Spoken Representation by Dr Annetta Berry [redacted]) at OFH1.

Good afternoon. My name is Annetta Berry. I am speaking today in my personal capacity as a local resident.

I object to East Pye Solar in its entirety. Like Norfolk Wildlife Trust, I believe it seeks to reshape our 'nature dense' landscape and poses a risk to the nationally important ecological network of South Norfolk. I am particularly concerned about bats.

I live near Spring Wood, adjoining Site 3. Spring Wood is an area of ancient replanted woodland and occupies part of the former Second World War airfield at RAF and USAAF Hardwick.

The northern edge of Spring Wood, which directly adjoins Site 3, was the location of the former heavy bomb dump. A number of underground wartime bunkers survive within this area. Approximately thirty years ago, those bunkers were deliberately converted by [redacted] of the Norfolk Bat Group for use as bat hibernacula. [redacted] has given me all of his records relating to the site in an effort to protect this habitat.

Spring Wood is bat habitat which has been deliberately protected and enhanced over decades for the benefit of rare bats, within a wider landscape of ancient woodland, historic hedgerows, dark skies and feeding habitat. It is also home to Barbastelles.

The Spring Wood hibernacula support Daubenton's and Natterer's bats, both members of the Myotis genus.[1] Tinsley et al. publishing in the *Journal of Applied Ecology* (2023)[2] found statistically significantly lower activity of Myotis bats along field boundaries at solar PV sites than at matched control sites. A further study by Barré et al., published in the same journal in 2024,[3] found reduced feeding-habitat quality and altered flight and feeding behaviour at solar farms, and specifically concluded that the mitigation hierarchy should begin by avoiding such sites. A subsequent BSG Ecology review in January 2024[4] also advised that solar

[1] Norfolk Biodiversity information Service also records soprano pipistrelle and common pipistrelle at site 3.

[2] Findings: The activity of six of eight species/species groups analysed was negatively affected by solar PV panels, suggesting that loss and/or fragmentation of foraging/commuting habitat is caused by ground-mounted solar PV panels. Activity of *Myotis* and serotine was reduced at boundaries. Activity of *Plecotus* and soprano pipistrelle was reduced in field centres. Activity of *Nyctalus* and common pipistrelle was reduced at both landscape locations. Mean activity for these species at solar sites vs control sites was up to 7.3 x lower (common pipistrelle in open habitats). Tinsley, E., Froidevaux, J. S. P., Zsebők, S., Szabadi, K. L., & Jones, G. (2023). 'Renewable energies and biodiversity: Impact of ground-mounted solar photovoltaic sites on bat activity'. *Journal of Applied Ecology*, 60, 1752–1762. https://doi.org/10.1111/1365-2664.14474.. E. Tinsley PhD University of Bristol, 2024 Abstract quote: 'Abstract Summary: There needs to be a nationally coordinated approach to avoid siting solar farms in areas which are ecologically sensitive'.

[3] Barré, K., Baudouin, A., Froidevaux, J. S. P., Chartendrault, V., & Kerbiriou, C. (2024). 'Insectivorous bats alter their flight and feeding behaviour at ground-mounted solar farms.' *Journal of Applied Ecology*, 61, 328–339. https://doi.org/10.1111/1365-2664.14555

[4] BSG Ecology 11 Jan 2024 'Do Solar Farms Affect Foraging & Commuting Bats?' This was an opinion piece on the Tinsley research.

infrastructure should be sensitively located away from valuable bat foraging habitat and known roosts.

The Applicant's own surveys identify the wider East Pye landscape as of national importance for bats, with Annex II European Protected Species, barbastelles the third most prevalent species and found at every survey site. Surveys by the Norfolk Barbastelle Study Group reveal multiple maternity colonies of barbastelles across this same landscape with core sustenance zones overlapping the entire scheme footprint.

It is unclear how favourable conservation status for bats can be maintained in the face of the landscape-wide threat of this scheme. Norfolk Wildlife Trust has already recommended removal of Site 3 from the development both at statutory consultation and in its relevant representation. The Applicant has not accepted that recommendation; it continues to rely instead upon buffers, and later detailed design. It contradicts itself in describing the current habitat as 'sub-optimal' yet also admits it is of national importance for bats.

I therefore respectfully ask the Examining Authority to require the Applicant to explain why solar-generating infrastructure remains proposed immediately beside a long-established bat hibernation site, within a wider landscape already recognised as of national importance for bats, when the majority of peer-reviewed research suggests this will be detrimental to bats.

It is my submission that East Pye Solar in its entirely should be rejected. However, if the wider East Pye Solar Scheme were otherwise to proceed, I respectfully submit that Site 3 should be secured as a coherent area of permanent bat habitat protection, restoration and enhancement.

I would also ask the Examining Authority to seek Natural England's express view on that approach and to require a proper assessment of the functional role of Spring Wood, the hibernacula and Site 3 within the wider bat population before any conclusion is reached that development here can safely be mitigated.

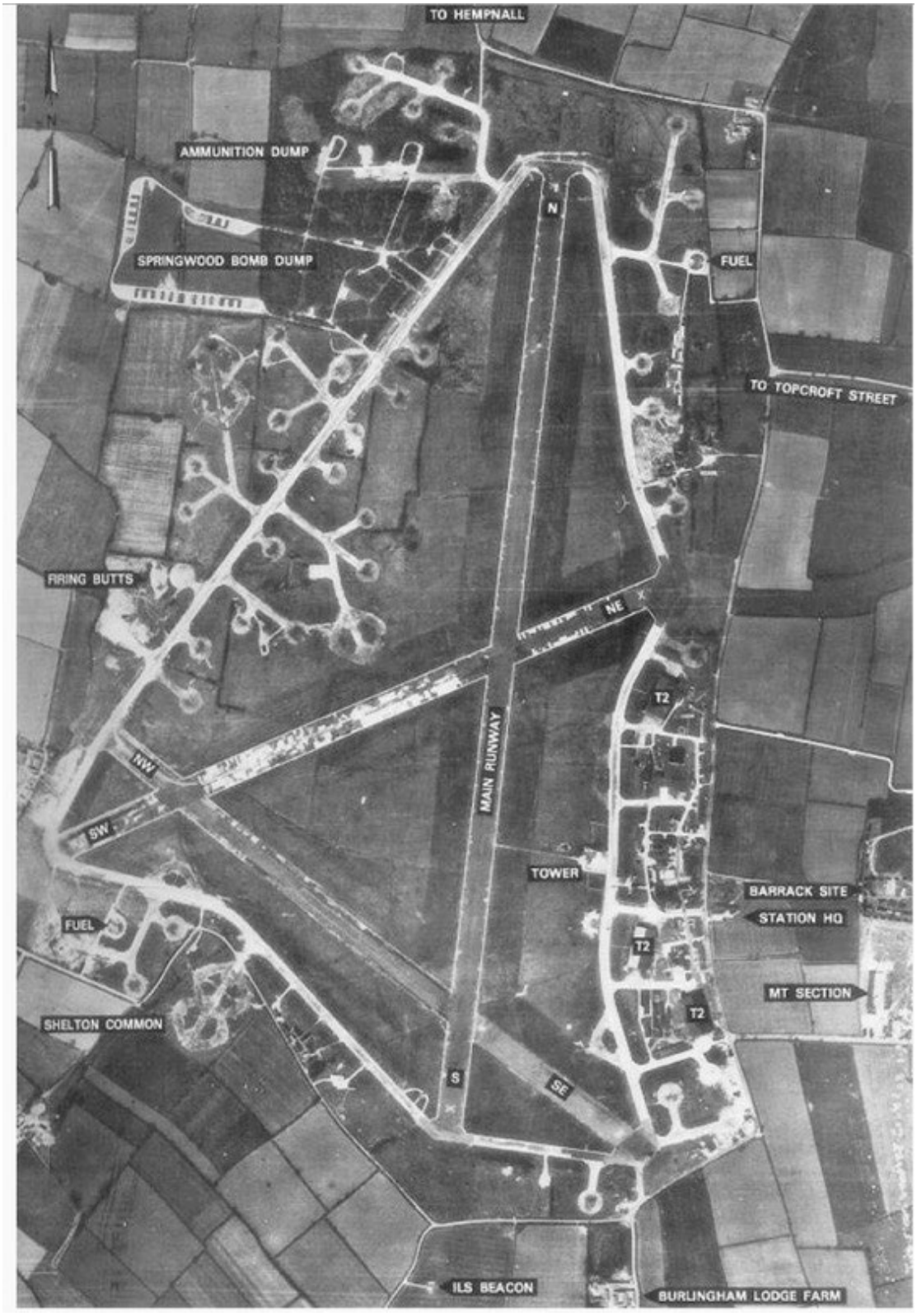
This is a location where habitat has already been protected deliberately for decades. In my submission, the appropriate response is not to disturb that habitat and then attempt to compensate for the consequences. It is to avoid the harm in the first place.

Thank you.

Photos and maps on following pages.



Image: WWII Bunker at Spring Wood converted to a bat hibernaculum by Norfolk Bat Group. Image Copyright Tony Tilson.



Hardwick Airfield 16 April 1946 showing bomb loading locations (associated bunkers beneath) along the north-western edge of Spring Wood.

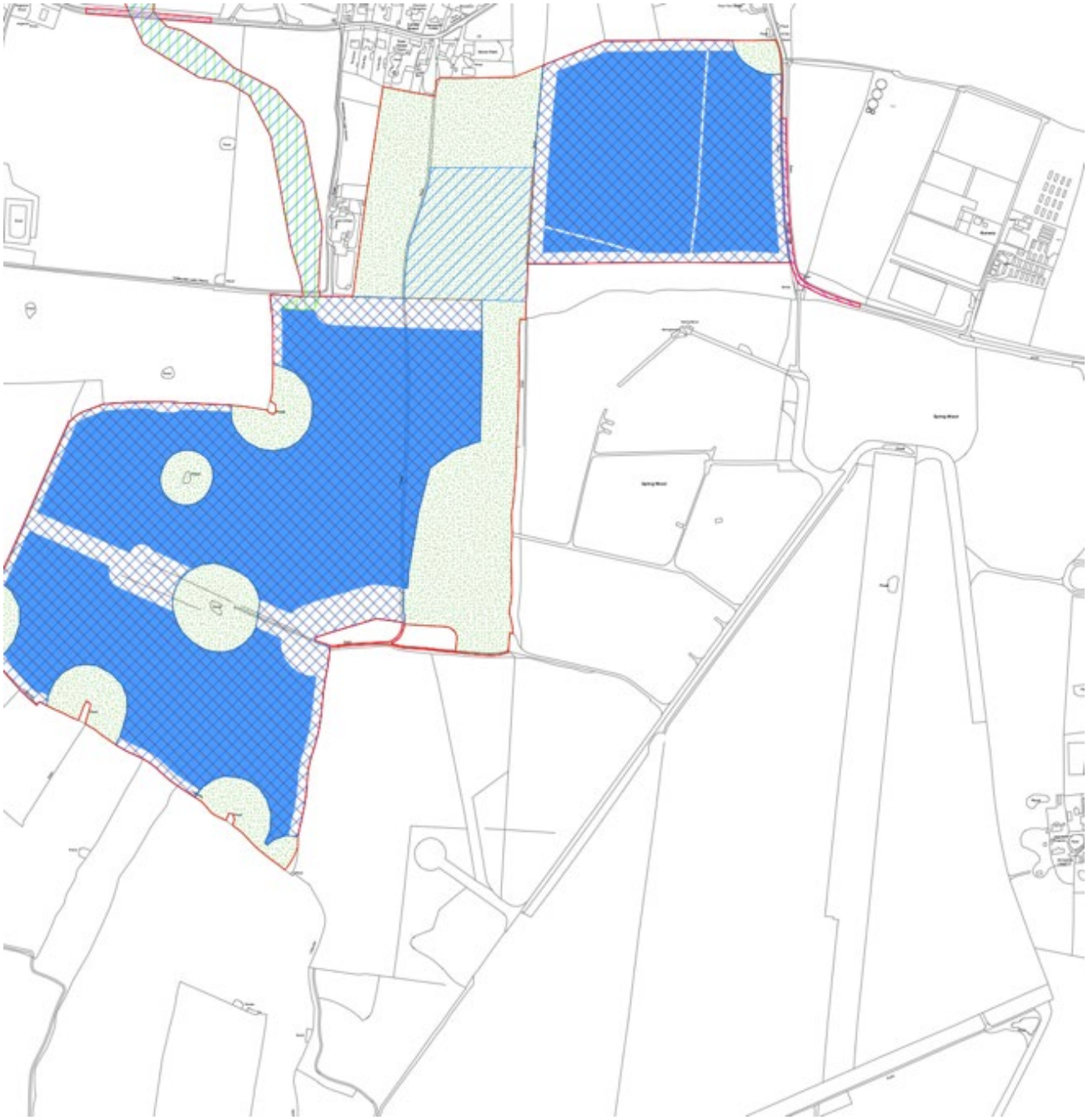
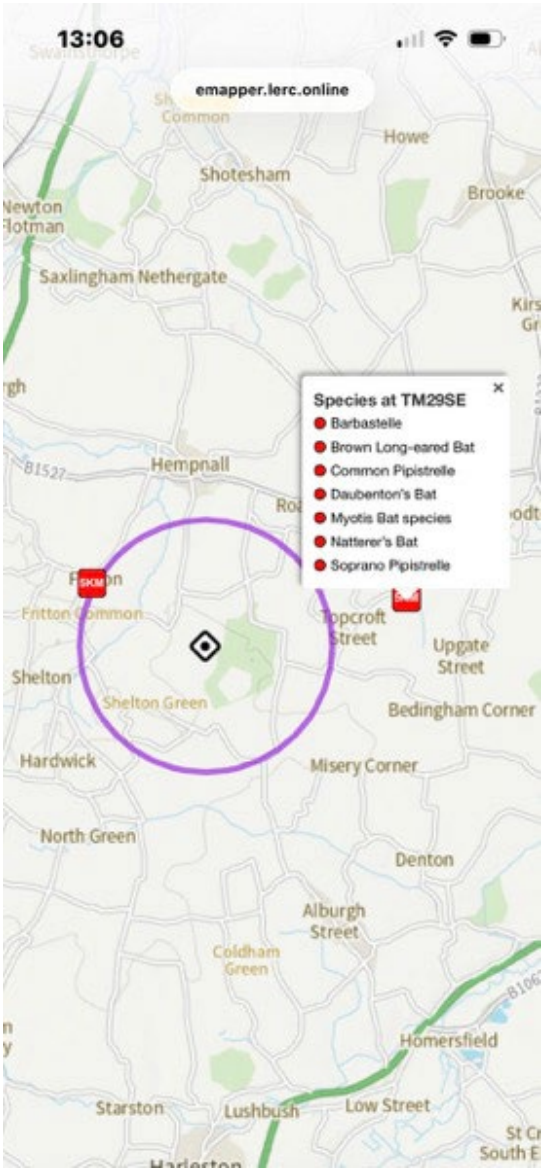


