

Preliminary Ecological Assessment

Land to rear

Tower End
Kelvedon Road
Tiptree
Colchester
Essex

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Final Report 27th January 2019



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1. Summary

- 1.1 Eco-Planning UK Ltd received instruction to complete an initial outline ecological assessment across an area to the rear of Tower End, Kelvedon Road, Tiptree in Essex.
- 1.2 The assessment and this subsequent report are to be part of a planning application that is to be submitted to the Local Planning Authority, seeking planning consent for development within the survey area.
- 1.3 The initial ecological assessments were completed on the 25th January 2019.
- 1.4 From the on-site ecological assessments and desk top study it was determined that: -
 - No part of the proposed development site has any type of statutory or non-statutory conservation designation.
 - The proposed development site however is within a zone of influence for Tiptree Heath Site of Special Scientific Interest to the south west and Abberton reservoir to the east. The proposed development will not reduce the size or conservation status of these designated sites nor affect their management regimes or future ecological potential.
 - The proposed development site is within a zone of influence for the Black Water RAMSAR site to the south-east and the Abberton Reservoir RAMSAR site to the east. The proposed development will not reduce the size or conservation status of these designated sites nor affect their management regimes or future ecological potential. The proposed development area does not create new access to these Natura 2000 sites.
 - However the proposed development being within the “zone of influence” could have some minor recreational/disturbance impact alone or when considered alongside other new developments within the same zone of influence for these Natura 2000 Sites and so be subject to a Habitat Regulations Assessment (H.R.A.).
 - Natural England now advise that a suitable contribution to the emerging Recreational Disturbance Avoidance and Mitigation Strategy (.R.A.M.S) from relevant planning applicants would enable the local authority to be able to reach a conclusion of “no likely significant effect” - and addressing the need for the suggested H.R.A.

- This type of direct contribution will help ensure that the delivery of the R.A.M.S. remains viable and fit for purpose.
- The planning applicant for this site fully supports this direct conservation action and will discuss the R.A.M.S. payment required with the local authority.
- There is a Priority Habitat Deciduous Woodland to the south west and Ancient Semi-Natural Woodland to the west. The proposed development will not reduce the size or conservation status of these habitats nor affect their management regimes or future ecological potential.
- The wider site comprises several existing and former grazing paddocks of various sizes and management regimes. To the rear of Tower End the paddocks are fenced and in constant equine use with no successional habitats - their conservation/biodiversity value is low.
- To the east is a larger open single pasture - again regularly grazed with limited successional mixed habitat. There are occasional spoil heaps of mixed materials with scrub cover – they are not connected and have limited conservation/reptile potential.
- To the rear of Tower End are 3 x water bodies they all have amphibian potential and will require suitable amphibian survey effort.
- Most of the wider site was an improved grazing pasture but had retained/developed some localised semi improved characteristics with bare ground areas and had a un-managed successional area – habitats possibly suitable for specialist invertebrates of conservation value.
- DEFRA/Natural England and Bug Life’s standing advice in relation to invertebrates - semi-natural vegetation - and planning development is that a scoping study is required to be completed by a suitably qualified invertebrate ecologist as part of the planning application submission. Such a scoping study – spring/summer2019 is required for this site.
- The main field units have significant mainly continuous hedgerow boundary features with maturing individual trees. These hedgerow/tree features will be important wildlife corridors for foraging/commuting bats and nesting birds. Their retention protection and enhancement would be an essential part of the site’s development. Any proposed removal would first require a full spring-summer-autumn bat and bird survey/monitoring assessment to determine removal impacts and associated mitigations.

