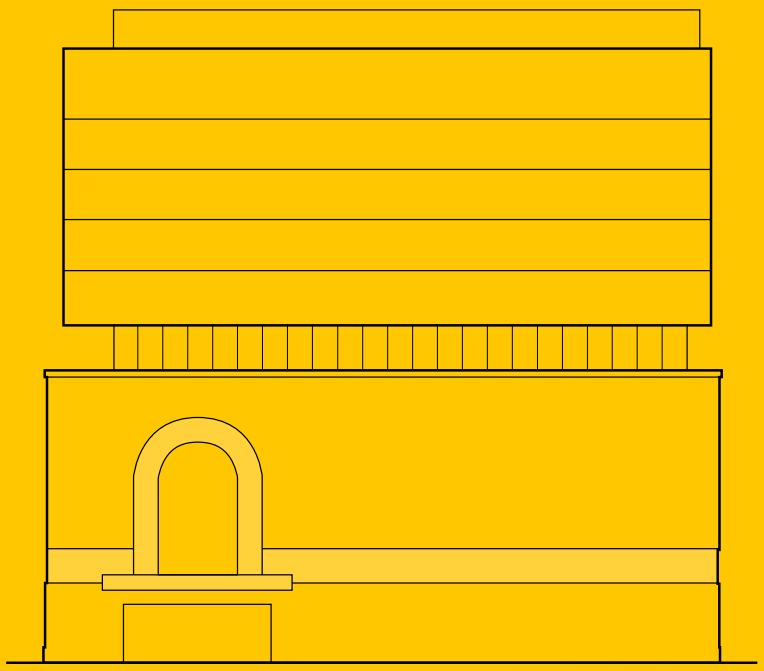

SAVILLE THEATRE

135 SHAFTESBURY AVENUE

ECOLOGICAL ASSESSMENT

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Ecological Assessment

on behalf of

Yoo Capital

March 2024

Report reference d512.2

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CONTENTS

NON-TECHNICAL SUMMARY

This report is prepared by Diversity on behalf of Yoo Capital. It relates to the Saville Theatre building (operating as an Odeon cinema) at Shaftesbury Avenue where mixed-use redevelopment is proposed.

This report provides results of a desk-top study for the local area, a Phase 1 habitat survey of the site and its neighbouring habitats, and Phase 2 surveys for bats. On the basis of the information collected an ecological assessment of the Saville Theatre building has been made and consideration given to the likely ecological effects of its redevelopment.

The site comprises the existing theatre building only. Nearby habitat features are street trees and the Phoenix Garden - a community garden that provides a habitat resource for common species of wildlife and a place for the public to access nature. A review of these habitat features and their sensitivity to change has been included as part of this study.

On the basis of the ecological investigations undertaken it is determined that the proposed refurbishment and redevelopment carries a relatively low risk of direct harm to wildlife but has potential for disturbance effects on fauna arising from increased night-time lighting and environmental stress to garden plants caused by increased daytime shade. In response to these potential effects, recommendations are given for avoidance, amelioration, and mitigation. Provided sensitive design and best-practice measures are implemented, the redevelopment has potential to achieve a net biodiversity gain in accordance with local and national planning policies and the Environment Act, 2021.

1.0 INTRODUCTION

Background

1.1 This report is prepared by Diversity on behalf of Yoo Capital. It provides an ecological baseline for the Saville Theatre at 135 Shaftesbury Avenue, Camden.

1.2 On the basis of a desk-top study, Phase 1 site survey, and Phase 2 surveys, an assessment is made of the ecological significance of the building within the context of the area. Comment is then given regarding the ecological impacts of the redevelopment and whether mitigation measures are needed alongside. Comment is also given on whether the proposal is in line with national planning policy and The Environment Act, 2021 regards the securing of biodiversity net gain.

1.3 In assessing the ecological value of a site, consideration is given to its component habitats and species and whether any of these qualify as notable e.g. rare in the region, or have legal protection. Protected species and certain types of habitats are covered by UK law and by local planning policy formulated in the light of national guidelines. Added to this, notably rare and declining species are a material consideration to planning and subject to conservation targets listed in regional and national Biodiversity Action Plans.

