The Conservation of Habitats and Species Regulations 2010 (as amended)

Bats – Method Statement template to support a licence application

The Method Statement will be used to determine the impact of the proposal on the favourable conservation status (FCS) of the species concerned (Regulation 53(9)(b)).
You are strongly advised to refer to the Bat Mitigation Guidelines.
Please use recent photographs to support your application.

Technical Services
Wildlife Licensing
Natural England
Horizon House
Deanery Road
Bristol
BS1 5AH.
T. 020802 61089

Important advice:

The format below must be used. Please enter text below each heading keeping information as concise as possible.

All maps/figures that will become part of any annexed licence granted must be submitted as separate documents (with the site name and date included on the map/figure. See section I for list – all others may be included within the Method Statement document (e.g. survey maps/figures) if preferred).

A separate work schedule must also be submitted on form WML-A13a-E5a&b to accompany the Method Statement.

A Executive summary

Provide an overview (no more than 1 side of A4) of what works are proposed and how the impacts identified will be addressed in order to ensure no detriment to the maintenance of the population at a favourable conservation status.

Proposed works will involve a single phase development at "High View", Scarlet Lakes, Huntley Lane, Cheadle, Stoke-on-Trent, Staffordshire. ST10 1UA [NGR: SK000417]. This will involve the removal/demolition of a two storey residential house with an existing footprint of ca. 115m2 (0.0115ha), to make-way for a new dwelling for residential purposes.

In the absence of mitigation, the development is therefore highly likely to result in an offence under Regulation 41 with disturbance and destruction of a male summer day roost for a small colony of common pipistrelle *Pipistrellus pipistrellus* (N5) is predicted. These bats were recorded emerging and re-entering under soffit gaps on the SE gable end apex region of the dwelling proposed for removal.

As common pipistrelle is widespread on a National level, and is known to be more opportunistic showing less fidelity to roost sites compared to other UK species; mitigation should be relatively straight-forward in-order to maintain and ensure favourable conservation status for the species onsite.

No evidence of over-wintering bats was recorded in the structure following an inspection in January 2017. However, due to the crevice-dwelling and synanthropic nature of the roosting species onsite, low to moderate potential for individual hibernating bats is considered possible, based on optimal habitat in the surrounding landscape including a woodland block immediately adjacent on the SW elevation.

Works is proposed to begin late September 2017 and to be completed by April 2018. For the purpose of this licence application, the following licence methods are therefore requested (and further expanded on in section E2 and E3.3.

1) **Disturb / destroy existing bat roost.**
2) **Destructive search by soft demolition around roof sections and areas that encroach into roof sections is carried out under supervision by the named ecologist (M.Weston),**
3) **The use of standard capture and exclusion methods by a licensed bat ecologist (by hand or static hand net) in the event that individual bats are discovered during works.**

Prior to any works, 1 x hibernation receptor box (Schwegler 1FW) will be sited onto a mature tree outside the zone of influence of the development for potential safeguarding of any bats discovered during

works. Soft demolition of roof sections will proceed thereafter under supervision until the building is deemed to be clear and free of roosting bats. Thereafter, all mitigation and enhancement features for roosting bats will be completed during the new build which will include:

a) Integration of 2No. Schwegler 2FR bat tubes into central apex areas on each opposing gable-end elevations of the building (SW and NE), the former being located as close to the existing roost area and existing flight paths as required. Further roost compensation will include a total of three PERMANENT ridge access points using modified Hog's-back or Half-round ridge ventilator tiles with removal of internal mesh or plastic mouldings [www.tudorrooftiles.co.uk]. These will be fitted at equidistant along the NE/SW ridge line of the new build,

b) No apertures should be made in any of the roofing underlay to prevent ingression of bats into any internal roof voids. Modern Breathable Roofing Membrane (BRM) is proposed to be incorporated into the new build. It is imperative therefore, that NO bats come into contact with BRM. In-order to prevent entanglement and injury to bats, a 1m^2 section of traditional dark, Bitumastic F1 underfelt will be sandwiched to the underside of the three proposed access ridge tile locations to isolate bats away from this substrate.

Timing of works:

- **Works to begin late September 2017**
- **All mitigation roost features are intended to be completed by January 2018.**
- **All other works are intended to be completed by April end 2018, prior to summer roost uptake.**
- **In the unlikely event that a number of torpid bats (exceeding the permitted licence are discovered, then ALL works will cease immediately and further consultation with Natural England may be required if necessary.**

Foraging and commuting habitat

No impact to foraging and commuting habitat used by bats is predicted from this small scale development, with no physical impact to the surrounding landscape and adjacent SBI considered. However, In-order to ensure no net reduction in the quality and availability of foraging habitat for local bat populations, a minimal post developmental lighting scheme will be implemented where necessary to avoid light-spill onto adjacent habitats and important linear features used by commuting bats. The use of low energy LED and/or low-pressure sodium lamps (SOX) will be used in-order to minimize light spill onto adjacent habitats and sky-glow.

Landscaping

All mature trees and hedgerows onsite are to be retained within the redevelopment in accordance to BS 5937:2012 "Trees in relation to design, demolition and construction", whilst no linear features used by commuting and foraging bats will be affected. Should any landscaping take place, then NO plant species listed under Schedule 9 of the Wildlife and Countryside Act (1981) will be used.

Post development monitoring

Considered as being a low impact Summer bat roost for a small population of common pipistrelle, minimal monitoring requirements by-way-of a single emergence survey will be carried out during June 2018 to assess the site and proportionality of implemented mitigation with regard to bats.

B Introduction

B1 Background to activity/development:

Include a brief summary of:

- Why the activity and a licence are necessary (*e.g. bridge structure repairs are required and will affect a known maternity roost of Daubenton's bats, which will be temporarily lost whilst works are being undertaken; renovation works to an office building will result in the permanent loss of three day roosts of common pipistrelle bats; demolition of an existing hospital to be replaced with flats will result in the loss of a brown-long eared bat maternity roost*).

Planning related consent has been obtained from Staffordshire Moorlands District Council for the removal of existing dwelling in-order for a new dwelling to be erected in its current place. In the absence of mitigation the development will result in permanent destruction of a low impact male summer bat roost for a small colony of common pipistrelle bat (N5).

- Include the site/project name and provide an OS grid reference to 8 figures (e.g. format AB 12345678).

"High View", Scarlet Lakes, Huntley Lane, Cheadle, Stoke-on-Trent, Staffordshire. ST10 1UA [NGR: SK 0002 4178].

- Include current status of planning permission (if applicable) *e.g. full planning permission with all relevant wildlife conditions discharged; permitted development; demolition with prior notification of demolition issues resolved*. If the proposal is for demolition only of a structure supporting a bat roost/s, please confirm whether there are plans to develop the site in the future and if so when.

