



The Former Stag Brewery, Mortlake

Supplementary Protected Species Report

September 2022

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Client Name: Reselton Properties Ltd

Document Reference: WIE18671-115-R-17-1-7-UPSR

Project Number: WIE18671-115

Quality Assurance – Approval Status

This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

First September 2022

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1. Introduction

- 1.1. This Supplementary Protected Species Report (PSR) has been prepared by Waterman Infrastructure & Environment Limited (Waterman) on behalf of Reselton Properties Limited ("the Applicant") to accompany two linked planning applications ("the Applications") for the comprehensive redevelopment of the former Stag Brewery Site in Mortlake ("the Site") within the London Borough of Richmond upon Thames (LBRuT).
- 1.2. This report has been updated from its previous version¹ that accompanied the Applications (ref. 22/0900/OUT (Application A) and 22/0902/FUL (Application B) as submitted in March 2022. This is due to consultation received from LBRuT at the end of May 2022 (see Consultation Section and Appendix A) requesting supplementary ecological surveys in 2022 to allow the full determination of ecological aspects of the Applications.
- 1.3. The former Stag Brewery Site is centred on Ordnance Survey Grid Reference TQ204 760 and is bounded by Lower Richmond Road to the south, the River Thames and the Thames Bank to the north, Williams Lane to the east and Bulls Alley (off Mortlake High Street) to the west. The Site is bisected by Ship Lane. The Site currently comprises a mixture of large-scale industrial brewing structures, large areas of hardstanding and playing fields.

Historical Ecological Survey Work

- 1.4. Historical ecological surveys were undertaken in 2016 and 2017 to accompany three separate planning applications for the Site, which were submitted to the London Borough of Richmond-Upon-Thames (LBRuT) in 2018 (ref. 18/0547/FUL, 18/0548/FUL and 18/0549/FUL) as detailed below:
 - Application A hybrid planning application for comprehensive mixed-use redevelopment of the former Stag Brewery site consisting of:
 - Land to the east of Ship Lane applied for in detail (referred to as 'Development Area 1' throughout); and
 - Land to the west of Ship Lane (excluding the school) applied for in outline (referred to as 'Development Area 2' throughout).
 - Application B detailed planning application for the school (on land to the west of Ship Lane).
 - Application C highways and landscape works at Chalkers Corner.
- 1.5. The ecological survey work in support of the LBRuT planning applications detailed above comprised an initial PEA². Based on the results of this PEA further surveys as detailed in a Protected Species Report³ (PSR)were also undertaken between 2016 and 2017.
- 1.6. Following the Applicant submitting revisions to the Greater London Authority (GLA) in 2020 (ref. 4172 (Application A), 4172a (Application B) 4172b (Application C withdrawn)) ecological survey works comprising an updated PEA⁴ together with further update surveys as detailed in a Protected Species Report⁵ were also undertaken in 2019. The applications submitted in 2020 detailed above to the GLA were refused in July 2021.
- 1.7. A summary of all the historical ecological survey work undertaken for previous planning



applications covering the Site are presented in Table 1.

Table 1: Historical Ecological Survey Work

Planning Application Ref	Ecological Survey Work Undertaken	Date of Assessment and Reporting
	PEA (ref. WIE10667-100-R-1-3-1-PEA) -comprising an ecological data search, 'Extended' Phase 1 Habitat Survey, a search for common invasive floral species, and a Preliminary Roost Assessment (PRA) (ground based and external only) of buildings and trees for bats.	PEA components undertaken between January 2016 to April 2017 with reporting finalised in February 2018.
LBRuT -18/0547/FUL, 18/0548/FUL, and 18/0549/FUL (the 2018 Planning Applications) GLA - ref 4172, 4172a, and 4172b (withdrawn) (the 2020 Planning Applications)	PSR (ref. WIE10667-100-R-7-3-1-PSR) - comprising a Preliminary Roost Assessment (ground based and external only) of accessible buildings, evening emergence and pre-dawn reentry bat surveys at buildings and trees, bat activity and automated surveys, and breeding bird surveys (specifically for black redstart <i>Phoenicurus ochruros</i>)	PSR components undertaken between May 2016 to September 2017 with reporting finalised in February 2018.
	PRA (ref. WIE10667-103-BN-2-1-2-LM) – comprising an external and endoscope inspection of the northern boundary wall.	PRA of the northern boundary wall undertaken in October 2018 with reporting also finalised in October 2018.
	PEA (ref. WIE15582-102-R-1-2-3-PEA) - comprising an ecological data search, 'Extended' Phase 1 Habitat Survey, a search for common invasive floral species, and a PRA (ground based and external only) of buildings and trees.	PEA components undertaken in July 2019 with reporting finalised in May 2020.
	PSR (ref. WIE15582-102-R-2-3-1-PSR) - comprising a PRA of the northern boundary wall (external and endoscope inspection of), evening emergence and pre-dawn re-entry bat surveys at buildings and trees, bat activity and automated surveys.	PSR components undertaken between July 2019 to September 2019 with reporting finalised in May 2020.

Proposed Development

1.8. The current proposals for the Site (hereafter referred to as the proposed 'Development') are for a redevelopment that will provide homes (including affordable homes), complementary commercial uses, community facilities, a new secondary school alongside new open and green spaces throughout. Associated highway improvements are also proposed, which include works at Chalkers Corner junction.



1.9. The Applications seek planning permission for:

Application A:

"Hybrid application to include the demolition of existing buildings to allow for comprehensive phased redevelopment of the site:

Planning permission is sought in detail for works to the east side of Ship Lane which comprise:

- a) Demolition of existing buildings (except the Maltings and the façade of the Bottling Plant and former Hotel), walls, associated structures, site clearance and groundworks
- b) Alterations and extensions to existing buildings and erection of buildings varying in height from 3 to 9 storeys plus a basement of one to two storeys below ground
- c) Residential apartments
- d) Flexible use floorspace for:
 - i. Retail, financial and professional services, café/restaurant and drinking establishment uses
 - ii. Offices
 - iii. Non-residential institutions and community use
 - iv. Boathouse
- e) Hotel / public house with accommodation
- f) Cinema
- g) Offices
- h) New pedestrian, vehicle and cycle accesses and internal routes, and associated highway works
- i) Provision of on-site cycle, vehicle and servicing parking at surface and basement level
- j) Provision of public open space, amenity and play space and landscaping
- k) Flood defence and towpath works
- I) Installation of plant and energy equipment

Planning permission is also sought in outline with all matters reserved for works to the west of Ship Lane which comprise:

m) The erection of a single storey basement and buildings varying in height from 3 to 8 storeys



- n) Residential development
- o) Provision of on-site cycle, vehicle and servicing parking
- p) Provision of public open space, amenity and play space and landscaping
- q) New pedestrian, vehicle and cycle accesses and internal routes, and associated highways works"

Application B:

"Detailed planning permission for the erection of a three-storey building to provide a new secondary school with sixth form; sports pitch with floodlighting, external MUGA and play space; and associated external works including landscaping, car and cycle parking, new access routes and other associated works"

1.10. Together Applications A and B described above, including the proposed Section 278 Highways works are hereafter referred to as the 'Development'. Full details and scope of the detailed planning application is detailed in the submitted Planning Statement, prepared by Gerald Eve LLP (report ref: NTH/AKG/CST/STHO/J7699).

Aims and Objectives of this Assessment

- 1.11. The aims and objectives of this Supplementary PSR are based on the findings of the PEA⁶ (hereafter referred to as the 2022 PEA) and the PSR⁷ (hereafter referred to as the 2022 PSR) that accompanied the Applications submitted in March 2022 and the consultation received from LBRuT received in Late May 2022 (see Consultation Section and Appendix A) that requested supplementary ecological surveys in 2022. The findings of these supplementary ecological surveys and any requirements for the proposed Development to provide additional mitigation and or compensation measures have been detailed in the report. For completeness the findings of the PSR that accompanied the Applications in March 2022 has also been included within this report.
- 1.12. The 2022 PEA comprised an ecological data search, UK Habitat Classification (UK Hab) field survey, a preliminary roost assessment (PRA) at buildings, walls and trees (external and ground based), and a survey for common invasive plant species. As a result of the 2022 PEA the Site was assessed to still have the potential to support roosting bats, and to be of value to foraging and commuting bats.
- 1.13. A preliminary roost assessment (PRA), as part of the 2022 PEA, was undertaken which noted that the following buildings, walls and trees as located in **Figure 1** to have the potential to support roosting bats as detailed in **Table 2**.

⁶Waterman IE February 2022 Preliminary Ecological Appraisal. Stag Brewery. Ref: WIE18671-103-R-1-2-4-PEA ⁷Waterman IE February 2022. Protected Species Report. Stag Brewery. Ref: WIE103-R-4-2-3-PSR



Table 2: PRA Results 2022

Building / Wall / Tree Ref	Recorded Bat Roost Suitability
Building B13, B9 the Maltings*, B10/11 and B18 the off Site Jolly Gardeners pub	Moderate
Building B14, B12, and B17	Low
Southern boundary wall	Moderate
Northern boundary wall	Moderate
Tree T43, T44, T67, T68, T71, T75, T78, T83, T157 and T321	Moderate
Tree T3, T10, T37, T73, T74, T84, T94 and T121	Low

^{*}Building previously recorded as a confirmed roost site in 2019

- 1.14. All other buildings, walls and trees on Site were recorded to have negligible potential to support roosting bats.
- 1.15. The 2022 PEA assessed that the Site itself offered limited foraging and commuting opportunities for bats, as most of the Site was made up of developed land comprising buildings and hardstanding. However, the trees located around the periphery and within the north-western corner of the Site offer some foraging and commuting opportunities for bats. The River Thames, located adjacent to the Site, also offers good commuting and foraging opportunities. For this reason, the Site overall was assessed to have low suitability for foraging and commuting bats.
- 1.16. The 2022 PEA scoped out all other ecological features including designated sites for nature conservation (excluding the River Thames and Tidal Tributaries SMI however protection measures during the proposed Development construction phase were proposed), on Site habitats, breeding birds (including peregrine falcon and black redstart) and terrestrial invertebrates. It should be noted that invasive plant species as listed on Schedule 9 of the Wildlife & Countryside Act 1981 (as amended) including Virginia creeper, Himalayan balsam and false-acacia were recorded on Site along with species listed under the London Invasive Species Initiative (LISI), comprising butterfly bush, tree of heaven.
- 1.17. Although breeding birds (including peregrine falcon and black redstart) were scoped out as part of the 2022 PEA as reported in the 2022 PSR, on the 4th October 2021 a single peregrine falcon was heard calling from the direction of building B2 during the day and then during an evening emergence bat survey on the same day at building B9 the Maltings, where a single peregrine falcon was observed entering the south west corner (**Appendix B**; Plate 1) (8 storeys high). The bird was recorded entering building B9 the Maltings through a gap in the wooden boarding 20 minutes post sunset (just as light levels were fading). The bird was not observed to have reemerged from the building for the remainder of the bat survey, by any of the four surveyors that surrounded the building.



2. Methodology

Bat Surveys

Preliminary Roost Assessment

- 2.1. In response to consultation received from LBRuT at the end of May 2022 (see consultation section and **Appendix A**) additional survey effort was made to determine if an internal Preliminary Roost Assessment (PRA) was possible at the buildings on Site. Where possible (see limitations and results section of this report) the PRA was undertaken by Lee Mantle MCIEEM who holds a Natural England Class 2 Licence (2015-14934-CLS-CLS) for all bat species and counties of England.
- 2.2. The survey was based on current best practice guidelines⁸ where each building was re-evaluated for its potential to support roosting bats with reference to the criteria in **Table 3**.

Table 3: Adapted Building Assessment Guidelines

Assigned Bat Roosting Potential	Description
Known or confirmed roost	Evidence of roosting bats within a building.
High	A building with one or more Potential Roost Features (PRFs) that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Moderate	A building with one or more PRFs that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only).
Low	A building with one or more PRF that could be used by individual bats opportunistically. However, these PRFs do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
Negligible	Negligible habitat features at a building likely to be used by roosting bats.

Northern boundary wall Inspection

- 2.3. An inspection of the northern boundary wall, (**Figure 2**) was undertaken on 4th October 2021 and 10th August 2022 given the results of the PRA (**Appendix C**). The inspection was based on current best practice guidelines⁹.
- 2.4. The inspection was undertaken at the entity of the wall including each PRF recorded during the 2021 PRA as part of the PEA. The inspection was undertaken with the use of a digital video endoscope (Ridgid Seesnake inspection camera), inspection mirrors, binoculars, high-powered torch and a ladder when required to inspect PRFs at height. The inspection searched for evidence of bat use (such as droppings, scratch marks, staining and sightings) as well as bats themselves,

⁸ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1

⁹ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1



and were led by Will O'Connor Cecol MCIEEM, a Natural England Class Level 2 Bat Licence holder (2015-11736-CLS-CLS) in 2021 and Lee Mantle MCIEEM a Natural England Class Level 2 Bat Licence holder (2015-14934-CLS-CLS) in 2022.

Evening Emergence and Pre-Dawn Re-entry Surveys

- 2.5. Evening emergence and/or pre-dawn re-entry surveys of the buildings, northern boundary wall (where a full inspection of PRFs could not be undertaken in 2021 only), southern boundary wall and trees was undertaken given the results of the PRA (**Table 2**).
- 2.6. An evening emergence and/or pre-dawn re-entry surveys were undertaken in 2021 and 2022 at:
 - Buildings determined as having low (building B14, B12 and B17) bat roost potential;
 - Buildings determined as having moderate (building B13, B9 (previously recorded as a confirmed roost site in 2019, Appendix B Plate 2), B10/11 and B18 the off Site Jolly Gardeners pub) bat roost potential;
 - The southern boundary wall determined as having moderate bat roost potential;
 - The northern boundary wall (at PRF 10a, 10b and 13) determined as having moderate bat roost potential in 2021 only; and
 - Trees T43, T44, T67, T68, T71, T75, T78, T83, T157 and T312 determined as having moderate bat roost potential.
- 2.7. The evening emergence and/or pre-dawn re-entry surveys were undertaken based on current best practice guidelines¹0. In addition, a sufficient number of surveyors were used during each survey to ensure all of the PRFs were covered. The surveys were led were led by Will O'Connor Cecol MCIEEM, a Natural England Class Level 2 Bat Licence holder (2015-11736-CLS-CLS) in 2021 and Lee Mantle MCIEEM a Natural England Class Level 2 Bat Licence holder (2015-14934-CLS-CLS) in 2022. The positions of the surveyors during each evening emergence survey in 2021 and 2022 are presented on Figure 3.
- 2.8. The surveys were undertaken using full spectrum Elekon Batlogger M, EchoMeter Touch 2 Pro, anabat scout and Pettersson D240x bat detectors with integrated or separate (Edirol) digital recording. This survey equipment is considered suitable for detecting all resident species of UK bats. In addition, and at building B9 the Maltings and due to its height and conformation as a roost site in 2019 Nightfox Infrared monocular's with IR torches were used by the surveyors during the surveys at this building in October 2021 as a supplementary survey technique.
- 2.9. In response to consultation received from LBRuT at the end of May 2022 (see consultation section and Appendix A) during the survey at building B9 the Maltings, due to its height and confirmation as a roost site in 2019, a variety of night vision aids (NVAs) were used by the surveyors during the surveys at this building in 2022 as a supplementary survey technique. The footage was then watched back after the survey to further determine the presence/absence of roosting bats. The NVAs with IR torches used during the surveys at the Maltings during the surveys in 2022, included:

¹⁰ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1



- · A Guide IR19 Pro thermal imaging scope;
- Canon XA10/XA40 cameras; and
- · Nightfox Red.
- 2.10. The surveys were undertaken in appropriate weather conditions and within the recognised bat active season for these types of surveys. The evening emergence surveys commenced approximately 15 minutes prior to sunset and continued for at least an hour and a half thereafter. The pre-dawn re-entry surveys commenced at least an hour and a half before sunrise and extended 15 minutes thereafter.
- 2.11. **Table 4** and **5** below provides a summary of the bat survey parameters.

Table 4: Summary of Evening Emergence Bat Surveys 2021

Survey	Date	Sunset / Sunrise Time	Time Start / End (GMT+1)	Wind (Beaufort)	Cloud Cover (Oktas)	Temp Start / End (°C)
Evening emergence (B9, T75, T43, T44)	04/10/2021	18:33	18:18 / 20:03	0	7/8	13 / 13
Evening emergence (B12, B10/11, B13, B14)	05/10/2021	18:31	18:16 / 20.01	3	8/8	13 / 12
Evening emergence (T71, T68, T67, B18 the off Site Jolly Gardeners pub)	07/10/2021	18:24	18:09 / 19:54	1	8/8	20 / 18
Evening emergence (B17, T78, T83, T157)	11/10/2021	18:15	18:00 / 19:45	1	2/8	15 / 10
Evening emergence (southern boundary wall)	14/10/2021	18:10	17:55 / 19:40	1	5/8	15 / 13
Evening emergence (northern boundary wall at PRA 10a, 10b, 13 and T321)	19/10/2021	18:00	17:45 / 19:30	1	8/8	19 / 18



Table 5: Summary of Evening Emergence Bat Surveys 2022

Survey	Date	Sunset / Sunrise Time	Time Start / End (GMT+1)	Wind (Beaufort)	Cloud Cover (Oktas)	Temp Start / End (°C)
Evening emergence (B14)	20/06/2022	21.21	20:51 / 23:21	1	1/8	21 / 16
Pre-dawn re-entry (B18 the off Site Jolly Gardeners pub)	26/07/2022	05:15	03:45 / 05:30	1	7/8	19 / 17
Pre-dawn re-entry (B12)	21/06/2022	04:43	03:15 / 05:00	2	2/8	14 / 12
Evening emergence (B10/11,17)	02/08/2022	20:49	20:30 / 23:00	2	1/8	22/ 20
Evening emergence (B10/11)	27/06/2022	21.23	21:00 / 23:00	2	8/8	19 / 17
Evening emergence (B10/11)	11/07/2022	21.15	20:45 / 23:15	1-2	3/8	28 / 25
Evening emergence (B13)	25/07/2022	21.00	20:30/ 22:30	3	8/8	22 / 21
Evening emergence (B9)	24/08/2022	20:05	19:50/ 21:36	0	4/8	30 / 23
Dawn re-entry (B9)	05/08/2022	05:28	04:00/ 05:30	1	6/8	17 / 16
Pre-dawn re-entry (Southern boundary wall)	03/08/2022	05.29	02:30/ 05:30	3	3/8	18 / 18
Evening emergence (Southern boundary wall)	30/08/2022	19:52	19:40/ 21:32	2	6/8	23 / 22
Evening emergence (T43, T44)	10/08/2022	20:30	20:03/ 22:30	2	3/8	24 / 22
Evening emergence (T67, T68, T71)	16/08/2022	20.22	20:07/ 21:52	0	6/8	22 / 20
Pre-dawn re-entry (T75, T78, T83)	17/08/2022	05.50	04:20/ 06:05	1	7/8	17 / 16
Pre-dawn re-entry (T75)	31/08/2022	06.10	04:40/06:15	2	6/8	23 / 22
Pre-dawn re-entry (T157, T321)	11/08/2022	05:02	03:30/ 05:02	0	3/8	18 / 18

^{2.12.} In addition, and at the B9 the Maltings (previously recorded as a confirmed roost site in 2019) on 1st August 2022, an automated bat detector (SM2 detector) was set to for five consecutive nights (as



detailed in the consultation received from LBRuT at the end of May 2022 (see consultation section and **Appendix A**). The automated detector was deployed just inside the entrance of the Maltings as a supplementary survey technique in an effort to determine if 'a peak' in calls are recorded just before or at peak emergence and re-entry times. The deployment of the automated detector was proposed specifically for brown long-eared bats given the roosting behaviour of the species that will normally 'warm up' within an internal void before emerging from a roost site¹¹.