Purpose of report

1.4 This report aims at providing sufficient ecological information to inform design proposals and for enabling Camden Borough Council to fulfil their statutory duty as a public body to consider biodiversity, as is required under Section 40 of the NERC Act 2006. The findings contained in this report remain relevant for two years from the date of its publication.

Personnel

1.5 Surveying was carried out by a suitably qualified ecologist (SQE), Robert Craine, who holds an MSc in Ecology from Durham University and a BSc (hons) in Biology from Bangor University. Robert has worked as an ecologist for over 25 years in field research, field studies teaching, consultancy and within Local Authorities. He has been a full member of the Chartered Institute of Ecology and Environmental Management since 2000 and became a Chartered Environmentalist in 2005.

Acknowledgement

1.6 Botanical and bat surveying carried out within the Phoenix Garden was with the kind permission of the Garden Manager.

2.0 PLANNING POLICY AND LEGISLATION

National Planning Policy

Biodiversity Action Plan Habitats and Species

2.1 The signing by the UK Government of the Convention on Biological Diversity, at the first international Earth Summit in 1992, led to the publication of the UK Biodiversity Action Plan (UK Biodiversity Partnership, 2006), now succeeded by the 'UK Post-2010 Biodiversity Framework'. The Framework sets out a national strategy regarding threatened native species and habitats that are priorities for conservation.

2.2 The conservation objectives of the national BAP is reinforced by ODPM Circular 06/2005 'Biodiversity and geological conservation'. The Circular states that the potential effects of a development on habitats or species listed as priorities in the UK Biodiversity Action Plan (BAP), and by Local Biodiversity Partnerships, are capable of being a material consideration in the making of planning decisions.

National Planning Policy Framework

2.3 The National Planning Policy Framework (NPPF), revised on 5 September 2023, sets out the Government's planning policies for England and how these should be applied. The NPPF directs planning decisions to enhance the natural environment by *"minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures"* (paragraph 174) and requires Plans to *"promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity"* (paragraph 179).

Local Planning Policy

Camden Local Plan

2.4 Policy A3 'Biodiversity' requires the protecting and enhancing of sites of nature conservation and biodiversity within the Borough of Camden. The policy states that the Council will:

a. designate and protect nature conservation sites and safeguard protected and priority habitats and species;

b. grant permission for development unless it would directly or indirectly result in the loss or harm to a designated nature conservation site or adversely affect the status or population of priority habitats and species;

c. seek the protection of other features with nature conservation value, including gardens, wherever possible;

d. assess developments against their ability to realise benefits for biodiversity through layout, design and materials used in the built structure and landscaping elements of a proposed development, proportionate to the scale of development proposed;

e. secure improvements to green corridors, particularly where a development scheme is adjacent to an existing corridor;

f. seek to improve opportunities to experience nature, in particular where such opportunities are lacking;

g. require the demolition and construction phase of development, including the movement of works vehicles, to be planned to avoid disturbance to habitats and species and ecologically sensitive areas, and the spread of invasive species;

h. secure management plans, where appropriate, to ensure that nature conservation objectives are met; and

i. work with The Royal Parks, The City of London Corporation, the London Wildlife Trust, friends of park groups and local nature conservation groups to protect and improve open spaces and nature conservation in Camden.

2.5 The policy makes note that the presence of protected species is a material planning consideration and requires applicants to appropriately address the indirect impacts a development could have on a designated nature conservation site (such as noise, light and shading).

2.6 Within the Greater London region Sites of Importance for Nature Conservation (SINCs) are assigned to tiers as follows: Sites of Metropolitan Importance, Sites of Borough Importance (borough I and borough II), and Sites of Local Importance. The boundaries and ranking of these reflect the latest information available for them. A built-up area that is more than 1km walking distance from an accessible Metropolitan or Borough site is mapped as an 'Area of Deficiency' (AoD) with regards access to nature. Sites of Local importance are particularly important within AoDs, where they serve as places for the study and appreciation of nature.

