



Brighter strategies
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Client: Summer Events Limited, trading as Brockwell Live

Project: Brockwell Park

Report: Ecological Constraints and Opportunities Plan

QUALITY ASSURANCE

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1.0 INTRODUCTION

Greengage Environmental Ltd (Greengage) was commissioned to produce an Ecological Constraints and Opportunities Plan (ECOP) by Summer Events Limited, trading as Brockwell Live, (hereafter 'SEL') for Brockwell Park, in the London Borough of Lambeth.

This ECOP document has been produced to understand more about the biodiversity of the park; concerns have been raised through the Friends of Brockwell Park, hereafter 'FOBP', in relation to the potential disturbing impacts large scale events in the park could be having on wildlife, and other environmental damage. This ECOP provides a high-level assessment and summary of potential ecological receptors that are present in and around Brockwell Park that may be impacted by activities associated with the events. It also provides recommendations on opportunities to enhance habitats on site for the benefit of wildlife and people.

1.1 CONTEXT

Brockwell Park, hereafter referred to as 'the Site', held nine temporary events between April to September 2024, after hosting a similar number of such events in previous years. The April to September period has been used for this assessment as it covers the peak times for both the bat activity, bird nesting season, and peak botanical period. It is understood that concerns have been raised through the FOBP that large scale events occurring at Brockwell Park could be disturbing wildlife and causing other environmental damage.

These concerns have been primarily outlined within community meetings and multiple online sources published by FOBP, including, but not limited to 'Events damage to Park summer 2024'¹, 'Ann Kingsbury speech to Lambeth Scrutiny Committee'², and 'Lambeth Scrutiny Committee examines events in Parks'³. However, no site-specific scientific evidence has been provided to support the scientific rigour of these claims.

As such, SEL has requested obtainable scientific information to understand the potential environmental impacts from events. In addition, SEL alongside Lambeth Borough Council, hereafter 'Lambeth BC', want to understand what opportunities there are at the Site for positive interventions that could be made for wildlife and people which would be implemented prior to the 2025 events, and continuing to build on the current community outreach. This will provide SEL the information required to allow a balanced approach to urban park management for wildlife and people to be undertaken, ensuring that evidenced-based decisions are made in the long term to benefit both and to communicate this more effectively, building on the Lambeth Biodiversity Action Plan 2019-2024⁴. This report could also be provided as supplementary information for the local authority planning officers if changes to the current event schedule are proposed.

Ecological information used to inform this report has been collected from the Greenspace Information for Greater London (GiGL) data holdings, creating a desk study that describes the likely current ecological context. The above desk study alongside professional judgement, using Greengage's previous experience of undertaking impact assessments for large scale events and local knowledge, provides the background information that forms the ECOP for the Site. It should be clarified this does not constitute an ecological impact survey.

1.2 SITE DESCRIPTION

Brockwell Park is managed by the Lambeth BC and extends to approximately 50.80 hectares (ha). Multiple temporary events of varying size are held within the Brockwell Park each year; these are divided into two distinct categories, Brockwell Live and Lambeth Country Show. The predominant area where events are held is on the eastern slope of the park, as shown in Appendix A and Appendix B. Brockwell Live occupies an approximate area of 13.25 ha, with the Lambeth Country Show occupying an approximate area of 15.90 ha. These relate to approximately 26% and 31% of the total park area respectively. The temporary events hosted at Brockwell Park are centred around Ordnance Survey (OS) National Grid Reference (OS NGR); TQ 31763 74132, OS co-ordinates 531763, 174132.

Using existing information produced by Lambeth BC⁵ and aerial imagery, a high-level review of the habitats present within Brockwell Park has been performed to provide Site context; note that this does not constitute an ecological survey which would be required to specify habitats present on Site. The primary habitats believed to be on Site include developed land, buildings, parkland grassland, meadow grassland, multiple ponds, scrub, hedgerows, and individual trees. The habitats with the perceived highest ecological benefit for receptors are located towards the south and west of the park, especially the multiple waterbodies and mature trees. The park rises to an elevated section in the middle where the original Brockwell Hall sits, with the western and eastern sides on opposite sides of the slope. The Site is also a Borough 'Site of Importance for Nature Conservation' (SINC) in recognition of its importance for both wildlife and people. The site is primarily designated for its multiple wetland features, the plant species inhabiting the banks and the common waterbirds which utilise this habitat, in addition to the areas of less managed 'meadow' grassland, mature native trees, and the birds these areas support are also described within the citation.

The area where the events are held is on the eastern slope of the park adjacent to an urban hub allowing ease of movement of people and access to existing amenities. This includes the nearest train station, Herne Hill, bus links to the local urban hubs of Brixton, Elephant and Castle and Tulse Hill, where pubs, bars, restaurants and live music venues are located. The Site Map for the temporary 'Brockwell Live' and 'Lambeth Country Show' events outlines the site boundaries for the events which took place over the months of May and June 2024, primarily being hosted on the open parkland and footpaths, see Appendix A and Appendix B for event site plans. Outside the temporary event boundary, the park is occupied by hardstanding and artificial surfaces which

are primarily occupied by the footpaths, six tennis courts, one basketball court, two cricket nets, a cricket pitch, an adventure playground and sand and water play area, a BMX track, lido, car park, and miniature railway. The park also contains the existing structures of Brockwell Hall, Brockwell Park Community Greenhouses and associated structures, lido buildings, sheltered seating, and three public toilets, with associated exterior security lighting.

The Site is located in a highly urban area of south London, adjacent to Brixton in the north and Herne Hill in the east with existing high level of light and noise, which is further exacerbated by the transport hubs and amenities to the east of the Site. The immediate area surrounding the Site is primarily urbanised, with roads and commercial and residential buildings located immediately adjacent to the park boundary around its entirety. Norwood Road (A215) runs along the eastern park boundary and Tulse Hill (A204) runs along the western park boundary, with Brixton Road (A23) located approximately 0.5 km west of the Site at its closest point. There are green spaces and corridors predominantly to the south of the Site that, while lacking direct green connections to the park, still offer potential opportunities for highly mobile urban species such as bats and birds. Urban public green spaces in the surrounding area of the Site includes Peabody Hill Wood located approximately 100m southeast of the Site, Dulwich Sport Grounds located approximately 315m east of the Site, Rosendale Allotments located approximately 320m southeast of the Site, Rush Common located approximately 490m west of the Site, Place Road Nature Gardens located approximately 700m southwest of the Site, and Belair Park located approximately 750m east of the Site. Although greater than 2km from the Site boundary, Sydenham Hill Wood Nature Reserve is located approximately 2.45km south-east of the Site and is included due to the hibernation tunnels for bats which are located within this area.

The closest statutory Site is Wimbledon Common Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) located approximately 7.69 km west of the Site, with one small Local Nature Reserve (LNR) situated within 2 km of the Site boundary, Unigate Wood LNR located approximately 1.89 km south of the Site boundary. Including Brockwell Park itself, 26 SINC's were identified within the local vicinity.

2.0 METHODOLOGY

This ECOP has been produced using ecological data returned by GiGL and specific information provided by SEL to describe the context in which these temporary events are taking place regarding local ecological receptors.

A data request was submitted to GiGL to obtain protected species records from the past 10 years recorded within the boundary of the Site and up to 2km from the centroid of the Site. A review of the recent ecological appraisal was also conducted, with the findings outlined within Section 4.1, in addition to a review of OS mapping, aerial imagery, and Defra's Multi-Agency Geographic Information for the Countryside (MAGIC) website⁶ to source additional information on protected sites and protected species licences within 2km of the Site.

