



Ecological Impact Assessment
Of
Batts Farm
Base Green, Wetherden
Suffolk



Client: Mrs Maria Brooks

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Notice

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This Ecological Impact assessment (EclA) report has been prepared by Torc Ecology Limited for the sole and exclusive use of Mrs Maria Brooks in response to her particular instruction.

This report has been prepared by an ecology specialist and does not purport to provide legal advice.

This report aims to provide advice on ecological constraints with regards development of the site, and includes recommendations for Reasonable Avoidance Measures (RAMs), compensation and enhancements, where appropriate. The ecological baseline and impact assessment is based on the status of the site at the time surveys were completed; any changes to the site or proposals may alter this assessment. The conclusions of this report are based on the understanding that RAMs, compensation and enhancements will be implemented at the appropriate point in the development process.

Should there be significant changes on site, or should the proposed plan for the site change, it is recommended that additional ecological advice is sought to determine if the recommendations of this report are still valid.

Barring any significant changes to the site or proposals, the baseline data detailed within this report is considered an accurate reflection of the status of the site until the dates tabulated overleaf. Should this report be used past these dates then additional ecological advice should be sought.

Ecological feature	Baseline conditions valid until
Habitats	March 2025
	March 2023
Bats (roost assessment)	March 2023
Bats (habitat assessment)	March 2025
Great crested newts <i>Triturus cristatus</i>	March 2025
Nesting birds (habitat assessment)	March 2025
Reptiles	March 2025
Hedgehog	March 2025

CONTENTS

1. Non-technical summary	5
2. Introduction	6
3. Site relevant planning policy and legislation	7
4. Survey methodology	9
5. Baseline ecological conditions	13
6. Assessment of effects and mitigation measures	18
7. Conclusion	21
8. References	22

APPENDICES

APPENDIX I: Plates 1 to 8	23
APPENDIX II: Figure 1: Site Location Plan	25
Figure 2: Existing Site Layout Plan	26
Figure 3: Ecological Constraints and Opportunities Plan	27
APPENDIX III: Great crested newt eDNA analysis results	28

1. NON-TECHNICAL SUMMARY

1.1. Torc Ecology Ltd was commissioned by Mrs Maria Brooks to undertake an Ecological Impact Assessment of a proposed development at Batts Farm, Base Green, Wetherden, Suffolk. A planning application is proposed to convert an existing stable block into a cattery.

1.2. A Preliminary Ecological Appraisal walkover survey of the site, a Preliminary bat Roost Assessment survey of the stable block, a desktop study and an eDNA test of offsite ponds for great crested newt presence was undertaken between March and April 2022 by Ms Louise Brown and Mr Shaun Baker of Torc Ecology Ltd. Ms Brown and Mr Baker are Full member of the Chartered Institute of Ecology and Environmental Management.

1.3. No notable habitats were identified upon the site, and great crested newts were confirmed likely absent from adjacent ponds. With the exception of nesting swallows there were no other protected or notable species associated with the site and no further surveys are required to inform this planning application.

1.4. Reasonable Avoidance Measures with respect to nesting birds, mammals, amphibians and reptiles are provided within this report as are measures to avoid any detrimental impact to an offsite pond during the construction phase of works and to minimise the impact of any introduced lighting. Recommendations for enhancement are also provided in line with the National Planning Policy Framework.

1.5. It is concluded that this Ecological Impact Assessment report has assessed the impacts of the proposed development, and presented appropriate and proportionate measures to prevent any negative impacts to biodiversity at a site and local level. Provided the recommendations outlined within this report are followed, and compensation and enhancement measures are installed, it is considered that the development will have a neutral-minor positive impact upon nesting birds with a minor positive for bats and amphibians. The recommendations outlined within this report should be made a condition of any planning permission for the site.

2. INTRODUCTION

2.1. Background information

2.1.1. Torc Ecology Ltd was commissioned by Mrs Maria Brooks to undertake an Ecological Impact Assessment of a proposed development at Batts Farm, Base Green, Wetherden, Suffolk IP34 3LS, hereafter referred to as 'the site'. A planning application is proposed to Babergh and Mid Suffolk Borough Councils to convert an existing stable block within the curtilage of Batts Farm into a cattery.

2.1.2. The site is located at Ordnance Survey (OS) grid reference TM 01421 63649 within a rural setting approximately 1km southwest of the village of Wetherden. The site comprises a stable block to the southeast of a central courtyard lying on a northeast-southwest axis. On the opposite side of the courtyard is a further stable block and a separate timber framed building (not subject to development). To the immediate southeast is a pond with a farmhouse and barns beyond set within mature and established gardens. To the north, west and south are horse paddocks, with a ménage and coral to the southwest. Access to the site is via a track leading through the farm from Base Green to the south. Arable habitat dominates the landscape beyond Batts Farm with a railway line to the immediate south. Plates 1 - 2 (Appendix I) show aerial views of the site and surrounding habitats within the wider countryside. Figure 1 (Appendix II) shows the site location, and Figure 2 (Appendix II) shows the existing site layout.

2.1.3. A Preliminary Ecological Appraisal (PEA) walkover survey and a Preliminary bat Roost Assessment (PRA) of the stables and a data search with the local biological records centre i.e. Suffolk Biodiversity Information Service (SBIS), was undertaken by Torc Ecology Ltd in March 2022. This included an assessment of three waterbodies for their potential to support breeding great crested newts. A Phase 2 eDNA water sample test was undertaken of two of the waterbodies in April 2022.

2.1.4. This EcIA report presents the results of the PEA, PRA, desktop study and great crested newt Phase 2 survey, and assesses the ecological impacts of the development providing recommendations for Reasonable Avoidance Measures (RAMs), compensation and enhancements, where appropriate.

2.2. Proposed works

2.2.1. The proposed works will affect the stable block to the southeast of the courtyard only. Works include the conversion of the stable to accommodate 10 cattery pens, two isolation pens, the refurbishment of an existing kitchen area/office/reception and the addition of a utility room, toilet and washroom. Works involve the part-demolition and re-build of the stable block at the north end and may involve raising part of the roof. Solar panels will be fitted to the new roof. Footpath access to the cattery for patrons will be created adjacent the southeast aspect of the building. A new wastewater treatment plant will be installed to the immediate south of the stable block and utilities may also be re-routed involving a further element of localised ground works. Access to the site will continue via the track to the south. There are no works proposed to the adjacent pond or trees to the southeast of the site.

2.3. Report author

2.3.1. Ms Louise Brown is the principal author of this EclA report. Ms Brown is a Full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM) and a Director at Torc Ecology Ltd. Ms Brown holds a Natural England survey licence for bats (Ref: 2016-20937-CLS-CLS) and is also a Registered Consultant (RC062) on the Bat Mitigation Class Licence (BMCL). Ms Brown also holds a Natural England survey licence for great crested newts (Ref: 2016_27348-CLS-CLS) and barn owls *Tyto alba* (Ref: CL29/00224).

