Ecological Assessment

Brockley Hill, Stanmore - New Banqueting Facility

Tyler Grange

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Summary

S.1. This report has been prepared by Tyler Grange Group Ltd on behalf of Sairam (Holdings) Ltd. It sets out the findings of a Phase 1 habitat survey and desk study, Habitat Suitability Index Assessment (HSI), Preliminary Bat Roost Assessment (PBRA), bat emergence survey, reptile presence/likely absence surveys and biodiversity net gain assessment of a parcel of land at the former Brockley Hill Golf Club (OS Grid Reference TQ 17758 93339) hereinafter referred to as the "Site".

S.2. The purpose of this report is to describe the results of the Ecological Assessment (EA) which includes:

- Phase 1 habitat survey and desk study:
    - Three nationally designated sites and ten locally designated sites are found within a 2km and 1km search radius of the site, respectively; and
    - The site comprises of areas of developed surface associated with the sites historic use as a golf course and driving range including poor semi-improved grassland and semi-improved grassland, a dry ditch, hedgerows, scattered trees and introduced shrub;
- Habitat Suitability Index (HSI) Assessment - two offsite ponds were subject to HSI assessments;
- Preliminary Bat Roost Assessment (PBRA) - Building (B1) has low potential to support roosting bats and five onsite trees have potential to support roosting bats;
- Dusk emergence survey - One emergence surveys was undertaken on building B1 in May 2020, prior to the building burning down, during which no roosts where observed;
- Reptile Surveys – Over seven survey visits, no reptiles were found to be present on site; and
- Biodiversity Net Gain Assessment - The proposals as presented in the indicative Landscape Strategy Plan (**13201/P11d**) and the site Master Plan (**05851_MP_00_2200-14**) would result in a net gain of +20.02% habitat units and a net gain of +49.55% hedgerow units.

S.3. Those habitats that are being lost to the development are mostly of negligible ecological importance and require no specific mitigation (building and hardstanding, sand bunkers, gravel and introduced shrub). Those habitats of ecological importance within the site context only that are proposed to be subject to habitat loss (poor semi-improved and semi-improved grassland, scattered trees and beech hedgerow) will be more than mitigated through the proposed habitat creation and ecological enhancements. These, alongside species-specific enhancements recommended within this report, will improve the habitat diversity onsite and will establish a range of habitats that will provide a series of nesting, foraging and commuting opportunities for species such as bats, birds, badger, reptiles, amphibians and hedgehogs.

S.4. It has been recommended that the mitigation and enhancement recommendations made throughout this report be secured through the production of a Landscape and Environment Management Plan (LEMP) and a Bat Lighting Strategy.

S.5. Any vegetation removal should be undertaken outside of the core nesting bird season (March-August, inclusive), otherwise, a pre-works check by an Ecological Clerk of Works (ECoW) should be undertaken.

S.6. In conclusion, it is considered that the future development of the site would accord with relevant planning policy that seeks to protect and enhance ecological features and that the mitigation and enhancement strategy can be secured by planning conditions.

Section 1: Introduction, Context and Purpose

Introduction

1.1. This report has been prepared by Tyler Grange Group Ltd on behalf of Sairam (Holdings) Ltd. It sets out the findings of a Phase 1 habitat survey, desk study, Habitat Suitability Index Assessment (HSI), Preliminary Bat Roost Assessment (PBRA), bat emergence survey, reptile presence/likely absence surveys and biodiversity net gain assessment of a parcel of land at Brockley Hill Golf Club (OS Grid Reference TQ 17758 93339) hereinafter referred to as the "site".

Context

1.2. The site comprises part of a disused driving range, golf club and associated club house, car parking, driving range and landscaping. The site is accessible from the A5, Brockley Hill road, to the east and is surrounded by the wider golf course and woodland associated with Stanmore Country Park Local Nature Reserve (LNR) to the north and west and a grassland to the south.

1.3. The proposed development is for the demolition of existing golf club buildings (Use Class D2) and construction of a new banqueting facility (Use Class D2), widening of existing vehicular access from Brockley Hill, car and cycle parking, waste / recycling storage, landscape enhancements and associated works.

1.4. It should be noted that following the initial Phase 1 habitat survey visit and visit one of two planned bat emergence surveys, the onsite club house was subject to a serious fire and the majority of the building has been destroyed. For the purpose of this report, the initial baseline which included the assessment of the building is detailed, however the majority of the building no longer exists at the site.

Purpose

1.5. This report:

- Uses available background data and results of field surveys, to describe and evaluate the ecological features present within the likely 'zone of influence' (ZoI)[1] of the proposed development;
- Describes the actual or potential ecological issues and opportunities that might arise as a result of the site's future development;
- Where appropriate, makes recommendations for mitigation of adverse effects and ecological enhancement, to ensure conformity with policy and legislation;
- Evaluates the proposals in terms of whether they will achieve a biodiversity net gain at the site; and
- Can be used to inform a planning application for the site's redevelopment.

[1] Defined as the area over which ecological features may be subject to significant effects as a result of activities associated with a project (CIEEM, 2019)

1.6. This assessment and the terminology used are consistent with the 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (CIEEM, 2019).

Section 2: Methodology

Data Search

2.1 The aim of the data search is to collate existing ecological records for the site and adjacent areas. Obtaining existing records is an important part of the assessment process as it provides information on issues that may not be apparent during a single survey, which by its nature provides only a 'snapshot' of the ecology of a given site.

2.2 The data search has been undertaken for a 10km radius around the Site for European statutory sites, a 2km radius for national statutory sites and a 1km radius for non-statutory sites and protected and priority[2] species records.

2.3 The following organisations and individuals have been contacted and, where relevant, the information provided has been incorporated with acknowledgement within this report:

- Greenspace Information for Greater London (GiGL) was contacted for details of protected and priority species and non-statutory sites within a 1km search radius from the site. The information from GiGL was received on 10th May 2020. Where relevant records were identified, the information provided has been incorporated into the report with due acknowledgement;
- The Multi-Agency Geographic Information for the Countryside website[3] was accessed for information on the location of European designated sites within 10km of the site and 2km for nationally designated sites;
- The London Council and London Borough of Harrow website was consulted for details of relevant local planning policies and supplementary planning guidance; and
- The London and Harrow BAP was consulted for priority habitats and species subject to conservation action, to assist with the evaluation of ecological features and to inform site enhancement strategies.

Extended Phase I Habitat Survey

2.4 An 'extended' Phase I habitat survey was undertaken on 6th May 2020 by Robert Sinclair, an experienced field ecologist and level 2 Natural England bat class licence holder. The technique was based upon Phase I survey methodology (JNCC, 2010). This 'extended' Phase I technique provides an inventory of the habitat types present and dominant species.

2.5 As part of this survey work, all habitats were assessed with consideration of the UK Habitat Classification (The UK Habitat Classification Working Group, 2018)[4] in order to determine their condition and ecological importance. This also enabled the accurate completion of DEFRA's latest Biodiversity Net Gain Metric (The Biodiversity Metric 2.0 (JP029)).

[2] UK priority species and habitats are those subject to conservation action and referred to as Species of Principal Importance (SoPIs) or Habitats of Principal Importance (HoPIs). They are listed at Section 41 [42 in Wales] of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act states that local planning authorities must have regard for the conservation of both SoPIs and HoPIs.
[3] http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx
[4] https://ecountability.co.uk/ukhabworkinggroup-ukhab/

Habitat Suitability Index

2.6 A HSI assessment of two offsite ponds, P1 and P2, was undertaken on 6th May 2020 to determine the suitability of the pond for Great Crested Newt (GCN) *Triturus cristatus*, by GCN Class Licence holder Robert Sinclair, in line with published guidance (Oldham, R.S., Keeble, J., Swan, M.J.S. and Jeffcote, M., 2000).

2.7 The National Amphibian and Reptile Recording Scheme HSI guidance (based on the Oldham et al. methods) was used, whereby a number of factors including pond size and location, proximity to other ponds, water quality, macrophyte cover and shading were assessed. A score is given to a waterbody between 0 and 1, with scores closer to 0 having lower probability of GCN occurrence. Although the HSI cannot be used as confirmation of GCN presence or likely absence, it can be used as a guide to assess the habitat in terms of its potential to support GCN. It also provides useful information that can inform pond management and enhancement programmes.

2.8 The HSI classifications are provided below:

- < 0.5 Poor;
- 0.5 – 0.59 Below average;
- 0.6 – 0.69 Average;
- 0.7 – 0.79 Good; and
- ≥ 0.8 Excellent.

Preliminary Bat Roost Assessment

2.9 A Preliminary Bat Roost Assessment (PBRA) of the buildings and trees present within the site was undertaken to assess their potential to support roosting bats. This survey was undertaken alongside the 'extended' Phase 1 habitat survey. The surveys followed standard methodologies (Mitchell-Jones, A.J., 2004; Mitchell-Jones, A.J. and McLeish, A.P., 2004; Collins, 2016) which are described below.

2.10 The PBRA for buildings comprised an external inspection of the buildings present on-site to assess their potential to support roosting bats. In summary, this required the following:

- A visual inspection of the exterior and interior of the buildings on site was undertaken on the 6th May 2020, examining features such as brickwork, lead flashing, and tiles for evidence of use by bats, including the presence of bat droppings and staining from fur-oil or urine; and
- A number of factors were considered including the presence of features suitable for use by crevice dwelling bats, proximity to foraging habitats or cover, and potential for disturbance from lighting and other sources.

2.11 The PBRA for trees comprised a ground level inspection of all trees present on the site to determine the potential of each tree to support roosting bats. During this survey, Potential Roost Features (PRFs) that may be used by bats, as identified within the BCT Good Practice Guidelines (Collins, 2016), were sought. These included the following:

- Woodpecker holes, rot holes, knot holes arising from naturally shed branches and man-made holes;
- Hazard beams and other vertical or horizontal cracks and splits (such as frost-cracks) in stems or branches;
- Partially detached platey bark;
- Cankers;
- Other hollows or cavities, including butt-rots; and

- Partially detached ivy with stem diameters in excess of 50mm.

2.12 Evidence of the presence of bat roosts was also sought. These signs include:

- Bat droppings in, around or below PRF;
- Odour emanating from a PRF;
- Audible squeaking at dusk or in warm weather; and
- Visible staining below a PRF.

2.13 The potential of the buildings and trees to support roosting bats has been categorised against the criteria described in **Table 2.1**.

Suitability	Description of Roosting Habitats
Negligible	Negligible habitat features on-site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites 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). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites 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.
High	A structure or tree with one or more potential roost sites 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.

Table 2.1 – Roost Assessment Criteria (adapted from Collins 2016)

Bat Emergence Survey

2.14 The emergence survey followed standard methodologies set out in the Bat Mitigation Guidelines (Mitchel-Jones, A. J., 2004), the Bat Workers Manual (Mitchell- Jones, A.J. and McLeish, A.P., 2004) and Bat Surveys – Good Practice Guidelines 3rd Edition (Collins, 2016). The methods broadly comprise the following:

- One emergence survey conducted on building B1, which was considered to have a low potential for roosting bats and was proposed to be demolished as part of the works.

2.15 Records of bats within 1km of the site were requested and received from the Green Space Information for Greater London (GIGL) on the 5th of May 2020.

2.16 Building B1 was considered to have low potential for roosting bats, and so in line with best practice guidelines (Collins, 2016) required one emergence/re-entry survey during the bat active season (May-August, inclusive). As the building required six surveyors to give full coverage of the PRFs the survey was split over two visits using three surveyors each time.

2.17 Surveyors were positioned strategically to ensure that the potential bat roost features were covered adequately (see plan **13201/P17**). Surveyors remained in these positions, observing the trees from 15

minutes before sunset, through until 1.5 hours after sunset. **Table 2.2** shows the metadata for this emergence survey.

Survey	Date	Survey Times	Weather		Surveyors
			Start	End	
Dusk Emergence – building B1	09/06/2020	Sunset: 21:16 Start: 21:01 End: 22:46	Wind (Beaufort): 0 Temp (°C): 17 Precipitation: dry Cloud cover (% cover): 100	Wind (Beaufort): 0 Temp (°C): 16 Precipitation: dry Cloud cover (% cover): 100	Nathan Jenkinson, Rebekah Baker, Zoe Durran

Table 2.2. Metadata for visit 1 out of two proposed emergence/re-entry surveys.