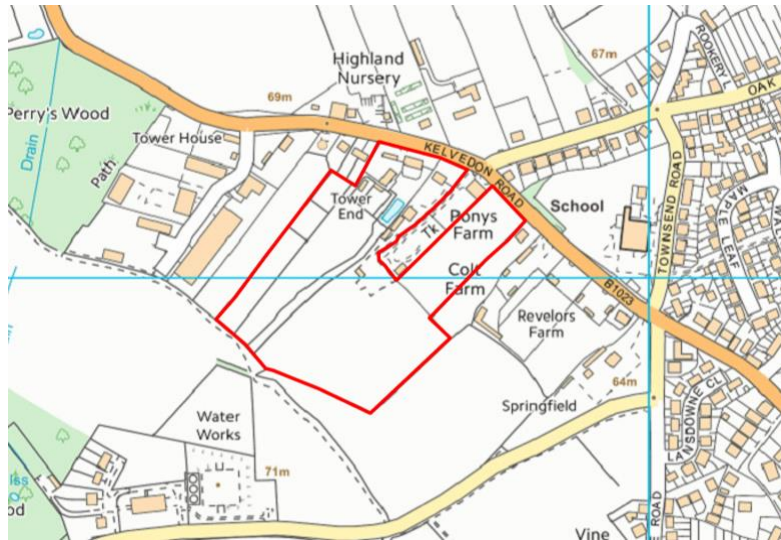
- A single linear field (Ponys Farm/Colt Farm) that leads into the central section of the site from the main Kelvedon Road has received no recent management – grazing mowing etc. This habitat has localised reptile potential that requires further survey efforts. There are a number of reptile or possible amphibian exclusion fences in the development site adjacent to this survey area.
 - There are a number of buildings within the wider site that will be removed as part of the proposed development. The state of repair of these buildings varies as does their associated bat roost potential. A bat roost absence must not be assumed, any building or maturing tree that will be removed as part of the proposed development must be suitably surveyed/assessed in relation to a bat roost presence or absence.
- 1.5 The on-site ecological assessment with the required further faunal survey efforts when completed will with this report meet in full all ecological/conservation related issues that could require consideration as part of the planning application process for this site.
- 1.6 Furthermore the potential developer will have addressed all his legal wildlife responsibilities and requirements in relation to due diligence as part of the planning application process.

2. Introduction

- 2.1 The revised National Planning Policy Framework (July 2018) still requires that on-site biodiversity/conservation is given full consideration at the time of a planning development application submission.
- 2.2 The Local Planning Authority are therefore acting in a reasonable and responsible manner under the legislation by requesting that the planning applicant for this potential development site completes a suitable ecological assessment and prepares/submits a subsequent report, if the Authority believes a habitat or species could be threatened by the proposed development.
- 2.3 The Preliminary Ecological Assessment, along with this report and subsequent faunal surveys when completed will meet all relevant conservation requirements and answers relevant associated wildlife concerns the local planning authority may have in relation to this proposed development site.

3. Site Assessment

- 3.1 The proposed development site is an area of land to the rear of Tower End Kelvedon Road, Tiptree in Essex (Drawing 1 - red boundary).



Drawing 1

- 3.2 To the north is the traffic busy B1023 Kelvedon Road with existing development beyond. To the west a narrow single paddock to the rear of a property fronting onto the Kelvedon Road and the Tower House industrial site beyond. To the east a recently approved development site that extends to the Tiptree urban area beyond. To the south an industrial water works and associated grounds (Photograph 1).
- 3.3 The wider site comprises several existing and former grazing paddocks of various sizes and management regimes.
- 3.4 To the rear of Tower End the paddocks are fenced and in constant equine use (Photographs 2-3). There are no successional habitats within the paddocks and their conservation/biodiversity value is low.
- 3.5 To the east of these enclosed paddocks is a larger open single pasture (Photograph 4). They again have been regularly grazed with limited successional mixed habitat. There are occasional spoil heaps of mixed materials with scrub cover (Photograph 5) – they are not connected and have limited conservation/reptile potential.



Photograph 1



Photograph 2



Photograph 3



Photograph 4



Photograph 5

- 3.6 To the rear of Tower End are 3 x water bodies. The first is an attractive aquatic habitat (Photograph 6), no fish were evident but had been present in the past. Wildfowl were present (Mallard and Moor Hen). Adjacent to this pond is the second water body (Photograph 7) very little open water was visible with emergent aquatic vegetation throughout.



Photograph 6



Photograph 7

- 3.7 The third pond is a linear feature (Photograph 8) created by the sites present owner to help drain excess rainfall and potential flooding from the first pond. The sides of this drain have been embanked and are now dominated by natural Blackthorn regeneration which restricts access. All 3 x aquatic habitats have amphibian potential and will require suitable amphibian survey effort.
- 3.8 The main field units have significant mainly continuous hedgerow boundary features with maturing individual trees (Photographs 9-12). They have received little recent management, however there are few gaps along their length. To

the east the Blackthorn hedge has spread onto the adjacent pasture forming a band of scrub from the original hedge line.



Photograph 8



Photograph 9



Photograph 10



Photograph 11



Photograph 12

- 3.9 These hedgerow/tree features will be important wildlife corridors for foraging/commuting bats and nesting birds. Their retention, protection and enhancement would be an essential part of the site's development. Any proposed removal would first require a full spring-summer-autumn bat and bird survey/monitoring assessment to determine removal impacts and associated mitigations.
- 3.10 A single linear field (Ponys Farm/Colt Farm) that leads into the central section of the site from the main Kelvedon Road has received no recent management – grazing, mowing etc. Natural succession has allowed scrub/young trees to establish and begin spreading into the site. The grass sward now has significant structure with only a few open areas remaining (Photographs 13 -14).
- 3.11 This habitat has localised reptile potential that requires further survey efforts. (There are a number of reptile or possible amphibian exclusion fences in the development site adjacent to this survey area Photograph 15).