2.4. Declaration of compliance

2.4.1. The information prepared and detailed within this report by Torc Ecology Ltd is true based on the information provided and/or obtained, and is in accordance with the CIEEM's Code of Professional Conduct. Where necessary the information prepared and provided is compliant with the British Standard BS 42020:2013.

3. SITE RELEVANT PLANNING POLICY AND LEGISLATION

3.1. National Planning Policy Framework

3.1.1. The National Planning Policy Framework (NPPF) set out the Government's planning policies for England and how these should be applied. It provides a framework within which locally-prepared plans for housing and other development can be produced. It updates and replaces the previous NPPF published in 2012 and was most recently updated on the 20th July 2021.

3.1.2. The purpose of the planning system is to contribute to the achievement of sustainable development with three overarching economic, social and environmental objectives. These are interdependent and 'need to be pursued in mutually supportive ways' (paragraph 8). Paragraph 8c outlines the environmental objective as:

'to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy'

3.1.3. Section 15 in the NPPF details how planning policies and decisions should contribute to and enhance the natural and local environment, and guidance on how to implement this is supported by the Natural Environment Planning Practice Guidance (PPG, 2019). This includes reference to minimisation of impacts to biodiversity and provision of net gains to biodiversity where possible (paragraph 170, NPPF 2019) and highlights that Local Authorities have a duty to place appropriate weight to protected species and biodiversity (paragraph 009, PPG 2019).

3.1.4. The NPPF also considers the strategic approach which Local Authorities should adopt with regard to the recovery of priority species, with the PPG (2019) providing guidance on how this can be achieved in Local Plans.

3.1.5. Paragraph 179 and 180 of the NPPF (2021) comprises a number of principles, which Local Authorities should apply, including encouraging opportunities to incorporate biodiversity in and around developments, provision for refusal of planning applications if significant harm can't be avoided, mitigated or compensated for (the 'mitigation hierarchy'), and the provision for the refusal for developments resulting in the loss or deterioration of 'irreplaceable' habitats, unless the need for, and benefits of the development in that location clearly outweigh the loss.

3.1.6. Paragraph 180(d) of the NPPF 2021 (formerly paragraph 175(d) 2019) states:

'development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate'.

3.1.7. This amendment to paragraph 175(d) of the NPPF 2019 now makes it a requirement to provide opportunity to incorporate biodiversity improvements in and around development.

3.1.8. National policy therefore implicitly recognises the importance of biodiversity and that with sensitive planning and design, development and conservation of the natural heritage can co-exist and benefits can, in certain circumstances be obtained and secured.

3.2. Bats and great crested newts

3.2.1. All bat species and great crested newts and their roosts/resting places in Britain are protected under the Wildlife and Countryside Act (WCA) 1981 (as amended) through their inclusion on Schedule 5. The offences prohibit certain intentional or reckless acts which harm these species or their roosts. Bats and great crested newts are also protected under the Conservation of Habitats and Species Regulations 2017 (as amended).

3.2.1. Therefore, legislation makes it an offence to kill, injure, capture or disturb bats or great crested newts, or to destroy, damage or obstruct access to their roosts/resting places in Britain.

3.3. Nesting birds

3.3.1. All wild birds are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended) by Schedule 12 of the Countryside and Rights of Way Act 2000. Subsection 1(1) makes it an offence to kill, injure, or take any wild bird; take, damage or destroy the nest of any such bird whilst it is in use or being built, or take or destroy an egg(s) of any such wild bird. The legislation covers all species of wild birds including common and pest or opportunistic species.

3.4. Reptiles

3.4.1. All common reptile species in England i.e. common lizard *Zootoca vivipara*, grass snake *Natrix helvetica*, slow worm *Anguis fragilis* and adder *Vipera berus* are partially protected under Schedule 5 (Sections 9 (1) and 9 (5)) of the Wildlife and Countryside Act 1981 (as amended). This legislation protects these animals from intentional killing and/or injury.

3.4.2. Reptiles are also recognised as being of 'principle importance' for conservation of biodiversity under Section 41 of the NERC Act 2006. It is therefore considered best practice to also employ suitable precautions to ensure that these species are protected from any potential adverse effects from the development.

3.4.3. In practice legislation protection means that all reasonable steps must be taken to avoid killing and/or injuring common reptiles during any ground maintenance and/or development works.

3.5. Hedgehogs

3.5.1. Hedgehogs are recognised as being of 'principle importance' for conservation of biodiversity under Section 41 of the NERC Act 2006. It is therefore considered best practice to employ suitable precautions to ensure that these species are protected from any potential adverse effects from development.

4. SURVEY METHODOLOGY

4.1. Approach to impact assessment

4.1.1. This EclA report describes the ecological baseline conditions of the application site and assesses the potential impacts that the proposed development could have on notable ecological features, where applicable. This impact assessment sets out the measures that are required to avoid, reduce and, if required, compensate for these impacts.

4.1.2. The scope of this EclA, collection of baseline data, description and assessment of impact significance has been carried with reference to the current guidelines set out by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018).

4.2. Zone of Influence

4.2.1. The Zone of Influence (Zol) was considered to be ecological features present on site and up to a 2km radius around the site. The Zol was considered to identify ecological features on site that could be directly affected by the development, as well as any offsite ecological features that could either be indirectly affected or could indicate a species that could reasonably commute to the development site.

4.3. Preliminary Ecological Appraisal – desktop study

4.3.1. SBIS were consulted with regards to obtaining all protected species records and listings of all statutory and non-statutory designated sites within a 2km radius of the site. For the purposes of the assessment, any records over 20 years old were considered to be historic and not reflective of current species distribution. In addition, Natural England's Multi Agency Geographic Information for the

Countryside (MAGIC) was searched to establish whether the site fell within the Impact Risk Zones (IRZ)¹ of any Sites of Special Scientific Interest (SSSI).

4.3.2. The Suffolk Local Biodiversity Action Plan (LBAP) was consulted in relation to species and habitats of concern locally, including Local Priority Species.

4.3.3. Google Earth™ was referred to for aerial photography of the site and surrounding habitats, including historic land use. OS maps were consulted to help identify water bodies within 250m of the development that could be suitable to support breeding great crested newts and that were not isolated from site by features considered barriers to great crested newt dispersal e.g. rivers and busy roads.

4.3.4. The Babergh and Mid Suffolk District Council planning portal was searched for any pre-existing ecology reports in support of local development within a 2km radius.

4.4. Great crested newt presence/absence eDNA survey

4.4.1. An eDNA water sample test was undertaken of two ponds in April 2022; one of the ponds (referenced P1) was within the curtilage of Batts Farm, whilst a second pond (reference P2) was offsite but within 100m of the application site boundary (refer to Plate 1, Appendix I and Figure 2, Appendix II for pond locations). The ponds were sampled following the methodology as detailed in the Technical Advice Note (TAN) for this survey technique (Biggs et al., 2014). This involved analysing water samples from each pond for the presence of great crested newt eDNA.