2.18 Surveyors used a combination of visual observations and echolocation detection to identify any bats emerging from the trees. The type of detector used by each surveyor is detailed within the raw data in **Appendix 2**.

2.19 One visit was undertaken using three surveyors prior to the fire at the building, and therefore only the north eastern and eastern aspects of the building were subject to an emergence survey.

Reptile Presence/Likely Absence Surveys

2.20 The reptile presence/likely absence surveys covered the area of the golf course that exists to the west and north of the current site boundary. The most suitable habitat for reptiles is found within this wider area of the golf course which beyond the site boundary. As such the reptile mats were placed in the most suitable habitat which comprised mostly of areas outside of the current site boundary.

2.21 These surveys were conducted in-line with Froglife Advice Sheet 10, with the number of mats deployed equal to a density of 10 mats per ha (Froglife, 1999) and Natural England's standing advice. The surveys were completed within the active season for reptiles (March to October inclusive).

2.22 A total of 70 reptile refugia, comprising 0.5×1m pieces of bitumen roofing felt, were deployed on the 25th of September 2020 within areas of suitable habitat identified during the extended Phase 1 habitat survey.

2.23 The most suitable areas of habitat were identified to be within the wider golf course area beyond the red line boundary. A total of 62 mats were placed around the golf course boundaries. A further eight mats were placed within the area of semi-improved grassland found within the site and continuing out into the wider golf course. As the grassland habitat found within and outside of the redline boundary is continuous, this method is still considered an appropriate assessment. For a detailed map of reptile mat locations see plan (**13201/P14a**).

2.24 The mats were left in situ for over seven days to bed in, before seven subsequent survey checks were undertaken between the 5th of 23rd of October during suitable weather conditions (dry, warm [air temperature between 9ºC to 18ºC], intermittent sun and light winds). The timings and weather data for these surveys are shown below in **Table 2.3**.

Visit	Date	Time	Weather Conditions	Temperature (˚C)
1	05/10/20	14:00-15:00	Dry with rain earlier in the day	16
2	07/10/20	11:00-11:50	Dry and sunny	12
3	09/10/20	09:15-10:00	Dry and sunny	9
4	13/10/20	16:00-16:45	Light rain through the middle and end of the survey	10
5	16/10/20	15:00-15:45	Dry	12
6	20/10/20	14:00-14:40	Dry	17
7	23/10/20	13:00 -13:45	Dry and sunny	16

Table 2.3: Meta data for reptile surveys of the site in October 2020.

2.25 In addition to checking beneath the artificial refugia, visual searches of the top of the artificial refugia, and searches of natural refugia/basking spots were also undertaken during each reptile survey visit.

Biodiversity Net Gain Metric

2.26 The DEFRA Biodiversity Metric 2.0 was utilised to calculate the pre-development and predicted post-development biodiversity value of the site based on the indicative Landscape Strategy Plan (**13201/P11d**).

2.27 This report should be read alongside the completed DEFRA 2.0 metric (**13201/Biodiversity Net Gain Metric_c**).

2.28 This metric operates by calculating the number of biodiversity units associated with a particular habitat type (both pre-and post-development) – the 'unit' value associated with each habitat type is calculated based on the following parameters:

- Size (in hectares)/Length (in km);
- Distinctiveness (i.e. how rare/valuable a given habitat is);
- Condition (i.e. how well the recorded habitat fits [or will fit] the standardised description of that habitat);
- Connectivity (i.e. how well-connected a given habitat is to similar habitats in the landscape); and
- Strategic significance (i.e. if the existing or proposed habitat is within an area formally adopted in the local plan for green infrastructure or biodiversity improvements).

2.29 When considering the creation of new habitats in the post-development site, other factors are also considered when calculating the 'unit' value of a given habitat and these are:

- Time to reach the target condition of each habitat; and
- Difficulty category for the creation of a given habitat.

2.30 A calculation has been undertaken using the baseline habitats identified during the 'extended' Phase I habitat survey and created/enhanced habitats taken from the Landscape Strategy Plan (**13201/P11d**) and the site

Master Plan (**05851_MP_00_2200-14**). The size of the scattered trees was calculated using the measurements presented within the Arboricultural Impact Assessment and Arboricultural Method Statement produced by David Clarke Chartered Landscape Architect and Consultant Arboriculturist Limited (DCCLA).

2.31 This calculation is completed separately for non-linear and linear habitats.

Evaluation

2.32 The evaluation of habitats and species is defined in accordance with published guidance (CIEEM, 2019). The level of importance of specific ecological features is assigned using a geographic frame of reference, with international being most important, then national, regional, county, borough, local and lastly, within the site boundary only.

2.33 Evaluation is based on various characteristics that can be used to identify ecological features likely to be important in terms of biodiversity. These include site designations (such as Sites of Species Scientific Interest (SSSIs)), or for undesignated features, the size, conservation status (locally, nationally, or internationally), and the quality of the ecological feature. In terms of the latter, quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.

Limitations

2.34 It is considered that the Phase 1 habitat survey was not subject to any limitations.

2.35 As the majority of building B1 was burnt down before the completion of the emergence surveys it is not clear whether a bat roost was present. However, now that the majority of the building does not exist, this does not have any bearing on the results of the ecological assessment.

2.36 There was a light rain during the fourth reptile presence/likely absence survey visit, however all other conditions were suitable and as the rain began part way through the survey, it is not considered that this will have had any substantial impact on the results.

2.37 Although the majority of the reptile mats were placed outside of the current red line boundary (as detailed in paragraph 2.20), as the habitat within the site boundary is not as suitable as those habitats subject to survey and as the habitats are connected, it is considered that this does not have any implication on the reliability of the results. The risk of reptiles being present within the site boundary is considered to be lower than that of the habitats outside of the red line boundary. As such, this methodology is considered still to be appropriate and does not have any bearing on the results.

Quality Control

2.38 All ecologists at Tyler Grange Group Ltd are members of CIEEM and abide by the Institutes Code of Professional Conduct**.**

Section 3: Ecological Features and Evaluation

Context

3.1. The site comprises part of a disused driving range and associated club house, car parking, small areas of the wider golf course and landscaping. The site is accessible from the A5, Brockley Hill road, to the east and is surrounded by the wider golf course and woodland associated with Stanmore Country Park LNR to the north and west. **Figure 3.1** shows the site boundary.

Figure 3.1 Site boundary

Protected Sites

Statutory Sites

3.2. There are no Internationally designated sites within a 10km search radius of the site.

3.3. There are three nationally designated sites within a 2km search radius of the site, Stanmore Country Park LNR, Stanmore Common LNR and Bentley Priory LNR and Site of Special Scientific Interest (SSSI).

3.4. Stanmore Country Park lies approximately 30m west of the site and is designated LNR for its acidic grassland community and woodland. Its grasslands support many raised nests of the Yellow Hill Ant *Lasius flavus*. Most of the woodland is formed largely of relatively young oak *Quercus sp*., birch *Betula* sp. and sycamore *Acer* sp., with sporadic occurrences of holly *Ilex aquifolium*, hawthorn *Crataegus monogyna* and elder *Sambucus nigra* in the shrub layer. This site supports a varied selection of birds, mammals and insects.

3.5. Stanmore Common which lies approximately 1.1km to the west of the site and is designated LNR for its woodland and heathland.

3.6. Bentley Priory which lies approximately 1.6km to the south west of the site and is designated LNR and SSSI for its meadows which are cattle grazed in the summer. As well as the meadows the site includes extensive woodlands, two ponds and supports a range of bird and plant life.

3.7. The site sits within an identified SSSI Impact Risk Zone (IRZ), however only developments that involve infrastructure, wind, solar energy, minerals or oil and gas extraction or developments of industrial or agricultural scale that may produce significant landfill, composting, combustion or discharge processes need to be considered. As such, the proposals do not need to be considered for their impact on nearby SSSI sites.

Non-Statutory Sites

3.8. In London, non-statutory sites designated for their biodiversity importance are known as Sites of Importance for Nature Conservation (SINCs). SINCs are recognised by the Greater London Authority and London Borough Councils as important wildlife sites. SINCs are broken down into three tiers dependent on the geographic scale at which they are of importance, and these are, from most to least important:

- Sites of Metropolitan Importance;
- Sites of Borough Importance (borough grade I and borough grade II); and
- Sites of Local Importance.

3.9. Within 1km of the site there are ten SINCS, the details of which are listed in **Table 3.1**.

Site Name	Geographical Importance	Approximate Distance and Direction from Site	Reason for Designation
Pear Wood and Stanmore Country Park	Metropolitan	0.03km north and west	This site supports acid grassland, ancient woodland, coniferous woodland, ponds, semi-improved neutral grassland, unimproved neutral grassland. The invertebrate fauna is also important, and many nationally scarce and regionally rare species occur, including the jewel beetle *Agrilus angustulus*. Pear Wood is one of only two London sites for the southern wood ant *Formica rufa*, a UK Biodiversity Action Plan priority species.
Walling Street Verge	Local	0.15km south east	This site represents an important remnant of relatively species rich neutral grassland. It is a flower-rich verge of the busy A5 road with ruderal vegetation, scattered trees, scrub and semi-improved neutral grassland

Site Name	Geographical Importance	Approximate Distance and Direction from Site	Reason for Designation
Wood Farm	Borough Grade II	0.3km west	A large area of open land with a good range of plants and insects with a pond, ruderal scrub, semi-improved neutral grassland and tall herbs. This restored landfill site, surrounded on three sides by Stanmore Country Park, supports a range of early successional habitats.
Sulloniacis Pastures	Borough Grade II	0.4km north east	This site supports flower-rich pastures alongside an important archaeological site. These flower-rich pastures lie on the London clay, beside the Sulloniacis Roman settlement, a Scheduled Ancient Monument
Edgware Way Rough	Metropolitan	0.5km east	This site supports damp, herb-rich grassland that includes London's strongest population of the regionally rare plant great burnet and many other uncommon plants characteristic of old meadows. It is an area of typical unimproved London clay grassland, traversed by a stream and an unused railway embankment.
Royal National Orthopaedic Hospital Grounds	Borough Grade I	0.7km north	This site supports areas of ancient woodland and acid grassland that support some uncommon plants and animals. The south margin of the hospital site is included as part of the Pear Wood & Stanmore Country Park SINC due to the presence of the UK Biodiversity Action Plan species southern wood-ant.
Canons Park and Stanmore Railway Embankments	Borough Grade II	0.75km south	This site supports amenity grassland, scrub, secondary woodland, semi-improved neutral grassland, tall herbs and vegetated walls. Canons Park has several features of wildlife interest, such as an area of woodland and an old walled garden.
Watling Chase Community Forest planting site and environs	Local	0.8km east	This is an area of former agricultural land and landfill, now covered in moderately species-rich rough grassland with remnant hedgerows and standing dead wood. There are extensive recent plantings of native shrubs and trees, an initiative of Watling Chase Community Forest. The site, due to its large area is an important resource for a wide range of vertebrate and invertebrate fauna.

Site Name	Geographical Importance	Approximate Distance and Direction from Site	Reason for Designation
Edgwarebury Brook	Borough Grade II	0.9km east	This kilometre-long section of the Edgwarebury Brook flows through farmland. It is a narrow stream of clear, mostly shallow water, with low banks and a bed of clay and gravel. Parts are shaded by trees and scrub, but much of it is open, with plenty of aquatic vegetation.
Edgwarebury Park	Local	0.9km east	A large park with ancient hedgerows, parkland with scattered trees, stream down western side, ornamental gardens and recently planted woodland.

Table 3.1. SINCs within a 1km search radius of the site.

Habitats and Flora

3.10. The site supports the following habitats:

- Artificial or developed surfaces (Astroturf, Building and Hardstanding, Gravel and Sand);
- Dry Ditch;
- Grassland (Amenity grassland, Poor semi-improved grassland and Semi improved grassland);
- Introduced Shrub;
- Hedgerow; and
- Scattered Trees

3.11. All the features described are shown on the Habitat Features and Potential Bat Roost Features Plan (**13201/P02e**).

