pitches; and
  - g. Open spaces of historic value.
- 2. Development which is considered likely to cause material harm to a site will not be supported unless the benefits outweigh its loss. Where there is a loss of a green infrastructure asset, replacement provision may be required. In assessing material harm, account will be taken of:
  - a. Recreational function, visual amenity, biodiversity, historic and structural quality and value; and
  - b. The green infrastructure functions provided.

#### Enhancement

- 3. Green infrastructure will be managed and enhanced to support the regeneration of the City, strengthen its distinctive sense of place and provide a multi-functional resource capable of delivering a wide range of environmental, economic and other quality of life benefits for local communities within the City by:
  - a. Requiring development proposals to make an appropriate contribution to the enhancement of the City's green infrastructure resource, either through on-site provision or a contribution to improving the function, quality and/or value of a nearby open space or green infrastructure asset. This could include:

- i. The use of innovative green infrastructure measures such as green roofs in the design of the development;
- ii. Integration and enhancement of biodiversity features;
- iii. Contributing to effective water management through the use of permeable surfaces and/or Sustainable Urban Drainage Systems and where possible and appropriate to do so the opening up of culverted watercourses;
- iv. Improving or creating green routes to encourage active and sustainable travel and recreation;
- Improving the recreational function of open spaces, particularly where it would assist in minimising recreational pressures on internationally designated sites both within and beyond the City boundary;
- vi. Providing or enhancing green infrastructure at key gateways to, and along, key corridors in the City;
- vii. Maintaining access to, and where required addressing deficiencies in, accessible open space.
- b. Requiring green infrastructure plans for all major development proposals to set out how the proposal will contribute to the objectives of the Green Infrastructure Strategy, including an assessment of the green infrastructure functions and benefits provided.
- c. Supporting innovative small-scale green infrastructure projects which meet identified needs of that area. This could include food growing, small community gardens or public art projects.
- 4. The City's green infrastructure assets will be identified, and the detailed criteria-based policy for protecting and enhancing green infrastructure, will be set out in a further development plan document.

## Strategic Policy 27 – Supporting Green Infrastructure Initiatives

The City Council will support and help deliver the aims and objectives of local and sub-regional green infrastructure initiatives and programmes that seek to enhance and create green infrastructure in Liverpool and which deliver a wide range of environmental, economic and quality of life benefits for local communities within the City, including:

- a. The Mersey Forest;
- b. Green Infrastructure Framework for the Liverpool City Region
- c. North Merseyside Biodiversity Action Plan;
- d. Liverpool City Region Ecological Framework.

## Strategic Policy 29 – Green Infrastructure in the Urban Core

In the Urban Core, the focus will be on improving the overall quality, value and function of the existing green infrastructure resource for the benefit of local communities. This will be achieved by:

- a. a. Protecting and enhancing:
  - i. City Parks Newsham, Everton, Stanley, Walton Hall and Princes Parks, and Wavertree Botanic Park and Gardens;
  - ii. Locally important open space sites;

- iii. Existing locally important wildlife sites at Melrose Cutting and Stanley Sidings.
- Maximising opportunities to enhance and/or introduce wildlife into existing areas of open space;
- c. Improving or creating green paths and cycle ways, through development proposals that link residential areas with existing open spaces (including the waterfront), employment locations, local community services and leisure facilities.

## **B.3** Designated Sites Legislation

## **Ramsar Sites**

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. Originally intended to protect sites of importance especially as waterfowl habitat, the Convention has broadened its scope over the years to cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. The Convention adopts a broad definition of wetland, namely "areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres". Wetlands "may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands".

#### Natura 2000

Natura 2000 is the name of the European Union-wide network of nature conservation sites established under the EC Habitats and Birds Directives. This network comprises Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). Marine Natura 2000 sites contribute to the ecologically coherent network of Marine Protected Areas.

## Special Areas of Conservation (SAC)

SACs are designated under the EC Habitats Directive. The Directive applies to the UK and the overseas territory of Gibraltar. SACs are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs in terrestrial areas and territorial marine waters out to 12 nautical miles are designated under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and beyond 12 nautical miles are designated under the Offshore Marine Conservation (Natural Habitats &c.) Regulations 2007 (as amended).