4.5. Preliminary Ecological Appraisal – field survey

4.5.1. The field survey comprised of an Extended Phase I habitat survey of the site which included surveying for different habitats and classifying them according to the habitats given in the Joint Nature Conservancy Council (JNCC) 'Handbook for Phase I Habitat Survey' (JNCC, 1993), where appropriate.

4.5.2. The survey also involved searches for signs of and potential for the presence of species protected under the Wildlife and Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2017 (as amended), and the Protection of ██████████ Act 1992, and any other notable species such as those included within the UK Biodiversity Action Plans (BAPs) and Local BAPs, or species included within a Red Data book for their faunal group.

4.5.3. This included an assessment of the potential for the habitat on and immediately adjacent site to support commuting, foraging, shelter and/or breeding activity by protected/notable fauna. The connectivity to the wider landscape for each species was also noted, accounting for any barriers to species dispersal e.g. busy roads. Based on the desktop study and the habitats present on site and in the local area, signs of the following protected species were searched for:-

¹ Impact Risk Zones (IRZs) are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could have potentially adverse impacts. The IRZs also cover the interest features and sensitivities of European sites, i.e. Ramsar, Special Areas of Conservation and Special Protection Area designated sites, which are underpinned by the SSSI designation. The SSSI IRZ can be used by local planning authorities to consider whether a proposed development is likely to affect a SSSI and determine whether they need to contact Natural England to seek advice on the nature of any potential SSSI impacts and how they might be avoided or mitigated.

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- Bats: Assessment of the stable blocks and adjacent trees for their potential to support roosting bats and the potential for habitats on and immediately adjacent the site to support commuting and/or foraging bats in accordance with the Bat Conservation Trust (BCT) Good Practice Guidelines (Collins ed., 2016). More detailed methodologies are provided in sub-section 4.6. below.
 - Birds: Noting the presence of habitats suitable for bird nesting, commuting and foraging, and assessing the site for features that could deter birds; recording of all birds seen or heard on and adjacent the site during the survey, and a visual search for any evidence of current or previous nesting activity.
 - Great crested newts: Assessment of the suitability of all potential breeding sites i.e. water bodies within 250m of the site that were not isolated from site by barriers to dispersal (where accessible) using the Habitat Suitability Index (Oldham et al, 2000) as a tool to aid the assessment, where necessary/appropriate.
 - Water vole: An assessment of the adjacent pond (P1) within the curtilage of Batts Farm for the potential to support water vole including a bankside search including burrows, latrines, feeding remains, etc.
 - Reptiles, common amphibians and hedgehog: Recording any observations of reptiles, common amphibians or hedgehog during the survey and noting any evidence of their presence on or immediately adjacent site, with a careful hand search of any obvious loose or moveable potential refugia within the site carried out.

4.5.4. The above checks for species signs were not intended to replace specific Phase 2 surveys but were carried out to support the habitat potential assessment.

4.5.5. The site was also surveyed for the presence of invasive weeds and any areas of general ecological or botanical interest. This could include any areas likely to provide suitable conditions for protected and/or notable plant species that may then require additional detailed surveys e.g. Phase 2 botanical surveys.

4.6. Preliminary bat Roost Assessment

4.6.1. The stable blocks were subject to a PRA with reference to the guidelines specified within English Nature's Bat Mitigation Guidelines (Mitchell-Jones, 2004) and the Bat Conservation Trust (BCT) Good Practice Guidelines (Collins ed., 2016). The stable block to the northwest of the courtyard was subject to an external survey only due to the presence of horses within some of the stables.

4.6.2. The exterior of the stable blocks were visually inspected for potential bat access points and evidence of bat activity using ladders, binoculars, a high-powered torch and an endoscope, where

necessary. Features such as lifted/missing roofing materials, damaged wall materials and open doors or windows, which had potential as bat access points into the stables, were sought. Evidence that these features/access points were actively used by bats typically would include staining within small gaps and/or bat droppings or urine staining under gaps and/or on walls, a note being made wherever these were present. Indicators that potential access points were likely not used by bats would include the presence of cobwebs and general detritus within the feature.

4.6.3. The interior of the stable block to be converted was assessed for evidence of bat activity using ladders, a high-powered torch and an endoscope, where necessary. Particular evidence, including bat droppings and/or urine staining, were sought beneath/within features that bats may use for roosting and/or as an access point(s). These included features such as exposed timbers and within/beneath crevices in the fabric of the walls.

4.6.4. Trees immediately offsite to the southeast around the banks of the pond were subject to a preliminary ground level roost assessment survey with reference to the guidelines specified within English Nature's Bat Mitigation Guidelines (Mitchell-Jones, 2004) and the BCT Good Practice Guidelines (Collins ed., 2016). This assessment involved identifying any Potential Roost Features (PRF) associated with the trees, using binoculars and a high-powered torch. PRF can include cracks, slits and cavities in the trunk and limbs, raised bark, old woodpecker holes and partially detached ivy *Hedera helix* with stem diameters in excess of 50mm. Evidence that a PRF was actively used by bats typically would include the presence of a dead or live bat(s), rub marks often stained with bat body oils in/under features and/or bat droppings or urine staining in/under features. Indicators that a PRF was unlikely to be used by bats would typically include the presence of general detritus within the feature or unfavourable internal conditions e.g. within a shallow and/or exposed feature.

4.6.5. A bat roost is typically determined by the presence of a dead or live bat(s), concentrated piles or on occasion scattered bat droppings, food remains such as moth wing fragments as well as scratch marks and/or body/fur/urine staining.

4.7. Details of the surveys and surveyor

4.7.1. The PEA/PRA field survey was undertaken on the 17th March 2022 by Ms Brown. The weather was sunny with a temperature of c.10°C, Beaufort scale (BF2). Ms Brown also undertook the desktop study.

4.7.2. Water samples for the eDNA tests for great crested newt presence were taken on the 19th April 2022 by Mr Baker. Mr Baker MCIEEM is a Director at Torc Ecology Ltd. Mr Baker holds a Natural England survey licence for bats (Ref: 2021-52920-CLS-CLS) and a Class 2 survey licence for great crested newts (Ref: 2020-48685-CLS-CLS-CL09). Mr Baker is also an RC (RC 059) on the BMCL and the great crested newt Low Impact Class Licence (LICL) (RC 030).

4.8. Limitations to the surveys

4.8.1. Stables where horses were present were not accessed, However a good view of these buildings could be had externally and there were limited roosting features internally. A small timber and metal clad building adjacent the pond was not accessed due to health and safety reasons.