2.13. **Table 6** provides a summary of the automated bat survey parameters.

Table 6: Summary of Building B9 The Maltings Automated Detector Survey

Survey Month	Date	Sunset Time	Max Wind speed (mph)	Rain (inches)	Average Day Temp °C
	01/08/2022	20:48	10	0	26
	02/08/2022	20:46	8	0	25
	03/08/2022	20:45	10	0	26
August 2022	04/08/2022	20:43	9	0	23
	05/08/2022	20:41	9	0	21

Bat Activity Survey

- 2.14. Bat activity surveys were undertaken at the Site in 2021 and 2022 but specifically along the northern boundary of the Site adjacent to the River Thames as well as Watney's Sports Ground. The survey commenced from sunset to until two hours thereafter. A pair of surveyors undertook the survey using a full spectrum Elekon Batlogger M detector with integrated digital recording and GPS and followed a pre-determined transect route (Figure 4). This survey equipment is considered suitable for detecting all resident species of UK bats. The surveys were led by Will O'Connor CEcol MCIEEM, a Natural England Class Level 2 Bat Licence holder (2015-11736-CLS-CLS) in 2021 and Lee Mantle MCIEEM a Natural England Class Level 2 Bat Licence holder (2015-14934-CLS-CLS) in 2022.
- 2.15. The surveys commenced at sunset and continued for at least 2 hours thereafter. The surveys were undertaken in appropriate weather conditions and within the recognised optimal bat active season for activity surveys. Table 7 and 8 below provide a summary of the timings and weather conditions of the bat surveys undertaken. Any bats observed were recorded and information noted, where possible, included:
 - time;
 - direction of flight;
 - use of landscape;
 - flight characteristics;
 - size;
 - height; and

¹¹ S. Swift (1998). Long-Eared Bats. Poyser Natural History.



behaviour.

Table 7: Summary of Bat Activity Surveys 2021

Survey	Date	Sunset / Sunrise Time	Time Start / End (GMT+1)	Wind (Beaufort)	Cloud Cover (Oktas)	Temp Start / End (°C)
Activity Survey	04/10/2021	18:32	18:51/ 21:19	0	5/8	14/ 11

Table 8: Summary of Bat Activity Surveys 2022

Survey	Date	Sunset / Sunrise Time	Time Start / End (GMT+1)	Wind (Beaufort)	Cloud Cover (Oktas)	Temp Start / End (°C)
Activity Survey	21/07/2022	21:03	21:03/ 23:03	3	7/8	22/ 20
Activity Survey	13/08/2022	20:20	20:20/ 22:20	2	8/8	20/ 18

Automated Detector Surveys

- 2.16. To supplement the bat activity surveys, three static automated bat detectors (AnaBat Express detector and/ or SM2 detectors) were deployed at the Site based on current best practice guidelines. The positioning of the static detectors was as follows, and illustrated in **Figure 4**:
 - on top of the northern boundary wall adjacent to the River Thames under the Budweiser sign at grid reference TQ 2044276093;
 - on top of the northern boundary wall adjacent to the River Thames but to the east of the Site at grid reference TQ2063376025 and to the west of the Site; and
 - on a tree at grid reference TQ2030076112 at the north western extent of the Site in 2021 and TQ20237600 at the north of Watney's Sports Ground in 2022.
- 2.17. The static detector recorded for five consecutive nights in October 2021, July 2022 and August 2022. Table 9 and 10 below provides a summary of the bat survey parameters for each deployment session.

Table 9: Summary of Automated Detector Bat Surveys 2021

Survey Month	Date	Sunset Time	Max Wind speed (mph)	Rain (inches)	Average Day Temp ºC
	04/10/2021	18:33	13	0	14
	05/10/2021	18:31	23	1.3	13
October 2021	06/10/2021	18:28	8	0	14
	07/10/2021	18:24	4	0	15
	08/10/2021	18:21	9	0	16



Table 10: Summary of Automated Detector Bat Surveys 2022

	<u> </u>	<u> </u>	<u></u>		
Survey Month	Date	Sunset Time	Max Wind speed (mph)	Rain (inches)	Average Day Temp °C
	21.07.2022	21:04	13	0	20
_	22.07.2022	21:03	8	0	19
July 2022	23.07.2022	21:02	12	0	21
_	24.07.2022	21:00	14	1	20
_	25.07.2022	20:59	14	0	20
	11.08.2022	20:30	8	0	32
_	12.08.2022	20:28	9	0	30
August 2022	13.08.2022	20:27	9	0	32
	14.08.2022	20:25	5	0	31
	15.08.2022	20:23	8	0	28

Bat Recordings Data Analysis

- 2.18. The sound recordings for the evening emergence and bat activity survey were analysed using BatExplorer and Kaleidoscope software respectively. Identification of bat calls was undertaken using the parameters set out by Russ¹².
- 2.19. The sound recordings for the automated survey were analysed using BatExplorer and AnaLook software and bat call parameters from Russ¹³. For the purposes of analysis, a bat pass correlates to a single 15 second recording. Due to the extensive data set recorded by the automated detectors during July and August 2022, auto species identification filters were used to identify common pipistrelle and soprano pipistrelle bats using parameters such as their peak frequency, call shape, recording quality and plausibility. Parameters used for each species can be found in Appendix D.

Peregrine Falcon and Breeding Bird Surveys

- 2.20. Due to the recorded presence of a peregrine falcon on Site on the 4th October 2021, a series of three peregrine falcon and breeding bird surveys were undertaken over the Site between June and July 2022. The surveys were undertaken by Bill Haines MCIEEM and predominantly undertaken at the buildings on Site to determine if peregrine falcon are utilising the Site. The surveys also recorded all breeding bird species on and adjacent to the Site. Due to the size of the Site, the completion of three survey visits was considered proportionate to give an overall picture of the use of the Site by breeding birds.
- 2.21. As part of the surveys a map was produced for each survey visit showing the locations of all birds seen and / or heard and the numbers of individuals for each survey visit (see Results section).

 Birds seen overflying the Site but not interacting with it were not recorded.

¹²Russ, J., 2012. British bat calls: a guide to species identification. Pelagic publishing

¹³ Russ, J., 2012. British bat calls: a guide to species identification. Pelagic publishing



2.22. The surveys were carried out in the late morning and/or afternoons and lasted approximately 2 to 3 hours in suitable weather conditions (i.e. not in heavy rain, poor visibility or wind greater that Beaufort 4). The parameters of the three breeding bird surveys are detailed in **Table 11**.

Table 11: Peregrine Falcon and Breeding Bird Survey Parameters

Visit		• • • • • • • • • • • • • • • • • • • •		Cloud Wind		Temp.	
No.	Date	and Leaving Time	ring Cover (Oktas) <i>(Beaufort)</i>		Precipitation	(°C)	Visibility
1	10/06/2022	11:00 / 14:45	6/8	2	0	21	Good
2	24/06/2022	13:25 / 15:50	7-8	3-4	Short rain shower	21	Good
3	12/07/2022	13.00 / 15.20	7/8	1-2	0	29	Good

Consultation

2.23. At the end of May 2022, consultation was received from LBRuT on the PEA and PSR that accompanied the Applications in March 2022. The comments received of relevance to this report for both Application A and B were the same and are detailed in Table 12 along with the resultant actions undertaken to address the comments following a meeting with LBRuT on the 7th July 2022.

Table 12: LBRuT Consultation 2022

LBRuT Comments - Application A and B

Surveys have all been carried out in October 2021 - therefore not following their own (or the BCT 2016 guidance) recommendations (para or monthly for 3 months (between May to August). The Protected Species report (para 2.15) states that the reason for this is due to the As part of the supplementary surveys, update internal previous planning application programme hearing in July 2021, it then goes on to say that this is not a constraint due to the historical data" and "further surveys will be carried to determine if amendments are necessary to the mitigation measure currently being proposed and to inform a licence application for NE". However, each survey is respectfully 3 years, 1 month and 2 years, 1 month apart, which is out of date and not as per the guidance.

Internal surveys are still not supplied despite the availability of drones and other technology that could assist.

The Dec 2019 EIA has the Maltings wrongly numbered as B9 not B8

The LPA expect a fully compliant suite of bat surveys over the summer period for a site of this complexity and size adjacent to the River Thames in the north and connecting to the railway and beyond in the south. The survey

Resultant Action - Application A and B

It was agreed with LBRuT that supplementary surveys as detailed in full consultation (provided in Appendix A) to build on those undertaken in October 2021 would be 5.18 of the PEA dated March 2022) for surveys sufficient to address LBRuT comments on the Applications to be carried out either 2 with a two week break submitted in March 2022 (to provide LBRuT with an 'in date' ecological evidence base to determine the application with regards to ecology).

surveys of the buildings on Site will be undertaken where safe access can be provided but given the structural issues at building B9 the Maltings no internal surveys will be surveys carried out "providing a robust baseline undertaken at this building. Instead, an automated bat detector (SM2) will be deployed inside the ground level doorway of the Maltings and set to record for a 5-night period to determine if 'a peak' in calls are recorded just before or at peak emergence times (will also look at re-entry timing data for bat species). This idea was proposed specifically for brown long-eared bats (but will cover other bat species) given LBRuT's previous comments and the roosting behaviour of the species that will normally 'warm up' within an internal void before emerging from the roost

> Given the health and safety issues at the buildings regarding internal surveys, but considering the use of the automated detector survey at building B9 the Maltings, it was agreed as part of the consultation that drone surveys would not be required.

As part of the evening emergence and pre-dawn re-entry surveys it was agreed as part of the consultation that those



LBRuT Comments - Application A and B

repot needs to contain raw data and a plan to show the movement of bats seen on site

and there is concern that carrying out phase 1 works adjacent to the potential nesting location will scare it away - this will need to be considered by a falcon expert.

Resultant Action - Application A and B

undertaken at Building B9 the Maltings will be supplemented with Infra-Red night vision aids given the size of the building The Peregrine falcon is a real asset for the site and as it was recorded in 2019 to be a pipistrelle day roost. As such the use of thermal imaging surveys would not be required. It was agreed as part of the consultation that the use of drone, IR and Thermal imaging surveys would not be required at other buildings/trees on Site. Whilst it was agreed that no other additional surveys for notable or protected species would be required as part of the consultation, the results of the peregrine and breeding bird surveys undertaken for the Temporary Filming Application would be included within this report.

2.24. All consultation e-mails and responses with LBRuT are provided in Appendix A.

Constraints and Limitations

- 2.25. It should be noted that the building numbering referred to in this report has now been amended to align with system used for the planning application. This system therefore supersedes the numbering system used in the historical ecological assessments referenced in Table 1.
- 2.26. Given the results of the Internal PRA review as detailed in section 3 below, it is assessed that the results of the PRA undertaken as part of the PEA in August 2021, are still valid and do not present a significant constrain given the supplementary surveys (evening emergence and/or pre-dawn reentry and the use of automated detectors) undertaken.
- 2.27. During the evening emergence survey at building 10/11 on the 27th June 2022, no access was possible to the Site side of the building. Instead, the survey was undertaken from the adjacent road and from vantage points through the locked gate adjacent to the security building. As a result of this constraint an additional evening emergence survey was undertaken on the 2nd August 2022 at the PRFs not covered by the survey on the 27th June 2022.
- 2.28. It should be noted that during the surveys in 2022 at building B9 the Maltings the tree line at the Site's northern elevation slightly limited visibility. However, as surveyors were positioned in opposite locations and a dawn survey was also carried out, the risk of any emergences or reentries being missed was reduced. Therefore, this is not considered to be a significant limitation.
- 2.29. The northern boundary wall inspections in 2021 and 2022 were undertaken as an alternative method to evening emergence/pre-dawn re-entry surveys. This was due to the associated number of surveyors that would be required to ensure full survey coverage due to the number of PRFs recorded. However, where a full endoscope inspection of a PRF could not be undertaken an evening emergence / pre-dawn re-entry survey was undertaken in 2021, to ensure a robust survey approach was undertaken.
- 2.30. The automated bat detector located on a tree at grid reference TQ20237600 at the north of Watney's Sports Ground in failed to record in July 2022, due to technical issues. However, and given the number of automated detectors deployed and that recordings were collated in October 2021 and August 2022, this is not assessed to be a significant constraint to the assessment.
- 2.31. Although the automated bat detector deployed in July 2022, on top of the northern boundary wall adjacent to the River Thames under the Budweiser sign at grid reference TQ 2044276093 was set to record for a 5 night period only 4 nights worth of data was recorded. However, the loss of one



- nights worth of data is not assessed to be a significant constraint to the assessment.
- 2.32. It should be noted that the activity survey undertaken in October 2021, did not start at the time of sunset (18:32) but 20 minutes after (18:51), this does not comply with the recommended start times of activity surveys. However, the loss of 20 minutes' worth of data is not assessed to be a significant constraint to the assessment and surveys in 2022 have supplemented this survey.
- 2.33. When undertaking the bat recordings data analysis it should be noted that there is considerable crossover between echolocation calls within British bat species¹⁴. Given the close parameters of the frequency range of the calls of certain bat species, analysis of bat calls from the group *Myotis* is fraught with difficulties. Whilst slope, call duration and inter-pulse intervals have been used as indicators to separate *Myotis* calls from frequency modulated *Pipistrellus* calls, for the purposes of this assessment, identification has only been made down to the group *Myotis* level. Both Frequency Modulation (FM) -qCF (quasi Constant-frequency calls) and qCF parameters are provided within Russ for identifying *Nyctalus* species, however there is a large amount of crossover between the parameters of the *Nyctalus* species. The lower frequency vocalisation calls of noctule bats can be differentiated from Leisler's *Nyctalus leisleri* as the Leisler's bat does not echolocate below 20.9 kHz. However, as there is crossover between the parameters of vocalisations above this frequency, Leisler's bats can be particularly difficult to differentiate from noctule and where this has occurred identification has been made to the group *Nyctalus* level. In addition, any recordings of long-eared bats have been noted as being of brown long-eared given the location of the Site.
- 2.34. As part of the peregrine falcon and breeding bird surveys internal access was restricted at buildings 2, 3, 4, 5, 7, 8, 9 (the Maltings), 13, 17 and 18 as the buildings due to structural integrity concerns. Instead, vantage points were sought during the surveys to record bird behaviour.
- 2.35. All other contractors, designers and the client should be aware of the following:
 - The design recommendations (ecological mitigation/compensation and enhancement measures) detailed within this report are assessed to be the most effective ecological solution at this stage of the project;
 - No other pre-construction information has been provided, obtained or referred to during the preparation of this report (including, but not limited to, services information, geotechnical reports and ordnance reports):
 - In deciding whether and how to progress with this project, it will be incumbent upon the client, designers and contractors to obtain and refer to relevant pre-construction and maintenance information, as required by the Construction (Design and Management) Regulations to ensure compliance.

¹⁴ Russ, J. 2012. British Bat Calls. A Guide to Species Identification.



3. Results

Preliminary Roost Assessment

- 3.1. A review of the buildings on Site was undertaken to determine which ones would warrant or could be subject to an internal PRA following the PRA undertaken as part of the PEA in August 2021.
- 3.2. Building B1, B2, B3, B4, B5, B6, B7, B8, B12, B13, B14, B15, B16 and B17 were either all flat roofed or had no roof void. All of these buildings were all assigned a negligible potential to support roosting bats (excluding B12, B14, B17 and B18 the off Site Jolly Gardeners pub) as part of the PRA and as such an internal PRA was not assessed to be necessary.
- 3.3. Whilst building 10/11 did have a pitched roof no physical access was possible due to the removal of an external metal staircase to the eastern extent of the building. In addition, no access was possible to the roof voids at the western extent of the building as on review of the asbestos reports no inspection for asbestos containing materials (ACMs) was previously undertaken within the void by the asbestos surveyors.
- 3.4. Whilst B18 the Jolly Gardeners pub did have a pitched roof it is located off Site and therefore outside the ownership of the Applicant, as such no access was possible.
- 3.5. Finally, and on review of the asbestos reports and historical issues raised regarding the structural integrity of the building B9 the Maltings, in consultation with the Client team we were again advised that access internally within the Maltings was prohibited. Permission was however provided to deploy the automated bat detector (SM2 detector) just inside the entrance of the Maltings as a supplementally surveys technique as agreed with LBRuT.

Northern boundary wall Inspection

3.6. The results of the northern boundary wall inspection completed in 2021 and 2022 are detailed in Appendix C. Potential Roosting Features (PRFs) were recorded both on the interior and exterior of the wall (Site and river side) during the PRA as part of the PEA. As a result of the inspection no roosting bats were recorded.

Evening Emergence and/or Pre-Dawn Re-entry Surveys

- 3.7. The following results section should be read in conjunction with the bat surveyor positions detailed on **Figure 3**.
- 3.8. During the 2021 survey, no bats were observed emerging from or entering buildings B14, B13, B9 the Maltings, B12, B10/11, B17, B18 the off Site Jolly Gardeners pub, the southern boundary wall, the northern boundary wall (at PRF 10a, 10b and 13) or trees T3, T10, T43, T67, T71, T83, T157 and T321 during the 2021 survey. However, foraging and commuting activity by common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctula, Nyctalus sp, Myotis sp and* brown long eared bats *Plecotus auratus* were recorded during the surveys, as detailed within **Table 13**.



Table 13: Results of Evening Emergence Surveys 2021

Building/Tree Number	Survey Type / Date	Survey Results	Summary
B9	Evening emergence: 04/10/2021	Foraging and commuting activity (c.28 passes) from common pipistrelle, soprano pipistrelle, brown long eared, noctule and Myotis bats.	No bat roosts recorded
		The majority of calls were from soprano and common pippistrelle bats and were heard not seen. One pass was made by a noctule bat heard not seen and three passes were made by a brown long eared bat heard, but not seen.	
B10/11	Evening emergence: 05/10/2021:	Foraging and commuting activity (c.6 passes) from soprano pipistrelle all heard not seen.	No bat roosts recorded
B12	Evening emergence: 05/10/2021	Foraging and commuting activity (c.4 passes) from soprano pipistrelle and one common pipistrelle bat all heard, but not seen.	No bat roosts recorded
B13	Evening emergence: 05/10/2021	One pass by a soprano pipistrelle bat flying north.	No bat roosts recorded
B14	Evening emergence: 05/10/2021	Foraging and commuting activity (c.7 passes) from common pipistrelle and soprano pipistrelle bats.	No bat roosts recorded
		The majority of activity during the survey was by soprano pipistrelle bats. Three passes were recorded close to B1 flying north, the rest were heard, but not seen.	
B17	Evening emergence: 11/10/2021	Foraging and commuting activity (c.8 passes) from Nathusius, soprano and common pippistrelle bats and several social calls from common pipistrelle.	No bat roosts recorded
		The majoruty were heard, but not seen, one common pippistrelle passed Northeast of B12	
B18 the off Site Jolly Gardeners pub	Evening emergence: 07/10/2021	Foraging and commuting activity (c.6 passes) from and common pippistrelle bats and one possible brown long eared bat.	No bat roosts recorded
		All common pippistrelle bats were heard not seen and th brown long eared bat was seen flying north between B12 and B6	
Southern boundary wall	Evening emergence: 14/10/2021	Foraging and commuting activity (c.9 passes) from soprano pipistrelle and common pipistrelle bat all heard not seen apart from social calls heard by soprano pippistrelle.	No bat roosts recorded
Northern boundary wall	Evening emergence: 19/10/2021 (at PRF 10a, 10b and 13 that could not be fully inspected by the northern boundary wall	Foraging and commuting activity (c.10 passes) from myotis, soprano and common pippistrelle bats. The majorty of of bats were common and soprano pipistrelles foraging, one myotis was heard, but not seen.	No bat roosts recorded



Building/Tree Number	Survey Type / Date	Survey Results	Summary
	inspection on 4 th October 2021)		
T43 and T44	Evening emergence: 04/10/2021	Foraging and commuting activity (c.12 passes) from Nathusius' soprano and common pippistrelle bats. All were heard not seen and social calls were heard from common and soprano pipistrelle bats.	No bat roosts recorded
T67 and T68	Evening emergence: 07/10/2021	No bats recorded	No bat roosts recorded
T71	Evening emergence: 07/10/2021	Foraging and commuting activity (c.7 passes) from soprano and common pipistrelle bats. Common pipistrelles were seen flying along treeline and the rest were heard, but not seen.	No bat roosts recorded
T75	Evening emergence: 04/10/2021	Foraging and commuting activity (c.8 passes) from soprano pipistrelle bats all heard, but not seen.	No bat roosts recorded
T78	Evening emergence: 11/10/2021	Foraging and commuting activity (c.8 passes) from soprano and common pipistrelle bats all heard, but not seen.	No bat roosts recorded
T83	Evening emergence: 11/10/2021	No bats recorded	No bat roosts recorded
T157	Evening emergence: 11/10/2021	Foraging and commuting activity (c.3 passes) from soprano and common pipistrelle bats all heard, but not seen.	No bat roosts recorded
Tree Group G321	Evening emergence: 19/10/2021	Foraging and commuting activity (c.4 passes) from common pipistrelle bats seen foraging to the west of the trees.	No bat roosts recorded

3.9. During the 2022 survey, 2 common pipistrelle bats were observed re-entering the Southern Boundary Wall on the 3rd August. At tree T75 a single common pipistrelle was recorded re-entering the tree on 17th August and a soprano pipistrelle was recorded re-entering the tree on 31st August. In addition, and during the surveys, foraging and commuting activity by common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctula* and serotine *Eptesicus serotinus* was recorded, as detailed within **Table 14**.