Full planning permission with all relevant wildlife conditions approved (see Folder 5. Supporting information).

B2 Relationship with other nearby development and cumulative impacts

B2.1 Is the current application part of a larger development project? For example, is it part of a phased or multi-plot housing development that will require more than one bat licence? Enter Yes, No or N/A in the text box below. If yes, note a separate ***master plan*** document will be required.

NO

Important Advice: If yes to the above, please note that sections in this Method Statement on impact assessment and mitigation measures must explicitly relate *only* to impacts from the works currently proposed.

A project-wide master plan must detail the overall impact assessment and mitigation and explain where, and why, each of the bat licences will be required. The master plan must be included as a separate document to this application: see http://www.naturalengland.org.uk/Images/WML-G11_tcm6-9930.pdf for details that are to be included in this separate document. The separate master plan is expected to take due regard of the overall project to ensure that in-combination effects are considered, and mitigation and compensation measures are both sufficient and coherent.

If the current development is part of a larger development project, summarise very briefly here how the current application relates to the larger project and how the in-combination effects are considered and mitigation/compensation is sufficient.

N/A

Important Advice: to accompany this Method Statement also include Figure. B2.1 for a Master plan overview - and see section I "Map checklist" at the end of this document.

B2.2 Apart from any mention in B2.1, please inform us of any past or future development or other projects (in the last 5 years or next 5 years) in the vicinity which may have significantly impacted or are likely to significantly impact on the same population/s of bats as this application (e.g. loss of maternity or hibernation roosts). You must make reasonable efforts to establish this, including discussions with your client and the Local Planning Authority – stating below what you undertook. A brief summary of the project/s should be provided including the site name and location, dates and if known the licence reference number(s).

Please note we are not expecting details of every licence/planning permission issued within the vicinity of the site – we are only concerned with projects that have the potential to significantly impact or have impacted on same population of bats (maternity and hibernation roosts). Note: Natural England is aiming to make available licensing records from the last 5 years publically available.

N/A

Important Advice: locations of other bat mitigation sites in relation to this proposal must be shown on Figure B2.2.

C Survey and site assessment (also see section 5 of the Bat Mitigation Guidelines)

C1 Pre-existing information on the bat species at the survey site:

Please undertake a historical data search within a 2km search radius and provide a summary of the results of this search. For example, records from local environmental records centres, local bat groups and previous survey work undertaken at the site is all relevant.

- Should no historical records be found from your search please state this – and specify what searches you undertook.
- Note that you must not include records from National Biodiversity Network (NBN) without first obtaining written permission from the relevant Data Provider.

Staffordshire Wildlife Trust (SWT) records show 11 of the 17/18 resident UK bat species occur within the county region, with two UK BAP species (brown long-eared bat and and soprano pipistrelle), with a further four/five non UK BAP species recorded (common pipistrelle, Daubenton's bat, Natterer's bat and Whiskered/Brandt's bat) being recorded within 2km of the proposed application area.

Three species of foraging and commuting bat was intermittently recorded onsite during activity surveys: Common pipistrelle was dominant onsite with up to six recorded at any one time, followed by individual transient Noctule and occasional Myotis spp. considered to be Whiskered/Brandt's.

ONLY common pipistrelle however is confirmed as roosting in low numbers (N5) within the building subject to removal. Staffordshire Ecological Records (SER) shows no other historic records of any notable bat roosts within the application area itself.

C2 Status of the bat species: Detail conservation status at the local, county and regional levels. Please complete the following table, justifying your assessment, and add additional lines where necessary. If the status is unknown then please enter 'unknown'.

Species	Conservation status assessment		
	Local	**County**	**Regional**
Common pipistrelle *Pipistrellus pipistrellus*	**Common & widespread**	**Common & Widespread and of least concern**	**Common & Widespread and of least concern**

** *Please note that you can add more rows to the table: right click in any cell outside the grey box area. Choose Insert > Insert rows below.*

C3 Objectives of the survey to inform this proposal: Please complete the following table, entering 'Yes', 'No' or N/A' to indicate the objective of your survey and provide comments/explanation where necessary:

Survey objective	Yes / No / N-A	Comments
Determine presence / absence of bats	Yes	Phase 2 activity surveys 2016 were carried out to determine presence/absence, species and population(s) onsite. This incoporated 2 x Dusk emergence / 1 x Dawn re-entry survey. Hibernation inspection carried out during January 2017 to determine presence of over-wintering bats onsite. No bats recorded.
Determine bat usage of site (e.g. maternity, hibernation, night roosts in various structures (specify)).	No	Existing building supports a small colony (N5) of roosting common pipistrelle and is considered as being used as a male summer day roost.
Identify foraging, commuting or swarming sites (explain)	Yes	Foraging and commuting bats were found to be high onsite, with a great deal of affinity recorded around the woodland linear ecotone. Three species of bat were recorded overall during the survey period; Common pipistrelle was dominant onsite with up to six recorded at any one time, followed by individual transient Noctule and occasional Myotis spp. considered to be Whiskered/Brandt's.
Other (explain)	N/A	

C4 Site/habitat description: Please provide:

- Brief descriptions of the site, including total size of the development site (ha) (most often within the red line planning boundary) and areas of the site with potential value to bats (ha).

The site is accessed along a steeply inclined private drive from Huntley Lane, and is located near to the semi-rural settlement of Huntley ca. 2km SW of Cheadle, and 2km NW of Tean in North Staffordshire. The

site comprises of a single residential dwelling with associated out-buildings and garden / field compartments (ca. 2.02 ha / 5acres).

The building was confirmed as having potential value for a small number (N5) of roosting common pipistrelle, with the main roosting area confirmed as being under barge board/soffit apex regions on the SW facing gable end. Potential ingress points across the roof were also noted by-way-of missing mortar along gable side roof verges, and under a small number of raised roof/ridge tiles.

- Brief descriptions of the structures on site, differentiating between those surveyed and not surveyed, with an explanation why. Ensure structures are referenced and consistently indicated on relevant figures and tables.

The dwelling proposed for removal is two-storey, standalone-structure constructed of brick/ cladding construction with a pitched, tiled roof and gable ends with associated single storey garage buildings and gardens. The building has an existing footprint of ca. 105m^2. No evidence of bats were recorded in any of the other structures onsite during surveys (sheds and garages).

- A description of adjacent areas/offsite habitats, specifying any relevance to bats, including descriptions of habitat/s relevant to bat commuting/foraging behaviour.

