

APPLICATION No.: V/2020/0184

APPEAL REF: APP / W3005 / W / 21 / 32744818



Town and Country Planning Act 1990

Appeal by Bellway Homes Ltd.

Land off Ashland Road West, Sutton in Ashfield, Nottinghamshire.

**ADDITIONAL CLARIFICATION:
ECOLOGY & NATURE CONSERVATION**

Mr Kurt Goodman, BSc (Hons), MSc, MCIEEM

September 2021

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DECLARATION

“The evidence which I have prepared and provide for this appeal reference W3005 / W / 21 / 3274818 is true and has been prepared and is given in accordance with guidance of my professional institution and I confirm that the opinions expressed are my true and professional opinions”.

1.0 INTRODUCTION

- 1.1 Following receipt of the rebuttal evidence provided by Mr Baker and the new evidence provided in the submission, this document is provided in response to the new evidence and provide additional clarification for the Inspector on matters relating to:
- 1 – Classification of the eastern area of grassland; and
 - 2 – Matters relating to ‘biodiversity net gain’ (BNG).
- 1.2 In addition to these matters, and to avoid the submission of separate documents, the results of the autumn bat surveys completed in September 2021 as outlined at Paragraph 4.27 of the appellant’s Proof of Evidence (PoE) are provided. These results make no material difference to the conclusion or suggested mitigation already submitted to this appeal.

2.0 GRASSLAND CLASSIFICATION

- 2.1 The rebuttal evidence provides records of additional species in the eastern field compartment. These additional species were recorded during an additional site visit completed by Mr Wood and Mr Baker on 24 August 2021. This is new evidence not submitted to the inspectorate following Mr Wood’s site visit on 29 June 2021.
- 2.2 The new evidence and the potential implications of the new evidence has been reviewed by Mr Nick Law (Associate Ecologist, FPCR). Mr Law specialises in habitats and habitat management, and he holds a degree of Master of Science with distinction from Birmingham University in Biological Recording, and a Botanical Society of Britain and Ireland Field Identification Skills Certificate Level 6. Thus, Mr Law has a similar level of experience to Mr Wood’s.
- 2.3 In summary the new survey information does not substantively affect the ecological importance which would be attributed to the grassland, it does alter the mitigation strategy which will secure the Biodiversity Net Gain (BNG) and matters relating to BNG are dealt with separately in Section 4.
- 2.4 As confirmed by Mr Baker the original botanical survey identified the presence of 29 species in the eastern grassland field. The additional survey completed by Mr Baker and Mr Wood recorded an additional 11 species.
- 2.5 On this basis, FPCR did not record 27.5% of the species that are now known to be present in the field. Inter-observer and intra-observer errors¹ in vegetation recording are well-known and ‘overlooking error’ where an observer simply fails to notice a species, forms one of the main forms of error. Morrison (2016) concluded from his literature review of observer error in vegetation surveys that “*In surveys of species composition, mean pseudoturnover (the percentage of species overlooked by one observer but not another) was 10-30%*”². Therefore, the difference in the number of species recorded by the two surveys is

¹ Inter-observer variation is the variation between what two observers record when observing/recording the same thing. Intra-observer variation is the variation between what one observer records when observing/recording the same thing on more than one occasion.

² Morrison, L.W. (2016). ‘Observer error in vegetation surveys: a review.’ *Journal of Plant Ecology*, 9(4) pp. 367-379.

consistent with what would be expected between two surveys by different observers. Therefore, Mr Baker's assertion in paragraph 14 that the eastern field "...was *not correctly surveyed by the appellant...*" is misleading, the variation between the two surveys is what would be expected.

2.6 From this exercise Mr Baker concludes that the grassland community in the eastern field compartment should be classified as the UKHab g3c 'other neutral grassland' community. Following review of the new evidence we would agree with this classification. As highlighted by Mr Baker, this grassland community is 'Extremely widespread in the UK lowlands', which are formed by several grassland types which were formally recorded as semi-improved neutral grassland.

