

Plot 5 Land  
**Adjacent to  
Pierhead Street  
Cardiff  
CF10 4AA**



An **Ecological Survey**  
**Report By:**



On **Behalf Of:**



May **2022**

<b>Client</b>	Dukes Education
<b>Project Name</b>	Plot 5 Land adjacent to Pierhead Street, Cardiff CF10 4AA
<b>Report Title</b>	An Ecological Survey Report
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## Contents

	Page No.
1 Executive Summary	1
2 Introduction	1
3 Survey Team Experience	1 – 2
4 Survey Methodology	2 – 3
5 Site Description	3
6 Survey Constraints	3
7 Desktop Study	3 – 4
8 Survey Results	4 – 5
9 Discussion and Conclusions	5 – 6
10 Recommendations	6
11 References	7
Appendix I: Site Plan	8 – 9
Appendix II: Phase 1 Habitat Map	10
Appendix III: Site Photographs	11
Appendix IV: List of Recorded Species	12
Appendix V: Relevant Legislation	13

### List of Tables

Table	Description of Contents	Page No.
Table 1	Survey Team Experience	1 – 2
Table 2	Summary of Survey Activity and Weather Conditions	4
Table 3	Summary of Phase 1 Habitat Notes	4
Table 4	Recommended Native Plant Species	6
Table 5	List of Recorded Species	12

### List of Figures

Figure	Description of Contents	Page No.
Figure 1	Site location plan	8
Figure 2	Aerial view	9
Figure 3	Site layout	9
Figure 4	Phase 1 habitat map	10

### List of Plates

Plate	Description of Contents	Page No.
Plate 1	Looking across Plot 5 from north-east corner	11
Plate 2	View over Plot 5 from west to east	11
Plate 3	View looking south towards Pierhead Street	11
Plate 4	Footpath at east end looking south	11
Plate 5	Footpath at east end	11
Plate 6	Semi-mature line tree beside footpath	11
Plate 7	Narrow band of vegetation at east end	11
Plate 8	Water body beyond east boundary	11

## 1 Executive Summary

- 1.1 It is proposed to develop a site beside Pierhead Street, in the Cardiff Bay area of the city. The site is known as Plot 5, and a new landmark building is designed to provide student accommodation for the new education establishment at the southern end of Bute Street, in the converted buildings of Cory's Buildings and Merchant's House. Ecological assessment was conducted with a Preliminary Ecological Appraisal in late April 2022, in order to support a planning application to Cardiff City Council, and consider the presence of protected species and the potential for impacts on legally protected species as a consequence of the proposed development activity.
- 1.2 The survey site covers an area of approximately 0.46 hectares with current use as a car park and footpath. The PEA assessment of Plot 5, recorded the area to be dominated by hard standing with a small number of perennial species of plants which can tolerate a harsh environment growing around the edges and in cracks of the tarmac surface. A small strip of short perennial vegetation at the eastern edge adjacent to a small water body linked to Roath Basin of the former city dock area was also assessed. This narrow strip offers no potential for other protected species such as reptiles, water vole or otter as it is isolated and too small with insufficient suitable habitat to support reptiles and mammals. Limited opportunities are present for breeding birds. A single semi-mature lime tree on the plot was inspected and it contains no potential for roosting bats. No Section 7 species under the Environment (Wales) Act 2016 are recorded at the site, and overall the site is considered to be of low to negligible ecological value.
- 1.3 No additional survey effort is recommended for Plot 5. The site is within an area of recent development with little natural habitat to support or attract wildlife in the immediate vicinity. Breeding birds are protected under the Wildlife and Countryside Act 1981 (as amended). To avoid the risk of encountering and disturbing nesting birds, the removal of the small area of vegetation at the eastern edge of the site is advised to be timed to occur outside the bird breeding season of March to August inclusive.
- 1.4 Invasive non-native plants were considered and identified at the site. Only invasive buddleja was found to be present in the narrow band of vegetation at the eastern end of the site.
- 1.5 A South East Wales Biological Record Centre search was obtained to consider the presence of protected habitats and species. There are no historic record for wildlife species at the site.
- 1.6 For compliance with Planning Policy Wales 11 and Future Wales policy, enhancements for biodiversity are recommended for the site to offer new benefits for pollinators and nesting birds. The green features are presented with a landscape plan.

## 2 Introduction

- 2.1 Just Mammals Limited was commissioned by Dukes Education to carry out a Preliminary Ecological Appraisal (PEA) of a site at Cardiff Bay known as Plot 5. The site is proposed for redevelopment with the construction of a new landmark building to provide accommodation for the students of the educational facility established on Bute Street, Cardiff. Survey was conducted in April 2022 by an experienced ecologist and an assistant.
- 2.2 Situated at National Grid Reference (NGR) ST19433 74710, at an altitude of 10m Above Ordnance Datum (AOD), in the Cardiff Bay area of the city, close to Mermaid Quay and the Millennium Centre, the area has undergone considerable urban regeneration and investment in recent years.
- 2.3 This report details the findings of the survey, and considers the overall ecological value of the site and the degree to which its re-development could potentially impact biodiversity. Additionally, it makes recommendations to avoid impacts to protected wildlife and proposes enhancements for biodiversity in line with British legislation and Welsh planning policy.