The desk-based assessment has been produced to identify the potential value for notable, rare, and protected species at the Site, providing a high-level assessment and summary of potential ecological receptors that are present in and around Brockwell Park that may be impacted by activities associated with the events.

The number of events that have taken place in Brockwell Park in 2024 have been compiled, with specific dates and times of each event recorded, with all the data referenced readily available from online sources, Table 3.1. These have been used to ascertain the proportion of time the park is hosting temporary events between April 1st 2024 to September 30th 2024. This period has been used as it covers the peak times for both the bat activity, bird nesting season, and peak botanical period. Although the activity periods for both bats and nesting birds have the potential to extend outside this period, it is weather dependent and as such, this time period has been utilised as a minimum time period for both calculations.

Information in relation to the temporary events at Brockwell Park has been provided by SEL and sourced from the public domain, including premises licence, approximate average yearly park attendance, approximate temporary event attendance, lighting plans, and event build/break working hours. Relevant information that has been provided has been used to supplement this ECOP assessment.

The event boundaries for Brockwell Live and Lambeth Country Show are illustrated Appendix A and Appendix B.

2.1 LIMITATIONS

This report is for scoping purposes only and does not include site specific survey data for either habitat types or protected species. As such recommendations within this scoping report may change, as further data and information is gathered.

2.2 COMPETENCIES

Josh Hurdiss, Graduate, has a BSc (Hons) in Environmental Science with Employment Experience, gaining valuable expertise in ecological surveying and reporting through a year-long placement. His experience includes Preliminary Ecological Appraisals, bat activity and emergence, badger, great crested newts, reptile, water vole and nesting birds; and has assisted in multiple Biodiversity Net Gain assessments.

Sam Barker, Senior, has an undergraduate degree in Environmental Science (BSc Hons), holds a Natural England Great Crested Newt Licence and is an Associate member of CIEEM. Sam has over six years' experience of undertaking and managing a range of ecological surveys and assessments.

Jo Ferguson, Principal, has a BSc (Hons) in Zoology and is a full member of CIEEM. She is a member of the CIRIA Biodiversity Community of Practice steering group. She has over 20 years of ecological survey and assessment experience in the voluntary, charity and professional sectors, from land management to ecological consultancy, both in the UK and abroad. Jo is licenced to survey bats in England and has held bat mitigation licences.

Trevor Curson, Operations Executive, holds a BTech, MEnvSc, and is a Chartered Environmentalist. He has over 40 years broad-based experience as an environmental professional in the UK and overseas. In 35 years in consultancy, he has been involved in a very wide range of built development projects in the UK and overseas, including major regeneration and infrastructure schemes. He also has extensive local knowledge of Brockwell Park.

This report was written by Josh Hurdiss with assistance from Sam Barker, Jo Ferguson and Trevor Curson, reviewed by Sam Barker and verified by Trevor Curson who confirms in writing (see the QA sheet at the front of this report) that the report is in line with the following:

- Represents sound industry practice;
- Reports and recommends correctly, truthfully and objectively;
- Is appropriate given the local site conditions and scope of works proposed; and
- Avoids invalid, biased and exaggerated statements.

3.0 BROCKWELL PARK 2024 EVENTS

Information in relation to the temporary events that have been held during 2024 has been provided by SEL and sourced from the public domain. All events are approved to take place within the boundaries of Lambeth's Event Strategy and Event Policy 2020-2025⁷. Specific information in relation to the Brockwell Park Summer Events New Premises Licence⁸ permitting the hosting of these events within Brockwell Park has been included to provide context surrounding the hosting of these temporary events and is not an element of evaluation in this ECOP assessment.

Licensable Events

- Plays (indoors and outdoors)
- Films (indoors and outdoors)
- Indoor Sporting Events
- Boxing or Wrestling Entertainment (indoors and outdoors)
- Live Music (indoors and outdoors)
- Recorded Music (indoors and outdoors)
- Performances of Dance (indoors and outdoors)
- Entertainment Similar to Music/Dance (indoors and outdoors)

Scale of Events

Events will be categorised based on the number of people that will be onsite at any one time⁷. As follows:

- Small Events: No more than 499 people on site at any one time.
- Medium Events: Between 500 and 4,999 people on site at any one time.
- Large Events: Between 5,000 and 19,999 people on site at any one time.
- Major Events: More than 20,000 people on site at any one time.

The Premises Licence grants 'A maximum of ten (10) event days may be operated under this licence in each calendar year, of which no more than seven (7) may be at a capacity not exceeding 29,999 (Major Event) and the remainder at a capacity not exceeding 14,999'⁸, with only the shows guests, security staff, contractors, performers and employees excluded from operational capacity.

As outlined within Table 3.1 below, the total number of days in which the temporary events took place between April to September 2024 at Brockwell Park is nine, with one of these being the smaller family event, Brockwell Bounce. During the period between April to September of this year, only category Major and Small events have taken place, with events classified as small excluded from this analysis and not discussed further. This is due to their limited scale and therefore the likely impacts such events could potentially impose.

Therefore, during the period between April 1st 2024 and September 30th 2024, approximately 4.40% of the total days will be utilised for temporary events within the Site.

Table 3.1 Temporary events taken/taking place in Brockwell Park between April to September 2024

Name of event	Date of event	Timing of event (clear of public)
Brockwell Live - Project 6 ⁹	24th May 2024	13:00 - 22:30 (23:00)
Brockwell Live - Wide Awake Festival ¹⁰	25th May 2024	12:00 - 22:30 (23:00)
Brockwell Live - Cross The Tracks ¹¹	26th May 2024	12:00 - 22:30 (23:00)
Brockwell Live - City Splash Festival ¹²	27th May 2024	12:00 - 22:00 (23:00)
Brockwell Live - Mighty Hoopla ¹³	1st June 2024 and 2nd June 2024	12:00 - 22:30 (23:00) and 12:00 - 22:15 (23:00)
Lambeth Country Show ¹⁴	8th June 2024 and	13:00 - 21:00 (21:30) and

Name of event	Date of event	Timing of event (clear of public)
	9th June 2024	13:00 - 21:00 (21:30)

The start time of each event represents the official event opening time.

All temporary events are proposed to finish live music no later than 22:30, with 'City Splash' and one day of 'Mighty Hoopla' proposed to finish earlier at 22:00 and 22:15 respectively due to earlier music curfews, with the Lambeth Country Show proposed to finish earlier at 21:00. Assuming music is running continuously between the start and latest end time, the maximum number of hours music could potentially be playing during this period is a total of 77.25 hours. Therefore, during the period between April 1st 2024 and September 30th 2024 (4,368 hours), approximately a maximum of 1.77% of total hours will be occupied by noise levels above average surrounding baseline. In reality, music events require change over time for artists and therefore even accounting for sound checks, the percentage of time occupied by music at the Site will be below this percentage value of the total hours available between 1st April and 30th September. In addition, all live music events are required to adhere to the Lambeth BC specific maximum sound levels, being constantly monitored by the council and independent organisers¹⁵.

All temporary music events are proposed to be cleared of the public by no later than 23:00, with the 'Lambeth Country Show' assumed to be cleared of the public earlier at 21:30. It is assumed that the amount of time which the most intense lighting directly emitted by the temporary music events within the Site which is over and above the general light pollution from the surrounding urbanised area will be a total of 82 hours. Therefore, during the period between April 1st 2024 and September 30th 2024, a maximum of 1.88% of total hours will be occupied by light emission levels potentially over and above average surrounding baseline levels.

As outlined in Table 3.2 below, the vast majority of these temporary events will be hosted outside the nocturnal activity period. In addition, the build and break of the temporary events is not expected to be outside the standard daylight working hours of 8am to 8pm, therefore all works relating to the events which all take place in May and June will not require external lighting during these working hours, with work taking place outside the nocturnal activity period.