Artificial or Developed Surfaces

3.12. There is a small area of Astroturf located to the south of the existing car parking area. This habitat offers no biodiversity value to the site and is of **negligible ecological importance**. As such, this feature is not discussed further within this report.

3.13. There are two buildings found onsite, building B1 was the golf club house and building B2, a small storage unit. The buildings themselves as habitat, provide no biodiversity value to the site and are of **negligible ecological importance.** These buildings, however, are discussed below in relation to their potential to support roosting bats.

3.14. The site contains areas of hardstanding associated with the site entrance and parking area. Small sections of gravel paving and sand bunkers associated with the sites previous use as a golf course and driving range are also found on site. These habitats offer no value to the biodiversity at the site and is considered to be **of negligible ecological importance**. As such the areas of hardstanding are not considered further within this report.

Photograph 3.1 Building and Hardstanding

Dry Ditch

3.15. There is a dry ditch which begins at the northern end of the wider golf course not contained within the site boundary. This ditch forks into two sections around the driving range, with both forks of the dry ditch passing through the site on either side of the club house.

3.16. The dry ditch is considered to be of **ecological importance within the site context only**.

Photograph 3.2 Dry Ditch

Grassland

3.17. Most of the grassland habitat found on site is poor semi-improved grassland which comprises species such as perennial ryegrass *Lolium perenne,* common daisy *Bellus perennis*, white clover *Trifolium repens*, cocksfoot *Dactylis glomerate*, creeping buttercup *Ranunculus repens*, yarrow *Achillea millefolium* and common birds foot trefoil *Lotus corniculatus*. This habitat is common and widespread and as such is considered to be of **ecological importance within the site context only**.

3.18. A small strip of grassland which borders the edge of the driving range is slightly more diverse and was classified as semi-improved grassland. Two small areas of this strip of semi-improved grassland overlap with the site boundary, both to the north east and south west of the driving range area. This habitat comprises species such as perennial ryegrass, red fescue *Festuca rubra,* creeping buttercup, common daisy, wild carrot *Daucus carota*, spear thistle *Cirsium vulgare*, *Equisetum* sp, creeping vetch *Vicia sativa*, Timothy *Phleum pratense* and selfheal *Prunella vulgaris*. As above for the poor semi-improved grassland, this habitat is common and widespread and as such is considered to be of **ecological importance within the site context only**.

Photograph 3.3 Poor semi-improved grassland

3.19. There is also a very small area of amenity grassland, which supports a less diverse range of flora than the poor semi-improved grassland and is located to the east of the Astroturf which is considered to be of **negligible ecological importance**.

Introduced Shrub

3.20. There are several areas of introduced shrub associated with the club house and car park. This habitat is common and widespread, and the majority of species are non-native including species such as bay laurel *Laurus nobilis*, variegated bamboo *Bambusa vulgaris*, *fuchsia* sp., *dahlia* sp. and some native species such as dogwood *Cornus sanguinea*. As such, this habitat is considered to be of **negligible ecological importance** and is not considered further within this report.

Hedgerow

3.21. There is a common beech *Fagus sylvatica* hedgerow that borders the car park and a small section of species rich hedgerow with trees at the site entrance on the eastern site boundary which includes species such as hawthorn ash *Fraxinus excelsior*, holly I*lex aquifolium*, ivy *Hedra helix* and oak.

3.22. These hedgerows both meet the definition for priority hedgerow habitat under the Habitats of Principle Importance (HoPI) in Section 41 of the Natural Environments and Rural Communities Act 2006 (NERC), being more than 20m long and comprising at least 80% native woody and shrubby species.

3.23. The hedgerow with trees found on the north eastern site boundary is more mature than the beech hedgerow and contains a diverse range of native woody species and therefore is considered to be of **local ecological importance**.

3.24. The beech hedgerow was likely planted at the time the clubhouse was built and is managed as an ornamental hedge. This type of managed beech hedge is widespread and common and so it is considered to be of **ecological importance within the site context only**.

Photograph 3.4 Hedgerow with trees

Photograph 3.5 Beech hedgerow

Trees

3.25. There are a number of mature and semi-mature scattered trees associated with the car park and wider golf course within the site boundary. The species present on site include ash, oak and black willow *Salix nigra*. These species are common and widespread and so are considered to be of **ecological importance within the site context only**.

Offsite Habitats

3.26. The majority of the habitats adjacent to the site are similar to those found on site and includes poor semi-improved grassland, scattered trees, a section of the dry ditch and developed surfaces associated with the wider golf course to the north, west and south of the site boundary.

3.27. The western and northern boundaries of the wider golf course which is not contained within the site boundary are bordered by broadleaved priority deciduous woodland and ancient woodland associated with Stanmore Country Park LNR. The woodland to the north of the golf course is classified as ancient, replanted woodland and the woodland to the east of the site is classified as ancient and semi-natural woodland. The woodland habitat adjacent to the wider gold course is a HoPI and as such, is considered to be of **national ecological importance.**

Fauna

Amphibians

3.28. 11 records of amphibians were returned by the data search. This included four records of common toad *Bufo bufo*, with the nearest record being 0.5km west from site and the most recent in 2011 and seven records of common frog *Rana temporaria,* with the nearest record being 0.5km from site and the most recent in 2012.

3.29. The scrub and grassland habitats, and the dry ditch, if inundated, could provide suitable habitat for common and widespread amphibians and it is considered that they could be present on site.

3.30. During the second reptile presence/likely absence survey visit, one common toad was identified just north of the site access.

3.31. The site was assessed for its potential to support GCN. The onsite ditch was scoped out for GCN due to it being dry, however, two offsite ponds found within 250m of the site boundary and not separated by barriers to dispersal, pond P1 and P2, were subject to a HSI assessment. The location of these ponds is presented in **Figure 3.2** and the results of the HSI assessment are presented below in **Table 3.2**.

Figure 3.2. Location of ponds P1 and P2 with respect to the site boundary.

Pond	P1	P2
Distance from site	**200m**	**227m**
HSI Suitability Indices	**Score**	**Score**
Geographic location	1	1
Pond area	0.8	0.6
Pond permanence	0.9	1
Water quality	0.33	0.33
Shade	1	1
Waterfowl effect	0.67	1
Fish presence	0.01	0.67
Pond Density	0.62	0.62
Terrestrial habitat	1	0.33
Macropyhyte cover	0.35	1
HSI Score	0.45	0.7
Pond Suitability	**Poor**	**Good**

Table 3.2. HSI assessment of offsite ponds P1 and P2

3.32. Pond P1 was scoped out for being unsuitable for GCN.

3.33. The Natural England Rapid Risk Assessment Tool was used to demonstrate that if GCN are present in pond P2 the risk of the proposals causing an offence is highly unlikely, as shown by **Figure 3.3**.

3.34. The Rapid Risk Assessment Tool has been used to access the areas of suitable habitat for GCN that is to be impacted by the establishment of an amenity lawn, and hard landscaping greater than 250m from pond P2 (approximately 0.357ha) and the proposed Sustainable Urban Drainage (SUDs) and re-routed ditch between 100-250m from pond P2 (approximately 0.033ha).

3.35. The Rapid Risk Assessment Tool also suggests that habitat loss or damage of up to 5ha over 250m away from Pond P2 would result in an offence being highly unlikely.

Component	**Likely effect** (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	**Notional offence probability score**
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.01
Land >250m from any breeding pond(s)	1 - 5 ha lost or damaged	0.04
Individual great crested newts	No effect	0
	Maximum:	0.04
Rapid risk assessment result:	**GREEN: OFFENCE HIGHLY UNLIKELY**	

Figure 3.3. Natural England Rapid Risk Assessment Tool

3.36. Considering the lack of records and lack of a matrix of suitable pond habitats within 250m of the site, it is considered unlikely that GCN are present on site. Moreover, in the event GCN are present within pond P2, it has been demonstrated that the proposals would be highly unlikely to cause an offence and as such GCN are not considered further within this report.

Badger

3.37. No records of badger *Meles meles* were returned by the data search and no evidence of badger was found during the Phase 1 habitat survey.

3.38. It is considered however, that due to the presence of nearby woodland habitat, the grassland habitats on site could offer some suitable foraging habitat for badger.

Bats

3.39. 23 records of bats were returned by the data search comprising five species of bats, which included:

- Four brown long-eared bat *Plecotus auritus* with the nearest and most recent record occurring approximately 0.5km from site in 2012;
- Four Daubenton's *Myotis daubentonii* with the nearest record occurring approximately 1km from site and the most recent in 2014;
- Three noctule *Nyctalus noctula* with the nearest record occurring approximately 1km from site and the most recent in 2017;
- Eight records of common pipistrelle *Pipistrellus pipistrellus* with the nearest occurring approximately 1km from site and the most recent in 2014; and
- Four records of Soprano pipstrelle *Pipistrellus Pygmaeus* with the nearest occurring approximately 1km from site and the most recent in 2014.

3.40. One European Protected Species Licences (EPSL) for bats was returned by the data search. This licence (EPSM2011-2886) was granted approximately 0.69km north west from site and allowed for the destruction of a resting place of common pipistrelle and brown long eared bat. The licence was dated from 26/11/2012 to 01/10/2014.

3.41. The grassland habitat that makes up the driving range and the native hedgerows could provide suitable habitat for foraging and commuting bats.

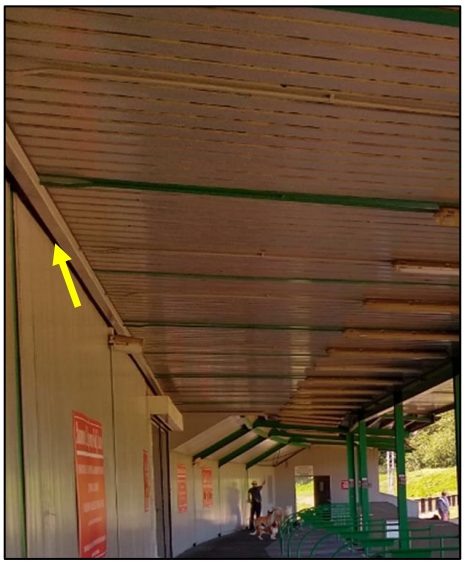
Preliminary Bat Roost Assessment

3.42. A PBRA was undertaken on the site, during which building B1 was identified as supporting PRFs.

3.43. Building B1 is a disused brick-built 1990s club house building with wood cladding and brick insulated cavity walls. The roof is constructed from concrete plain tiles hitched with skylights, with the northern most part of the roof being comprised of bitumen felt with a soffit box below. The rear north section of the building is a driving range with pitched roof wooden cladding, which supports fascia's but no soffit boxes.

3.44. An external inspection of the building B1 identified several features with the potential to support roosting bats. These features are detailed in **Table 3.3** below.

Feature	Feature description and Feature Suitability	Photograph
Gaps at soffits, facias and cladding	Gaps between timber soffit boxes and brick work or cladding are present around the whole building. These features are of **Low suitability** for use by roosting bats.	

		 
Gaps between cladding and steel structure at range	Numerous gaps between cladding boards and the metal frame structure. These features are considered to offer **Low suitability** for roosting bats.	 

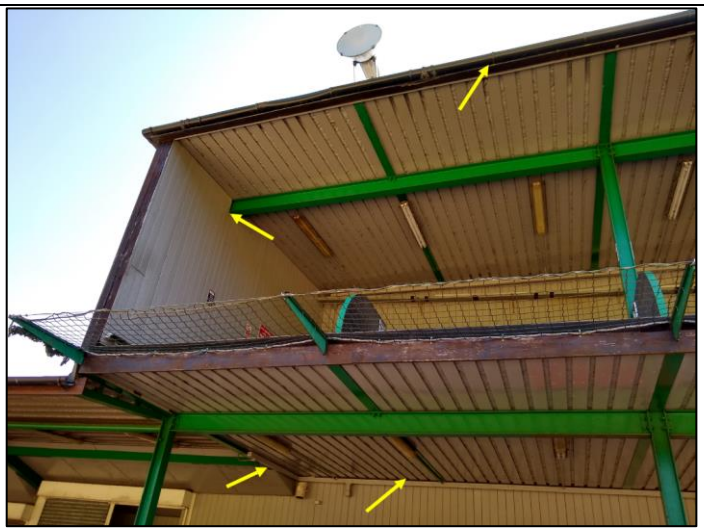
		

Table 3.3 Results of the PBRA on building B1

3.45. Building B1 was considered to have **low potential for roosting bats** and in line with best practice guidelines, required one emergence/re-entry survey during the bat active season (May-august, inclusive).