5. BASELINE ECOLOGICAL CONDITIONS

5.1. Statutory and non-statutory designated sites

Desktop study

5.1.1. There are no statutory designated sites within a 2km radius of the site although the site does fall within the IRZ of SSSIs. However the type of works proposed does not match an IRZ category where the Local Planning Authority is recommended to consult with Natural England.

5.1.2. East Wood County Wildlife Site (CWS - reference mid Suffolk 58) lies approximately 1.9km to the north of the site and is listed in the Suffolk Ancient Woodland Inventory with a notably diverse woodland flora. There are no direct terrestrial or hydrological links between the CWS and the site.

Assessment

5.1.3. Considering the scale of the proposal and as all development activities will be within the application boundary with no connectivity to East Wood CWS, it is determined there will be no direct or indirect impacts to any statutory nor non-statutory sites. There are therefore no further discussions with regards to statutory or non-statutory designated sites within this report.

5.2. Habitats

Desktop study

5.2.1. There were no significant plant or habitat records that related directly to the site.

Field survey (refer also to Plates 1 to 8, Appendix I)

5.2.2. The site comprised a single storey timber stable block on the southeast side of a concrete courtyard running on a northeast-southwest axis. On the southeast aspect was a covered storage area and a car port. A border of amenity grassland was present adjacent the southeast aspect of the stables.

5.2.3. A timber tack room, store and adjoining car port were present to the immediate southwest of the stables as was an L-shaped stable block on the opposite side of the courtyard. A further single storey timber building was present to the immediate northeast of the stables. Beyond the site to the southeast but within the curtilage of Batts Farm was a pond (P1) approximately 3m from the stables to be converted. A small timber and metal clad building was also present on the banks of the pond. Batts Farmhouse and a small barn complex were beyond the site and the pond to the south set in mature and established gardens. Paddocks were present to the north and west of the site delineated by mature field boundary vegetation and connecting the site to the wider countryside.

Assessment

5.2.4. The site was considered to have negligible botanical interest; however surrounding habitats were of more interest, the pond meeting the LBAP criteria and field boundary vegetation providing biodiversity and potential corridors for species movement.

5.4. Bats

Desktop study

5.4.1. There were a number of bat records provided within a 2km radius of the site with six species of bat recorded: common pipistrelle *Pipistrellus pipistrellus*; soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared *Plecotus auritus*; noctule *Nyctalus noctula*; Natterer's *Myotis nattereri* and serotine *Eptesicus serotinus*. A number of records related to roosts within St Mary's Church in Wetherden, approximately 1km southwest of the site. Other bat records related to various roost sites in Haughley approximately 1.8km southeast. There were no bat records for the site or within Base Green.

5.4.2. There were no granted Natural England European Protected Species Licences (EPSL) for bats within a 2km radius of the site and no bat ecology reports found in support of planning applications within a 2km radius of the site.

5.4.3. Barbastelle *Barbastella barbastellus*, noctule, soprano pipistrelle, brown long-eared and lesser horseshoe *Rhinolophus hipposideros* bats are listed as Local BAP species (Suffolk Biodiversity Partnership, 2021).

Preliminary Roost Assessment

5.4.4. The stable block was divided into two sections with a slight difference in roof height. The stable section further north had a pitched corrugated felt roof with the more south stable section part-way through being re-roofed with a PVC sheeted pantile roof covering on the northwest pitch only. Internally the stables were open to the roof apex with machine-cut beams visible. There was some

boarding against the timber frame to approximately 1.2m in height. There were no horses present within the stables, these stables being used for storage.

5.4.5. The stables were found to have limited potential for roosting bats. Small gaps noted at gable ends of the roof sections were found to be cobwebby with a build-up of detritus that was not indicative of bat use. There were no other obvious features found in association with the roof material that would accommodate roosting bats. On the southeast aspect of the stables were two areas where timber boarding had been damaged and was slightly raised; however upon inspection these were found to be shallow features and exposed to external elements with cobwebbing also present. There were no other external features that bats could utilise.

5.4.6. Internally the stables were open to the roof apex with no ridge beam present in the more north section. The roof area was generally cobwebby with the interior subject to changes in light levels and temperature fluctuations due to the open stable doors. There were limited roosting opportunities identified; timber panelling was sealed with no potential bat access points that would lead into the gap behind the panelling. There was no evidence of bats found internally, however bat access to the interior was possible via the open stable doors.

5.4.7. The tack room, store, and offsite stables and small timber building on the opposite side of the courtyard were of a similar construction with limited roosting opportunities and no bat evidence identified (where accessed). The small timber and metal clad building on the banks of the pond could support roosting bats but likely a low conservation status roost, i.e. low numbers or individual bats, due to the derelict and exposed nature of the building. The farmhouse and barns within the curtilage of Batts Farm could potentially provide further bat roosting opportunities.

5.4.8. Habitat adjoining the site was considered to provide strong connective links to the wider countryside whilst the pond and surrounding trees would provide good bat foraging habitat. Trees adjacent the pond were found to have limited bat roost potential with no obvious features identified that could be exploited by roosting bats. There was no light pollution upon the site and therefore the site was considered suitable for both light tolerant and less light tolerant bats species.

Assessment

5.4.9. The stable block was limited for roosting bats although could provide an internal sheltered feeding/light sampling area due to the open stable doors. As there was no bat evidence identified it is considered likely any bat use would be occasional and by low numbers of bats. This was considered the same for the offsite stable. Habitat surrounding the stable was considered excellent for commuting and foraging bats with possibly some roosting potential in association with offsite buildings to the south. Consideration should therefore be given to a sensitive lighting strategy post-development so as not to deter bats from using adjacent habitats as well as incorporating enhancement measures into the design so as to provide roosting opportunities that are currently unavailable either upon or immediately adjacent the site.

5.5. Great crested newts

Desktop study

5.5.1. There were five records of great crested newts within 2km of the site at Wetherden (approximately 1km southwest) and at Haughley (approximately 1.8km southeast). In addition a great crested newt EPSL (ref 2017-31568-EPS-MIT) was provided from Little London 1.5km southwest of the site.

5.5.2. There were three ponds identified within 100m of the site: P1 was located within 5m of the site to the southeast; P2 was a pond located 100m to the west in a small copse associated with field boundary vegetation; whilst P3 was a ditch located 30m to the southeast in mature vegetation between residential properties. There were five additional ponds located within a 250m radius; two ponds within the curtilage of Batts Farm were no longer present; two ponds were located to the south in arable fields and beyond partial barriers to dispersal; and a further pond was located in a neighbouring property with no access at the time of the survey. All other ponds were over 200m from the site where grounds works are proposed.

Field survey

5.5.3. Pond P1 was approximately 40m x 10m with mature willow *Salix* sp(p). and a small amount of sedge *Carex* sp. and scrub at the margins. Beyond the banks of the pond were occasional lords and ladies *Arum maculatum*, common nettle *Urtica dioica* and dogs mercury *Mercurialis perennis*. The pond was subject to approximately 70% shade but had moderate water quality with some duckweed *Lemna minor* and noticeable leaf litter on the pond bed. Log piles were noted around the pond. A wet ditch ran from the pond to the north. The pond was HSI assessed as 'Excellent' for breeding great crested newts.