Legislation

Natural Environment and Rural Communities Act, 2006

2.7 Section 41 of the Natural Environment and Rural Communities (NERC) Act, 2006 lists those habitats and species considered to be of principal importance for the conservation of biological diversity in England. The list includes a number of garden bird species that have suffered population declines in recent years.

European Protected Species

2.8 In England and Wales European species including all bats (*Vespertillionidae and Rhinolophidae*) are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) against capture, killing, injury and disturbance. In addition, their breeding sites and resting places receive protection under The Conservation of Habitats and Species Regulations 2017 (as amended)[1]. Offences include damaging or destroying a breeding or resting place and obstructing access to such places.

Birds

2.9 All species of birds are protected under the Wildlife and Countryside Act, 1981. This legislation makes it an offence to intentionally kill, injure or take any wild bird, or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. For species listed on Schedule 1 of the Act, such as black redstart (*Phoenicurus ochrurus*), additional offences are to intentionally or recklessly disturb them whilst they are nest building or at or near a nest with eggs or young, or to disturb the dependent young.

[1] Although Britain is no longer part of the European Union, this EU-derived legislation continues to form part of UK domestic law and the existing associated guidance remains relevant.

3.0 METHODOLOGY

Scope of Assessment

3.1 The zone of influence of the proposed project overall i.e. the area over which construction or future site operations could have a biophysical effect on habitats and species, includes the site, adjacent trees, and the nearby Phoenix Garden (Site of Local Importance).

Desk-top Study

3.2 A search for ecological records has been undertaken for the site location and for a 1km zone extending out from a point central. Sources consulted for information include:

- Greenspace Information for Greater London
- Biological atlases
- Multi-Agency Geographical Information for the Countryside
- London Bird Club
- Black Redstarts.org.uk

3.3 Information obtained from these sources has informed the preparation of this report and, where appropriate, is included with due acknowledgement.

Habitat Survey

3.4 Habitat surveying was initially carried out for the Saville Theatre site location on 8th April 2022 and then extended to include the adjacent Phoenix Garden on 29th September 2023. Both areas are shown at Plan1: Habitats.

3.5 The survey method was at a level intermediate between the JNCC standard 'Phase 1' survey and 'Phase 2' (Joint Nature Conservancy Council 1990 - Handbook for Phase 1 habitat survey - a technique for environmental audit), also referred to as 'Extended Phase 1 Survey' (Institute of Environmental Assessment, 1995). This type of survey provides information on dominant plant species allowing habitats to be mapped and classified. During the survey, note is also made of conspicuous fauna and the potential for fauna and flora of conservation value or protected status. Habitat surveying within the Phoenix Garden was with particular attention to the assemblages of plant species and their potential for supporting notable invertebrates.

Bat Survey

3.6 Bat activity at roof top level of The Saville Theatre was monitored using a static automated bat detector (Wildlife Acoustics SM-mini 'data logger') from mid June to mid September 2023. Monitoring from within the tree canopy of Phoenix Garden then followed in late September 2023. Automated bat detectors can be operated to record ultrasound over several nights, providing quantitative data on bat echolocation calls. In this case the detector was deployed over four week-long periods.

3.7 Recordings of echolocation calls were analysed using Kaleidoscope software. This software enables species identification and yields information on the date and time of each recording, which is then used to produce an "acoustic activity index" for the period of monitoring.

Limitations

3.8 Phase 1 surveying provides only a 'snapshot' of the biodiversity evident at a particular time. In this instance habitat types were identifiable, and an assessment of ecological value can be made with a high level of confidence.

3.9 Due to access permissions needed it was not possible to survey bats within the Phoenix Garden until early autumn. There is, therefore, no bat activity data available for this location during summer months.

3.10 There are inherent limitations with remote bat surveying, the main one being bats are not directly observed. For reasons of practicality, however, automated/static detectors are the optimal method for 'at-height' surveys.

Ecological Assessment

3.11 The valuation of ecological features follows the *'Guidelines for Ecological Impact Assessment in the UK and Ireland'* published by the Chartered Institute of Ecology and Environmental Management in September 2018. This process assesses the geographical scale of importance of habitats and species that may be affected by development proposals. The terms used to describe geographical scale in this report are: International (Europe), National (England), Regional (Southeast), District (Greater London), Local (Camden).

