



Former Bowls Club, Church Walk

Preliminary Ecological Appraisal

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1 Introduction

1.1 Site Description

The site comprises a former Bowls Club, located off Church Walk, to the east of Gravesend, in the County of Kent, at approximate postcode DA12 2QU.

The site, which is estimated to be around 0.6 hectares in size, is centred on Ordnance Survey (OS) grid reference TQ 6573 7377 and contains a disused clubhouse building and overgrown bowling green with associated miscellaneous planting, ruderal vegetation, hedgerows and trees, along with amenity grassland and debris to the west.

The land immediately surrounding the site is suburban in character, containing residential/educational/commercial properties, roads, a railway line, amenity grassland and scattered trees.

The site and surrounding area are illustrated in aerial images provided in Appendix 1 and photographs of the site are provided in Appendix 2.

1.2 Proposed Works

The proposed works are the subject of a planning application (ref: 20221328) to Gravesham Borough Council, the Local Planning Authority (LPA), for: *"Demolition of existing bowls pavilion and erection of a 4-storey building to provide a 62-unit Use Class C2 retirement living complex, with a new access from Ellerslie, a new emergency access off Ellerslie, parking, landscaping and associated works"*.

Consultation feedback from Kent County Council's (KCC) Ecological Advice Service has identified the need for a Preliminary Ecological Appraisal (PEA) and requested clarification on the Biodiversity Net Gain (BNG) calculation for the site.

1.3 Aims of Study

To inform the planning application and address the consultation feedback, GreenLink Ecology Ltd. has been commissioned to conduct a PEA for the site, to include a basic desk study and a survey to identify what habitats are present and look for any evidence of, or potential for, protected/notable species and their habitats. The key objectives of this PEA are to:

- Identify likely ecological constraints associated with the proposals;
- Identify mitigation measures likely to be required;
- Identify additional surveys that may be required to inform an Ecological Impact Assessment¹ (EclA);
- Identify potential opportunities offered by the proposals to deliver ecological enhancement; and
- Provide a summary of the BNG assessment for the site, to accompany the Defra metric 3.1 calculation spreadsheet.

¹ CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester.

2 Methodology

A survey was undertaken on 21st February 2023 by experienced consultant ecologist Marcus Fry MCIEEM², in accordance with the published guidelines³. The native plant species and habitat types present were identified and any evidence of, or potential for, protected/notable species and their habitats was recorded. On the day of the survey, the weather conditions were overcast and the temperature at midday was around 9°C.

In addition, the Multi Agency Geographic Information for the Countryside (<http://magic.defra.gov.uk>) database was accessed for information relating to statutory designated sites from within the surrounding area and the Kent Landscape Information System (<https://webapps.kent.gov.uk/KCC.KLIS.Web.Sites.Public/ViewMap.aspx>) database was accessed for information relating to non-statutory designated sites from within the surrounding area.

² Member of the Chartered Institute of Ecology and Environmental Management (Full)

³ CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal*, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

3 Results

3.1 Habitat Description

In addition to the building, which is considered subsequently, the site contains hard standing, amenity grassland, miscellaneous planting, ruderal vegetation, hedgerows, boundary trees and debris.

Hard standing is present to the front of the clubhouse and around the perimeter of the overgrown bowling green. This represents a habitat type that is of inherently low ecological value, with no potential for protected/notable species.

The bowling green contains amenity grassland that has become overgrown through a lack of use/maintenance. Species present include fescue (*Festuca* sp.), bent (*Agrostis* sp.), annual meadow-grass (*Poa annua*), dandelion (*Taraxacum officinale*) and common ragwort (*Senecio jacobaea*). There is also amenity grassland dominated by perennial rye-grass (*Lolium perenne*) to the west of the site, which is regularly maintained along with the sport's pitch to the south. This represents a habitat type that is of low ecological value, with no significant potential for protected/notable species.

Miscellaneous planting is present around the front of the clubhouse, which is comprised of non-native ornamental species. This represents a habitat type that is of low ecological value, with no significant potential for protected/notable species.