## 3 Survey Team Experience

- 3.1 The survey was undertaken by Diane Morgan and Daniel White. Table 1 below details their relevant experience.

**Table 1: Survey Team Experience**

Name/Position	Licences	Experience
Diane Morgan BA (Hons) ACIEEM Senior Ecologist	S087512/1; bat, expiry January 2022:	Diane has considerable experience (nearly 30 years) of surveying-built structures for bats and has carried out ringing of Daubenton's bat as part of a multi-year project on the

	S090043/1; otter, expiry August 2023: S090042/1; dormouse, expiry August 2023: S090044/1; water vole, expiry August 2023	species. She has undertaken monitoring work on several important lesser horseshoe bat roosts and assisted in radio tracking projects on the same species. She holds a City & Guilds Level 2 award for working in Medium Risk Confined Spaces. Prior to her work as a consultant ecologist, Diane was the Director of Brecknock Wildlife Trust and was involved in a wide range of nature conservation work including species and habitat protection and conservation land management. Other areas of interest include otter, dormice, water voles, reptiles, amphibians, fungi and crayfish. Diane is a Senior Ecologist with Just Mammals Limited
Daniel White LLB MSc QCIEEM Trainee Ecologist		Following qualification from the University of South Wales with an MSc in Wildlife and Conservation Management in 2021, Daniel is a Trainee Ecologist with Just Mammals Limited. He has experience of reptile surveys, having previously conducted presence/absence surveys for non-native Aesculapian snakes. In addition to carrying out botanical surveys, river surveys and small mammals trapping, he has also undertaken practical land management activities whilst volunteering with Cambrian Wildwood

## 4 Survey Methodology

- 4.1 Prior to the site visit, a desktop study was undertaken, which involved a standard search area of a 2km radius from the site (using a central grid reference), using the web-based MAGIC database ([www.MAGIC.gov.uk](http://www.MAGIC.gov.uk)). Details of statutory sites, designated for nature conservation were obtained. These included sites with statutory designations of international importance; Special Areas of Conservation (SACs), Special Protected Areas (SPAs) and Ramsar sites, as well as sites of national importance; Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs).
- 4.2 The South East Wales Biodiversity Records Centre (SEWBRc) was consulted for records of Protected and Priority species and Phase 1 habitats within 1km of the site (package B). The record centre also provided details of any Local Nature Reserves and Sites Important for Nature Conservation (SINC) within 1km.
- 4.3 A PEA and Preliminary Roost Assessment (PRA) were conducted on the 28<sup>th</sup> April 2022. Details of the survey activity and weather conditions are provided in Table 2. The assessment comprised a survey employing the Phase 1 habitat survey methodology. This is a standardised technique for classifying and mapping British habitats. The site and its boundaries were appraised according to the standard methodology detailed in the 'Handbook for Phase 1 habitat survey' (JNCC 2010). All areas within the survey zone were inspected and assessed for indicators of ecological value, including the presence and/or field signs of any protected or rare habitats and species. The site was walked over, recording plant species and features onto a custom-made recording sheet. Habitats and notes were drawn onto a map of the survey site and photographs were taken. A coloured Phase 1 habitat map was produced (see Appendix II).
- 4.4 Assessment for the presence or potential presence of protected species, such as bats, otters, hazel dormouse, badger, reptiles and amphibians, was undertaken by considering the features of the site. For consideration of great crested newt (*Triturus cristatus*) potential presence, ponds and water bodies within 500m of the site were identified using Ordnance Survey maps and aerial imagery. Other priority species listed under Section 7 of the Environment (Wales) Act were also considered, such as west European hedgehog (*Erinaceus europaeus*).
- 4.5 A daytime visual assessment was carried out on the narrow band of vegetation at the eastern end of the site. Bat roosts in trees were also assessed. An assessment followed the process of inspection of a single tree from ground level with the use of binoculars and a powerful torch to consider features of the tree and its potential to support bat roosts.
- 4.6 When considering the likelihood of bats using the trees, the survey is not concerned with the size of the overall tree or its trunk diameter as even quite small trees can be used for roosting activity. Tree health is considered to be a much better indicator of the likely use by bats, as these animals have no means of making holes in wood themselves. Instead they are reliant on naturally occurring cavities caused by rot or wind damage; holes made by other species such as woodpeckers; branches or limbs damaged by vehicles or other natural means; growth of ivy (*Hedera helix*); and loose bark on trunks.

- 4.7 The potential suitability of the site for nesting birds was also considered, with the ecologists seeking signs of historic bird activity, nest remains, evidence of collections of bird dropping, feathers or any other signs of use by birds.
- 4.8 Invasive non-native species (INNS) as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded, where present.