3.12 The valuation process also requires consideration of relating factors that include biodiversity value, potential value, supporting value e.g. providing a buffer, and social value e.g. for health and recreation. With regards to biodiversity, there are various characteristics determining the value of a resource or feature, these include:

- Rare or uncommon species in the local, national or international context
- Endemic or locally distinct sub-populations of a species
- Species-rich assemblages of plants or animals
- Typical faunal assemblages characteristic of homogeneous habitats
- Ecosystems and their component parts, which provide the habitats required by the above species, populations and / or assemblages
- Habitat diversity, connectivity and / or synergistic associations
- Notably large populations of animals or concentrations of animals considered uncommon or threatened in a wider context
- Plant communities (and associated animals) considered typical of valued natural / semi-natural vegetation types
- Species on the edge of their range; particularly where distribution is changing as a result of global trends and climate change.

4.0 BASELINE ECOLOGICAL CONDITIONS

Site context

4.1 Camden lies within the 'Inner London National Character Area' as defined in National Character Area (NCA) Profile publication 112 (Natural England, 2013). This NCA is entirely urban and relies on an extensive network of parks and open spaces to provide resource for wildlife and public access to nature. The site location at 135 Shaftesbury Avenue, within an 'AoD' where access to nature is limited.

4.2 The site comprises the Saville Theatre building, it is trapezoidal in shape and enclosed on all sides by roads. The central grid reference is TQ29982 81148.

Sites designated for nature conservation value

4.3 There are no nature conservation designations for the site location.

4.4 There are no national or international statutory sites, such as special areas of conservation (SACs) or sites of special scientific interest (SSSIs) within 1km of the site area. There are no 'impact risk zones' for statutory protected sites (within which certain types of development could have adverse impact) within 1km.

4.5 There is one non-statutory metropolitan site (highest tier SINC) within 1km. This is a section of the 'River Thames and tidal tributaries', where habitats comprise running water, intertidal mud, sand, shingle and artificial surface.

4.6 There are six non-statutory sites of local importance (lowest tier SINC) within a 1km radius. The nearest of these is Phoenix Garden, a community run green space that lies 10m to the northwest.

Phoenix Garden

4.7 Phoenix Garden was established in 1984 on reclaimed ground. It features naturalised planting over a free-draining thin rubble-filled soil and has a community building with a biodiverse (brown) roof. Habitats at ground level comprise grassland, flower beds, shrubs, trees, ponds, tall herbs and vegetable planting beds.

4.8 The site supports a diverse array of trees and shrubs, some native to the UK but a larger proportion being introduced. Species include: English oak (*Quercus robur*), rowan (*Sorbus aucuparia*), silver birch (*Betula pendula*), maidenhair tree (*Ginkgo biloba*), walnut (*Juglans regia*), cherry (*Prunus* spp.), hawthorn (*Crataegus monogyna*), holly (*Ilex aquifolium*), yew (*Taxus baccata*), ovens wattle (*Acacia pravissima*), hop bush (*Dodonaea viscosa*), apple (*Malus* sp.), spindle (*Euonymus europaeus*), field maple (*Acer campestre*), plum (*Prunus domestica*), hornbeam (*Carpinus betulus*), cherry (*Prunus* spp.), olive (*Olea europaea*), tree echium (*Echium pininana*), rose (*Rosa* spp.), jasmine (*Jasminum* sp.), ivy (*Hedera helix*), butterfly bush (*Buddleja davidii*), elder (*Sambucus nigra* & cultivars), Mexican orange blossom (*Choisya ternata*), Japanese aralia (*Fatsia japonica*), hydrangea (*Hydrangea* spp.), garden tree mallow (*Malva thuringiaca*), mediterranean mallow (*Malva cretica*), mediterranean spurge (*Eurphorbia characias*), lavender (*Lavandula* sp.), rosemary (*Salvia rosmarinus*), hebe (*Hebe* sp.), abelias (*Abelia* sp.), shrubby hare's ear (*Bupleurum fruticosum*), box-leaved honeysuckle (*Lonicera nitida*), silver ragwort (*Jacobaea maritima*), myrtle (*Myrtus communis*), contorted hazel (*Corylus avellana* 'contorta'), paris daisy (*Argyranthemum frutescens*), crown vetch (*Securigera varia*), dogwood (*Cornus sanguinea*), yucca (*Yucca gigantea*), European fan palm (*Chamaerops humilis*), snowberry (*Symphoricarpos albus*), broom (*Cytisus scoparius*), pittosporum (*Pittoporum* spp.), strawberry tree (*Arbutus unedo*), viburnum (*Viburnum* spp.), fragrant sweet box (*Sarcococca ruscifolia*), and loquat (*Eriobtrya japonicus*).

