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8110: GREAT WILSEY PARK, HAVERHILL

ECOLOGY SURVEYS UPDATE AND REVIEW OF CONDITION 4 OF DC/15/2151/OUT APRIL 2019

Introduction

1. Ecology Solutions was instructed by Redrow Homes in October 2018 to address the requirements of a series of planning conditions prior to reserved matters applications for the development of the site at Great Wilsey Park, Haverhill, Suffolk.

2. It is noted that Condition 4 of DC/15/2151/OUT is concerned with supplementary ecological surveys. The condition is as follows:

   Any reserved matters planning application shall be supported by further supplementary ecological surveys to inform the preparation and implementation of corresponding phases of ecological measures required by the Environmental Statement. The supplementary surveys shall be of an appropriate type for the habitats and/or species affected by the proposals and survey methods shall follow national good practice guidelines.

   Reason: To ensure that wildlife habitats and protected species are not affected adversely by the development.

3. A large amount of existing survey data accompanied the Environmental Statement (ES) and ES Addendum, which dates from 2014 and 2015. This has been reviewed in as part of Ecology Solutions' preparation for the project.

4. The following work has been undertaken by Ecology Solutions since instruction:

   - Badger monitoring;
   - Bat activity surveys;
   - Dormouse surveys;
   - Wintering bird surveys;
   - Breeding bird surveys; and
   - Review of background information.

5. This briefing note summarises the results observed during the surveys undertaken to date and the forthcoming work to be completed in 2018 / 19. The results of surveys completed by FPCR in 2014 and 2015 are also summarised.

A future programme of monitoring is also proposed, and this discussed further below.

6. The purpose of the note is to demonstrate that a significant knowledge base already exists, and consequently the ecological interest of the site and the effects of the proposed development are well understood. A comprehensive mitigation and monitoring strategy is proposed, based on the approved measures submitted with the outline application, which underwent detailed scrutiny. It is therefore not necessary to update all of the existing survey information prior to submission of reserved matters applications. This position is set out below, with reference to relevant guidance published by Natural England.

Natural England Policy 4

7. In December 2016, following extensive consultation, Natural England published a series of new policies to be applied to European Protected Species (EPS) licence applications. Of these, Policy 4 is relevant for the current purpose:

Natural England will be expected to ensure that licensing decisions are properly supported by survey information, taking into account industry standards and guidelines. It may, however, accept a lower than standard survey effort where: the costs or delays associated with carrying out standard survey requirements would be disproportionate to the additional certainty that it would bring; the ecological impacts of development can be predicted with sufficient certainty; and mitigation or compensation will ensure that the licensed activity does not detrimentally affect the conservation status of the local population of any EPS.

8. The views of the statutory nature conservation agency are clearly defined on this point, and it is reasonable to attach significant weight to them when considering the need for comprehensive updates to survey work. Policy 4 is specifically concerned with EPS licence applications, but nonetheless the principles hold true for more general planning purposes.

9. While the rationale for Condition 4 is understood, it is unreasonable to expect to delay the reserved matters applications significantly, potentially until August / September 2019, to allow the surveys to be fully updated, particularly since this is not likely to deliver results that are significantly different to the information in hand. Moreover, the mitigation strategy set out in the outline application is wide-ranging and robust, is being adopted for the reserved matters applications, and the results of new surveys are not likely to alter it significantly.

10. This note will show that:

- the costs or delays associated with carrying out further surveys required by Condition 4 would be disproportionate to the additional certainty that they would bring;
- the ecological impacts of development can be predicted with sufficient certainty; and
- mitigation or compensation will ensure that the development will not detrimentally affect the conservation status of local populations or the ecological interest of notable habitats.

Habitats

Ecology Solutions

11. A walkover survey of the site was undertaken by Ecology Solutions in October 2018, with further checks of the woodland habitats in November and December 2018.

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12. The outline application was supported by a full extended phase 1 habitat survey initially undertaken in 2014 but later updated in 2015.