Sites which have been submitted to the European Commission by Government, but not yet formally adopted by the Commission, are referred to as candidate Special Areas of Conservation (cSACs). Sites which have been adopted by the EC, but not yet formally designated by governments of Member States are known as Sites of Community Importance (SCIs). In the UK, designation of SACs is devolved to the relevant administration within each country. In UK offshore waters JNCC is responsible for identification and recommendation to Government of SACs.

## Special Protection Areas (SPA)

SPAs are classified by the UK Government under the EC Birds Directive. The Directive applies to the UK and the overseas territory of Gibraltar. SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union. SPAs in terrestrial areas and territorial marine waters out to 12 nautical miles are classified

under the Wildlife and Countryside Act 1981 and beyond 12 nautical miles are designated under the Offshore Marine Conservation (Natural Habitats &c.) Regulations 2007 (as amended).

#### **Sites of Special Scientific Interest**

Sites of Special Scientific Interest (SSSI) (England, Scotland and Wales) have developed since 1949 as the national suite of sites providing statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features. These sites are also used to underpin other national and international nature conservation designations. Most SSSIs are privately-owned or managed; others are owned or managed by public bodies or non-government organisations.

Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs have been re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and the Nature Conservation (Scotland) Act 2004.

#### Wildlife Sites

Local authorities for any given area may designate certain areas as being of local conservation interest. The criteria for inclusion, and the level of protection provided, if any, may vary between areas. Most individual counties have a similar scheme, although they do vary.

These sites, which may be given various titles such as 'Listed Wildlife Sites' (LWS), 'Local Nature Conservation Sites' (LNCS), 'Sites of Importance for Nature Conservation' (SINCs), or Sites of Nature Conservation Importance' (SNCIs), together with statutory designations, are defined in local and structure plans under the Town and Country Planning system and are a material consideration when planning applications are being determined.

## **B.4** Species Specific Legislation

#### Badger

Badgers are protected under the Protection of Badgers Act 1992. In summary it is an offence to wilfully kill or injure a badger; damage, destroy or obstruct access to a badger sett; or disturb a badger when it is occupying a sett.

## Bats

Throughout Britain, bat numbers have suffered a decline in recent years and, as a result, all species of British bat are protected by United Kingdom (UK) and European legislation.

All species of British bats and their roosts are fully protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) with additional protection offered under Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended). This makes it an offence to kill, injure or disturb bats or obstruct access to, damage or destroy bat roosts. Under this legislation, a roost is determined as any structure or place used for shelter. As bats tend to reuse the same roosts, the roost is protected whether the bats are present at the time or not.

## **Breeding Birds**

All breeding birds are protected under the Wildlife and Countryside Act 1981 (as amended), which prohibits the intentional killing, injuring or taking of any wild bird, the taking, damaging or destroying of eggs or of the nest (whilst being built or in use). Schedule 1 bird species are afforded greater protection under the Wildlife and Countryside Act 1981 (as amended). It is an offence to disturb Schedule 1 birds or the dependant young of Schedule 1 birds in the vicinity of their nest site.

#### **European Water Vole**

Water vole are fully protected under the Wildlife and Countryside Act 1981 (as amended). In summary it is an offence to intentionally kill, injure or capture a water vole; intentionally or recklessly damage, destroy or obstruct access to any structure which water voles use for shelter or protection; or disturb water vole while they are using such a place. Water voles are also listed on Section 41 of the NERC Act 2006.

#### Herptiles (Reptiles and Amphibians)

Widespread reptiles are afforded partial protection under the Wildlife and Countryside Act 1981 (as amended). In summary it is offence to intentionally kill or injure any of these species. All widespread reptiles are also listed on Section 41 of the NERC Act 2006.

Great crested newt is protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitat and Species Regulations 2017 (as amended).F In summary it is illegal to intentionally or deliberately kill, injure, disturb or capture a great crested newt or damage, destroy or obstruct access to any structure used for breeding or resting. Great crested newt is also listed on Section 41 of the NERC Act 2006.

#### West European Hedgehog

West European Hedgehog are protected against cruelty under the Wild Mammals Act 1996 and are listed on Section 41 of the NERC Act 2006.