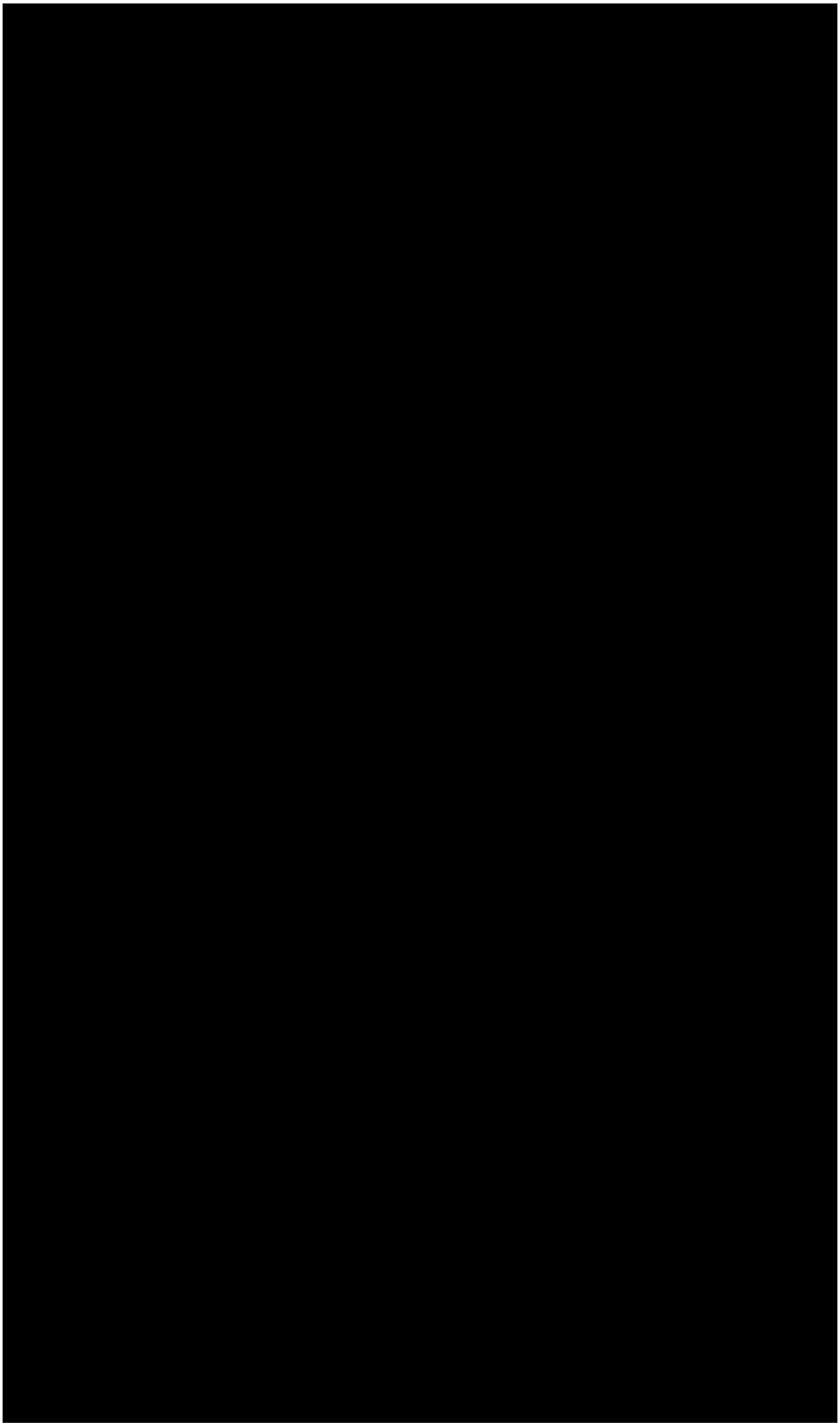
Image: Proposed siting of solar infrastructure on site 3, immediately adjacent to bat hibernacula.

Norfolk Biodiversity Information Service public information about Springwood (25/09/2026)

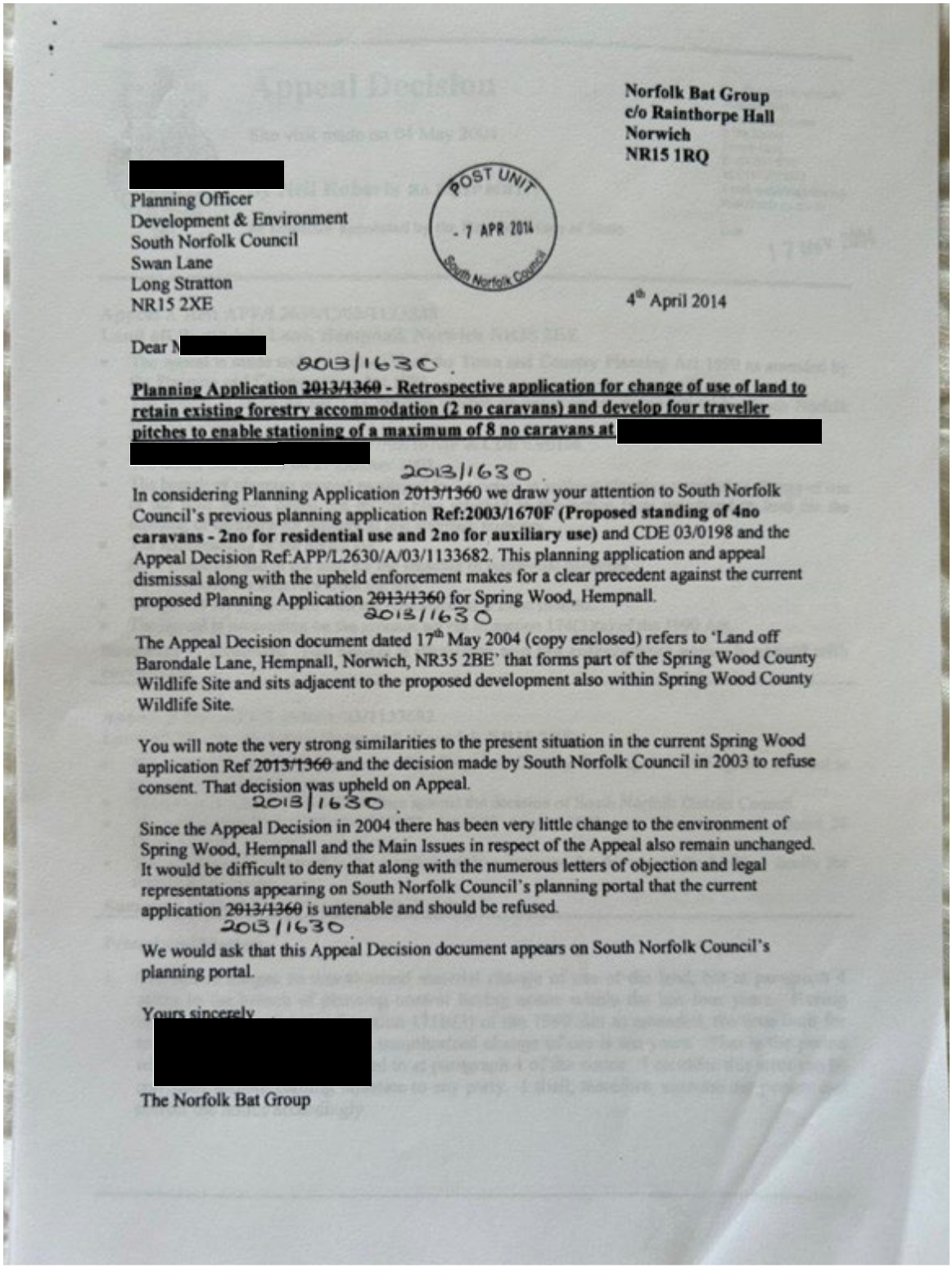




CONFIDENTIAL Norfolk Biodiversity Information Service restricted information about Springwood (25/09/2026). REDACT THIS PAGE BEFORE PUBLICATION ONLINE



Records from [redacted], formerly of Norfolk Bat Group, who did the Springwood bat hibernaculum conversions in the 1980s and subsequently monitored them.



Norfolk Bat Group
c/o Rainthorpe Hall
Norwich
NR15 1RQ

[redacted]
Planning Officer
Development & Environment
South Norfolk Council
Swan Lane
Long Stratton
NR15 2XE

POST UNIT
- 7 APR 2014
South Norfolk Council

4th April 2014

Dear M[redacted]

2013/1630.

Planning Application ~~2013/1360~~ - Retrospective application for change of use of land to retain existing forestry accommodation (2 no caravans) and develop four traveller pitches to enable stationing of a maximum of 8 no caravans at [redacted]

2013/1630.

In considering Planning Application ~~2013/1360~~ we draw your attention to South Norfolk Council's previous planning application **Ref:2003/1670F (Proposed standing of 4no caravans - 2no for residential use and 2no for auxiliary use)** and CDE 03/0198 and the Appeal Decision Ref:APP/L2630/A/03/1133682. This planning application and appeal dismissal along with the upheld enforcement makes for a clear precedent against the current proposed Planning Application ~~2013/1360~~ for Spring Wood, Hempnall.

2013/1630

The Appeal Decision document dated 17th May 2004 (copy enclosed) refers to 'Land off Barondale Lane, Hempnall, Norwich, NR35 2BE' that forms part of the Spring Wood County Wildlife Site and sits adjacent to the proposed development also within Spring Wood County Wildlife Site.

You will note the very strong similarities to the present situation in the current Spring Wood application Ref ~~2013/1360~~ and the decision made by South Norfolk Council in 2003 to refuse consent. That decision was upheld on Appeal.

2013/1630.

Since the Appeal Decision in 2004 there has been very little change to the environment of Spring Wood, Hempnall and the Main Issues in respect of the Appeal also remain unchanged. It would be difficult to deny that along with the numerous letters of objection and legal representations appearing on South Norfolk Council's planning portal that the current application ~~2013/1360~~ is untenable and should be refused.

2013/1630.

We would ask that this Appeal Decision document appears on South Norfolk Council's planning portal.

Yours sincerely

[redacted]

The Norfolk Bat Group

Appeal Decision

Site visit made on 04 May 2004

by [redacted]

an Inspector appointed by the First Secretary of State

The Planning Inspectorate
4/09 Kite Wing
Temple Quay House
2 The Square
Temple Quay
Bristol BS1 6PN
☎ 0117 372 6372
e-mail: enquiries@planning-inspectorate.gsi.gov.uk

Date
17 MAY 2004

Appeal A Ref: APP/L2630/C/03/1133535
Land off [redacted]

- The appeal is made under section 174 of the Town and Country Planning Act 1990 as amended by the Planning and Compensation Act 1991.
- The appeal is made by [redacted] against an enforcement notice issued by South Norfolk District Council.
- The Council's references are SW07/03/1670/F & CDE 03/0198.
- The notice was issued on 27 October 2003.
- The breach of planning control as alleged in the notice is without planning permission change of use of the land shown edged red on the plan attached to the notice from woodland to land for the standing of caravans for residential and ancillary purposes.
- The requirements of the notice are:
  (i) Cease the use of the land for the standing of residential caravans.
  (ii) Remove the caravans from the site.
- The period for compliance with the requirements is three months.
- The appeal is proceeding on the grounds set out in section 174(2)(a) of the 1990 Act.

Summary of Decision: The appeal is dismissed and the enforcement notice is upheld with corrections.

Appeal B Ref: APP/L2630/A/03/1133682
Land off Barondale [redacted]

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by [redacted] against the decision of South Norfolk District Council.
- The application (Ref. SW07/03/1670/F), dated 20 August 2003, was refused by notice dated 20 October 2003.
- The development proposed is the standing of four caravans for the use of the [redacted]amily for residential purposes.

Summary of Decision: The appeal is dismissed.

Procedural Matters

1. The notice alleges an unauthorised material change of use of the land, but at paragraph 4 refers to the breach of planning control having arisen within the last four years. Having regard to the provisions of section 171B(3) of the 1990 Act as amended, the time limit for taking enforcement against an unauthorised change of use is ten years. That is the period which should have been referred to at paragraph 4 of the notice. I consider this error can be corrected without causing injustice to any party. I shall, therefore, exercise my powers and correct the notice accordingly.