Photograph 13



Photograph 14



Photograph 15

3.12 There are a number of buildings – residential/stables/offices/church within the (Photographs 16-19) wider site that will be removed as part of the proposed development.

3.13 The state of repair of the these buildings varies as does their associated bat roost potential. However, all are within an open habitat with suitable bat foraging and dispersal features. A bat roost absence must not be assumed, any building or maturing tree that will be removed as part of the proposed development must be suitably surveyed/assessed in relation to a bat roost presence or absence.



Photograph 16



Photograph 17



Photograph 18



Photograph 19

4. Planning Policy and Site Status

- 4.1 The direction to protect sites with a designated conservation status including Local Wildlife Sites has continued in the revised National Planning Policy Framework July 2018. Local Planning Authorities are still required to set criteria based policies against which proposals for any development, on or affecting protected wildlife or geodiversity sites or landscape areas, will be judged. Planning policies should identify and map components of local ecological networks including the hierarchy of international, national and locally designated sites of importance for biodiversity.
- 4.2 With such extensive legislative/planning policy protection of biodiversity and designated conservation sites against development it is essential to first establish the status of any site where any ecological related assessment is being made if it is, as in this case, in relation to a proposed planning application.
- 4.3 A search for any type of conservation designations for the proposed development site and the immediate adjacent areas was completed and is represented in Appendices 1 - 3.
- 4.4 Appendix 1 shows the position/boundaries of any conservation area with Statutory Designation in or adjacent to the proposed development site.
- 4.5 Appendix 2 shows the position/boundaries of any conservation area with Non-Statutory Designation in or adjacent to the proposed development site.
- 4.6 Appendix 3 shows the position/boundaries of any habitat registered on the Habitat Inventory as Priority Habitat in or adjacent to the proposed development area.
- 4.7 No part of the proposed development site has any type of statutory or non-statutory conservation designation.
- 4.8 The proposed development site however is within a zone of influence for Tiptree Heath Site of Special Scientific Interest to the south west and Abberton reservoir to the east. The proposed development will not reduce the size or conservation status of these designated sites nor affect their management regimes or future ecological potential.
- 4.9 The proposed development site is within a zone of influence for the Black Water RAMSAR site to the south-east and the Abberton Reservoir RAMSAR site to the east. The proposed development will not reduce the size or

conservation status of these designated sites nor affect their management regimes or future ecological potential. The proposed development area does not create new access to these Natura 2000 sites.

- 4.10 However the proposed development being within the “zone of influence” could have some minor recreational/disturbance impact alone or when considered alongside other new developments within the same zone of influence for these Natura 2000 Sites and so be subject to a Habitat Regulations Assessment (H.R.A.).
- 4.11 Natural England now advise that a suitable contribution to the emerging Recreational Disturbance Avoidance and Mitigation Strategy (.R.A.M.S) from relevant planning applicants would enable the local authority to be able to reach a conclusion of “no likely significant effect” - and addressing the need for the suggested H.R.A.
- 4.12 This type of direct contribution will help ensure that the delivery of the R.A.M.S. remains viable and fit for purpose.
- 4.13 The planning applicant for this site fully supports this direct conservation action and will discuss the R.A.M.S. payment required with the local authority.
- 4.14 There is a Priority Habitat Deciduous Woodland to the south west and Ancient Semi-Natural Woodland to the west. The proposed development will not reduce the size or conservation status of these habitats nor affect their management regimes or future ecological potential.

5. Planning Policy and Wildlife Legislation

- 5.1 Regardless of any planning policy or guideline change certain species are legally protected and any type of development that would injure, kill, ill-treat or intentionally damage or destroy any protected species or place of shelter would be a criminal act.
- 5.2 However some species that do not receive statutory full protection under existing ranges of legislation continue to be identified as requiring conservation action as species of principal importance in the revised National Planning Policy Framework:
- Promote the preservation, restoration and re-creation of priority habitats and the protection of priority species populations.... linked to national and local targets.
 - When determining planning applications local planning authorities should aim to conserve and enhance biodiversity....
 - To achieve this conservation action/protection planning authorities are instructed to refuse planning applications that cause harm to these species or their habitats if no suitable mitigation has been identified.
- 5.3 With legal responsibilities and new planning framework implications it remains essential that any ecological assessment of any development site, including the area of this report, must determine the possible presence or absence of any protected species as part of the development process.
- 5.4 Without this assessment the potential developer would be unable to demonstrate due diligence in his legal wildlife responsibilities.
- 5.5 Furthermore the local planning officer will not have been provided with sufficient information to be able to determine if the new ecological based requirements of their relevant planning application for the site are being met in full.
- 5.6 It would however be unreasonable to survey for every protected floral/faunal species. The likelihood of a protected species being present is based on the habitat type and condition, and any relevant species record within a 2 kilometre radius – Appendix 4 - Species data.
- 5.7 The Site Assessment identified that the wider site has 3 x water bodies with some amphibian potential.