3.46. A second building was identified on site, building B2 which is a small storage building that offered no opportunities for roosting bats and as such is considered to have **negligible potential for roosting bats**. As such, building B2 is not discussed further within this report.

3.47. Although no tree loss is proposed as part of the proposals, the onsite trees were also subject to a PBRA, the results of which, and recommended further actions should any tree loss be proposed in the future, are summarised in **Table 3.4**.

Tree Number	Bat Roost Potential	Recommended Further Works
G8b, G8d	Low	Any works are required to be carried out under the supervision of an ECoW (Collins, 2016)
T2, G8a, G8c	Moderate	Two emergence/re-entry surveys during the bat active season (May-September, inclusive) with at least one survey taking place from May-August (Collins, 2016)

Table 3.4 Summary of the results from the PBRA assessment undertaken on the five onsite trees found to have bat roost potential, along with the recommended further required works if impacts are likely. The location of the trees with bat roost potential, are shown on the Habitat Features and Potential Bat Roost Features Plan (**13201/P02e**).

Dusk Emergence Survey

3.48. Building B1 required six surveyors to cover all of the PRFs supported by the building. It was proposed that the building B1 be subject to two emergence surveys with three surveyors, in order to cover the six required surveyor positions.

3.49. Only one emergence survey with three surveyors was undertaken prior to the majority of the building being burned down.

3.50. During the emergence survey, no bats were seen emerging from building B1 and low numbers of three bat species were recorded which included common pipistrelle, soprano pipistrelle and one noctule. Most of the activity recorded was from commuting bats however, one common pipistrelle and one soprano pipistrelle were observed foraging around the car park area and associated introduced shrub.

3.51. Following the fire which resulted in the destruction of the majority of building B1, there are now no potential roost features associated with buildings present on site.

Birds

3.52. 383 records of birds were returned by the data search including species listed on the Birds of Conservation Concern (BoCC) red list such as house sparrow *Passer domesticus*, starling *Sturnus vulgaris* and mistle thrush *Turdus viscivorus* and those listed on the BoCC amber list such as swift *Apus apus*, swallow *Hirundo rustica* and dunnock *Prunella modularis*.

3.53. The site could support common and widespread bird species however, it is considered unlikely that the site could support notable assemblages of breeding or wintering birds. As such, it is considered that no further work is required regarding notable assemblages of breeding or wintering birds.

3.54. The onsite trees, buildings, introduced shrub and hedgerow habitats could provide opportunities for nesting birds.

Reptiles

3.55. Thirteen records of grass snake *Natrix helvetica* were returned by the data search, with the closest record being 0.3km west and the most recent in 2015.

3.56. The matrix of hedgerows, grassland, introduced scrub and open habitats, such as sand and gravel, could provide suitable habitat for common and widespread reptiles.

3.57. During the seven reptile visits conducted at the site during October 2020, no sightings of reptiles or reptile sloughs were recorded.

3.58. As such, it is considered that reptiles are likely absent from site and therefore require no further consideration in terms of mitigation.

3.59. As discussed within **Section 2**, the majority of the reptile mats were placed in areas of habitat beyond the red line boundary. However, as the habitats are well connected and those habitats found offsite are more suitable than those found on site, the methodology is considered appropriate and the results reliable.

Stag Beetle

3.60. No records were returned for the stag beetle *Lucanus cervus* and there is no suitable habitat on site for stag beetle. However, there is some deadwood habitat present in the wider golf course and adjacent connected woodland habitats could support stag beetle.

Western European Hedgehog

3.61. Three records of Western European hedgehog *Erinaceus europaeus* were returned by the data search with the closest record occurring approximately 0.5km west from site and the most recent in 2015.

3.62. During the emergence survey that took place on the 9th of May 2020, a hedgehog was identified on site, utilising the introduced shrub and hedgerow habitat found at the car park area at the entrance of the site. It is likely that hedgehog utilise the grassland, introduced shrub and hedgerow habitats found on site.

Other notable species

3.63. No records of hazel dormouse *Muscardinus avellanarius*, Eurasian water vole *Arvicola amphibius*, European otter *Lutra lutra* or white clawed-crayfish *Austropotamobius pallipes* were returned within the data search. Due to the lack of suitable onsite habitat and lack of records returned by the data search, it is considered likely that these species are absent from site and as such are not considered further within this report.

Invasive Species

3.64. Invasive species are those listed under Schedule 9 of the Wildlife and Countryside Act 1981. With regard to invasive plant species (listed under Part II of Schedule 9), it is an offence to plant or otherwise cause to grow in the wild any plant which is included in Part II of Schedule 9.

3.65. No invasive species were identified during the Phase 1 habitat survey.

Section 4: Potential Impacts, Mitigation and Enhancements

Proposed Development

4.1 The proposals are for the demolition of existing golf club buildings (Use Class D2) and construction of a new banqueting facility (Use Class D2), widening of existing vehicular access from Brockley Hill, car and cycle parking, waste / recycling storage, landscape enhancements and associated works (see the site Master Plan in **Appendix 4, 05851_MP_00_2200-14**).

4.2 The potential consequences with respect to development at the site are set out below, with reference to relevant legislation and planning policy, which is summarised in **Appendix 1**.

Protected Sites

Statutory Sites

4.3 The site is approximately 30m east of Stanmore Country Park LNR however, it is considered that the proposals will have no direct negative impacts on this statutory site. Due to the nature of the proposals, there is not likely to be any direct impacts from an increase in recreational pressure as visitors will be localised at the venue and associated amenity space for discrete periods of time and being a function venue there will be no permanent residents on site.

4.4 The proposals are considered to provide the opportunity to bring benefit to Stanmore Country Park. The enhancements proposed as part of the development proposals, which are discussed in more detail in the below habitats section, would increase the habitat diversity on site and therefore a diversity of habitat structures in habitat that is connected to Stanmore Country Park via the wider golf course.

4.5 Stanmore Common LNR and Bentley Priory LNR and SSSI are not directly adjacent to site and so direct impacts do not require consideration. For the reasons listed above, the proposals are considered unlikely to have any negative indirect impacts on these two sites.

Non-Statutory Sites

4.6 The site is in close proximity to Pear Wood and Stanmore Country Park SINC, however for the reasons stated above for Stanmore Country Park LNR, the proposals are not considered to have any direct negative impacts on this site.

4.7 Due to the nature of the development, it is considered that the proposals do not have the potential to cause indirect impacts to any of the other nine SINCs that are not directly adjacent to the site. The nature of the proposed development of the site means that visitors will be localised at the venue itself or at the associated amenity lawn and so indirect impacts through an increase in recreational pressure or rubbish dumping do not need consideration.

Habitats and Flora

Dry Ditch

4.8 The section of the ditch that passes through the north eastern end of the site is proposed to be retained as part of the proposals. The section that runs through the south western part of the site is proposed to be re-routed to accommodate the site layout and proposed pond and will remain connected to the wider ditch network that runs throughout the wider golf course.

4.9 The ditch could be enhanced through modification to encourage permanent inundation. Additionally, through planting up the ditch edges, a riparian corridor could be created, further adding to the habitat diversity on site.

4.10 A pond is proposed for the south western corner of the site that will act as both Sustainable Urban Drainage (SUDs) and habitat enhancement (**05851_MP_00_2200_SK004-00**). The proposed pond will be created adjacent to the dry ditch and through inundation of the ditch and the establishment of the new pond, a network of wet habitats could be created across the site.

4.11 The creation of new pond habitat would be in line with Policy DM 21 of the Harrow DMP. Furthermore, ponds have been identified as a key habitat within the Harrow BAP.

Grassland

4.12 All the semi-improved and poor-semi-improved grassland will be lost to establish a new amenity lawn, new meadow planting, rough grassland, a SUDs feature and new hard and soft landscaping features.

4.13 This loss will be more than mitigated through proposed native planting and ecological enhancements. The enhancements proposed include the establishment of a meadow flower grassland and rough grassland areas and additional tree planting which will lead to an increase in habitat diversity across the site as a whole. Native scrub species such as hawthorn, dogwood, yew *Taxus baccata*, holly, blackthorn *Prunus spinosa* and dog rose *Rosa canina* could be planted to increase habitat diversity and provide a range of native species.

4.14 Grassland habitats are also identified as a key habitat within the Harrow BAP and the proposals offer the opportunity to greatly enhance this habitat and increase its diversity and complexity.

Hedgerow

4.15 A small section of the beech hedgerow is proposed to be lost to facilitate the movement of coaches within the car park, which is an integral feature to the functionality of the development as an events venue.

4.16 As this loss cannot be avoided and the hedgerow is considered a HoPI, its loss should be mitigated for through replacement hedgerow planting. As well as mitigating the loss of the beech hedgerow, the proposed native hedgerows will increase habitat connectivity across the site and increase the mosaic of available habitat structures on site.

4.17 The stretch of proposed native hedgerow which borders the site access could be further improved through the creation of rough and meadow grassland in addition to scrub planting along the northern edge of the hedgerow. This would provide a gradient of habitat structures moving from the hedgerow into the areas of more open grassland.

Trees

4.18 All onsite trees are proposed to be retained as part of the development, with the exception of the scattered trees T1 and one tree from G4, as labelled on the Tree Protection Plan produced by DCCLA shown in **Appendix 5** (**TPP/BHGCBHS/010 B**).

4.19 This loss will be mitigated, and the site will be enhanced through proposed native tree planting that will further increase the diversity of habitats on site and will contribute to a habitat mosaic that is to be established on site.

4.20 All trees should be protected in line with best practice guidance BS5873 to ensure the protection of the trees and their roots during the construction phase.

Offsite Habitats

4.21 A buffer zone of at least 15m from the identified ancient and HoPI woodland located on the northern and western site boundaries should be maintained, within which no development occurs to avoid root damage. As the site is located over 15m from the woodland edge this buffer zone will be more maintained.

4.22 Any outdoors lighting should be designed to avoid illuminating the northern and western site boundaries to avoid light pollution of the woodland habitat.

Fauna

Amphibians

4.23 Common toad are listed under Section 41 of the NERC Act (2006) meaning that public bodies have a duty to consider common toads when performing any of its functions.

4.24 It is considered that the risk of a common toad being present in the habitats within the red line boundary is low as they are more likely to be using the habitats in the wider golf course. However, in the event a common toad is found during the works, we should be contacted for advice and during the construction phase of the development, any holes or excavations should be covered at night as precautionary mitigation.

4.25 The proposed SUDs pond provides an excellent opportunity to enhance the site for common and widespread amphibians, such as the common toad. The proposed establishment of marginal vegetation would provide a riparian zone which will provide shelter and commuting opportunities for common and widespread amphibians.

4.26 The pond creation along with the general enhancement of the site will provide sheltering, foraging and commuting opportunities for these species. Furthermore, the inundation of the dry ditch would provide a network of wet habitats across the site.

Bats

4.27 Bats are protected under The Conservation of Species and Habitats Regulations (2010) which makes it an offence to deliberately or recklessly capture, injure or kill such an animal, harass an animal or group of animals and obstruct access to a breeding site or resting place, or otherwise deny an animal use of a breeding site or resting place.

Roosting

4.28 As stated in **Section 3** of this report, building B1 was subject to one emergence re-entry survey with three out of six surveyor positions covered prior to the building being burnt down. As the survey work was not completed, it is unclear whether building B1 did support roosting bats.

4.29 The onsite trees that are considered to have potential for roosting bats are not proposed to be lost to the development and so will continue to provide potential roosting opportunities for bats post development.

4.30 The site could be enhanced for roosting bats by including bat boxes within the scheme design. This could be achieved by using free hanging exterior bat boxes on the new building or retained trees, such as the "Schweglar 1F Bat Box" or by using enclosed brick bat boxes such as the "Ibstock Enclosed Bat Box" which can be incorporated into the design of the buildings.