The Ground (a) and Section 78 Appeals

Main Issues

2. The main issues in respect of both appeals are:

   (a) the effect of the development on the County Wildlife Site within which the appeal site lies;

   (b) whether the appellant's gypsy status merits an exception being allowed to policies of restraint on development outside defined development boundaries;

   (c) whether there has been any violation of the appellant's human rights.

Planning Policy

3. At the national level *Circular 1/94: Gypsy Sites and Planning* advises that, although gypsies make up a tiny proportion of the country's population, their land use requirements need to be met, and stresses the importance of policies for gypsy site provision being set out clearly in development plans. Paragraph 12 indicates that, where locations suitable for gypsy sites cannot be identified, clear realistic criteria should be set out. *Planning Policy Guidance Note 7 The Countryside - Environmental Quality and Economic and Social Development* (PPG7) advises that the countryside should be protected for its own sake.

4. The development plan includes the Norfolk Structure Plan 1999 and the South Norfolk Local Plan 2003. Structure plan policy ENV.8 seeks to protect the nature conservation interest of designated County Wildlife Sites against harmful development. In similar vein policy ENV.9 seeks to protect all areas of important wildlife quality from the harmful effects of development. Policy H.8 sets out criteria against which proposals for housing in the countryside are to be assessed. Policy H.10 is directed specifically at gypsy sites, indicating that sites should be located within a reasonable distance of local services and facilities, subject to environmental and access considerations.

5. Local plan policy ENV 8 indicates that development in the open countryside outside the development limits and village boundaries of existing settlements, or areas identified for development in the plan, will be allowed only in specified circumstances, and must respect the beauty, natural resources and ecological value of the countryside as well as being satisfactorily integrated into its rural surroundings. Policy ENV 13 generally reflects the objectives of structure plan policy ENV.8. Policy HOU 22 states that applications for residential caravans will be treated as if for permanent housing. Policy HOU 23 sets out the circumstances in which proposals for gypsy sites will be permitted as an exception to normal policies which restrict new development to land within defined development boundaries.

6. Additionally, a Protocol for Consideration of Unauthorised Encampments has been prepared by the Norfolk Traveller Liaison Group and adopted by the constituent local authorities including South Norfolk District Council. This provides management guidance for the various authorities regarding the consideration of unauthorised encampments, enabling a consistent and fair approach to be followed. The Protocol also sets out in Appendix 2 a number of criteria against which encampments are to be assessed.

Reasons

The First Issue: Effect on the County Wildlife Site

7. The appeal sites lie within an area of woodland known as Spring Wood. This has been designated as a County Wildlife Site (CWS), and is in a relatively isolated location about 265 metres from the nearest dwelling. In its advice to the Council the Norfolk Wildlife Trust has accepted that the standing of the caravans themselves may not directly cause significant harm, but says that the associated residential activities could have an adverse impact. The Trust considers that the imposition of conditions would enable any harmful effects of the development to be overcome. On balance, however, I agree with the Council that it would be difficult to impose conditions which met the tests of reasonableness and enforceability. The remote location of the site would make it virtually impossible to enforce conditions seeking to prevent access into the wider area of the CWS, and disturbance to wildlife and diminution of the conservation value of that site would almost certainly ensue. Similarly, once the principle of residential development was accepted it would be difficult and unreasonable to seek to restrict cultivation and general domestic use of the residential curtilages in a manner which would maintain the conservation value of the site. I am also concerned that the proposal involves the felling of trees to enable the caravans to be parked within the woodland. Such felling seems to me to be somewhat perverse given that the woodland lies within a designated County Wildlife Site, where nature conservation is a primary objective.

8. I consider harm to the wildlife and conservation value of this secluded site, remote from existing dwellings, would arise from the disturbance associated with the introduction of residential use. That would of course apply directly to the appeal sites themselves, but such disturbance would extend to that part of the CWS around the sites. I also feel it inevitable that, if the appeals were allowed, residents would on occasion venture further into the CWS, causing more widespread disturbance to wildlife and reducing the conservation value of the site as a whole. Comings and goings of vehicles along the access track would cause further disturbance and harm.

9. In my view development of the appeal sites for residential purposes would harm and undermine the conservation value of the CWS, in direct conflict with structure plan policies ENV.8 and ENV.9, local plan policy ENV 13, and criterion v) of local plan policy HOU 23.

The Second Issue: Exception to Policies of Restraint

10. The appeal sites lie in a relatively remote rural area, outside any settlement or development boundaries. The broad thrust of relevant development plan policies, reflecting the advice in PPG7 about the importance of protecting the countryside for its own sake, is that new residential development in areas such as this should be allowed only for specific purposes, such as to meet an essential agricultural need. The establishment of a gypsy site does not fall within any of those specified categories.

11. Local plan policy HOU 23 thus becomes a key factor in determination of these appeals. The policy sets out five criteria which have to be met if proposals for gypsy sites are to be permitted as an exception to normal policies seeking to restrict development to land within defined development boundaries.

12. Criterion i) requires that there shall be minimal adverse impact on the amenity of local residents. There is evidence from third party representations that the unauthorised use has on occasion given rise to nuisance from dense acrid smoke stemming from burning waste from scrap vehicles (dealing in which vehicles is the appellant's family's occupation). Whilst planning conditions could be imposed to preclude such activities on site they would be difficult to enforce in this isolated area. It seems to me that there would, therefore, occasionally be more than minimal impact on neighbours' amenity, in conflict with criterion i).

13. Criterion ii) requires minimal impact on visual amenities. To the extent that the sites are well screened from public vantage points I feel the visual impact of the development would be minimal.

14. The appeal sites lie in an area of countryside remote from existing settlements, the nearest of any size being the village of Hempnall about 4 kilometres (2.5 miles) generally to the north. This village is itself lacking in basic community facilities such as schools and shops. So far as I am aware the nearest such facilities are in Long Stratton about 8 kilometres (5 miles) away. The site is not well related to the primary road network, local access roads being no more than winding country lanes. The provision of a gypsy site in this location conflicts, therefore, with criteria iii) and iv) of local plan policy HOU 23. I have concluded above in respect of the first main issue that the development harms the conservation value of the CWS in conflict with criterion v) of policy HOU 23.

15. On balance, even making allowance for the gypsy status of the appellant's family, and the present shortfall of gypsy sites in both Norfolk generally and South Norfolk District in particular, I believe the harm caused by allowing the stationing of caravans for residential purposes would be such that an exception is not justified to adopted policies of restraint.

The Third Issue: Human Rights

16. The appellant has referred to the case of *Varey v UK* in the European Court of Human Rights, but gives no details. My understanding is that the court made no substantive decision, but simply endorsed an out of court settlement between the parties. In that situation I am cautious about drawing anything from that case which would assist in determination of the present appeals.

17. This is also a convenient point to mention the judgement in *Rexworthy v Secretary of State for the Environment 1998 (JPL 864)*, also drawn to my attention by the appellant. In that case an appeal decision was quashed on the basis that the Inspector had been misled by the first sentence of paragraph 22 of Circular 1/94, giving the impression that he had relegated the subject of gypsy accommodation, including gypsies' personal needs, and elevated the subject of the development plan, and had thus not given proper weight to the relevant factors in reaching his decision. It is argued that the Council has subordinated the particular circumstances of the appellant to the broad policies of the development plan, in that the development plan contains no specific gypsy policies. I find that argument unsustainable. Both the structure plan and the local plan contain gypsy policies. Structure plan policy H.10 says local plans should make provision for gypsy sites. Following on from that, local plan policy HOU 23 is directed specifically at the provision of such sites and sets out criteria which have to be met. I would add that the Protocol also sets out criteria to be taken into account when assessing unauthorised encampments. Overall, it seems to me that full

account is taken of the needs of gypsies in the development plan, including provision for allowing gypsy sites as an exception to normal policies of restraint.

18. It is intended, according to the planning application subject of Appeal B, to site four caravans on the site for residential occupation by the appellant and his family. I understand that there were four caravans on the site when the enforcement notice was issued. Photographs submitted by Sibbett Ecology Consultants on behalf of Topcroft Parish Council show one caravan and a storage container on the site on 16 January 2004. When I made my inspection there were no caravans on the site.

19. The bi-annual count of gypsy sites shows that in July 2003 there were 16 unauthorised encampments in South Norfolk district, together with 18 authorised private sites. In Norfolk as a whole there were 358 encampments, of which 158 were unauthorised. On the face of it there would appear to be a shortfall in the provision of sites both within the county as a whole and South Norfolk in particular. However, as the statistics give no details of whether gypsies resort to the area on a regular basis or are simply passing through, it is not possible to quantify what the shortfall might be.

20. I recognise that the appellant is seeking to establish a base for his extended family. This would enable the children to benefit from opportunities for education, support for which is given by the County Council's Travellers Liaison Officer. The appellant and his wife would use the site as their permanent home, and the elder sons would use it as a base from which they could seek seasonal and other work. In my judgement, however, these undoubted benefits to the appellant's family are outweighed by the disproportionate harm caused to the wider interests of the local community.

Conditions

21. I have considered whether the imposition of conditions on a planning permission would render the use acceptable. In my judgement, however, the drawbacks of the development are too fundamental to be remedied in that manner. In any event, as I have mentioned earlier, I believe there would be difficulties in drafting conditions which were at the same time effective in preventing harm, but also reasonable and enforceable.

Conclusions

Appeal A

22. For the reasons given above and having regard to all other matters raised, I conclude that the appeal should not succeed. I shall uphold the notice with corrections and refuse to grant planning permission on the deemed application.

Appeal B

23. For the reasons given above and having regard to all other matters raised, I conclude that the appeal should be dismissed.

FORMAL DECISIONS

Appeal A Ref: APP/L2630/C/03/1133535

24. I direct that the enforcement notice be corrected by deleting at paragraph 4 the word "four" and substituting therefor "ten". Subject to these corrections I dismiss the appeal, uphold the

notice and refuse planning permission on the application deemed to have been made under section 177(5) of the Act as amended.

Appeal B Ref: APP/L2630/A/03/1133682

25. I dismiss the appeal.

[redacted]

Inspector

Spring Wood Hempnal

Having been asked by [redacted] to update the Spring Wood Management Plan I have visited the site on numerous occasions over the past year and have spoken to him at length regarding the past management and his future plans for the woodland. I have always been struck by his deep understanding of woodland management principles which comes from doing it and having read extensively on the topic especially the many [redacted] books which feature many of the woods in Norfolk having been born in Norwich.

The ongoing removal of the soft woods planted after the WWII coupled with the thinning and promotion of the former hardwood trees and shrubs such as Hornbeam, Oak and Hazel has led to tremendous increase in plant diversity especially within the widened ride systems; as the Norfolk Flora Group have a visit planned for this year more will be learnt with regard to the botanical diversity.

As a competent woodsman [redacted] utilises most of the timber he extracts with the larger timber being planked for cladding or fencing posts etc with remainder for charcoal production and keeping abreast of the latest techniques, production is being changed from the traditional ring kilns to the retort kiln. This allows a much smaller size of timber (brash) to be converted with a shortened burn time and with the un-burnt gasses being recirculated within the retort, a considerable decrease in smoke is achieved. It is hope that this will please those who perceive charcoal production a threat to bats.

The eastern air raid bunker held 5 bats again this winter whilst plans are in hand adapting the western bunker to become more bat friendly by restricting the internal illumination and Schwegler bat boxes and shelter purchased which will make the bunker more suitable to hibernating bats. A data logger recording temperature and humidity has been running in the eastern bunker which will give us important information with regard to the environmental conditions required by the bats.

As the woodland is still in its infancy and generally lacking mature tree with the bat roosting features are few and far between therefore bat boxes are being erected throughout to increase the roosting potential along with a technique used successfully in numerous other 'young' woodland to increase bat roosting potential is via the use of a chainsaw to produce slots and cuts in a selected number of semi-mature trees which will develop via rot holes into roosting niches in the long term.

The Management Plan will run to spring 2015 and should be produced by early summer.

[redacted] (Ecologist) 10 February 2015

2

habitatmanagement.org.uk
Hall Cottage Bedingham Woodbridge IP13 8LU. ☎01728 638161

[redacted]

VAT Reg. 571 3272 51

131630

Management Plan

-2 SEP 2013

Spring Wood, Hempnall Green

Prepared with, and on behalf of: [redacted]

01 June 2005

Introduction

This management plan has been prepared to outline the objectives and nature of the management of Spring Wood proposed by owner [redacted] This is a brief outline plan prepared to support a planning application for a domestic dwelling to be occupied by the owner and his family.
Should this application fail management will probably be uneconomic. To avoid unnecessary expense this plan is intended only to provide an outline of intentions. Should planning consent be granted, further survey and planning work will be needed to ensure that maximum nature conservation benefit is delivered through appropriate management of Spring Wood.

Site description

Ancient woodland site that was coniferised in the 1960s.

Current detailed survey information is not available at time of writing. No records exist of Forestry Commission planting plans. A survey needs to be undertaken to detail areas of differing species and ground conditions through the woodland in order to target management. For the purposes of this management plan use has been made of aerial photography that has had some ground truthing.

Although there appears to be little in the woodland of nationally significant wildlife value there are signs of lacent potential. There are indications that suggest successful long term restoration is possible, providing benefit for local biodiversity, through sympathetic management of the woodland. Delaying suitable management will reduce this potential.

The woodland is adjacent to Hardwick Airfield and was used as a bomb dump during World War II. Since the conifer planting the woodland was used for holiday home style static caravans for a time, and in the 1990s travellers were resident in the wood.