The surrounding landscape provides a number of valuable resources for bats, and consists of lowland heath and agricultural farmlands, with a number of woodland blocks providing high potential for tree roosts, with water-bodies also present in the immediate vicinity. A number of operable and defunct sand and gravel quarries are also present in the immediate landscape.

Huntley Wood & Quarry SBI abuts onto the SE corner elevation of the proposed residential dwelling and is considered as being within the immediate Zone of Influence of the proposed application. There is excellent connectivity for bats to the wider landscape.

- Please also include annotated (cross reference the structures) and dated photographs (showing both internal and external survey areas) as these are very useful as an assessment aid. These can be inserted below or submitted as a separate (referenced) document.

See separate document

C5 Field survey(s):

Please complete the following tables and add additional lines where necessary (*right click in any cell outside the grey box area. Choose Insert > Insert rows below)*. Please enter 'N/A' if the table is not applicable to your survey:

Visual inspection

Date of each survey visit **(e.g. format 01/06/13)**	**Structure reference / location**	**Equipment used (e.g binoculars, endoscope)**	**Weather –** ***(Include temps, precipitation, Beaufort wind scale etc)***
O1/08/16	"HIGH VIEW" ST10 1UA / SK0006 4172	Ladders, torch, binoculars and endoscope	12.**7°C** , Nil precipitation, Wind <1
Comments (to include # of surveyors used for each visit):			
Comments:			
Comments:			
Comments: **A Preliminary Roost Appraisal (PRA) assessed the overall rating of the building has having moderate to high potential for roosting , whilst the surrounding landscape was also considered as pertaining to features and highly suitable for roosting, commuting and foraging bats.**			

Please provide surveyors names *(including Class Licence registration number if applicable)* and ensure the above table states the number of surveyors used for each survey visit undertaken.

Mark Weston BSc (Hons), AMRSB, GradCIEEM – Class (survey) licence level 2 (CLS 10722)

Dusk survey

Date of each survey visit (e.g. format 01/06/13)	Start and end times and time of sunset	Structure reference / location	Equipment used (include make of bat detectors and logging equipment)	Weather – *(Include start and end temps, precipitation, Beaufort wind scale etc)*
DUSK 1 SURVEY: 23/07/16 **DUSK 2 SURVEY: 24/08/16**	**21:10-23:30hrs Sunset: 21:17hrs** **20:00-22:45hrs Sunset 20:15hrs**	**"HIGH VIEW" ST10 1UA / SK0006 4172** **"HIGH VIEW" ST10 1UA / SK0006 4172**	**1 x Batbox Duet 1 x SSF Bat2 1 x *EcoObs* Batcorder. 1 x NVMT-1 2x24 1 x Venture HC, CB2 1 x Clubman Deluxe high-power lamp with Filter.**	**DUSK 1: Temp start: 16.7°C Temp end: 17.5°C Precipitation: NIL Wind speed: <1 DUSK 2: Temp start: 14.4°C Temp end: 12.0°C Precipitation: NIL Wind speed: <1**
Comments (to include # of surveyors used for each visit):				
Comments: DUSK 1 = 2 X SURVEYORS USED				
Comments: DUSK 1 = 2 X SURVEYORS USED				

Please provide surveyors names *(including Class Licence registration number if applicable)* and ensure the <u>above</u> table states the number of surveyors used for each survey visit undertaken.

Mark Weston BSc (Hons), AMRSB, GradCIEEM – Class (survey) licence level 2 (CLS 10722)
Assistant: Louise Cox BSc (Hons)

Dawn survey

Date of each survey visit (e.g. format 01/06/13).	Start and end time and time of sunrise	Structure reference / location	Equipment used (include make of bat detectors and logging equipment)	Weather – *(Include start and end temps, precipitation, Beaufort wind scale etc)*
DAWN 1 SURVEY: 10/08/16	**03:00-05:15hrs Sunrise 05:33hrs**	**"HIGH VIEW" ST10 1UA / SK0006 4172**	**1 x Batbox Duet 1 x SSF Bat2 1 x *EcoObs* Batcorder. 1 x NVMT-1 2x24 1 x Venture HC, CB2 1 x Clubman Deluxe high-power lamp with Filter.**	**Temp start: 14°C Temp end: 15°C Precipitation: NIL Wind speed: <1**
Comments (to include # of surveyors used for each visit):				
Comments: DAWN SURVEY – 2 XSURVEYORS USED:				

Please provide surveyors names *(including Class Licence registration number if applicable)* and ensure the <u>above</u> table states the number of surveyors used for each survey visit undertaken.

Mark Weston BSc (Hons), AMRSB, GradCIEEM – Class (survey) licence level 2 (CLS 10722)
Assistant: Jack Weston

'Other' survey (please specify e.g. hibernation, remote, etc)

Date of each survey visit (e.g. format 01/06/13).	Start and end times	Structure reference / location	Equipment used (include make of bat detectors and logging equipment)	Weather – *(Include start and end temps, precipitation, Beaufort wind scale etc)*
HIBERNATION INSPECTION:	**12:30-1:30hrs**	**"HIGH VIEW" ST10 1UA / SK0006**	**1 x ladders 1 x seasnake**	**Temp start: 8.3°C Temp end: 9.5°C**

30/01/2017		**4172**	**endoscope 1 x SSF Bat2 1 x Clubman Deluxe high-power lamp with Filter.**	**Precipitation: NIL Wind speed: 1**
Comments: 1 X SURVEYOR – *apex region of summer roosting area investigated using endoscope – no evidence of hibernating bats recorded*				

Please provide surveyors names *(including Class Licence registration number if applicable)* and ensure the <u>above</u> table states the number of surveyors used for each survey visit undertaken.

Mark Weston BSc (Hons), AMRSB, GradCIEEM – Class (survey) licence level 2 (CLS 10722)

Please explain any constraints on the survey/s undertaken (time of year, cold weather, refused access, safety issues preventing access etc – justify as necessary and include evidence where required). If access was refused please provide evidence (letter/email) to demonstrate this.

No survey constraints encountered during ALL survey periods

Also complete the following:

- If DNA analysis of droppings has been undertaken, please indicate below (Yes, No, N/A) and ensure that **Figure C5b** (if applicable – see below) details the locations where the samples were taken.

N/A

- Please confirm (Yes, No, N/A) that a walk over survey/check has been carried out within 3 months *prior* to application submission to ensure that conditions have not changed since the most recent survey was undertaken. Provide details of any changes to conditions and habitats and/or structures on site since the surveys were undertaken. If no walk-over survey/check has been undertaken please explain why.

A walkover survey encompassing a general assessment for over-wintering bats was conducted in January 2017, whereby no conditions were seen to have changed onsite with regard to the existing structure and/or habitat on site since Phase 2 surveys in 2016.