- 5.8 Great Crested Newts and their habitat receive full protection under the Wildlife and Countryside Act 1981 Schedule 5, and are a European Protected Species listed in Annex IV (a) of the Habitats Directive (The Conservation Regulations 1994 Schedule 2).
- 5.9 It is a criminal act to kill, injure or disturb any Great Crested Newt or its associated habitat.
- 5.10 The Smooth and Palmate Newt do not benefit from any development related protection.
- 5.11 The Common Frog receives no protection from development.
- 5.12 The Common Toad as a BAP species requires consideration during any development process.
- 5.13 Any development of this site if Great Crested Newts were found to be present in the sites relevant aquatic habitats could be a deliberate and unreasonable act, i.e. an offence could have been committed if no provision had been made within the development area to mitigate for any possible Great Crested Newt presence.
- 5.14 It is therefore essential to determine a Great Crested Newt presence or absence for all three ponds before development begins.
- 5.16 The wider sites buildings will be removed as part of the proposed development. These buildings vary in condition/state of repair and subsequently their bat roost potential. They are all however in a semi rural wider location that contains water bodies and mature hedge lines that could provide bat foraging and dispersal opportunities. There are numerous recent bat records within a 2 kilometre radius of the site (Appendix 4 Species Data).
- 5.17 All bat species in Britain are protected under the Wildlife and Countryside Act 1981 through inclusion on Schedule 5. They are also protected under the Conservation (Natural Habitats &c.) Regulations 1994 (which were issued under the European Communities Act 1972), through inclusion on Schedule 2. On 1st April 2010, these Regulations, together with subsequent amendments, were consolidated into the Conservation of Habitats and Species Regulations 2010.
- 5.18 European protected animal species and their breeding sites or resting places are protected under Regulation 39. It is an offence for anyone to deliberately capture, injure or kill any such animal or to deliberately take or destroy their

eggs. It is an offence to damage or destroy a breeding or resting place of such an animal. It is also an offence to have in one's possession or control, any live or dead European protected species.

- 5.19 The threshold above which a person will commit the offence of deliberately disturbing a wild animal of a European protected species has been raised. Now, a person will commit an offence only if he deliberately disturbs such animals in a way as to be likely to significantly affect (a) the ability of any significant groups of animals of that species to survive, breed, or rear or nurture their young, or (b) the local distribution of abundance of that species. However, please note that the existing offences under the Wildlife and Countryside Act (1981) as amended which cover obstruction of places used for shelter or protection (for example, a bat roost), disturbance and sale still apply to European protected species. This legislation provides defences so that necessary operations may be carried out in places used by bats, provided the appropriate Statutory Nature Conservation Organisation (in England this is Natural England) is notified and allowed a reasonable time to advise on whether the proposed operation should be carried out and, if so, the approach to be used. The UK is a signatory to the Agreement on the Conservation of Bats in Europe, set up under the Bonn Convention. The Fundamental Obligations of Article III of this Agreement require the protection of all bats and their habitats, including the identification and protection from damage or disturbance of important feeding areas for bats.
- 5.20 Paragraph 98 of Circular 06/2005 states that *'the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat'*.
- 5.21 Section 9 of the National Planning Policy Framework 2012 (NPPF) states that *'the planning system should contribute to and enhance the natural and local environment byminimising impacts on biodiversity and providing net gains in biodiversity where possible.'*
- 5.22 With such legislative protection and high conservation value a bat roost assessment is required for all relevant buildings on site and any maturing tree that requires removal to allow the proposed development.
- 5.23 There is a significant area of successional rank grassland/scrub habitat within the site were that has developed in the absence of any recent management regime - grazing – mowing etc. This area has reptile potential. There are reptile records within a 2 kilometre distance of the survey site – (Appendix 4 Species Data).

- 5.24 Slow Worm, Common Lizard and Grass Snake are all protected under Schedule 5 of the Wildlife and Countryside Act (1981 and amendments) against killing, injury and sale. However, it must be noted that their habitat is not protected, only the individual animal.
- 5.25 Any development of this site if any reptile population was identified as being present would be a deliberate and unreasonable act, i.e. an offence would have been committed if no provision had been made.
- 5.27 A reptile presence or absence survey is therefore required in relation to all reptile suitable habitats within the wider survey site that could be impacted upon by the proposed development.
- 5.28 Most of the wider site was an improved grazing pasture but had retained/developed some localised semi improved characteristics with bare ground areas and had a un-managed successional area – habitats possibly suitable for specialist invertebrates of conservation value.
- 5.29 DEFRA/Natural England and Bug Life’s standing advice in relation to invertebrates - semi-natural vegetation - and planning development is that a scoping study is required to be completed by a suitably qualified invertebrate ecologist as part of the planning application submission. Such a scoping study – spring/summer2019 is required for this site.