Current site condition

See appended Current State map

Woodland

- There is one surviving ancient woodland remnant on the western side of the wood. Boundaried by ditches and a woodbank. There are fine oak pollards, standard oaks, large hornbeam coppice stools and hazel. An ancient track *Longacre Lane* runs through the middle of this narrow strip.
- There are poor quality conifer trees throughout the rest of the wood. Some dense stands exist but much of the planting has failed.
- Where planting has failed in very wet areas there is a dominance of sallow and birch.
- Throughout the woodland there are surviving hornbeam and hazel coppice stools. These species dominated the woodland before coniferisation.
- There are also many young oak standards and other self-seeded saplings including cherry and aspen occurring throughout.

Rides

- Concreted during the 1940s as part of the Hardwick Airfield infrastructure; most of the concrete has since been lifted and removed.
- Partly as a result of the concreting the rides tend to be low and wet. The tree canopy is dense to the edge of, and often over, the rides.

- Due to the heavy clay substrate and the compaction resulting from concreting and use of heavy vehicles the rides are often under several inches of water.

Ponds

- No ponds currently exist although the rides often have standing water in them for long periods.

Bomb shelters

- There are 3 derelict structures, two bomb shelters and a third unroofed building.

Rubbish

- As a result of residential use over the last 30-40 years there is a significant amount of fly-tipped rubbish to be disposed of.

Objectives of management

- To provide a sustainable income for the woodland owner
- To restore and enhance the nature conservation value of the woodland
- To provide an informal recreational amenity space for the local community

Management recommendations

See appended maps: *New rides and other management*, and *Compartments and their management*.

Detailed survey and monitoring plan

Surveys need to be undertaken to assess vegetation communities, bats, badgers, reptiles, butterflies and nesting birds, plus a survey of mature trees to assess condition and individual management. Soil types should be identified from national soil maps.

Ancient woodland remnant

Work is to be undertaken here to maintain and enhance the features of what is the best part of the woodland. Careful consideration will be given to pollarding where this will extend the life of existing over-stood pollards. Large hornbeam coppice stools require large amounts of light to enable them to regenerate once coppiced and so should probably be undertaken along with the clearance of the neighbouring compartment.

Ride widening / creation

Some initial ride widening is already in process through the application for a felling licence.

Further ride widening is proposed to create four wide conservation rides meeting at a central glade. These rides would be kept open and mown on an annual or biannual rotation with all cut material removed.

A series of new rides are proposed to enable easier access for the extraction of coppice products and to demarcate compartments. The positioning of these rides has been partial determined by the existing tree cover; an effort has been made to compose compartments that currently have similar species composition throughout.

Management compartments have been prioritised to promote coppice management of those areas where most wildlife benefit will be gained, and maximise profit potential through selective thinning where minimal biodiversity losses will be incurred by delaying clearance.

Broadleaf dominated compartments

Priorities should be given to those compartments where broadleaves are still dominant. Coppicing of these areas will promote the natural regeneration of the coppice woodland habitat through the removal of remaining conifers and the resulting needle drop.
Given the right circumstances species such as hornbeam and hazel will come to dominate over the birch and sallow; this will require deer control and techniques such as layering of hazel will certainly help.

Conifer removal

Over the period of a single management cycle all conifer tress should be removed – this cycle could however take another 40 years. In those areas of dense conifers where there are few signs of broadleaf trees it is proposed that these areas should be selectively thinned in order to maximise the long term value of harvestable timber.

In all other areas there is a presumption that all conifers will be removed as a part of the compartmentalised coppice restoration management.

Natural regeneration v tree planting

It is hoped that a productive coppice can be re-established through natural regeneration and the layering of hazel. However, a small tree nursery will be established to allow areas that do not naturally regenerate to be given a helping hand. It is also envisaged that some standard oaks of local provenance will be planted amongst the coppice.

Ditches and ponds

At present no maps exist of the ditch system within the wood. Further survey and mapping work will be needed to establish how previous drainage was undertaken. The opening up of a ride network will also allow a level survey to be undertaken.

At least one new pond will be created to be fed by a ditch system allowing access rides to be drained but also provide control of water levels so as not to drain the wood.

Deer control

Deer numbers are escalating across the region. For coppicing to be feasible deer control is imperative. A combination of culling and electric fencing (as used by Norfolk Wildlife Trust) should allow numbers to be restricted to a sustainable level.

Bomb shelters

The bomb shelters flood during high water table levels. These present a hazard to children and visitors to the wood.
It is proposed that these should be closed up to prevent human access and provide the necessary measures to allow use as bat hibernacula.

Clearing rubbish

The small tips that are situated in various places through the wood will need to be removed and taken to landfill.

Other activities

- Public access – initially a permissive path is proposed that will provide a circular woodland walk, accessed from an existing PROW. The route would be along Longacre Lane and then back along the wide rides and through the glade. In time it is anticipated that a larger area of the wood would be available for open access.
- Charcoal making – one of the main business activities; making and selling charcoal to the local community. An area is identified as a charcoal yard for this activity.

- Firewood sales – another business venture; an area is required for bulk storage. Processing is undertaken on the concrete ride.
- Base for small contracting business – the costs of managing the woodland can be recouped partly through the charcoal and firewood business, but at least one other person will need to be employed to ensure safe working practices are followed. Small scale contracting work fitted in around the Spring Wood management work will allow better financial viability.
- Woodland crafts and skills training – the wood will be made available for the training of woodland management skills and crafts.
- Owners residence – an area is demarcated in the *Current State* map showing the location of the current and proposed dwelling. The philosophy of John and his family is to undertaken subsistence living within the wood, this would include keeping:
    - Poultry – for eggs and meat confined to an area adjacent to the garden
    - Pigs – 2 or 3 Tamworth (*Iron Age*) sows and their offspring will be used to clear areas of woodland prior to coppice / conifer clearance and reared for meat.
- Indian oyster mushrooms –can be grown as a cash crop on rotting wood. The proposal is to inoculate softwood stumps with spores to provide an additional potential income.

Safe working in woodland management

The nature of woodland management work is dangerous, with at least a high level of risk due both to risks posed by the machinery used and through working with falling trees, timber under compression or tension and moving heavy loads.
Lone working is ill-advised and should be avoided at all times. Some activities can be undertaken with a nominated person on site, and many activities require another person working alongside, within hearing distance and direct line of sight.

The Robert Stebbings Consultancy Limited

Species Ecologists and Habitat Assessors

91 Thorpe Road, Peterborough, Cambridgeshire PE3 6JQ Tel: 01733 340318
Fax: 01733 897018

Doc Ref: 062/13 - 01913/E/0113 Issued 15 January 2014

SNDC 2013/1630 - Retrospective application for change of use of land to retain accommodation and develop four traveller pitches for 8 caravans at [redacted]

[redacted]

APPRAISAL FOR PROTECTED SPECIES IN AREA

Client:

Norfolk Bat Group

The Robert Stebbings Consultancy Limited
91 Thorpe Road
Peterborough
Cambridgeshire
PE3 6JQ

Telephone: 01733 340318
Facsimile: 01733 897018

© This report is the copyright of the authors to whom requests for use should be directed.

[redacted]

APPRAISAL FOR PROTECTED SPECIES

1. BACKGROUND

1.1 There is a proposal to increase the number of mobile home units on this site and permit use of the woodland for charcoal production.

1.2 As part of the necessary investigations prior to determining the application, it is important to know whether any protected species or habitats are likely to be affected and, if so, what mitigation would be required.

1.3 There is a variety of wildlife legislation which needs to be considered including the *Wildlife and Countryside Act 1981(WCA 1981)* as amended by the *Environmental Protection Act 1990* and *The Countryside and Rights of Way Act 2000* and *Natural Environment and Rural Communities Act 2006.* Also, the Habitats and Species Directive is embodied in *The Conservation (Natural Habitats, &c.) Regulations 1994 and 2010.* The *UKs Biodiversity: Action Plans* lists species which are nationally or locally rare and in need of consideration and protection.

1.4 The application site is designated as a County Wildlife Site because of its special habitat in Norfolk.

2. AIM

2.1 To make an appraisal of the site, including nearby areas, for protected species, principally using results published by others. The search to include examining data bases for species which have been found in that habitat.

2.2 To make a site visit on adjacent land where permission to walk has been provided.

2.3 Any species subject to legislation which occurs in the area of influence of the proposed developments will need advice on what precautions will be needed, including any licences which are or may be required.

3. METHODS

3.1 The field survey involved walking around the adjacent area to consider the quality of habitat types.

3.2 An appraisal was made being cognisant of what species are known to live in the application area and in adjacent contiguous habitats.

3.3 The field visit was undertaken on 16 November 2013, a fine day with little wind and mostly high cloud.

4. EXPERIENCE OF AUTHOR

[redacted] has been undertaking scientific research since 1952 and as a Government scientist since 1960. From 1989 he formed his own Consultancy Company, continuing research mostly for Governmental agencies

He joined a Cambridge University bat research project in January 1952 (project started in 1947) and from 1960 became a research officer working for the Nature Conservancy where bat research continued. Other long term research on British bat populations has continued to the present in various locations around Britain funded to a large extent by Government agencies.

With up to 14 staff, undertook ecological assessments and specialist surveys of species and habitats, especially those protected by legislation eg *Wildlife & Countryside Act 1981 (WCA), The Conservation (Natural Habitats & c.) Regulations 1994, The Countryside and Rights of Way Act 2000* and *Protection of Badgers Act 1992*. This included development of ecological impact assessments and detailed management plans and in supervising their implementation for species and habitats. Work has been contracted primarily by English Nature, Natural England, Countryside Council for Wales, Scottish Natural Heritage, Ministry of Defence (Defence Estates), Highways Agency, Environment Agency, British Waterways, DETR (now DEFRA), Welsh Development Agency (Welsh Assembly Government), but also, many other organisations both governmental and NGOs.

In addition, investigated and, as expert witness, prepared evidence for presenting on behalf of the police and CPS, as well as the Statutory Nature Conservation Organisations and other bodies, preparing casework leading to prosecutions under the *WCA 1981*, *The Conservation (Natural Habitats & c.) Regulations 1994*, *Protection of Animal Acts 1911-1964*, *Animal Health and Welfare Act 1984* and *The Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973, (CITES)*. Also, has presented evidence for public inquiries concerning planning appeals mostly representing local, District and County Councils.

The Consultancy has provided 'in-house' staff training for English Nature (Natural England) and Countryside Council for Wales on wildlife surveying and interpretation of legislation as well as for the Environment Agency, Local, District and County Councils.

Project leader for field research on population dynamics and ecology of bats. Field and laboratory research on chronic and lethal effects on wildlife of pesticides used in agriculture and for remedial timber treatments effects on bats.

As a Government servant assisted the development of National/International wildlife legislation, drafting and implementation casework with National and International Statutory Wildlife Conservation Organisations (Bonn & Bern Conventions, CWCWP Act 1975, WCA 1981).

5. DOCUMENTARY EVIDENCE OF BATS

5.1 All species of bat and their roosts are protected under Section 9 of the *Wildlife and Countryside Act 1981* (Schedule 5) (*WCA 1981*). Indeed, roosts are protected at all times irrespective of whether bats are present.

5.2 Records from the Norfolk Bat Group were obtained and, in addition, records presented in the report by Mr M Finnemore titled Spring Wood, Spring Lane, Hempnall Green, Norfolk, dated November 2013.

Sensitivity of Wild Living Bats to Disturbance

5.3 The present author undertook research in the 1950s and 1960s to assess the sensitivity of bats to disturbance of various kinds including that from near proximity of people. Observations have continued, concentrating more on the effects on bats of roads and lighting (work for Highways Agency and Councils).

5.4 The site has two underground sites which are used by hibernating bats. These small animals are particularly sensitive while in hibernation and can lose up to 10% of their body mass by unscheduled awakenings. As they have a maximum of about one third of their body mass as stored energy reserves (mostly as subcutaneous fat) at the start of hibernation, three such disturbances can cause death from starvation. (Bats hibernate in winter because there are insufficient insects for them to catch and eat.)

5.5 Disturbance can be of many types. Most obvious include close proximity of people such as entry of the hibernation site, but also, vehicles driving nearby causing noise, vibrations and exhaust gasses. Those, as well as more distant noises and vibrations from, for instance tree felling and cutting timber by chain saw can cause bats to awake in an unscheduled time. In addition, smoke and its component gasses (eg from charcoal production) can be toxic and heavier elements, with suitable conditions, will enter the underground voids and be toxic to bats.

5.6 Lighting, even at low levels, disturb bats and this can have two principal effects depending on season. Lights penetrating the hibernation site at night usually causes arousal from hibernation. Also, lights in the active season causes bats to avoid areas where they would normally feed. Therefore, consideration of any lighting in the application site needs to be carefully considered and appropriate action taken, if necessary.

Great Crested Newts

5.7 There are several water bodies both in and in close proximity to the application site where great crested newts could breed. It has been established from published records (see Finnemore Associates Report) that this protected newt occurs in several nearby ponds.

5.8 At the time of this site visit (16 November) an immature great crested newt was casually discovered beneath a piece of concrete in woodland close to the application site, suggesting this species was abundant in the area. A targeted search was not attempted because the winter season was not appropriate for this protected species.

6. DISCUSSION

6.1 Bats are well known to live in the application site and especially in hibernation when they are most sensitive to disturbance. It is always difficult to precisely measure effects in each situation. But as the severe effects can be fatal and bats are specially protected because of these sensitivities and because of large declines in populations, it is important to be cautious in determining any planning application so as to not contravene the requirements of the UK and European legislation.

6.2 Great crested newts breed in many different kinds of water bodies. The *Habitat Suitability Index* employed by Mr Finnemore is not a definitive measure of whether the newts actually occur in any site. It is just a broad indicator of likelihood and not a replacement for actual surveys which are necessary when specific planning applications are made. Therefore, before any determination of this application can be made, full surveys at an appropriate season must be completed so that appropriate mitigation could be planned and implemented which would include application to Natural England for a licence to permit development.