Table 14: Results of Evening Emergence and/or Pre-dawn Re-Entry Surveys 2022

Building/Tree Number	Survey Type / Date	Survey Results	Summary
B9 the Maltings	Dawn re-entry: 05/08/2022	Foraging and commuting activity (c.18 passess) from common pipistrelle and soprano pipistrelle all heard not seen. The first bat recorded was a soprano pippistrellle at 04:19.	No bat roosts recorded



Building/Tree	Survey Type /	Survey Results	Summary
Number	Date		
B9 the Maltings	Evening emergence: 24/08/2022	Foraging and commuting activity (c.46 passess) from common pipistrelle, soprano pippistrelle and noctule. A clear flight path was noted south to north towards the river. The first bat recorded was a noctule at 20:17.	No bat roosts recorded
B10/11	Evening emergence: 27/06/2022	Foraging and commuting activity (c.47passess) from common pipistrelle, soprano pipistrelle noctule and serotine bats. Mainly common pippistrelle and noctule bats were recorded.	No bat roosts recorded
		Three common pipistrelle were seen foraging in the courtyard and towards the chimney, and one soprano pipistrelle was seen foraging in the courtyard.	
		Serotine was first recorded on Site two hours after sunset.	
B10/11	Evening emergence:	Foraging and commuting activity from common pipistrelle, soprano pipistrelle, and noctule bats.	No bat roosts recorded
	11/07/2022	Mostly common pipistrelle and soprano pipistrelle were recorded with common pipistelle seen foraging by a tree adjacent to the building, and a number of other common pipistrelle seen commuting throughout the survey.	
		The first bat recorded on Site was a noctule 15 minutes after sunset.	
B10/11	Evening emergence: 02/08/2022	Foraging and commuting activity (c.7 passess) all from soprano pippistrelle. One pass infront of the building with the rest of thr calls all heard not seen. Activity was heard away from the building. The first bat recorded on site was 53 minutes	No bat roosts recorded
_	_	after sunset.	
B12	Dawn re-entry: 21/06/2022	Foraging and commuting activity (c.67 passess) from common pipistrelle, soprano pipistrelle and noctule bats. Mainly common pipistrelle were recorded, with this species seen commuting around the western edge of the building on four occasions during the survey.	No bat roosts recorded
B13	Evening emergence: 25/07/2022	Commuting activity (c. 12 passess) from noctule, soprano and common pippistrelle bats all heard not seen.	No bat roosts recorded
B14	Evening emergence: 20/06/2022	Foraging and commuting activity (c.42 passess) from common pipistrelle, soprano pipistrelle and noctule bats starting 30 minutes after sunset with one common pipistrelle seen foraging south to north-west around the buildings edge.	No bat roosts recorded
B17	Evening emergence: 02/08/22	Foraging and commuting activity (c.2 passes) from common pippistrelle in front of the building from south to north towards the river.	No bat roosts recorded



Building/Tree Number	Survey Type / Date	Survey Results	Summary
B18 the off Site Jolly Gardeners pub	Dawn re-entry: 26/07/2022	Low levels of activity (c.4passess) from common pippistrelle (3 passes) and serotine (1 pass). The first bat recorded was of a common pippistrelle at 4:02.	No bat roosts recorded
Southern Boundary Wall	Dawn re-entry: 03/08/2022	Two common pipistrelle bats seen entering behind the steel girder of the southern wall. One common pipistrelle pass from west to east.	Bat roosts recorded
Southern Boundary Wall	Evening emergence: 30/08/2022	Low levels of activity recorded.	No bat roosts recorded
T43	Evening emergence: 10/08/2022	Low levels of activity recorded. 2 passes from, a soprano and common pippistrelle at 21:05 and 21:54 seen commuting.	No bat roosts recorded
T44	Evening emergence: 10/08/2022	Low levels of activity recorded. 1 pass from a common pippistrelle at 21:29 heard not seen.	No bat roosts recorded
T67	Evening emergence: 16/08/2022	One common pippistrele seen commuting 27 minutes after sunset from west to north. No other bats recorded.	No bat roosts recorded
T68	Evening emergence: 16/08/2022	Foraging and commuting activity (c.16 passes) from common pippistrelle soprano pippistrelle and myotis bats. All heard not seen.	No bat roosts recorded
T71	Evening emergence: 16/08/2022	No bats recorded.	No bat roosts recorded
T75	Dawn re-entry: 17/08/2022	Common pipistrelle bat seen re-entering into split feature 4m above ground. 1 pass from soprano pipistrelle recorded at 05:08.	Bat roost recorded
T75	Dawn re-entry: 31/08/2022	Soprano pipistrelle bat seen re-entering into split feature 4m above ground	Bat roost recorded
T78	Dawn re-entry: 17/08/2022	Three passes from soprano pipistrelle bats heard not seen.	No bat roosts recorded
T83	Dawn re-entry: 17/08/2022	One pass from common pipistrelle flying east to west. No other bats recorded.	No bat roosts recorded
T157	Dawn re-entry: 11/08/2022	Low levels of activity recorded. 1 common pippistrelle pass at 4:08 heard not seen.	No bat roosts recorded
T321	Evening emergence: 10/08/2022	No bats recorded.	No bat roosts recorded

3.10. The results of the automated detector deployed just inside the entrance of building B9 the Maltings, recorded four species of bat being common pipistrelle, soprano pipistrelle, brown long-eared and myotis species.

Table 15: Results of Automated Detector Survey Building B9 The Maltings August 2022



Recording Period and Location	Common Pipistrelle	Soprano Pipistrelle	Brown Long Eared	Myotis Species	Total no. of Bat Passes
01.08.2022-05.08.2022 Detector located just inside the entrance of the Maltings grid reference TQ20427609	331	17	2	9	359
Total	331	17	2	9	359

3.11. **Table 16** provides a summary of the earliest recording times for each of the automated detectors deployed in 2021 and 2022. For the location of the automated detector refer to **Figure 4**.

Table 16: Automated Detector Earliest Recording Times Building B9 The Maltings August 2022

Bat Species	Earliest approximate Time (mins after sunset) August 2022	Latest approximate Time (mins before sunrise) August 2022
Detector located just inside the entrance of the Maltings grid reference TQ20427609		
Common Pipistrelle	-9	-25
Soprano Pipistrelle	+108	-236
Brown Long Eared	+47	-260
Myotis sp	+99	-102

Bat Activity Survey

- 3.12. Descriptions of bat activity recorded during the activity survey is provided below and illustrated in **Figure 5.**
- 3.13. During the 2021 survey, a total of 61 bat passes were recorded along the transect survey route (Figure 5) in October. Of these, 54 passes were by soprano pipistrelle bats, 1 by brown longeared bat and 6 by common pipistrelles bats. The first bat call recorded was of a soprano pipistrelle at 19:01 (28 minutes after sunset) which was heard but not seen.
- 3.14. During the 2022 surveys, a total of 165 bat passes were recorded along the transect survey route (slightly altered connect down to Mortlake Train Station) in both July (Figure 6) and August (Figure 7). Of these, 51 passes were by soprano pipistrelle bats, 103 passes by common pipistrelles bats and 2 by *Pipistrellus* species. In July, the first bat call recorded was of a soprano pipistrelle at 21:28 (25 minutes after sunset) which was heard but not seen. In August, first bat call recorded was of a soprano pipistrelle at 20:42 (19 minutes after sunset) which was heard but not seen.

Automated Detector Surveys

3.15. A total of six confirmed bat species were recorded by the automated detectors deployed across the Site in 2021, the majority of the recordings were made by common and soprano pipistrelle bats. Brown long eared, noctule, nathusius' pipistrelle and myotis bats were also recorded. As detailed within the limitation section of this report, identification down to species level could not be made for myotis species.



- 3.16. A total of eight confirmed bat species were recorded by the automated detectors deployed across the Site in July and August 2022, the majority of the recordings were made by common and soprano pipistrelle bats. Brown long eared, nathusius' pipistrelle, noctule, leisler, serotine and myotis bats were also recorded. As detailed within the limitation section of this report, identification down to species level could not be made for myotis species.
- 3.17. **Table 17 to 19** provides a summary of the number of passes recorded by each species during each automated bat detector survey session.



Table 17: Results of Automated Detector Surveys October 2021

Recording Period and Location	Common Pipistrelle	Soprano Pipistrelle	Nathusius' Pipistrelle	Noctule	Brown Long Eared	Nyactulus Species	Myotis Species	Total no. of Bat Passes
04/10/2021 - 08/10/2021								
Detector located on top of the northern boundary wall adjacent to the River Thames under the Budweiser sign at grid reference TQ 2044276093	511	576	-	3	1	1	2	1095
04/10/2021 - 08/10/2021								
Detector located on top of the northern boundary wall adjacent to the River Thames to the east of the Site at grid reference TQ2063376025	139	99	1	5	-	1	1	246
04/10/2021 - 08/10/2021								
Detector located to the west of the Site and on a tree at grid reference TQ2030076112	56	42	-	1	1	1	-	101
Total	706	717	1	9	2	3	3	1441



Table 18: Results of Automated Detector Surveys July 2022

Recording Period and Location	Common Pipistrelle	Soprano Pipistrelle	Nathusius' Pipistrelle	Noctule	Leisler	Serotine	Brown Long eared	Nyactulus Species	Myotis Species	Total no. of Bat Passes
21.07.22 to 24.07.22*										
Detector located on top of the northern boundary wall adjacent to the River Thames under the Budweiser sign at grid reference TQ 2044276093	1700	2409	-	2	1	1	5	18	-	4237
21.07.22 to 26.07.22										
Detector located on top of the northern boundary wall adjacent to the River Thames to the east of the Site at grid reference TQ2063376025	628	417	1	15		-	-	-	4	1065
27.07.22 to 31.07.22**										
Detector located on a tree at grid reference TQ20237600 at the north of Watney's Sports Ground in 2022*	-		-	-		-		-		
Total	2328	2826	1	17	1	1	5	18	4	5302

^{*}No recordings made on the night of the 25th July due to technical issues ***Automated detector failed to record due to technical issues



Table 19: Results of Automated Detector Surveys August 2022

Recording Period and Location	Common Pipistrelle	Soprano Pipistrelle	Pipistrellu s sp.	Nathusius , Pipistrelle	Noctule	Leisler	Serotine	Brown Long eared	Nyactulus Species	Myotis Species	Total no. of Bat Passes
10.08.2022-15.08.2022 Detector located on top of the northern boundary wall adjacent to the River Thames under the Budweiser sign at grid reference TQ 2044276093	5205	1597	8	-	8	5	-	12	22	2	6856
11.08.2022-15.08.2022 Detector located on top of the northern boundary wall adjacent to the River Thames to the east of the Site at grid reference TQ2063376025	1489	423	-	1	11	-	2	-	-	17	1943
11.08.2022-15.08.2022 Detector located on a tree at grid reference TQ20237600 at the north of Watney's Sports Ground in 2022	398	293	-	2	16	-	1	3	-	4	716
Total	7092	2313	8	3	35	5	3	15	22	23	9515



3.18. **Table 20** provides a summary of the earliest recording times for each of the automated detectors deployed in 2021 and 2022. For the location of the automated detector refer to **Figure 4**.

Table 20: Automated Detector Earliest Recording Times October 2021

Table 20. Automated Detector Lamest	Troopraing Fillios October 2021				
Bat Species	Earliest approximate Time (mins after sunset)				
Detector located on top of the northern boundary wall adjacent to the River Thames under the Budweiser sign at grid reference TQ 2044276093					
Common Pipistrelle	+26				
Soprano Pipistrelle	+18				
Myotis sp	+340				
Noctule	+62				
Brown Long eared	+79				
Nyctalus sp	+464				
Detector located on top of the northern the Site at grid reference TQ206337602	boundary wall adjacent to the River Thames to the east of				
Common Pipistrelle	+42				
Soprano Pipistrelle	+42				
Noctule	+69				
Nathusius Pipistrelle	+385				
Myotis sp	+335				
Nyctalus sp	+477				
Detector located to the west of the Site	and on a tree at grid reference TQ2030076112				
Common Pipistrelle	+48				
Soprano Pipistrelle	+46				
Brown Long Eared	+67				
Noctule	+175				
Nyctalus sp	+63				



Table 21: Automated Detector Earliest Recording Times July and August 2022

Bat Species	Earliest Recording Times July and Aug Earliest approximate Tim	ne Earliest approximate Time
	(mins after sunset) July 2022	(mins after sunset) August 2022
Detector located on top of the no Budweiser sign at grid reference	orthern boundary wall adjacent to the R TQ 2044276093	liver Thames under the
Common Pipistrelle	+20	+24
Soprano Pipistrelle	+21	+18
Myotis sp	-	>240
Noctule	+180	+82
Leisler	+133	+121
Nyctalus sp	+33	+39
Serotine	>240	-
Brown Long Eared	+34	+273
Detector located on top of the no Site at grid reference TQ2063376	rthern boundary wall adjacent to the R 025	liver Thames to the east of the
Common Pipistrelle	+6	+25
Soprano Pipistrelle	+18	+26
Myotis sp	+77	+28
Noctule	+25	+38
Serotine	-	+95
Nathusius Pippistrelle	+68	-
Detector located to the west of the	ne Site and on a tree at grid reference T	Q2030076112
Common Pipistrelle	NA*	+32
Soprano Pipistrelle	NA*	+19
Brown Long Eared	NA*	+193
Noctule	NA*	+56
Nathusius Pippistrelle	NA*	+114
Myotis sp.	NA*	+155

^{*}No recordings, automated detector failed to record due to technical issues

Peregrine Falcon and Breeding Bird Surveys

3.19. On the 4th October 2021, a single peregrine falcon was heard calling from the direction of building B3 during the day and then during an evening emergence bat survey on the same day at building B9, where a single peregrine falcon was observed entering the south west corner (Appendix B; **Plate 1**) (8 storeys high). The bird was recorded entering building B9 through a gap in the wooden boarding 20 minutes post sunset (just as light levels were fading). The bird was not observed to have re-emerged from the building for the remainder of the bat survey, by any of the four surveyors that surrounded the building. It is assessed that that the peregrine recorded entering building B9 has only recently started to roost at the Site, and it is unlikely that a breeding pair have taken



residence.

- 3.20. This assessment has been based on the results of the data search as extended through consultation with London Peregrine Partnership (LPP), and given this is the only evidence / sighting of peregrine falcon at the Site during a six-year period (when ecologists have been on Site undertaking various surveys for the previous planning applications). In consultation with the LLP on the 28th September 202, regarding the presence of potential peregrine falcons at the vicinity of the Site (before the recordings in October 2021), LPP stated that no known records of breeding pairs are in the local area either recent or historical. In addition, the LPP also stated that: there are records of a pair roosting on Saint Matthias Church (2.5km to the south west of the Site) during the past few years, and sightings this year (2021) of at least one bird on Holy Trinity Church (2km to the south west of the Site). In addition, a nesting tray has now been installed at St Matthias, but it has not yet been made use of.
- 3.21. In order to avoid the contravention of legislation, a series of peregrine falcon and breeding bird surveys were undertaken between June and July 2022, as a result the recorded presence of peregrine in October 2021, roosting in building B9 the Maltings. The results of the peregrine falcon and breeding bird surveys carried out in 2022 are noted below.
- 3.22. The following results section should be read in conjunction with **Figure 8, 9** and **10**. In summary a total of 12 bird species were seen either on or immediately adjacent to the Site. Birds seen overflying the Site but not interacting with it were not recorded.
- 3.23. No peregrine falcon *Falco peregrinus* were recorded on any of the three visits. It is thought that the incidental recording of the peregrine in October 2021, was a single occurrence.
- 3.24. Feral pigeon *Columba livia* was the only species proven to be breeding on Site as confirmed within building 3. In addition, feral pigeon nesting was confirmed at building 6, 8, 9 and 17 and other activity (perching flying in/out etc) confirmed at buildings 3, 4, 5, 12 and 13. Grey wagtail were recoded signing and lesser black backed gull perching on/from the roof of building 12. The results of the building inspections undertaken during Site visits 1 to 3 are detailed in **Appendix E**, **F** and **G**.
- 3.25. A list of the species recorded and their likely breeding status is detailed in **Table 22**. This table also details each species recorded on each survey visit along with their notable status.