## 5 Site Description

- 5.1 Plot 5 is an area of land of circa 0.46 hectares on the north side of Pierhead Street, close to the landmark building of the Millennium Centre, in Cardiff Bay. The majority of the site is composed of hard surfaces serving currently as a car park within a metal mesh perimeter fence and secure gate.
- 5.2 A footpath at the eastern end runs from Pierhead Street to the multi-storey car park north of the site. A single semi-mature lime tree (*Tilia x europaea*) stands at the southern end of the footpath.
- 5.3 Within a separately fenced off area, a small strip of perennial vegetation is present on level ground at the eastern end adjacent to a water body that is a part of Roath Basin and the former Cardiff docks. Outside the site boundary to the east, the ground slopes steeply down to the water level. The small water body has culvert connections to other water bodies and the steep banks above the water line are covered with large stones and stone chippings.
- 5.4 This part of Cardiff Bay has seen major re-development in recent years with modern office blocks, leisure and apartment buildings in the immediate area. A Premier Inn hotel stands adjacent to the west and a multi-storey car park is directly to the north.

## 6 Survey Constraints

- 6.1 All habitats on site could be identified with confidence. Full access was provided.

## 7 Desktop Study

- 7.1 No part of the site contains, or is within, any statutory sites of nature conservation interest, such as Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SAC), National Nature Reserves (NNRs), Special Protected Areas (SPA) or Local Nature Reserves (LNRs) etc. Within a 2km radius of the site there is one site designated for ecological significance: Severn Estuary (Wales) SSSI, SAC, SPA and Ramsar site is some 1.4km to the south-east at its closest point
- 7.2 SEWBRc's search noted one Local Nature Reserve, namely Cardiff Bay Wetlands and Hamadryad Park, south-west of the survey site, as well as two Sites Important for Nature Conservation (SINCs) including Afon Taff and much the same area as the Cardiff Bay Wetlands Nature Reserve. This part of Cardiff Bay falls within the area of Natural Resources Wales (NRW) Coastal Saltmarsh Priority Habitat.
- 7.3 The record search (unique reference 0212-965) reported 2299 species records with 932 for protected and priority species within 1km. These are briefly summarised in the bullet list below.
  - terrestrial mammals – excluding bats – accounted for only 11 records, the closest being an otter *(Lutra lutra)* recorded in Roath Basin. A small number of records are for West European hedgehog\* with the closest 780m to the west of the survey area. A badger (*Meles meles*) record is from Roath Dock Road, in 2013 and a weasel (*Mustela nivalis*) record from the Cardiff Bay nature reserve;
  - bats – accounted for 117 records with the dataset dominated by pipistrelle bat, and a low number of *Myotis* and *Nyctalus* species. Pipistrelle\* bats were recorded in the Coal Exchange building a short distance west of Plot 5, but there were no unusual bats within the dataset, although many were of Section 7 species;
  - no reptile records are in the data set;
  - amphibians – were recorded on 22 occasions, with common frog (*Rana temporaria*) and common toad\* (*Bufo bufo*) within the Cardiff Bay water bodies (the closest at 780m distant), but there were no records for any newt species;
  - birds – dominate the dataset with 707 records. Recorded close to Plot 5 is red kite (*Milvus milvus*). Also close by in the Roath Basin of Cardiff Bay are herring gull\* (*Larus argentatus*), a single record for Mediterranean gull (*Ichthyophaga melanocephalus*), starling\* (*Sturnus vulgaris*), kingfisher (*Alcedo atthis*), house sparrow\* (*Passer domesticus*) and Eurasian



skylark \* (*Alauda arvensis*). Several other birds of prey are recorded including kestrel\* (*Falco tinnunculus*), merlin (*Falco columbarius*) and peregrine (*Falco peregrinus*).

- Plants – accounted for just 25 records but the records close to the survey site are all distinctly historic. Numerous records (127) for invasive non-native plants include buddleja (*Buddleja davidii*), Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and several cotoneaster species.
- invertebrates – accounted for 46 records with cinnabar moth\* (*Tyria jacobaeae*), small heath butterfly\* (*Coenonympha pamphilus*), and latticed heath moth\* (*Chiasmia clathrata*), within 500m of the site.
- fish – accounted for 2 records, including eel\* (*Anguilla anguilla*), and smelt (*Osmerus eperlanus*), recorded in Cardiff Bay.

\*denotes Section 7 priority species from the Environment (Wales) Act 2016

## 8 Survey Results

- 8.1 A Phase 1 survey, was completed on Thursday 28<sup>th</sup> April 2022 by an experienced ecologist and an assistant. Details of the conditions under which the surveys were conducted are given in Table 2 below. Wind speeds shown employ the Beaufort scale.

**Table 2: Summary of Survey Activity and Weather Conditions**

Date	Survey Type	Timing	Weather Conditions
28/04/2022	Day time visual inspection, botanical survey and habitat assessment, including protected species assessment and ground level assessment of tree for roosting bats	13.00 – 14.30 hours British Summer Time (BST)	Air temperature: 12°C Cloud cover: 8/8 oktas Wind speed: F2, light breeze Conditions: Dry
<b>Surveyors</b>	Diane Morgan, Daniel White		

- 8.2 For recording purposes, the site was divided into three different habitat types and mapped following the codes and conventions described in the Phase 1 Habitat Survey Handbook (JNCC 2010). Table 3 below describes the on-site habitats in order of surface area, with the most extensive habitats listed first. The most dominant plant species are also listed: a complete list can be found in Table 5 (see Appendix IV).