Foraging

4.31 The areas identified as being suitable for foraging bats, namely the grassland habitat that makes up the driving range and golf course, will be replaced with a formal lawn (amenity grassland), meadow grassland, rough grassland and associated landscaping.

4.32 The loss of the grassland habitat will therefore be more than mitigated and the site will be enhanced for foraging bats through the creation of a diversity of habitats including the proposed meadow grassland, native hedgerow and rough grassland. As a result of these proposals, the amount of insect forage available to bats is likely to increase.

4.33 The site could be further enhanced for foraging bats through the creation of green walls by using native climbing species such as honey suckle and ivy which would increase the amount of insect forage on site for bats and would be in line with Policy DM 21 of the Harrow Core Strategy, London Plan Policy 5.11 and draft London Plan Policies G5 and G6.

Lighting

4.34 No tangible impacts are predicted in terms of lighting, as the species recorded are light tolerant. However, to ensure the value of the site for foraging and commuting bats is maximised once to scheme is built, a sensitive lighting strategy should be implemented. Any lighting scheme should be designed to maintain dark, unlit areas by avoiding the illumination of bat foraging and commuting habitats (as below), particularly those that are not already subject to illumination. Sensitive lighting will help to encourage the continued use of the site by bats.

4.35 The areas of habitat where sensitive lighting should be employed are the areas of established meadow and rough grassland habitat and the site boundaries. This would maintain an area of dark foraging habitat and would minimise the impacts of artificial lighting on the wider golf course area that is not within the site boundary which could be used by foraging bats.

4.36 In addition, any on site tree with bat potential should either be kept dark or be subject to sensitive lighting to avoid the illumination of potential roost features. Lighting should also be designed to avoid illuminating newly installed bat boxes.

4.37 Sensitive lighting measures may include low bollard lighting, use of hoods and cowls on lamps and use of low-pressure sodium or, where glass glazing is preferred, use of high-pressure sodium instead of metal halide lamps (Collins, 2016; BCT and Institute of Lighting Engineers, 2009).

4.38 These mitigation and enhancement recommendations for bats will be in line with the Harrow BAP which identifies bats as a key species group within the Borough.

Badger

4.39 The site proposals would enhance the site for foraging badgers by increasing the amount of habitat diversity on site which will provide a greater source of insect and fruit forage.

4.40 It is recommended that sensitive construction methods be put in place so that any foraging badgers that are present on site will not be negatively impacted by construction. It is recommended that precautionary mitigation methods such as the covering over of holes or excavations and safe storage of chemicals at night should be adhered to.

Birds

4.41 In England and Wales, birds and their nests are protected under the Wildlife and Countryside Act (1981) (as amended).

4.42 The existing trees, hedgerow and introduced shrub habitat have the potential to support nesting birds. Although some introduced shrub and most of the existing hedgerows and scattered trees are proposed to be retained, any vegetation lost with the potential to support nesting birds can be mitigated by sensitive timing of works. This can be done by scheduling any vegetation works for outside of the core nesting bird season (March-August, inclusive), although nests can be present at any time of year. If works must take place during the breeding bird season, the vegetation must first be checked for nesting birds by a suitably qualified ECoW. Should any active nests be found during works a suitable buffer must be erected around the nest and no works may take place within that buffer until the nest can be confirmed fledged or failed by an ECoW.

4.43 The site will be enhanced for birds through the establishment of the habitat mosaics as described above. The establishment of rough grassland and new tree planting would provide an increase in nesting opportunities for birds. The site could be further enhanced for nesting birds through the incorporation of bird boxes into the scheme design. These could take the form of free hanging bird boxes or integrated bird boxes which can be designed into the building. In particular, the London BAP species could be targeted such as the house sparrow by including bird boxes such as the “1SP Schweglar Sparrow Terrace”.

4.44 The proposed enhancements will also provide an increase in foraging opportunities for birds, in particular planting species that fruit and flower at different times of the year such as holly and ivy will ensure that a year-round supply of fruit and insect forage is available to birds. As described above for bats, the establishment of native green walls would increase foraging opportunities for birds through an increase in fruit and insect forage.

Reptiles

4.45 All species of reptile in the UK including, slow worm, grass snake, common lizard and adder are protected against killing, injuring or trade under Section 9 (Schedules 1 and 5) of the Wildlife and Countryside Act 19818 (As Amended).

4.46 As discussed in **Section 3**, it is considered that reptiles are likely absent from site and so no consideration is required in terms of mitigation. However, the site proposals will improve the sites suitability for reptiles that may exist in the wider landscape.

4.47 The loss of the suitable semi-improved and poor semi-improved grassland to make way for an amenity lawn will be more than mitigated through the habitat creation that is proposed for the rest of the site.

4.48 The site will be enhanced for reptiles through the creation of rough grassland, meadow grassland and through the implementation of relaxed mowing regimes which will be used to create a mosaic of habitats which will increase foraging, sheltering and commuting opportunities for common and widespread reptiles that may be present on site.

4.49 The site could be further enhanced for reptiles through the creation of hibernacula piles on site. These can be created by making a 2x3 meter scrape in the ground which is filled with logs and rubble. The turf which was removed to create the scrape is then positioned on top of the materials used to create the habitat pile. Structures such as these would provide increased hibernation opportunities for reptiles.

4.50 These survey and enhancement recommendations for common and widespread reptiles will be in line with the Harrow BAP which identifies reptiles as a key species within the Borough.

Stag Beetle

4.51 The site could be enhanced for the London BAP species stag beetles that may use adjacent off-site habitats through the creation of deadwood habitat piles located at site boundaries and in the areas of established rough or meadow grassland.

Western European Hedgehog

4.52 The loss of any possible foraging, commuting, or sheltering habitat in the form of hedgerow will be more than mitigated through the establishment of a new native hedgerow.

4.53 Increasing the diversity in habitat structures on site will provide increased opportunities for hedgehogs that already exist on site and creating habitat piles as described above for reptiles can provide suitable hibernation sites for hedgehogs.

4.54 It is recommended that precautionary mitigation measures such as described above for common toad and badgers be adhered to in relation to hedgehogs.

4.55 These mitigation and enhancement recommendations for hedgehogs will be in line with the Harrow BAP which identifies hedgehogs as a key species within the Borough.

Section 5: Biodiversity Net Gain

5.1 A development achieves Biodiversity Net Gain when the total biodiversity units present post development is higher than that of the biodiversity units present on site prior to development. Biodiversity offsetting is used to achieve Biodiversity Net Gain.

5.2 Biodiversity offsetting involves the provision of compensatory habitat for residual habitat losses and/or indirect effects arising from development that persists despite the implementation of appropriate avoidance and mitigation measures. A calculation is produced to assess the effects of a scheme on the habitats present versus the proposed compensatory habitat creation and enhancement measures. In order to determine whether offsetting is required, the biodiversity impact assessment metric is used to calculate the biodiversity value of a site before and after development in terms of 'biodiversity units" to give an overall biodiversity net gain or loss.

Existing Habitats

5.3 The following habitats are present within the red line boundary of the application site and are shown on Habitat Features and Potential Bat Roost Features Plan (**13201/P02e**). A brief summary of each habitat is provided below along with the habitat condition and category it is assigned within the biodiversity impact calculator. The rational for condition assessments are detailed within the metric (**13201/Biodiversity Net Gain_c**).

5.4 The UK Habitat definitions have been used to convert the Phase 1 Habitat Types into UK Habitat types as these are the definitions that the metric is based upon.

Habitat Areas and Condition:

- **Urban – Artificial unvegetated, unsealed surface (0.177ha)**: This category includes the sand bunkers and areas of gravel found across the golf course, habitat condition is not applicable to this category;
- **Urban – Developed land; sealed surface (0.481ha)**: This category includes the small area of Astroturf, building and hardstanding associated with club house and the car park; habitat condition is not applicable to this category;
- **Grassland – Other neutral grassland (0.905ha)**: This category includes 0.071ha of semi-improved grassland and 0.834ha of poor semi-improved grassland habitats. The semi-improved grassland has been assigned a condition of "fairly poor" and the poor semi-improved "poor";
- **Lakes – Ditches (0.011ha)**: This category includes the dry ditch and has been assigned a condition of "poor";
- **Urban – Introduced shrub (0.056ha)**: This category includes the introduced shrub habitat and has been assigned a condition of "poor";
- **Urban – Amenity grassland (0.002ha)**: This category includes the small area of amenity grassland habitat and has been assigned a condition of "poor"; and
- **Urban – Street tree (0.081ha)**: This category includes all onsite scattered trees and is automatically assigned a condition of "moderate".

Linear Habitats and Condition:

- **Native species rich hedgerow with trees (0.008km):** This category covers the native hedgerow with trees on the eastern site boundary and has been assigned a condition of "good"; and

- **Native hedgerow (0.285km)**: This category covers the beech hedgerow associated with the car park and has been assigned a condition of "poor".

Proposed, Enhanced and Retained Habitats

5.5 The indicative Landscape Planting Strategy (**13201/P11d**) and the site Master Plan (**05851_MP_00_2200-14**) have been used to calculate the proposed, retained and enhanced habitat areas and linear habitats. A brief summary of each habitat is provided below along with the habitat condition and category it is assigned within the biodiversity impact calculator. The habitats have been split into habitat areas and linear habitats. The rationale for target condition assessments is detailed within the metric (**13201/Biodiversity Net Gain_c**).

Habitat Areas and Target Condition:

Proposed:

- **Urban - Sustainable urban drainage feature (0.0025ha)**: This includes the proposed SUDs and has been assigned a target condition of "fairly poor";

- **Urban - Introduced shrub (0.025ha)**: This includes the proposed introduced shrub habitat which includes planters, planting in the car park area and the proposed landscaped mound that will surround the amenity lawn and has been assigned a target condition of "poor";

- **Urban - Amenity grassland (0.331ha)**: This includes the proposed formal lawn and has been assigned a target condition of "fairly poor";

- **Urban - Developed land; sealed surface (0.452ha)**: This includes the proposed building, hardstanding and hard landscaping and does not require a condition assessment;

- **Artificial Lake or Pond (0.001ha):** This includes the proposed formal pond that has been assigned a target condition of "poor";

- **Urban - Street Tree (0.06ha)**: This includes the 134 proposed new trees and is automatically assigned a target condition of "moderate"; and

- **Grassland - Other neutral grassland (0.534ha)**: This includes the proposed wildflower meadow planting and rough grassland that will be established in the grassland habitats that are not covered by the formal lawn and has been assigned a target condition of "fairly good".

Retained:

- **Urban - Developed land; sealed surface (0.195ha):** This includes the hardstanding areas associated with the car park and does not require a condition assessment;

- **Lakes – Ditches (0.005ha)**: This category includes the proposed retained section of the dry ditch and has been assigned a condition of "poor";

- **Urban - Introduced shrub (0.056ha)**: This includes the proposed areas of retained introduced shrub habitat and has been assigned a condition of “poor”;

- **Urban – Street tree (0.0805ha)**: This category includes the proposed retained street trees which are automatically assigned a condition of “moderate”.

Linear Habitats and Target Condition:

Proposed

- **Native hedgerow (0.229km)**: This includes a proposed native hedgerow by the site entrance and around the car parking areas and has been assigned a target condition of “poor”.

Retained

- **Native species rich hedgerow with trees (0.008km)**: This includes the proposed retained species rich native hedgerow with trees that exists at the site access and has been assigned a condition of “good”; and

- **Native hedgerow (0.229km)**: this includes the proposed retained sections of the beech hedgerow associated with the car park and has been assigned a condition of “poor”.

Biodiversity Net Gain Metric Results

5.6 As described within the biodiversity impact assessment calculator set out below in **Figure 5.1**, based on the habitats present on site that will be subject to direct impacts and those to be created and retained, the development would achieve a net gain of +20.02% habitat units and a net gain of +49.55% hedgerow units.