Table 22: Results of Peregrine Falcon and Breeding Bird Surveys

Bird Species	Species Code	Notable Status	Likely Breeding Status	Number of Birds Recorded Per Visit	Total Number of Birds Recorded
Lesser black- backed gull Larus fuscus	LB	Amber	Possible breeding	Visit 1 (10 June 2022) - 2 Visit 2 (14 June 2022) - 6 Visit 3 (12 July 2022) – 2	10
Feral pigeon Columba livia	FP	N/A	Confirmed breeding	Visit 1 (10 June 2022) - 50 Visit 2 (14 June 2022) - 22 Visit 3 (12 July 2022) -28	100
Wood pigeon	WP	Amber	Probable Breeding	Visit 1 (10 June 2022) - 2	4



Bird Species Notable Likely Breeding Number of Birds Recorded Per	Total Number of
, , , , , , , , , , , , , , , , , , , ,	Birds Recorded
Columba Visit 2 (14 June 2022) – N/A	
palumbus Visit 3 (12 July 2022) – 2	
31	3
pica breeding Visit 2 (14 June 2022) - 1	
Visit 3 (12 July 2022) – N/A	
,	7
crow breeding Visit 2 (14 June 2022) - 1	
Corvus Visit 3 (12 July 2022) – 4	
Wren WR Amber Possible Visit 1 (10 June 2022) - N/A	1
Troglodytes breeding Visit 2 (14 June 2022) - N/A	
troglodytes Visit 3 (12 July 2022) – 1	
Starling SG Red and Probable Visit 1 (10 June 2022) - N/A	20
Sturnus S41 breeding Visit 2 (14 June 2022) - N/A	
vulgaris NERC Visit 3 (12 July 2022) – 20	
2006	
Robin R. N/A Possible Visit 1 (10 June 2022) - 1	1
Erithacus breeding Visit 2 (14 June 2022) - N/A	
rubecula Visit 3 (12 July 2022) - N/A	
House HS Red and Probable Visit 1 (10 June 2022) - N/A	1
sparrow S41 breeding Visit 2 (14 June 2022) - 1	
Passer NERC Visit 3 (12 July 2022) - N/A domesticus Act	
2006	
Grey GL Amber Probable Visit 1 (10 June 2022) - 1	2
wagtail breeding Visit 2 (14 June 2022) - 1	
Motacilla Visit 3 (12 July 2022) - N/A cinerea	
Pied wagtail PW N/A Possible Visit 1 (10 June 2022) - 1	2
Motacilla breeding Visit 2 (14 June 2022) - 1	
alba Visit 3 (12 July 2022) - N/A	
•	2
Carduelis breeding Visit 2 (14 June 2022) - 1 carduelis	



4. Discussion and Recommendations

Bats - Roosting and Foraging and Commuting

- 4.1. No roosting bats were recorded at the Site during the surveys in October 2021. However, and as a result of the supplementary surveys undertaken in July and August 2022, roosting bats were recorded at the southern boundary wall and tree T75. Although building B9 the Maltings, is a historical bat roost site (soprano pipistrelle day roost recorded in 2019) no roosting bats were recorded during the surveys in 2021 or 2022, however and as a precautionary approach building B9 the Maltings, is still assessed to be a soprano pipistrelle day roost (low numbers).
- 4.2. At the southern boundary wall two common pipistrelle bats were seen re-entering at different locations behind a steel girder and the wall itself (**Appendix B**, Plate 3 and 4). Common pipistrelle bats are considered one of the most common and widespread bat species in England (population estimate of 3,040,000)¹⁵. As such this species is of a low conservation status. Given the number of bats recorded and as they were re-entering the roost at dawn, it is assessed that a common pipistrelle day roost (low numbers) is present as defined in current best practice guidance¹⁶.
- 4.3. At tree T75, a common pipistrelle bat was seen re-entering a split/peeled bark feature (**Appendix B**, Plate 5 and 6) 4m above ground level and on a separate survey a soprano pipistrelle re-entering the same feature. As detailed above in terms of conservation status, similar to common pipistrelle, soprano pipistrelle bats are also one of the most common and widespread bat species in England (population estimate of 2,980,000)¹⁷. As such this species is of a low conservation status. Given the number of bats recorded and as they were re-entering the roost at dawn, it is assessed that a common and soprano pipistrelle day roost (low numbers) is present in tree T75, as defined in current best practice guidance¹⁸.
- 4.4. The supplementary automated detector survey at building B9 the Maltings, only recorded a total of 395 passes over a 5 night period in August. It was found that no 'peak' in calls had occurred just before or at peak emergence /re-entry times at sunset/sunrise respectively for the species recorded (common pipistrelle¹⁹, soprano pipistrelle¹⁹ and brown long-eared²⁰). As such, this confirms that roosting bats are not currently utilising this building. It is more likely that the automated detector in the Maltings was picking up on strong and direct call from outside the building most notably along the towpath as adjacent to the River Thames.
- 4.5. As a result of the activity and automated surveys undertaken in 2021, a total of six different bat species were recorded. The surveys completed in 2022, recorded a total of eight bat species. The combined survey results indicate that the habitats at the Site and adjacent to the River Thames (to the northern boundary of the Site) are typically used by urban bat species common and soprano pipistrelle, associated to be non-light sensitive. It is noted that species including brown long-eared, nathusius' pipistrelle, noctule and myotis species were also recorded however these were in very low numbers in 2021 (under 10 passes for each species as a result of the automated detector results), with the addition of leislers and serotine in 2022, but still in very low numbers (under 20

 ¹⁵ Natural England Joint Publication (2018): 'A review of the Population and Conservation Status of British Mammals'. JP025
 ¹⁶ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1

¹⁷ Russ, J. 2012. British Bat Calls. A Guide to Species Identification.

¹⁸ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1

¹⁹ Davidson-Watts I & Jones G 2006. Differences in foraging behavior between *Pipistrellus pipistrellus* (Schreber, 1774) and *Pipistrellus pygmaeus* (Leach, 1825). J. Zool 268: 55- 62

²⁰ Entwistle A, Racey P & Speakman J 1996. Habitat exploitation by a gleaning bat, *Plecotus auritus*. Phil. Trans. R. Soc. Lond. B 351: 921-931



- passes in July and under 40 passes in August for each species). The results of the bat activity and automated survey indicates that bat activity is low at the Site and adjacent to River Thames. Nonetheless, bat species were recorded in good diversity.
- 4.6. The automated detector surveys in 2021 and 2022 recorded a number of early bat passes after sunset (Tables 20 and 21) for common and soprano pipistrelle, *myotis*, brown long eared, nyctalus species and noctule. Common pipistrelles are noted as having a mean emergence time of 24.8 minutes after sunset²¹, soprano pipistrelles 33.5 minutes after sunset²², noctule emerge typically, 0-40 minutes after sunset²³, myotis typically emerge 56 minutes after sunset²⁴ and long-eared species typically, around 60 minutes after sunset²⁵. Whilst it is known that both common and soprano pipistrelle bats are roosting on Site the data would also indicate that these bat species and the those recorded to have early bat passes could also be roosting in the local area. No other species were assessed to have early bat passes considering recognised emergence times detailed in Table 22.

Table 23: Bat Species Roost Emergence Times

Species	Research on Emergence Times	
Nathusius pipistrelle	Assessed to be an 'early emerging species' 26 or typically 20-30 minutes after sunset 27	
Serotine	Typically 20 minutes after sunset ¹⁷	
Leisler	Typically, 0-20 minutes after sunset ¹⁷	

Natural England Licencing Requirements

- 4.7. As part of the proposed Development, the southern boundary wall would be demolished and with open public realm constructed in its place and newly constructed buildings and infrastructure in proximity. Tree T75 would be retained and would have a multi-use games area (MUGA) and soft landscaping constructed in proximity to it. Building B9 the Maltings, would be refurbished and converted into residential apartments and community space and would have newly constructed buildings and infrastructure in proximity on its south side, however the towpath and existing vegetation adjacent to the River Thames would be retained in its majority.
- 4.8. As such, these works have potential to impact upon the common and soprano pipistrelle day roosts (low numbers) recorded and therefore, without mitigation, contravene the protection afforded to roosting bats by legislation (**Appendix H**). As a result, an approved Natural England (NE) European Protected Species (EPS) Mitigation Licence (type to be determined) would be required to permit the proposed works to the southern boundary wall and building B9 the Maltings. As part of the licence a method statement would set out the sensitive working methodologies required that would be overseen by an Ecological Clerk of Works (licence holder or accredited agent) to allow for roost destruction.
- 4.9. In support of the licence application updated surveys (between May and August) may be required

²¹ Davidson-Watts, I. & Jones, G. 2006: 'Differences in foraging behaviour between *Pipistrellus pipistrellus* (Schreber, 1774) and *Pipistrellus pygmaeus* (Leach, 1825)'. Journal of Zoology, 268, 55-62.

²² Davidson-Watts, I. & Jones, G. 2006: 'Differences in foraging behaviour between *Pipistrellus pipistrellus* (Schreber, 1774) and Pipistrellus pygmaeus (Leach, 1825)'. Journal of Zoology, 268, 55-62.

²³ Racey, P. A. 1991: *The Handbook of British Mammals* (Ed. by G. B. Corbet & S. Harris), pp. 117-121. Oxford: Blackwell.

²⁴ Russ, J. 2012. British Bat Calls. A Guide to Species Identification.

²⁵ Russ, J. 2012. British Bat Calls. A Guide to Species Identification.

²⁶ Russ, J. 2012. British Bat Calls. A Guide to Species Identification.

²⁷ Russ, J. 2012. British Bat Calls. A Guide to Species Identification.



depending on the time that elapses and if the existing data becomes older than 18 months in age²⁸ at these recorded roost sites. In addition, and should the existing data become older than 18 months in age and prior to works at the remaining buildings, walls and trees on Site, updated bat surveys are likely to be required to determine if roosting bats have taken residence give the highly transient nature of the species. These mitigation options would be subject to any planning conditions attached to a planning consent.

Mitigation

- 4.10. To mitigate for the loss of the common pipistrelle day roost (low numbers) at the Southern Boundary Wall and the historical soprano pipistrelle day roost (low numbers) at building B9 the Maltings, a total of 10 bat roosting features would be incorporated on retained trees (of a suitable size) and on/within the fabric of retained and newly created buildings. The roosting features would be aimed at the pipistrelle species recorded and located in the most suitable locations including proximity to green infrastructure, area subjected to no/minimal lighting and on suitable elevations so the features receive an element of solar radiation thus enhancing roosting conditions within the features. As the common and soprano pipistrelle day roost (low numbers) at T75 will be retained no replacement roosting provision would be provided.
- 4.11. Whilst the remaining buildings, walls and trees were determined to not currently contain roosting bats given the transient nature of the species (note the need for update surveys as detailed above) a toolbox talk would be provided to contractors during the demolition/refurbishment phase of the proposed Development. In addition, work to moderate potential buildings would be undertaken in a sensitive manner with an Ecological Clerk of Works (ECoW) present.
- 4.12. Further to the above, the felling of those trees with moderate and low bat roosting potential would be undertaken using soft felling techniques and in accordance with the Arboricultural Association Guidance Note 1²⁹, with the felling of those trees with moderate bat roosting potential also carried out under an ECoW.
- 4.13. In the unlikely event that bats are identified, during the Works, all works would cease in the relevant areas, and an ecologist contacted. Liaison would then be undertaken between the ecologist, LBRuT and / or Natural England to agree a suitable way forward.
- 4.14. In line with the NPPF, London Planning Policy and Local Planning Policy LP 15 'Biodiversity' the Development would include the following mitigation and enhancement measures for roosting, foraging and commuting bats:
 - During the demolition and construction phase of the Development all construction lighting would be aimed towards the centre of the Site to minimise light spill towards the adjacent River Thames and Tidal Tributaries SMI, no 'up lighting' would be permitted
 - Soft landscaping as well as artificial habitats would be provided in the Development which would provide enhanced opportunities at the Site for bats. The Site would include:

²⁸ CIEEM (2019). Advice Note On The Lifespan of Ecological Reports & Surveys

²⁹ Arboricultural Association (2011): 'Bats in the Context OF Tree Work Operations'. Guidance Note 1. ISBN 978-0-900978-54-8



- up to 404 new trees (including 62 ornamental trees) and up to 99 individual and 3 tree groups retained;
- hedge planting (1.5 m high) enclosing all ground level residential courtyards east of Ship Lane in the detailed part of the Development;
- provision of new trees including the use of native species, or species of benefit to wildlife.
 This includes planting in areas close to the river edge responding to existing riverside vegetation and grove trees located in the community park south of the proposed school;
- provision of biodiversity roofs, including a mix of extensive green and brown roofs; and
- a green link connecting the River Thames and Mortlake Green.
- As detailed above a ten bat roosting features would be incorporated in the proposed Development.
- A sensitive lighting strategy would be implemented as part of the Development which will avoid light spill upon habitats currently utilised by bats (particularly the River Thames) and the new roosting features.

Peregrine Falcon and Breeding Birds

- 4.15. As a result of the peregrine falcon and breeding bird surveys undertaken at the Site, peregrine falcons are likely to be absent from the Site in 2022, however breeding feral pigeons have been confirmed at building 3. In addition, feral pigeon nesting was confirmed at building 6, 8, 9 the Maltings and 17 and other activity (perching flying in/out etc) confirmed at buildings 3, 4, 5, 12 and 13. Grey wagtail were recorded signing and lesser black backed gull perching on/from the roof of building.
- 4.16. Bird interest at the Site was limited with a total of 12 bird species recorded that were seen either on or immediately adjacent to the Site (those flying over the Site were not recorded) with S41 and red list species including house sparrow and starling and amber list species including lesser blackbacked gull, wood pigeon, wren, grey wagtail.

Mitigation

- 4.17. As common species of birds have been recorded at the Site including the buildings the following mitigation measures would be provided;
 - Should any habitats of value to nesting birds (vegetation and buildings) require removal to facilitate the proposed Development this would be undertaken outside of the breeding bird season (March to August inclusive). However, if works cannot be undertaken outside the breeding bird season an ecologist would inspect any vegetation to be removed. An ECoW would be deployed to carry out an inspection at least within 24 hours prior to the clearance. If an occupied nest is detected, an appropriate buffer zone will be created around the nest, and clearance of this area delayed until the young have fledged.
 - Given that pigeons (and other known pest species) are known to breed all year round an
 appropriately qualified Contractor would be appointed to develop a strategy to ensure the
 buildings (with respect to the peregrine mitigation and building B9 the Maltings as detailed
 below) are free and stay free of nesting birds prior to demolition. If any birds, including pigeons,
 are found to be nesting on/within buildings prior to Works commencing, then this could lead to
 delays.



- 4.18. Although peregrine falcon was recorded to be absent from the Site in 2022 their presence was recorded in October 2021, roosting in building B9 the Maltings and as such a precautionary approach would be adopted to ensure that any contravention of legislation is avoided.
- 4.19. A series of monitoring visits (including surveys at both ground level and at height subject to safe access being possible) would be undertaken until it can be confirmed that the roosting peregrine is absent from the building. Works would then be undertaken at the building to block access points previously utilised (pending the results of any updated bat surveys as detailed above). Monitoring would continue prior to the demolition and construction works commencing at building B9 the Maltings to ensure the bird does not return to the roost site.
- 4.20. The Works at the Site would also be timed to commence outside of the main peregrine falcon breeding season (assessed to be between February/March when courtship intensifies to June when young normally fledge).
- 4.21. In line with the NPPF, London Planning Policy and Local Planning Policy LP 15 'Biodiversity' the Development would include the following mitigation/enhancement measure for peregrine falcon and other bird species;
 - A peregrine falcon nest box would be incorporated into the proposed Development on the roof of the building B9 (the Maltings) after the refurbishment works have been completed.
 - The provision of 5: 'Schwegler Starling Next Box 3S' This nest box has been designed with a large, deep cavity and 45 mm entrance hole to attract starlings and can be installed on mature trees or buildings. As well as starlings, this nest box is suitable for woodpecker species. These bird boxes should be placed at least 3 m above ground level to prevent vandalism and face east to north;
 - The provision of 5 'Schwegler Swift Brick No.25' Swift bricks should be installed under the
 roof, in shaded areas out of direct sunlight and away from windows, ideally facing north. They
 should be installed at least 5 m above ground level. Swift bricks, if competently installed, do not
 require any maintenance;
 - The provision of 'Schwegler Sparrow Terrace 1SP' Suitable for house sparrows and tree sparrows. The nest box contains three separate nesting cavities. They can be installed on buildings either affixed to the exterior wall or incorporated into the wall. These bird boxes should be placed at least 3 m above ground level to prevent vandalism and face east to north. 5.34. As detailed previously, the provision of green space would provide foraging and nesting opportunities at the Site for local bird species; and
 - The provision of five Schwegler 2H Nest Boxes for black redstarts. The Schwegler 2H Nest Boxes are an open fronted box suitable for a number of bird species including black redstart. These boxes should be installed on buildings not trees (unless in dense climbing plant cover i.e. ivy) and should be hung sideways with the entrance at a 90° angle to the wall, preferably placed below 2m in height in areas with restricted public access (i.e. upon rooftops), or if this is not feasible, 3m above ground level to prevent vandalism and face east to north.
- 4.22. In addition the landscaping provisions detailed above for bats would also enhance the Site for bird species.



5. Conclusions

- 5.1. As a result of the bat surveys undertaken in 2021, the supplementary survey undertaken in 2022 and with due regard to the existing bat records and historical surveys (in 2019) undertaken at the Site for previous planning applications, roosting bats have been determined to be currently present on Site. In addition, the habitats at the Site and the River Thames, directly adjacent to the northern boundary of the Site, are used by a low level of urban bat species, predominantly common and soprano pipistrelles typically considered not to be light sensitive. Nonetheless, a diverse group of eight bat species were recorded.
- 5.2. During the evening emergence survey on the 4th October 2021, a single roosting peregrine falcon was recorded at building B9 the Maltings, however, no peregrine activity was recorded between June and July in 2022.
- 5.3. In accordance with good practice and to avoid the contravention of existing wildlife legislation, mitigation measures have been detailed in this report, including the need for update and monitoring surveys, timing of works and the requirement to be in receipt of an approved Natural England European Protected Species licence (type to be determined) prior to the start of works. In addition, the requirement of an ECoW has been highlighted during the proposed Development works.
- 5.4. Further mitigation, together with proposed enhancement measures for bats and peregrine falcon have been detailed within this report and in the Environmental Statement Chapter 13: Ecology.
- 5.5. Should there be a period of greater than 18 months since the time of the surveys detailed in this report, and the commencement of the Works, further update surveys are recommended, subject to any planning conditions attached to a planning consent.