2.7 From the decision-making perspective, does this change in the grassland communities make a substantive difference to determination of this appeal? It is our professional judgement that this change does not make a substantive difference when consider against the hierarchy of designated sites outlined at Paragraph 179(a) of the NPPF which confirms:

'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.'

2.8 Using the available data, we have considered whether the reclassified grassland of the eastern field compartment would be considered to meet the represent one of the statutory designated sites listed in Para 179 (a). This assessment concludes that the grassland community in the eastern field compartment would not be considered to meet the requirements of the statutory ecological designations.

2.9 We have also considered the eastern field compartment grassland against the criteria for selection as a Local Wildlife Site (LWS) in Nottinghamshire. The criterion for neutral grassland requires a threshold of 14 indicator species to be reached. The combined species list from FPCR and Mr Woods has only recorded eight of the required 14 species and it is our opinion that even if other indicator species have been overlooked by both surveys, in number, it is unlikely that these would reach the additional six species required to meet the threshold. Furthermore, the eastern field is managed as a forage crop and is subject to two annual cuts, one in early spring and one in summer, and artificial fertiliser is applied to the field. This management will be inhibiting any increase of the existing species diversity of the sward, and the establishment of sufficient additional indicator species in the future is very unlikely.

2.10 Given the assessment above and that present in Appendix 1, it is our professional opinion that the eastern field compartment would not reach the threshold to be considered as a LWS and therefore does not represent a locally designated site as referred to at Paragraph 179(a) of the NPPF. Consequently, from an ecological perspective the grassland would only be considered as being of local level importance, and the loss of, or reduction to, this resource would not result in significant effects to biodiversity locally.

2.11 Despite CD7.11 being primarily written for the 'extractive industry' the document does provide a useful guide to the application of the mitigation hierarchy confirming:

‘For both biodiversity and ecosystem services, this guidance assumes a focus on significant (or material) impacts. This means that the impacts are on a BES feature that has substantial intrinsic or ecosystem service value, for example because it is highly threatened, unusual and localized, or of major cultural or economic importance, or in an intact and unmodified state. It also means that the potential impacts are not minor or trivial—for example they would severely reduce a species’ viability, or the ability of a habitat to maintain viable populations of its native species.’

- 2.12 This theme follows through the D7.11. When the grassland community in the eastern field is considered in this context this community would not the threshold identified at CD7.11, and as such affects need to be considered by the decision maker in the overall planning balance which is a matter considered by our planning witness Mr Lomas.

3.0 BIODIVERSITY NET GAIN (BNG)

- 3.1 The main ecological PoE confirms the basic principle of biodiversity net gain (BNG) and that the DEFRA metric is the tool which is used to assist the assessment. It is noteworthy that the numerical output of the metric is only there to assist a quantitative assessment across sites or schemes prior to and following the application of mitigation and / or compensation. The numerical output is known to be the ‘currency’ of the metric which is a ‘proxy for the relative biodiversity worth of a site pre- and post-interventions’³ but the metric is not a substitute for expert ecological opinion.
- 3.2 Despite the Local Authority’s (LA) use of offsite contributions to compensate ecological effects at other sites in the administrative area, for the purpose of this appeal we are aware the LA have recently withdrawn their agreement to such provisions for this site despite such matters being agreed in the Statement of Common Ground (SoCG). Notwithstanding this position the appellant maintains such provision can be provided through the Unilateral Undertaking (UU) which is submitted to this appeal. The UU provides appropriate funding to cover the loss of 12.22 biodiversity units. This allows the 10% net gain over the original 11.1 unit loss that was calculated over the determination period.
- 3.3 Following receipt of the new evidence the BNG assessment has been re-calculated using DEFRA 2.0, based on the eastern field being ‘other neutral grassland’ of ‘medium’ distinctiveness. This re-assessment confirms that development in the eastern field compartment will generate additional biodiversity units equal to 20.24 units. However, as the submitted application is an outline application, with amendments to the layout of design of the scheme, and the retention / creation of additional habitats within the site it is considered that any additional biodiversity units can be accommodated within the site without any requirement for additional offsite compensation.
- 3.4 Whilst a copy of a revised metric is included at Appendix 1, please note the composition of the retained and created habitat could change at the reserved matters stage but the revision demonstrates the principle that the additional units can be accommodated on the site.