5.5.4. P2 was approximately 33m x 10m surrounded by dense self-set deciduous trees, scrub and ruderal vegetation. There was no submerged or emergent vegetation but leaf litter on the pond bed was present. The pond would be subject to 100% shade when vegetation was in full leaf. The pond had low water quality but was surrounded by excellent terrestrial habitat with connectivity to pond P1. The pond was HSI assessed as 'Poor' for breeding great crested newts.

5.5.5. P3 was a ditch located at the boundary of Batts Farm and an adjacent property. The ditch was approximately 30m x 2m, quite shallow and heavily shaded. Water quality was found to be low with no emergent or submerged vegetation although terrestrial habitat was excellent and connected to pond P1. The ditch was HSI assessed as 'Poor' for breeding great crested newts.

5.5.6. Considering the scope and scale of the works, i.e. low impact with minimal loss of newt terrestrial habitat it was considered proportionate to assess ponds P1, P2 and P3, i.e. ponds within 100m of the site.

eDNA presence/absence survey

5.5.7. Ponds P1 and P2 provided a negative result for great crested newt eDNA (refer to Appendix III – Great crested newt eDNA analysis). P3 was not tested as this was dry at the time of the field visit.

Assessment

5.5.8. Despite habitat adjacent the site providing excellent shelter, foraging and commuting habitat for great crested newts during their terrestrial phase, if present locally, the eDNA test results were negative determining this species to be likely absent from breeding habitat i.e. ponds close to site, and therefore the proposed development works are unlikely to impact great crested newts or their terrestrial habitat. There are therefore no further discussions with regards this species in this report.

5.6. Birds

Desktop study

5.6.1. There were no records of bird species within 500m of the site although house sparrow *Passer domesticus*, dunnock *Prunella modularis*, song thrush *Turdus philomelos* and woodcock *Scolopax rusticola* records were provided within 750m which may be of relevance to habitats within close proximity to the site.

Field survey

5.6.2. Swallow *Hirundo rustica* nests were identified within two sections of the stable block on site adjacent open stable doors. Further swallow nests were identified in the offsite stable block. Pied wagtail *Motacilla alba*, robin *Erithacus rubecula* and wren *Troglodytes troglodytes* were identified by sight or by call in adjacent habitats around the pond to the southeast. The potential for nests within mature trees and scrub in association with the pond was noted although the site was considered likely too disturbed for woodcock.

Assessment

5.6.3. Evidence of nesting swallows was identified both on and offsite in the stable blocks and therefore these structures are of importance for juvenile recruitment of this species into the locality. Ensuring long-term nest site provision for swallows adjacent the site would therefore be considered best practice.

5.6.4. Common garden birds utilise adjacent habitats and therefore consideration should be given to the provision of additional nest sites as part of an enhancement strategy for the site.

5.7. Other protected and notable species

Desktop study

5.7.1. A single record of water vole was provided 750m southwest of the site at Haughley watercourse; however there was no hydrological link from this location to the site. A single record of a slow worm was provided 550m to the southwest of the site although again there was no direct link to the site. There were no other reptile records returned from the data search. Records of common toad *Bufo bufo* and hedgehog were provided from Wetherden with a hedgehog record also provided from Base Green.

Field survey

5.7.2. There was no evidence of water vole activity in association with the pond or ditch immediately adjacent site and there are no further discussions with regards this species in this report.

5.7.3. The site was not considered to offer any shelter or foraging habitat for reptiles, amphibians or hedgehogs. However adjacent habitats in association with the pond and ditch and surrounding mature vegetation do provide opportunities for these species/species groups.

Assessment

5.7.4. Habitats adjacent the site potentially offered more optimal conditions for reptiles, amphibians and hedgehog. As a precaution these species/species groups should be considered when undertaking construction activities upon the site.

6. ASSESSMENT OF EFFECTS AND MITIGATION MEASURES

6.1. Habitats

Potential impacts

6.1.1. There are no habitats of conservation value upon the site. However the pond within proximity to the stables is of LBAP status. Ground works to install the path and to install the waste water treatment plant, including works to install a concrete headwall into the receiving ditch risks impacting upon the integrity and functionality of the pond should RAMs not be adopted. This includes RAMs to prevent damage to pond/ditch banks from machinery movement; to prevent materials from entering the pond/ditch, i.e. soil, waste from materials used on site, and pollution from oil or diesel spills, etc.

6.1.2. The waste water treatment plant specified is a WPL DMS2 (Diamond range) suitable for households and small commercial premises (toilets and sinks) where mains drainage is unavailable. The WPL Diamond range is BS EN12566-3 2014 approved with treated effluent documented to be discharged safely in to the environment, meeting the required consent standard. It is therefore considered this should not be of detriment to the pond's conservation value and there are no further discussions with regards this element of work.

6.1.3. Ground works and machinery movement within the vicinity of trees have the potential to affect the integrity and functionality of these trees if measures are not adopted to protect the roots of trees.

Reasonable Avoidance Measures

6.1.4. The following measures should be implemented to minimise risks during the construction phase:-

- An appropriate fencing (e.g. solid hoarding or Heras fencing with debris netting (or similar) should be erected round the northwest and south sides of the pond at least one metre from the edge of the banks of the pond. This will create a physical barrier preventing machinery movement and preventing debris from entering the waterbody.

- Similarly a barrier should be placed adjacent the ditch with the exception of the working area. Works to install the headwall should ensure no soil enters the watercourse which could lead to siltation of the pond and/or ditch. If necessary and feasible these works should be undertaken by hand.
- Trees and their roots should be protected from accidental damage during the construction period in line with industry standard best practice guidelines by installing root protection areas using Heras fencing prior to and during construction in line with Trees in Relation to Design, Demolition and Construction – Recommendations BS5837:2012 (BSI, 2012).
- Appropriate storage and control of materials/chemicals to avoid pollution and siltation incidents (e.g. fit all plant with drip-trays and re-fuel machinery off-site).
- Provision of spill containment equipment on the site.

Significance of residual effects

6.1.5. It is considered the development will have no significant negative impacts on habitats providing the RAMs outlined above are followed. The residual impact of the development upon habitats would therefore be neutral.

6.2. Bats

Potential impacts

6.2.1. Inappropriate lighting that illuminates vegetation beyond the site boundary may deter bat use of surrounding habitats.

Reasonable Avoidance Measures

6.2.2. Any external lighting in association with the cattery will be downward directional, low level and if necessary will be PIR sensor activated to avoid unnecessary prolonged illumination. The lighting will avoid illumination of the pond, upper canopies of trees and the roof of the new cattery.