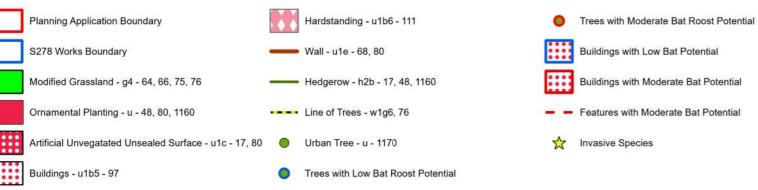


FIGURES

- Figure 1: Habitat Features Plan (ref. WIE18671_115_GIS_EC_SPSR_1A)
- Figure 2: Northern boundary wall Feature Locations (ref. WIE18671_115_GIS_EC_SPSR_2A)
- Figure 3: Evening Emergence Bat Surveyor Locations (ref. WIE18671_115_GIS_EC_SPSR_3A)
- Figure 4: Bat Activity Survey Transect & Static Detector Locations (ref. WIE18671_115_GIS_EC_SPSR_4A)
- Figure 5: Activity Survey Results October 2021 (ref WIE18671_115_GIS_EC_SPSR_5A)
- Figure 6: Evening Bat Activity Survey Results July 2022 (ref. WIE18671_115_GIS_EC_SPSR_6A)
- Figure 7: Evening Bat Activity Survey Results August 2022 (ref. WIE18671_115_GIS_EC_SPSR_7A)
- Figure 8: Peregrine Falcon and Breeding Bird Survey Map 10th June 2022 (ref. WIE18671_115_GIS_EC_SPSR_8A)
- Figure 9: Peregrine Falcon and Breeding Bird Survey Map 24th June 2022 (ref. WIE18671_115_GIS_EC_SPSR_9A)
- Figure 10: Peregrine Falcon and Breeding Bird Survey Map 12th July 2022 (ref. WIE18671_115_GIS_EC_SPSR_10A)







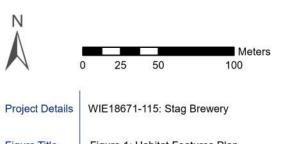


Figure Title Figure 1: Habitat Features Plan

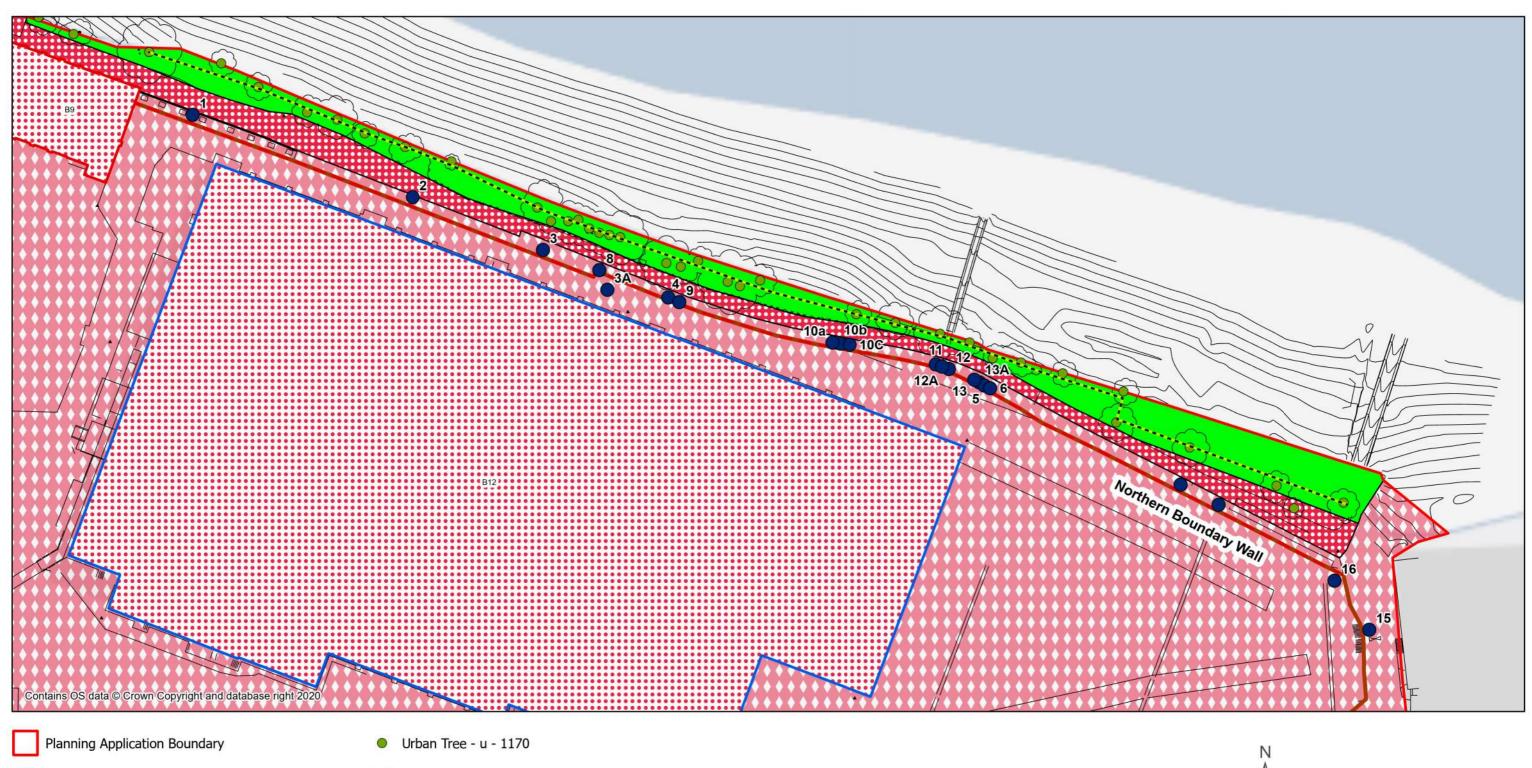
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Date September 2022

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Project Details

WIE18671-115: Stag Brewery

Figure Title

Figure 2: Northern Boundary Wall Feature Locations

Figure Ref

WIE18671-115-GIS-EC-SPSR-2A

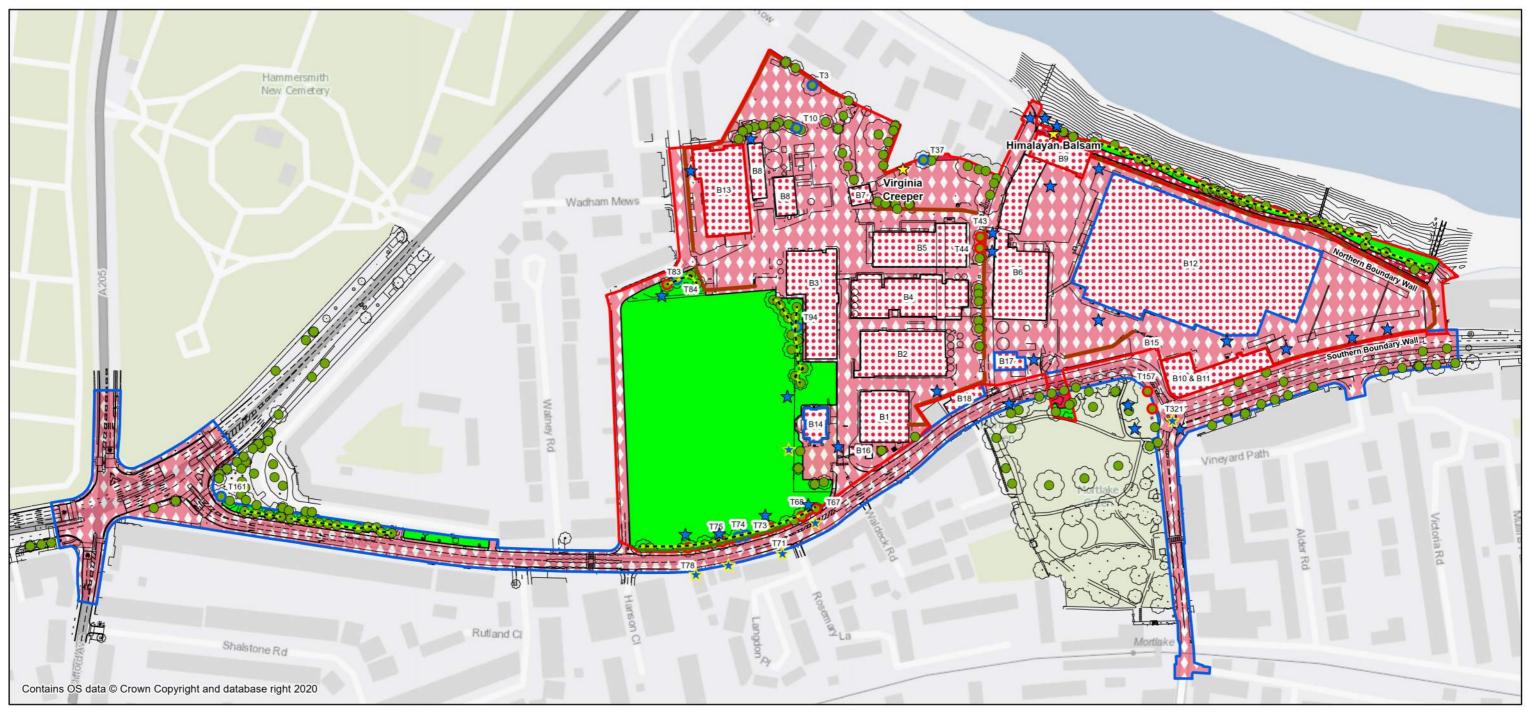
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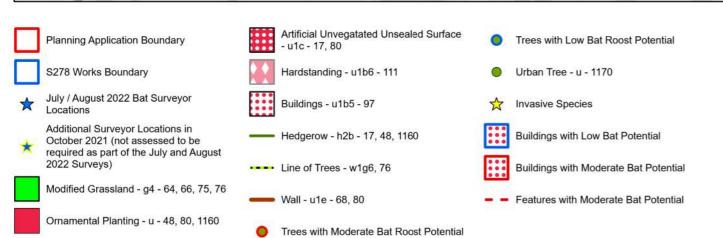
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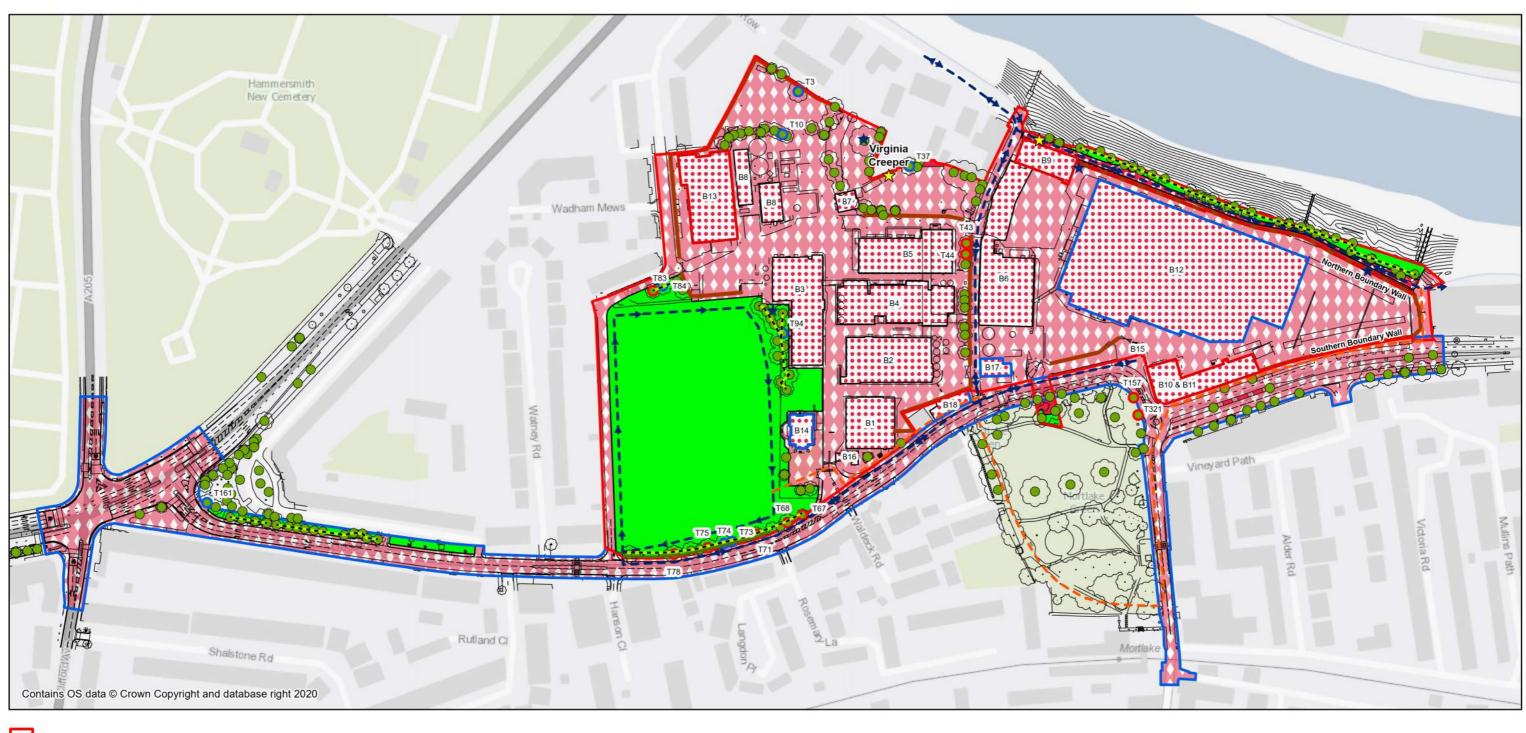




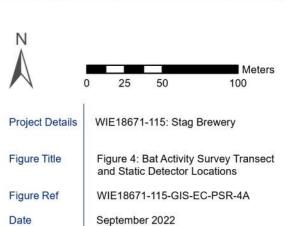












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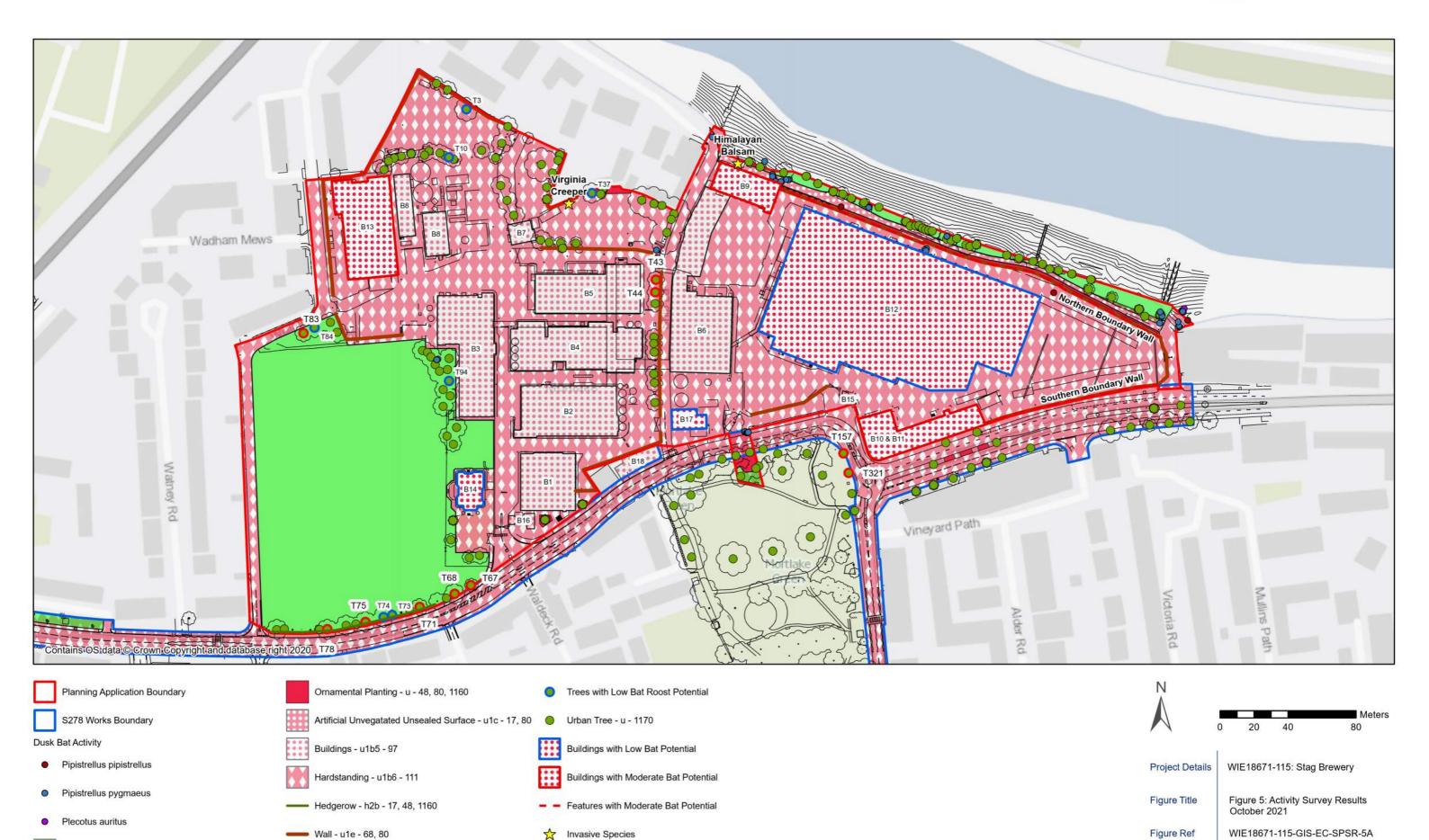
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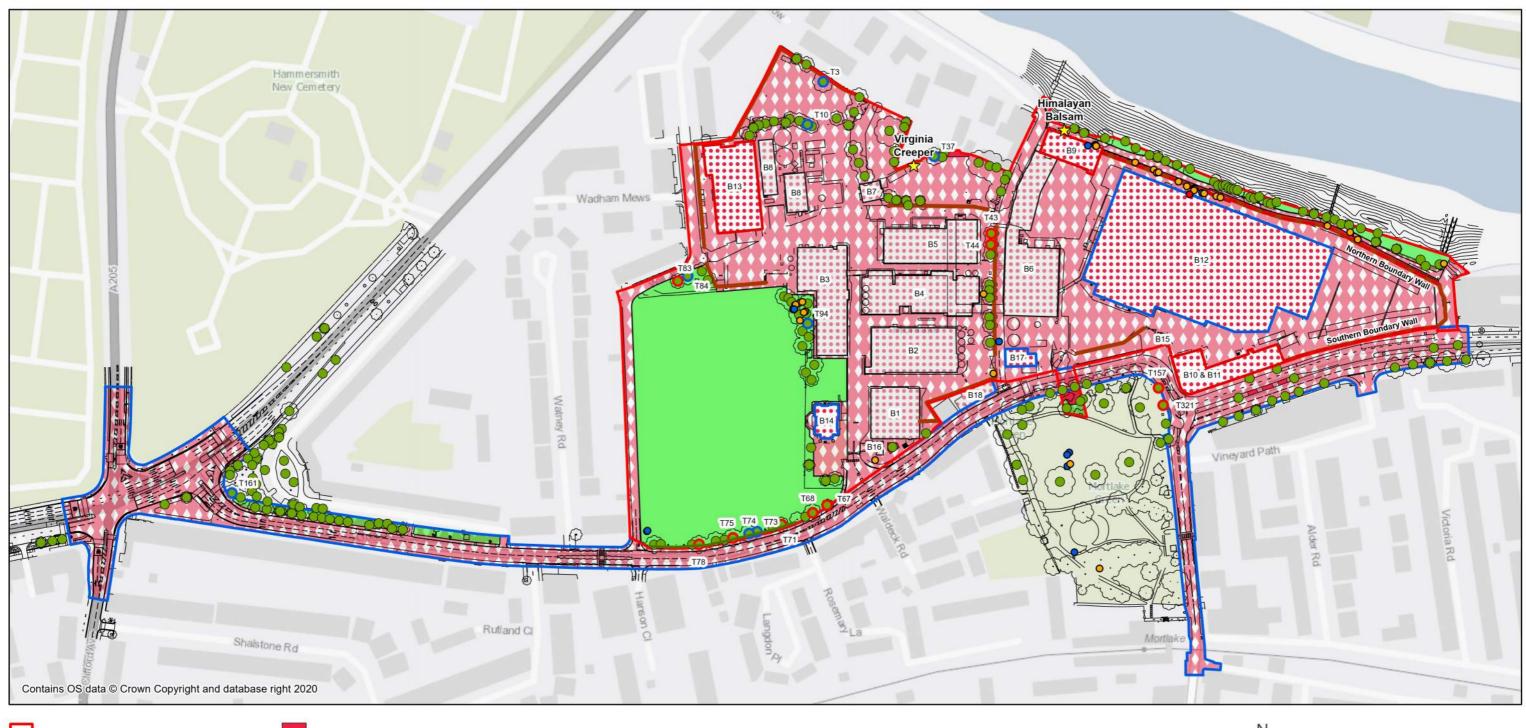
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Modified Grassland - g4 - 64, 66, 75, 76

Trees with Moderate Bat Roost Potential







Myotis spec.

Pipistrellus pipistrellus

Pipistrellus pygmaeus

Pipistrellus spec.