Table 3.2 Time of sunset in Brockwell on dates of temporary events

Name of event	Date of event	Time of sunset
Brockwell Live - Project 6	24th May 2024	20:59
Brockwell Live - Wide Awake Festival	25th May 2024	21:00

Name of event	Date of event	Time of sunset
Brockwell Live - Cross The Tracks	26th May 2024	21:02
Brockwell Live - City Splash Festival	27th May 2024	21:03
Brockwell Live - Mighty Hoopla	1st June 2024 and 2nd June 2024	21:09 and 21:10
Lambeth Country Show	8th June 2024 and 9th June 2024	21:15 and 21:16

Festoon lighting associated with access points and walkways for the general public to be able to leave and traverse the Site safely are kept on for 24 hours whilst these temporary events are taking place, primarily for security reasons. In addition, low-level arena lighting also remains on overnight during the event and during build and break periods for site security reasons. Although this lighting is likely to increase levels of light within the site boundary during this period: as described above it is temporary and active for a small proportion of the year and time-period investigated.

Lambeth BC provided information from the last calculation performed in 2011 -2012 that estimated Brockwell Park receives circa two million visitors annually, averaging approximately 5,500 visitors daily. The maximum capacity of all events considered within this report as outlined within the Premise Licence is 29,999 due to their classification as Major events. Although these events if sold out, and comprising additional attendees on the Site who wouldn't be present anyway, could in theory cause a substantial increase in daily visitor numbers above the average during events, these increases are isolated to specific short periods. In addition, with an average of 5,500 visitors to the park daily, with assumed higher levels in the summer months and visitor avoidance during the event days, the total attendance to the park during the eight event days across the calendar year is likely less of an uplift than the maximum capacity implies.

4.0 ECOLOGICAL CONSTRAINTS AND OPPORTUNITIES

4.1 DESK STUDY RESULTS

A review of readily available ecological information and other relevant environmental databases (included Defra's MAGIC website⁶) was undertaken for the site and its vicinity. This search identified one European Protected Species (EPS) Licence within 2 km of the Site boundary, pertaining to the destruction of a common pipistrelle *Pipistrellus pipistrellus* resting place located approximately 1.49 km northeast of the Site boundary. This licence was only active for one day and has since expired.

In addition, the biological records search from GiGL was reviewed to identify the presence of records for notable and protected species, with only the records recorded within the past 10 years being considered and reported on, summarised in Table 4.1 below. As many of the species record locations were reported using a six-figure grid reference instead of a more accurate eight or ten figure grid reference, and the boundary for each event differs, the Brockwell Park boundary has been used to determine approximate distance. Any species records identified as confidential by GiGL have not had their location disclosed for persecution purposes and as such have been reported as N/A in this report. However, to aid in this assessment and the nature of the record provided, the approximate location of the nearest badger record has been provided. This provided the overall ecological context for the site, to better inform this ECOP.

Table 4.1 Desk study records results.

Common Name	Latin Name	Approximate distance of nearest record	Date of most recent record	Ecological conservation status
Terrestrial Mammals (bats)				
Daubenton's Bat	<i>Myotis daubentonii</i>	Within park boundary	13/05/2014	WCA5/9.4b, WCA5/9.4c
Leisler's Bat	<i>Nyctalus leisleri</i>	Within park boundary	25/06/2024	WCA5/9.4b, WCA5/9.4c
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	Within park boundary	11/09/2019	WCA5/9.4b, WCA5/9.4c
Nathusius's Pipistrelle	<i>Pipistrellus nathusii</i>	Within park boundary	26/10/2017	WCA5/9.4b, WCA5/9.4c
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	Within park boundary	13/09/2022	WCA5/9.4b, WCA5/9.4c
Nyctalus Bat species	<i>Nyctalus sp.</i>	Within park boundary	13/09/2017	WCA5/9.4b, WCA5/9.4c

Common Name	Latin Name	Approximate distance of nearest record	Date of most recent record	Ecological conservation status
Pipistrelle Bat species	<i>Pipistrellus</i>	Within park boundary	01/08/2020	WCA5/9.4b, WCA5/9.4c
Noctule Bat	<i>Nyctalus noctula</i>	700m south	13/09/2022	WCA5/9.4b, WCA5/9.4c
Birds				
Common Scoter	<i>Melanitta nigra</i>	Within park boundary	n.d/n.d/2020	Sch1 / BOCC Red
Fieldfare	<i>Turdus pilaris</i>	Within park boundary	n.d/n.d/2020	Sch1 / BOCC Red
Brambling	<i>Fringilla montifringilla</i>	Within park boundary	25/02/2021	Sch1 / BOCC Green
Kingfisher	<i>Alcedo atthis</i>	Within park boundary	n.d/n.d/2020	Sch1 / BOCC Green
Redwing	<i>Turdus iliacus</i>	Within park boundary	03/06/2024	Sch1 / BOCC Not assessed
Black Redstart	<i>Phoenicurus ochrurus</i>	N/A	06/05/2015	Sch1 / BOCC Amber
Firecrest	<i>Regulus ignicapilla</i>	N/A	10/01/2021	Sch1 / BOCC Green
Red Kite	<i>Milvus milvus</i>	N/A	16/06/2021	Sch1 / BOCC Green
Peregrine Falcon	<i>Falco peregrinus</i>	N/A	11/08/2023	Sch1 / BOCC Green
Hobby	<i>Falco subbuteo</i>	N/A	n.d/n.d/2020	Sch1 / BOCC Green
Barn Owl	<i>Tyto alba</i>	N/A	09/06/2020	Sch1 / BOCC Green
Cetti's Warbler	<i>Cettia cetti</i>	N/A	01/06/2021	Sch1 / BOCC Green
Crossbill	<i>Loxia curvirostra</i>	380m north-east	18/06/2015	Sch1 / BOCC Green
Lesser Redpoll	<i>Acanthis cabaret</i>	Within park boundary	05/11/2020	BOCC Red
Skylark	<i>Alauda arvensis</i>	Within park boundary	04/03/2021	BOCC Red
White-fronted Goose	<i>Anser albifrons</i>	Within park boundary	12/01/2021	BOCC Red
Swift	<i>Apus apus</i>	Within park boundary	02/07/2023	BOCC Red

Common Name	Latin Name	Approximate distance of nearest record	Date of most recent record	Ecological conservation status
Greenfinch	<i>Chloris chloris</i>	Within park boundary	08/02/2022	BOCC Red
Cuckoo	<i>Cuculus canorus</i>	Within park boundary	n.d/n.d/2020	BOCC Red
House Martin	<i>Delichan urbicum</i>	Within park boundary	16/06/2021	BOCC Red
Lesser Spotted Woodpecker	<i>Dryobates minor</i>	N/A	n.d/n.d/2020	BOCC Red
Herring Gull	<i>Larus argentatus</i>	Within park boundary	27/11/2021	BOCC Red
Linnet	<i>Linaria cannabina</i>	Within park boundary	14/03/2021	BOCC Red
Spotted Flycatcher	<i>Muscicapa striata</i>	Within park boundary	12/05/2021	BOCC Red
House Sparrow	<i>Passer domesticus</i>	Within park boundary	08/06/2024	BOCC Red
Whinchat	<i>Saxicola rubetra</i>	Within park boundary	30/06/2021	BOCC Red
Starling	<i>Sturnus vulgaris</i>	Within park boundary	05/05/2023	BOCC Red
Ring Ouzel	<i>Turdus torquatus</i>	Within park boundary	n.d/n.d/2020	BOCC Red
Mistle Thrush	<i>Turdus viscivorus</i>	Within park boundary	08/02/2022	BOCC Red
Woodcock	<i>Scolopax rusticola</i>	480m north-east	22/11/2020	BOCC Red
Lapwing	<i>Vanellus vanellus</i>	1.02km south-east	12/02/2021	BOCC Red
Pochard	<i>Aythya ferina</i>	N/A	22/04/2020	BOCC Red
Hawfinch	<i>Coccothraustes coccothraustes</i>	N/A	06/11/2021	BOCC Red
Short-eared Owl	<i>Aslo flammeus</i>	Within park boundary	n.d/n.d/2020	BOCC Amber
Dunnock	<i>Prunella modularis</i>	Within park boundary	27/12/2021	BOCC Amber
Song Thrush	<i>Turdus philomelos</i>	Within park boundary	17/01/2024	BOCC Amber
Common Tern	<i>Sterna hirundo</i>	Within park boundary	n.d/n.d/2020	BOCC Amber