6.3 It was noted in the Finnemore Associates Report that under paragraph 2.4 it was stated that their survey was undertaken in 'optimal' timing but as that was in November, clearly that is not optimal for great crested newts. Surveys for those amphibians should be completed in the period from March to May.

6.4 Also, it is noted the Finnemore Associates report is headed as '*Final Report - Nov 2013*' but perhaps the copy as presented was not the 'final' version as there are omitted sections such as paragraph 3.5.

6.5 Woodland near breeding ponds is the preferred hibernation habitat for great crested newts because it presents ideal protection. Woodlands remain warmer in winter than open habitats.

6.6 It is noted that the plans showing ponds in the Finnemore Associates Report not only miss-number ponds but omits perhaps the largest and most important pond close to the application site.

7. RECOMMENDATIONS

7.1 It is clear appropriate surveys, especially for great crested newts, have not been completed for the application site so any determination of the application is not possible at this time.

7.2 Also, there are serious wildlife constraints in relation to bats and great crested newts which, with present knowledge, should restrict developments within their habitats.

NORFOLK WILDLIFE TRUST
Response to Planning Application

21st October 2013

Retrospective and further application at [redacted] 2013/1630
Thank you for consulting Norfolk Wildlife Trust on this application. On the basis of the information provided, we have the following comments to make.

According to our records the site lies within Spring Wood County Wildlife Site (CWS 90). However, I understand that there is some discrepancy between the boundary shown on the CWS citation and that on the GIS layer, which appears to have arisen during the annual update several years ago and has only just come to light, as a result of this application. I have attached the CWS citation to this email, which you will see includes the area of woodland owned by [redacted] However, the GIS layer, which the planning department refers to, does not include this area within the CWS. We will ensure the discrepancy is rectified and the GIS layer updated to match the citation, during the 2014 annual update. Even if the council is not able to treat the application as a CWS, it will still be adjacent to CWS 90.

We have had some contact with the owner in the past and the wood appears to have been relatively well managed with respect to wildlife, with some restoration of the ancient woodland taking place. However, regarding the new aspects of the application, it is not clear what impacts increased usage of the site will have on the ecology of the woodland.

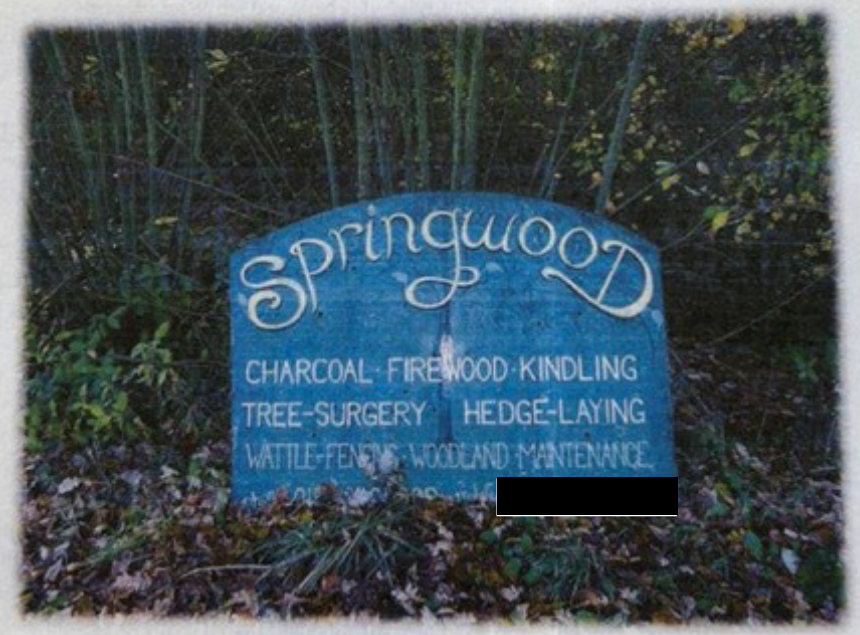
Although the application is accompanied by a woodland management plan it has not been accompanied by an ecological assessment. In our view it is essential that there is an ecological assessment of impacts of the development on both the County Wildlife Site and on protected species, including bats, before any planning decision is made.

[redacted]
Senior Conservation Officer

[redacted]

HEMPNALL GREEN
NORFOLK

PROTECTED SPECIES ASSESSMENT



On behalf of: [redacted]

Author: Finnemore Associates

[redacted]

Hempnall Green Norfolk

* Protected Species Assessment November 2013*

1.0 INTRODUCTION

1.1 Brief

Mick Finnemore was approached by [redacted] to carry out a protected species assessment of the above land prior to submitting an application for 4off caravan pitches.

An initial site survey was carried out on the 24 November 2012 by [redacted] to assess the potential of bats and great crested newts together with an assessment of the botanical value of the site and the effect of the proposed development on them. A further visit by MF accompanied by [redacted] was carried out on 26 November 2013 to take temperature and humidity readings.

1.2 Site Location

[redacted] is located approximately 5.5km directly east of Long Stratton in south Norfolk on the southern edge of the hamlet of Hempnall Green and can be accessed off Spring Lane at grid ref [redacted] (See Fig 1 Appendix I)

1.3 Site Description

The proposed development site [redacted] is part of the [redacted] county wildlife site [redacted] and consists of approximately16ha (39acre) of regenerating ash/hornbeam woodland, soft wood plantations, grassy rides and concrete hard standing along with 2 former II World War underground concrete bunkers associated with USAAF and headquarters for 20th Combat Bombardment Wing of the 2d Bomb Division.

The 1946 black and white aerial photograph shows the site criss-crossed with numerous concrete runways and taxiways with approximately 6 'pan handle' hardstands although Spring Wood was used mainly for bomb and ammunition storage. From the mid 1945 onward when the USAAF ceased operational use much of the concrete runways were removed as hardcore and softwood plantations of Scots Pine, Western Red Cedar and Larch were planted. Although in this part of the woodland complex the softwoods are progressively being removed by the present owner who is involved in actively managing the woodland for hardwoods

and wildlife by promoting the Hornbeam and Ash on what is an ancient semi-natural woodland site.

A Woodsman by trade he produces charcoal in two clamps and makes and sells traditional hurdles and sells firewood. Within Spring Wood ditch lines have been cleaned out and the rides cleared of softwood and the remaining vegetation coppiced, these now hold much of the floral interest within the county wildlife site.

The soils comply with Beccles 1 Series – typical stagnogley slightly calcareous loamy clay, seasonally waterlogged soils. Often the presence of old concrete runways and hardstanding leads to an enhancement of the base richness.

The surrounding fields of wheat and rape form a typical arable landscape of large fields with trimmed hedgerows and few hedgerow trees. Two ponds were recorded within 250m of the proposed development site. (See Fig 2 Appendix II) Great Crested Newts (GCN) have been recorded c 2.5km to the west at Fritton Common SSSI.

1.4 Bat Legislation

All bats and their roosts are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981(as amended) and are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations 1994.

Under the Act it is illegal to.

- intentionally or deliberately kill, injure or capture bats (take) bats
- deliberately disturb bats (whether in a roost or not)
- damage, destroy or obstruct access to bat roosts
- possess or transport a bat or any parts of bats, unless acquired legally
- sell, barter or exchange bats, or parts of bats

In this interpretation, a bat roost is 'any structure or place which any wild animal uses for shelter or protection. Because bats tend to reuse the same roosts, legal opinion is that the roost is protected whether or not the bats are present at the time.

The above interpretation of the bat legislation is abstracted from the Bat Workers Manual; Chapter 1, Bats and the Law by [redacted] with permission of English Nature.

1.5 Great Crested Newt Legislation

The Great Crested Newt (GCN) is protected through the Wildlife and Countryside Act (1981), Habitat Regulations (1994) and Countryside Rights of Way Act (2000). In essence this legislation prohibits the following:

- ***intentional disturbance or harm,***
- ***reckless damage to a breeding site or resting place or a place used for shelter and protection***
- ***intentionally obstructing a place used as shelter***

2.0 METHODOLOGY

2.1 Bat Survey

All structures were surveyed using the following methodology: -

(a) Signs of residency by bat species.* This consisted of a slow, methodical, search both internally and externally, for actual roosting bats and their signs. Droppings on walls, and floors can be used to identify species, and scratch marks and staining at roosts and exit holes, can be used to identify the presence of bats. Similarly, the presence of spider webs at a potential roost can often indicate their absence.

(b) An assessment of the potential of the buildings in the locality to provide a roost, either in the summer (nursery) or winter (hibernation), together with an assessment of the habitat surrounding the proposed development to be used by bats either for foraging or commuting based on over 32 years previous experience of bat occupancy at other sites in Great Britain and under the current Natural England licence No CL00485. (Science and education)

2.2 Great Crested Newt and Common Reptile Survey

All adjacent habitats were surveyed using the following methodology: -

(a) This consisted of an initial desktop assessment looking at Google Earth, Emap Explorer, 1:25000 OS map and Magic.gov followed by a walk over assessment of the habitats present (both aquatic – GCN and terrestrial – GCN and common reptile) based on c16 years working knowledge of the species under the current English Nature license No CLS 0485 and as a committee member of Norfolk Amphibian and Reptile Group (NARG)

Should suitable habitats be present then further surveys in line with the present guidelines may be necessary.

2.3 Weather

SURVEY No	DATE	CONDITIONS	MAX TEMP.	WIND
1	24 Nov 2013	Cold and overcast	8°C	N (1 - 2 Beaufort)
2	26 Nov 2013	Cold but sunny	4°C	NW (1 - 2 Beaufort)

2.4 Limitations of Surveys

The timing of the surveys were considered optimal given the conditions on the ground and no limitations were experienced.

Building No 2 Former Wartime Bunker
A small 2nd World War concrete underground bunker constructed between 1941 and 1942 situated to the west of the main concrete track near the road entrance - c110m from the charcoal clamps (ENE direction). (See lower right and left)



It is of similar size to building No 1 (ie c2m wide x 2.5m high x 12m long) although it differs in having roof vent sealed by a latticed concrete slab, this feature and the



dog-legged doorway ensured complete darkness at the end furthest from the door.

A light meter gave a reading of 0 lumens approximately 1m in from the doorway.

The floor which was accessed via a set of steps was relatively clear of artefacts and covered with approximately 30mm of water thought to have originated via ground water percolating through cracks in the concrete floor which promoted the vital damp internal conditions. Numerous Herald Moths Peacock butterflies and midges were evident on the walls and ceiling.

At approximately 3m from the far end were two hibernating Daubentons, roosting on opposite sides of the bunker on a lip of concrete on the wall. (a product of seepage via the timber shuttering) (See lower right)



Two further bats a third Daubentons and a Natterers were recorded roosting in the lattice work of the concrete slab. (See right page 7) On some concrete slabs below were

approximately 30 old droppings perhaps from a night roost.



The temperature inside the bunker on the second visit was 7.5°c (12.0°c external) with a relative humidity of 75%. (See Figure 3 Appendix III) – **High probability of bat interest.**

3.3 Hibernation Checks

Two of the bats (most likely all) had been present from at least 6 November 2013 when they were observed during a site visit.



It is planned to conduct 2/3 further (monthly) surveys throughout the winter.

3.4 Great Crested Newts (GCN)

Two ponds (Ponds A and B) were recorded within 200m of the proposed development with a further pond at c400m. (See Appendix II - Figure 2)

Whilst the Habitat Suitability Index (HSI) for great crested newts is primarily for use in the summer months it can be used outside this period to roughly assess ponds whilst some accuracy problems will be encountered an indication as to the need for further surveys can be gain. (See Table 1 Appendix V)



3.4.1 Aquatic habitats

Pond A – a small shallow (c300mm deep) figure of eight pond recently excavated by the current owner in 2006 , some vegetation and Toad spawn was introduced shortly after its construction from a large

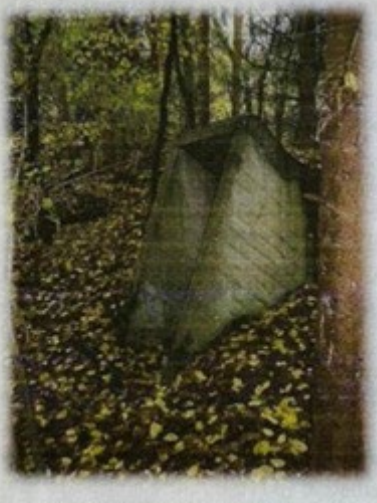
3.1 RESULTS (Bats)

3.2 Building No 1 - Former Wartime Bunker

A small 2nd World War concrete underground bunker constructed between 1941 and 1942 and situated approximately 150mm south-west of the proposed development site (See right and centre left)



It was initially built above



ground with the surrounding soil being partly heaped-up around the structure and measures c 12m long with the internal dimensions of c2m wide x c2.5m high. Internally the bunker was relatively clean and the walls were quite smooth and it appeared to be dry although according to Mr Hollis the bunker had contained a small amount of surface water in the past.

Apart from a south facing doorway a further opening c600mm square was present in the roofline at the opposite end of the bunker - together, both openings gave a high degree of internal illumination and allowed the internal temperature to mirror that of the outside temperature, the rapid through movement of air also had a drying effect.



Whilst in its present condition it is doubtful that it would be used by bats in the winter however it has the potential to be used as a night perch during the summer. – **Low probability of bat interest.**

lake. Whilst Smooth newts (small) have been recorded by the owner the pond does regularly dry out and is occasionally used by Mallards.