Current Position and Further Work

13. It is clear that there has been no change to nature of the habitats present and their management in the intervening period. There is no requirement for further detailed survey work.

14. The habitats of ecological interest, namely the woodland, watercourse and hedgerows, are being retained and incorporated into the green infrastructure strategy, as part of which they will be enhanced and managed. The ecological effects of the proposed development are well understood, and further survey work would not alter the approach that is being taken. The strategy proposed will ensure that the ecological interest of the notable habitats present is fully safeguarded and enhanced during construction and operation.

Bats

Ecology Solutions

18. Bat activity surveys were carried out in October 2018. The survey on 17 October covered the southern area while that on 23 October focused on the north of the site.

19. The activity surveys recorded a low level of activity. Areas shown to be of greater interest for bats are Great Field Plantation and Hedgerow H4 in the south of the site. Species recorded during the activity surveys include Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Noctule Bat *Nyctalus noctula*, Brown Long-eared Bat *Plecotus auritus* and Barbastelle *Barbastella barbastellus*.

20. The activity surveys were bolstered by the deployment of four remote detectors across the site for five consecutive nights. The transects taken by the surveyors, as well as the locations of the static detectors are shown on Plan ECO1. Analysis of the results found that the same bat species were recorded as in the activity surveys, with the addition of *Myotis* sp. and *Nyctalus* sp.

FPCR

21. The results of the activity surveys completed by FPCR in 2014 and 2015 showed that a similar assemblage of bats was recorded. Surveys were undertaken in April, June, July, August and September 2014 and April, May, June, July, August and September 2015 across the wider site. Within the Redrow site activity was highest on the boundary features in the south and around the central woodland block in surveys completed in 2014. Common Pipistrelle, Soprano Pipistrelle, Barbastelle, Noctule, *Myotis* sp. and Brown Long-eared Bat were all recorded. The same species were recorded in 2015 with the boundary features in the south of the site as well as the central woodland block again displaying the most activity.

22. Static detectors were deployed across the site monthly from April to September 2014 and April to July 2015. The same species were recorded as that of the activity surveys with the addition of Nathusius' Pipistrelle *Pipistrellus nathusii* and Serotine *Eptesicus serotinus*. During the 2014 and 2015 static detector surveys the dominant species recorded was Common Pipistrelle, with Soprano Pipistrelle the second most frequently recorded species and Barbastelle the third most commonly recorded species.

23. Several trees were noted to possess potential roost features, three of which were found to contain roosts. A Pipistrelle species hibernation roost was identified within tree T28. Trees T44 and T49 were found to support bat roosts but the species was not identified from eDNA testing. Nocturnal surveys concluded that T49 was used as a roost by Soprano Pipistrelle.

Current Position and Further Work

24. All mature trees with potential roost features are to be retained as part of the proposed development, though some tree climbing surveys will be undertaken where necessary over winter 2018/19 to check the findings of the earlier work. A full review of the activity survey work, including the deployment of remote detectors, will be completed as part of the monitoring strategy in 2019. All survey

work has been and will be undertaken in line with the Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines*.

25. The comprehensive series of surveys completed to inform the outline application identified an assemblage of species, including the relatively rare Barbastelle. The mitigation strategy devised for the outline scheme and approved by the LPA took full account of the presence of bats, and included measures specifically designed to retain and encourage the bat interest within the site. In addition to the green infrastructure network, these measures include a lighting strategy, provision of hop-overs where new roads cross existing and proposed landscape features (e.g. hedgerows and the new green spine), and a series of bat boxes. These measures have been recognised and adopted by the project team as part of the reserved matters applications.

26. A monitoring programme has been commenced and will be completed in spring and summer 2019. However, it is considered very unlikely that the results obtained will be significantly different from the earlier work completed by FPCR and indeed by Ecology Solutions in October 2018. The mitigation and enhancement strategy proposed is already of a very high standard, fully adopting the approved measures of the outline consent, and thus even if unexpected results were obtained the mitigation strategy is not likely to be amended significantly.