³ The biodiversity Metric 2.0. Auditing and Accounting for Biodiversity. User guide (29 July 2019). Natural England.

- 3.5 Overall, to satisfy a net gain requirement following reassessment the proposals would be required to 36.34 biodiversity units following but to provide a 10% net gain the proposals would be required to provide 39.97 biodiversity units. This higher net gain requirement is achieved through the provision 27.96 units on site and the agreed compensation measure of 12.21 units off site.
- 3.6 In addition to the above, I raise one final point regarding the Biodiversity Net Gain calculation. In paragraph 20 of his rebuttal, Mr Baker considers that within the BNG calculation, the hay meadow ecological connectivity should be "... *classified as being of at least medium ecological connectivity.*" and bases this on the fact that the grassland is located adjacent to high quality grasslands within Brierley Forest Park LNR. In my opinion, this represents a lack of understanding of the metric by Mr Baker.
- 3.7 Guidance for usage of the Biodiversity Metric 2.0 considers connectivity in paragraphs 5.32 to 5.35 of the 'User Guide' and paragraphs 2.15 to 2.19 of the 'Technical Supplement'. This guidance states that habitats of High and Very High Distinctiveness should be assigned a 'Medium' connectivity multiplier, and all other habitats a 'Low' connectivity multiplier. On the basis that consensus has now been achieved regarding classification of the grassland, and this is g3c Other Neutral Grassland, in accordance with Table TS2-11 'Habitats classified as being of Medium Distinctiveness' within the Technical Supplement, this habitat type should be assigned a 'Low' connectivity multiplier in the revised calculation.

4.0 ADDITIONAL BAT DATA

- 4.1 The additional bat survey completed in September 2021 confirmed the results of the other surveys that common pipistrelle is the dominant species using the site and the level of use by other species was not significant (Appendix 2). Given the evidence of recorded use and the potential mitigation that can be provided within the site, as outlined in previous submission, development of the site is unlikely to result in significant effect to the local bat population

5.0 CONCLUSIONS

- 5.1 Whilst the additional survey information is noteworthy, the addition of the recorded species does not increase the overall ecological importance of the grassland and therefore the weight which is attributed to the grassland. The addition of these species merely changes the 'proxy' value which is attributed to the grassland through the use of the DEFRA metric. This in turn will require the creation of additional habitats or the retention of additional grassland in the east of the site to ensure the development proposals demonstrate a net gain to biodiversity. These are matters which will be resolved at the reserved matters stage thought when the detail design of the scheme are known but the revised metric presented at Appendix 1 demonstrates that with the use of the offsite contribution a net gain and a 10% net gain to biodiversity can be delivered.
- 5.2 The completion of the additional bat surveys confirms the result of the previous surveys and that with the application of appropriate mitigation as recommended significant effects to the local population can be avoided.

Appendix 1:

Updated Biodiversity Impact Assessment (BIA)

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Ashland Road, Sutton-in-Ashfield

Headline Results

Return to
results menu

| | | |
|-------------------------------------------------------------------------------------------------|----------------|---------|
| On-site baseline | Habitat units | 36.34 |
| | Hedgerow units | 2.94 |
| | River units | 0.00 |
| On-site post-intervention (Including habitat retention, creation, enhancement & succession) | Habitat units | 27.96 |
| | Hedgerow units | 3.49 |
| | 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 | -8.38 |
| | Hedgerow units | 0.55 |
| | River units | 0.00 |
| Total net % change (including all on-site & off-site habitat creation + retained habitats) | Habitat units | -23.05% |
| | Hedgerow units | 18.69% |
| | River units | 0.00% |