**Table 3: Summary of Phase 1 Habitat Notes for Plot 5**

Habitat	Phase 1 Classification	Description of Area and Typical Species
Type 1	J5 Other habitat; hardstanding	Tarmacadam covers a parking area and a footpath. Around the fringe and in cracks in the surface, plant species were noted; Red valerian ( <i>Centranthus ruber</i> ), ribwort plantain ( <i>Plantago lanceolata</i> ), cleavers ( <i>Galium aparine</i> ), groundsel ( <i>Senecio vulgaris</i> ), teasel ( <i>Dipsacus fullonum</i> ) and common toadflax ( <i>Linaria vulgaris</i> )
Type 2	J1.3 Disturbed ground with ephemeral/short perennial	A narrow band of vegetation at the eastern end of the survey site is within the fenced enclosure around a small water body – a remnant feature of Roath Basin. (The water body lies outside the survey site.) Dominant vegetation is short perennial species of disturbed ground which include red clover ( <i>Trifolium pratense</i> ), groundsel ( <i>Senecio vulgaris</i> ), birds-foot-trefoil ( <i>Lotus corniculatus</i> ), ribwort plantain ( <i>Plantago lanceolata</i> ), bramble ( <i>Rubus fruticosus</i> ), with the addition of buddleja bushes ( <i>Buddleja davidii</i> ). A single semi-mature lime tree ( <i>Tilia x europaea</i> ) stands at the southern edge of this vegetation
Type 5	J2.4 Fence	Metal mesh fencing encloses the car park and separate fencing encloses the short perennial vegetation adjacent to the water body with the footpath route between the fence lines

- 8.3 In summary, the site features hardstanding which covers the 0.46 ha site, set within a dense urban context. A narrow band of vegetation dominated by short vegetation typical of a derelict urban site is present along the eastern edge.
- 8.4 No invasive non-native species were recorded as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) but buddleja bushes are present. These shrubs will establish themselves on hostile substrates and can dominate waste ground in an invasive manner.
- 8.5 Two bird species were observed in the vegetation surrounding the water body beyond the eastern end of the site. A grey heron (*Ardea cinerea*) was observed in the margin of the water body, and a goldfinch (*Carduelis carduelis*) was feeding on thistle-down.
- 8.6 Characteristics of the site contain few features of natural habitat suitable to support wildlife. Nesting opportunities for common garden bird species is very limited, as the buddleja and bramble may provide sufficient cover and protection to establish a nest site. Predatory gull species are constantly present over the site so nests require adequate cover and camouflage.

- 8.7 When considering the site in relation to protected mammals, there is no evidence of badger and no suitable habitat likely to encourage them to explore or make use of the survey site. Similarly the presence of European water vole (*Arvicola amphibius*), and otter was dismissed, with no suitable habitat at the site or in the wider area. Single historic records of badger and otter are within the record search, and their historic presence is unexpected in the dense urban context of Cardiff Bay.
- 8.8 The site offers very limited suitability for hedgehog as there is little shelter and restricted forage habitat. The busy network of roads and the steep sided water bodies makes the area a very hazardous environment for this species. Hedgehogs can swim, but getting out of the water of the steep sided dock features is likely to be challenging for any animal.
- 8.9 Reptiles favour tussocky, rank grassland with areas of bare ground, along with varied vegetative architecture. No reptiles were recorded during the survey and habitat on site is not considered suitable to support reptiles. The habitat is too small in scale to provide food and shelter for a viable population, with no linking connections to suitable habitat in the wider area. There is insufficient cover against predatory gull species. There are no historic records for reptiles in the dataset.
- 8.10 There are historic records for amphibians in the area but there are no records for great crested newts. Amphibians also require a mosaic of habitats for the terrestrial phase of their cycle, but a key element of their ecology is a still water body in which to breed. The former dockland water bodies do not look to contain aquatic vegetation that is necessary for a healthy breeding population of amphibians. The habitat is considered too hostile an environment to support amphibians through their full life cycle with sufficient food sources and shelter.
- 8.11 Similarly there are limited features on the site to support and shelter invertebrate species with the small size and isolation being a key factor.
- 8.12 In terms of habitat quality, the single semi-mature lime tree near the south-east corner of the site and the narrow strip of short perennial vegetation is of low/negligible ecological value. No Section 7 species are present at the site. In the immediate vicinity of Plot 5, the built environment of the surrounding area contains limited green spaces and features to support biodiversity.
- 8.13 Invasive non-native species (INNS) of plants were considered during the assessment. None was noted but the invasive species buddleja was recorded.