C6 Survey results: Summarise your findings in the tables below and cross reference to **Figure C6** (which must also include flight lines, access points, dimensions of existing roosts, locations of surveyors etc). If you did not undertake a specific survey type please add N/A to the relevant table/s. Raw data is to be appended to the Method Statement (including sonograms, DNA analysis results etc).

Roost t*ypes to be referenced as:* *Day, Night, Feeding Perch, Transitional, Satellite, Maternity, Hibernation, Foraging Area, Commuting Route, Swarming Site, Other*. See end of document for "Definitions" of these roosts.

When completing "**Notes/observations" include** reference *to direct observations, extent and age of droppings, presence of field signs, emergence or re-entry, echolocation analysis. Also include DNA results if applicable and include nil results)*

Visual inspection results

Date (e.g. format 01/06/13)	**Species**	**Roost type** *(to be consistent with the above listed types)*	**Structure reference** *(consistent with relevant figures and other text)*	**Roost location**	**Access points (include # of them)**	**Dimensions of existing roosts or explanation of where the roost is (as appropriate)**
Notes/observations:						
01/08/16	**TBC**	**TBC**	**"HIGH VIEW" ST10 1UA / SK0006 4172**	**TBC**	**TBC**	**TBC**

Provide further (brief) comments/explanation if required:

In the absence of any evidence the structure was assigned a building rating of moderate to high potential for roosting bats with optimal habitat in the immediate area also considered.

Dusk survey results

Date (e.g. format 01/06/13)	**Start and end times**	**Species**	***Roost type*** *(to be consistent with the above listed types)*	**Structure reference** *(consistent with relevant figures and other text)*	**Roost location**	**Access points (include # of them)**	**Dimensions of existing roosts or explanation of where the roost is (as appropriate)**
DUSK 1 SURVEY: 23/07/16 **DUSK 2 SURVEY: 24/08/16**	**21:10-23:30hrs Sunset: 21:17hrs** **20:00-22:45hrs Sunset 20:15hrs**	**Common pipistrelle *Pipistrellus pipistrellus***	**Male summer 'day roost' (N5)**	**"HIGH VIEW" ST10 1UA / SK0006 4172**	**Four / five common pipistrelle bats recorded emerging from southern elevation gable-end.**	**One access point recorded between the apex roof verge and brick-work on south facing gable-end.**	**Precise dimensions of the existing roost / cavity area is not known.** **Main roosting area is located between soffit boards and converging points around the apex roof verge and brick-work.**
Notes/observations: **DUSK 1:** Emergence of 4 x Common pipistrelle from South facing gable end apex at around 21:33hrs. / Noctule characteristically recorded intermittently commuting at height over the site shortly around dusk and throughout the survey period. **Commuting and foraging:** / Overall foraging and commuting activity was seen to be moderate to high onsite. Pip 45 dominant in wider landscape – showing affinity to ecotone along woodland boundary LOW: a total twelve bat passes (N12) recorded during entire survey period.							
Notes/observations: **DUSK 2:** Emergence of 3/4 x Common pipistrelle from South facing gable end apex **Commuting and foraging:** Overall foraging and commuting activity was seen to be moderate to high onsite. Pip 45 dominant in wider landscape – showing affinity to ecotone along woodland boundary.							
Notes/observations:							

Provide further (brief) comments/explanation if required:

Dawn Survey results

Date (e.g. format 01/06/13)	**Start and end times**	**Species**	**Roost type** *(to be consistent with the above listed types)*	**Structure reference** *(consistent with relevant figures and other text)*	**Roost location**	**Access points (include # of them)**	**Dimensions of existing roosts or explanation of where the roost is (as appropriate)**
DAWN 1	**03:00-**	**Common**	**Male**	**"HIGH**	**Refer to**	**Refer to**	**Refer to**

SURVEY 10/08/16	**05:15hrs Sunrise 05:33hrs**	**pipistrelle *Pipistrellus pipistrellus***	**summer 'day roost' (N5)**	**VIEW" ST10 1UA / SK0006 4172**	**dusk survey location**	**dusk survey access point**	**dusk survey dimension**
Notes/observations: Re-entry of 4/5 Comm. Pips into South facing gable-end apex. Swarming around mature tree on NE elevation also noted. Possible roost although not confirmed / Occasional bat passes of whiskered/Brandt's bat in wider landscape/. A total of six PIP45 visually recorded in single sighting. **Commuting and foraging:** Overall foraging and commuting activity was seen to be moderate to high onsite. Pip 45 dominant in wider landscape – showing affinity to ecotone along woodland boundary.							

Provide further (brief) comments/explanation if required:

'Other' results – please specify.

Date (e.g. format 01/06/13)	**Species**	**Roost type** *(to be consistent with the above listed types)*	**Structure reference** *(consistent with relevant figures and other text)*	**Roost location**	**Access points (include # of them)**	**Dimensions of existing roosts or explanation of where the roost is (as appropriate)**
WALKOVER / HIBERNATION INSPECTION 30/01/2017	**-**	**No evidence of overwintering bats present**	**"HIGH VIEW" ST10 1UA / SK0006 4172**	**N/A**	**N/A**	**N/A**
Notes/observations: No changes to conditions and habitats and/or structures on site since the surveys were undertaken,						
Notes/observations:						
Notes/observations:						
Notes/observations:						

Provide further (brief) comments/explanation if required:

C7 Interpretation/evaluation of survey results (also see the Bat Mitigation Guidelines section 5.8 and Figure 4 for conservation significance of roost type): Please complete the following table:

Structure reference *(ensure consistency with other text and Figures)*	**Species**	**Count / estimate of number of individuals**	**Site status assessment (e.g. hibernation, maternity, feeding roost, swarming site etc)**	**Conservation significance of roost**	**Use and importance of the site throughout the year** (e.g. used by different species at different times, hibernation potential, etc)
"HIGH VIEW" ST10 1UA / SK0006 4172	**Common pipistrelle *Pipistrellus pipistrellus***	**N5**	**Day roost / male summer roost**	**LOW STATUS**	The building would appear to have transient use by a low number of common pipistrelle throughout the summer.

Provide further (brief) comments / explanation if required:

Important Advice:

Survey maps that must be included in this section of the Method Statement, or as separate documents if preferred, are listed in *section I "Map checklist" at the end of this document.*

Insert survey figures, photographs etc below here if not submitting them as separate documents:

D Impact assessment <u>in absence of mitigation or compensation for each species / roost type</u>

(also see section 6 of the Bat Mitigation Guidelines). Where appropriate you must take into consideration cumulative impacts of your proposals on the bat species and populations identified in your survey in each section.