On-site baseline	*Habitat units*	4.25
	Hedgerow units	0.67
	River units	0.00
On-site post-intervention (Including habitat retention, creation, enhancement & succession)	*Habitat units*	5.10
	Hedgerow units	1.00
	River units	0.00
Off-site baseline	*Habitat units*	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (Including habitat retention, creation, enhancement & succession)	*Habitat units*	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention/creation)	*Habitat units*	0.85
	Hedgerow units	0.33
	River units	0.00
Total net % change (including all on-site & off-site habitat creation + retained habitats)	*Habitat units*	20.02%
	Hedgerow units	49.55%
	River units	0.00%

Figure 5.1 Results of the Biodiversity Net Gain Assessment

Management

5.7 The results of the DEFRA 2.0 metric are based on the habitats within the site being maintained at a certain condition, as prescribed by the condition assessment sheets published by DEFRA. In order to achieve these conditions and maintain them, specific establishment and management practices will be required.

5.8 As such, details of habitat establishment and long-term management could be provided through the production of a Landscape and Ecological Management Plan (LEMP). The LEMP would set out the prescriptions for the establishment and maintenance of the habitats on site and would also outline details on additional ecological enhancements such as the positions of bat and bird boxes and hibernacula.

Section 6: Conclusions

6.1 With the implementation of the mitigation and enhancements described in **Section 4** and shown on the indicative Landscape Strategy Plan (**13201/P11d**) for habitats and fauna, the proposed development would conform with relevant planning policy and legislation, as listed in **Appendix 1**, primarily Harrow Core Strategy Policies DM 20 and DM 21, London Plan Policies G5, G1 and G6 and Published London Plan Policies 7.19 and 5.11.

6.2 The mitigation and enhancement recommendations, such as sensitive construction methods in relation to badgers, common toad and hedgehogs, a sensitive lighting strategy in relation to bats and a long-term management plan to secure the ecological enhancements that are proposed as part of the development could be controlled by appropriately worded planning conditions devised to:

- The implementation of precautionary mitigation to protect the nocturnal species using both the site and adjacent habitats during construction;
- A bat lighting strategy; and
- A LEMP.

6.3 The site is located approximately 30m from Stanmore Country Park LNR, however it is considered that the proposals do not present any negative impacts on the statutory designated site. In addition, the proposals are not considered to have any impacts on Stanmore Common LNR, Bentley Priory LNR and SSSI or any of the ten SINCS within a 1km radius of the site.

6.4 Any vegetation removal should be undertaken outside of the core nesting bird season (March-August, inclusive), otherwise, a pre-works check by an ECoW should be undertaken to determine whether active birds' nests are present. If nest(s) are present, no nests, eggs or young should be destroyed and an appropriate buffer must be instated until the chicks have been confirmed as fledged by an ECoW.

6.5 It is considered likely that reptiles are absent from site and therefore no specific mitigation is required. However, the proposals do offer the opportunity to enhance the site for reptiles that may be in the wider landscape.

6.6 Those habitats that are being lost to the development are mostly of negligible ecological importance and require no specific mitigation (building and hardstanding, sand bunkers and gravel). Those habitats of ecological importance within the site only that are proposed to be subject habitat loss (poor semi-improved grassland, semi-improved grassland, scattered trees, dry ditch and beech hedgerow) will be more than mitigated through the proposed habitat creation. These enhancements will achieve a net gain of +20.02% habitat units and a net gain of +49.55% hedgerow units, will improve the habitat diversity onsite and will establish a mosaic of habitats that will provide a range of nesting, foraging and commuting opportunities for species such as bats, birds, badger, reptiles, amphibians and hedgehogs.

6.7 Species specific enhancements such as the incorporation of a new SUDs feature, bat and bird boxes and hibernacula will increase sheltering, roosting, nesting, and hibernation opportunities. Harrow BAP species such as bats, hedgehogs, amphibians and reptiles will benefit from the habitat creation described above and through these enhancements.

6.8 In conclusion, it is considered that the future development of the site would accord with relevant planning policy and seeks to protect and enhance ecological features and that the mitigation and enhancement strategy can be secured by planning conditions.

Appendix 1: Policy and Legislation

National Planning Policy

National Planning Policy Framework (NPPF), February 2019

A1.1. The National Planning Policy Framework (NPPF) was published in February 2019 and sets out the Government's planning policies for England and how these should be applied. It replaces the first National Planning Policy Framework published in March 2012.

A1.2. Paragraph 11 states that:

"Plans and decisions should apply a presumption in favour of sustainable development."

A1.3. Section 15 of the NPPF (paragraphs 170 to 177) considers the conservation and enhancement of the natural environment.

A1.4. Paragraph 170 states that planning and decisions should contribute to and enhance the natural and local environment by:

a) "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);
b) 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; and
c) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures".

A1.5. Paragraph 171 states that plans should distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

A1.6. Paragraph 174 states that in order to protect and enhance biodiversity and geodiversity, plans should:

a) "Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and

b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity."

A1.7. When determining planning applications, Paragraph 175 states that local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

a) "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;
b) 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;

c) 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 reasons58 and a suitable compensation strategy exists; and

d) 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."

A1.8. As stated in paragraph 176 the following should be given the same protection as habitats sites:

a) "potential Special Protection Areas and possible Special Areas of Conservation;

b) listed or proposed Ramsar sites; and

c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites."

A1.9. Paragraph 177 states that the presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined.

Local Planning Policy

London Plan

A1.10. The London Plan 2016: The Spatial Development Strategy for London[12], consolidated since 2011

A1.11. Relevant policies relating to ecology and nature conservation are set out below.

A1.12. Policy 5.10 'Urban Greening' states:

Strategic

The Mayor will promote and support urban greening, such as new planting in the public realm (including streets, squares and plazas) and multifunctional green infrastructure, to contribute to the adaptation to, and reduction of, the effects of climate change.

The Mayor seeks to increase the amount of surface area greened in the Central Activities Zone by at least five per cent by 2030, and a further five per cent by 2050[1].

Planning decisions

Development proposals should integrate green infrastructure from the beginning of the design process to contribute to urban greening, including the public realm. Elements that can contribute to this include tree planting, green roofs and walls, and soft landscaping. Major development proposals within the Central Activities Zone should demonstrate how green infrastructure has been incorporated.

LDF preparation

Boroughs should identify areas where urban greening and green infrastructure can make a particular contribution to mitigating the effects of climate change, such as the urban heat island.

A1.13. Policy 5.11 ‘Green roofs and development site environs’ states:

Planning decisions

Major development proposals should be designed to include roof, wall and site planting, especially green roofs and walls where feasible, to deliver as many of the following objectives as possible:

- *adaptation to climate change (i.e. aiding cooling)*
- *sustainable urban drainage*
- *mitigation of climate change (i.e. aiding energy efficiency)*
- *enhancement of biodiversity*
- *accessible roof space*
- *improvements to appearance and resilience of the building*
- *growing food.*

LDF preparation

Within LDFs boroughs may wish to develop more detailed policies and proposals to support the development of green roofs and the greening of development sites. Boroughs should also promote the use of green roofs in smaller developments, renovations and extensions where feasible.

A1.14. Policy 5.3 ‘Sustainable design and construction’ states:

Strategic

The highest standards of sustainable design and construction should be achieved in London to improve the environmental performance of new developments and to adapt to the effects of climate change over their lifetime.

Planning decisions

Development proposals should demonstrate that sustainable design standards are integral to the proposal, including its construction and operation, and ensure that they are considered at the beginning of the design process.

Major development proposals should meet the minimum standards outlined in the Mayor’s supplementary planning guidance and this should be clearly demonstrated within a design and access statement. The standards include measures to achieve other policies in this Plan and the following sustainable design principles:

- *minimising carbon dioxide emission*
- *s across the site, including the building and services (such as heating and cooling systems)*
- *avoiding internal overheating and contributing to the urban heat island effect*
- *efficient use of natural resources (including water), including making the most of natural systems both within and around buildings*
- *minimising pollution (including noise, air and urban runoff)*
- *minimising the generation of waste and maximising reuse or recycling*
- *avoiding impacts from natural hazards (including flooding)*
- *ensuring developments are comfortable and secure for users, including avoiding the creation of adverse local climatic conditions*
- *securing sustainable procurement of materials, using local supplies where feasible, and*
- *promoting and protecting biodiversity and green infrastructure.*

LDF preparation

Within LDFs boroughs should consider the need to develop more detailed policies and proposals based on the sustainable design principles outlined above and those which are outlined in the Mayor’s supplementary planning guidance that are specific to their local circumstances.

A1.15. Policy 7.19 'Biodiversity and Access to nature' states:

Strategic

The Mayor will work with all relevant partners to ensure a proactive approach to the protection, enhancement, creation, promotion and management of biodiversity in support of the Mayor's Biodiversity Strategy. This means planning for nature from the beginning of the development process and taking opportunities for positive gains for nature through the layout, design and materials of development proposals and appropriate biodiversity action plans.

Any proposals promoted or brought forward by the London Plan will not adversely affect the integrity of any European site of nature conservation importance (to include special areas of conservation (SACs), special protection areas (SPAs), Ramsar, proposed and candidate sites) either alone or in combination with other plans and projects. Whilst all development proposals must address this policy, it is of particular importance when considering the following policies within the London Plan: 1.1, 2.1-2.17, 3.1, 3.3, 3.7, 5.4A, 5.14, 5.15, 5.17, 5.20, 6.3, 6.9, 7.14, 7.15, 7.25 – 7.27 and 8.1. Whilst all opportunity and intensification areas must address the policy in general, specific locations requiring consideration are referenced in Annex 1.

Planning decisions

C) Development Proposals should: a wherever possible, make:

- *positive contribution to the protection, enhancement, creation and management of biodiversity*
- *prioritise assisting in achieving targets in biodiversity action plans (BAPs), set out in Table 7.3, and/or improving access to nature in areas deficient in accessible wildlife sites*
- *not adversely affect the integrity of European sites and be resisted where they have significant adverse impact on European or nationally designated sites or on the population or conservation status of a protected species or a priority species or habitat identified in a UK, London or appropriate regional BAP or borough BAP.*

D) On Sites of Importance for Nature Conservation development proposals should:

- *give the highest protection to sites with existing or proposed international designations1 (SACs, SPAs, Ramsar sites) and national designations2 (SSSIs, NNRs) in line with the relevant EU and UK guidance and regulations3*
- *give strong protection to sites of metropolitan importance for nature conservation (SMIs). These are sites jointly identified by the Mayor and boroughs as having strategic nature conservation importance*
- *give sites of borough and local importance for nature conservation the level of protection commensurate with their importance.*
- *When considering proposals that would affect directly, indirectly or cumulatively a site of recognised nature conservation interest, the following hierarchy will apply:*
- *avoid adverse impact to the biodiversity interest*
- *minimize impact and seek mitigation*
- *only in exceptional cases where the benefits of the proposal clearly outweigh the biodiversity impacts, seek appropriate compensation.*

LDF preparation

F) In their LDFs, Boroughs should:

- *use the procedures in the Mayor's Biodiversity Strategy to identify and secure the appropriate management of sites of borough and local importance for nature conservation in consultation with the London Wildlife Sites Board.*
- *identify areas deficient in accessible wildlife sites and seek opportunities to address them*
- *include policies and proposals for the protection of protected/ priority species and habitats and the enhancement of their populations and their extent via appropriate BAP targets*
- *ensure sites of European or National Nature Conservation Importance are clearly identified*
- *identify and protect and enhance corridors of movement, such as green corridors, that are of strategic importance in enabling species to colonise, re-colonise and move between sites.*

1) *Designated under European Union Council Directive on the conservation of wild birds (79/409/ EEC) 1992, European Union Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) 1992 and Ramsar Convention on wetlands of international importance especially as waterfowl habitat 197*
2) *Designated under the Wildlife and Countryside Act 1981 as amended by the countryside Right of Way Act 2000*
3) *Conservation of Species and Habitats Regulations (2010) (as amended*

The Publication London Plan, The Spatial Development Strategy for Great London, (December 2020)

A1.16. The Mayor has formally approved a new London Plan, the "Publication London Plan", which has been sent to the Secretary of State for consideration. Once formal confirmation has been received from the Secretary of State, steps will be made to publish the final London Plan which will set out the overall strategic plan for London over the next 20-25 years. Policies relating to ecology and nature conservation can be found in Chapter 8: Green Infrastructure and Natural Environment, which are summarised as follows:

A1.17. Policy G1 Green infrastructure

London's network of green and open spaces, and green features in the built environment should be protected and enhanced. Green infrastructure should be planned, designed and managed in an integrated way to achieve multiple benefits.