Ruderal vegetation is present throughout the margins of the site and in association with the eastern boundary hedgerows, comprised of common nettle (*Urtica dioica*), thistle (*Cirsium arvense*), bramble (*Rubus fruticosus*), cleavers (*Galium aparine*),

There are hedgerows present around the perimeter of the Bowls Club, which are species-poor in composition, comprised predominantly of privet (*Ligustrum vulgare*) and non-native conifer species. There is also a discontinuous species-poor privet hedgerow with trees on the northern boundary and a species-poor hedgerow composed of ash (*Fraxinus excelsior*) and hawthorn (*Crataegus monogyna*) on the site's eastern boundary. This represents a habitat type that is of relatively low ecological value, which has the potential for seasonal use by breeding birds.

There are trees present on/close to the site's northern and western boundaries, with species recorded during the survey including ash, hawthorn, field maple (*Acer campestre*), lime (*Tilia x Europaea*), willow (*Salix fragilis*), cherry (*Prunus avium*), sycamore (*Acer pseudoplatanus*) and silver birch (*Betula pendula*). This represents a habitat type that is of moderate ecological value at site level, which has the potential for use by bats and breeding birds. The hedgerows and trees are the subject of an independent report by Keen Consultants Ltd., which makes an assessment of their arboricultural value.

To the north-west of the clubhouse there are piles of debris including vegetation waste and discarded metal/plastic and timber materials.

None of the plants within the site are protected/notable species and they do not constitute habitats that are of conservation concern.

3.2 Protected/Notable Species

3.2.1 Bats

Since the proposals include the demolition of the clubhouse building, which could impact on bats (if present), this was assessed internally and externally by a Natural England bat licence holder (no. 2015-10955-CLS) in accordance with the 2016 Bat Conservation Trust's (BCT) guidance⁴, for any evidence of, or potential for bats. Features and evidence considered during the survey included:

- Roof and wall construction;
- Features that have the potential to be actual bat roosts or provide access to roosting opportunities within the building;
- Scattered or accumulated bat droppings (identified by their dry, powdery texture when compressed) within the building or around entrances to potential roosts;
- Oily staining, scratch marks and/or urine staining around access points to potential roosting locations;
- Places where cobwebs have been swept away; and
- The actual presence of live or dead bats.

The clubhouse building has timber cladding walls and a timber frame. The roof is pitched and clad in traditional felt and there is no roof void present. In summary, there was no evidence of bats recorded during the internal and external inspection and overall, the building is considered to have negligible bat roost potential due to an absence of potentially suitable features.

Since some of the scattered trees will need to be removed to facilitate the development, as identified in the independent report by Keen Consultants Ltd., these were assessed and categorised (to align with BS 8596:2015 "Surveying for Bats in Trees and Woodland") in accordance with the 2016 BCT guidance:

- Negligible potential – Unlikely to be used by roosting bats.
- Low potential – A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only limited roosting potential
- Moderate potential – A 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 significance.
- High potential – A 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, protection, conditions and surrounding habitat.

In summary, the trees were assessed as having negligible potential for use by roosting bats due to their immaturity and/or an absence of potentially suitable features, although they are may be used by the local bat population for occasional commuting/foraging purposes.

3.2.2 Breeding Birds

There was no evidence for actively breeding birds recorded during the survey, which was undertaken outside the breeding season (March-July/August). However, the sections of hedgerow and trees represent potentially suitable habitat for use by nesting birds during the breeding season.

⁴ Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, Bat Conservation Trust (3rd Edition)

3.3 Designated Sites

According to the Multi Agency Geographic Information for the Countryside database, the closest statutory designated site for nature conservation is South Thames Estuary and Marshes Site of Special Scientific Interest (SSSI), part of which is also a Ramsar site, located circa 1.3 kilometres to the east.

According to the Kent Landscape Information System database, the closest non-statutory designated sites for nature conservation are Canal and Grazing Marsh, Higham Local Wildlife Site (LWS) and Shorne Marshes RSPB Reserves, part of which is located circa 750 metres to the north-east, although the majority of this site is located circa 1.6 kilometres to the east.