27. Overall, it is considered that the ecological effects of the proposed development can be predicted with sufficient certainty on the basis of the information in hand, and that the mitigation strategy proposed will ensure that the favourable conservation status of the local bat populations is not adversely affected.

Dormice

Ecology Solutions

28. Dormouse *Muscardinus avellanarius* nest tube and box surveys were completed in October and November 2018, in line with the survey methods described in the *Dormouse Conservation Handbook*. In addition, four Dormouse footprint tunnel surveys were completed across October and November, using the Suffolk Wildlife Trust methodology published in the September 2018 issue of CIEEM's *In Practice*. In the Suffolk Wildlife Trust study, the footprint tube methodology was shown to have a higher detection rate than nest tubes and boxes in hedgerow and scrub habitats. Moreover, it is noted that notwithstanding its low index score in the *Dormouse Conservation Handbook* methodology, October is a month in which Dormice are often detected if they are present on a given site. No evidence of Dormice was recorded in Ecology Solutions' surveys. The locations of the nest tubes, boxes and footprint tunnels are shown on Plan ECO2.

FPCR

29. A partial Dormouse nest was recorded to the southeast of the wider site in September 2015, approximately 0.6km to the southeast of the Redrow site at its closest point. The nest was still present in October when the tubes were collected; no evidence of Dormice was ever recorded in the Redrow site in work to inform the outline application.

30. A total of 381 nesting tubes were deployed across the wider site in suitable habitats in line with the approved survey methodology. Surveys were completed

in May, June, July, August and September 2015, giving a total of 20 points under the index of probability. A further partial check was undertaken in October, of tubes that had not been collected in September. This was not included in the probability index threshold calculation.

31. The FPCR survey was therefore fully compliant with the approved survey methodology. It was suggested at the January 2019 workshop that the survey informing the outline application was in some way deficient, but it is clear that is not the case.

Current Position and Further Work

32. The work undertaken by FPCR to inform the outline application is all in accordance with the survey guidelines, and recorded only a single partially-constructed nest a significant distance from the Redrow site. Further intensive surveys in October and November 2018 using established and emerging survey methodologies did not record any evidence of the presence of Dormice within the Redrow site. On the basis of this accumulated evidence, it is considered highly unlikely that Dormice are present within the Redrow site. Nonetheless, Dormouse surveys will continue from April 2019 as part of the monitoring programme.

33. The agreed Dormouse Method Statement and Risk Assessment accompanying the ES Addendum forms a sound basis on which to proceed with mitigation without a Natural England licence. In summary, this includes the following measures:

- Installing Dormouse nesting boxes prior to work;
- Limiting the removal of hedgerows and woodland to no greater than 12m, ensuring potential links are retained;
- Timed vegetation removal under the supervision of an ecologist;
- Habitat enhancement, creation and compensation; and
- Habitat Management Strategy.

34. Given the absence of evidence of Dormice, these measures are arguably excessive for the Redrow site. Nonetheless they will be adopted in full. The overwhelming majority of the hedgerows and woodland are to be retained and enhanced as part of the proposed development.

35. It is the case that the effects of the proposed development on Dormice are well understood and can be predicted with sufficient certainty on the basis of the existing evidence. Further checks to be continued in 2019 will provide a further safeguard. The mitigation strategy approved under the outline consent is to be adopted in full as part of the reserved matters applications, and ensures that the favourable conservation status of Dormice in the locality will not be adversely affected.

Otters and Water Voles

Ecology Solutions

36. Check surveys of the watercourse as it flows through the Redrow site were undertaken in October 2018, with no evidence recorded.

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37. No evidence was recorded within the Redrow site or wider site in work by FPCR, but both species are known from the area.