Boroughs should prepare green infrastructure strategies that identify opportunities for cross-borough collaboration, ensure green infrastructure is optimised and consider green infrastructure in an integrated way as part of a network consistent with Part A.

Development Plans and area-based strategies should use evidence, including green infrastructure strategies, to:

- *identify key green infrastructure assets, their function and their potential function; and*
- *identify opportunities for addressing environmental and social challenges through strategic green infrastructure interventions.*
- *Development proposals should incorporate appropriate elements of green infrastructure that are integrated* into London's wider green infrastructure network.

A1.18. Policy G5 Urban Greening

Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage;

Boroughs should develop an Urban Greening Factor (UGF) to identify the appropriate amount of urban greening required in new developments. The UGF should be based on the factors set out in Table 8.2, but tailored to local circumstances. In the interim, the Mayor recommends a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development (excluding B2 and B8 uses); and

Existing green cover retained on site should count towards developments meeting the interim target scores set out in (B) based on the factors set out in Table 8.2.

A1.19. Policy G6 Biodiversity and access to nature

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

Boroughs, in developing Development Plans, should:

- *use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks*

- *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*
- *support the protection and conservation of priority species and habitats that sit outside of the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans*
- *seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context*
- *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*
- *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.*

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.

A1.20. Policy G7 Trees and woodlands

London urban forest and woodlands should be protected and maintained, and new trees and woodlands should be planted in appropriate locations in order to increase the extent of London's urban forest –the area of London under the canopy of trees.

In their Development Plans, boroughs should:

- *protect 'veteran' trees and ancient woodland where these are not already part of a protected site*
- *identify opportunities for tree planting in strategic locations.*
- *Development proposals should ensure that, wherever possible, existing trees of value are retained. If planning permission is granted that necessitates the removal of trees there should be adequate replacement based on the existing value of the benefits of the trees removed, determined by, for example, i-tree or CAVAT or another appropriate valuation system. The planting of additional trees should generally be included in new developments –particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy.*

Local Planning Policy

Harrow Local Development Framework (LDF)

Harrow Core Strategy

A1.21. The Core Strategy is the most important component of the Harrow LDF. It sets out the long-term vision of how Harrow, and the places within it, should develop by 2026 and sets out the Council's strategy for achieving that vision. The Core Strategy sets the context for other policy documents that make up the Harrow LDF. The relevant policy documents and policies to ecology are as follows:

Harrow Development Management Policies (DPD)

A1.22. Policy DM 20: Protection of Biodiversity and Access to Nature

a) *Proposals that would be detrimental to locally important biodiversity or that would increase local deficiencies in access to nature will be resisted. Regard will be had to any relevant provisions in the Harrow Biodiversity Action Plan.*

b) *The design and layout of new development should retain and enhance any significant existing features of biodiversity value within the site. Potential impacts on Biodiversity should be avoided or appropriate mitigation sought. Where loss of a significant existing feature of biodiversity is unavoidable, replacement features of equivalent biodiversity value should be provided on site or through contributions towards the implementation of relevant projects in Harrow's Biodiversity Action Plan.*

c) *Green corridors and green chains will be retained. Proposals that would prejudice their function as routes for the passage of wildlife through the urban environment will be resisted.*

A1.23. Policy DM 21: Enhancement of Biodiversity and Access to Nature

Opportunities to enhance locally important habitats and to support locally important species will be sought in accordance with the Harrow Biodiversity Action Plan. Where possible, proposals should secure the restoration and re-creation of significant components of the natural environment as part of the design and layout of development. Particular attention will be paid to:

a) green corridors and green chains, including the potential to extend or add to the network;
b) gardens, including planting for wildlife, green roofs and green walls;
c) landscaping, including trees, hedgerows of historical or ecological importance and ponds;
d) allotments; and
e) habitat creation, such as nesting and roosting boxes, especially when replacing an old building that provided certain habitats.

Biodiversity Action Plans

A1.24. The UK Post-2010 Biodiversity Framework succeeded the UK BAP partnership in 2011 and covers the period 2011 to 2020. However, the lists of Priority Species agreed under the UK BAP still form the basis of much biodiversity work in the UK. The current strategy for England is 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services' published under the UK Post-2010 UK Biodiversity Framework. Although the UK BAP has been superseded, Species Action Plans (SAPs) and Habitat Action Plans (HAPs) developed for the UK BAP remain valuable resources for background information on priority species under the UK Post-2010 Biodiversity Framework.

A1.25. Most areas now possess a Local BAP (LBAP) to complement the national strategy where priority habitats and species are identified, and targets set for their conservation. BAP's are the key nature conservation initiative in the UK, working at national, regional and local levels.

The London BAP

A1.26. The London BAP outlines Species Action Plans for the following species and habitats:

A1.27. Species

- Bats
- Black poplar
- House sparrow
- Mistletoe
- Reptiles
- Sand Martin
- Stag Beetle
- Water vole

A1.28. Habitats

- Acid grassland
- Chalk grassland
- Heathland
- Parks and urban green spaces
- Private gardens
- Reedbeds
- Rivers and Streams
- Standing Water
- Tidal Thames
- Wasteland

Harrow Biodiversity Action Plan (2015-2020)

A1.29. The Harrow BAP sets out a framework for the protection, conservation and enhancement of wildlife within Harrow. The Harrow BAP is a culmination of work by various members of the Harrow Biodiversity. The Harrow BAP has identified various habitats and species, which are of importance within the borough.

A1.30. The following species have action plans in Harrow:

- Bats
- Heath spotted orchid
- Reptiles
- Amphibians
- Southern wood ants
- Hedgehog
- Coralroot

A1.31. The following habitats have been identified as key habitats of ecological importance within Harrow:

- Bare ground
- Built environment
- Decaying Timber
- Gardens and Allotments
- Grassland (meadows and acid grassland)
- Heathland
- Parks
- Standing and Running Water (ponds, lakes, rivers and streams)
- Wasteland (Brownfield)
- Woodlands (ancient, wet and secondary)
- Wildlife corridors

Appendix 2: Raw Bat Survey Data

A2.1 See the Bat Surveyor Location Plan for the locations of the three surveyors.

Emergence Survey Visit 1:

Surveyor: Rebekah Baker		
Date: 09/05/2020		
Survey: Dusk		
Building: B1		
Surveyor Location: SL2		
Equipment used: Pearsonic and Anabat Express		
Sunset time: 21:16	Start time: 21:01	End Time: 22:46
Weather	At Start	At End
Cloud Cover (%):	100	100
Wind (Beaufort Scale):	0	0
Precipitation	0	0
Temperature (C°)	17	16
Notes: Low levels of commuting bats with four common pipistrelle passes and one noctule.		

Table A2.1. Survey data for Rebekah Baker

Surveyor: Nathan Jenkinson		
Date: 09/05/2020		
Survey: Dusk		
Building: B1		
Surveyor Location: SL3		
Equipment used: Bat Box Duet and Ediroll		
Sunset time: 21:16	Start time: 21:01	End Time: 22:46
Weather	At Start	At End
Cloud Cover (%):	100	100
Wind (Beaufort Scale):	0	0
Precipitation	0	0
Temperature (C°)	17	16
Notes: One common pipistrelle pass heard.		

Table A2.2. Survey data for Nathen Jenkinson

Surveyor: Zoe Durran		
Date: 09/05/2020		
Survey: Dusk		
Building: B1		
Surveyor Location: SL1		
Equipment used: Echometer Pro and iPhone		
Sunset time: 21:16	Start time: 21:01	End Time: 22:46
Weather	At Start	At End
Cloud Cover (%):	100	100
Wind (Beaufort Scale):	0	0
Precipitation	0	0
Temperature (C°)	17	16
Notes: Low levels of foraging and commuting activity with four common pipistrelles and two soprano pipistrelles heard.		

Table A2.3. Survey data for Zoe Durran

Appendix 3: Raw Reptile Survey Data

A3.1 The results of the seven presence/likely absence surveys are summarised in Table A3.1 below:

Visit	Date	Common Lizard			Slow Worm			Grass Snake		
		Adult male	Adult female	Juvenile/unknown	Adult male	Adult female	Juvenile/unknown	Adult male	Adult female	Juvenile/unknown
1	05/10/2020	0	0	0	0	0	0	0	0	0
2	07/10/2020	0	0	0	0	0	0	0	0	0
3	09/10/2020	0	0	0	0	0	0	0	0	0
4	13/10/2020	0	0	0	0	0	0	0	0	0
5	16/10/2020	0	0	0	0	0	0	0	0	0
6	20/10/2020	0	0	0	0	0	0	0	0	0
7	23/10/2020	0	0	0	0	0	0	0	0	0

Table A3.1 Reptile survey results

A3.2 There was one incidental record which is summaries in Table A3.2 below:

Visit	Date	Incidental Recordings
2	07/10/20	One common Toad

Table A3.2 Incidental sightings

Appendix 4: Master Plan 05851_MP_00_2200-14

KEY PLAN:

Notes
For landsape information refer the Landscape Architect.
Please note the proposed building is shown for context purposes.

Brockley Hill kerbs shown in dashed line are based on an Adoped Highways OS Map.

KEY

Application Boundary

Key

Disabled car parking space

Enlarged car parking space

Car parking space with electric vehicle charging station

Car parking space adaptable to be fitted with electric vehicle charging station

Covered bicycle parking

Large bicycle parking

Proposed tree

Vehicle entrance

Brockley Hill

Pedestrian entrance

Bridge

Mound with french drain

Staff car park

Short stay bicycle parking

Motorcycle parking

Moveable planter with tree

REV:	DATE:	DETAILS:
14	21/01/21	Issued for Planning
13	19/01/21	Issued for Planning
12	26/08/20	Issued for Planning
11	24/08/20	Issued for information
10	22/08/20	Issued for information
09	20/08/20	Issued for information
08	20/08/20	Issued for information - revised as highlighted
07	19/08/20	Issued for information
06	05/08/20	Issued for information - revised as highlighted
05	04/08/20	Issued for information
04	22/07/20	Issued for information - WIP
03	29/06/20	Issued for information
02	29/05/20	Issued for information
01	22/05/20	Issued for information
00	22/04/20	Issued for information

0 2 4 6 8 10 15m

5plus architects

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Manchester. 0161 228 0211
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PROJECT:
Brockley Hill, Stanmore - New Banqueting Facility

TITLE:
Proposed Site Plan

SCALE	ORIGIN DATE:	DRAWN:	CHECKED:
1:250 @ A1	21/04/20	CB	AT

STATUS:
Stage 2 - Planning

PROJECT	DRAWING NO:	REV:
05851	MP_00_2200	14

Appendix 5: Tree Protection Plan TPP/BHGCBHS/010 B

Based on drawings supplied by 5 Plus Architects and CSL Surveys.

The original of this drawing was produced in colour – a monochrome copy should not be relied upon.

The position of trees is indicative where access was restricted during the survey or trees were not included within the topographical survey.

T4 Oak. Asymmetrical RPAs due to presence of road surface of Brockley Hill

Brockley Hill

Site Access and Ground Protection Measures: retained hard standing with additional materials added as required.

T3 Willow

Section of Beech, Hazel and Dogwood Hedge removed to accommodate revised access

T2 Walnut

Ground Protection Measures – 'no dig' surface if alternative footpath route is used.

G8 3 no. Ash and 1 no. Oak. Asymmetrical RPAs for some due to presence of ditch to site boundary. Understorey of Hawthorn

Site Boundary

Golf Driving Range infrastructure to be removed

G3 6 no. Ash

G3 8 no. Ash

Section of Beech Hedge removed

Main building to be demolished

Proposed Building Footprint (grey solid hatched)

Beech Hedge between bays

G3 6 no. Ash

G7 Several trees including Ash, Field Maple and Hornbeam

Edge of existing hard standing (red line)

Ground Protection Measures – retained hard standing with additional materials added as required.