4 Assessment

4.1 Constraints

It was possible to access all parts of the site and the survey was undertaken by an experienced consultant ecologist using standard survey techniques and in accordance with the published guidelines. Therefore, it is considered that there are no significant constraints to the PEA.

4.2 Potential Impacts

4.2.1 Habitats

The site contains common/widespread habitat types that are not of conservation concern and generally of low ecological value (i.e. hard standing, amenity grassland, miscellaneous planting, ruderal vegetation and species-poor hedgerows) and impacts to these habitats are therefore considered insignificant.

The majority of the trees on/close to the northern and western boundaries are to be retained and potential impacts to trees are considered in the independent report by Keen Consultants Ltd.

4.2.2 Protected/Notable Species

4.2.2.1 Bats

Since there was no evidence of roosting bats recorded during the survey and there was no significant potential for roosting bats identified, it is considered that there is no perceived risk of impacts to bats as a result of the proposed works.

The proposed works could actually have a positive impact for bats through the provision of wall-integrated roosting features on the new building, as recommended in a subsequent section.

4.2.2.2 Breeding Birds

Although no evidence for actively breeding birds was recorded during the survey, there is potentially suitable habitat present throughout the site, which could be used by nesting birds during the breeding season.

Therefore, breeding birds could be directly impacted on by the proposed works, if potentially suitable habitat is removed/disturbed during the breeding season (March-July/August, as a guide).

To avoid the seasonal risk of impacts to breeding birds, precautionary mitigation measures are recommended in a subsequent section.

The proposed works could actually have a positive impact for breeding birds through the provision of wall-integrated bird boxes on the new building, as recommended in a subsequent section.

4.2.3 Designated Sites

Although there are statutory and non-statutory designated sites present in the local area, these are located at least circa 750 metres from the proposed development site and buffered from the it by a substantial area of suburban land. Since the proposals are relatively limited in scope and restricted to the existing site footprint, they should not have any impact on these designated sites.

4.3 Legislation and Policy

4.3.1 Bats

All species of bat and their habitats are fully protected under the Wildlife and Countryside Act 1981 (as amended by the CRoW Act 2000) and by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

The legislation makes it illegal under the Wildlife and Countryside Act 1981 (as amended) to:

- Intentionally or recklessly kill, injure or take a wild bat;
- Be in possession or control of any live or dead wild bat, or any part of, or anything derived from a wild bat;
- Intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection; and
- Intentionally or recklessly disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection.

The legislation makes it illegal under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 to:

- Deliberately capture, injure or kill any wild animal of a European Protected Species;
- Deliberately disturb wild animals of any such species. Disturbance of animals includes in particular any disturbance which is likely to:
 - impair their ability -
 - to survive, to breed or reproduce, or to rear or nurture their young; or
 - in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
 - to affect significantly the local distribution or abundance of the species to which they belong;
- Deliberately take or destroy the eggs of such an animal; or
- Deliberately damage or destroy a breeding site or resting place of such an animal.

4.3.2 Breeding Birds

Breeding birds are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally or recklessly kill, injure or take any wild bird or take, damage or destroy its nest whilst it is in use or being built, or to take or destroy its eggs.

4.3.3 National Planning Policy Framework

The Government revised the National Planning Policy Framework (NPPF) in July 2021. The NPPF states that when determining planning applications, LPAs should aim to conserve and enhance biodiversity by encouraging opportunities to be taken for the incorporation of biodiversity in and around developments.

4.3.4 Biodiversity Net Gain (BNG)

BNG is part of the Environment Act 2021, which requires development schemes in England to deliver a mandatory 10% BNG by creating or enhancing habitats in association with development, to ensure that proposals "...leave biodiversity in a better state than before".

5 Recommendations

5.1 Further Survey

Further survey work is not considered necessary for this site, since the risk of potential impacts to protected/notable species can be adequately addressed via the use of mitigation measures, as detailed below.

5.2 Mitigation Measures

5.2.1 Habitats

Mitigation measures are not considered necessary for the hard standing, amenity grassland, miscellaneous planting, ruderal vegetation and species-poor hedgerows, since they are common/widespread habitat types that are not of conservation concern and potential impacts to such habitats are considered to be insignificant.