D1 Initial impacts: The impact/s of activities undertaken on site pre-development and during works must be considered and explained. **Consider disturbance** (such as human presence, noise, vibration, dust, lighting, access obstruction due to scaffolding and plastic sheeting etc), **temporary damage and temporary loss of roosts and injuring/killing.**

E.g. Unsupervised contractor removing roof tiles has the potential to crush 3 common pipistrelle bats using the roof tiles as day roosts. Major negative impact at a site level; Demolition of an extension to a building will take place adjacent to a maternity roost of common pipistrelle bats situated under the soffit board of the retained building. Potential for significant disturbance if demolition works are undertaken during the maternity period through vibration, noise and dust. Medium negative impact on a local level.

In the absence of mitigation, the demolition the building during development will cause a negative impact resulting in destruction of a summer 'day roost' for a small population of male common pipistrelle (N5). Based on the widespread distribution of this species the roost is considered as being of low impact on a local level overall.

D2 Long-term impacts: Consider and explain the impacts of the proposed works on the different species populations at a site, local, regional, and national level**.**

D2.1. Roost modification: e.g. changes to roosts/access points, new entrances (including human access e.g. for servicing/maintenance etc), change in size of roost space, changes in air flow, temperature and humidity, light etc. Please detail the access points into each roost and the type/s of roosts which will be modified.

E.g. Non-mitigated changes to the roof structure, which requires replacing, will lead to the modification of 3 access points into a common pipistrelle maternity roost which will result in bats being unable to enter or exit the roost. Moderate negative impact on a local level.

D2.2. Roost loss: Loss or deterioration of roosting sites, access points, habitat, etc must be considered. Please detail the access points into each roost and types of roost/s which will be lost.

E.g. Demolition of building reference X in June will lead to the loss of a night roost in the porch used by 1 lesser horseshoe bat and the loss of a maternity brown-long eared bat roost in the loft space. This will lead to the death and/or injury of bats including dependent young and permanent destruction (loss) of both roosts. Moderate negative impact at a site level for lesser horseshoe bats and moderate negative impact at a local level for brown-long eared bats.

In the absence of mitigation, the demolition of "HIGH VIEW" (ST10 1UA / SK0006 4172) will result in an offence under Regulation 41, whereby both disturbance and destruction of a male summer day roost for a small colony of common pipistrelle *Pipistrellus pipistrellus* (N5) is predicted. Low impact on a local level is considered.

D2.3. Fragmentation and isolation: Will the proposed works results in these impacts? E.g. loss of linear features such as hedges, tree lines, increased lighting, severance of flight lines by roads/rail lines, separation of breeding/hibernation sites from feeding grounds, etc.

E.g. In addition to the removal of common pipistrelle day roosts in trees along the proposed road, removal of hedgerows, shown on Figure D, and the construction of the new road will fragment a significant commuting and foraging route for a lesser horseshoe maternity roost. This may cause a reduction in the long term success of the breeding colony of lesser horseshoes by restricting existing foraging range or killing bats on the road. Potentially major negative impact at a site and local level.

No immediate impact to fragmentation and isolation is predicted under the proposed development scheme, with the existing footprint to be retained. Subsequently no additional land uptake or removal of mature trees and hedgerows is proposed. However, mitigation

considers a sensitive post-development lighting scheme to prevent the potential of severance between habitats around site (see D3)

D3 Post-development interference impacts: e.g. extra street lighting or other external lighting, use of loft space as storage, increased noise. Please also consider other direct or indirect post development impacts which may include disturbance/ injuring/killing.
E.g. Security lighting being installed will shine on the brown-long eared bat maternity roost access points which may affect emergence patterns and lead to a reduction in foraging times. This may cause a reduction in the long term success of the breeding colony or cause the roost to be abandoned. Moderate to high negative impact at a site and local level.

Whilst there are currently no proposals to increase lighting onsite, mitigation recommends that any additional post development lighting should be kept to an absolute minimal to reduce light spill onto adjacent habitats (incl. an SBI) and sky-glow.

D4 Predicted scale of impact of this development/activity on species status (also see section 6.5 of the Bat Mitigation Guidelines and the BCT's Bat Survey Good Practice Guidelines): Please complete the following table to explain what this is likely to be at the site, local/county and regional levels for each roost type and species. Add additional lines when necessary

Roost types to be referenced as: Day, Night, Feeding Perch, Transitional, Satellite, Maternity, Hibernation, Foraging Area, Commuting Route, Swarming Site, Other.

Species & #s (which will be affected at the time works will be undertaken)	**Roost type**	**Predicted scale of impact** ***(place X in relevant column)***			**Notes** (include impact on roost – damage / destruction /modification etc)
		Site	**County**	**Regional**	
Common pipistrelle *Pipistrellus pipistrellus*	**Day roost – male summer roost**	***X***			**Damage/destruction of a low conservation roost with low impact predicted on a local level.**

* ***Please note*** *that you can add more rows to the table: right click in any cell outside the grey box area. Choose Insert > Insert rows below.*

Provide further comments/explanation as required (this helps understand how the impacts will be mitigated or compensated for when assessing section E):

Based on the population size recorded, low impact roost status and ecology of common pipistrelle, mitigation should be relatively straight forward to achieve by-way-of correct timing of works and roost compensation.

Important Advice:
Please ensure that a separate 'Impact map' is provided (Figure D) which must show all structures or habitats (clearly referenced) that will be disturbed, damaged or destroyed, detailing where the roosts and access points are etc. Also *see section I "Map checklist" at the end of this document*.

E Mitigation and Compensation (please also see section 7 and 8 of the Bat Mitigation Guidelines)

E1 The mitigation solution being proposed in the method statement should be the one that delivers the 'need' with the least impact on the bat population.
Please explain why this design was chosen over other potential solutions - set out what other designs were considered and why they were not feasible (*e.g. if the proposal is to construct a new stand-alone roost, explain why it is not possible to retain the roost in the existing structure etc).*

As this is a single phase development, the least impact to roosting bats onsite is to undertake works during the winter period (September end), and to ensure that all building works (with new bat roost features and enhancement included) is *in-situ* before the summer season begins.

E2 Capture and exclusion (If not applicable to your proposals please state 'N/A' in the relevant text boxes): Include details on:

- The methods proposed - to include timings, effort, methods (please clearly state what will be used, e.g. use of endoscopes, one way excluders, capture by hand (and state in which referenced structures), disturbance by noise or light, destructive search by soft demolition etc) and equipment to be employed.