Common Name	Latin Name	Approximate distance of nearest record	Date of most recent record	Ecological conservation status
Gadwall	<i>Mareca strepera</i>	Within park boundary	n.d/n.d/2020	BOCC Amber
Tawny Owl	<i>Strix aluco</i>	225m south-east	24/02/2021	BOCC Amber
Sand Martin	<i>Riparia riparia</i>	Within park boundary	n.d/n.d/2020	BOCC Green
Little Egret	<i>Egretta garzetta</i>	N/A	14/05/2016	BOCC Green
Reed Bunting	<i>Emberiza schoeniclus</i>	Within park boundary	24/03/2020	BOCC Not assessed
Pied Flycatcher	<i>Ficedula hypoleuca</i>	Within park boundary	08/08/2020	BOCC Not assessed
Lesser Black-backed Gull	<i>Larus fuscus</i>	Within park boundary	06/07/2021	BOCC Not assessed
Baltic Gull	<i>Larus fuscus fuscus</i>	Within park boundary	01/08/2021	BOCC Not assessed
Grey Wagtail	<i>Motacilla cinerea</i>	Within park boundary	13/11/2023	BOCC Not assessed
Artic Tern	<i>Sterna paradisaea</i>	480m west	11/10/2017	BOCC Not assessed
Amphibians				
Common Toad	<i>Bufo bufo</i>	Within park boundary	12/11/2021	Sect. 41
Common Frog	<i>Rana temporaria</i>	330m west	01/04/2024	HSD5
Reptiles				
Slow worm	<i>Anguis fragilis</i>	600m south	17/05/2019	WCA Sch5 / Sec9.1k/l, Sect. 41
Common Lizard	<i>Zootoca vivipara</i>	1.67km south-east	06/03/2014	WCA Sch5 / Sec9.1k/l, Sect. 41
Terrestrial Mammals (excl. bats)				
European Hedgehog	<i>Erinaceus europaeus</i>	Within park boundary	10/07/2022	Sect. 41
Eurasian Badger	<i>Meles meles</i>	Within park boundary	04/07/2014	PoBA 1992

Common Name	Latin Name	Approximate distance of nearest record	Date of most recent record	Ecological conservation status
Designated Flowing Plants				
Cornflower	<i>Centaurea cyanus</i>	Within park boundary	08/06/2024	Sect. 41 / London Priority Species
Large-leaved Lime	<i>Tilia platyphyllos</i>	285m east	01/01/2020	Nationally Scarce
Service-tree	<i>Sorbus domestica</i>	600m west	01/01/2020	Nationally Rare
Welsh Poppy	<i>Meconopsis cambrica</i>	870m south-west	26/06/2023	Nationally Scarce
Wild Pansy	<i>Viola tricolor</i>	925m south	01/07/2021	Local Spp of Cons Cons
Box	<i>Buxus sempervirens</i>	1.10km east	01/01/2020	Nationally Rare
Chives	<i>Allium schoenoprasum</i>	1.12km north-east	06/06/2022	Nationally Scarce
Corn Marigold	<i>Glebionis segetum</i>	1.26km west	21/04/2024	Local Spp of Cons Cons
Invertebrates - Moths				
Cinnabar	<i>Tyria jacobaeae</i>	Within park boundary	05/07/2023	Sect. 41
Jersey Tiger	<i>Euplagia quadripunctaria</i>	Within park boundary	23/04/2024	HSD5np
Small Square-spot	<i>Diarsia rubi</i>	515m west	26/08/2023	Sect. 41
Invertebrates - Beetles				
Stag Beetle	<i>Lucanus cervus</i>	Within park boundary	07/06/2024	Sch 5 / Sect. 41
A Beetle	<i>Polydrusus formosus</i>	Within park boundary	07/06/2024	Nationally Notable
Alder Leaf Beetle	<i>Agelastica alni</i>	630m south	20/05/2024	Insufficiently Known (RBD K)
Iris Weevil	<i>Mononychus punctumalbum</i>	1.59km south-east	20/05/2024	Nationally Notable

4.2 CONSTRAINTS AND OPPORTUNITIES

Findings of the desk-based survey and relevant research, as well as potential enhancement recommendations are summarised in Table 4.2 below.

It is assessed that further mitigation and/or surveys are not required. This is due to the very low percentage of time these temporary events will be present, and the small area these events will occupy, between approximately 26% to 31% of the total park area.

There is little opportunity to move the event to different areas to the park due to the access required for the multiple public facilities that are located throughout the park, in addition to the locations of trees across the Site dictating the size of open area. Therefore, a balanced approach needs to be undertaken when considering the potential impacts on both wildlife and people and the right of people to have a facilities offering play, sports, leisure, arts and culture experiences locally.

Table 4.2 Results and Evaluation of Ecological Constraints and Opportunities at the Site

Ecological Receptor	Research	Conclusion
Designated Sites	Brockwell Park is designed as a Borough SINC for its waterbodies, 'meadow' grassland, and mature trees, along with the birds these areas support. However, the site is poorly connected to ecologically designated sites, with Norwood Road (A215) and Tulse Hill (A204) running along the park boundaries, acting as barrier for dispersal of most animals and there are few green corridors between Brockwell and other areas of open space that afford protection for animals to move through. Designated sites form networks of high-quality ecological habitats and support some of the rarest and/or most endangered species not just nationally but internationally. Some sites such as Wimbledon Common SAC, 7.69km from Brockwell, are designated for the importance that the old trees and fallen decaying timber have as habitat for stag beetle. Stag beetles will	Although Brockwell is currently poorly connected to ecologically important sites, it is important that parks and open spaces provide habitats and the opportunity for mobile urban species to colonise and form populations outside of specifically designated zones, to ensure the long-term viability and survivability of a specific species and to connect people with nature. Opportunities for enhancement should focused on the habitats outlined within the SINC citation of the site. In addition, given that designated sites in West London are often cited for their importance to stag beetles with records of this species returned by GiGL, providing dead wood habitat that stag beetle larvae rely on such as log piles should be considered alongside signage.