4.9 Ground flora comprises a mix of planted bulbs and often-competitive herbs characteristic of woodland edge. Species that are common include: bluebell (*Hyacinthoides non-scripta*), autumn cyclamen (*Cyclamen hederifolium*), three cornered leek (*Allium triquetrum*), crocus (*Crocus* sp.), snowdrop (*Galanthus nivalis*), wood anemone (*Anemone nemorosa*), daffodil (*Narcissus pseudonarcissus*), red campion (*Silene dioica*), hedge woundwort (*Stachys sylvatica*), black horehound (*Ballota nigra*), ox-eye daisy (*Leucanthemum vulgare*), cow parsley (*Anthriscus sylvestris*), common nettle (*Urtica dioica*), docks (*Rumex* spp.), *Fuchsia*, spurge (*Euphorbia* sp.), borage (*Borago officinalis*), tufted hair grass (*Deschampsia cespitosa*), foxglove (*Digitalis purpurea*), bramble (*Rubus fruticosus* agg.), lesser burdock (*Arctium minus*), garlic mustard (*Alliaria petiolata*), ground ivy (*Glechoma hederacea*), teasel (*Dipsacus fullonum*), yellow archangel (*Lamiastrum galeobdolon*) and wood avens (*Geum urbanum*).

Fig. 1 Phoenix Garden

4.10 Pond vegetation includes water mint (*Mentha aquatica*), great reedmace (*Typha latifolia*), yellow iris (*Iris pseudacorus*), white water lily (*Nymphaea alba*), duckweed (*Lemna minor*), soft rush (*Juncus effusus*) and hard rush (*J. inflexus*).

4.11 A survey for invertebrates has not been undertaken as part of this study, however, the following bee species have been anecdotally reported: hairy-footed flower bee (*Anthophora plumipes*), red mason bee (*Osmia bicornis*), blue mason bee (O. *caerulescens*), white-faced bee (*Hylaeus anthracinus*), tawny mining bee (*Andrena fulva*), wool carder bee (*Anthidium manicatum*), buff-tailed bumble bee (*Bombus terrestris*), tree bumble bee (*B. hypnorum*), white-tailed bumble bee (*B.lucorum*), and nomad bee (*Nomada* sp.).

Assessment

4.12 The garden features a number of micro-habitats comprising diverse assemblages of species that thrive in positions of 'full sun, partial shade, or full shade range' (Royal Horticultural Society categories). Whilst none of the habitats are regionally or nationally rare, within Camden borough they are sparse and uncommon and therefore the garden provides an important 'stepping stone' habitat for mobile species, particularly birds such as tits and finches, and foraging insects. The garden also serves an important social and educational function within the neighbourhood.

Table 1. Sites of importance for nature conservation within 1km.

Site name	Tier	Distance from site boundary	Features
Phoenix Garden	Site of Local Importance	0.01km	Community garden with amenity grassland, flower beds, planted shrubbery, pond, scattered trees and tall herbs.
Lincoln's Inn Fields	Site of Local Importance	0.72km	London's largest square with specimen plane trees of antiquity, amenity grassland, hedge, planted shrubbery and scattered trees.
Russel Square	Site of Local Importance	0.73km	Large square with amenity grassland, hedge, planted shrubbery and scattered trees.
Victoria Embankment Gardens: Main Garden	Site of Local Importance	0.74km	Riverside park with good range of common birds, amenity grassland, flower beds, planted shrubbery and scattered trees.
River Thames and tidal tributaries	Site of Metropolitan Importance	0.83km	London's most famous natural feature. The habitat provides a wildlife corridor for freshwater, estuarine and marine plant and animal communities.
St James's Square	Site of Local Importance	0.85km	Privately managed square with mature trees including very old plane, good range of nesting birds, amenity grassland, flower beds, planted shrubbery and scattered trees.
Victoria Embankment Gardens: Whitehall Garden	Site of Local Importance	0.9km	Riverside garden with old trees and naturalistic planting of ornamental woodland flowers, amenity grassland, flower beds, planted shrubbery and scattered trees.