- **Works has been time-tabled to begin on "HIGH VIEW" (ST10 1UA / SK0006 4172) in late September 2017, when bats are in roost transition to autumn swarming/hibernation sites. Due to the crevice-dwelling and synanthropic nature of common pipistrelle however, there is low to moderate potential that individual bats may be encountered during works.**

- **It is proposed that a soft demolition of the roof will take place under direct ecological supervision, allowing for an accurate assessment of existing roost area, and any exposed cavity regions on the converging point between the underside of the roof and the internal dividing wall.**

- **The use of an endoscope may be required to inspect any such regions, whilst a 'top-down' roof strip approach and careful inspection of ridge and roof tile undersides will be carried out.**

- **Should individual bats be discovered, then deployment of capture and exclusion methods by the named ecologist may be necessary (by hand or net), although it is preferable that any bats are left to vacate under their own volition should weather conditions and relative fitness permit.**

- Should your proposals include capture (taking) please specify numbers of each species that will be affected at the time the works are to be undertaken. Note*: this may be different in many cases to the number of bats using the roost at its optimum time as timings for works will be at a time when bats are least likely to be present.*

Five N = 5

- Weather conditions during which licensed activities will be carried out, release sites, care of bats, unexpected discovery of bats, what would be done with any injured bats found etc.

WEATHER CONDITIONS:

- **Any works affecting existing roof section areas will be carried out under supervision during periods of dry weather (and ideally when temperatures have not dropped below 8°C over four consecutive days and nights).**

SITE SAFEGUARD:

- **Before ANY work commences, ALL building contractors will be made aware of the possible presence of bats within the building subject to redevelopment, their legal protection and of working practices to avoid harming bats. A copy of the Method Statement and licensing conditions with summary sheet of works time table will be made permanently accessible onsite for contractor reference.**

- **A go-slow soft demolition approach will initially commence around the existing roost area and roof section working in a 'top-down' approach. Supervision will oversee the soft demolition and inspect any internal crevices, using a flexible endoscope where necessary, prior to any removal around cavity sections and intermediate layers between roof and brick lines.**

RECEPTOR SITE:

- **In the event that individual bats are unexpectedly discovered during works, use of standard capture and exclusion methods will be deployed by the named ecologist. Thin hand gloves ora hand net will be used to capture any individual bats, which will placed into a soft 'draw-string' breathable bag and carefully translocated to pre-installed hibernation receptor bat box (Schwegler 1FW). This receptor box will be placed at height onto a mature tree well outside the zone of influence of the proposed development.**

- **In the unlikely event, that a significant number of torpid bats are bats are discovered, then <u>ALL works will cease immediately</u>. The Named Ecologist will re-assess the structure and determine whether works can continue under this licence, or whether a modification to the licence is required before works re-commence.**

- **A written record will be kept of this decision, which will be made available to Natural England and any other related authorities on request. Any incidents will also be reported on the licence return form. Should any bats be found injured, underweight or at risk prior to and during works, then such individuals will be taken to taken into rehabilitation care (Staffordshire Bat Group).**

E3 Bat roost and access point retention, modification and creation: Please detail how all impacts to each species (as identified in sections C and D) will be mitigated. If not applicable to your proposals please state 'N/A' in the relevant text boxes.

E3.1 Retention of existing roost(s) – *Works may include, for example, maintenance works that result in no material changes to the roost but may cause disturbance or temporary damage e.g. t*emporary exclusion of a roost to allow investigative and repair works to a bridge.
Provide details of all works including:

- Number and description of roosts to be retained, with an explanation of how they will be retained.

N/A

- Number of access/entrance points to be retained and how this will be achieved. If enhancements to the roosts will be provided, such as through crevice provision, please detail.

N/A

- Mitigation for any other impacts e.g. new lighting at the site.

N/A

E3.2 Modification of existing roost(s) - *Works may include, for example, reduction in roof void height, change of tiles and roof lining (stating the type of membrane that will be used), alteration of access point through replacement of soffits etc.*
Provide the following:

- Dimension details of modified roosts or access points ensuring that it is clear what the original dimensions were and what the dimensions of the modified roost will be.

- Details of any other modifications to be made to roosts.

- Mitigation for any impacts of lighting on the modified roost/s if appropriate.

No impacts of lighting to modified roosts are predicted on the proviso that a sensitive lighting scheme is incorporated (see E3.4).

- Scale drawings of the modified roost and bat access points, orientation, location (including an 8-figure grid reference for the modified roost) – to be submitted as a Figure E2 – see below.

E3.3 New roost creation (including bat houses, cotes and bat boxes etc).

Note – creation of compensation for high impact cases (e.g. loss of a maternity roost) must be protected in the long term.
Any bat boxes or roost structures part of a licence proposal which do not show signs of bats must be retained for a minimum of 5 years from date of completion of the development/works. Typically this will be around 5 years for low conservation status roost compensation (e.g. bat boxes) and longer for other significant roosts (e.g. bat houses, lofts etc). The exact time period will be specified in any licence issued. For high conservation status roost loss, the compensation roost/s must still be protected in the long term by another means (such as a s106 agreement), which is particularly important if the structure is likely to change ownership.

Provide the following:

- New roost dimension details or features (to include bat tiles/boxes as applicable).
- Access points and size of access points.
- Location details (including an 8-figure grid reference for bat houses or bat lofts relating to the structure. 8-figure grid references are not required for positions of individual boxes, tiles etc).
- Aspect. Explain how the internal conditions of the roost will be created.
- Details of the materials to be used e.g. timber, sarking, felt etc.
- Justification for any variation from the original roost and/or deviations from recommendations in the Bat Mitigation Guidelines. (*Diagrams of widely available standard bat box designs are not required; just refer to bat box name and reference number, e.g. Schwegler 1FF*).
- Mitigation for any impacts of lighting if appropriate.
- Structures for access for monitoring / maintenance purposes (if applicable)

NEW ROOST COMPENSATION:

1 x summer day roost of low status conservation concern will be destroyed during demolition.

Mitigation proposes the inclusion of 2No. Schwegler 2FR bat tubes (HT. 47 X W. 20 X D. 12.5CM) **These will be rendered flush into new brick-work, as near to central apex areas on each opposing north and south facing gable-end elevation of the new build. The 2FR being as close to existing roost area and existing flight paths where possible, whilst also providing a selection of microclimates). These bat tubes are made from wood-concrete and are self-cleaning, durable, weather resistant and air permeable. They have entrance holes 15cm wide x 2cm high.**

Further compensation will include a total of three PERMANENT ridge access points using modified Hog's-back or Half-round ridge ventilator tiles with removal of internal mesh or plastic mouldings [www.tudorrooftiles.co.uk]. These will be fitted at equidistant along the NE/SW ridge line of the new build. No apertures should be made in any of the roofing underlay to prevent ingression of bats into any internal roof voids.