**Ashland Road, Sutton-in-Ashfield
A-1 Site Habitat Baseline**

Condense / Show Columns Condense / Show Rows
Main Menu Instructions

| Ref | Habitats and areas | | | Habitat distinctiveness | Habitat condition | Ecological connectivity | Strategic significance | Suggested action to address habitat losses | Ecological baseline |
|---------------------------|-----------------------|-------------------------------------------|-----------------|-------------------------|--------------------|-------------------------|------------------------------------------------------------|-----------------------------------------------------------------|---------------------|
| | Broad Habitat | Habitat type | Area (hectares) | Distinctiveness | Condition | Ecological connectivity | Strategic significance | | Total habitat units |
| 1 | Sparse vegetated land | Sparse vegetated land - Ruderal/Ephemeral | 0.5 | Low | Poor | Low | Area/compensation not in local strategy/ no local strategy | Same distinctiveness or better habitat required | 1.00 |
| 2 | Heathland and shrub | Heathland and shrub - Mixed scrub | 0.26 | Medium | Poor | Low | Area/compensation not in local strategy/ no local strategy | Same broad habitat or a higher distinctiveness habitat required | 1.04 |
| 3 | Cropland | Cropland - Cereal crops | 5.27 | Low | N/A - Agricultural | N/A | Area/compensation not in local strategy/ no local strategy | Same distinctiveness or better habitat required | 10.54 |
| 4 | Grassland | Grassland - Other neutral grassland | 2.53 | Medium | Moderate | Low | Area/compensation not in local strategy/ no local strategy | Same broad habitat or a higher distinctiveness habitat required | 20.24 |
| 5 | Grassland | Grassland - Modified grassland | 1.76 | Low | Poor | Low | Area/compensation not in local strategy/ no local strategy | Same distinctiveness or better habitat required | 3.52 |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| Total site area ha | | | 10.32 | | | | | | 36.34 |

| Retention category biodiversity value | | | | | | | | Bespoke compensation agreed for unacceptable losses | Comments | |
|---------------------------------------|---------------|-----------------|-------------------------|-------------------------|---------------------------|-------------|--------------|-----------------------------------------------------|-----------------------|-------------------|
| Area retained | Area enhanced | Area succession | Baseline units retained | Baseline units enhanced | Baseline units succession | Area lost | Units lost | | Assessor comments | Reviewer comments |
| 0.04 | | | 0.08 | 0.00 | 0.00 | 0.46 | 0.92 | | | |
| 0.26 | | | 1.04 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| | | | 0.00 | 0.00 | 0.00 | 5.27 | 10.54 | | | |
| 0.7 | | | 5.60 | 0.00 | 0.00 | 1.83 | 14.64 | | Eastern field parcel. | |
| | | | 0.00 | 0.00 | 0.00 | 1.76 | 3.52 | | Arable field margins. | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| 1.00 | 0.00 | 0.00 | 6.72 | 0.00 | 0.00 | 9.32 | 29.62 | | | |

