

A47 Wansford to Sutton Dualling

Scheme Number: TR010039

Volume 6

6.3 Environmental Statement Appendices

Appendix 8.9 - Barn Owl Survey Report

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

July 2021

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Applications: Prescribed Forms and
Procedure) Regulations 2009**

A47 Wansford to Sutton
Development Consent Order 202[x]

ENVIRONMENTAL STATEMENT APPENDICES
Appendix 8.9 - Barn Owl Survey Report

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1. Introduction

- 1.1.1. In February 2020, Highways England undertook a barn owl *Tyto alba* survey at Wansford in line with the Road Investment Strategy announced in 2014 (Highways England 2014). This is to inform the Environmental Statement (ES) Chapter 8 (Biodiversity) (**TR010039/APP/6.1**) at PCF Stage 3.
- 1.1.2. The surrounding area of the Proposed Scheme consists of mainly arable farmland, including Sacrewell Farm, located north of the A47 and surrounding scattered settlements. The River Nene flows south of the A47.
- 1.1.3. This detailed baseline provides a summary of the barn owl survey undertaken at the site by Sweco on 21 July 2020. It outlines recommendations for mitigation and further survey work where necessary.

1.2. Scheme description and location

- 1.2.1. The Proposed Scheme is designed to provide a new 2.6km dual carriageway which largely follows the existing A47 at the Wansford end, crossing to the north and running parallel to the existing A47 after Sutton Heath Road. There would also be a dedicated free-flow link road from the A1 southbound to the A47 eastbound to alleviate congestion at the Wansford junctions.
- 1.2.2. The Proposed Scheme is located at Wansford and extends eastwards to Sutton and forms a section of Single carriageway that is part of the main arterial highway route connecting to Peterborough and Norwich to the east.

2. Ecological Background

2.1. Legislation

- 2.1.1. Barn Owls are protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:
- intentionally kill, injure or take a barn owl,
 - intentionally take, block, damage or destroy any structure used by barn owls as a nesting site,
 - intentionally take or destroy their eggs,
 - possess or control any living or dead part or parts of a barn owl or their eggs,
 - intentionally or recklessly disturb any barn owl or its young whilst 'building' a nest or whilst occupying the nest.

2.2. Aims and objectives

- 2.2.1. The aims of the 2020 survey work and this report are to:
- to determine the presence or likely absence of barn owls on-site
 - to provide preliminary advice on mitigation strategies against any adverse effects on the local barn owl population which may arise as a result of the Proposed Scheme
 - to inform any Natural England mitigation licences that may be required
- 2.2.2. To enable this, the following scope of works was programmed:
- Desktop study – a review of suitable habitats as on the Phase 1 Habitat map, and of data from Northamptonshire and Cambridgeshire Record Centres.
 - Field surveys - a survey of suitable habitats that could potentially be affected.
 - Ecological report - detailing the survey results, implications for the Proposed Scheme and instructions for further ecological work.

3. Methodology

3.1. Desk Study

- 3.1.1. A desk study was conducted to assess the land within 1.5 kilometres of the Proposed Scheme boundary. The desk study was used to inform the survey approach and provide a knowledge of the habitat within the study area.
- 3.1.2. The land was assessed following the guidelines by Shawyer (2011). Foraging habitat can be split into 3 categories, type I, type II and type III, with type I being most suitable and type III the least suited for barn owls.
- 3.1.3. Biological data was gleaned from the Northamptonshire and Cambridgeshire Records Centre and used in line with the extended Phase 1 Habitat survey and anecdotal data from the wintering and breeding bird surveys to inform the study area for the barn owl survey.

3.2. Field Survey

- 3.2.1. On 21 July 2020 a barn owl survey was conducted to look for field signs and identify potential roost and/or nest sites. This was completed by walking along sections of previously identified suitable habitats (Annex A)
- 3.2.2. The weather during the survey was very sunny, warm (18C), light breeze (<10mph) and high very scattered cloud.
- 3.2.3. The survey on 21 July 2020 was undertaken by Keith Ross MCIEEM (Technical Manager, Sweco) and Chelsea Edwards (Senior Ecologist, Sweco) accredited under licence number CL29/00422.

4. Results

4.1. Desk study

- 4.1.1. During the desk study, habitat was identified that was suitable for barn owls. This included Type I habitat (rough grassland), Type II habitats such as semi-improved grassland and Type III habitat, for example unimproved grassland and grazed fields.
- 4.1.2. Additionally, the study area highlighted barns that were potentially suitable for barn owls, including those located at Sacrewell Farm.

4.2. Field Survey

- 4.2.1. Table 4.1 below summarises all the barn owl field signs and sightings during the survey on 21 July 2020. Locations of these features are shown in Annex A.