Ecological Receptor	Research	Conclusion
	disperse up to approximately 250m ¹⁶ from where they are across a season.	
Bats	Studies indicate that bat activity in rural areas can decrease by as much as 50% in response to exposure to high levels of anthropogenic noise, such as loud music¹⁷. Artificial lighting is also known to have adverse effects on bat species¹⁸, though further research is required to fully understand the specific impacts of large-scale festival lighting displays¹⁷. However, Brockwell Park is situated in a highly urban area that is exposed to already likely high levels of anthropogenic noise and lighting. It has been shown in Section 3 of this report that between April and September (the times of year that bat activity is highest)¹⁹, that the maximum amount of time where noise levels would be above pre-existing ambient levels is 1.77% of the total hours, and light levels that would be above baseline levels would be 1.88% of the total hours, which would be even lower when considered across a 12 month period. In a Greengage study looking at impacts of fireworks at Battersea Park, there was a reduction in bat activity levels pre-fireworks and post-fireworks, however, there were too many variables such as natural seasonal activity reduction and weather conditions to be able to conclude that the reduction was caused by the fireworks from just one year's worth of data collection. In a study undertaken by Greengage at Victoria Park²⁰ that looked	It is clear that festivals are likely to cause temporary shifts in bat activity, however, research from similar urban parks has identified that activity levels recover quickly. Given that approximately only 4.40% of available days and 1.77% of available hours during the bird nesting and bat activity season are given to events in Brockwell Park, many of which are, in addition, outside nocturnal activity time for bats during the longest days of the year, it is likely this represents a temporary low level of impact on bat activity. Also, any bats that are found within the park will already have exposure to elevated levels of artificial light and noise from the surrounding highly urban environment. This is illustrated by the predominantly faster flying, open and edge species of bat recorded on the Site, more adapted to highly urban settings. There is the opportunity for SEL to engage with local residents to explore the potential of greater collaboration with the London Bat Group which has been present at the Lambeth Country Show in previous years²¹, potentially contributing to the organisation of increased bat walks within the park which have taken place in recent years and encouraging citizens science engagement²²

Ecological Receptor	Research	Conclusion
	at impacts of the All Points East festival, it was identified that over the August weekends that the festival was taking place bat activity levels fell within the festival site; however, activity levels had recovered during monitoring in September. However, during August, quieter areas of the park recorded higher levels of activity than the previous month or the following month, whether this was a temporary movement of bats that would use the festival site to peripheries of the park was not possible to determine.	
Nesting birds	Species that do utilise the park are already exposed to noise and light pollution throughout the bird nesting season. Research currently being conducted by the British Trust for Ornithology (BTO) has linked recent blackbird population declines, especially affecting London populations since 2020, to the appearance of the Usutu virus²³, a new mosquito-borne virus in the UK which is often fatal to blackbirds. Findings have linked its spread to climate change, with on-going research being currently undertaken to better understand disease transmission²⁴. In addition, disturbance to birds also occurs outside of these temporary events, as outlined within the 'Birds and Biodiversity in Brockwell Park - Past, Present and Future'²⁵, with high number of daily visitors and the presence of dogs likely resulting in regular disturbance of birds on ground and withing the various water bodies to the west of the park.	Many factors negatively influence nesting bird populations on large and small scales, in rural, suburban and urban areas, including impacts linked to climate change such as the increase of disease affecting bird populations and changes to the availability of feeding resources²⁶. This does not conclude that potential impacts on nesting birds resulting from the temporary events are not occurring, but the limited time these temporary events occur is likely to cause low level impacts on a temporary basis.

Ecological Receptor	Research	Conclusion
Invertebrates	Certain flying invertebrates are attracted to lights, although this can have the advantage of congregating an easy food source for some bat species this also draws in insects from darker areas of surrounding habitat²⁷. As many bat species avoid artificial lighting they are therefore less able to forage in highly lit environments, impacting upon individual survival rates and ability to successfully breed, posing as a threat to their populations²⁸. There is likely already a relatively high artificial light levels in the surrounding area due to its highly urban location however these will increase over a temporary and short timescale, up to 4.40% of total days during the bat activity season with the majority of this work being undertaken in the daytime due to work restriction times to consider residents.	Night flying invertebrates are attracted to blue-rich light sources, which can cause direct impacts such as death by exhaustion and becoming trapped in fittings, in addition, there are a detrimental impact on the species that forage on invertebrates, particularly bats. Festoon lighting required overnight for safe exit and passage across the site is low level and warm white in nature. Also, any bats that are found within the park will already have exposure to elevated levels of artificial light and noise from the surrounding highly urban environment. This is illustrated by the predominantly faster flying, open and edge species of bat recorded on the Site, more adapted to highly urban settings.
Hedgehog	Hedgehogs are a declining mammal species in both urban and rural environments, with habitat loss being one of the biggest causes of this decline²⁹. Being nocturnal, hedgehogs using the park are likely to be disturbed by higher than average light and noise on those few days that events are taking place. However, there is already likely high levels of artificial light and noise due to the urban nature of the park. With the majority of build and break work being undertaken in the daytime due to work restriction times, it is unlikely that this would cause any additional disturbance.	Hedgehogs are likely to use the darker areas found around the waterbodies and woody hedgerow edges of the park at the peripheries of the events area, where denser vegetation is present as this provides the most amount of protection from predators and natural disturbance. Planting to thicken green corridors and these edges of the park would enhance the desirability and accessibility of the Site for hedgehogs. There is the opportunity for SEL to engage with local residents to explore the potential for hedgehog highways and setting up citizen

Ecological Receptor	Research	Conclusion
		science monitoring schemes for this species, to connect people with nature.
Badger	Badgers are known to reside within the urban environment but are less resilient to human disturbance when compared to other known urban exploiting mammals ³⁰ . The desk study provided a sighting record of a pair of badgers being recorded in Brockwell Park in 2014, 10 years ago. Therefore, based on the data available, the parks highly urban setting, high number of daily visitors and being fully accessibility to the public and dogs, the chance of a sett being present on site is highly unlikely and therefore so is the risk of disturbance from these events. However, bearing in mind the record was a sighting and not a sett, that it was 10 years ago, and that the park is extremely busy with no areas without public and dog access, this is not considered to require further work at this stage. Being nocturnal, any badgers that may be using the park are likely to be disturbed by higher than average light and noise on those few days that events are taking place. However, there is already likely high levels of artificial light and noise due to the urban nature of the park. With the majority of build and break work being undertaken in the daytime due to work restriction times, it is unlikely that this would cause any additional disturbance.	If present, badgers would likely use the darker areas found around the waterbodies and woody hedgerow edges of the park for foraging and moving through the area at the peripheries of the events arena, where denser vegetation is present as this provides the most shelter and food availability. However, there is public and dog access throughout the Site and high levels of footfall throughout the year, therefore the Site is assessed to be unlikely to be suitable for badger setts. Planting to thicken green corridors and these edges of the park would enhance the desirability and accessibility of the Site for badgers.
Plants	It is known that protected plant species are present within Brockwell Park, this includes the Cornflower which receives general protection under Sect. 41 WCA 1981. Cornflowers and other	Protected flora are susceptible to being damaged and destroyed through trampling and picking. It is important that the locations of these plants are identified to allow for appropriate protection

Ecological Receptor	Research	Conclusion
	protected flora are susceptible to trampling and picking. Footfall and infrastructure are likely to have some compaction impacts on soils, despite the best efforts of the promoters. Soil properties within urban park open rest areas are affected by daily human activities the most as they are subject to the highest levels of human activity and intervention³¹, with the temporary events at Brockwell Park primarily being held on such open areas.	measures to be put in place. Following identification of the locations, measures to ensure that the ground conditions surrounding these are enhanced to encourage spread and therefore increase in vital areas that are suitable for populations to spread into is recommended. The open parkland areas where the events are taking place where there is likely short modified grassland are likely unsuitable to support protected and notable plant species as these are areas that are usually sown with hard wearing grass seed mixtures that usually comprise 2-3 species and are mown very short which inhibits the ability for other plants to colonise.
Soil compaction and vegetation trampling	Footfall and infrastructure are likely to cause vegetation trampling and have some compaction impacts on soils³², despite the best efforts of the promoters. However, no independent Site-specific scientific studies have been performed in relation to this, with research suggesting that soil properties within urban park open rest areas are negatively affected the greatest due to the continuous high levels of human activities and intervention³¹.	No independent Site-specific scientific studies have been performed in relation to soil compaction. However, the highly urbanised setting that Brockwell Park is located the soil properties of the open parkland areas have likely been negatively effects and degraded over long periods of time by continuous high levels of human activities and interventions. In addition, with an average of 5,500 visitors to the park daily, with assumed higher levels in the summer months and visitor avoidance during the event days, the total attendance to the park during the eight event days is likely less of an uplift than the maximum capacity implies. This does not conclude that potential impacts on increased soil compaction resulting from the temporary events are not occurring, but the limited time these temporary events occur is likely to cause