#### Bluebell

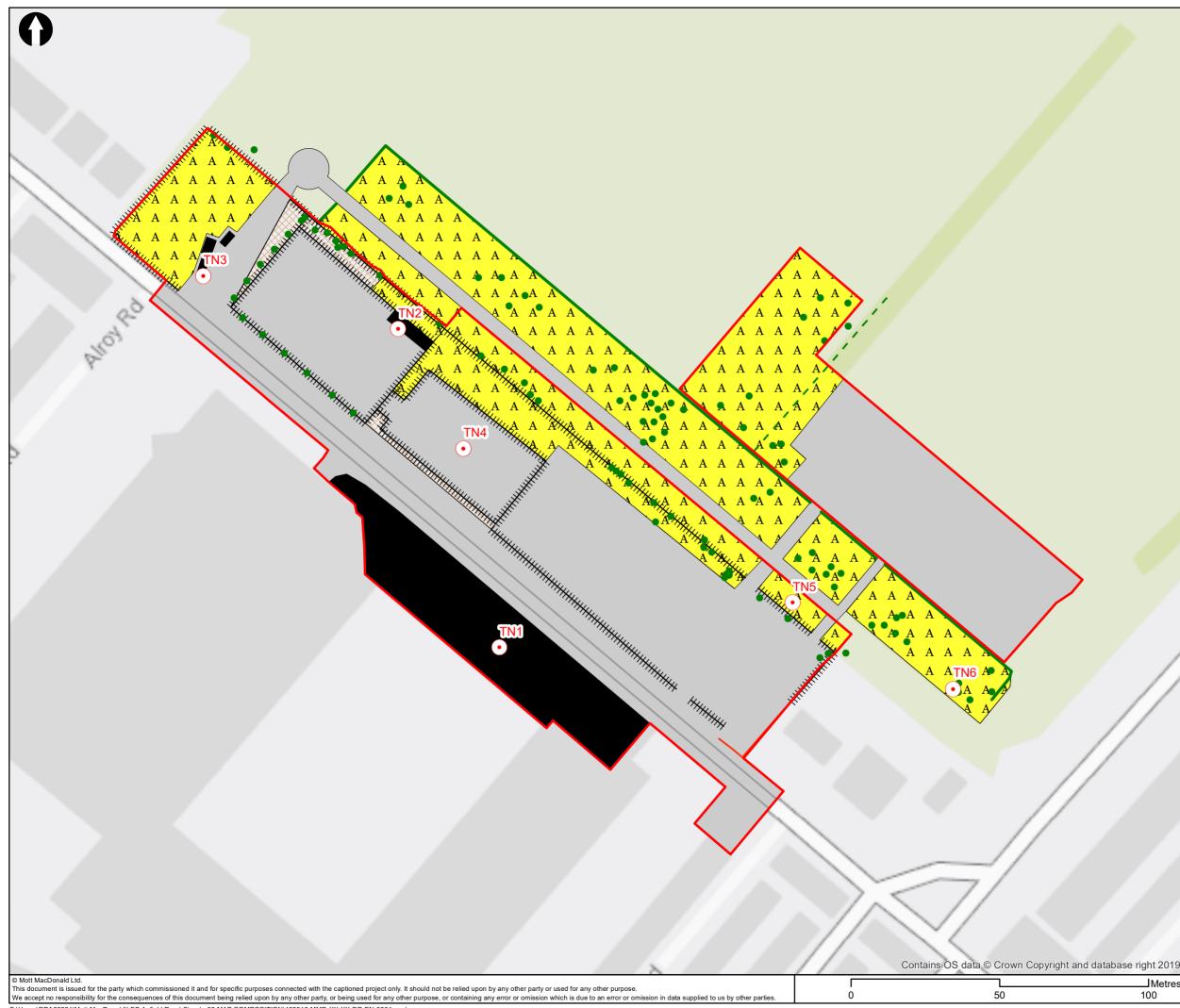
English bluebell is listed under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) which protects them from sale.