## 9 Discussion and Conclusions

- 9.1 Plot 5 is currently assessed to be of low/negligible ecological value due to the extensive areas of hard surfaces. The surrounding built environment results in wildlife unlikely to be drawn to the site or passing through it. The current features of the site provide few opportunities for wildlife with very limited opportunity for nesting birds.
- 9.2 No evidence for the presence of protected species was found and there are no recommendations for any follow-up targeted survey effort. No potential roost features for bats were identified on the single tree and no evidence for breeding bird activity was noted although the buddleja and bramble cannot be ruled out for providing nesting habitat for small common garden bird species.
- 9.3 The single lime tree will be retained in the re-development of the site. This will require adequate protection for the root zone to ensure the health of the tree is not compromised and recommendations are made below.
- 9.4 Situated beside a busy network of roads, the site is not considered likely to be attractive to nocturnal wildlife such as foraging or commuting bats, otter or hedgehog. Bats may explore over the site but the lack of green features to support invertebrates that bats will feed on means that the bats will forage elsewhere. It is likely that the trees along Lloyd George Avenue, and green features around the Civic Centre will attract foraging bats. The water bodies of Cardiff Bay may also produce insects for bats to consume. As a consequence lighting issues are not identified as a constraint in the design plans as impacts on nocturnal wildlife are assessed as unlikely. However, to adhere to good practise for ecological and environmental reasons, unnecessary lighting must be avoided and only installed where safety issues require lighting.
- 9.5 Buddleja is an invasive plant species attractive to butterflies. So long as no nesting birds are present, its removal is recommended below.



- 9.6 To comply with current Welsh planning policy, it will be necessary for the new development to make a positive contribution to biodiversity. A scheme is proposed below which takes account of the context of the site in the wider landscape and introduces green features to the new building on Plot 5. Planting in containers focuses on species known to be beneficial for pollinators.

## 10 Recommendations

- 10.1 No further targeted ecological surveys are recommended at this time. A high proportion of the site is hard surface and no loss of features of ecological value is identified. The single lime tree is to be retained and a root protection zone below the full extent of the canopy in leaf must be marked out as a no go zone for digging, for active machinery or for storage of plant and materials. Damage to the roots or compaction of the soils and substrates will be harmful to the health of the tree.
- 10.2 All nesting birds, their nests, chicks and eggs are protected by Part 1 of the Wildlife and Countryside Act 1981 (as amended). Clearance of the narrow band of vegetation at the east end of the site is recommended to take place during the autumn/winter months of late August to February inclusive in order to avoid the bird nesting season. If this is not possible, then the vegetation must be carefully checked by an appropriately qualified ecologist immediately prior to removal of vegetation.
- 10.3 To comply with policy PPW11, as an enhancement for bird species, two woodcrete bird boxes (type Vivara Barcelona x 1 and Vivara Seville x 1 (or equivalent) are recommended for the site to be attached to the lime tree. The boxes must be installed in suitable positions avoiding direct sun and possible predation.
- 10.4 To provide enhancements to benefit wildlife, a landscape plan must be provided. This gives an opportunity for a planting scheme to favour shrubs and flowering plants beneficial to wildlife. Table 4 below includes a list of species, which can be planted as part of the landscaping design proposals in containers with special focus on species to benefit pollinators. It is best that such plants are sourced locally in order to reduce likelihood of importing diseases.

**Table 4: Recommended Native Plant Species**

Common Name	Scientific Name
Barberry	<i>Berberis vulgaris</i>
Clematis	<i>Clematis montana</i> or <i>Clematis vitalba</i>
Common broom	<i>Cytisus scoparius</i>
Guelder rose	<i>Viburnum opulus</i>
Heather/ling	<i>Calluna vulgaris</i>
Hebe	<i>Hebe</i> sp.
Honeysuckle	<i>Lonicera periclymenum</i>
Lavender	<i>Lavandula</i> spp.
Marigolds	<i>Tagetes</i> sp.
Oregon grape	<i>Mahonia aquifolium</i>
Salvia	<i>Salvia</i> sp.
Skimmia	<i>Skimmia</i> sp.
Tree cotoneaster	<i>Cotoneaster 'Coral Beauty'</i>
Viburnum	<i>Viburnum davidii</i>

- 10.5 During construction works, any ground trenches must not be left in such a state as to present a pitfall trap, where animals such as hedgehogs can fall in and not be able to climb out. An escape builders' plank must be secured so that any animal falling into pits and trenches can make use of the plank, set at an angle of 45°, in order to escape. Food waste from the workforce must not be left at the site, which can attract wildlife such as hedgehog into the working zone.