Enhancement

6.2.3. The provision of bat boxes will introduce bat roost features to the site which are currently unavailable. Therefore two improved cavity bat boxes will be installed upon suitable trees adjacent the pond.

Significance of residual effects

6.2.4. With the implementation of RAMs, it is considered the development will have no significant negative impacts on bats with additional bat roost provision to be provided to encourage bats to continue to use the site. The residual effect of the development upon bats will likely be minor positive.

6.3. Birds

Potential impacts

6.3.1. In the absence of RAMs works to convert the stables has the potential to disturb, kill or injure nesting birds, their chicks and/or their eggs, and/or to destroy the nest(s) if undertaken during the nesting bird season (swallow nesting period generally regarded as April – August/September)

6.3.2. The proposed development will also remove swallow nesting opportunities that are currently available in the stable block.

Reasonable Avoidance Measures

6.3.3. Works to convert the stable block will be undertaken outside of the nesting swallow season. However, should this not be feasible, a nesting bird check should be undertaken by an ecologist who is a member of CIEEM and adheres to their code of professional conduct, to ensure that no nests are present up to five days prior to works.

Compensation and enhancement

6.3.4. There will be four artificial swallow cups placed within the offsite stable block to compensate for the loss of swallow nests and to provide additional nesting opportunities to enhance the site for this species.

6.3.5. In addition there will be three open fronted nest boxes installed upon trees adjacent the pond to provide additional nesting opportunities for birds such as pied wagtail, robin and wren that were identified active upon the site.

Significance of residual effects

6.3.6. With the implementation of RAMs, compensation and enhancement measures it is considered the development will have no significant negative impacts on birds. If implemented, the proposed measures will provide alternative and enhanced roosting/nesting features for birds and the residual impact of the development upon birds will therefore be minor positive.

6.4. Other protected and notable species

Potential impacts

6.4.1. The proposed development is considered unlikely to have any significant impact upon local ██████████ reptile, amphibian and hedgehog populations (if present on site) as the site currently offers limited opportunity for these species and ground works should be limited to amenity grassland around the pond. However, there could be potential negative impacts to these species during the construction phase of the development.

6.4.2. Individual animals could fall into and become trapped in any trenches or excavations in association with the wastewater treatment installation works if left open overnight.

6.4.3. Should there be the requirement to remove any log piles around the pond to facilitate the wastewater treatment plant installation, if not undertaken sensitively this activity risks killing or injury to reptiles, amphibians and potentially hedgehog (if present).

6.4.4. In addition site conditions may become more optimal once development commences, in particular the storage of materials or spoil could provide opportunities for shelter, and thereby risk killing or injury to reptiles, amphibians and hedgehog.

Reasonable Avoidance Measures

6.4.5. As a precaution all building materials should be placed upon pallets located upon hardstanding and therefore raised above ground level to deter animals seeking shelter. All spoil piles should similarly be located on hardstanding and at least 5m from the pond.

6.4.6. All log piles should be removed by hand and checked for the presence of reptiles, amphibians and hedgehogs. Log piles should be replaced in their original location once works are complete.

6.4.7. All trenches and excavations should be fitted with a plank of wood or similar so any [REDACTED] reptile, amphibian or hedgehog that could be active on site that may inadvertently fall into the trenches/excavations, have a means of escape. Ideally trenches and excavations should be filled in immediately following completion of works.

6.4.8. Should any reptiles, amphibians or hedgehogs be found they should be carefully removed and placed within habitat upon the southeast side of the pond. [REDACTED]

Significance of residual effects

6.4.9. With the implementation of RAMs, it is considered the development will have no significant negative impacts on [REDACTED] reptiles, amphibians or hedgehogs and the residual impact of the development upon this species will therefore be neutral.

7. CONCLUSIONS

7.1. The proposed development will have an overall neutral impact upon habitats, [REDACTED] reptiles, amphibians and hedgehog and a neutral–minor positive impact upon bats and birds provided recommended RAMs, compensation and enhancement measures, outlined within this report are implemented, where appropriate, to help prevent any potential negative impacts. The implementation of recommended enhancements will introduce bat and bird nesting features on site and increase opportunities for foraging and shelter for faunal species. The recommendations outlined within this report should be made a condition of any planning permission for the site.

7.2. The recommendations proposed comply with the intentions of national and local planning policy with regards to priority species and biodiversity by minimising impacts to biodiversity and providing enhancements where appropriate.

8. REFERENCES

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APPENDIX I: Plates 1 - 8

Plate 1: Aerial view of the site. The application boundary is outlined in red. This Google Earth image is from 2021.



Plate 2: Aerial view of the site (circled) within the wider countryside. This Google Earth image is from 2021.

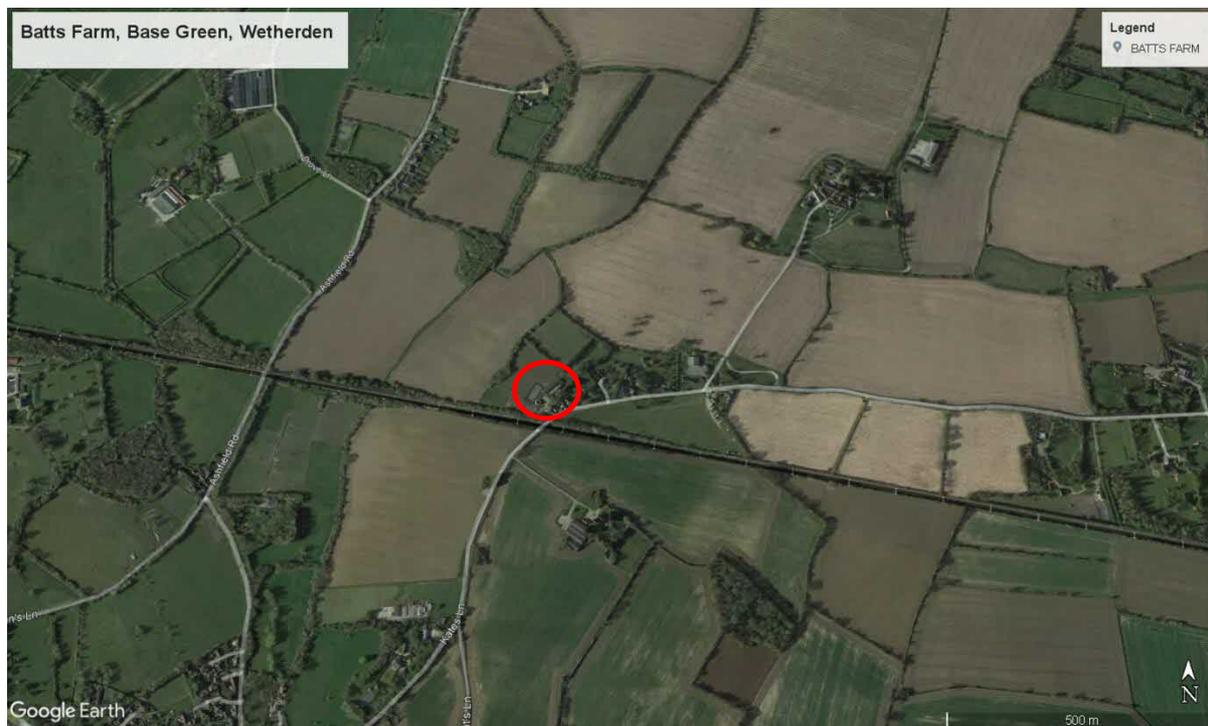


Plate 3: Southwest aspect of the stables to be developed.