Site description

4.13 The Saville Theatre is a six-storey red-brick building with a Portland stone frontage. It has a flat roof, surfaced with tarred bitumen, beneath which is the fly tower and grid. The fly tower space measuring approximately 6000m^3, contains the apparatus from the original 1930s theatre; it is no longer in use except for the housing of service pipes and cables.

Fig 2. Site front.

Fig. 3. Site rear.

Fig 4. Fly tower used for service pipes and cables.

4.14 There is no vegetation associated with the building except where ferns such as hart's-tongue (*Asplenium scolopendrium*) and maidenhair spleenwort (*A. trichomanes*) have managed to exploit crevices in brickwork. To the rear of the building are street trees comprising cherry, rowan and London plane (*Platanus x hispanica*).

Fauna

Mammals

4.15 At least three bat species are recorded for the 1km radius: Daubenton's bat (*Myotis daubentonii*), common pipistrelle (*Pipistrellus pipistrellus*), and soprano pipistrelle (*Pipistrellus pygmaeus*). The nearest record, relating to soprano pipistrelle, is for a location less than 100m from the site.

4.16 The fly-tower provides conditions that are superficially suitable for bat roosting but due to the building's well-maintained external state the potential for this is beneath a categorisation of 'low' (referred to by Bat Conservation Trust guidelines). There are, however, minor gaps in brickwork and air vents that could provide potential ingress and as bats are recorded locally a precautionary approach is advised for initial stages of building work.

4.17 Results of bat monitoring for the roof of the Saville Theatre and within the Phoenix Garden are shown at Table 2.

Table 2. Results of bat monitoring.

SAVILLE THEATRE. June to September 2023				
Date	**Species**	**Nights present**	**Timings of calls**	**Behaviour**
22nd to 28th June	Common pipistrelle Noctule	4/7	20.00hrs to 02.00hrs	Commuting
11th to 17th August	Soprano pipistrelle Common pipistrelle Noctule Nathusius pipistrelle*	6/7	21.00hrs to 06.00hrs	Commuting
15th to 21st September	Common pipistrelle Noctule Nathusius pipistrelle*	4/7	0.00hrs to 05.00hrs	Commuting
PHOENIX GARDEN. September 2023				
22nd to 28th September	Common pipistrelle Nathusius pipistrelle*	7/7	19.00hrs to 06.00hrs	Foraging and social. Peak activity on 23.9.23 between 22.00hrs and 23.00hrs.

* calls characteristic of Nathusius pipistrelle with a peak frequency of 39Khz, compared to 45Khz for common pipistrelle and 55Khz for soprano pipistrelle.

4.18 Results for monitoring carried out on the Saville Theatre roof indicate that three or more bat species commute above or close to the roof level of the building, but that it is not an area used for foraging.

4.19 Results for monitoring within the Phoenix Garden indicate that bats use this habitat for regular foraging and social activity. The surveying here was within the autumn bat mating season and it is possible that the echolocation calls recorded indicate the garden to be a bat breeding territory. It is not known whether bats forage within the garden during summer months though based on all evidence collected it is reasonable to suppose that this is the case.

4.20 The calls recorded with a peak frequency are of particular interest, these being characteristic of Nathusius' pipistrelle, a rare species in Britain. A degree of caution is attached to this finding as it is not consistent with the species' normal habitat preference; typically woodland, or near lakes and rivers. However, there are records of Nathusius' pipistrelle in the London area and as the species is migratory it may travel through the site area. Further monitoring, to gather a larger data set, would be required to reliably confirm the presence of this species.