Ashland Road, Sutton-in-Ashfield

A-2 Site Habitat Creation

Condense / Show Columns

Condense / Show Rows

Main Menu

Instructions

Post development/ post intervention habitats

| Proposed habitat | Area (hectares) | Distinctiveness | Condition | Ecological | Strategic significance | Temporal multiplier | Difficulty | Habitat units delivered | Comments | |
|--------------------------------------------|-----------------|-----------------|-------------|-------------------------|------------------------------------------------------------|--------------------------------|---------------------------------|-------------------------|--------------------------------------------------------------------------------------------|-------------------|
| | | | | Ecological connectivity | Strategic significance | Time to target condition/years | Difficulty of creation category | | Assessor comments | Reviewer comments |
| Urban - Amenity grassland | 0.08 | Low | Poor | Low | Area/compensation not in local strategy/ no local strategy | 1 | Low | 0.15 | Amenity road verges | |
| Urban - Developed land; sealed surface | 3.58 | V.Low | N/A - Other | N/A | Area/compensation not in local strategy/ no local strategy | 0 | Low | 0.00 | Hardstanding in residential parcels. 70:30 split HS:garden/planting | |
| Urban - Vegetated garden | 1.53 | Low | Poor | Low | Area/compensation not in local strategy/ no local strategy | 1 | Low | 2.95 | Gardens/planting in residential parcels. 70:30 split HS:garden/vegetation | |
| Urban - Developed land; sealed surface | 1.18 | V.Low | N/A - Other | N/A | Area/compensation not in local strategy/ no local strategy | 0 | Low | 0.00 | Main access roads | |
| Heathland and shrub - Mixed scrub | 0.52 | Medium | Moderate | Low | Area/compensation not in local strategy/ no local strategy | 3 | Low | 3.74 | Scrub | |
| Urban - Sustainable urban drainage feature | 0.07 | Low | Fairly Poor | Low | Area/compensation not in local strategy/ no local strategy | 2 | Medium | 0.13 | SuDS facility | |
| Urban - Street Tree | 0.04 | Low | Moderate | Low | Area/compensation not in local strategy/ no local strategy | 27 | Low | 0.06 | | |
| Grassland - Other neutral grassland | 1.74 | Medium | Moderate | Low | Area/compensation not in local strategy/ no local strategy | 10 | Low | 9.75 | Around SuDS facility, areas retained and sown. Created area adjacent to northern boundary. | |
| Heathland and shrub - Mixed scrub | 0.62 | Medium | Moderate | Low | Area/compensation not in local strategy/ no local strategy | 3 | Low | 4.46 | 10m native scrub buffer along northern boundary | |
| | | | | | | | | | | |
| Totals | 9.32 | | | | | | | 21.24 | | |

Ashland Road, Sutton-in-Ashfield
B-1 Site Hedge Baseline

Condense / Show Columns Condense / Show Rows
 Main Menu Instructions

| Baseline ref | UK Habitats - existing habitats | | | Habitat distinctiveness | Habitat condition | Ecological connectivity | Strategic significance | Suggested action to address habitat losses | Ecological baseline Total hedgerow units | Retention category biodiversity value | | | | | | Comments | |
|--------------|---------------------------------|-----------------------------|-------------|-------------------------|-------------------|-------------------------|------------------------------------------------------------|--------------------------------------------|---------------------------------------------|---------------------------------------|-----------------|----------------|----------------|-------------|-------------|-------------------|-------------------|
| | Hedge number | Hedgerow type | length KM | Distinctiveness | Condition | Ecological connectivity | Strategic significance | | | Length retained | Length enhanced | Units retained | Units enhanced | Length lost | Units lost | Assessor comments | Reviewer comments |
| 1 | H1 | Native Hedgerow with trees | 0.15 | Low | Good | Low | Area/compensation not in local strategy/ no local strategy | Same distinctiveness band or better | 0.9 | 0.15 | | 0.9 | 0 | 0 | 0 | | |
| 2 | H2 | Native Hedgerow with trees | 0.25 | Low | Good | Low | Area/compensation not in local strategy/ no local strategy | Same distinctiveness band or better | 1.5 | 0.25 | | 1.5 | 0 | 0 | 0 | | |
| 3 | H3 | Native Hedgerow | 0.09 | Low | Good | Low | Area/compensation not in local strategy/ no local strategy | Same distinctiveness band or better | 0.54 | 0.07 | | 0.42 | 0 | 0.02 | 0.12 | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | Total Site length/KM | 0.49 | | | | | Total Site baseline | 2.94 | 0.47 | 0.00 | 2.82 | 0.00 | 0.02 | 0.12 | | |

Ashland Road, Sutton-in-Ashfield
B-2 Site Hedge Creation

Condense / Show Columns Condense / Show Rows

Main Menu Instructions

| | | Multipliers | | | | | | | | | |
|--------------|------------------|--------------------|-----------|-------------------------|-------------------|-------------------------|------------------------------------------------------------|--------------------------------|-----------------------|-------------------|-------------------|
| | | Spatial quality | | | | | Temporal multiplier | | | | |
| | | Proposed habitats | | Habitat distinctiveness | Habitat condition | Ecological connectivity | Strategic significance | | Comments | | |
| Baseline ref | New hedge number | Habitat type | Length km | Distinctiveness | Condition | Ecological connectivity | Strategic significance | Time to target condition/years | Hedge units delivered | Assessor comments | Reviewer comments |
| 1 | | Native Hedgerow | 0.2 | Low | Moderate | Low | Area/compensation not in local strategy/ no local strategy | 5 | 0.67 | | |
| 2 | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| | | Creation Length/KM | 0.20 | | | | | | 0.67 | | |

Appendix 2:
Additional Bat Survey Information (September 2021)

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September 2021

Technical Note: Additional Bat Activity Surveys (Autumn 2021).