T1 Goat Willow

G2 1 no. Silver Birch and 4 no. Crab Apple

G3 3 no. Ash

Golf Driving Range infrastructure to be removed

G6 9 no. Ash and 1 no. Birch

G1 8 no. Silver Birch

G5 2 no. Willow

Drainage Ditch

G5 1 no. Willow

G4 – 4 no. Hawthorn, 3 no. Field Maple and 1 no. Crab Apple

G5 1 no. Willow. Asymmetrical RPA due to presence of drainage ditch

G5 1 no. Willow. Asymmetrical RPA due to presence of drainage ditch

KEY

- Tree (Trunk) Locations and Category Grading
- Root Protection Areas – circular and asymmetrical – and Category Grading (see below)
- Tree Canopy Spreads (indicative).
- Trees to be removed irrespective of the site development (red circle) and due to the site development.
- Buildings and structures to be demolished
- Construction Site Access and Ground Protection Measures
- Ground Protection Measures
- Tree Protection Fencing – different alignment for Demolition Phase
- Tree Protection Fencing – Demolition and Construction Phase except as above

Category Grading
Category A
Category B
Category C
Category U

Brockley Hill, Stanmore, HA7 4LR – New Banqueting Facility

Drawing Title: Tree Protection Plan

Drawing No: TPP/BHGCBHS/010 B

Client: Sairam (Holdings) Ltd

Scale: 1:500 @ A2

Drawn By: drc

Date: January 2021

DCCLA
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Plans

Plan 1: 13201/P02e Habitat Features and Preliminary Bat Roost Assessment Plan

Plan 2: 13201/P17 Bat Surveyor Location Plan

Plan 3: 13201/P14a Reptile Mat Location Plan

Plan 4: 13201/P11d Landscape Strategy Plan

- Red Line Boundary
- A — Amenity
- Astro Turf
- Building
- Gravel
- Hardstanding
- Introduced Shrub
- Sand
- SI — Semi-Improved Grassland
- SI — Poor Semi-Improved Grassland
- Dry Ditch
- Native Hedgerow
- Native Hedgerow with Trees
- Scattered Trees

Potential Bat Roost Features

- Tree with Low Bat Potential
- Tree with Moderate Bat Potential
- Gaps at Soffits, Facias and Cladding
- Gaps between Cladding

N

0 30 m

Project	Brockley Hill Golf Club
Drawing Title	**Habitat Features and Preliminary Bat Roost Assessment Plan**
Scale	As Shown (Approximate)
Drawing No.	13201/P02e
Date	January 2021
Checked	RB

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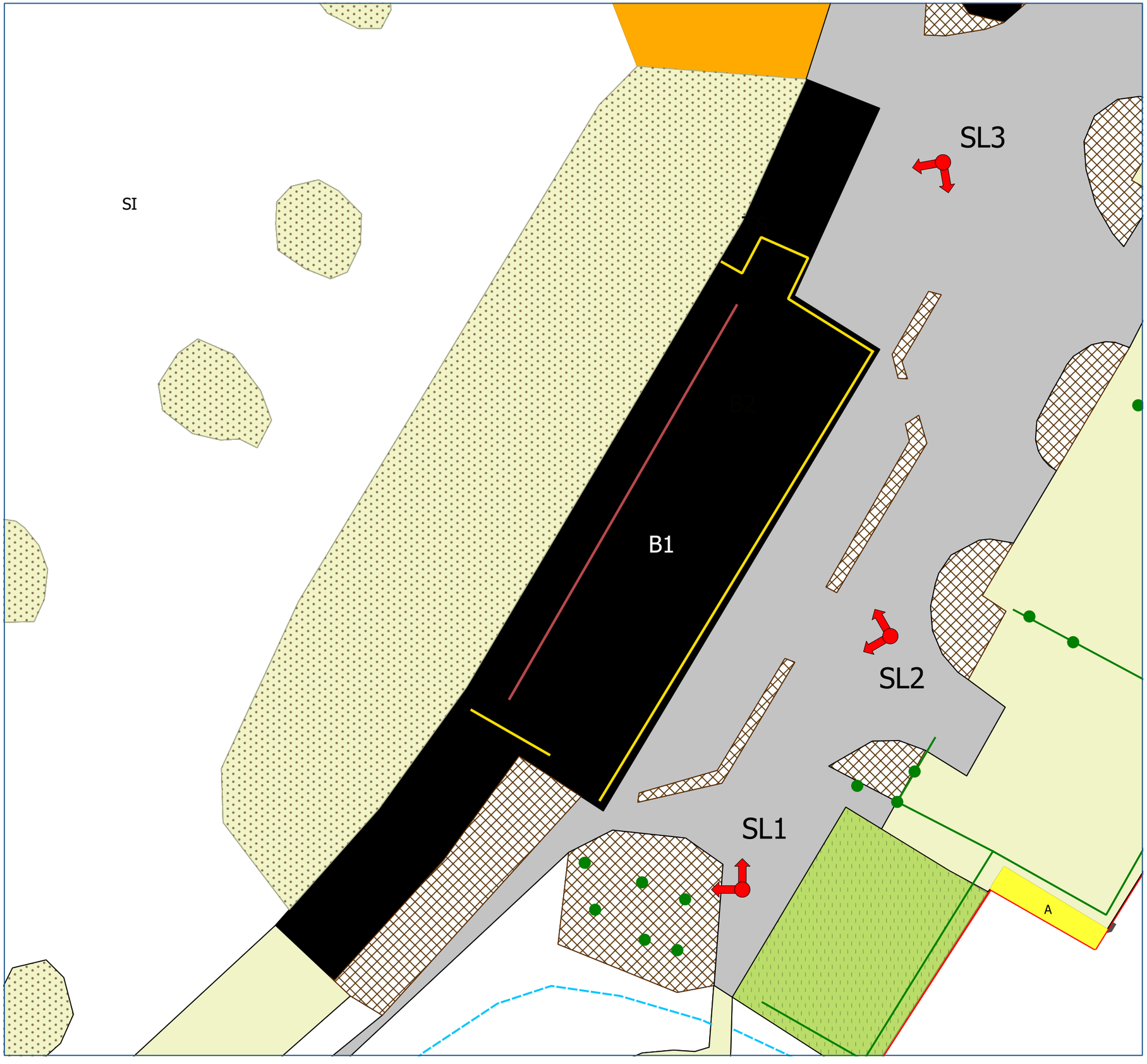

- Red Line Boundary
- A — Amenity
- Astro Turf
- Building
- Gravel
- Hardstanding
- Introduced Shrub
- Sand
- SI — Semi-Improved Grassland
- SI — Poor Semi-Improved Grassland
- Dry Ditch
- Native Hedgerow
- Scattered Trees

Potential Bat Roost Features

- Gaps at Soffits, Facias and Cladding
- Gaps between Cladding

- Surveyor Location

N

0 30 m

Project	Brockley Hill Golf Club
Drawing Title	**Bat Surveyor Location Plan**
Scale	As Shown (Approximate)
Drawing No.	13201/P17
Date	January 2021
Checked	RB

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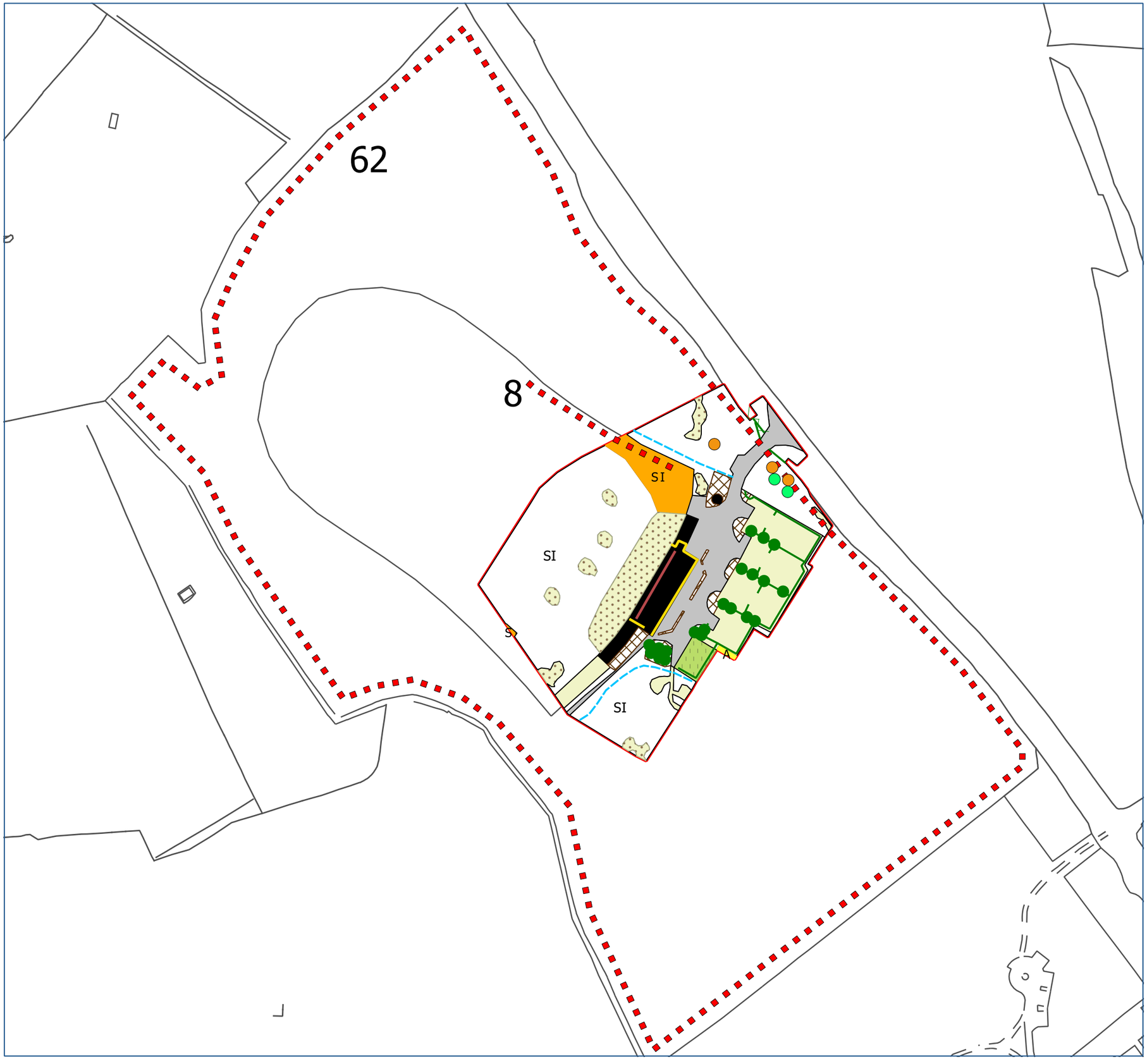

- Red Line Boundary
- A — Amenity
- Astro Turf
- Building
- Gravel
- Hardstanding
- Introduced Shrub
- Sand
- SI — Semi-Improved Grassland
- SI — Poor Semi-Improved Grassland
- Dry Ditch
- Native Hedgerow
- Native Hedgerow with Trees
- Scattered Trees
- Reptile Mat Locations

N

0 30 m

Project	Brockley Hill Golf Club
Drawing Title	**Reptile Mat Location Plan**
Scale	As Shown (Approximate)
Drawing No.	13201/P14a
Date	January 2021
Checked	RB

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- Site Boundary
- Proposed Formal Lawn
- Proposed Species Rich Wildflower Meadow Planting
- Proposed Native Hedging
- Proposed Shrub Planting
- Proposed Architectural Naturalistic Planting- Formal
- Proposed Architectural Naturalistic Planting
- Proposed Mound
- Proposed Planters With Trees
- Attenuation Pond With Proposed Marginal Planting
- Formal Water Feature
- Proposed Multi-Stemmed Trees
- Proposed Specimen Trees
- Proposed Avenue Trees
- Proposed Native Broadleaved Trees
- Proposed Native Water Tolerant Trees
- Proposed Paved Hard Landscaping
- Proposed French Drain
- Proposed Bulb Planting
- Proposed Flowering Meadow Planting
- Proposed Hoggin Path
- Drainage Ditch
- Proposed Timber Footbridge

Project	Brockley Golf Club
Drawing Title	**Landscape Strategy Plan**
Scale	1:500 @ A2
Drawing No.	13201/P11d
Date	January 2021
Checked	KL/RP

N

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