## 11 References

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## Appendix I: Site Plans

Figure 1: Site location plan

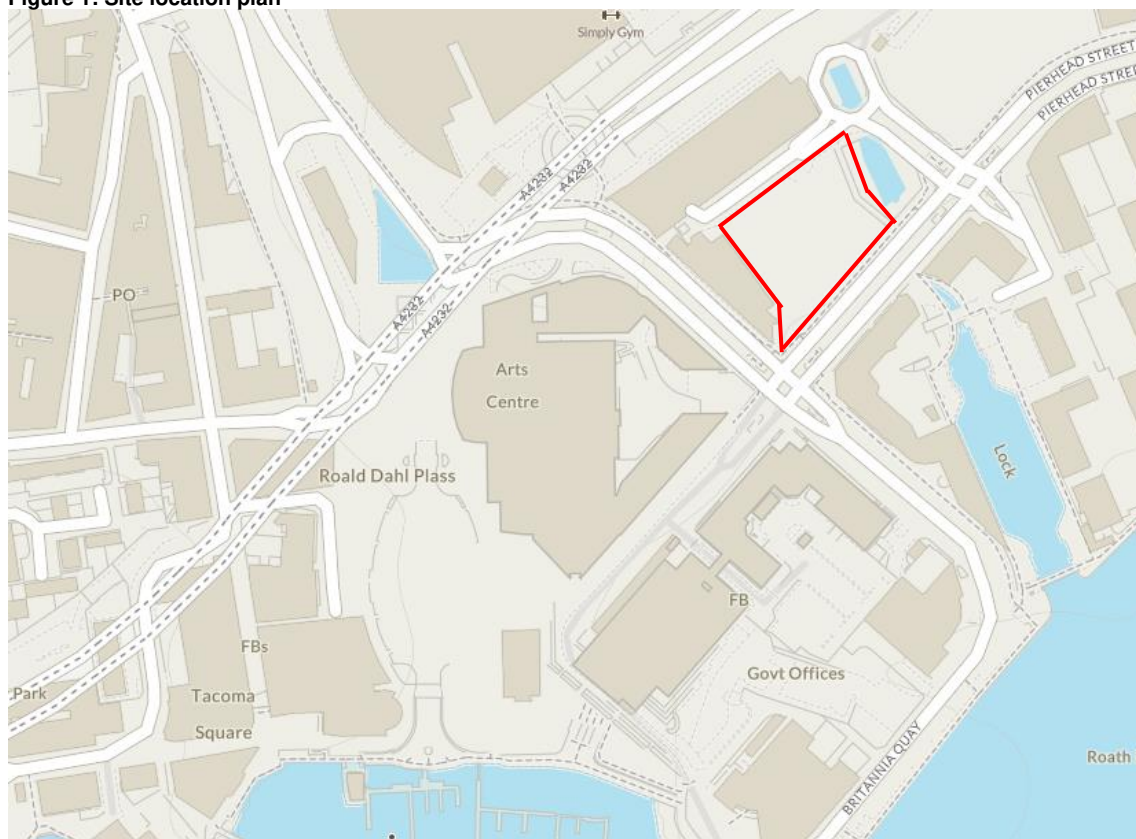
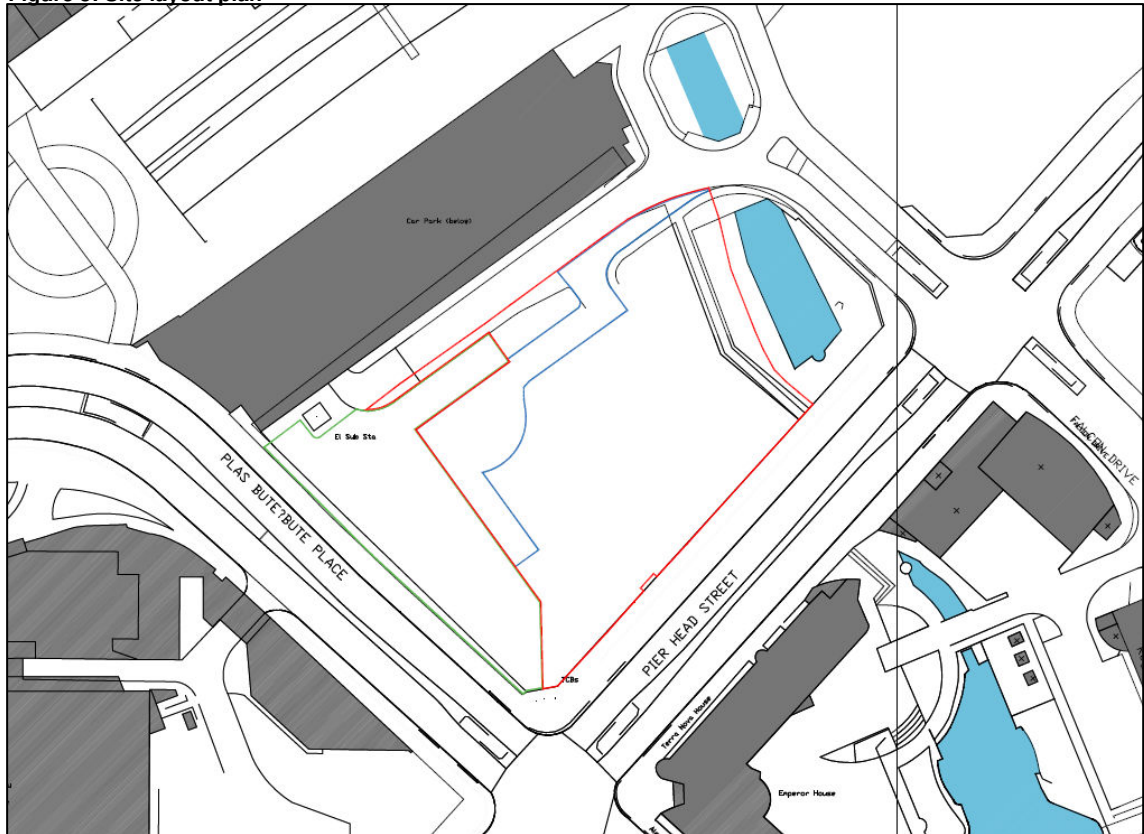