1.0 Introduction

- 1.1 The following Technical Note provides the results of additional bat activity surveys completed at the appeal site in September 2021. These surveys have been completed to update the bat activity survey information gathered over the relevant survey periods in 2019.

2.0 Survey Methods

Transect Surveys

- 2.1 The primary objective of the transect was to identify foraging areas, commuting routes and species utilisation of the Site. The transect route covered the Site. The route followed the route previously used and point count stops were incorporated to provide further information regarding bat activity levels. Each point count was a minimum of five minutes long, during which time all bat activity was recorded. The transect commenced at sunset and lasted a minimum of 2 hours. The transect additionally included surrounding land as part of a wider survey area.
- 2.2 The transect was walked at a steady pace and when a bat passed by the species, time and behaviour was recorded on a plan. This information helps to form a general view of the bat activity present and highlights what habitats types are associated with bat activity. A Wildlife Acoustics Inc. Echo Meter Touch® bat detector was used in conjunction with an Echo Meter Touch® app and Apple Inc. iPad®.
- 2.3 The transect was undertaken when conditions were suitable (i.e. when the ambient air temperature exceeded 10°C and there was little wind and no rain).
- 2.4 Post-survey, bat calls were analysed using Kaleidoscope© (Wildlife Acoustics) software package, by taking measurements of the peak frequency, inter-pulse interval, call duration and end frequency. From this, the level of bat activity across the Site and surrounding study area in relation to the abundance of individual species foraging and commuting along habitats was assessed.

Automated Surveys – Foraging and Commuting Bats

- 2.5 Two static passive recording broadband detector were deployed within the Site in September 2021, to supplement the manual transect survey in accordance with industry guidance. This survey is intended to build upon previous automated surveys undertaken in 2019.
- 2.6 Passive monitoring was undertaken using an automated logging system (Wildlife Acoustics Inc. Song Meter® SM4BAT+ bat detector, herein referred to as a SM4BAT detector) with the output saved to an internal storage device. Two SM4BAT detectors were placed at locations around the site for five survey nights period to access the overall level of activity.
- 2.7 The detectors were programmed to activate 30 minutes before dusk and recorded continuously until 30 minutes following sunrise over an extended period of time (five consecutive nights) of suitable and/or typical weather conditions. The five-day recording period for this survey occasion was 01.09.21 – 06.09.21.
- 2.8 The recorded data was analysed using the Kaleidoscope© and BatSound® Pro software packages.

3.0 Results

Transect Surveys

- 3.1 In common with the other transect surveys completed at the site, common pipistrelle *Pipistrellus pipistrellus* is the dominant species recorded. No other species were recorded during this survey.
- 3.2 Over this survey, the overall level of activity recorded across the site was low and the majority of the activity was recorded adjacent along the northern and western site boundaries and hedgerow H3 (Figure 1). Activity along the other site boundaries was limited to occasional passes.

Static Detector Results

- 3.3 Unit 10 was located on the southern boundary of the site (Figure 1). Over this period five bat species and one species identified to genus level were recorded. Common pipistrelle is the dominant species comprising 92% of the registrations. Noctule and unidentified *Myotis* species were frequently recorded but the registrations from these species comprised 4.8% and 2% of the total registrations. Registration from brown long eared, Pipistrelle sp. and soprano pipistrelle were at less than 1% of the total registrations.
- 3.4 Over the five night recording period, the total number of common pipistrelle registrations was 1799 registrations. The majority of these were recorded over two nights. The recording rates for Noctule. and unidentified *Myotis* species were significant lower with a total of 95 and 39 registrations over the survey period.
- 3.5 Registration from brown long eared, Pipistrelle sp. and soprano pipistrelle were at less than 1% of the total registrations.