Modified Grassland - g4 - 64, 66, 75, 76

Ornamental Planting - u - 48, 80, 1160

Artificial Unvegatated Unsealed Surface - u1c - 17, 80 Urban Tree - u - 1170

Buildings - u1b5 - 97 Hardstanding - u1b6 - 111

Hedgerow - h2b - 17, 48, 1160

Wall - u1e - 68, 80

Trees with Moderate Bat Roost Potential

Trees with Low Bat Roost Potential

Buildings with Low Bat Potential

Buildings with Moderate Bat Potential

- Features with Moderate Bat Potential

Invasive Species



WIE18671-115: Stag Brewery

Figure 6: Evening Bat Activity Survey Results (July 2022)

WIE18671-115-GIS-EC-SPSR-6A Date September 2022

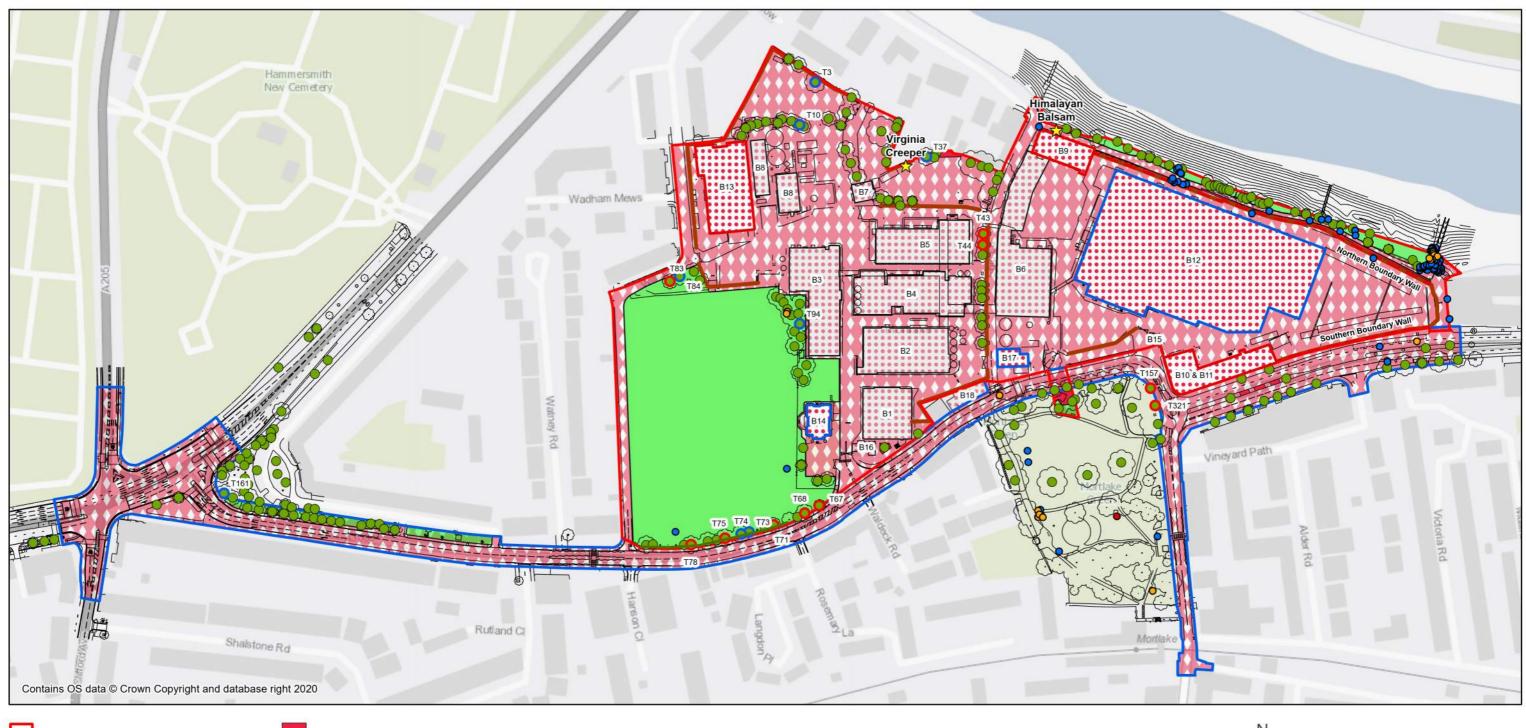
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Pipistrellus pygmaeus
 Pipistrellus spec.
 Modified Grassland - g4 - 64, 66, 75, 76

Ornamental Planting - u - 48, 80, 1160

Trees with Low Bat Roost Potential

Artificial Unvegatated Unsealed Surface - u1c - 17, 80

Urban Tree - u - 1170

Buildings - u1b5 - 97

Buildings with Low Bat Potential

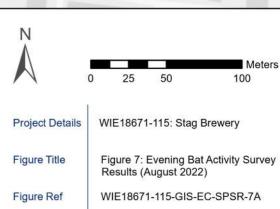
Hardstanding - u1b6 - 111

Hedgerow - h2b - 17, 48, 1160

Trees with Moderate Bat Potential

Wall - u1e - 68, 80

Invasive Species



September 2022

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Date

File Location















APPENDICES

A. LBRut Consultation

Ellen Smith

Thanks Anna

From: Hunter, Tasha 18 July 2022 22:39 Sent: To: Anna Gargan; Suzanne Thurtle; Thatcher, Lucy; Lee Mantle; Stephen Brindle; Ellen Smith; Guy Duckworth; Neil Henderson; Sophie Thomson Subject: RE: Ecology meeting - Stag Official Dear Anna Many thanks for the summary and attachments. I have just one change, it was agreed that instead of BNG being required on the application site, some ecological enhancements could be facilitated on the adjacent Mortlake Green. I have submitted a plan with recommendations to my operational colleagues and will come back to you with items they are happy to be installed. In a nutshell they consist of bird/bat boxes, stag beetle loggeries, bulb and hedge planting. Best wishes Tasha Hunter **Ecology Policy and Planning Officer** Serving Richmond and Wandsworth Councils www.richmond.gov.uk / www.wandsworth.gov.uk From: Anna Gargan **Sent:** 18 July 2022 17:18 To: Suzanne Thurtle Subject: RE: Ecology meeting - Stag Hi Lucy, Tasha, I hope you are both well. Following the meeting held with you both on 7 July '22, Watermans have prepared a summary of the discussions below. Trust this is useful. Please let me know if you have any comments.

As a result of the meeting earlier this month please find below a synopsis of the ecology aspects we discussed and an update with regards to the surveys undertaken (to date) for both applications. I trust this is a true reflection of

events, however if you have any queries please let me know. In addition please find a link below to the Survey Results Spreadsheet (SS), I will update the SS on a regular basis (every Friday afternoon) as the remaining surveys progress. I also attach the plans mentioned in the initial e-mail issued by Anna that detail the building numbers and the external lighting area as part of the Temporary Filming Application. I also attach Figure 3 of the latest PEA that relates to building numbering in the SS that I used initially before different building number plans came out. I have detailed these to avoid building reference errors on my part.

Temporary Filming Application – It was agreed that the survey effort detailed in the e-mail below was sufficient to accompany the temporary filming application, as no impacts either direct or indirect would occur at building B9 the Maltings (as no internal filming works are proposed or external lighting at this building) and therefore the need for any surveys at the Maltings is not required, including the use of additional drone, IR and thermal imaging methods. It was also agreed that the use of drone, thermal imaging or IR survey methods at buildings B10, B11, B12 and B14 would not be required.

The surveys highlighted below for the Temporary Filming Application have now been completed. No sightings or any other evidence of peregrine falcon have been recorded as part of the surveys undertaken. No bat roosts have been recorded, however and due to access constraints to the eastern half of the site additional survey effort will be undertaken with single surveyor covering the potential roosting features not visible. This survey is currently planned for the 3rd August.

The results of these surveys (and the proposed additional survey on the 3rd August) will now be used to inform the Technical Appendix (TA) to the ecology section of the Environmental Assessment report. As no roosting bats and nesting peregrine falcons have been recorded no specific mitigation/compensation measures will detailed in the TA. With regards to lighting the TA will refer to Institute of Lighting Professionals, 2018. Guidance Note 8 Bats and Artificial Lighting, to prevent any up-lighting. In terms of providing an ecological enhancement at the site and given the temporary nature of the application which will not include any groundworks/landscaping on site, enhancement measures are still not proposed on site and no design stage biodiversity net gain assessment is proposed to accompany the application.

Hybrid Application – It was agreed that undertaking supplementary surveys as detailed in the e-mail below to build on those undertaken in October 2021 was sufficient to address LBRuT comments on the submitted hybrid application (to provide LBRuT with an 'in date' ecological evidence base to determine the application with regards to ecology).

To date no surveys have been undertaken as part of the hybrid application. The first activity survey was due to commence today but I have postponed this due to the weather warning and will now be undertaken on Thursday this week. As part of the supplementary surveys we will be undertaking update internal surveys of the buildings on site where safe access can be provided, but given the structural issues at building B9 the Maltings (as discussed) no internal surveys will be undertaken at this building. Instead it was proposed that an automated bat detector (SM2) is deployed inside the ground level doorway of the Maltings and set to record for a 5 night period to determine if 'a peak' in calls are recorded just before or at peak emergence times (will also look at re-entry timing data for bat species as believe this information is available in a study done by Ian Davidson-Watts). This idea was proposed specifically for brown long-eared bats (but will cover other bat species) given LBRuT previous comments and the roosting behaviour of the species that will normally 'warm up' within an internal void before emerging from the roost site). Given the health and safety issues at the buildings regarding internal surveys but taking into account the use of the automated detector survey at the Maltings it was agreed that drone surveys would not be required. The results of the internal surveys over the entire site however would determine if the level of evening emergence and pre-dawn re-entry surveys would need to be subject to change (based on any amendments in potential rating assigned).

As part of the evening emergence and pre-dawn re-entry surveys it was agreed that those undertaken at Building B9 the Maltings will be supplemented with Infra-Red night vision aids given the size of the building and as it was recorded in 2019 to be a pipistrelle day roost. As such the use of thermal imaging surveys would not be required. It was agreed that the use of drone, IR and Thermal imaging surveys would not be required at other buildings/trees on site.

Whilst it was agreed that no other additional surveys for notable or protected species would be required, the results of the peregrine surveys undertaken for the Temporary Filming Application would be included within the protected

species report and Ecology ES Chapter addendum. In addition these reports would also detail any changes to the ecological mitigation, compensation and enhancement measures already provided.

I hope this provides a useful synopsis of the ecology aspects we discussed and agreed...and an update with regards to the surveys undertaken (to date) for both applications and is a true reflection of events, however if you have any queries please let me know.

Anna Gargan

Associate

Gerald Eve LLP One Fitzroy 6 Mortimer Street London, W1T 3JJ www.geraldeve.com





GERALDEVE

From: Anna Gargan
Sent: 07 July 2022 10:05
To: Suzanne Thurtle

Hi Lucy, Tasha,

Ahead of this morning's ecology meeting, please see a note provided by Watermans below covering the proposed approaches for both the temporary and masterplan applications.

Speak soon, Anna

Thank you for agreeing to attend the Stag Brewery meeting tomorrow to discuss ecological aspects following comments received from yourselves on behalf of LBRuT on both the temporary filming and hybrid application. I have set out Waterman's response to the comments to look to agree the scope and level of additional ecological surveys moving forward.

Temporary Filming Application

On 26th May 2022 my colleague Ellen Smith issued an e-mail directly to Tasha Hunter to advise LBRuT of the proposed ecological surveys to be undertaken to accompany the forthcoming renewal of the temporary application. It is proposed that the scope of additional ecological surveys are based on the findings of the Preliminary Ecological Appraisal (PEA Ref WIE18761-103-1-2-4-PEA) and Protected Species Report (PSR Ref: WIE18671-103-R-4-2-3-PSR) undertaken between August and October 2021 (in respect of the March 2022 Environmental Statement submitted for the hybrid planning application). Given that the age of the bat surveys undertaken as part of the above reports in 2021 and that some surveys were undertaken at the end of the recognised bat active period in October, additional surveys to accompany the renewal of the temporary application are proposed.

For bats this will include the following evening emergence or pre-dawn re-entry surveys at buildings B10, B11, B12 and B14 were filming works are proposed at the buildings internally and along part of the northern boundary wall located directly adjacent to a proposed external lighting area (please refer to attached building plan attached for building numbers and the updated plan that shows the current external lighting area, please note however that no lighting will occur at building B9 the Maltings) as set out below.

- The provision of a single evening emergence or pre-dawn re-entry survey at building B14 and B12 both assessed as having low potential to support roosting bats at detailed in the PEA in 2021;
- The provision of a single evening emergence and a separate pre-dawn re-entry survey at building B10 and B11 assessed as being a single building with moderate bat potential as detailed in the PEA in 2021.
- Part of the northern boundary wall will be subject to two endoscope inspections (two weeks apart).

In line with industry guidance (Collins, J. 2016) the survey work would be undertaken between May to August, however we would programme the surveys to be completed by the end of July.

Due to the recorded presence of a single roosting peregrine falcon at building B9 (the Maltings) and calling from B3 in October 2021, we are also proposing to undertake further survey effort for this species over the Site to determine if any other buildings are being utilised by the species. The survey work for peregrine falcon at all buildings which would be subjected to building works, would comprise:

• An inspection of the buildings (where suitable and safe access can be provided) to search for signs of roosting activity in early June followed by two surveys to record behaviour of the species on and in the vicinity of the Site in June/July. It should be noted that the timing for these surveys are somewhat late in the season, however, it is assessed that an adequate baseline would still be collated on which to accompany the renewal of the temporary application. The work would be undertaken based on industry guidance (Gilbert et al 1998).

In addition to the above we note that under the London Plan 2021 and other local planning policy that there is a policy requirement to provide an ecological enhancement at the Site. However and given the temporary nature of the application which will not include any groundworks/landscaping, it is not viable to provide ecological enhancement for this application. However, it should be noted that the hybrid planning application provided a design stage biodiversity net gain assessment and has a long term commitment to provide ecological enhancement at the site.

Comments issued by Lucy Thatcher on behalf of LBRuT regarding this approach are detailed below in yellow along with Waterman's response.

1. Need the bat surveys that are being undertaken in (June / July) – based on the correspondence from Ellen Smith to Tasha Hunter – she is satisfied with the approach proposed for the additional surveys. However, she expects additional bat assessment (thermal imagery) and drones to ensure a proper look at the top of building 9. The surveys are currently programmed to be completed in July 2022. No impacts are anticipated at building B9 (the Maltings) as no internal filming works are proposed at this building and no lighting of this building is proposed. As no impacts to building B9 (the Maltings) are anticipated we see no reasons for thermal imagery surveys at this building. No internal surveys are possible inside of building B9 (the Maltings) due to structural integrity issues that is preventing a full asbestos survey, in addition we

understand that the building is full of pigeons that in itself will have its own health and safety risks. It is also queried if drone surveys would be practical as we understand that internally building B9 (the maltings) is cluttered with scaffolding. In addition we query what additional and useful information drone surveys would provide.

- 2. Ecological enhancement statement the document states it is not necessary / reasonable however, the conclusion is subject to the findings of the bat and peregrine falcon surveys being undertaken on Site in June/July 2022. Agreed, any mitigation and enhancement measures for these species recorded by the additional surveys outlined above will be provided within a technical appendix to the ecology section of the Environmental Assessment report.
- 3. Protected species report 2022 refer to redevelopment application. I am sorry but I do not understand this comment?

Hybrid Application

Following comments received from LBRuT regarding ecological aspects on the Hybrid Planning Application (planning ref. 22/0900/OUT) and the Detailed Planning Application for the School (planning ref. 22/0902/FUL) we understand that LBRuT 'cannot assess or comment on these applications fully without the relevant and in date surveys, therefore have no alternative but to recommend refusal due to lack of Protected Species information at this time'. Given the comments received, we are currently proposing to undertake the following additional bat surveys at the Site.

In response to these comments we would look to update the bat surveys in 2022 in-combination with the October 2021 surveys where possible. Whilst October is assessed in industry guidance to be a sub-optimal survey month, bats still utilise 'summer' roosting sites before moving on to hibernation roosts when ambient temperatures drop. As the October 2021 bat surveys were undertaken in suitable weather conditions (10 degrees or above) they are still assessed to hold weight.

When undertaking the surveys, we propose the following: We would commence with internal building inspections where safe access can be provided. Following the internal surveys and subject to the results (any change in potential rating assigned) we would repeat the evening emergence or pre-dawn re-entry surveys at low potential buildings (single survey required at each building) but supplement the October 2021 bat surveys in 2022 at moderate and high potential/former roost sites at buildings, trees and the boundary wall (so an addition of a single additional survey at those assigned to have moderate potential and two surveys at high potential or former roost sites). In addition, and as October is an optimal survey month for bat activity transect and automated surveys, we would look to supplement these surveys on two occasions in 2022 to reach the required number for sites offering low potential for foraging and commuting bats. We would also look to supplement the endoscope surveys at the northern river wall with a single endoscope survey (at height). The evening emergence and pre-dawn re-entry survey at Building B9 (the Maltings) will be supplemented with Infra Red night vision aids given the size of the buildings and it as was recorded in 2019 to be a pipistrelle day roost. The results of these surveys and any changes to the ecological mitigation, compensation and enhancement measures already provided will be detailed in a protected species report and Ecology ES Chapter addendum

It is noted that the comments received from LBRuT mention the use of drone surveys to supplement the internal surveys that could not be undertaken due to health and safety issues. As detailed above we query what additional and useful information drone surveys would provide regarding the presence/absence and roost classification of any bat roosts present, given the additional bat surveys that are being proposed.

We note that as part of the comments received from LBRuT only bat surveys were referred. We therefore are not planning to undertake any other additional notable or protected species surveys.

In addition I will prepare a spreadsheet detailing the finding of the surveys that have been completed to date (no bat roosts or signs of peregrine falcon recorded to date) and update it on a regular basis for all concerned as they progress.

Anna Gargan

Associate

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GERALDEVE

From: Suzanne Thurtle
Sent: 06 July 2022 17:37
To: Thatcher, Lucy

Subject: RE: Ecology meeting - Stag

Dear all,

Ahead of the meeting tomorrow, I attach a brief agenda.

Kind regards

Suzanne

Suzanne Thurtle

Associate

Gerald Eve LLP One Fitzroy 6 Mortimer Street London, W1T 3JJ www.geraldeve.com





B. Photographs

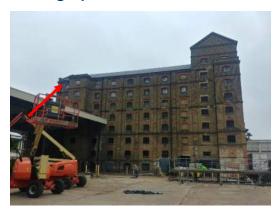


Plate 1 – Approximate location of peregrine falcon roost on southern aspect of building B9 (The Maltings).



Plate 2: 2019 Soprano pipistrelle emergence location from a second-floor window on the northern façade of The Maltings (B9).



Plate 3: Common pipistrelle re-entry locations at Southern Boundary Wall between horizonal support beam and wall





Plate 4: Common pipistrelle re-entry locations at Southern Boundary Wall close up



Plate 5: Approximate location of common and soprano pipistrelle re-entry locations at tree T75



Plate 6: Approximate location of common and soprano pipistrelle re-entry location at tree T75 close up (in crevices/under peeled bark)



C. Results of Northern Boundary Wall Inspections 2021 and 2022

Potential Roosting Feature	Photographs	Northern boundary wall Inspection Results October 2021	Northern boundary wall Inspection Results August 2022
PRF 1 (River Side)		No evidence of bats recorded. Feature present on the river side of the wall. The front of 'Budweiser' sign comprises sheet metal wording attached to metal boarding. The rear of the sign comprises a steel frame and corrugated steel sheeting. Whilst the sign is assessed to be a solid structure with no cavities, gaps are present between the wooden boarding and 'Budweiser' lettering. The gaps are 4 to 5cm at their widest and open to the elements from above, below and the sides.	No evidence of bats recorded, no change in the status of the feature as assessed in the 2021 survey.
PRF 2 (Site Side)		No evidence of bats recorded Feature present on the Site, side of the wall. This section of the wall has areas of paint which are peeling, that may offer temporary sheltering opportunities for bats.	No evidence of bats recorded, no change in the status of the feature as assessed in 2021 survey apart form additional areas of peeled paint as seen in the second photograph.



Photographs

Northern boundary wall Inspection Results October 2021

Northern boundary wall Inspection Results August 2022



PRF 3 (Site Side)



No evidence of bats recorded.

Feature present on the Site, side of the wall. An open gap is present between steel support and the wall with 14 of these features present in close succession.