#### **Invasive Species**

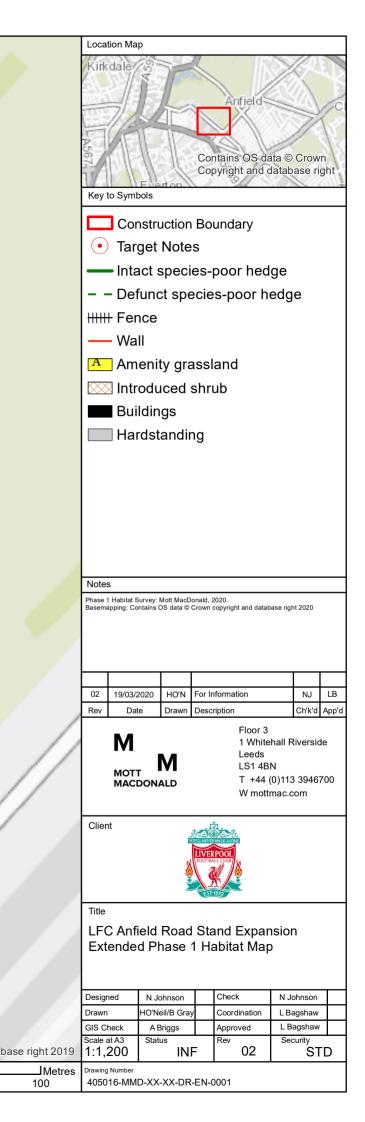
Japanese knotweed and rhododendron are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). It is an offence to plant or otherwise cause to grow in the wild invasive non-native plants listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

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# C. Phase 1 Habitat Map



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# **D. Target Notes**

#### Table 8 Phase 1 Habitat Survey Target Notes.

Target Note (TN)	Details	Photo Reference
1	<b>Building 1:</b> LFC Stadium Anfield Road Stand. Re-bricked, multi- storey building, comprising metal and concrete structures. Numerous ground-floor metal doors, several in front of turn styles. Numerous windows. Lighting above doors and at the top of the building over windows. Street lighting on north-east side of the road. See Mott MacDonald's 2020 Potential Roost Assessment (PRA) for trees and structures Technical Note (405016-MMD-XX-XX-FN-EN- 0001) for further details of buildings and assessment of their potential for bats.	1
2	<ul> <li>Building 2: Red-brick, single-storey building with lighting above each metal door. Building potentially houses an electrical substation unit.</li> <li>See Mott MacDonald's 2020 Potential Roost Assessment (PRA) for trees and structures Technical Note (405016-MMD-XX-XX-FN-EN-0001) for further details of buildings and assessment of their potential for bats.</li> </ul>	4
3	<b>Building 3:</b> Metal, single-storey, rectangle building (merchandise stall) with door and shutter front in good condition, well-sealed. Adjacent are repurposed metal shipping containers (LFCTV), one stacked on top of the other. The upper unit has glass windows on three sides and is furnished inside. Tall lighting column adjacent. See Mott MacDonald's 2020 <i>Potential Roost Assessment (PRA) for trees and structures Technical Note</i> (405016-MMD-XX-XX-FN-EN-0001) for further details of buildings and assessment of their potential for bats.	8
4	Ornamental planting on amenity grassland, in between the two car parks.	15
5	Large flower bed (currently exposed soil) amongst amenity grassland, in between the two car parks.	16

# E. Photographs

Photo Reference	JNCC Habitat Code	Details	Photo
1	Buildings (J3.6)	Building 1: LFC Stadium Anfield Road Stand, located on the south-west side of Anfield Road. See Mott MacDonald's 2020 Potential Roost Assessment (PRA) for trees and structures Technical Note (405016- MMD-XX-XX-FN-EN-0001) for assessment of Building 1	<image/>

Photo Reference	JNCC Habitat Code	Details	Photo
2	Parkland scattered trees (A3.3) Fence (J2.4)	Line of six Turkish hazel young trees (D) between metal bollards and approximately 1.5m high fence on hardstanding (pedestrian pavement) along the north-east side of Anfield Road. Negligible ecological value.	
3	Fence (J2.4) Other habitat (J5)	Large area of hard standing used for outside broadcaster (OB), with approximately a 1.5m high metal fence around the perimeter, comprising double gate and barrier system. <b>Building 2</b> within north-east corner (see TN4). Negligible ecological value.	
4	Buildings (J3.6)	Building 2: Red-brick, single-storey building with lighting above each metal door. Building houses an electrical substation unit. See Mott MacDonald's 2020 Potential Roost Assessment (PRA) for trees and structures Technical Note (405016- MMD-XX-XX-FN-EN-0001) for assessment of Building 2.	
5	Introduced scrub (J1.4) Fence (J2.4) Other habitat (J5)	Hardstanding (paved pedestrian footpath) adjacent ornamental planted borders with a line of young Turkish hazel trees. Understorey comprises bark chippings with <i>Viburnum davidii</i> (F), <i>Skimmia japonica</i> (F) and non-native dogwood <i>Cornus</i> sp.(F) along the most northerly length of the fence. Negligible ecological value.	