Figure 2: Aerial view



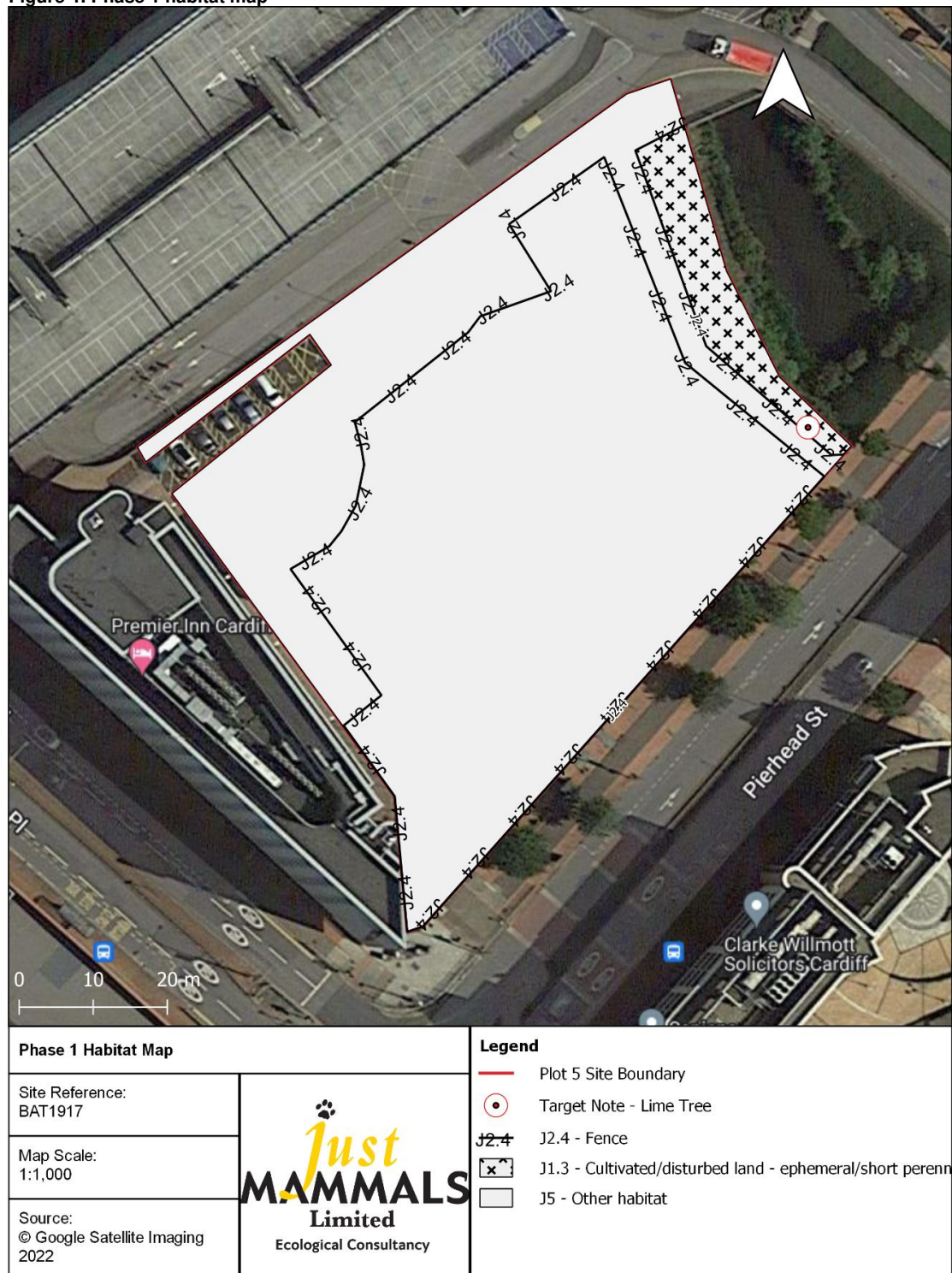
Figure 3: Site layout plan





## Appendix II: Phase 1 Habitat Map

Figure 4: Phase 1 habitat map





## Appendix III: Site Photographs

Plate 1: Looking across Plot 5 from north-east corner



Plate 2: View over Plot 5 from west to east



Plate 3: View looking south towards Pierhead Street



Plate 4: Footpath at east end looking south

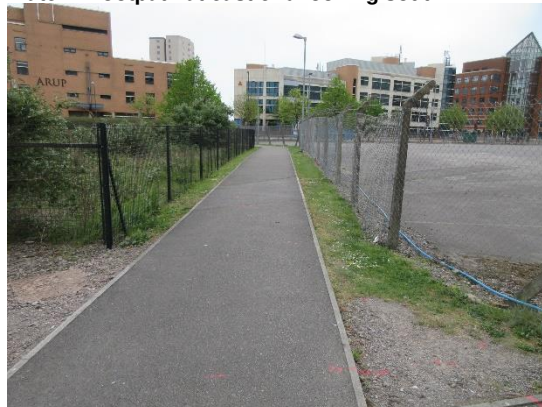


Plate 5: Footpath at east end



Plate 6: Semi-mature line tree beside footpath



Plate 7: Narrow band of vegetation at east end



Plate 8: Water body beyond east boundary





## Appendix IV: List of Recorded Species

**Table 5: List of Recorded Species**

Plant Species		JNCC Classification
Common Name	Scientific Name	1
Annual meadow grass	<i>Poa annua</i>	x
Birds-foot-trefoil	<i>Lotus corniculatus</i>	x
Bramble	<i>Rubus fruticosus</i>	x
Butterfly bush	<i>Buddleja sp.</i>	x
Cleavers	<i>Galium aparine</i>	x
Clover, red	<i>Trifolium pratense</i>	x
Colt's foot	<i>Tussilago farfara</i>	x
Common daisy	<i>Bellis perennis</i>	x
Cotoneaster	<i>Cotoneaster sp.</i>	x
Dandelion A	<i>Taraxacum sp.</i>	x
Dock A	<i>Rumex sp.</i>	x
Forget-me-not A	<i>Myosotis sp.</i>	x
Herb-Robert	<i>Geranium robertianum</i>	x
Horsetail A	<i>Equisetum sp.</i>	x
Lime, common	<i>Tilia x europaea</i>	x
Mouse ear A	<i>Cerastium sp.</i>	x
Oilseed rape	<i>Brassica napus</i>	x
Plantain, greater	<i>Plantago major</i>	x
Plantain, ribwort	<i>Plantago lanceolata</i>	x
Ragwort, common	<i>Senecio jacobaea</i>	x
Red valerian	<i>Centranthus ruber</i>	x
Sow thistle	<i>Sonchus sp.</i>	x
Teasel	<i>Dipsacus fullonum</i>	x
Thistle	<i>Cirsium sp.</i>	x
Vetch, common	<i>Vicia sativa</i>	x
Willowherb A	<i>Epilobium sp.</i>	x
Yarrow	<i>Achillea millefolium</i>	x
Yorkshire fog	<i>Holcus lanatus</i>	x
<b>Fauna</b>		
Grey heron	<i>Ardea cinerea</i>	
Goldfinch	<i>Carduelis carduelis</i>	

1: J1.3 Ephemeral /short perennial on disturbed ground

## Appendix V: Relevant Legislation

### Bats

All species of bat in Britain, and their places of rest are protected under the provisions of the Wildlife and Countryside Act 1981 (WCA), Section 9(1), 9(4)(a) and 9(4)(b) as amended by Schedule 12 of the Countryside and Rights of Way Act 2000. Further protection is afforded by the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019. In relation to structures used by bats for shelter or protection (i.e. roosts), this legislation makes it an offence to either intentionally or recklessly damage, destroy or obstruct access to any site used by bats, whether bats are present at the time or not, or to intentionally or recklessly disturb bats within a roost.

Infringements under this legislation include building demolition, removal of hollow trees, blocking, filling or installing grills over old mines or tunnels, building alteration or maintenance work, re-pointing of stone walls, getting rid of unwanted bat colonies, re-roofing, remedial timber treatment, re-wiring or plumbing in roofs, treatment of wasps, bees or cluster flies (Mitchell-Jones, 1992; Childs, 2001). Lesser horseshoe bats are included in Annex II of the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019 and hence require special protection.