6. Amphibian Assessment

- 6.1 Two adjacent water bodies and a wet ditch were identified within the proposed development area that have some amphibian potential.
- 6.2 This potential needs to be quantified using the Habitat Suitability Index methodology (Oldham *et al* 2000) which scores a habitats suitability in relation to a possible amphibian presence.
- 6.3 This scoring technique uses 10 different habitat criteria scoring indices depending on amphibian suitability. An overall calculation of suitability from the 10 individual results is completed as a geometric mean of the ten suitability indices, on an approximate scale from 0-1 (see below).

H.S.I. score criteria

Scoring criteria	Comments	HSI score
Geographic location		
Pond area		
Permanence		
Water quality		
Shade		
Fowl		
Fish		
No of ponds within 1km (not separated by a major barrier).		
Quality of terrestrial habitat		
Macrophyte cover		
	HSI Score	

Categorisation of HSI scores

Lee Brady has developed a system for using HSI scores to define pond suitability for great crested newts on a categorical scale:

HSI	=	Pond suitability
< 0.5	=	poor
0.5-0.59	=	below average
0.6-0.69	=	average
0.7-0.79	=	good
> 0.8	=	excellent

- 6.4 Following the spring H.S.I. assessment any water body that has a score of average or above a Great Crested Newt presence or absence survey is usually required.
- 6.5 For this site an initial presence or absence Great Crested Newt E-D.N.A. survey will be completed following the H.S.I. scoring in April 2019.
- 6.6 The E-D.N.A. technique uses a courier delivered kit into which samples from each water body are placed into a sterile solution that preserves potential D.N.A.
- 6.7 These samples are returned via the courier to the supplying laboratory that can then identify at the genetic level – does the pond from which the samples were taken contain a Great Crested Newt – a definitive ‘yes’ or ‘no’.
- 6.8 For a confirmed ‘no’ presence - no further Great Crested Newt related works would be required.
- 6.9 For a confirmed ‘yes’ presence – a multiple visit mixed methodology survey effort would be required April- Late May 2019 to determine population size and to help guide a possible licenced mitigation for the protected amphibians.
- 6.10 The possible licence from Natural England would be required if part of the proposed development negatively impacted upon any Great Crested Newt/population, its breeding site or access to or from, a resting place/hibernation site or damaged, fragmented, restricted access to viable terrestrial habitat.
- 6.11 The use of the appropriate licence does not prevent ecological impact, it simply “legalises/approves” what is a negative action. Mitigation by suitable design to remove ecological impact is always the most appropriate option in relation to conservation constraints.

7. Reptile Survey

- 7.1 The Site Assessment identified a significant area of mixed successional vegetation in an-unmanaged area of the wider site that has some reptile potential.

Survey Technique

- 7.2 Two complimentary but different survey techniques will be used in all possible reptile habitats throughout the sites to determine a reptile presence or absence, distribution and abundance.

Direct observation

- 7.3 The experienced reptile recorder on each survey visit will walk slowly with care, avoiding vegetation disturbance, along the relevant habitat areas, ensuring that no shadow was cast upon or adjacent to the survey site.
- 7.4 All vegetation/open ground will be scanned for up to 4-5 metres ahead for any reptile presence during each direct observation survey.
- 7.5 Close focus binoculars will be available/used to provide detailed information on any possibly partially obscured observation.
- 7.6 For any possible reptile disturbances the same location will be re-surveyed 10-15 minutes later after the potential disturbance when the animal possibly returns.

Artificial basking/refugia tiles

- 7.7 Artificial refugia (Photograph 1) will be carefully placed in the potential reptile habitats throughout the proposed development site at 10 metre centres.
- 7.8 The refugia will be placed several weeks before the relevant presence or absence surveys begins to ensure that they are settled in and were familiar to any reptile present.
- 7.9 The refugia will be a mix of roofing felt; corrugated metal and plywood sheets, all cut to 75 cm wide squares.
- 7.10 These refugia provide basking areas on which reptiles can warm themselves in the early morning sun, seek refuge from predators and gain shelter from adverse weather conditions.