Mitigation measures for the retained trees are detailed in the independent report by Keen Consultants Ltd., to ensure that they are protected in accordance with BS 5837:2012 "*Trees in Relation to Design, Demolition and Construction - Recommendations*".

5.2.2 Protected/Notable Species

5.2.2.1 Bats

Since it is considered that there is no significant risk of potential impacts to bats, mitigation measures are not recommended.

However, if at any time during the proposed works, it becomes apparent that bats are present and at risk of impacts, works will need to temporarily cease whilst a Natural England licence holder is consulted about how to proceed further, without the risk of an offence being committed.

5.2.2.2 Breeding Birds

The removal of potentially suitable breeding habitat should ideally be undertaken outside of the breeding bird season (avoiding March-July/August). If it is necessary to conduct this work during the breeding season, it should be carried out under the supervision of an experienced ecologist, who will check the habitats for the presence/absence of any birds' nests.

If any active nests are found then works with the potential to impact on the nest must cease and an appropriate buffer zone should be established until the young have fledged and the nest is no longer in use.

5.2.3 Designated Sites

Since it is considered that there is no significant risk of impacts to designated sites as a result of the proposed works, mitigation measures are not required for designated sites.

5.3 Biodiversity Net Gain

The BNG Defra Biodiversity Metric 3.1 calculation tool accompanies this document as an excel spreadsheet and what is provided in this section is a summary of the results.

It should be noted that some of the existing site area figures have been updated as a result of being informed by a survey visit and therefore, are different from those detailed in letter ref: 22_1705_Letter_MF_AR, dated 28/10/2022.

The pre-existing site area (data is included within the A-1 Site Habitat Baseline and B-1 Site Hedge Baseline pages in the spreadsheet) consists of '*developed land; sealed surface*' i.e. buildings and hard standing, '*modified grassland*' i.e. amenity grassland, '*introduced shrub*' i.e. miscellaneous planting, '*ruderal/ephemeral*' i.e. ruderal vegetation, '*urban tree*' i.e. scattered trees, '*native hedgerow*' and '*line of trees*'. This equates to an on-site baseline score of 1.95 habitat units and 1.08 hedgerow units, as identified in the Headline Results page in the spreadsheet (Appendix 3).

The post-construction site area (data is included within the A-2 Site Habitat Creation and B-2 Site Hedge Creation pages in the spreadsheet) consists of '*developed land; sealed surface*' i.e. buildings and hard standing, '*modified grassland*' i.e. amenity grassland, '*artificial unvegetated, unsealed surface*' i.e. permeable paving, '*introduced shrub*' i.e. soft landscaping, '*other neutral grassland*' i.e. mosaic of wet/meadow/flowering lawn grassland, '*urban tree*' and '*native hedgerow*'. This equates to an on-site post-intervention score of 2.30 habitat units and 2.28 hedgerow units, as identified in the Headline Results page in the spreadsheet (Appendix 3).

Overall, according to the calculation tool, the proposals will result in an on-site net change of 18.33% for habitats (0.36 total net units) and 110.76% for hedgerows (1.20 total net units), which satisfies the trading summary criteria as confirmed in the Trading Summary page in the spreadsheet.

5.4 Enhancement Measures

To ecologically enhance the site in accordance with the principles of the NPPF, the following guideline measures should be implemented:

- The soft landscaping scheme should specify a high proportion (at least 70%) of native species of plant, or non-native species with a known benefit to wildlife. This should include a variety of grassland types, bulbs, herbaceous plants, large shrubs, climbers, hedgerows and small trees, to provide a diversity of habitat type/structure and benefit local biodiversity.
- The development should incorporate a minimum of 4 no. wall-integrated bat boxes (e.g. <http://www.birdbrickhouses.co.uk/brick-nesting-boxes/bat-box/>), which should be installed at least 4-5 metres from ground level on different elevations and not illuminated by artificial lighting;
- The development should incorporate a minimum of 8 no. wall-integrated bird nesting boxes (<http://www.birdbrickhouses.co.uk/brick-nesting-boxes/nesting-boxes/>), which should be installed at least 2-3 metres from ground level and on different aspects, although in the absence of shade, none of these boxes should be facing due south, to avoid over-heating; and
- Bird tables/feeders and water features should also be provided, to benefit the local bird population and provide stimulation for the future residents.