- 3.6 Unit 11 was positioned along the northern boundary of the Site. Common pipistrelle was again the dominant species with 5195 registrations which comprised 96% of the total registrations. Over 70% of the common pipistrelle registration were recorded over two of the survey occasions. Unidentified Myotis species were frequently recorded with a total of 115 registrations over the survey period which comprised 2% of the total registrations. The total number of registrations range from 11 – 38 registrations over the surveys.
- 3.7 The other species recorded occasional using the southern boundary included: soprano pipistrelle, noctule, brown long eared and pipistrelle species. The registration rate for all of these species was below 1% of the total registrations.

4.0 Conclusions

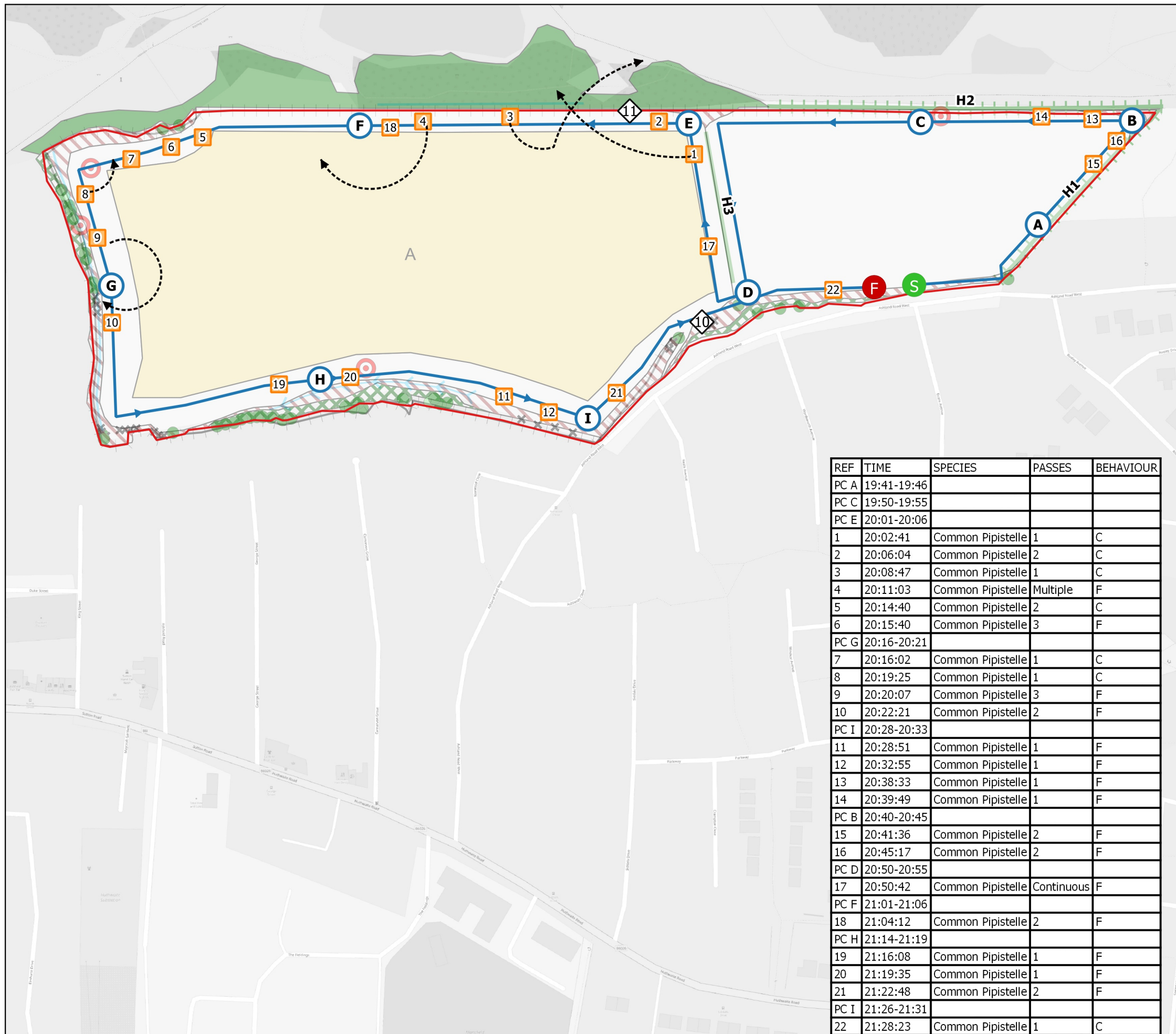
- 4.1 The results the surveys are similar to those recorded during previous surveys confirming the assemblage using the site is dominated by common and widespread species. The results also confirmed common pipistrelle is the dominant species using the site. The level of use from other species is significant lower demonstrating the habitats within the Site do not provide a significant resource any of these species.
- 4.2 Given these results, the mitigation previously outlined in the various submission document including the original ecological assessment (CD.1.12) remains valid and with the implementation of this mitigation no significant effects to the local bat population are expected.