The surface was covered by Floating Reed-grass and Creeping Buttercup indicative of its summer status along with Lesser Spearwort and Typha minima. **HSI Score = 0.478 (Poor)**

Pond B - was situated approximately 170m to the north-east although it was dry on the date of the survey and totally overshaded by several Oak and Ash trees along with numerous Willows and would be best described as an enlarged ditch junction.

Due to the lack of water and the dense shade the pond was screen out as having little GCN potential.

A third pond (**Pond C**) was located approximately 400m to the south-east in a section of woodland. It too was thought to be of fairly recent origin being constructed as a 'flight pond' some thirty years ago. Unfortunately as it was on private land it was not surveyed but if as suspected it was constructed for shooting it would most likely have had feeding and high levels of duck usage.

3.4.2 Terrestrial habitats Great Crested Newts

Pond 1 was situated in species poor grassland adjacent to the main ride which would provide a good foraging habitat although relatively isolated from ponds in the surrounding countryside. Pond 2 whilst thought not to have any GCN potential was connected to ditch system and an area of tall herb.

The proposed development site was either predominately scattered ash and willow regeneration along with Hard Rush and Creeping Buttercup dominated grassland in wet clay which became waterlogged during the winter or sparse vegetation under a stand of c50 year old Scots Pine and whilst concreted hard standing was present it was well sealed at the edges buy the weathered clay. Even where the soil had been piled to form a bank the underlying nature of the clay made it unsuitable for GCN hibernation.

3.6 Botanical

The site consisted of four main habitat types **1**. Semi-mature ash/hornbeam secondary woodland; **2**.Scots Pine Plantation; **3**. Species poor calcareous grassland under coppice (rides);. Concrete hard standing/buildings.

As the new pitches are adjacent to the concrete hardstanding the survey effort was focussed in this area.

5.0 RECOMMENDATION

5.1 Introduction

Under the Natural Environment and Rural Communities Act 2006 bio- diversity has to be taken into consideration at all levels of planning and this has been interpretated as a series of wildlife enhancements.

Enhancements for Bats

Building No 1 (Bunker) has the greatest potential for enhancements although Building No 2 could be improved via the introduction of further niches on the walls.

The author has considerable experience in improving underground sites for hibernating bats, the most important being Marlborough Tunnel in Wiltshire and Privet Tunnel in Hampshire and over the past 8 years has been monitoring a new hibernation roost at the Essex and Suffolk Water Treatment Plant at Ormesby in Norfolk.

Light levels and relative humidity along with the provision of roosting niches are the three most important environmental conditions to be considered in providing enhancements for bats in the winter, together with the lack of disturbance.

Due to the method of manufacture the walls of the bunker are relatively smooth and therefore lack irregularities to which the bats can cling. at Marlborough Tunnel off cuts of timber were attached at a slight angle to the to the walls a similar roosting and initiative roosting niche was constructed using corrugated Perspex on a board whereby the bats could be easily recorded. Other niches can be gained via the use of a mixture of bat bricks and Schwegler type bat (woodcrete) boxes. Gates or grills could easily be erected to stop accidental disturbance although as most onsite usage will be by [redacted] immediate family/work colleagues this can be easily controlled. Gates/grills themselves can bring with them a level of disturbance, at a large Daubentons roost in Leicestershire the bats disappeared for several years when the tunnel was grilled despite having approximately 1m of clear space above.

5.2 Follow-up Visits – Bat

The site will be visited during the winter and recording sheets will be placed where droppings have been found monitor usage over the next year to see how much the bunkers are used as a nigh perch during the summer. The information gained will be used to inform the level of enhancements required in building No 1

Data loggers will also be installed in building No 2 and monitored throughout the winter period and the temperature and humidity regimes gained will be replicated in Building No 1.

6.0 APPENDIX

6.1 Review of Bat Ecology

The surveys would indicate use by at least a two species of bat at Spring Wood namely Daubentons and Natterer's. Although the [redacted] regularly see bats foraging along the rides in the summer, these bats are most likely one of the commoner Pispistrelle species (Common or Soprano) which utilise rich invertebrate habitats such as woodland rides from their maternity roost often 2-3km away

All British bats have two main types of roost (a) A summer or maternity roost and (b) A winter or hibernation roost.

Definition - Summer Maternity or Breeding Roost. During late April/May the bats leave their winter roosts and the females come together to form 'maternity roosts'; these usually consist of pregnant females along with a few non-breeding and immature females. At this time the males roost either singly or in small numbers.

The single offspring is born during late June early July and can fly within 3-5 weeks

Typical roost sites are cracks and crevices in buildings and other structures, but more typically under hanging tiles, slates, soffits and cavity walls of fairly modern buildings, or holes and splits in trees.

Definition - Winter or Hibernation Roost

The conditions required by bats for hibernation are the opposite of the warm, dry summer roost, often being cold and wet, and where a relatively stable low temperature ($2 - 6^0$) can be maintained. Suitable sites include old trees, caves, cellars, tunnels and icehouses.

Whilst the summer roosts consists of single species (although 2 – 3 species can be found within one large structure, but occupying separate roost sites), winter sites often consist of 4 – 6 different species of bat, although again there is often niche separation.

The above definitions are at best simplistic; in truth bats have a complex social structure based on 'meta populations' and utilise as many as 20-30 other transitional roost sites throughout the year, many only for 1/2 evenings.

Natterer's Bat

A medium sized and perhaps one of our commoner species after Long-eared bat but being an inhabitant of woodland it is under researched. It is commonly found in

assorted cracks and crevices and rot holes in trees and is often found in the attic spaces of timber framed houses and barns where it uses mortise and tenon joints.

Like other Myotis species they emerge late in the evening and avoid high levels of illumination to forage in a wide range of habitats such as woodland edge and streams and wet meadows feeding on a variety of invertebrates including moths, caddis and spiders many taken from the ground or on vegetation.

In the winter they are the commonest bat found in underground sites (90%) although several Norfolk sites they second to the following species, where they occupy a temperature regime of 5 - 10^{0}

Daubentons Bat. A small/medium sized bat with a strong association to water for foraging where the low skimming flight over the water's surface picking of insects is characteristic. It uses a number of roosting sites ranging from holes and cavities in trees to stone and concrete buildings and bridges although some roosts can be up to 2km away from water especially where trees are involved.

The maternity roosts begin to form during early to mid May after a period of socialising in tunnels and buildings, where concentration of hundreds may be found. They then split into smaller groups to form their maternity roosts, it is now considered that trees are used more that was formerly thought.

The bats emerge later in the evening and are classed as species intolerant of high levels of artificial night lighting and during the early part of the evening may forage under the darkened tree canopy with the characteristic low skimming flight being adopted c60-80 minutes after sunset. They take a variety of emerging aquatic invertebrates such as midges mayflies and caddis.

They are often found underground in mines tunnels and caves in hibernation where they occupy a temperature regime of 5^{0}c - 8^{0}c.

The Pipistrelle Bat

One of our smallest and commonest bat species, which has only recently been split into two separate species, Pipistrellus pipistellus and P. pygmaeyus, which have been found to have differing ecological niches.

In summer, large nursery colonies are found in the cracks and crevices of modern houses where the single offspring is born during late June and early July. Typical roosts are under the soffit and bargeboards, cavity wall, under hanging tiles and under loose lead flashing, but not normally within an attic space.

The nursery roosts consists of mainly pregnant female bats and a few immature females and can number up to hundreds, but 20-30 is a more normal figure. The

male bats are often found either singly or in small numbers, more often away from the breeding roost. Pipistrelles more than any other species will 'light sample, whereby they emerge early dusk an fly inside an open building with occasional forays outside to check on the light levels - this may be carried out for 10/15 minutes until a suitable level of darkness is achieved.

As with all bats their hibernation (winter) requirement is the opposite from the summer. In the summer their roosts are warm and dry, in the winter they are cold and damp.

In hibernation Pipistrelle bats are often found roost singly or in small numbers, although occasionally fairly large numbers have been found, where they are associated with a variety of habitats within buildings.

As their winter roosts are located deep within cavity walls, between tiles and felt or behind loose plaster or skirting board or panelling, they are difficult to locate.

Whilst in such locations their presence is only discovered by building workers during demolition and refurbishment.

6.2 Review of GCN Ecology

Introduction

Whilst considered an aquatic creature great crested newts in fact only use the pond environment for a short period every year to breed. They leave their winter hibernation site in late February when the evening air temperature is above about 5^0c and enter suitable breeding ponds, the males first later followed by the females and immature.

A good breeding pond is not too shaded with a good invertebrate life and abundant vegetation especially species such as water mint and water forgetmenot. These soft leaved plants are chosen by the female for egg laying and each egg is carefully attached and the leaf is the folded to form a protective envelope. Hatching is weather dependant so warm sunny shallows are often a favoured place. The young newts – efts – are vulnerable to predation at this time by fish and large water beetles etc therefore a fishless pond is most important and one which occasionally dries out – therefore a group of ponds in a particular habitat are important.

By mid/late July many of the newts will have left the pond and will be found in pasture or woodland edges with abundant cover and places such as tree roots and log piles for shelter and in autumn the young newts will also leave the pond and will live in the locality for several years before visiting the pond as an immature newt.

APPENDIX III

FIGURE 3 - SURVEY RESULTS BUILDING No 2

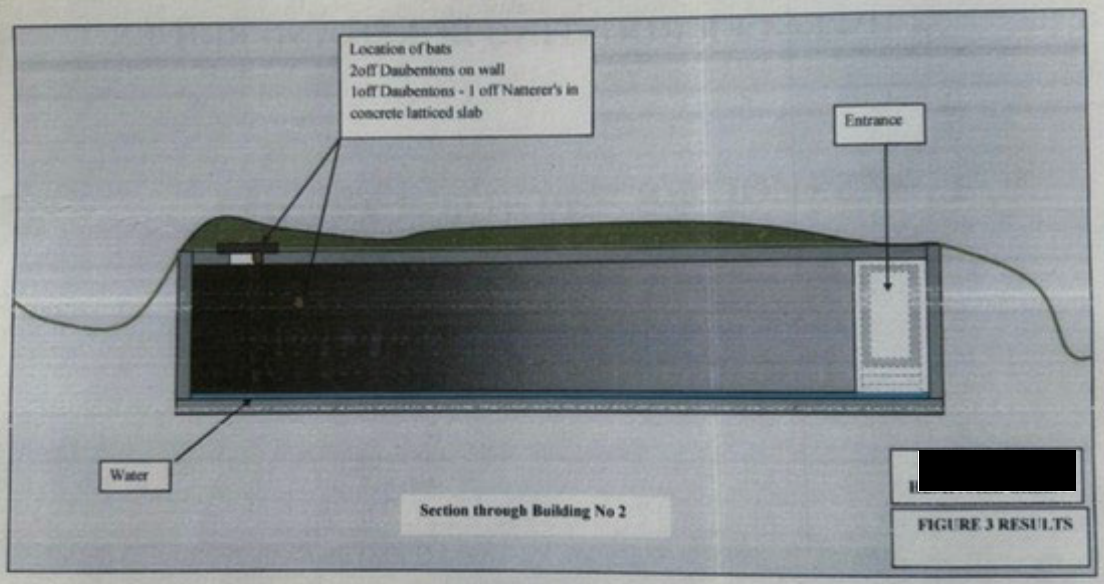


FIGURE 3 RESULTS

FREETHS

Freeth Cartwright LLP

For the attention of [redacted]
Development and Environment
South Norfolk Council
Long Stratton
Norwich
NR15 2XE

Freeth Cartwright LLP
Solicitors

Cumberland Court
80 Mount Street
Nottingham NG1 6HH
United Kingdom

DX 10039 Nottingham 1

20 December 2013

Our Ref:
Your Ref 2013/1630

Dear [redacted]

We act on behalf of The Norfolk Bat Group who have instructed us to review and provide advice on matters relating to planning application 2013/1630. We have been in receipt of the application and have reviewed the documentation and in particular the ecological matters.

In light of this review, it is apparent that the area including the application site contains the hibernation roosts of at least two bat species. The application site forms part of the Spring Wood County Wildlife Site (CWS 90), and is recognised as an important roosting and hibernating site for several European Protected Species of bat. Since at least 1980 enhanced bat hibernation sites have been established as close as 50 metres from the development, reaffirming the bats ever presence within the area. The South Norfolk Council Ecologist Nick Bolton has confirmed a significant bat roost is also located within 110m of the location of the charcoal clamps. The species identified can fly several kilometres from their roost and therefore activities on the application site are considered likely to disturb the bats particularly while they are feeding.

There is a further issue surrounding the presence of protected Great Crested Newts which are listed as a priority species under the UK BAP. The District Ecologist suggests the pond on site scores below average for great crested newts in a Habitat Suitability Index assessment, although this has not been made available. However, the advice from the retained ecologist for SNDC acknowledges this would not preclude the presence of the species from the site.

All UK bats are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of The Conservation

Freeth Cartwright LLP is a limited liability partnership, registered in England and Wales, partnership number OC304688.

Registered Office - Cumberland Court, 80 Mount Street, Nottingham NG1 6HH.

Authorised and regulated by the Solicitors Regulation Authority.

A list of the members of Freeth Cartwright LLP is available for inspection at the registered office.

Freeths LLP is a limited liability partnership, registered in England and Wales, partnership number [illegible]
Authorised and regulated by the Solicitors Regulation Authority. A full list of the [illegible]

INVESTORS IN PEOPLE

Lexcel
Law Society Accredited

of Habitats and Species Regulations 2010 making all species of the bat European Protected Species. The great crested newt is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of The Conservation of Habitats and Species Regulations 2010 (as amended) making it a European Protected Species.