38. Otter *Lutra lutra* and Water Vole *Arvicola amphibius* were both recorded in 2017 approximately 1km south of the site. The location given was Haverhill Railway Culvert but the sighting is likely to be from the Stour Brook, slightly north of this. This section of the Stour Brook meets the section of the Stour Brook that runs through the site, further downstream to the southeast (approximately 2.5km southeast of the site). A second record for Otter was recorded in 2013 on the Stour Brook, further southeast of the first record. A second record also exists for Water Vole, recorded in 2003 within a 1km grid square approximately 0.7km south of the site at its nearest point. This is also likely to have been recorded in the Stour Brook or interconnecting ditches.

Current Position and Further Work

39. Owing to the absence of evidence of presence, no specific mitigation measures were included in the outline application. Further checks will be undertaken in 2019 as part of the monitoring programme, but it is not expected that specific mitigation measures will be required. The effects of development on Otters and Water Voles are therefore well understood. The proposed development is not likely to have any adverse effect on the favourable conservation status of these species.

Wintering Birds

Ecology Solutions

40. Four wintering bird surveys were completed, in November and December 2018, and January and February 2019. The transect route taken by the surveyor is shown on Plan ECO3. A total of 47 species were recorded, including 17 species that are listed as NERC species of principal importance, Suffolk LBAP and / or on the UK Birds of Conservation Concern Red and Amber lists. Species recorded include Song Thrush *Turdus philomelos*, Skylark *Alauda arvensis*, Yellowhammer *Emberiza citrinella*, Kestrel *Falco tinnunculus*, Linnet *Carduelis cannabina*, Redwing *Turdus iliacus*, Fieldfare *Turdus pilaris*, Stock Dove *Columba oenas*, Bullfinch *Pyrrhula pyrrhula*, Dunnock *Prunella modularis*, Mistle Thrush *Turdus viscivorus*, Starling *Sturnus vulgaris*, House Sparrow *Passer domesticus*, Reed Bunting *Emberiza schoeniclus*, Black-headed Gull *Chroicocephalus ridibundus*, Lesser Black-backed Gull *Larus fuscus* and Mallard *Anas* platyrhynchos.

41. Several common species were recorded within the woodland on site including Blue Tit *Cyanistes caeruleus*, Great Tit *Parus major*, Coal Tit *Periparus ater*, Goldcrest *Regulus regulus*, Blackbird *Turdus merula*, Jay *Garrulus glandarius*, Magpie *Pica pica*, Carrion Crow *Corvus corone*, Robin *Erithacus rubecula*, Wren *Troglodytes troglodytes*, Chaffinch *Fringilla coelebs*, Goldfinch *Carduelis carduelis*, Siskin *Carduelis spinus*, Green Woodpecker *Picus viridis* and Great Spotted Woodpecker *Dendrocopos major*.

FPCR

42. Four surveys were previously undertaken between November 2014 and February 2015. A similar complement of species was recorded during the earlier work.

Current Position

43. The completed survey work has shown that the complement of wintering bird species within the site is similar to that recorded during the earlier surveys. The mitigation strategy is based on retaining existing habitat features and providing high quality new landscaping.

Breeding Birds

Ecology Solutions

44. A breeding bird survey was undertaken by Ecology Solutions in April 2019. The transect route taken by the surveyor is shown on Plan ECO3. A total of 36 species were recorded, including 12 species that are listed as NERC species of principal importance, Suffolk LBAP and / or on the UK Birds of Conservation Concern Red and Amber list. Species recorded include Dunnock, Fieldfare, Herring Gull *Larus argentatus*, House Sparrow, Starling, Yellowhammer, Skylark, Black-headed Gull, Lesser Black-backed Gull and Song Thrush. Of these species, Dunnock, Linnet, Yellowhammer and Skylark were all recorded singing.

FPCR

45. Breeding bird surveys were undertaken in April, May and June 2015 across the wider site. A total of 49 species were recorded, including 22 species that are listed as species of principal importance under Section 41 of the Natural Environment & Rural Communities Act 2006, Suffolk LBAP and / or on the UK Birds of Conservation Concern Red and Amber lists.