Modern Breathable Roofing Membrane (BRM) is proposed to be incorporated into the new build. It is imperative therefore, that NO bats come into contact with BRM. In-order to prevent entanglement and injury to bats, a 1m^2 section of traditional dark, Bitumastic F1 underfelt will be sandwiched to the underside of the three proposed access ridge tile locations to isolate bats away from this substrate.

E3.4 Other habitat re-instatement or creation (e.g. retention of existing flight lines, retention or creation of appropriate vegetation around roost entrances where applicable) – please include details of:

- Habitat replacement (following works resulting in temporary impacts) or creation not covered by sections E2 to E3 such as hedgerow/woodland planting or enhancement. State the length of

hedgerow planting and areas (ha) of other planting to be provided such as woodland and anticipated establishment period etc.

All existing flight lines, foraging and commuting habitat are to be retained.

- Creation of flight lines/routes of connectivity.

N/A

Foraging area enhancements, etc

N/A

- Mitigation for any impacts of lighting if appropriate.

No impacts of lighting to foraging or commuting habitat of bats are currently predicted under the proposed scheme. However, should any post development lighting be considered at later date, then mitigation considers PERMANENT low energy LED post development lighting installation to minimize light pollution and spill onto roosting areas and adjacent habitats, including a Site of Biological Importance (SBI).

Alternatively, Low-pressure sodium lamps (SOX) will be used and fitted with hoods to direct the light below the horizontal plane to minimize light-spill. Where necessary any security lighting will be less than 200 lumens (150 watts) and placed on a timer setting and faced down to reduce sky glow. Height of any columns around the development will not exceed eight metres

E3.5 Wider biodiversity gains:

Please indicate if enhancements, over and above what is necessary to mitigate the impact of the activity of the licence proposal, are being provided. Please indicate if enhancements are included to satisfy the requirement of a planning permission, and if so state the relevant planning condition, or other consents in your response below. Please also state if an applicant wishes to provide more than is typically required to mitigate for the impacts. Enter N/A if this is not applicable to your application.

Note: *Any licence granted will only cover mitigation and compensation required to fulfill licensing requirements, but will acknowledge additional biodiversity enhancements*.

It is considered that the mitigation proposed is proportionate in terms of overall compensation for roosting bats onsite. Under the Natural Environment and Rural Communities (NERC) act 2006, 2 x schwegler 2F general purpose bat boxes are proposed to be fitted to selected mature trees by-way-of additional enhancement for the long-term sustainability of local bat populations overall.

Important Advice:

Scaled maps/plans of mitigation/compensation must be provided as separate maps/figures (also ***see section I "Map checklist" at the end of this document)***:

- **Figure E2a** to show the locations and structures where all capture and exclusion activities will be undertaken (ensure this is clearly labelled and consistent with other mandatory maps/figures).
- **Figure E2b** if non-standard capture and exclusion apparatus is proposed please include diagrams/photographs.
- **Figure E3** to show specifications for mitigation / compensation to be provided and annotate where it will be provided. Should the scheme be large or complicated it may be necessary to submit more than one figure.

NOTE: It must be possible to compare these with the survey results plan (**Figure C6**) and 'Impacts' Figure (**D)**.

E4 Post-development site safeguard: Further guidance and explanation on post-development monitoring requirements are included within our 'How to get a licence' document http://www.naturalengland.org.uk/Images/wml-g12_tcm6-4116.pdf. Also see Section 8.7 of the Bat Mitigation Guidelines.

E4.1 Habitat/site management and maintenance: Is any specific post-development habitat management and site maintenance planned? If 'No; state 'N/A'. If 'Yes' include the following:

- The period (years and months) for which habitat management and maintenance will take place. Ensure that this is consistent with the post development works detailed in section **E5b** of the **Work Schedule document, WML-A13-a-E5a&b**.

N/A

- Details of what will be undertaken in terms of site maintenance required to ensure long-term security of the affected population (e.g. maintain, repair or reinstate access points; maintain and repair heaters and /or data loggers; maintain, repair or restore bat feature / bat loft in good condition; repair or replace inspection hatches; management and maintenance of lighting regime, or bat boxes etc).

N/A

- Details of what will be undertaken in terms of habitat management (e.g. planting cover around roost structure, hedgerow management regime, checking establishment of habitat creation; reduction of shade around roosts, woodland management to maintain species and structural diversity etc). Ensure this relates to the relevant map.

N/A

Note – for phased or multi-plot developments a separate habitat management and maintenance plan is required, which must be submitted with the master plan: see guidance on phased developments.

Important Advice:
Please include **Figure E4** as a separate figure to show which structures and habitats will be managed, maintained and monitored post development as part of your proposal – also *see section I "Map checklist" at the end of this document)*.

E4.2 Population monitoring, roost usage etc: This should be in line with the monitoring requirements detailed in the Bat Mitigation Guidelines section 8.7 and Figure 4, and, where required, should include details of:

- Timing – state the years and months post development monitoring or other will be undertaken. Ensure that is consistent with the post development works detailed in section **E5b** of the **Work Schedule document WML-A13-a-E5a&b**.

Considered as being a low impact to a male summer bat roost for a small population of common pipistrelle, minimal monitoring requirements by-way-of a single emergence survey will be carried out during June 2018 to assess effectiveness of mitigation.

- The type of monitoring which will be undertaken – include survey methods and equipment to be used. If it is expected any bats are to be taken or disturbed during this period please state anticipated numbers per species against each licensable activity.

DUSK EMERGENCE SURVEY MID JUNE 2018

- Specify which compensation/mitigation measures will be subject to monitoring (as referenced on Figure E4).

Monitor and assess effectiveness of bat tubes and raised ridge tiles, whilst also assessing any negative effects on foraging and commuting behaviour from post development lighting that may be require further maintenance / management. Details will be recorded for subsequent licence returns submission.

Please include a commitment to undertake remedial action in your Method Statement should monitoring identify that further management/maintenance is required of any

compensation/mitigation provided, to ensure that mitigation/compensation measures are working effectively and are fit for purpose.

Important advice: Please always consider whether any *post development* monitoring effort should be staggered over alternate years in cases where use of the compensation measures may not occur in the same year of provision.

E4.3 Mechanism for ensuring safeguard of mitigation/compensation and post-development management, maintenance and monitoring works:
Please explain what mechanism is in place to ensure safeguard of mitigation/compensation provisions (e.g. Restrictive Covenant, clause to relinquish future development rights in S106 agreement, NERC Act agreement, explicit recognition of site in local planning documents, designation as County Wildlife Site or similar.) The need for this, and the type of mechanism, will vary with the scheme and impact. For substantial impact schemes (e.g. destruction of a significant maternity roost, or important hibernation site), some mechanism is always required. If you offer no specific mechanism, explain how you believe the population will be free of threats as far as can be reasonably determined (the expectation of the granting of a licence should not be used for this purpose).