6 Conclusions

To inform the planning application and to address the KCC consultation feedback, GreenLink Ecology Ltd. was commissioned to undertake a PEA of the site, which has been completed without significant constraint.

The survey that was undertaken by an experienced consultant ecologist, determined that the site contains common/widespread habitat types that are not of conservation concern and since potential impacts are considered to be insignificant, mitigation measures are only required for retained trees, as detailed in the independent report by Keen Consultants Ltd. This is to ensure that they are protected in accordance with BS 5837:2012 "*Trees in Relation to Design, Demolition and Construction - Recommendations*".

During the survey, the potential presence of legally protected/notable species was considered, including bats and breeding birds.

There was no evidence of bats recorded during the survey and the building/trees are considered to have negligible potential for use by roosting bats. Therefore, mitigation measures for bats are not required.

To avoid the seasonal risk of impacts in relation to the removal of potentially suitable habitats, mitigation measures have been recommended for breeding birds.

Although there are designated sites for nature conservation in the local area, there is no perceived risk of impacts as a result of the proposed works and therefore, no need for mitigation measures.

In accordance with the NPPF, recommendations have also been made for ecological enhancement measures to benefit local biodiversity, in particular habitats, bats and breeding birds.

Overall, there are no known overriding ecological constraints that would prevent the proposed works going ahead, subject to the recommendations made in this report being correctly implemented.

7 Disclaimer

This report is issued to the client for their sole use and for the intended purpose as stated in the agreement between the client and GreenLink Ecology Ltd. under which this work was completed, or else as set out within this report.

This report may not be relied upon by any other party without express written agreement. The use of this report by unauthorised third parties is at their own risk and GreenLink Ecology Ltd. accepts no duty of care to any such third party.

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Any recommendation, opinion or finding stated in this report is based on circumstances and facts as they existed at the time that GreenLink Ecology Ltd. performed the work. The content of this report has been provided in accordance with the provisions of the CIEEM Code of Professional Conduct. GreenLink Ecology Ltd. works where appropriate to the scope of our brief, to the principles and requirements of British Standard BS42020.

Nothing in this report constitutes legal opinion. If legal opinion is required the advice of a qualified legal professional should be secured. Observations relating to the state of built structures or trees have been made from an ecological point of view and, unless stated otherwise, do not constitute structural or arboricultural advice.

8 Appendices

Appendix 1: Aerial images illustrating the site location and surrounding area

Photograph 1: The approximate site boundaries and immediate surrounding area



Photograph 2: The approximate site location and wider surrounding area



Appendix 2: Photographs of the site

Photograph 1: Front of the clubhouse, looking north-west



Photograph 2: Rear of the clubhouse, looking south-east



Photograph 3: Interior of the clubhouse, with no evidence of/potential for bats/birds



Photograph 4: Overgrown bowling green, ruderal vegetation and boundary hedgerows



Photograph 5: View of the site from the south-east corner, looking north-west



Photograph 6: View of the site from Ellerslie (western boundary), looking east



Photograph 7: View from the corner of the clubhouse, looking west towards Ellerslie



Photograph 8: View of the eastern boundary, with hedgerows and ruderal vegetation



Appendix 3: BNG Headline Results

Former Bowls Club, Church Walk, Gravesend

Headline Results

Return to results menu

On-site baseline	Habitat units	1.95
	Hedgerow units	1.08
	River units	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	2.30
	Hedgerow units	2.28
	River units	0.00
On-site net % change (Including habitat retention, creation & enhancement)	Habitat units	18.33%
	Hedgerow units	110.76%
	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)	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 & enhancement)	Habitat units	0.36
	Hedgerow units	1.20
	River units	0.00
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	18.33%
	Hedgerow units	110.76%
	River units	0.00%
Trading rules Satisfied?	Yes ✓	