Ecological Receptor	Research	Conclusion
		low level impacts based upon the setting these events are being held. In addition, SEL are funding the repair of impacted grassland areas in partnership with the Lambeth BC by reseeding these areas after the 2024 events³³. Given the grassland is predominately comprised of fast-growing species, it is likely that areas of bare ground would recover to grassland shortly after the events concluded.

Based on aerial imagery, and data from GiGL and MAGIC, only species that robust data has been provided on have been evaluated within Table 4.2. Any species not mentioned are considered to be likely absent from within the Site boundary.

The main ecological receptors identified for the Site are primarily associated with designated sites, soil compactions and vegetation trampling, bats, nesting birds, hedgehogs, badgers and designated plant species. It is unlikely that foraging badgers are currently using the Park due to the age of the record, therefore it is not considered to require further work at this stage. It is assessed that due to the very low percentage of time the temporary events will be present on a small percentage of the Site, between approximately 26% to 31% of the total park area, overall impacts are likely to be small in scale. The impacts are considered to be localised, temporary and low level.

In addition, there are opportunities for the events to contribute positively to habitat creation and enhancement for wildlife and people on the Site; guided by professional judgement, the local needs of the park uses, and the LPA. These opportunities would be in addition to measures already in place to protect ecological receptors on site, further recommendations are made to enhance the best quality habitats on site. This will ensure SEL's legacy from their events for enhancing the park for nature and people, if enhancements are properly designed, implemented and managed. These would build on the commitments outlined within the 'Brockwell Live Environmental Sustainability Policy'³⁴ and 'Lambeth Country Show Sustainability Action Plan'³⁵, focusing on objective nine of the Lambeth 'Parks and Open Spaces Strategic Plan 2020-2025'³⁶ to protect and enhance biodiversity and actively promote nature conservation. Indicate opportunities have been suggested based upon the high-level review of the habitats within Brockwell Park, with the primary focus on enhancing habitats outlined within the sites SINC citation which are believed to be to the west and south of the site, forming an essential connective spine of green

infrastructure to encourage movement of species such as bats and birds from the surrounding habitat to the south in particular. Opportunities for enhancement are given below:

- Planting of standard trees to diversify age structure and ensure continuity of this resource;
- Managing and enhancing the low quality grassland as wildflower meadow to increase diversity and structural variation;
- Allowing native scrub to develop;
- Creating areas of standing & fallen deadwood;
- Enhancement of existing wildlife ponds and the potential creation of new wildlife ponds; and
- Introduction of native mixed-species.

In addition, further recommendations have also been provided to increased enhancement opportunities for SEL including:

- Designated fenced off protection areas for soil and tree root recover, and for the protection of habitats where reptiles, amphibians, and designated plant species may be present;
- Signage and investment into citizen science initiatives to encourage people to engage with their local natural environment. This work could include bird and bat walks which are known to have previously taken place within the park, recommending involvement in national wildlife surveys, interpretation on site with interactive QR codes and also workdays to manage habitats with Friends Groups; and
- Incorporation of additional bat and bird boxes in desirable habitats.

Enhancements have the opportunity to involve local people in surveying wildlife on their doorstep through collaboration with conservation organisations. This would provide an opportunity for people to manage areas of habitat within the park, directly connecting local people with their surrounding natural environment which would return the known health and well-being benefits that come from such interactions.

5.0 CONCLUSIONS

There are many external factors which negatively influence wildlife populations within the highly urban setting of Brockwell Park, with the species associated with the Site already exposed and accustomed to elevated levels of artificial light and noise from the surrounding urban environment. In addition, the park natural environment is subject to disturbance all year around, with thousands of daily visitors and likely incidences of birds being disturbed by dogs. It is acknowledged that the temporary music events occurring at Brockwell Park have the potential to cause low level impacts on local wildlife, namely bats and birds. However, these temporary events occur over a total of eight days across the year and only contribute 4.40% of all days within the outlined activity period, with the majority of the time these events are being held outside the nocturnal activity hours. Therefore, these events are likely to result in an overall small-scale impact on a temporary basis.

The increased footfall and infrastructure are likely to have some compaction impacts on soils, however, given the highly urbanised setting that Brockwell Park, the soil properties of the open parkland areas are likely negatively affected by daily high levels of human activities and interventions. The areas where these events are situated in the park are predominantly located on areas seeded with fast growing grass species, with areas of bare ground likely recover shortly after event conclusion. Therefore, in conjunction with the temporary nature of these events, it is likely impacts are small in scale.

In addition, there are opportunities for SEL to invest further in enhancement for the park, which also act as an opportunity to engage the local community and involve people in outdoor activities, socialising and connecting with nature, with all the physical and mental wellbeing benefits this has. As a result, if designed and implemented properly, these enchantments will contribute in a positive way for wildlife and people's use of the park for the future.