46. Of these species Dunnock, House Sparrow, Starling, Yellowhammer, Skylark, Swallow *Hirundo rustica*, Black-headed Gull, Song Thrush, Green Woodpecker, Meadow Pipit *Anthus pratensis*, Linnet, Stock Dove, Kestrel, Whitethroat *Sylvia communis*, House Martin *Delichon urbicum*, Bullfinch, Willow Warbler *Phylloscopus trochilus*, Mallard and Swift *Apus apus* were recorded within the Redrow site. None of these notable species were found to be breeding on site.

Current Position and Further Work

47. Further surveys will be completed by Ecology Solutions in May and June 2019.

48. The nature and management of the habitats has remained constant since the earlier work, so it is expected that a similar complement of species would be recorded. The effects of development on bird species can therefore be predicted with confidence. The mitigation strategy includes the establishment of a range of new habitats as part of the green infrastructure strategy, which will offer a variety of opportunities to bird species. Existing habitats of interest, including the hedgerows, woodland and field margins, are to be retained and enhanced. Overall, the mitigation strategy will ensure that the conservation status of bird species is not adversely affected.

Reptiles

Ecology Solutions

49. To date, no reptile survey work has been completed by Ecology Solutions.

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50. Populations of Grass Snake *Natrix helvetica* and Common Lizard *Zootoca vivipara* are known from the Redrow site, but at the margins and generally within areas proposed for green infrastructure under the outline scheme.

51. An adult Grass Snake was recorded along Hedgerow H11 on 24 June 2014 and Hedgerow H14 on 4 September 2014. Adult Common Lizards were recorded along Hedgerow H11 on 24 June and 23 September 2014 and along Hedgerow H4 and southeastern boundary of the site on 14 August 2014. Juvenile Common Lizards were also recorded on the southeastern boundary on 14 August 2014 (see Plan ECO4).

52. The approach to mitigation set out in the ES is one based on passive displacement of animals rather than active capture and translocation, and this established and agreed approach would be followed as part of the implementation of reserved matters.

53. Passive displacement will involve the intensive management of the existing habitats favourable to reptiles, through a number of cutting regimes which will encourage reptiles to move away from such areas. Cuts will be undertaken using a hand strimmer with an initial cut of 200mm followed by a cut of 100mm 24 hours later and then cut as short as possible. Displacement will occur ahead of development, when reptiles are active (between mid-March and October) and during favourable weather conditions. All cuttings and other debris will be removed to avoid creating places of refuge. Following the passive displacement exercise, topsoil will be stripped to remove any suitability for reptiles. All works will be undertaken under the supervision of a suitably qualified ecologist.

Current Position and Further Work

54. The nature and distribution of the habitats present has not changed significantly since the 2014 surveys, and the majority of the site continues to be intensive arable. A review of the survey would be undertaken as part of the monitoring strategy in 2019, with regard to good practice guidelines. However, it is not expected that the results of the survey would be significantly different to those obtained previously, either in terms of the population size or distribution, since the status of the habitats and site management has remained constant. The green infrastructure strategy includes establishing new habitats for reptiles.

55. The effect of development on reptile species is therefore well understood, and further survey work will not add to that understanding. The measures proposed will ensure that there is no adverse effect on the favourable conservation status of the species concerned.

Amphibians

Ecology Solutions

56. No amphibian survey work has been completed by Ecology Solutions.

FPCR

57. No Great Crested Newts *Triturus cristatus* were recorded during earlier survey work in 2015. Additionally, there are no records for Great Crested Newts in the local area. Some Common Toads *Bufo bufo* and Smooth Newts *Lissotriton vulgaris* were found, but these are not a significant constraint to development.