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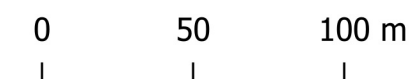
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Key:

- Site Boundary
- Transect Route
- Flight Arrow
- Point Count Locations
- Start point
- Finish point
- Static Detector Locations (Unit Number)
- Bat Contacts**
- Common Pipistrelle



| REF | TIME | SPECIES | PASSES | BEHAVIOUR |
|------|-------------|-------------------|------------|-----------|
| PC A | 19:41-19:46 | | | |
| PC C | 19:50-19:55 | | | |
| PC E | 20:01-20:06 | | | |
| 1 | 20:02:41 | Common Pipistelle | 1 | C |
| 2 | 20:06:04 | Common Pipistelle | 2 | C |
| 3 | 20:08:47 | Common Pipistelle | 1 | C |
| 4 | 20:11:03 | Common Pipistelle | Multiple | F |
| 5 | 20:14:40 | Common Pipistelle | 2 | C |
| 6 | 20:15:40 | Common Pipistelle | 3 | F |
| PC G | 20:16-20:21 | | | |
| 7 | 20:16:02 | Common Pipistelle | 1 | C |
| 8 | 20:19:25 | Common Pipistelle | 1 | C |
| 9 | 20:20:07 | Common Pipistelle | 3 | F |
| 10 | 20:22:21 | Common Pipistelle | 2 | F |
| PC I | 20:28-20:33 | | | |
| 11 | 20:28:51 | Common Pipistelle | 1 | F |
| 12 | 20:32:55 | Common Pipistelle | 1 | F |
| 13 | 20:38:33 | Common Pipistelle | 1 | F |
| 14 | 20:39:49 | Common Pipistelle | 1 | F |
| PC B | 20:40-20:45 | | | |
| 15 | 20:41:36 | Common Pipistelle | 2 | F |
| 16 | 20:45:17 | Common Pipistelle | 2 | F |
| PC D | 20:50-20:55 | | | |
| 17 | 20:50:42 | Common Pipistelle | Continuous | F |
| PC F | 21:01-21:06 | | | |
| 18 | 21:04:12 | Common Pipistelle | 2 | F |
| PC H | 21:14-21:19 | | | |
| 19 | 21:16:08 | Common Pipistelle | 1 | F |
| 20 | 21:19:35 | Common Pipistelle | 1 | F |
| 21 | 21:22:48 | Common Pipistelle | 2 | F |
| PC I | 21:26-21:31 | | | |
| 22 | 21:28:23 | Common Pipistelle | 1 | C |



client
Bellway Homes

project
Ashland Road,
Sutton in Ashfield

drawing title
BAT TRANSECT PLAN (September 21)

scale @ A3
1:2500

drawn
JR/CDM

issue
13/9/2021

drawing / figure number
Figure 1

rev
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