APPENDIX A MIGHTY HOOPLA (BROCKWELL LIVE) SITE PLAN

Figure A.1 *Mighty Hoopla Site Plan 2024*



Project:
Brockwell Live

SE24 0NG

Client:
Summer Events Ltd

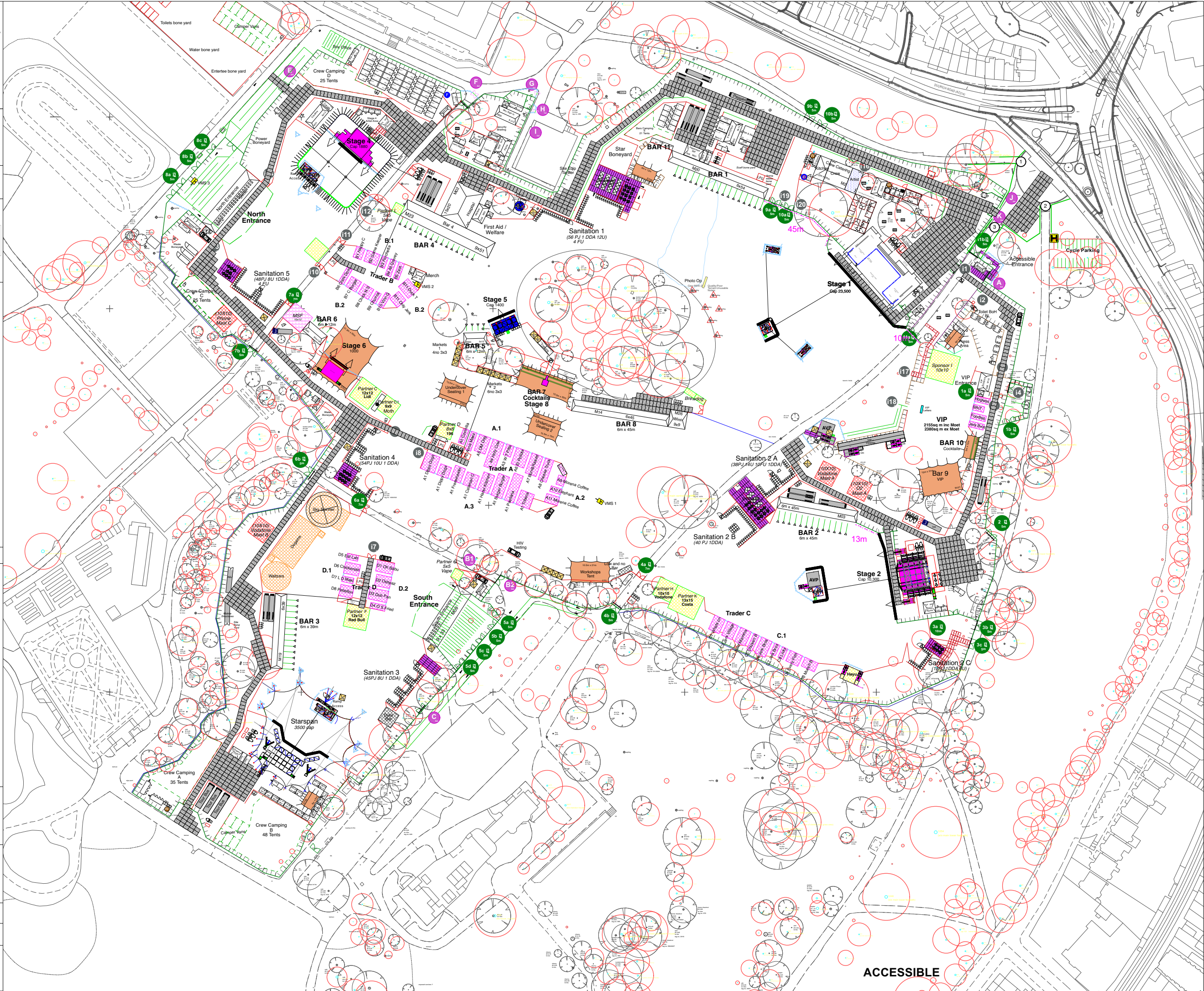
- Key:
- FENCE - CHESTNUT PALE
 - FENCE - HERAS
 - FENCE - MET BARRIER
 - FENCE - STAGE BARRIER
 - FENCE - PEDESTRIAN BARRIER
 - FENCE - SMART HOARD
 - FENCE - T SHIELD
 - TRAKWAY PANEL
 - TRACKMAT
 - PITCH - CONCESSION
 - PITCH - MARKET
 - PITCH - FAIRGROUND
 - PITCH - SPONSOR
 - AREA - OUT OF BOUNDS
 - AREA - CREW CAMPSITE
 - EE REFERENCE & WIDTH
 - SECURITY POINT
 - CCTV REFERENCE
 - CCTV BL OPERATED
 - CCTV LBL OPERATED

No.	Date	Revision Notes



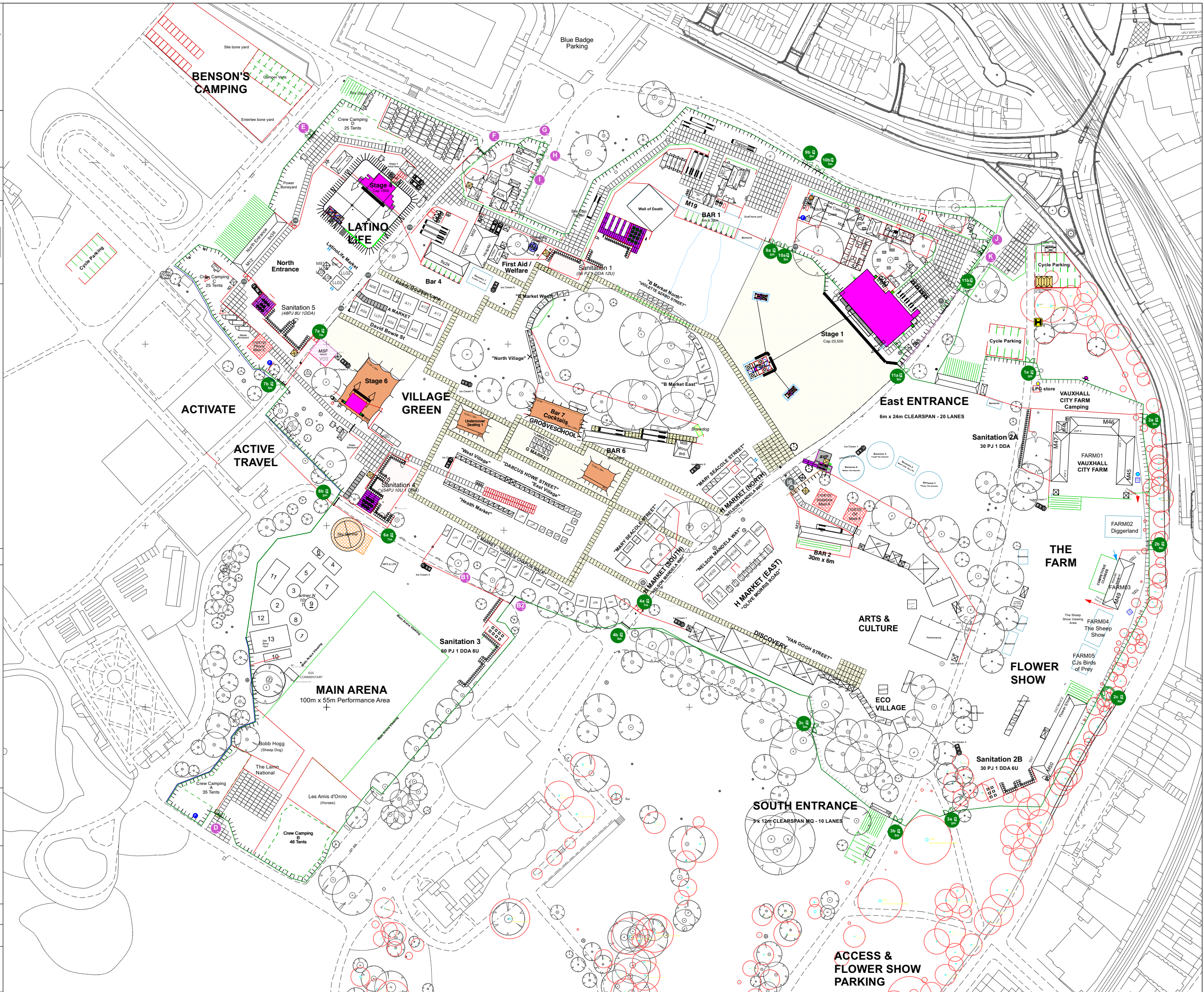
Full Site - Mighty Hoopla
Saturday 1st June
Sunday 2nd June

Project Director Clare Goodchild	Scale 1:1700 @ A3
Project Manager	Issue Date 06/05/2024
Drawn By Tom Wilkinson	Issue Number
Project ID BL24 - BB	v3.5