Current Position and Further Work

58. This situation is not likely to have changed given the nature and location of the waterbodies in question, and at most an eDNA survey of the ponds would be undertaken in the 2019 survey season as part of the monitoring programme. The position with respect to amphibians is therefore well understood and no further insight would be gained from further surveys. Moreover, the strategy for the site will provide significantly enhanced opportunities for amphibians.

Planning / Construction Schedule and Survey Updates

59. At the time of writing it is expected that reserved matters applications for infrastructure and the first phase of the Redrow housing development will be submitted in February and March 2019.

60. Construction work for the northern access is expected to begin in April 2019, with the wider infrastructure works in June and the sales area in July.

61. It is recognised that it is not possible to fully update the existing survey data prior to submission of the reserved matters applications in early 2019, although a certain amount of work has been and will be undertaken in autumn / winter 2018 / 2019 as set out above. However, the nature and management of the habitats within the site has not changed significantly since the earlier work: they remain largely intensive arable bordered by hedgerows, with areas of plantation. Supplementary survey work completed so far has not identified any significant changes to the species present.

62. The approved mitigation strategies set out in the ES and ES Addendum remain sound and fit for purpose. They will be implemented in full at the time of construction.

63. Redrow is committed to a monitoring programme as summarised above that will complete the updates to the protected species information during 2019. Owing to the aforementioned continuity of management, it is expected that the results of this work will not be materially different from those obtained during the earlier work, and certainly the early data indicate this. The results will, however, allow the mitigation strategies to be refined and focused on any localised differences where necessary.

64. Though the work to facilitate the northern access is scheduled to commence in April, this will affect only the northern boundary of the site, a limited area. Much of the monitoring work will have been completed by the time the infrastructure

work commences in June, and surveys will continue throughout the summer. The construction programme is therefore more than able to accommodate the monitoring surveys, which will then inform any necessary localised amendments to the mitigation strategies. This is a reasonable approach.