Furthermore, where European Protected Species may be affected by the proposed development, planning authorities ***must***, pursuant to their duty under regulation 9 of the Conservation of Habitats and Species Regulations 2010 (the 'Habitats Regulations') have regard to the requirements of the Habitats Directive. Therefore, we wish to draw your attention to the relevant case law of *Woolley v Cheshire East Borough Council* [2009] EWHC 1227 (Admin) and *Morge v Hampshire County Council* [2009] EWHC 2940 (Admin), where the High Court ruled planning authorities must have regard to the provisions of Article 16 (1) of the Directive prior to granting planning permission.

We note that an ecological survey, '*Spring Wood, Spring Lane, Hempnall Green: A protected species survey 2013*' has been submitted for Nick Bolton to review. However this document, which forms part of the planning application and is a public document, is not available to view on the Council's website. We therefore request a copy is made available to the public immediately. Furthermore, reviewing the consultation responses in relation to this document, it is apparent that it is only an assessment of the potential impact the development may have on the protected species in which it relates, and not a full and comprehensive survey, as survey works are restricted to specific times of the year.

As a result it is not possible from the information and assessments carried out so far in relation to this proposal to assess the full impact on protected species. Consequently, it will not be possible for the planning authority to have proper regard to the provisions of the law quoted above in the absence of complete and up to date survey information, and therefore a lawful assessment of the application 2013/1630 cannot currently be made by the local planning authority.

We would therefore request that the application is withdrawn until a full and comprehensive ecological survey has been completed at an optimal time of year and submitted to the Council for consideration or alternatively, as the local planning authority cannot lawfully grant legal planning permission, and the application should be refused.

We look forward to receiving your confirmation that the application has been either withdrawn or will be refused.

Yours sincerely

[redacted]
Head of Planning and Environment Group
Freeth Cartwright LLP

Freeth Cartwright LLP

Freeth Cartwright LLP
Solicitors

Cumberland Court
80 Mount Street
Nottingham NG1 6HH
United Kingdom

DX 10039 Nottingham 1

Freeth Cartwright LLP is a limited liability partnership, registered in England and Wales, partnership number OC304688.

Registered Office - Cumberland Court, 80 Mount Street, Nottingham NG1 6HH.

Authorised and regulated by the Solicitors Regulation Authority.

A full list of the members of Freeth Cartwright LLP is available for inspection at the registered office.

INVESTORS IN PEOPLE

Lexcel Practice Management Standard Law Society Accredited

FREETHS

For the attention of [redacted]
Head of Planning
Development and Environment
South Norfolk District Council
Long Stratton
Norwich
NR15 2XE

By post and email

16 January 2014

Our Ref: PAS/1776
Your Ref 2013/1630

Dear [redacted]

PLANNING APPLICATION 2013/1630
RETROSPECTIVE APPLICATION FOR CHANGE OF USE OF LAND TO RETAIN EXITING FORESTRY ACCOMODATION (2 NO CARAVANS) AND DEVELOP 4 TRAVELLER PITCES TO ENABLE STATIONING OF A MAXIMUM OF 8 NO CARAVANS, [redacted]

We write on behalf of the Norfolk Bat Group and further to our letter to the Council dated 20 December 2013 (to which we note we have not had any response).

We have now had an opportunity to review the applicant's "Protected Species Assessment" report dated November 2013 (**"Report"**) which was posted on the Council's website on 24 December 2013 following our letter to the Council dated 20 December 2013.

Summary

As you are aware South Norfolk District Council is under a legal duty, set out in regulation 9(3) of the Conservation of Habitats and Species Regulations 2010, to have regard to the Habitats and Birds Directives when determining the above planning application.

Following the 2011 Supreme Court decision in *Morge vs Hampshire County Council*, which considered this duty in some detail in a planning context, the Council must not grant planning permission where it considers that an offence against a European Protected Species is likely and where the grant of a Natural England (**"NE"**) licence is unlikely. As confirmed by NE's standing advice (as found on NE's website, eg the flow chart entitled "Guidance on how to assess a bat survey and mitigation strategy"), the Council must therefore make an assessment of the likelihood of any offence against a European Protected Species being triggered, having first obtained sufficient survey work and undertaken a suitable assessment in accordance with good practice guidelines.

Freeths LLP is a limited liability partnership, registered in England and Wales, partnership number OC 304688. Registered Office: Cumberland Court, 80 Mount Street, Nottingham NG1 6HH. Authorised and regulated by the Solicitors Regulation Authority. A full list of the members of Freeths LLP is available for inspection at the registered office.

The Council is at present not in a position lawfully to grant planning permission in respect of this application. The ecological survey information provided to date is deficient. If the Council wishes to determine this application before sufficient survey information has been provided then it has no choice but to refuse permission. We have advised our client that if the Council were to proceed and grant planning permission based on the survey information provided to date, the decision would, upon application for judicial review, be quashed by the Court.

Our conversation with the planning officer, [redacted] on 6 January 2014 indicated that she regards the ecological issues in this case as somewhat secondary given other concerns regarding the principle of the development. In view of this she has said that she is not inclined to request further survey information from the applicant due to the associated cost. This is a misguided approach. In the absence of further survey information the Council has no choice but to refuse this planning application on ecological grounds (whether or not there may be other grounds for refusal). It will be significantly cheaper for the applicant to carry out sufficient surveying as is required over the coming summer, than be forced to (i) appeal against the Council's refusal; or (ii) (if the Council ignores this letter and grants permission) fight judicial review proceedings brought against the Council in respect of its unlawful decision.

Detailed comments relating to bats

The survey information provided to date in relation to bats is inadequate. As such the requirement on the Council to make an informed assessment of the likelihood of an offence to bats arising from the proposed development cannot be made and its regulation 9(3) duty cannot be discharged. Specifically:

- The information presented in the Report presents results of a hibernation survey only. Two key gaps arise: no survey information has been presented in relation to the presence or absence of maternity roosts in or near to the development site; and no survey information has been presented which allows assessment of summer time bat disturbance, habitat loss or summer time flight path severance.

- As such the requirements of Natural England's Standing Advice are not met. Natural England's standing advice Species Sheet on Bats states:

  under "4. Survey Requirements", "there must be sufficient information supplied to understand *the nature of impacts and their likely effect on the conservation status of the species concerned*" (my emphasis added); and

  under "Guidance on how to assess a bat survey and mitigation strategy", "Has sufficient survey work and suitable assessment work been undertaken.....This should be sufficient to determine (i) presence or absence of roosts and, if present, (ii) roost status (iii) species affected. It should also be sufficient to assess *direct and indirect impacts on bats and their breeding sites and resting places within and outside the application site, including disturbance, habitat loss and severance*" (my emphasis added).

- These gaps are particularly significant given the nature of the proposed development. For this planning application, disturbance of bats using the woodland is likely to be the key issue. Disturbance factors (noise, lighting, vibration, fumes) will increase with the increased human activity arising from the proposed development (the applicant seeks permission for up to 8 additional caravans (presumably to be occupied by families), in addition to the continuation of his own activities). The impact of these factors on bats cannot be assessed without information about how bats use the woodland for foraging, travelling, light sampling and maternity roosts during the summer (when they are out of hibernation), particularly the area of the woodland within / near to which the development is to be located. If, for example, bats regularly use a flight line along the existing access road to the development site, which is perfectly likely given bats' behaviour, then the additional lighting, noise, fumes and traffic vibration arising from the development could well amount to a "deliberate disturbance" of the species (a relevant criminal offence). It is also understood from our client that there are mature trees in the ancient woodland site to the west of the application site which are known to provide feeding habitat and contain summer (maternity or other) bat roosts, in particular for the rare Barbastelle bat (*Barbastella barbastellus*).

- Summer surveys must therefore be undertaken prior to the determination of this application, in accordance with the recognised guidance.

Detailed comments relating to great crested newts

The survey information provided to date in relation to GCN is also inadequate. Any grant by the Council of planning permission in respect of this application, prior to provision of spring time GCN population assessment surveys, would be unlawful because its regulation 9(3) duty cannot be discharged.

- No surveys to assess presence / absence of GCN or to assess population size in ponds have been undertaken. This is despite the existence of three ponds noted in the Report, all of which are stated to be within 500m of the development site (or where the Report has provided no distance it can be assumed from the text / Figure 2 that this is so). As is evidenced by the Great Crested Newt Mitigation Guidelines and NE's Standing Advice Species Sheet on GCN (section 4.1), NE expects ponds within 500m of a development site to be surveyed.

- A fourth pond is also present at reference TM25139183, approximately 155m south east of the development site. This is however not mentioned in the Report. This is a significant omission.

- Two of the three ponds noted in the Report are stated to be within 170m of the development site and one of these (Pond A) appears from Figure 2 to be extremely close to the development site. Furthermore Pond A is stated to contain smooth newts, so it is clearly suitable for amphibians.

- The Report comments that, following the HSI method, the three ponds noted are of poor quality. By contrast the Great Crested Newt Mitigation Guidelines state "*ponds should not be excluded* [from surveying] *simply because they appear superficially unsuitable; even heavily shaded ponds may still support newts..*" (pg 22). In addition the Forestry

- Commission / NE Guidance on managing GCN in woodland in England (dated 8 October 2013) sates that "*The HSI is not a replacement for newt surveys.*"

- Most significantly, both the Report (section 4.2) and [redacted] (the Council's ecologist) acknowledge that a low density of GCN may be present in the ponds. [redacted] states "*The ponds on site scored below average for GCN in the habitat suitability index. This does not necessarily mean that that they are not present but it is believed that this would be in small numbers*" (see his memorandum dated 16 December 2013). [redacted] memorandum goes on to say that "*If any great crested newts are found during construction works, then an ecologist should be contacted immediately*". A Court would regard as both irrational and contrary to regulation 9(3) a position where the Council on the one hand acknowledges the risk of low numbers of GCN and yet on the other hand grants consent without obtaining full survey information to quantify the population size and the risk of offences occurring.

- The reasons given in section 4.2 of the Report, for the conclusion that that the proposed caravan standings would have no effect on GCN, do not stand up to scrutiny. Pond A is extremely close to caravan standings and as noted above the Report acknowledges that GCN could be present in all the ponds, including Pond A (which is also stated to be suitable for amphibians). The Report also takes the view that the threshold for determining an effect on GCN is a "*high level of disturbance*" (para 4.2, 2nd bullet) but this alone is not sufficient. It ignores the other risks of deliberately killing a GCN or deliberately injuring a GCN or damage or destruction of resting places of GCN, all of which are also criminal offences.

- Pond A in this case is within 100m of the development site. Natural England's / the Forestry Commission's Guidance on managing GCN in woodland in England dated 8 October 2013 (at sections 3.4 and 3.5) sets a threshold that unlicensed construction or ground works may only occur beyond 100m of any pond because such works are considered to "*constitute an offence or carry a significant risk of committing an offence*". Therefore the Report's conclusion at para 4.2 that "*it is thought highly unlikely that newts would be present in the proposed development area*" is contrary to this guidance.

- Finally, a GCN was found by [redacted] (in the presence of witnesses) under a piece of concrete in the woodland within 1km of the development site on 16 November 2013. Therefore GCN are clearly present in the vicinity.

Further shortcomings of the Report

Finally, in addition to the above, there are further shortcomings of the Report which are far from helpful:

- There is confusion over which ponds are Ponds A, B and C (see section 3.4 in relation to Figure 2) and how these relate to Ponds 1 and 2 (referred to in section 3.4.2).

- There is also confusion over which buildings are buildings 1 and 2 (see section 4.1 in relation to Figure 2).

- Some of the photographs used to show Buildings 1 and 2 in the text of the Report appear to be the same location.

These shortcomings do nothing to inspire confidence in the quality of the assessment presented.

Conclusion

In the light of this letter, please now respond to us to confirm that the Council will:

- refuse the planning application (or if the determination is to be made by Committee recommend to Committee that this planning application be refused) on ecological grounds, whether or not other grounds for refusal also exist; or

- request the applicant to provide further survey information as is required and prior to the Council's determination of this application.

We reserve our position in relation to the likely impact on bats and GCN from the proposed development, which our client intends to consider and present to you in full detail once adequate survey information to inform that assessment has been presented by the applicant.

Yours sincerely

[redacted]

cc. [redacted]s-norfolk.gov.uk)
[redacted]@norfolk.gov.uk)

Result: The caravans were retained but the four traveller pitches were withdrawn.

Spoken Representation by Dr Annetta Berry ([redacted]) at OFH1.

Good afternoon. My name is Annetta Berry. I am speaking today in my personal capacity as a local resident.

I object to East Pye Solar in its entirety. Like Norfolk Wildlife Trust, I believe it seeks to reshape our 'nature dense' landscape and poses a risk to the nationally important ecological network of South Norfolk. I am particularly concerned about bats.

I live near Spring Wood, adjoining Site 3. Spring Wood is an area of ancient replanted woodland and occupies part of the former Second World War airfield at RAF and USAAF Hardwick.

The northern edge of Spring Wood, which directly adjoins Site 3, was the location of the former heavy bomb dump. A number of underground wartime bunkers survive within this area. Approximately thirty years ago, those bunkers were deliberately converted by [redacted] of the Norfolk Bat Group for use as bat hibernacula. [redacted] has given me all of his records relating to the site in an effort to protect this habitat.

Spring Wood is bat habitat which has been deliberately protected and enhanced over decades for the benefit of rare bats, within a wider landscape of ancient woodland, historic hedgerows, dark skies and feeding habitat. It is also home to Barbastelles.