Photograph 1

- 7.11 All the refugia will be inspected during each of the subsequent 7 x separate survey assessments. At the same time as the artificial refugia inspections, surveys amongst any timber/brush piles were also completed.
- 7.12 During each survey inspection the refugia tiles will be lifted from one side, with any reptile recorded and the tile placed back in the same position.
- 7.13 Each inspection will be completed on warm sunny mornings when there has been no overnight rain.
- 7.14 Following the 7 x survey efforts during suitable conditions a presence or absence can be determined.

8. Invertebrate Assessment.

- 8.1 The Site Assessment determined that most of the wider site was an improved grazing pasture but had retained/developed some localised semi improved characteristics with bare ground areas and had a un-managed successional area – habitats possibly suitable for specialist invertebrates of conservation value.
- 8.2 Defra/Natural England and Bug Life’s standing advice in relation to invertebrates - semi-natural vegetation - and planning development is that a scoping study is required to be completed by a suitably qualified invertebrate ecologist as part of the planning application submission.
- 8.3 Such a scoping study – spring/summer2019 is required for this site.
- 8.4 The purpose of the scoping invertebrate assessment would be to identify if a more detailed survey is required based upon invertebrate species of conservation interest being present or features or habitats with significant value to invertebrates that would be impacted upon by the proposed development.
- 8.5 Of particular concern would be the potential for the site to support Species of Principal Importance in England, as defined within Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006*, although species included in other conservation categories would need to be also considered .

9. Bat Roost Assessment

Building Roost – Survey Methods

- 9.1 All building roost inspections will be completed by a suitably licenced, experienced bat ecologist.
- 9.2 The exterior surfaces of all relevant buildings will be examined for any field signs of use as bat roosts, such as the presence of droppings on walls, windows or staining around roost entrances.
- 9.3 The use of a crevice by a colony of bats produces droppings on brickwork and adjacent surfaces close to the crevice, together with an accumulation of droppings beneath the roost entrance. However, upon examination, many surfaces will have one or two droppings, randomly placed, caused by bats seeking out new roost sites.
- 9.4 The internal survey will be conducted using a powerful torch. The internal roof space of the buildings will be searched for evidence of roosting, the floor areas for droppings and any beams/timbers for crevices and staining indicative of the presence of roosting bats.
- 9.5 An Xtend & Climb Pro Ladder and a ProVision 300 endoscope will be available to inspect crevices in brickwork and around beams.
- 9.6 Any roost to be closed will require detailed licenced mitigation following further survey efforts that will depend on the species present, roost type and number of bats present.

Tree Roost – Survey Methods

- 9.7 Any tree feature/bat roost assessment will be completed following the broad advice as given in:

Bat Conservation Trust's Bat Survey Guidelines for Professional Ecologists: Good Practice Guidelines.

Ref: Collins, J. (ed.) (2016) (3rd edition). The Bat Conservation Trust, London.

- 9.8 However, it must be noted that the first page of all three editions includes the following:

The guidelines should be interpreted and adapted on a case-by-case basis according to site-specific factors and the professional judgement of an experienced ecologist. Where examples are used in the guidelines, they are descriptive rather than prescriptive.

9.9 Any tree that requires removal as part of the proposed development will be inspected from ground level to identify any Potential Roost Feature (P.R.F.) that could be used as a bat roost site.

9.10 These features, as per the guide lines, include:

- woodpecker holes;
- rot holes;
- hazard beams;
- other vertical or horizontal cracks and splits (such as frost-cracks) in stems or branches;
- partially detached platey bark;
- knot holes arising from naturally shed branches, or branches previously pruned back to the branch collar;
- man-made holes (e.g. cavities that have developed from flush cuts) or cavities created by branches tearing out from parent stems;
- cankers (caused by localised bark death) in which cavities have developed;
- other hollows or cavities, including butt-rots;
- double-leaders forming compression forks with included bark and potential cavities;
- gaps between overlapping stems or branches;
- partially detached ivy with stem diameters in excess of 50mm;
- bat, bird or dormouse boxes.

9.11 For any possible Roost Feature, its suitability or likelihood as being a possible bat roost will be identified as being negligible - low, medium or high as per the suitability guidelines below.

Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	<p>A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions^a and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation^b).</p> <p>A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.^c</p>	<p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.</p> <p>Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.</p>
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^a and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^a and surrounding habitat.	<p>Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.</p> <p>Site is close to and connected to known roosts.</p>

9.12 At the same time as the visual assessment of the feature, observations will be made to determine if there are any bat activity field signs - droppings, staining, scratch marks – or indeed any obvious bat presence that does not require invasive techniques to determine.

9.13 Before any individual tree is inspected its location and associated habitats will be assessed:

- Is the tree a stand-alone feature – does it have good connectivity with potential bat foraging areas.
- Is it part of a possible bat dispersal route.
- Is it at present illuminated or disturbed at night.