Photo Reference	JNCC Habitat Code	Details	Photo
6	Amenity grassland (J1.2) Fence (J2.4)	Grass length maintained short, comprises perennial ryegrass <i>Lolium perenne</i> (A), annual meadow-grass <i>Poa annua</i> (F), white clover <i>Trifolium repens</i> (O), broadleaved dock <i>Rumex obtusifolius</i> (O), Yorkshire fog <i>Holcus</i> <i>lanatus</i> (R), greater plantain <i>Plantago major</i> (R), dandelion <i>Taraxacum</i> <i>officinale agg.</i> (O), smooth cat's-ear <i>Hypochaeris</i> <i>glabra</i> (R). Linear grassed mounds parallel the south- west and north-east field perimeter. Negligible ecological value.	
7	Parkland scattered trees (A3.3)	Broadleaved young scattered trees along the north-east field boundary comprising holly <i>llex</i> sp. Low ecological value.	
8	Building (J3.6)	Building 3: Metal, rectangle, single-storey building (merchandise stall) with door and shutter front in good condition, well-sealed. Adjacent are repurposed metal shipping containers (LFCTV), one stacked on top of the other. The upper unit has glass windows on three sides and is furnished inside. Tall lighting column. See Mott MacDonald's 2020 Potential Roost Assessment (PRA) for trees and structures Technical Note (405016- MMD-XX-XX-FN-EN-0001) for assessment of Building 2.	

Photo Reference	JNCC Habitat Code	Details	Photo
9	Introduced scrub (J1.4)	Oregon grape <i>Mahonia</i> <i>aquifolium</i> (R) amongst dogwood (F), euonymus sp. (R), bramble <i>Rubus</i> <i>fruticosus agg.</i> (R), cleavers <i>Galium aparine</i> (R), field maple (R). Negligible ecological value.	
10	Parkland scattered trees (A3.3)	Scattered semi-mature sycamore <i>Acer</i> <i>pseudoplatanus</i> (A) and holly (F) trees with low laying ivy (D) understorey, with patches of bramble (O), nettles (R) and herb- Robert (R) and short grasses (unknown sp.) Low ecological value.	

Photo Reference	JNCC Habitat Code	Details	Photo
11	Amenity grassland (J1.2)	Yorkshire fog (F), greater plantain (R), creeping buttercup <i>Ranunculus</i> <i>repens</i> (R), ragwort (R), broadleaved dock (R), common nettles (R), dandelion (R), small patches of bare ground (potentially a result of vegetation clearance). Most grass species unidentifiable as sward is maintained short. Negligible ecological value.	<image/>

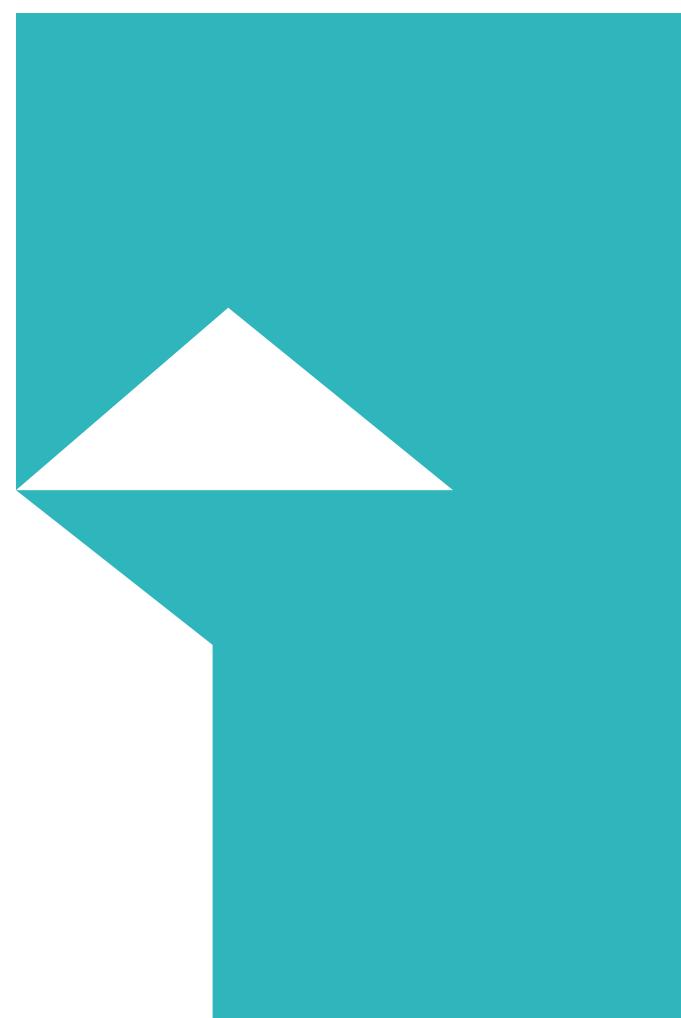
Photo Reference	JNCC Habitat Code	Details	Photo
12	Parkland scattered trees (A3.3) Amenity grassland (J1.2) Fence (J2.4)	Scattered trees over amenity grassland compared semi-mature sycamore (A), English Elm (R), leylandii sp. (R) and young holly (R). Grass species unidentifiable due to short sward. Several herbaceous species noted in grass included greater plantain (R), creeping buttercup (R), yarrow (R). Low ecological value.	<image/>