Table 4-1 : Results from barn owl survey

Location	Field sign or feature	Location	Results
BO1	Barn owl pellet (2019)	TF 07841 00077	The tree did not contain adequate features for nesting and no evidence of regular roosting (pellets, splashing of droppings) was present to indicate a regular roost site, therefore not considered a potential nesting site.
BO2	Sighting (2019)	TL 07917 99992	Barns at Sacrewell Farm were fully inspected inside and out with no evidence of Barn Owl. Prior to the COVID-19 Pandemic most barns were subject to regular public disturbance (and will be following restrictions) and are therefore unlikely nest sites/ 2019 – flew out of barn during bat survey.
BO3	Large tree (A)	TF 10317 00446	These three trees were assessed using binoculars as outside land access wasn't permitted. No evidence was seen on any of the trees, and they did not appear to contain adequate nesting features although foliage may have obscured evidence. Trees are distant from works and will not be disturbed.
	Large tree (B)	TF 10318 00382	
	Large tree (C)	TF 10293 00319	
BO4	Owl box (Pole)	TL 07057 99418	Box is now completely defunct. It doesn't have a roof.
BO5	Owl box (tree)	TL 09538 98603	No consent to check the owl box, therefore assessed using

			binoculars. Box is on an angle in the tree. No evidence of use externally (splashing, pellets, scratching at entrance). Previously recorded red kite nest in the pine next door.
BO6	Sacrewell tree (A)	TF 08321 00099	Trees closely inspected and deemed to have a low potential as nest sites as they lacked any signs of splashing, pellets or feathers.
	Sacrewell tree (B)	TF 08363 00107	
BO7	Lowe Lodge Farm tree	TL 09588 99660	Tree closely inspected, no evidence of use by barn owl and limited suitable features. Unlikely to be nest site.
BO8	Wansford Pasture (Tree Box) IN USE	TL 07034 99364	Nest box in a tree on the southern edge of Wansford Pasture. Barn Owl flushed from box, box not internally inspected as during nesting season so surveyors withdrew. Assumed to be a nest site.
BO9	Lower Lodge Farm (Sighting)	TL 10002 99454	Owl flushed at this located, trees checked in vicinity and north/south along hedgerow. No suitable features or evidence on any trees.
BO10	Sacrewell Farm Owl Box	TL 07917 99992	New Barn Owl box within grounds of Sacrewell Farm. No evidence of use at present.

5. Limitations

- 5.1.1. Activities during construction may disturb barn owls in the area. Disturbances to barn owls may include but are not limited to; increased light pollution and human activity, foraging habitat loss, as well as noise, dust and vibrations from machinery.
- 5.1.2. Land access was not available at two locations (BO3 and BO5). Where this was the case, the surveyors used binoculars to assess trees/boxes from a distance.

6. Impacts

6.1. Construction phase

- 6.1.1. There is the potential for construction to create disturbances that would affect barn owls in the local area. The potential impacts of disturbance would continue for at least the duration of the construction phase and may persist after completion. Disturbance may include but are not limited to; foraging habitat loss, increased light pollution, construction vibration and noise. The increased activity in general can have serious adverse effects on the success of nesting barn owls, see Section 6.1.3.

Habitat loss

- 6.1.2. The landscape is intensively farmed, with ideal foraging habitat scarce. Potential foraging areas would be reduced by the construction phase. The majority of land loss is arable farm land, however sections of rough grassland such as road and field margins would be lost.

Increased human activity

- 6.1.3. The requirement for lighting to facilitate working outside of daylight hours can lead to the disturbance of barn owl prey species. The increased human activity could also cause barn owl pairs to abandon their nests in extreme cases.

6.2. Operational phase

- 6.2.1. The Proposed Scheme would present new challenges in the way of local barn owls. The most significant is the increased resistance to movement across the A47 road network. The widened road would present a greater chance of mortality from collisions with vehicles as owls would be faced with crossing more lanes of faster moving traffic. The Proposed Scheme would create a much less permeable barrier to foraging grounds, nest sites and dispersal, which can disrupt the stability of the local population.