Plate 4: Stables on opposite side of the courtyard



Plate 5: Southeast aspect of the stables.



Plate 6: Pond P1 with southeast aspect of stables to be developed in background. Negative eDNA result.



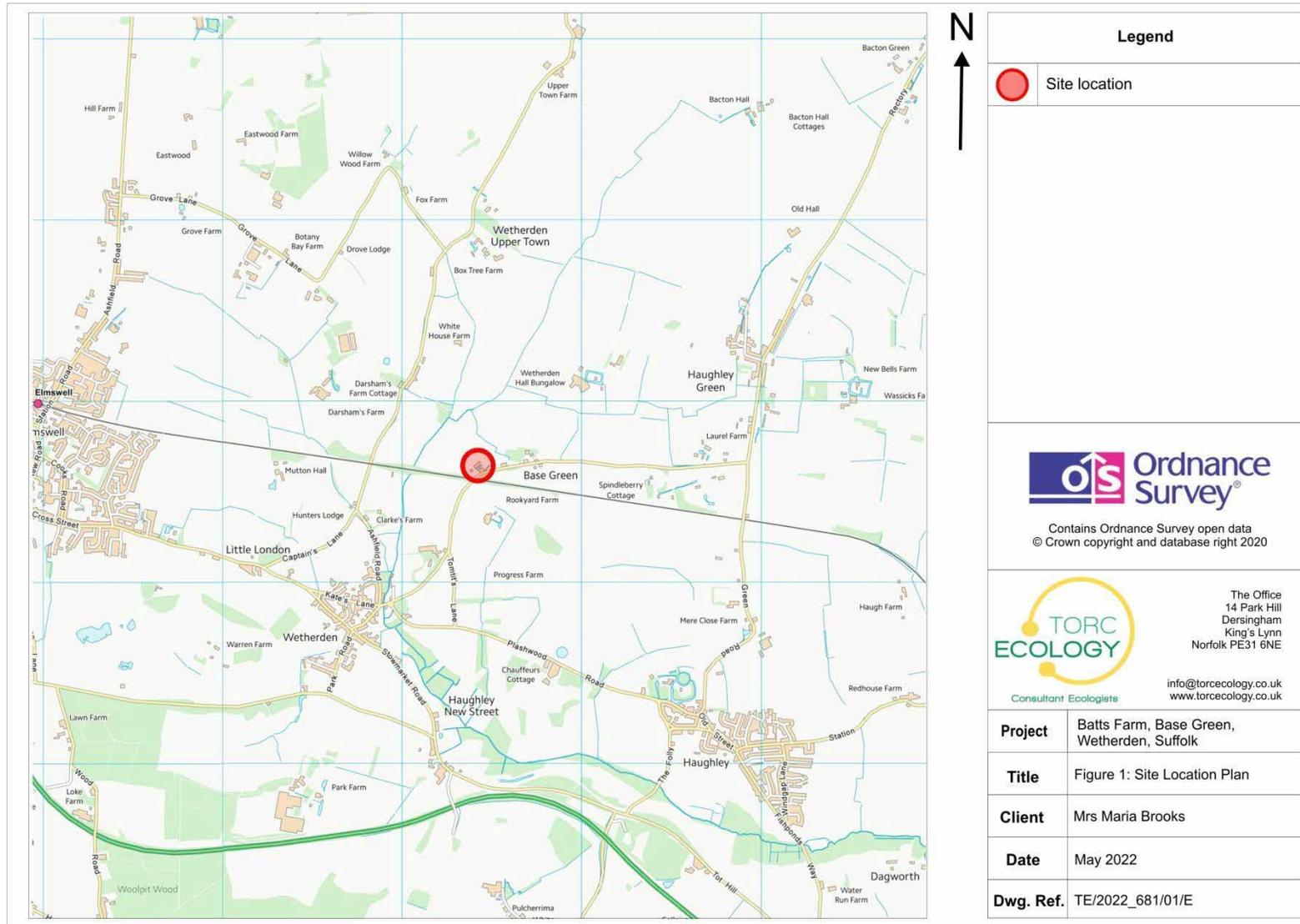
Plate 7: Pond P2 to west of stables. Negative eDNA result.