9.14 Any bat roost within a tree identified for removal will require detailed licenced mitigation following further survey efforts that will depend on the species present, roost type and number of bats present.

10. Conclusion

- 10.1 No part of the proposed development site has any type of statutory or non-statutory conservation designation.
- 10.2 The proposed development site however is within a zone of influence for Tiptree Heath Site of Special Scientific Interest to the south west and Abberton reservoir to the east. The proposed development will not reduce the size or conservation status of these designated sites nor affect their management regimes or future ecological potential.
- 10.3 The proposed development site is within a zone of influence for the Black Water RAMSAR site to the south-east and the Abberton Reservoir RAMSAR site to the east. The proposed development will not reduce the size or conservation status of these designated sites nor affect their management regimes or future ecological potential. The proposed development area does not create new access to these Natura 2000 sites.
- 10.4 However the proposed development being within the “zone of influence” could have some minor recreational/disturbance impact alone or when considered alongside other new developments within the same zone of influence for these Natura 2000 Sites and so be subject to a Habitat Regulations Assessment (H.R.A.).
- 10.5 Natural England now advise that a suitable contribution to the emerging Recreational Disturbance Avoidance and Mitigation Strategy (.R.A.M.S) from relevant planning applicants would enable the local authority to be able to reach a conclusion of “no likely significant effect” - and addressing the need for the suggested H.R.A.
- 10.6 This type of direct contribution will help ensure that the delivery of the R.A.M.S. remains viable and fit for purpose.
- 10.7 The planning applicant for this site fully supports this direct conservation action and will discuss the R.A.M.S. payment required with the local authority.
- 10.8 There is a Priority Habitat Deciduous Woodland to the south west and Ancient Semi-Natural Woodland to the west. The proposed development will not reduce the size or conservation status of these habitats nor affect their management regimes or future ecological potential.

- 10.9 The wider site comprises several existing and former grazing paddocks of various sizes and management regimes. To the rear of Tower End the paddocks are fenced and in constant equine use with no successional habitats - their conservation/biodiversity value is low.
- 10.10 To the east is a larger open single pasture - again regularly grazed with limited successional mixed habitat. There are occasional spoil heaps of mixed materials with scrub cover – they are not connected and have limited conservation/reptile potential.
- 10.11 To the rear of Tower End are 3 x water bodies they all have amphibian potential and will require suitable amphibian survey effort.
- 10.12 The main field units have significant mainly continuous hedgerow boundary features with maturing individual trees. These hedgerow/tree features will be important wildlife corridors for foraging/commuting bats and nesting birds. Their retention protection and enhancement would be an essential part of the site's development. Any proposed removal would first require a full spring-summer-autumn bat and bird survey/monitoring assessment to determine removal impacts and associated mitigations.
- 10.13 A single linear field (Ponys Farm/Colt Farm) that leads into the central section of the site from the main Kelvedon Road has received no recent management – grazing mowing etc. This habitat has localised reptile potential that requires further survey efforts. There are a number of reptile or possible amphibian exclusion fences in the development site adjacent to this survey area.
- 10.14 There are a number of buildings within the wider site that will be removed as part of the proposed development. The state of repair of these buildings varies as does their associated bat roost potential. A bat roost absence must not be assumed, any building or maturing tree that will be removed as part of the proposed development must be suitably surveyed/assessed in relation to a bat roost presence or absence.
- 10.15 Most of the wider site was an improved grazing pasture but had retained/developed some localised semi-improved characteristics with bare ground areas and had a un-managed successional area – habitats possibly suitable for specialist invertebrates of conservation value.
- 10.16 DEFRA/Natural England and Bug Life's standing advice in relation to invertebrates - semi-natural vegetation - and planning development is that a scoping study is required to be completed by a suitably qualified invertebrate