The Spring Wood hibernacula support Daubenton's and Natterer's bats, both members of the Myotis genus.[1] Tinsley et al. publishing in the *Journal of Applied Ecology* (2023)[2] found statistically significantly lower activity of Myotis bats along field boundaries at solar PV sites than at matched control sites. A further study by Barré et al., published in the same journal in 2024,[3] found reduced feeding-habitat quality and altered flight and feeding behaviour at solar farms, and specifically concluded that the mitigation hierarchy should begin by avoiding such sites. A subsequent BSG Ecology review in January 2024[4] also advised that solar

[1] Norfolk Biodiversity information Service also records soprano pipistrelle and common pipistrelle at site 3.

[2] Findings: The activity of six of eight species/species groups analysed was negatively affected by solar PV panels, suggesting that loss and/or fragmentation of foraging/commuting habitat is caused by ground-mounted solar PV panels. Activity of *Myotis* and serotine was reduced at boundaries. Activity of *Plecotus* and soprano pipistrelle was reduced in field centres. Activity of *Nyctalus* and common pipistrelle was reduced at both landscape locations. Mean activity for these species at solar sites vs control sites was up to 7.3 x lower (common pipistrelle in open habitats). Tinsley, E., Froidevaux, J. S. P., Zsebők, S., Szabadi, K. L., & Jones, G. (2023). 'Renewable energies and biodiversity: Impact of ground-mounted solar photovoltaic sites on bat activity'. *Journal of Applied Ecology*, 60, 1752–1762. https://doi.org/10.1111/1365-2664.14474.. E. Tinsley PhD University of Bristol, 2024 Abstract quote: 'Abstract Summary: There needs to be a nationally coordinated approach to avoid siting solar farms in areas which are ecologically sensitive'.

[3] Barré, K., Baudouin, A., Froidevaux, J. S. P., Chartendrault, V., & Kerbiriou, C. (2024). 'Insectivorous bats alter their flight and feeding behaviour at ground-mounted solar farms.' *Journal of Applied Ecology*, 61, 328–339. https://doi.org/10.1111/1365-2664.14555

[4] BSG Ecology 11 Jan 2024 'Do Solar Farms Affect Foraging & Commuting Bats?' This was an opinion piece on the Tinsley research.

infrastructure should be sensitively located away from valuable bat foraging habitat and known roosts.

The Applicant's own surveys identify the wider East Pye landscape as of national importance for bats, with Annex II European Protected Species, barbastelles the third most prevalent species and found at every survey site. Surveys by the Norfolk Barbastelle Study Group reveal multiple maternity colonies of barbastelles across this same landscape with core sustenance zones overlapping the entire scheme footprint.

It is unclear how favourable conservation status for bats can be maintained in the face of the landscape-wide threat of this scheme. Norfolk Wildlife Trust has already recommended removal of Site 3 from the development both at statutory consultation and in its relevant representation. The Applicant has not accepted that recommendation; it continues to rely instead upon buffers, and later detailed design. It contradicts itself in describing the current habitat as 'sub-optimal' yet also admits it is of national importance for bats.

I therefore respectfully ask the Examining Authority to require the Applicant to explain why solar-generating infrastructure remains proposed immediately beside a long-established bat hibernation site, within a wider landscape already recognised as of national importance for bats, when the majority of peer-reviewed research suggests this will be detrimental to bats.

It is my submission that East Pye Solar in its entirely should be rejected. However, if the wider East Pye Solar Scheme were otherwise to proceed, I respectfully submit that Site 3 should be secured as a coherent area of permanent bat habitat protection, restoration and enhancement.

I would also ask the Examining Authority to seek Natural England's express view on that approach and to require a proper assessment of the functional role of Spring Wood, the hibernacula and Site 3 within the wider bat population before any conclusion is reached that development here can safely be mitigated.

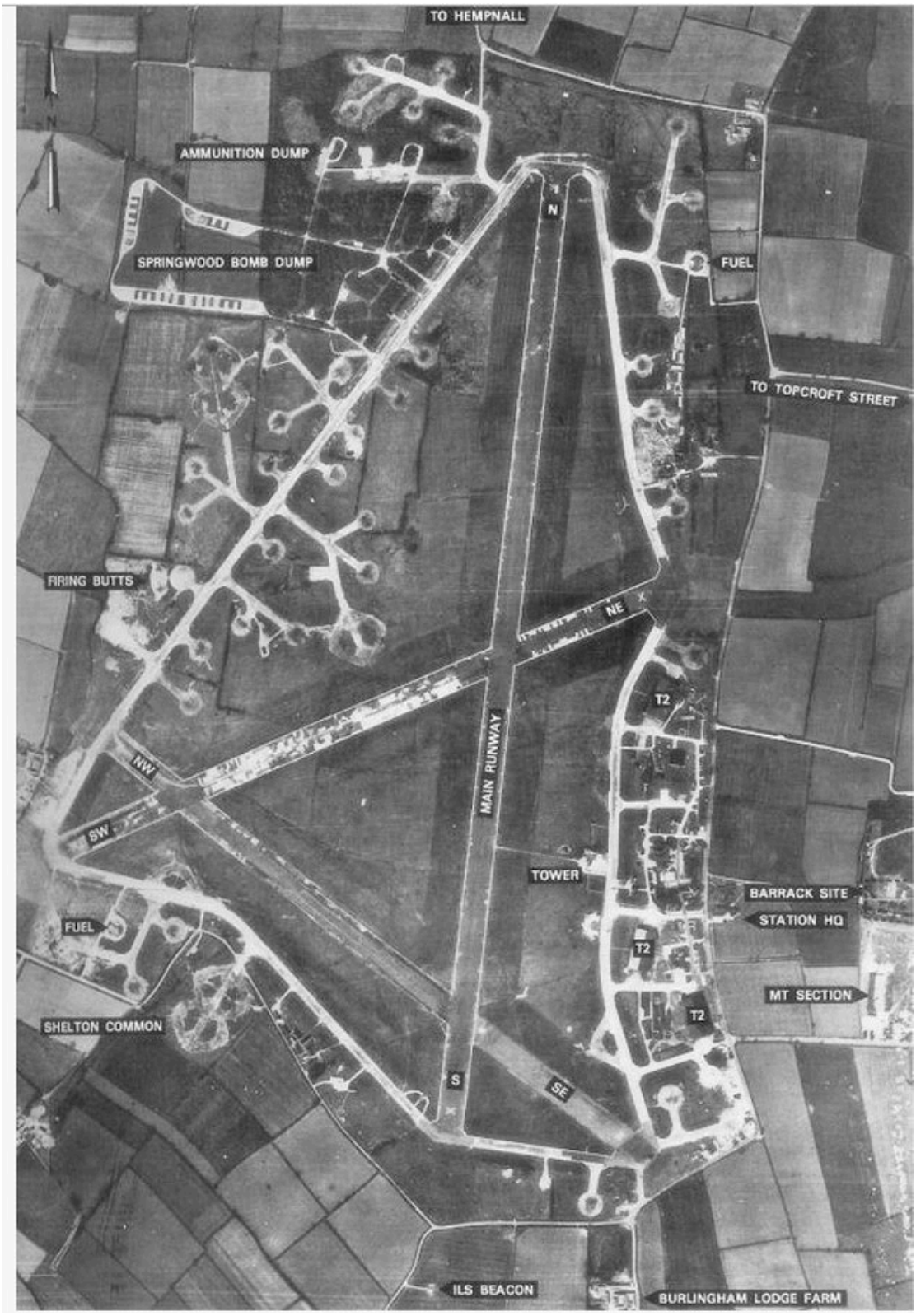
This is a location where habitat has already been protected deliberately for decades. In my submission, the appropriate response is not to disturb that habitat and then attempt to compensate for the consequences. It is to avoid the harm in the first place.

Thank you.

Photos and maps on following pages.



Image: WWII Bunker at Spring Wood converted to a bat hibernaculum by Norfolk Bat Group. Image Copyright [redacted]. Records from [redacted], who did this installation and subsequently monitored it, to follow at deadline 1.



Hardwick Airfield 16 April 1946 showing bomb loading locations (associated bunkers beneath) along the north-western edge of Spring Wood.

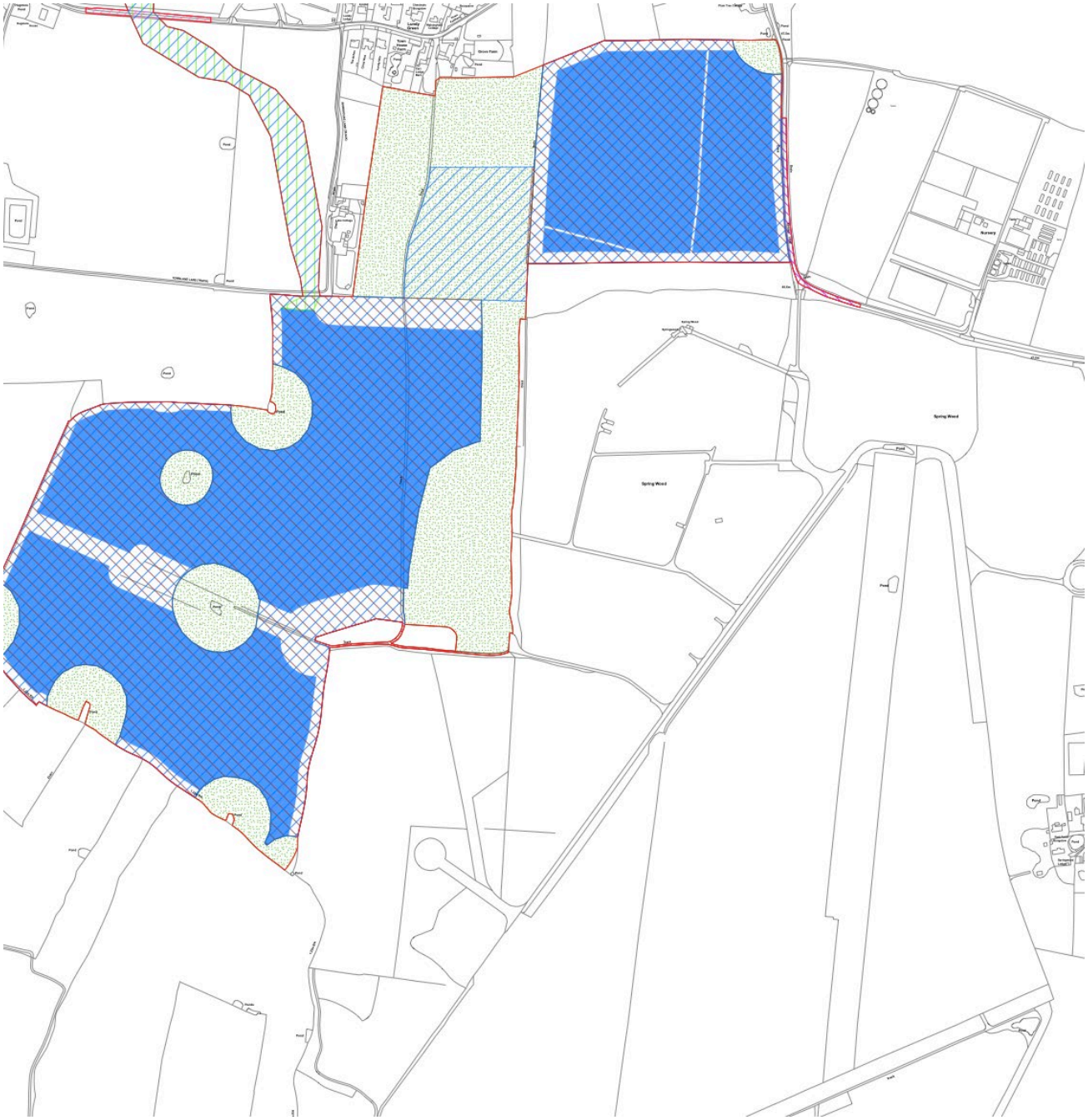


Image: Proposed siting of solar infrastructure on site 3, immediately adjacent to bat hibernacula.

From: [redacted]
To: East Pye Solar; info@eastpyesolar.co.uk
Cc: [redacted]
Subject: Schipol Airport Glint and Glare
Date: 17 September 2026 17:52:00

Dear East Pye Solar,

Following on from my reference in the hearing this afternoon about glint and glare and Schipol/Amsterdam Airport, I attach the below summary.

I am surprised you were unaware of this example as I also discussed it in my response to Statutory Consultation over a year ago. Here it is again.

I also copy in the ExA to this email so they have access to the same information. [redacted] (GAAC) and I discussed the Schipol case at the time, but I am copying her in here as well so she is also aware you have been sent this same evidence yet again.

Best wishes,
Annetta Berry.

The Schiphol Case: Summary of the Enforcement

In early 2025, Schiphol Airport identified significant glare incidents originating from the De Groene Energie Corridor (DGEC) solar park, located adjacent to the airport's operational flight paths. The facility, comprising nearly 230,000 solar panels, was designed to deliver sustainable energy to local infrastructure but had not been adequately assessed for aviation glint and glare risks.

Glare from the panels was reported by pilots and air traffic controllers during morning and afternoon hours, with particular issues affecting operations on the Polderbaan and Zwanenburgbaan runways. In March 2025, Schiphol was forced to close the Polderbaan runway daily between 10 a.m. and 12 p.m. due to the visibility hazard. The airport subsequently warned that continued glare could jeopardise operations from late August 2025 onward, **potentially incurring over €300 million in economic losses**.

Following legal proceedings, a Dutch court ordered the removal of 78,000 panels in two phases - half by 1 September and the remainder by 15 October 2025. Despite the operators proposing mitigation measures, including the application of anti-reflective film, Schiphol and the court determined that removal was the only viable solution to eliminate the risk to aviation safety.

The enforcement underscores the need for comprehensive glint and glare assessments prior to approval and installation of solar energy developments in the vicinity of airports.