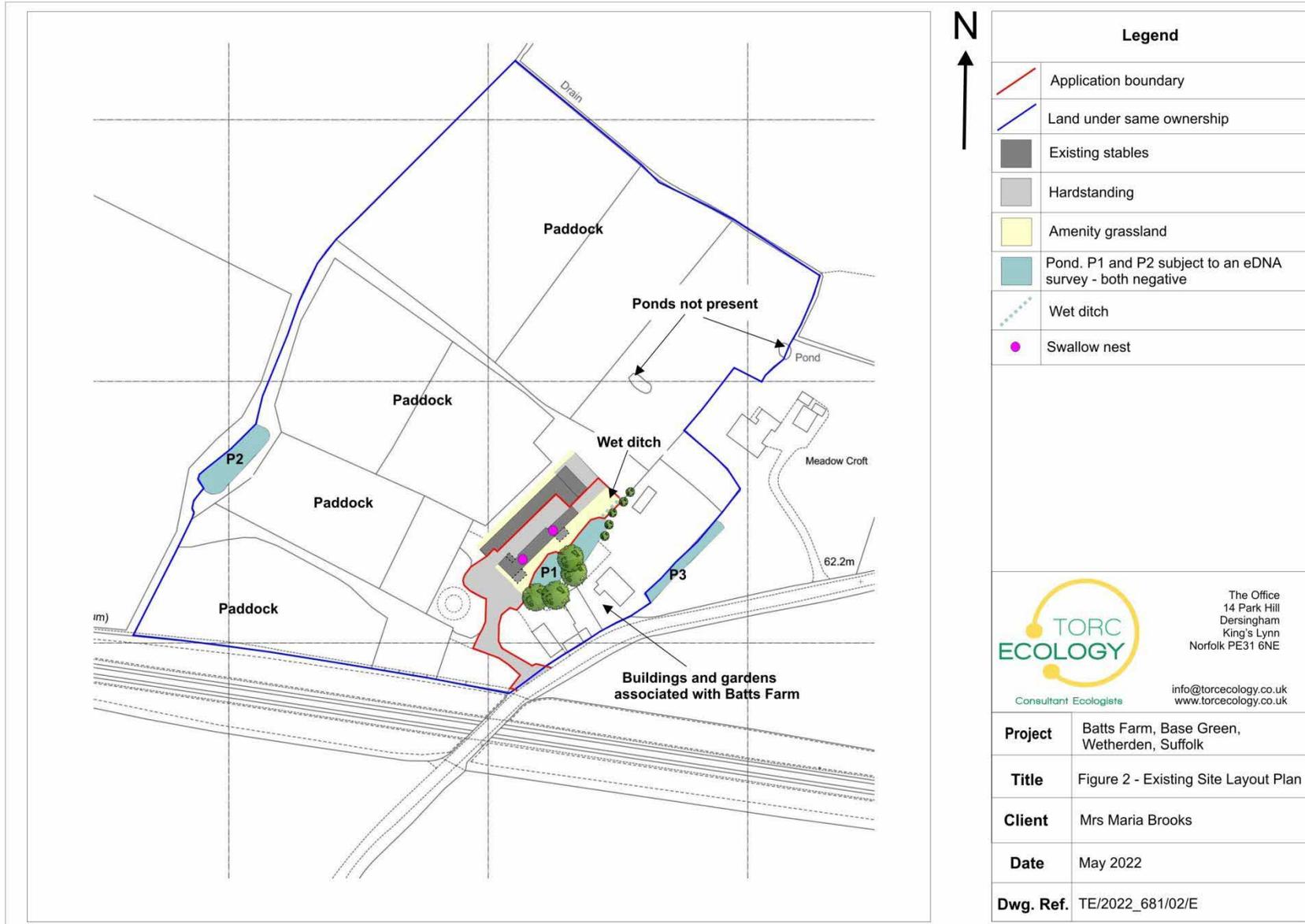


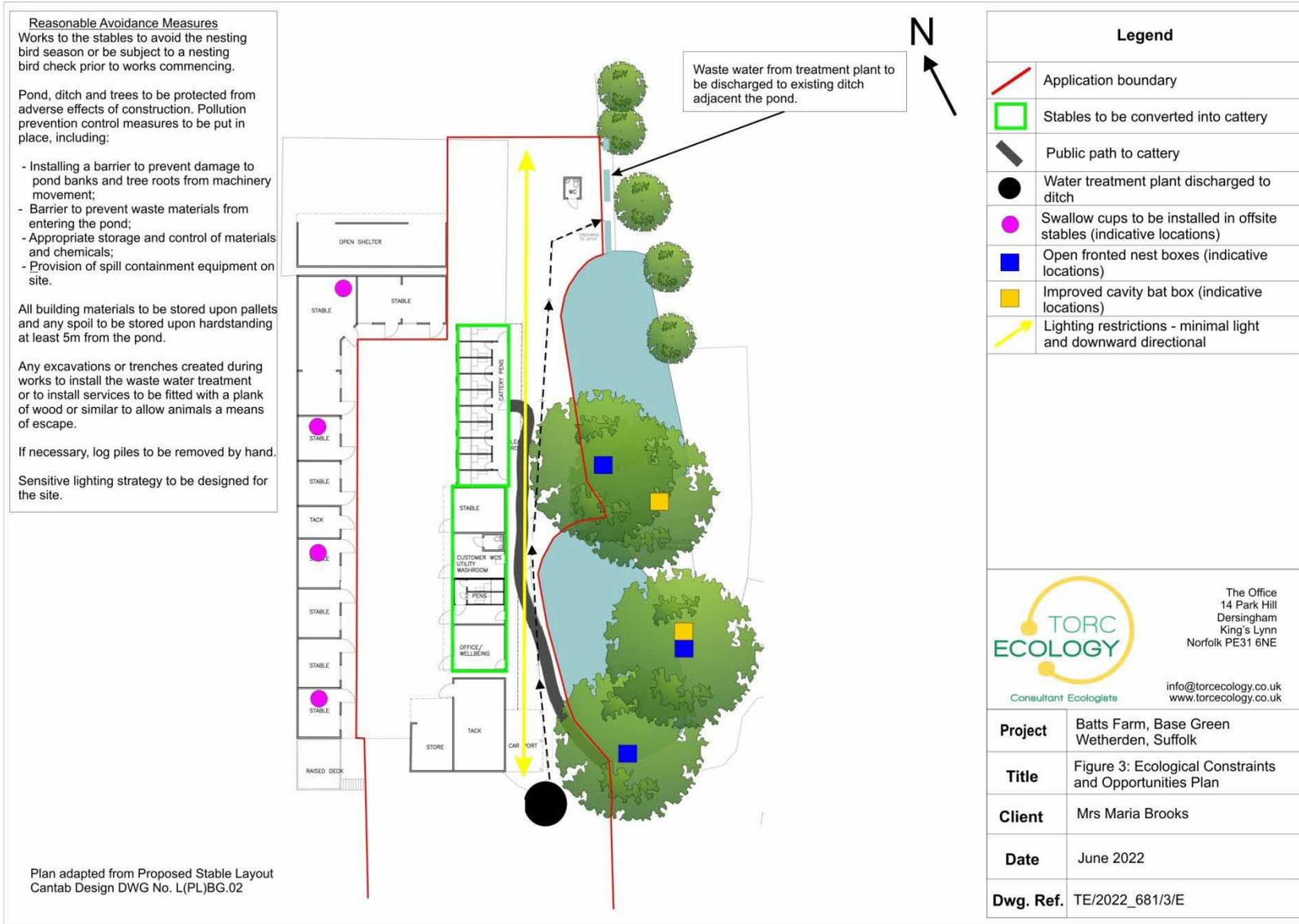
Plate 8: Access to the site via Base Green



APPENDIX II: Figures 1 – 3







APPENDIX III: Great crested newt eDNA analysis results



Folio No: E12848
Report No: 1
Purchase Order: Bat75 Farm
Client: TORC ECOLOGY
Contact: Shaun Baker

TECHNICAL REPORT

ANALYSIS OF ENVIRONMENTAL DNA IN POND WATER FOR THE DETECTION OF GREAT CRESTED NEWTS (*TRITURUS CRISTATUS*)

SUMMARY

When great crested newts (GCN), *Triturus cristatus*, inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analysing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

RESULTS

Date sample received at Laboratory: 22/04/2022
Date Reported: 03/05/2022
Matters Affecting Results: None

Lab Sample No.	Site Name	O/S Reference	SIC	DC	IC	Result	Positive Replicates
1506	Pond 2 Adjacent Paddocks	TM 01304 63673	Pass	Pass	Pass	Negative	0
1508	Pond 1 Adjacent Stables	TM 01432 63635	Pass	Pass	Pass	Negative	0

If you have any questions regarding results, please contact us: ForensicEcology@surescreen.com

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