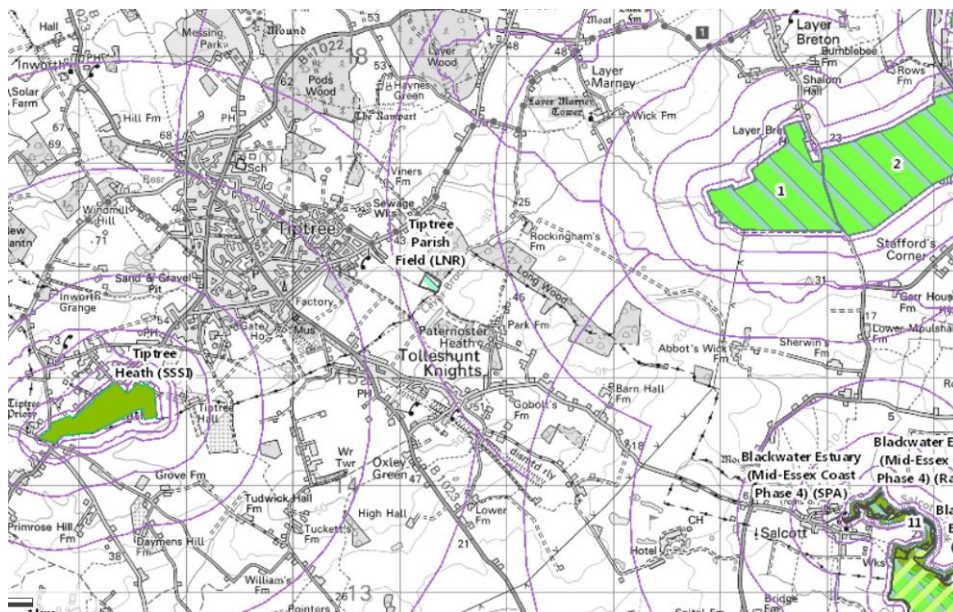
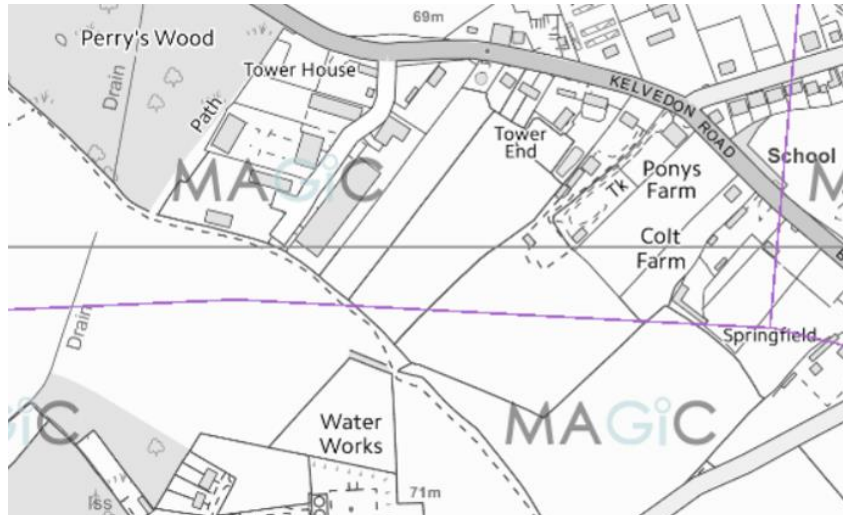
ecologist as part of the planning application submission. Such a scoping study – spring/summer2019 is required for this site.

10.17 The on-site ecological assessment with the required further faunal survey efforts when completed will with this report meet in full all ecological/conservation related issues that could require consideration as part of the planning application process for this site.

10.18 Furthermore the potential developer will have addressed all his legal wildlife responsibilities and requirements in relation to due diligence as part of the planning application process.

Appendix 1

Statutory Conservation Designated Sites



Sites of Special Scientific Interest Units (England)	
Name	TIPTREE HEATH
Reference	1064517
Site Unit Condition	UNFAVOURABLE RECOVERING
Citation	1005109
Hectares	24.57
Hyperlink	http://designatedsites.naturaler

25 Nayland Road, Bures, Suffolk CO8 5BX
 Tel: 01787 227432; mobile: 07770 690899
 Email: info@eco-planning.co.uk
 Company no: 5553720 VAT Reg. No: 980 8484 75

Ramsar Sites (England)	
Name	ABBERTON RESERVOIR
Reference	UK11001
Hectares	718.31

Sites of Special Scientific Interest Units (England)	
Name	ABBERTON RESERVOIR
Reference	1064186
Site Unit Condition	FAVOURABLE
Citation	1004607
Hectares	66.72
Hyperlink	http://designatedsites.naturalengland.org.uk/UnitId=1004607

Ramsar Sites (England)	
Name	BLACKWATER ESTUARY (MID-ESSEX COAST PHASE 4)
Reference	UK11007
Hectares	4403.41

Appendix 2 Non-Statutory Designated Sites



25 Nayland Road, Bures, Suffolk CO8 5BX
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Email: info@eco-planning.co.uk
Company no: 5553720 VAT Reg. No: 980 8484 75

Appendix 3 Habitat Inventory



Ancient Woodland (England)	
Wood Name	PERRYS WOOD
Theme Name	Ancient & Semi-Natural Woodland
Theme ID	1116819
Area (Ha)	3.578944

Priority Habitat Inventory - Deciduous Woodland (England)	
Main Habitat Present	Deciduous woodland
Confidence in Main Habitat Classification	Low
Name of 1st Data Source	National Forest Inventory 2014