Birds

4.21 There are 24 bird species of conservation concern recorded for 1km radius, including black redstart (*Phoenicurus ocruros*) occurring within 500m. The Saville Theatre building does not appear to have any obvious nesting features for this or other bird species and no evidence of nesting was apparent at the time of survey.

Other fauna

4.22 There are a number of notable invertebrate species recorded for the 1km radius and the adjacent Phoenix Garden is reported to support 15 bee species. In its current state, the Saville Theatre building has negligible potential for supporting invertebrate communities.

4.23 There is no other fauna recorded within a 1km radius that is considered especially relevant to the site location.

Summary of key issues

4.24 The Saville Theatre building represents negligible ecological interest in its current state. However, two ecological factors are identified:

- Bats commute over the site area. Potential bat access points into the building are limited.
- Proximity of Phoenix Garden. This is a site of local importance for nature conservation and a foraging habitat for bats.

Plan 1 Habitats

Project: Saville Theatre
Client: Yoo Capital

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Drawing no. d512_001
Scale: nts
Prepared by: KC
Date: January 2023

diversity

5.0 DESCRIPTION OF PROPOSED DEVELOPMENT

5.1 The proposal is for refurbishment of the Saville Theatre, incorporating new hotel facilities and taking it back to being a live performance location. A major part of the restoration will be to carefully maintain and restore the Grade 2 Listed façade.

5.2 In recognition of the location's ecological sensitivity, redevelopment proposals have been significantly revised so that the uppermost level of the building is set back on its north-west elevation to ameliorate the temporal loss of sunlight to the adjacent Phoenix Garden. In addition, vegetated habitats will be a feature at this elevation and will be visible from the Phoenix Garden below. The plant species chosen will be an assemblage that benefits the bird, bat and insect species recorded locally.

5.3 Design proposals include the introducing of 0.03 hectares of varied new habitats, to be situated on the roof-top and on the set-back terraces. In accordance with Camden Local Plan policy A3 part 'e', the detailed design of these habitats will be aimed at strengthening local ecological networks, which will be achieved by responding to the specific niche requirements of bird, bat and insect species recorded locally.

6.0 ASSESSMENT OF IMPACTS

Designated sites

Potential impacts

6.1 The proposed refurbishment and change of use has a zone of influence that encompasses the Phoenix Garden. The degree to which this SINC will be ecologically impacted depends on changes to the height of the Saville Theatre building (potentially causing increased shade) and changes to night lighting (potentially causing increased light pollution).

6.2 Due to the varied nature of habitat within the Phoenix Garden it is likely that increased shade would have a differential effect - with native species, such as holly, being least affected and exotic species, such as tree echium, being most affected. Depending on the degree of shade increase, the effect could be a delay to leaf and flower development, a shortening of the flowering season and, at the extreme end, a potential loss of some species. A change in the amount of sunlight reaching the ground may also affect soil temperature in turn affecting the timing of when bulbs emerge in spring and autumn.

6.3 As a result of a shorter daily insolation period and growing season, the availability of nectar and pollen for invertebrates at certain times of year may be reduced. It is expected the effect would be most apparent in the spring and autumn.

6.4 It is recognised by assessment methodologies, such as the Ratcliffe Criteria (1977) that, alongside biological value, the importance of Local Sites relates to their value for people, stemming from factors such as geographical context, educational value, and intrinsic appeal. The degree to which shade and its ecological effect alters public enjoyment of Phoenix Garden is beyond the scope of this report though has been a consideration for design.

6.5 There are no anticipated impacts to other designated sites or to notified habitats arising from the proposed scheme.

Mitigation

6.6 Measures for ecological mitigation and biodiversity enhancement ('urban greening') are integral to the design and the further detailed interpretation of these are expected to form part of a reserved matters application. The measures, which are illustrated on proposal drawings prepared by SPPARC, are in line with Policy G5 of the London Plan 2021 (Greater London Authority, 2021) and are anticipated to ameliorate some of the ecological impacts of building height increase. Design of habitats will be with reference to species recorded in nearby green spaces including the Phoenix Garden.

Habitats

Potential impacts

6.7 The building supports only minimal amounts of vegetation and therefore its redevelopment will not cause any discernible direct loss of habitat.