Photo Reference	JNCC Habitat Code	Details	Photo
13	Other habitat (J5)	Large area of hardstanding north side of Anfield Road, with numerous metal shipping containers repurposed as food venders and covered seating area. See Mott MacDonald's 2020 Potential Roost Assessment (PRA) for trees and structures Technical Note (405016- MMD-XX-XX-FN-EN-0001) for assessment of these repurposed shipping containers.	<image/>
14	Other habitat (J5)	Large area of hard standing used as a car park, north of Anfield Road. Negligible ecological value.	
15	Introduced shrub (J1.4)	Ornamental planting on amenity grassland between the two car parks. Low ecological value.	

Photo Reference	JNCC Habitat Code	Details	Photo
16	Introduced shrub (J1.4)	Flower bed currently comprising bare soil with a small vegetated border. Negligible ecological value.	
17	Parkland scattered trees (A3.3) Amenity grassland (J1.2) Other (J5)	Numerous scattered semi- mature and young broadleaved trees comprising sycamore (A), Norway maple (F), ash (F), common lime (O), beech <i>Fagus sylvatica</i> (R), cherry laurel (R), English elm (R), London plane (R). Low ecological value.	

Species-poor intact hedge (J2.1.2)	Intact, species-poor hedgerow along the south- west boundary of the Stanley Park Car Park, comprising yew <i>Taxus</i> <i>baccata</i> (D) only. Low ecological value.	
Amenity grassland (J1.2) Parkland scattered trees (A3.3)	South corner of Stanley Park adjacent Stanley Park Car Park comprises amenity grassland and young broadleaved scattered beech (R), blackthorn <i>Prunus spinosa</i> (R), hawthorn <i>Crataegus</i> <i>monogyna</i> (R) and holm oak <i>Quercus ilex</i> (R) Robinia sp. (R). Grass sward too short to identify species, herbaceous species include red clover (R) and white clover (R).	
	intact hedge (J2.1.2) Amenity grassland (J1.2) Parkland scattered	intact hedge (J2.1.2)hedgerow along the south- west boundary of the Stanley Park Car Park, comprising yew Taxus baccata (D) only.Amenity grassland (J1.2)South corner of Stanley Park adjacent Stanley Park Car Park comprises amenity grassland and young broadleaved scattered trees (A3.3)South corner of Stanley Park Car Park comprises amenity grassland and young broadleaved scattered beech (R), blackthorn Prunus spinosa (R), hawthorn Crataegus monogyna (R) and holm oak Quercus ilex (R) Robinia sp. (R). Grass sward too short to identify species, herbaceous species include red clover

Photo Reference	JNCC Habitat Code	Details	Photo
20	Defunct hedge – species-poor (J2.2.2)	Defunct species-poor hedge between Stanley Park amenity grassland and Stanley Park Car Park, comprising hawthorn (D), rosehip (R) and field maple (R). Low laying metal rail fence / barrier along hedge line. Negligible ecological value.	
21	Other (J5)	Extensive area of hardstanding, Stanley Park Car Park, adjacent (south-east of) Stanley park. Negligible ecological value.	
22	Other (J5)	Stadium Car Park hardstanding, adjacent Sir Kenny Dalglish Stand and backs onto the residential properties along Skerries Road. Negligible ecological value.	



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