Maximum penalties for committing offences relating to bats or their roosts can amount to imprisonment for a term not exceeding six months or to fines of up to Level 5 on the standard scale under the Criminal Justice Act 1982/1991 (i.e. £5000 in April 2001) per roost or bat disturbed or killed, or to both. Bodies corporate and their directors/secretaries are liable for offences under the above mentioned Regulations and the WCA. Additionally, where such an offence results in the offender benefitting in a monetary form from the illegal action, confiscation or civil recovery of the proceeds can occur under the Proceeds of Crime Act 2002.

It is sensible to assess as soon as possible if bats are present at potential sites for development – preferable before the land is acquired. In some cases, the period required for adequate survey work may span more than one calendar year. If a development, including demolition or change of use, is likely to impact on bats and their roosts then a licence will usually be required. Adequate survey results are a necessary input to any licence application. If bats are not found until late in the development stage this may result in delays while a licence is sought and even in offences being committed.

The law with respect to dwellings and other structures is applied equally. Where disturbance is deemed likely to have a significant effect on bats to survive, breed and rear their young or will affect the local distribution and abundance of the species, a European Protected Species licence issued by Natural Resources Wales. A licence application must demonstrate that the development will not be detrimental to the maintenance and conservation status of the species concerned. This explanation must be regarded only as a guide to the law. For further details, reference must be made to the Wildlife and Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019, and the Countryside and Rights of Way Act 2000.

### Wild birds

All wild birds, their eggs and nests are protected by The Wildlife and Countryside Act 1981 (as amended). It is an offence, with certain exceptions, to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- intentionally take or destroy the egg of any wild bird;
- sell wild birds or put them on display for sale;
- use traps or similar items to kill, injure or take wild birds; and
- intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Penalties that can be imposed for criminal offences in respect of a single bird, nest or egg contrary to the Wildlife and Countryside Act 1981 (as amended) is an unlimited fine, up to six months imprisonment or both. In exceptional cases Natural Resources Wales issues licences for specific purposes, so that legitimate work may be undertaken without breaking the law.

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