Mitigation

6.8 No mitigation is required regarding loss of habitat for the building footprint. With appropriate habitat creation there is opportunity to achieve a 'net biodiversity gain' and to enhance conditions for wildlife through the inclusion of green roofs, planting beds and a living green wall. It is important to note that biodiversity net gain calculations are separate to any consideration of offsite impacts.

Fauna

Potential impacts

6.9 Bat monitoring has shown that during summer and autumn months bats commute over the roof of the Saville Theatre (presumably taking advantage of the relatively dark conditions here) and forage within the grounds of the Phoenix Garden. As bats are disturbed by lighting any upwards light pollution above the theatre or light spillage onto the Phoenix Garden and its connecting 'dark corridors', such as lines of street trees, could be detrimental.

6.10 The potential for bat access into the Saville Theatre building e.g. via wall crevices and vents, was found to be limited though this situation could change after commencement of construction.

Mitigation

6.11 The lighting impact of the operational hotel and theatre is examined by the Lighting Strategy document prepared by Studio Fractal. This models it possible to achieve a negligible amount of upwards light pollution at all times of night and a minimal degree light spillage onto the Phoenix Garden after late evening (11pm to 6am 'Lighting Scheme 3'). Fine-tuning of the proposed measures will be targeted at protecting potential bat-flight corridors from light disturbance, particularly during summer and early autumn months when bats are most active. Measures to minimise light disruption will also apply for the period of construction.

6.12 A dark flight corridor over the new roof is incorporated as part of the design, which will enable bats continued commuting over the Saville Theatre building. In addition, this area is to be enhanced for bats with planting introduced to attract night-flying insects (see Section 7.0). Lighting, where needed on other parts of the building, should conform to 'best practice' guidelines such as that produced by the Bat Conservation Trust and the Institution of Lighting Professionals (guidance note 08/23 Bats and Artificial Lighting at Night). Measures outlined in the Lighting Strategy include: all luminaires fitted with optical control devices, downward and focused lighting, and using only LED bulbs (with zero UV) on a 'warm white' spectrum.

6.13 As a precautionary measure, it is recommended that initial building works to the fly tower and external walls be preceded by an ecology 'tool-box talk' to construction staff. This will highlight what to look out for in terms of evidence of bats and what steps will be taken in the event of encountering a bat. Any risk to bats from ongoing building work will be addressed by preparing and implementing a Precautionary Methods of Working (PMW) statement.

6.14 Provided the measures described above are put in place, Regulation 53(9)(b) of the Conservation of Habitats and Species Regulations 2017 will have been met. This Regulation requires that development *"will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range."*

7.0 ENHANCEMENT

7.1 To comply with Policy A3 of the Camden Local Plan and the NPPF, measures that secure improvements to green corridors, improve opportunities for experiencing nature, and increase biodiversity are required. Consistent with this, Policy G5 of The London Plan 2021 directs towards urban greening in the form of green roofs and green walls.

7.2 Details for urban greening are outlined in the Landscape Vision chapter of the Urban Greening Factor report prepared by RPS. The features include an extensive green roof, integral planters, raised planters and green walls. To accord with the Environment Act, 2021 these measures need to secure a biodiversity net gain (BNG) of at least 10%, which in this case is easily achieved.

7.3 The framework within which habitat creation measures will be achieved is as follows:

Level 05 Terrace - 78m^2

Level 09 Terrace - 34m^2

Level 10 Terrace - 43m^2

Level 11 - 47m^2 (below PV's)

Level 12 - 35m^2 (roof of core)

The ecological design and management of created habitats will be according to detailed drawings and a Habitat Creation and Management Plan.

7.4 As the presence of bats commuting over and foraging next to the site has been established, it will be appropriate to direct an element of biodiversity enhancement towards bat conservation. This will involve the inclusion, within planting proposals, of night-scented herbs and low-growing native shrubs known to attract insects.

7.5 Policy G6 'Biodiversity and access to nature' of The London Plan is relevant to site development. As well as citing protection of SINCs, the policy promotes the creation of features such as artificial nest sites that are of particular benefit within an urban context. The proposed development presents good opportunity to do this.