APPENDIX B LAMBETH COUNTRY SHOW SITE PLAN

Figure B.1 *Lambeth Country Show Site Plan 2024*



REFERENCES

- ¹ Laura Morland, Friends of Brockwell Park (FOBP) (2024). Events damage to Park summer 2024, dated June 2024.
- ² Peter Bradley, Friends of Brockwell Park (FOBP) (2023). Ann Kingsbury speech to Lambeth Scrutiny Committee, dated 2nd October 2023.
- ³ Laura Morland, Friends of Brockwell Park (FOBP) (2023). Lambeth Scrutiny Committee examines events in Parks, dated 29th September 2023.
- ⁴ Lambeth (2019). Lambeth Biodiversity Action Plan 2019 - 2024. Available at: https://www.lambeth.gov.uk/sites/default/files/2024-04/New%20Lambeth%20BAP%202019-24_2.pdf, accessed 16/09/2024.
- ⁵ Lambeth (n.d). Brockwell Park wildlife trail. Available at: <https://brockwellparkcommunitypartners.org.uk/wp-content/uploads/2014/02/brockwell-park-leaflet-wildlife-final.pdf>, accessed 24/09/2024.
- ⁶ MAGIC (2019); Interactive Map. (Partnership project involving six government organisations: Defra (Department for Environment, Food and Rural Affairs); English Heritage; Natural England; Environment Agency; Forestry Commission; Department for Communities and Local Government). Available at: www.magic.gov.uk.
- ⁷ Lambeth (2020). Lambeth Events Policy 2020-2025. Available at: https://app1.apply4.com/uploads/uk/instance_document/file/1487/Lambeth_Events_Policy_2020.2025.pdf, accessed 16/09/2024.
- ⁸ Lambeth (2023). New Premises Licence (Ref: DSFX1674472681674). Available at: <https://www.lambeth.gov.uk/sites/default/files/2023-01/summer-event-brockwell-park.pdf>, accessed 26/09/2024
- ⁹ RA (2024). Project 6 Festival / Rinse 30th Anniversary 2024 + Fabric After Party. Available at: <https://ra.co/events/1828352>, accessed 26/09/2024.
- ¹⁰ RA (2024). Wide Awake Festival. Available at: <https://ra.co/events/1780834>, accessed 26/09/2024.
- ¹¹ TimeOut (2024). Cross The Tracks 2024 in Brockwell Park: timings, tickets and everything you need to know. Available at: <https://www.timeout.com/london/news/cross-the-tracks-2024-in-brockwell-park-timings-tickets-and-everything-you-need-to-know-052424>, accessed 26/09/2024.
- ¹² RA (2024). City Splash Festival 2024. Available at: <https://ra.co/events/1819074>, accessed 26/09/2024.
- ¹³ Mighty Hoopla (2024). FAQ's. Available at: <https://mightyhoopla.com/faqs/>, accessed 26/09/2024.
- ¹⁴ Lambeth (2024). Lambeth Country Show Saturday 8 & Sunday 9 June 2024. Available at: <https://www.lambethcountryshow.co.uk/>, accessed 26/09/2024.
- ¹⁵ BrockWell Live (2024). Community FAQs. Available at: <https://www.brockwell-live.com/community>, accessed 26/09/2024.
- ¹⁶ Rink, M. & Sinsch, U. (2007); Radio-telemetric monitoring of dispersing stag beetles: implications for conservation. *Journal of Zoology*, Vol. 272:3 pg 235-243.
- ¹⁷ Hooker, J., Daley, E., Stone, E., & Lintott, P. (2023). Assessing the impact of festival music on bat activity. *Ecological Solutions and Evidence*, 4, e12250. <https://doi.org/10.1002/2688-8319.12250>.
- ¹⁸ Stone, E., Harris, S., & Jones, G. (2015). Impacts of artificial lighting on bats: a review of challenges and solutions, Vol. 80:3 pg 213-219.
- ¹⁹ Bat Conservation Trust (2023); Bat Surveys for Professional Ecologists, Good Practice Guidelines (4th edition). BCT, London.
- ²⁰ Greengage (2024). Baseline Ecological Assessment, Victoria Park (Ref: 552322sb23Feb24FV01_Baseline).

-
- ²¹ London Bat Group (2024). Events. Available at: <https://londonbats.org.uk/events/>, accessed on 26/09/2024.
- ²² Bat Conservation Trust Sunset Survey: <https://www.bats.org.uk/our-work/national-bat-monitoring-programme/getting-started/sunset-survey>
- ²³ LAWSON, B. et al., 2022. Combining host and vector data informs emergence and potential impact of an Usutu virus outbreak in UK wild birds. *Scientific Reports* 12: 10298.
- ²⁴ British Trust for Ornithology, (2024); Press release: Much-loved songbird threatened by mosquito-borne virus. No. 2024-19. [online] Available at: [Much-loved songbird threatened by mosquito-borne virus | BTO - British Trust for Ornithology](#), accessed 16/09/2024.
- ²⁵ Czech Conroy, Friends of Brockwell Park (FOBP) (2023). *Birds and Biodiversity in Brockwell Park - Past, Present and Future*, dated November 2023.
- ²⁶ Carey, C. (2009) The impacts of climate change on the annual cycles of birds *Philos Trans R Soc Lond B Biol Sci*. 2009 Nov 27; 364(1534): 3321–3330.
doi: [10.1098/rstb.2009.0182](https://doi.org/10.1098/rstb.2009.0182) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2781852/>
- ²⁷ Bat Conservation Trust and Institute of Lighting Professionals, (2023); Guidance Note 08/23 Bats and Artificial Lighting. [online] Available at: [Guidance Note 8 Bats and Artificial Lighting | Institution of Lighting Professionals \(theilp.org.uk\)](#)
- ²⁸ Stone, Emma & Harris, Stephen & Jones, Gareth. (2015). Impacts of artificial lighting on bats: A review of challenges and solutions. *Mammalian Biology - Zeitschrift für Säugetierkunde*. 80. 10.1016/j.mambio.2015.02.004.
- ²⁹ Wembridge, D., Johnson, G., Al-Fulajj, N. & Langton, S. (2022); *The State of Britain's Hedgehogs 2022*. [online] Available at: [SoBH-2022-Final.pdf \(hedgehogstreet.org\)](#)
- ³⁰ Lovell, C. et al. (2022). The effect of habitat and human disturbance on the spatiotemporal activity of two urban carnivores: The results of an intensive camera trap study. *Ecology and Evolution*, Vol:12:3.
- ³¹ Sarah, P., Zhevelev, H., & Oz, A. (2015); *Urban Park Soil and Vegetation: Effects of Natural and Anthropogenic Factors*. *Pedosphere*, Vol. 25:3 pg 392-404.
- ³² Luoma, S. (2018). The environmental impacts of the biggest music festivals in Europe. Available at: <https://www.theseus.fi/bitstream/handle/10024/148752/The%20environmental%20impacts%20of%20the%20biggest%20music%20festivals%20in%20Europe.pdf?sequence=1&isAllowed=y>
- ³³ Lambeth (2024). Brockwell Park set for summer. Available at: <https://love.lambeth.gov.uk/brockwell-park-set-for-summer/#:~:text=Those%20impacted%20areas%20have%20now,and%20should%20see%20results%20soon>, accede 30/09/2024
- ³⁴ BrockWell Live. (2024). Brockwell Live Environmental Sustainability Policy. Available at: https://static1.squarespace.com/static/62228dc36b1f4102a20f37a/t/661941f586d97332f315c8b1/1712931317880/BWL_Sustainability-Policies-24_A4_v2.pdf, accessed 26/09/2024.
- ³⁵ Lambeth (2024). Lambeth Country Show Sustainability Action Plan. Available at <https://www.lambethcountryshow.co.uk/wp-content/uploads/2023/11/LCS-Sustainability-Action-Plan-2024.pdf>, accessed 26/09/2024.
- ³⁶ Lambeth (2020). *Parks and Open Spaces Strategic Plan 2020-2025*. Available at: https://www.lambeth.gov.uk/sites/default/files/2023-02/Lambeth_Parks_and_Open_Spaces_Strategic_Plan.pdf, accessed 26/09/2024.
-