The majority of the supports are flush with the wall or with a wide gap present, however several have a 1-3cm gap present along the length of the support. During the inspection no signs of roosting bats were recorded.

No evidence of bats recorded, no change in the status of the features as assessed in the 2021 survey

WIE18671-103-R-4-1-3-PSR



Photographs

Northern boundary wall Inspection Results October 2021

Northern boundary wall Inspection Results August 2022

PRF 3a (Site Side)



Features not recorded in 2021.

No evidence of bats recorded

Features present on the Site side of the wall with stress fracture creating crevices between the brickwork and exposed hole where it is assumed old pipework was present.

The stress fracture commencing 1.5m above ground level to a height of 3.5m. Crevices are present between 1.5 to 3cm wide, 6cm in height (height of the brick) and extends back 8cm.. Thick spider webs present in the majorty of crevices.

Pipehole is present 2m above ground level, 9cm in diameter and extends back 20cm. Debris, a moth and snails were recorded to be present.

PRF 4 (Site Side)



No evidence of bats recorded.

Feature present on the Site side of the wall with four of these One of the features has now been bricked up to pevent features present in close succession.

The features are fully bricked up on the river side, with various heights of bricking up on the Site side, creating cavities between approximately 40-80cm high.

No evidence of bats recorded.

break-ins to the Site from the River Thames two path.

The Former Stag Brewery, Mortlake WIE18671-103 WIE18671-103-R-4-1-3-PSR



^{1g} Photographs

Northern boundary wall Inspection Results October 2021

Northern boundary wall Inspection Results August 2022



PRF 5 (Site Side)



No evidence of bats recorded.

Feature present on the Site side of the wall. An area of render has broken away from the wall and has created a linear gap between the render and the wall.

The gap is 1cm wide at its greatest extent and protrudes up between 2 to 6cm. It is arguable if the cavity present is wide enough to provide an entrance point for bats, however spider webs are present both in the cavity and at the entrance. During the inspection no signs of roosting bats were recorded.

No evidence of bats recorded.

The gap present at the render has expanded due to weathering. It is now 2-3cm wide and around 50cm long. The gap also extends up into the cavity for around 30cm. The cavity is now wide enough to provide an entrance point for roosting bats.

PRF 6 (Site Side)



No evidence of bats recorded.

Feature present on the Site side of the wall.

Linear gaps are present in the wall where mortar is missing, in the vicinity of PRF 5. The gaps are 1 to 1.5cm tall, 4cm at their widest and protrude into the wall 3-5cm. The gaps contain debris from the mortar and spider webs are present.

No evidence of bats recorded.

The gap present in the wall where mortar is missing due to weathering is now 2cm wide on avergae, 30-40cm long and protrudes into the wall 5cm



Photographs

Northern boundary wall Inspection Results October 2021

Northern boundary wall Inspection Results August 2022

PRF 7 (Site Side)



No evidence of bats recorded.

Feature present on the Site side of the wall. An open gap is present around the window frame with three of these features present in close succession.

The gap is 3 to 4cm wide and 5cm deep. Spider webs are present.

No evidence of bats recorded, no change in the status of the features as assessed in the 2021 survey

PRF 8 (River Side)



No evidence of bats recorded.

Feature present on the riverside of the wall. A crack is present The crack present on the riverside of the wall now appears in the wall running up the brickwork from 1m to 3m above 0.5m above ground level and is 2-3cm wide and runs to ground level.

The crack is assessed to be superficial and is 2cm at its. The crack is still assessed to be superficial and contains widest and contains snails, woodlice and spider webs. The spider webs. The crack is still 6cm at its deepest. crack is 6cm at its deepest.

No evidence of bats recorded.

around 2.5m above ground level.



Photographs

PRF 9 (River Side)





Northern boundary wall Inspection Results October 2021

No evidence of bats recorded.

Previously located on the river side of the wall and is one of the river side features of PRF 4.

This feature has now been vandalised and is considered too large exposed to support roosting bats.

Northern boundary wall Inspection Results August 2022

No evidence of bats recorded, no change in the status of the features as assessed in the 2021 survey as detailed in the second photograph.



Photographs

PRF 10a and 10b (River Side)





Northern boundary wall Inspection Results October 2021

No evidence of bats recorded, although cavities could not be No evidence of bats recorded, no change in the status of adequately inspected by an endoscope.

Both features are present on the river side of the wall and again are river side features of PRF 4. The features are the same except that 10a comprises a horizontal access point in the bottom left-hand corner and 10b comprises 2 no. vertical access points down the left-hand side. The features are present at between 0.5 and 1m above ground level.

Where previous bricking up works were undertaken the resulting cavity has been filled with debris. Where external mortar has been lost, internal debris which filled the cavity has also been lost, creating small cavities behind. The access points are 2 to 3cm high and 2 to 7cm long, with the internally cavities protruding between 5 and 10cm back and 5 to 7cm across. Old spider webs are present within the cavities.

Northern boundary wall Inspection Results August 2022

the features as assessed in the 2021 survey. Cavities could not be adequately inspected by an endoscope.



Photographs

Northern boundary wall Inspection Results October 2021

Northern boundary wall Inspection Results August 2022

PRF 10c





Features not recorded in 2021

No evidence of bats recorded.

A gap (first photo) 2-3cm is present at the top of the wall where the concrete lintel is being pushed away from the wall. The gap is open to the elements and contain debris.

The concrete lintel (second photo) also has a large 1m long verticle crack 3-4cm wide and extends through the entire lintel.



Photographs

Northern boundary wall Inspection Results October 2021

Northern boundary wall Inspection Results August 2022

PRF 11 (River Side)





No evidence of bats recorded.

Feature present on the riverside of the wall. A gap is present between the top of a 'new' wall (constructed from darker brick work as part of previous bricking up work) and a concrete lintel above. The gap is 5cm wide and goes up 2cm and back the width of a brick.

No evidence of bats recorded. No change in the status of the features as assessed in the 2021 survey as detailed in the second photograph.



Photographs

Northern boundary wall Inspection Results October 2021

Northern boundary wall Inspection Results August 2022

PRF 12 (River Side)



No evidence of bats recorded

Feature present on the riverside of the wall. A large crack is present at the stone lintel at the top of the wall. The crack has split the stonework in two and has expanded in width to 5-6cm at its widest.

Crevice could not be adequately inspected by an endoscope but was very open and exposed.

The cavity is therefore open to the elements and spider webs are present and it is considered that the gap is now too open and exposed to be of value to roosting bats.

No evidence of bats recorded. No change in the status of the features as assessed in the 2021 survey as detailed in the second photograph for PRF11 above.

PRF12 a (River Side)



Features not recorded in 2021

No evidence of bats recorded

Feature present on the riverside of the wall. A gap is present between the top of the wall and a concrete lintel above. The gap is 3cm wide, 40cm long and goes 10cm back.

Feature also present at the stone lintel at the top of the wall. The stone lintel is being forced away from the wall due to vegetation growth. Shrub roots are present in the cavity 4 cm wide.



Photographs

Northern boundary wall Inspection Results October 2021

Northern boundary wall Inspection Results August 2022

PRF 13 (River Side)



survey. Cavity could not be adequately inspected by an the features as assessed in the 2021 survey endoscope.

Feature present on the river side of the wall and is a river side feature of PRF 4. The feature is present at 1.5m above ground level and is assessed to have formed due to bricking up work.

The access point (created as a result of missing mortar) is 3 to 4cm high and 7 to 8cm wide and leads into a confined internal cavity. The cavity runs 1m along the top of the brick work and is 10cm wide but also drops down by 5cm on the site side of the wall. The cavity contains debris from the brick work including mortar and spider webs are present.

No evidence of bats recorded, no change from previous No evidence of bats recorded. No change in the status of

PRF13a River Side



Feature not recorded in 2021

No evidence of bats recorded.

A gap is present where an area of the wall has been recently 'bricked up'. The gap is 9cm wide, 3.5cm high and extends back 20cm. Spider webs are present.



Potential Roosting Feature

Photographs

PRF 14 (River Side)

Pnotograph



Northern boundary wall Inspection Results October 2021

No evidence of bats recorded.

Feature present on the riverside of the wall. A crack is present above the bricked-up window.

The crack is 1.5cm at is widest with spider webs and woodlice present.

Northern boundary wall Inspection Results August 2022

No evidence of bats recorded.

An additional verticle crevice is present as detailed in the second photograph. The crevice is 2cm wide and approximetly 30cm long. It extends back 10cm, Spider webs are present.





Potential Roosting **Feature**

Photographs

Northern boundary wall Inspection Results October 2021

Northern boundary wall Inspection Results August 2022

PRF 15 (River Side)



Feature not recorded in 2021

No evidence of bats recorded

Missing brickwork resulting in a 5cm high and 8-9cm wide gap that extends 12cm into the wall. Spiderwebs present.

WIE18671-103-R-4-1-3-PSR



Potential Roosting Feature

Photographs

Northern boundary wall Inspection Results October 2021

Northern boundary wall Inspection Results August 2022

No evidence of bats recorded

PRF 16 (Site Side



Feature not recorded in 2021

Pipe (first photograph) is present within the wall on the site approximently 2.5-3m above ground level. The pipe is 3-4cm in diameter and 20cm in depth. Snails recorded at the end of the pipe.

A cicular hole is also present within the nearby wall abutment where a former pipe used to be present. The hole is 2-3cm in diameter and a clear view could be sought straight through to the other side of the abutment.





D. Bat Identification Parameters

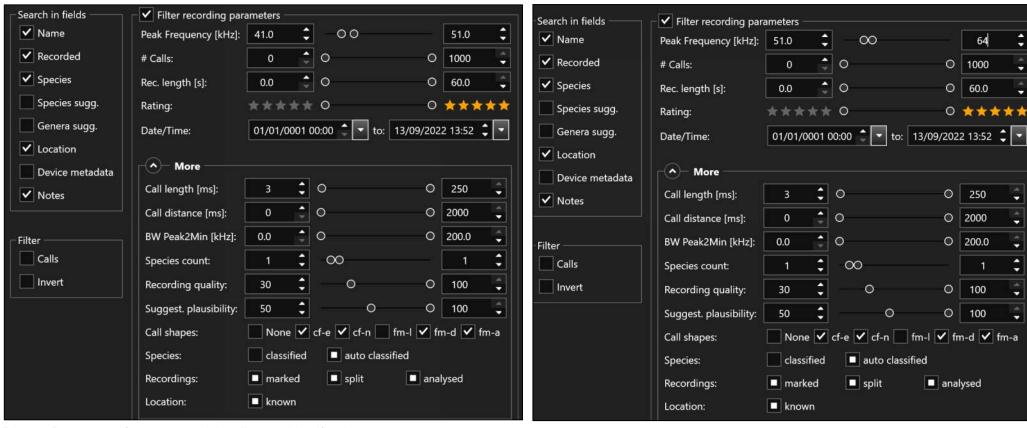


Plate 7: Parameters for common pipistrelle auto identification

Plate 8: Parameters for soprano pipistrelle auto identification



E. Results of Nesting Bird Building Check – 10 June 2022

Building Number	Exterior	Interior
1	N/A – no signs of nesting birds recorded	N/A - no signs of nesting birds recorded
2	N/A – no signs of nesting birds recorded, however no access to check behind pipes on east side of building	No access
3	Holes in east side of building. Evidence of feral pigeon inside. Young feral pigeon calling (assessed to be breeding)	No access
4	N/A – However north and south side of the building is part-demolished so access for nesting/breeding birds exists. Feral pigeons seen to fly out from south side of the building	No access
5	Holes in east side of the building. Feral pigeon seen entering.	No access
6	Likely to be feral pigeon nests in roof area	Restricted access. Approximately 7+ feral pigeon nests though no signs of any supporting young
7	Hole in building fabric on south side that could be accessed by birds	No access
8	Holes in windows on north side of the building	No access
9	Feral pigeon perching on outside - pigeon spikes on most windows	Restricted access. No young heard from bottom of stairwell - breeding status inconclusive
10	N/A - no signs of nesting birds recorded	N/A - no signs of nesting birds recorded
11	N/A - no signs of nesting birds recorded	N/A - no signs of nesting birds recorded
12	N/A - no signs of nesting birds recorded	N/A - no signs of nesting birds recorded
13	Nothing on main building but pigeon netting in poor repair in loading bay on south side and feral pigeon singing	No access
14	N/A - no signs of nesting birds recorded	N/A - no signs of nesting birds recorded
15	N/A - no signs of nesting birds recorded	N/A - no signs of nesting birds recorded
16	N/A - no signs of nesting birds recorded	N/A - no signs of nesting birds recorded
17	Feral pigeon - 1 nest	No access
18	N/A - no signs of nesting birds recorded	No access
19	N/A - no signs of nesting birds recorded	N/A – Wall.



F. Results of Nesting Bird Building Check – 24 June 2022

Building Number	Exterior	Interior
1	N/A - no signs of nesting birds recorded	N/A - no signs of nesting birds recorded
2	N/A - no signs of nesting birds recorded	No access
3	N/A - no signs of nesting birds recorded	No access
4	N/A - no signs of nesting birds recorded	No access
5	N/A - no signs of nesting birds recorded	No access
6	N/A - no signs of nesting birds recorded	Restricted access. Approximately 7+ feral pigeon nests though no signs of any supporting young
7	N/A - no signs of nesting birds recorded	No access
8	N/A - no signs of nesting birds recorded	No access. Feral pigeon flew inside - nesting
9	FP perching on building	Restricted access. No young heard from bottom of stairwell - breeding status inconclusive. Feral pigeon flew inside - nesting
10	N/A - no signs of nesting birds recorded	N/A - no signs of nesting birds recorded
11	N/A - no signs of nesting birds recorded	N/A - no signs of nesting birds recorded
12	Grey wagtail singing from roof. Lesser black-backed gull perched on roof	N/A - no signs of nesting birds recorded
13	N/A - no signs of nesting birds recorded	No access
14	N/A - no signs of nesting birds recorded	N/A - no signs of nesting birds recorded
15	N/A - no signs of nesting birds recorded	N/A - no signs of nesting birds recorded
16	N/A - no signs of nesting birds recorded	N/A - no signs of nesting birds recorded
17	N/A - no signs of nesting birds recorded	No access
18	N/A - no signs of nesting birds recorded	No access
19	N/A - no signs of nesting birds recorded	N/A – Wall.



G. Results of Nesting Bird Building Check – 12 July 2022

Building Number	Exterior	Interior
1	N/A	N/A - no signs of nesting birds recorded
2	N/A	No access
3	4 feral pigeons on roof	No access
4	Feral pigeon flew out; 2 feral pigeons perching on outside of building	No access
5	Feral pigeon flew out from the east side of the building	No access
6	2 feral pigeons flew out from the building. Starling singing from roof	Restricted access. Approximately 7+ feral pigeon nests though no signs of any supporting young
7	N/A	No access
8	N/A	No access. Feral pigeon flew inside - nesting
9	All windows except one now blocked off. Feral pigeon on ledge of open window	Access to stairwell. Feral pigeon heard flapping inside. No young heard.
10	N/A	N/A - no signs of nesting birds recorded
11	N/A	N/A - no signs of nesting birds recorded
12	Feral pigeon flew out from east side of the building	N/A - no signs of nesting birds recorded
13	N/A	No access
14	N/A	N/A - no signs of nesting birds recorded
15	N/A	N/A - no signs of nesting birds recorded
16	N/A	N/A - no signs of nesting birds recorded
17	N/A	No access
18	N/A	No access
19	N/A	N/A – Wall.



H. Summary of Relevant Planning Policy and Legislation

National Planning Policy

National Planning Policy Framework, 2021

The National Planning Policy Framework (NPPF) was published in 2012 and last updated on 20th July 2021³⁰. Section 15 (outlined below) of the NPPF, 'Conserving and Enhancing the Natural Environment', replaces Section 11 of the previous NPPF 2012 revision and NPPF 2018³¹. No significant changes to Section 15 are noted between the 2019³² and 2021 update. The Government Circular 06/2005³³ - Biodiversity and Geological Conservation: Statutory Obligations and Their Impact within the Planning System, remains valid and is still referenced within the NPPF.

Of particular significance with respect to biodiversity in the NPPF revision, is the amendment to para 175(d) of the NPPF 2019 (now para 180(d) of the NPPF 2021), which now requires opportunities to incorporate biodiversity improvements in and around development, rather than simply making it optional. This demonstrates further steps taken by the government towards achieving the 25 Year Environment Plan (2018). Otherwise there have been no further changes to the wording of "Conserving and enhancing the natural environment" Chapter of the NPPF.

The NPPF encourages the planning system to contribute to and enhance the natural and local environment. This should be achieved by:

- "Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate".

The NPPF also stipulates that Local Planning Authorities (LPAs), when determining planning applications, should apply the following principles:

³⁰ Ministry of Housing, Communities and Local Government. (2021). *National Planning Policy Framework*.

³¹ Ministry of Housing, Communities and Local Government. (2018). *National Planning Policy Framework*.

³² Ministry of Housing, Communities and Local Government. (2019). National Planning Policy Framework

³³ Department of Communities and Local Government. (2005). *Circular 06/05: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.*



- "If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- development on land within or outside a Site of Special Scientific Interest, and which is likely to
 have an adverse effect on it (either individually or in combination with other developments),
 should not normally be permitted. The only exception is where the benefits of the development
 in the location proposed clearly outweigh both its likely impact on the features of the site that
 make it of special scientific interest, and any broader impacts on the national network of Sites of
 Special Scientific Interest;
- development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity."

National Planning Practice Guidance, 2021

The Government's National Planning Practice Guidance 2016³⁴, updated in 2019³⁵ (NPPG) is intended to provide guidance to local planning authorities and developers on the implementation of the planning policies set out within the NPPF. The guidance of most relevance to ecology and biodiversity is the Natural Environment Chapter, which explains key issues in implementing policy to protect biodiversity, including local requirements.

Regional Planning Policy

The London Plan: The Spatial Development Strategy for Greater London, 2021

The London Plan 2021 sets out the overall strategic plan, setting out a framework for development over the next 20 to 25 years and includes several policies relating to ecology. Key to the London Plan is Policy G6 'Biodiversity and Access to Nature' which sets out the Mayor's policy in relation to biodiversity and access to nature. This states:

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

Boroughs, in Developing Plans, should:

- a) use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks;
- b) identify areas of deficiency in access to nature (i.e. areas that are more than 1km walking distance from an accessible Metropolitan or Borough SINC) and seek opportunities to address them;

³⁴ Department for Communities and Local Government. (2016). *National Planning Practice Guidance*. DCLG, London.

³⁵ Department for Communities and Local Government. (2019). *National Planning Practice Guidance*. DCLG, London.



- c) support the protection and conservation of priority species and habitats that sit outside the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans;
- d) seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context; and
- e) ensure designated sites of European or national nature conservation importance are clearly identified and impacts assessed in accordance with legislative requirements.

Where harm to a SINC is unavoidable, and where the benefits of the development proposal clearly outweigh the impacts on biodiversity, the following mitigation hierarchy should be applied to minimise development impacts:

avoid damaging the significant ecological features of the site;

- f) minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site; and
- g) deliver off-site compensation of better biodiversity value.

Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process.

Proposals which reduce deficiencies in access to nature should be considered positively.

Mayor of London: Environment Strategy, 2018

The London Environment Strategy, 2018³⁶ compliments the London Plan. It sets out how London's biodiversity can be protected and enhanced and contains a list of Priority Habitats and Species within the city. Priority species (SAPs) and habitats (HAPs) related to the Site are listed below:

- Birds, house sparrow, and bats (SAPs)
- · Rivers and Streams (HAPs).

The relevant policy within the strategy is Policy 5.2.1 'Protect a core network of nature conservation sites and ensure a net gain in biodiversity'.