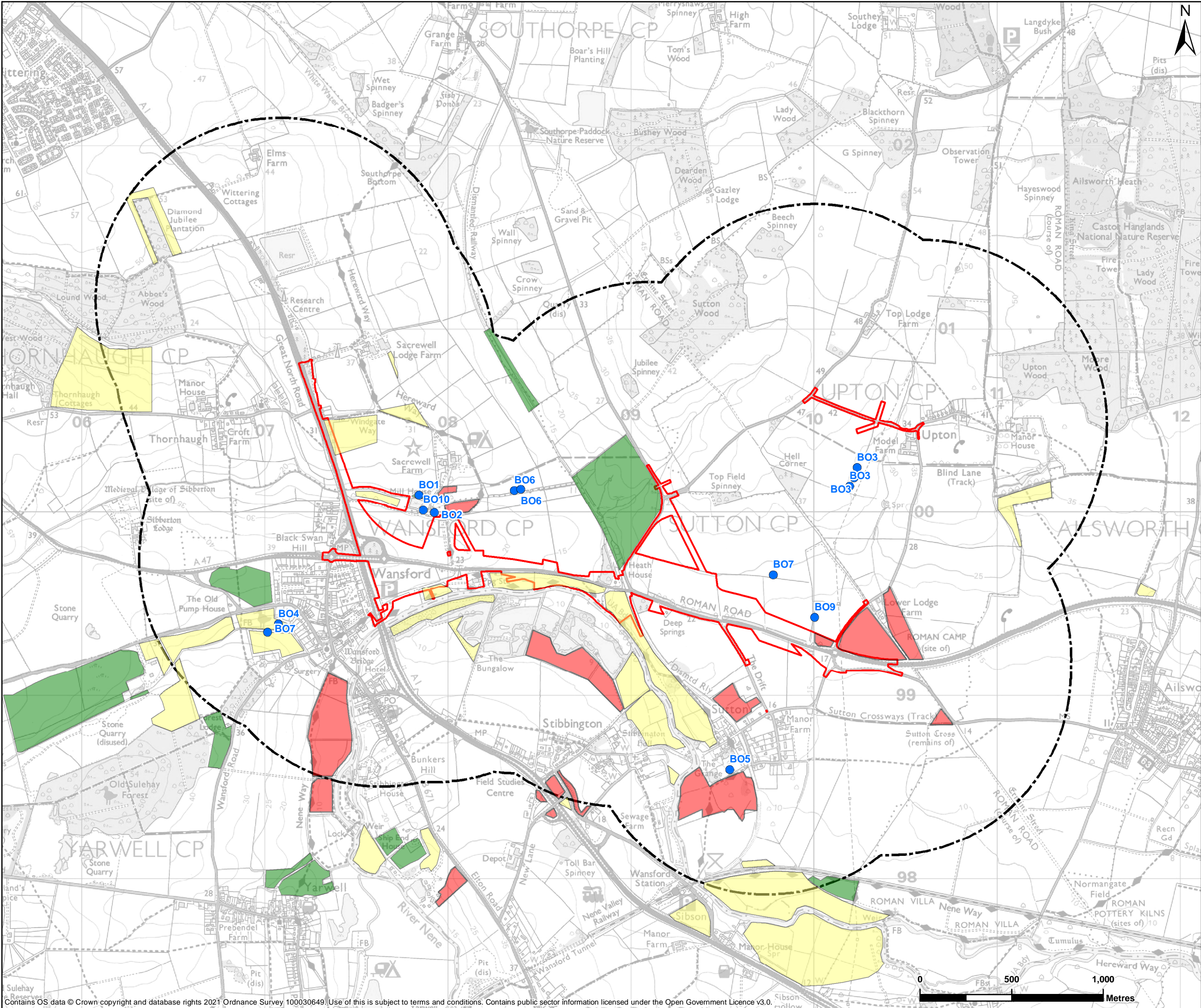
7. Conclusions

- 7.1.1. Barn owls have been confirmed within the study area, by the direct sighting from Sweco ecologists. A number of potential nest sites were previously identified during the Stage 1 barn owl surveys, including barns and farm buildings as well as dedicated nest boxes. Only one of these locations has been confirmed as a potential nest site (BO8 Wansford Pasture Nest Box). This nesting location is not at direct risk of either destruction or disturbance from the Proposed Scheme.
- 7.1.2. Barn owls are at high risk of mortality from major road systems, the construction of the Proposed Scheme would place local barn owls at a greater risk of mortality, which in turn would reduce the stability of the local population. Therefore, mitigation is recommended to off-set against the negative impacts the Proposed Scheme would generate. This mitigation will be set out in the Chapter 8 (Biodiversity) of the ES (**TR010039/APP/6.1**).

8. References

- 8.1.1. Shawyer, C. R. (2011) Barn Owl *Tyto alba* Survey Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in Survey and Reporting. IEEM, Winchester.

Annex A. Study Area (Habitat and Barn Owl Feature Location)



Proposed Scheme Boundary

Barn Owl Feature Location

1km Study Area

Habitat Type

I

II

III

REFERENCE MAP

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P01	17/05/2021	FIRST EDITION	AC	RMC	BM
REV	DATE	REVISION NOTE	ORG	CHKD	APPD

DESIGNER

CONTRACTOR

CLIENT

PROJECT TITLE

A47 WANSFORD TO SUTTON

PROJECT STAGE

PCF STAGE 3

DRAWING TITLE

ANNEX A: STUDY AREA (HABITAT AND BARN OWL FEATURE LOCATION)
TR010039/APP/6.2

SUITABILITY

FOR INFORMATION

SHEET SIZE	A3	SCALE	1:20,000	STATUS	S2
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DRAWING NUMBER

HE551494-GTY-EGN-000-DR-GI-30095

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