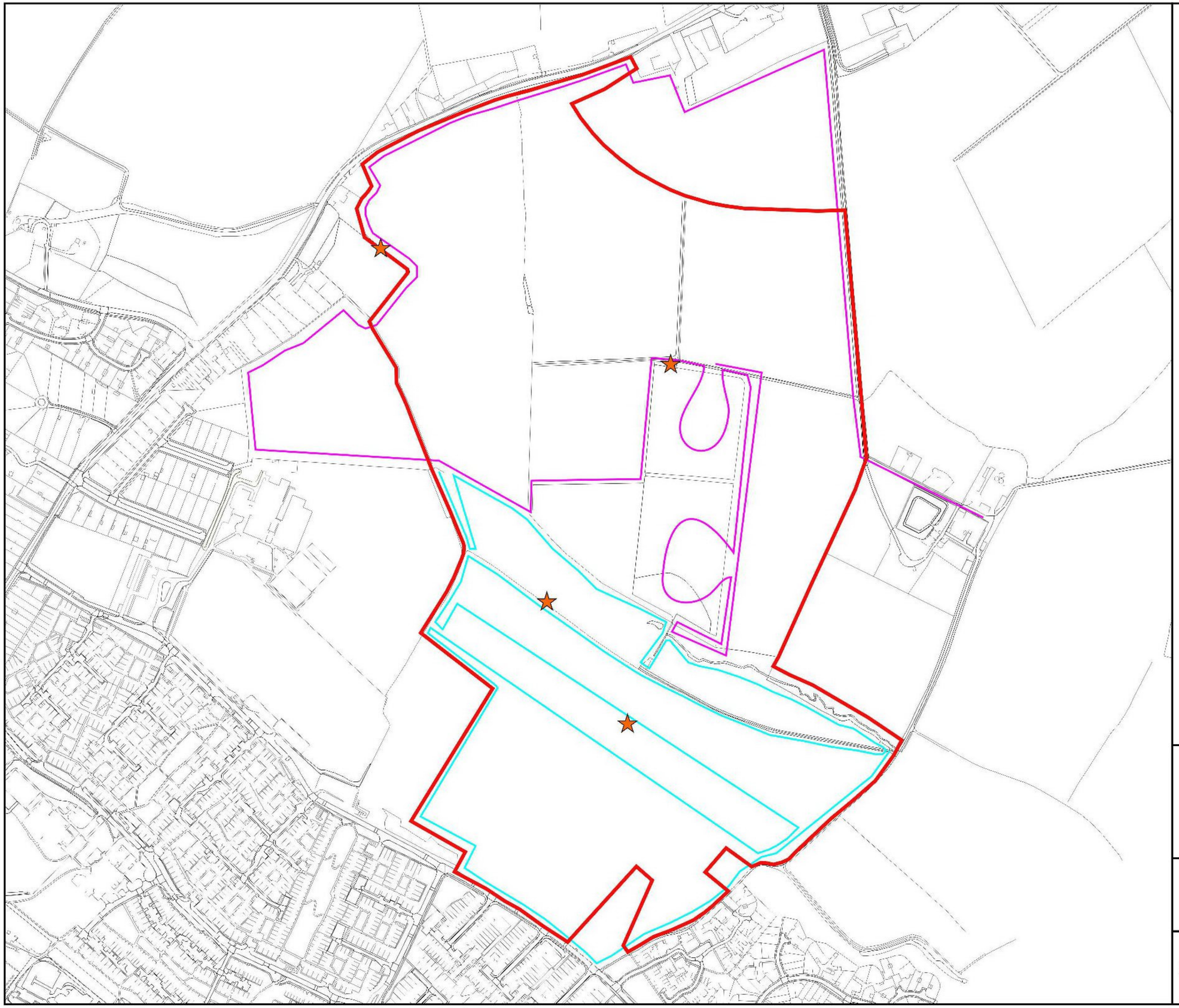
Conclusion

65. This note has considered the various habitat and species surveys completed for the site, in light of the above considerations and Natural England's Policy 4. In summary and in each case:

- the costs and delays associated with carrying out further surveys required by Condition 4 would be disproportionate to the additional certainty that they would bring;
- the ecological impacts of development can be predicted with sufficient certainty; and
- mitigation or compensation will ensure that the development will not detrimentally affect the conservation status of local populations or the ecological interest of notable habitats.

66. It is therefore reasonable for the forthcoming reserved matters applications to be informed by the existing survey information, supplemented by the work undertaken by Ecology Solutions in 2018 and early 2019. To require the applications to be delayed, potentially until August / September 2019, is unnecessary and disproportionate to the additional information that would be gained through further survey work.

Ecology Solutions
April 2019



KEY:

REDROW SITE BOUNDARY

NORTHERN TRANSECT

SOUTHERN TRANSECT

STATIC DETECTOR LOCATIONS

N

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PLAN ECO1:
BAT TRANSECTS AND LOCATIONS OF STATIC DETECTORS

Dormouse surveys have been completed across the Redrow site in October and November 2018. No evidence or Dormice has been recorded.

A partial Dormouse nest was recorded in the wider site, approximately 0.6km to the south-east of the Redrow site in 2015.

KEY:

- REDROW SITE BOUNDARY
- DORMOUSE TUBE LOCATION
- NEST BOX LOCATION
- DORMOUSE FOOTPRINT TRACKING TUNNEL LOCATION

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PLAN ECO2:
DORMOUSE TUBE, BOX AND FOOTPRINT TUNNEL LOCATIONS

KEY:

REDROW SITE BOUNDARY

TRANSECT ROUTE

N

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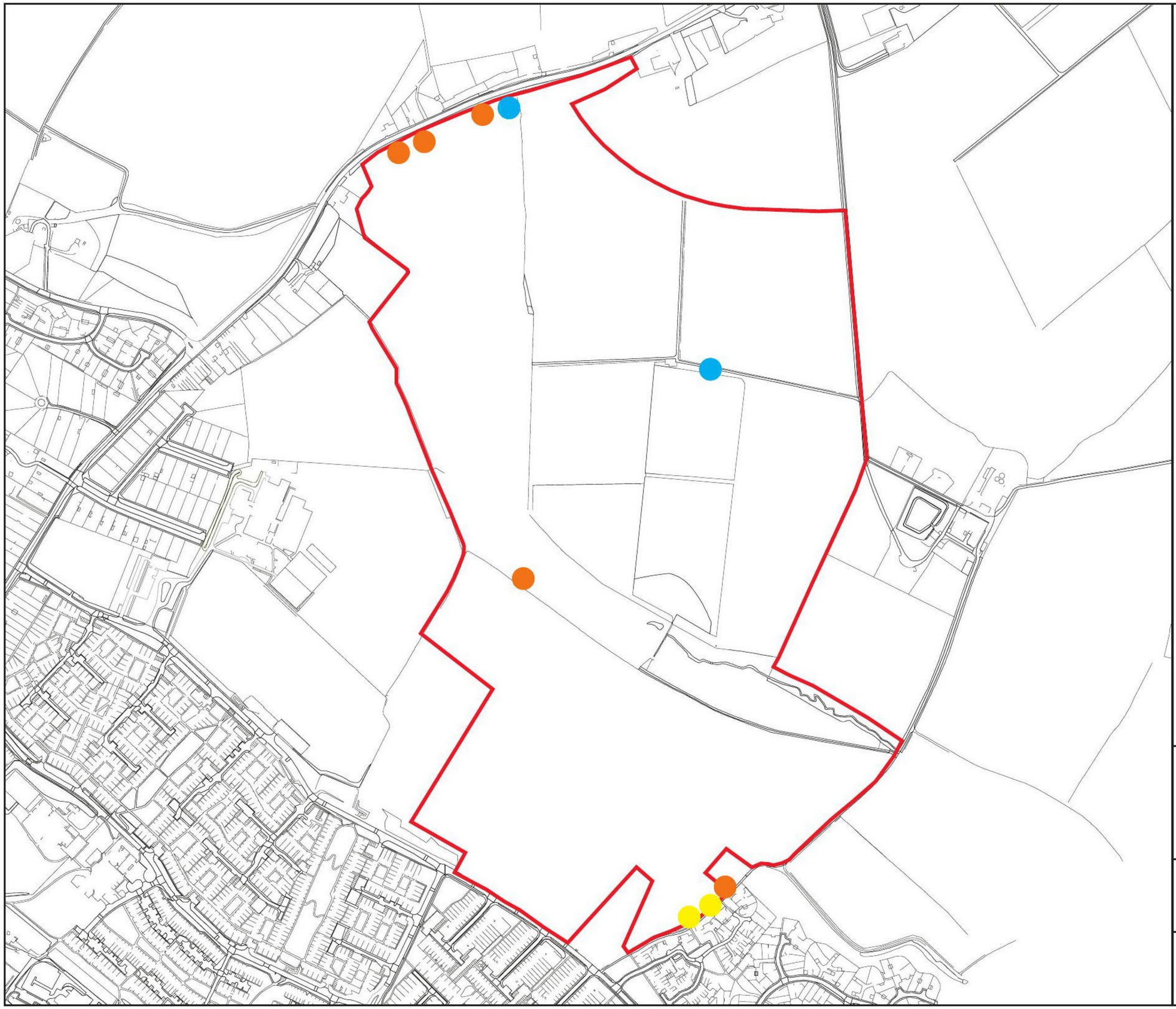
PLAN ECO3: BIRD SURVEY TRANSECT ROUTE



KEY:

- REDROW SITE BOUNDARY
- ADULT GRASS SNAKE
- ADULT COMMON LIZARD
- JUVENILE COMMON LIZARD

N

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PLAN ECO4: REPTILE SURVEY RESULTS 2014 (FPCR)

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