The development will remain under the ownership of the applicant who has read and agreed to the Method Statement proposal. All person(s) using the site will be made aware of the existence of a bat roost onsite. The deeds to the relevant dwellings will incorporate an information sheet about the presence of a European Protected Species, conservation status and protected legislation.

Explain how all post-development works (management, maintenance (including remedial action) and monitoring, as appropriate) will be ensured? Include a commitment that the monitoring, habitat management and maintenance work will be undertaken. Mechanism/s for ensuring delivery must be in place before applying for a licence (also see Section F).

The applicant will sign the application form to agree that all post development works are ensured and that all terms and conditions of the NE licence and LPA planning consent are met.

E5 Timetable of works: Please complete the **work schedule document WML-A13-a-E5a&b found on the 'bat' application form web page and append to your application pack.**

Important Advice: *Please note that from end of March 2014 a separate work schedule is a mandatory requirement to support a new bat licence application when using this template.*

F Declarations

If the mitigation/compensation area/s is/are not owned by the applicant, you must have consent from the relevant land owner(s). You must have also secured details of how any measures to maintain the population in the long term will be achieved (e.g. a legal agreement).

F1 Declaration Statement(s) – You must <u>include</u> the following declarations within your Method Statement and include the appropriate answer (Yes/No/Not applicable):

F1.1 Re: section E1 - I confirm that relevant landowner consent/s has/have been granted to accept bats into roosts or access into roosts on land outside the applicant's ownership:

Yes

F2.2 Re: section E2 - I confirm that landownership consent/s has/have been granted to allow the creation of the proposed compensation on land outside the applicant's ownership

Yes

F2.3 Re: section E3 - I confirm that consent/s has/have been granted by the relevant landowner/s for monitoring, management and maintenance purposes on land outside the applicant's ownership

Yes

Comments if applicable:

Important Advice:

Unsecured consents statement:

If you have been unable to secure consents for any of the three declarations please explain why and detail any plans you have in place to obtain the consent(s) or provide details of any right(s) or agreement(s) that will enable the lawful implementation of the proposed mitigation, compensation and monitoring. Failure to provide the appropriate landowner consents means that the Method Statement is unlikely to meet the requirements for the FCS test to be met. It is therefore in your interest to ensure that the appropriate consents have been secured *before* applying for a licence.

G References: List any references cited, and include credits for source information.

H Annexes (supporting documents please append to your application pack)

H1 Pre-existing survey reports;

H2 Raw survey data.

I Check list of figures to be submitted with each Bat Method Statement

With your Method Statement and supporting documents please submit the following maps/figures – see table below. Note that some can be included within the Method Statement itself (if preferred) and others must be submitted individually (i.e. separate documents)**.** Maps/Figures must include the title, site name as referenced on your application form, date and figure reference. If a grid reference is more applicable (e.g. a bat house is being provided please included this). Include a scale bar (appropriate to the situation e.g. 100m on site maps, 1km on location maps) and direction of North etc.

Additional maps, photographs or diagrams should be included where necessary to adequately explain the scheme.

Figure reference	Mandatory as will be included in the annexed licence, if applicable	Mandatory for assessment purpose only, but will not be included in the annexed licence	What it must show (also see details above on site reference, dating and naming).
Figure B2.1	-	Yes, if the application is part of a phased or multi-plot development	**Master plan overview-** note – this is not the same as a master plan document, for which you should follow the guidance as stated in section B2.1.
Figure B2.2	-	Yes, if applicable	**Locations of other nearby bat licensed sites, or sites which will be impacted on by future development.**
Figure C5a	-	Yes	**Location map** at an appropriate scale for the application (often 1:50,000 or 1:25,000)
Figure C5b	-	Yes	**Survey area** showing all buildings, structures and habitats that are within the survey area and distinguishing those that were surveyed and those that were not. Indicate where surveyors were located. Aerial photographs should be provided where possible (ensure you have permission to use copy righted maps). If automated detectors were used or transect routes, ensure that these are

			indicated as appropriate.
Figure C6	-	Yes	**Survey results -** provide clear, annotated and cross-referenced maps/plans/photographs to show the survey results (access points, location of roosts, flight lines, results of activity surveys where DNA samples were taken etc).Ensure Figure is at a suitable scale to show the results.
Figure D	**Yes**	**-**	**Impacts plan –** map/figure to show impacts and where licensable works will take place: clearly indicate areas of structures and habitats to be impacted by the works (damage, destruction (to include habitat types if applicable), and temporary impacts, disturbance.
Figure E2a	**Yes**	**-**	**Locations and structures where all capture and exclusion activities will be undertaken** (ensure this is clearly labelled and consistent with other mandatory maps/figures).
Figure E2b	**Yes** – but only if applicable to the application	**-**	**Non-standard capture and exclusion apparatus.** If these are proposed please include diagrams/photographs.
Figure E3	**Yes**	**-**	**Specifications for mitigation / compensation** (including all dimensions for bat lofts/houses/stand-alone structures and materials to be used etc and 8-figure grid reference). Mitigation / compensation (must show all habitat creation, restoration, boxes). It may be necessary to submit more than 1 figure if the proposal is large or complicated. Any temporary features to be used to relocate bats into during capture/exclusion must also be shown and annotated accordingly.
Figure E4	**Yes** – when monitoring and maintenance will be included in the licence	**-**	**Monitoring, management and maintenance map.** Please indicate the specific structures and habitat that are to be managed, maintained and monitored as part of this licence proposal. Ensure that they are correctly referenced and are consistent with other parts of the Method Statement and figures.

Definitions of roost types to be included in the application (further detail can also be found in the Bat Mitigation Guidelines and the BCT's "Bat Surveys Good Practice Guidelines"):

a. **Day roost**: a place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.

b. **Night roost**: a place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.

c. **Feeding roost**: a place where individual bats or a few individuals rest or feed during the night but are rarely present by day.

d. **Transitional / occasional roost**: used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.

e. **Swarming site**: where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites

f. **Mating sites**: sites where mating takes place from later summer and can continue through winter.

g. **Maternity roost**: where female bats give birth and raise their young to independence.

h. **Hibernation roost**: where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.

i. **Satellite roost**: an alternative roost found in close proximity to the main nursery colony used by a

few individual breeding females to small groups of breeding females throughout the breeding season.

j. **Other** – please explain what the roost type is if not one of the above (we recognise that roost types are interchangable and not always easy to classify according to the nuances of certain species).