Local Planning Policy

Richmond Local Plan 'The best for our borough' - Draft for consultation 2021

The Council's new Local Plan will set out policies and guidance for the development of the borough over the next 15 years, from the date of its adoption. Its development has been informed by a 'Direction of Travel' public consultation which was undertaken in spring 2020.

The new Local Plan includes a place-based strategy for Mortlake and East Sheen that the proposed Development Site is located within. With regards to biodiversity the future development in this place-based strategy is expected to 'Enhance continuity, connectedness and legibility of the Thames Path route, to improve'. In addition, and with respect to the Site itself the following is detailed;

³⁶ Mayor of London (2018) London Environment Strategy



At Stag Brewery (Site Allocation 34) there is a significant opportunity to create a new quarter for living, with recreational and commercial uses to generate vibrancy, local employment, community and leisure opportunities. The redevelopment will create vibrant links between the River and the town, enlivening the Riverside frontage and Mortlake High Street, to transform Mortlake while respecting the character and history of the area. There is an opportunity to accommodate tall buildings within the sensitivities of the surrounding context, in accordance with Policy 45 Tall and Mid-Rise Building Zones.

Strategy 21: Increasing biodiversity and the quality of our green and blue Spaces and greening the borough, with respect to biodiversity under Policy 34: Green and Blue Infrastructure, Policy 39: Biodiversity and Geography, Policy 40: Rivers and River corridors details:

Policy 34: Green and Blue Infrastructure

- Enhance the existing blue and green infrastructure network, including open spaces and green corridors, providing habitats for biodiversity to flourish and expand.
- Protect and enhance biodiversity within the green and blue infrastructure networks, particularly on sites designated for nature conservation interest.
- Enhance accessibility to open spaces as well as to the blue infrastructure network, particularly
 to the borough's rivers and their banks, for leisure and recreational use, while ensuring that the
 biodiversity value is protected.

Policy 39: Biodiversity and Geography

In accordance with London Plan Policy G6 (Biodiversity and access to nature), the Council will protect and enhance the borough's biodiversity and geodiversity, in particular, but not exclusively, the sites designated for their biodiversity and nature conservation value, including the connectivity between habitats and stepping-stone sites that connect wildlife or ecological corridors. This will be achieved by:

- Protecting biodiversity in, and adjacent to, the borough's designated sites for biodiversity and
 nature conservation importance (including buffer zones) against inappropriate development; this
 includes sites of international or national nature conservation importance, such as Special
 Areas of Conservation (SACs), Sites of Special Scientific Interest (SSSIs) or National Nature
 Reserves (NNRs) as well as those of London- and boroughwide importance, including Local
 Nature Reserve (LNRs) and Sites of Importance for Nature Conservation (SINCs);
- Protecting and conserving priority species and habitats that sit outside the nature conservation network of designated sites, including protecting other existing habitats and features of biodiversity value on non-designated sites and promoting opportunities for their enhancement by using the Richmond Biodiversity Action Plan's aim and actions;
- Protecting ecological or wildlife corridors from development which may destroy, impair or harm the integrity of the corridor;
- Requiring development to deliver robust and measurable net gains for biodiversity by
 incorporating and/or creating new habitats or biodiversity features, such as expansion and
 improvement of habitats, green links or habitat restoration, incorporation of green roofs and
 walls, tree planting as well as micro-habitat features such as bird and bat bricks and boxes,
 hedgehog gates or wildlife ponds in line with other policies of this Plan;



Requiring the following development proposals to provide at least a minimum of 20% contribution towards delivering measurable Biodiversity Net Gain (BNG):

- a. small-scale householder applications which increase the footprint and/or floorspace of the existing dwelling;
- b. all development proposals, including conversions or changes of use, that result in 1 dwelling unit or more;
- c. non-residential development proposals which increase the footprint and/or floorspace;

Where development would impact on species or a habitat, especially where identified in the Richmond Biodiversity Action Plan (BAP) at London or local level, or the Biodiversity Strategy for England, development proposals shall demonstrate that the mitigation hierarchy has been followed sequentially in accordance with the principles of:

- Avoid damaging the significant ecological features of the SINC site.
- Minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site.
- Deliver off-site compensation of better biodiversity value.

In accordance with the adopted London Plan Policy G6 (Biodiversity and access to nature), development proposals which seek to reduce deficiencies in access to nature and therefore help deliver robust, credible and measurable Net Gains for Biodiversity (by reducing natural green space deficiency) will be considered positively by the local planning authority.

Development proposals which would cause harm to a designated site with geodiversity value will not be permitted unless any damaging impacts can be prevented by appropriate mitigation measures. Development proposals which would affect a designated site with geodiversity value should seek to retain, restore and enhance the geological interest where possible.

Policy 40: Rivers and river corridors

Section F - Ensuring development on sites along the river is functionally related to the river and includes river-dependent or river-related uses where possible, including gardens which are designed to integrate and enhance the river, and be sensitive to its ecology

Policy 43: Floodlighting and other external artificial lighting

Section A - Floodlighting, including alterations and extensions, of sports pitches, courts and historic and other architectural features will be permitted unless there is demonstrable harm to character, biodiversity or amenity and living conditions

Section D – The following criteria will be taken into account when assessing floodlighting:

The impacts on biodiversity and wildlife;

London Borough of Richmond upon Thames: Adopted Local Plan 2018 / 2020

The following strategic visions, objectives and policies within the final draft of the Local Plan are of relevance to biodiversity:

Strategic vision 'Natural Environment, Open Spaces and the Borough's Rivers' states:



"The outstanding natural environment and green infrastructure network, including the borough's parks and open spaces, biodiversity and habitats as well as the unique environment of the borough's rivers and their corridors will have been protected and enhanced where possible. Residents will continue to highly value and cherish the borough's exceptional environmental quality"

Strategic objective 'Protecting Local Character' states:

- ".....3) Protect and improve the borough's parks and open spaces to provide a high quality environment for local communities and provide a balance between areas for quiet enjoyment and wildlife and areas to be used for sports, games and recreation;
- 4) Protect and enhance the borough's network of green infrastructure that performs a wide range of functions for residents, visitors, biodiversity and the economy;
- 5) Protect and enhance the borough's biodiversity, including trees and landscape, both within open spaces but also within the built environment and along wildlife corridors; and
- 6) Protect and improve the unique environment of the borough's rivers, especially the River Thames and its tributaries as wildlife corridors, as opportunities for recreation and river transport where possible, increasing access to and alongside the rivers where appropriate, and gain wider local community benefits when sites are redeveloped."

Policy LP 12 'Green Infrastructure' states:

"Green infrastructure is a network of multi-functional green spaces and natural elements, which provides multiple benefits for people, nature and the economy.

- A) To ensure all development proposals protect, and where opportunities arise enhance, green infrastructure, the following will be taken into account when assessing development proposals:
 - the need to protect the integrity of the green spaces and assets that are part of the wider green infrastructure network; improvements and enhancements to the green infrastructure network are supported;
 - its contribution to the wider green infrastructure network by delivering landscape enhancement, restoration or re-creation;
 - incorporating green infrastructure features, which make a positive contribution to the wider green infrastructure network
- B) The hierarchy of open spaces, as set out in the table below (refer to original document), will be protected and used in accordance with the functions shown."

Policy LP 13 'Green Belt, Metropolitan Open Land and Local Green Space' states

Local Green Space

D. Local Green Space, which has been demonstrated to be special to a local community and which holds a particular local significance, will be protected from inappropriate development that could cause harm to its qualities.

Policy LP 15 'Biodiversity' states:

"A) The Council will protect and enhance the borough's biodiversity, in particular, but not exclusively, the sites designated for their biodiversity and nature conservation value, including the connectivity between habitats. Weighted priority interms of their importance will be afforded to



protected species and priority species and habitats including National Nature Reserves, Sites of Special Scientific Interest (SSSI) and Other Sites of Nature Importance as set out in the Biodiversity Strategy for England, and the London and Richmond upon Thames Biodiversity Action Plans. This will be achieved by:

- 1) protecting biodiversity in, and adjacent to, the borough's designated sites for biodiversity and nature conservation importance (including buffer zones), as well as other existing habitats and features of biodiversity value:
- supporting enhancements to biodiversity;
- 3) incorporating and creating new habitats or biodiversity features, including trees, into development sites and into the design of buildings themselves where appropriate; major developments are required to deliver net gain for biodiversity, through incorporation of ecological enhancements, wherever possible;
- ensuring new biodiversity features or habitats connect to the wider ecological and green infrastructure networks and complement surrounding habitats;
- 5) enhancing wildlife corridors for the movement of species, including river corridors, where opportunities arise; and
- 6) maximising the provision of soft landscaping, including trees, shrubs and other vegetation that support the borough-wide Biodiversity Action Plan.
- B) Where development would impact on species or a habitat, especially where identified in the relevant Biodiversity Action Plan at London or local level, or the Biodiversity Strategy for England, the potential harm should:
- 1) firstly be avoided (the applicant has to demonstrate that there is no alternative site with less harmful impacts);
- 2) secondly be adequately mitigated; or
- as a last resort, appropriately compensated for."

LP 16 'Trees, Woodlands and Landscape' states:

- "A) The Council will require the protection of existing trees and the provision of new trees, shrubs and other vegetation of landscape significance that complement existing, or create new, high quality green areas, which deliver amenity and biodiversity benefits.
- B) To ensure development protects, respects, contributes to and enhances trees and landscapes, the Council, when assessing development proposals, will:

Trees and Woodlands:

- 1) resist the loss of trees, including aged or veteran trees, unless the tree is dead, dying or dangerous; or the tree is causing significant damage to adjacent structures; or the tree has little or no amenity value; or felling is for reasons of good arboricultural practice; resist development that would result in the loss or deterioration of irreplaceable habitat such as ancient woodland:
- 2) resist development which results in the damage or loss of trees that are considered to be of townscape or amenity value; the Council will require that site design or layout ensures a



- harmonious relationship between trees and their surroundings and will resist development which will be likely to result in pressure to significantly prune or remove trees;
- 3) require, where practicable, an appropriate replacement for any tree that is felled; a financial contribution to the provision for an off-site tree in line with the monetary value of the existing tree to be felled will be required in line with the 'Capital Asset Value for Amenity Trees' (CAVAT);
- 4) require new trees to be of a suitable species for the location in terms of height and root spread, taking account of space required for trees to mature; the use of native species is encouraged where appropriate;
- 5) require that trees are adequately protected throughout the course of development, in accordance with British Standard 5837 (Trees in relation to design, demolition and construction Recommendations).

The Council may serve Tree Preservation Orders or attach planning conditions to protect trees considered to be of value to the townscape and amenity and which are threatened by development.

Landscape:

- 1) require the retention of important existing landscape features where practicable;
- 2) require landscape design and materials to be of high quality and compatible with the surrounding landscape and character; and
- 3) encourage planting, including new trees, shrubs and other significant vegetation where appropriate."

Policy LP 17 'Green Roofs and Walls' states:

"Green roofs and / or brown roofs should be incorporated into new major developments with roof plate areas of 100sqm or more where technically feasible and subject to considerations of visual impact. The aim should be to use at least 70% of any potential roof plate area as a green / brown roof.

The onus is on an applicant to provide evidence and justification if a green roof cannot be incorporated. The Council will expect a green wall to be incorporated, where appropriate, if it has been demonstrated that a green / brown roof is not feasible.

The use of green / brown roofs and green walls is encouraged and supported in smaller developments, renovations, conversions and extensions."

Policy LP 18 'River Corridors' states:

- "A) The natural, historic and built environment of the River Thames corridor and the various water courses in the borough... will be protected. Development adjacent to the river corridors will be expected to contribute to improvements and enhancements to the river environment.
- B) Development proposals within the Thames Policy Area should respect and take account of the special character of the reach as set out in the Thames Landscape Strategy and Thames Strategy as well as the Council's Conservation Area Statements, and where available Conservation Area Studies, and / or Management Plans."



London Borough of Richmond upon Thames: Supplementary Planning Documents and Guidance

A series of Supplementary Planning Guidance (SPG) and Supplementary Planning Documents (SPDs) has been produced by LBRuT to provide greater detail on existing local planning policies to support decisions on planning applications. LBRuT no longer produces SPGs as they have been replaced with SPDs since 2004. However, they remain material considerations in planning decisions. With regards to biodiversity, a SPG titled 'Nature Conservation and Development' has been published by LBRuT. This SPG states:

i. "It is important that nature conservation should be integrated at the planning stage with all new development. Schemes should be designed to retain existing features and habitats of wildlife value on site, and to create new habitats where appropriate."

Currently, the only parts of the UDP that remain saved and have not been superseded are those Proposal sites that were originally saved. The eastern part of the Site is allocated on the Proposals Map as site S4 (Budweiser Stag Brewery)³⁸.

The LBRuT adopted a planning brief for the Site in July 2011 with SPD³⁹ status. This document sets out opportunities and constraints regarding the redevelopment of the Site. With regard to biodiversity, this SPD states:

"Opportunities should be taken to enhance biodiversity throughout the site and particularly along the River."

Site Allocations

LBRuT have also produced a suite of 14 Village Plan SPDs, one for each Village Area in the Borough. Each Village Plan SPD provides a vision for the area, identifying the local character and setting out key policies and design principles that will apply to both new development and changes to existing buildings. These are used as material considerations in determining planning applications in each area.

The Site is located within the 'Mortlake Village Plan'⁴⁰. It sets out that the vision for Mortlake is to create a new heart to the village by the redevelopment of the Stag Brewery Site creating a recreational and living quarter and a vibrant link between the village and the riverside.

Biodiversity Action Plans

UK Post-2010 Biodiversity Framework

The Environment Departments of all four governments in the UK work together through the Four Countries Biodiversity Group. Together they have agreed, and Ministers have signed, a framework of priorities for UK-level work for the Convention on Biological Diversity. Published on 17 July

³⁷ London Borough of Richmond upon Thames (no-date); 'Design Guidelines for Nature Conservation & Development'.

³⁸ London Borough of Richmond upon Thames (2005); 'Unitary Development Plan. Chapter 12 – Local Strategies and Plan Proposals'.

³⁹ London Borough of Richmond upon Thames (2011); 'Stag Brewery, Mortlake, SW14 Planning Brief. Supplementary Planning Guidance'.

⁴⁰ London Borough of Richmond upon Thames (2015); 'Mortlake Village Planning Guidance. Supplementary Planning Guidance'.



2012, the 'UK Post-2010 Biodiversity Framework'⁴¹ covers the period from 2011 to 2020. This now supersedes the UK Biodiversity Action Plan (UK BAP)⁴². However, many of the tools developed under UK BAP remain of use, for example, background information about the lists of priority habitats and species. The lists of priority species and habitats agreed under UK BAP still form the basis of much biodiversity work in the countries.

Although the UK Post-2010 Biodiversity Framework does not confer any statutory legal protection, in practice many of the species listed already receive statutory legal protection under UK and / or European legislation. In addition, the majority of Priority national (English) BAP habitats and species are now those listed as Habitats of Principal Importance (HoPI) and Species of Principal Importance (SoPI) in England listed under Section 41 (S41) of the NERC Act 2006. For the purpose of this report, habitats and species listed under S41 of the NERC Act are referred to as having superseded the UK BAP. All public bodies have a legal obligation or 'biodiversity duty' under Section 40 of the NERC Act 2006 to conserve biodiversity by having particular regard to those species and habitats listed under S41.

Based on the results of the PEA the following HoPIs and SoPIs listed under S41 are considered to be of potential value on and/or immediately adjacent to the Site:

- Rivers and Streams;
- Noctule bat (SoPI);
- Soprano pipistrelle bat Pipistrellus pygmaeus (SoPI);
- Starling Sturnus vulgaris (SoPI);
- House sparrow Passer domesticus (SoPI).

Richmond Biodiversity Action Plan

The Biodiversity Action Plan for the London Borough of Richmond upon Thames (LBRuT)⁴³ sets out the framework for the protection, conservation and enhancement of wildlife within the borough. Through its implementation, the plan protects and manages habitats and species of national, regional or local significance, or those that are in the Red Data Books and on the Red Lists. Based on the results of the PEA the following Habitat and Species Action Plans are considered to be of relevance to the Site:

- Tidal Thames:
- House sparrow;
- Song thrush;
- Swift;
- Stag beetle.

⁴¹ JNCC and DEFRA (on behalf of the Four Countries' Biodiversity Group). (2012). UK Post-2010 Biodiversity Framework.

⁴² HMSO. (1994) Biodiversity The UK Action Plan.

⁴³ Richmond Biodiversity Partnership (2019): 'London Borough of Richmond Upon Thames. Biodiversity Action Plan)



Guidance

Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services

In October 2010, over 190 countries signed an historic global agreement in Nagoya, Japan to take urgent and effective action to halt the alarming global declines in biodiversity. This agreement recognised just how important it is to look after the natural world. It established a new global vision for biodiversity, including a set of strategic goals and targets to drive action. England's response to this agreement was the publication of 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services' 14. The mission for this strategy is:

"to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people."

BS 42020: 2013 Biodiversity: Code of Practice for Planning and Development

The UK commitment to halt overall loss of biodiversity by 2020 in line with the European Biodiversity Strategy and UN Aichi targets⁴⁵, is passed down to local authorities to implement, mainly through planning policy. To assist organizations affected by these commitments, BSI has published BS 42020 which offers a coherent methodology for biodiversity management.

This British Standard sets out to assist those concerned with ecological issues as they arise through the planning process in matters relating to permitted development and activities involved in the management of land outside the scope of land use planning, which could have site-specific ecological implications.

The standard has been produced with input from a number of organisations including the Chartered Institute of Ecology and Environmental Management (CIEEM) and the Association of Local Government Ecologists (ALGE) and provides:

- Guidance on how to produce clear and concise ecological information to accompany planning applications;
- recommendations on professional ethics, conduct, competence and judgement to give confidence that proposals for biodiversity conservation, and consequent decisions/actions taken, are sound and appropriate; and
- direction on effective decision-making in biodiversity management a framework to demonstrate how biodiversity has been managed during the development process to minimize impact.

⁴⁴ Defra. (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services.

⁴⁵ https://www.cbd.int/sp/targets/



Legislation

Bats

In summary, all UK bat species are protected by the Conservation of Habitats and Species Regulations 2017 (as amended) and by the Wildlife Countryside Act 1981. Taken together it is an offence to deliberately, intentionally or recklessly:

- Kill, injure or capture a bat;
- Disturb bats in such a way as to be likely significant to affect:
 - (i) the ability of any significant group of bats to survive, breed, or rear / nurture their young; or
 - (ii) the local distribution of that species;
- Damage or destroy any breeding or resting place used by bats; or
- Obstruct access to any place used by bats for shelter or protection and disturbing bats while occupying such as place.

Peregrine Falcon

Peregrines (and their nests) are a Schedule one bird classified under the Wildlife Countryside Act 1981. The following are criminal offences:

- · Killing, injuring or taking any wild bird;
- Taking, damaging or destroying the nest of any wild bird whilst that nest is in use or being built;
- · Taking or destroying the egg of any wild bird;
- · Possessing any live or dead wild bird, or any part, or anything derived from such a bird; and
- Possessing an egg of a wild bird or any part of such an egg.

The following are criminal offences in relation to "Schedule 1" birds:

- Disturbing any Schedule 1 wild bird whilst it is building a nest or is in, on or near a nest containing eggs or young; and
- Disturbing dependent young of such a bird.

Breeding/Nesting Birds

Statutory protection is given to all nesting birds in the UK under the WCA 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird, take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition to this, for species listed on Schedule 1 of the WCA 1981 (as amended), it is an offence to intentionally or recklessly disturb birds while they are nest building, or at or near a nest with eggs or young, or to disturb the dependent young of such a bird.



UK and Ireland Office Locations

