CurtisEcology

Biodiversity Management Plan

For

John Halmshaw Partners

At

Unit 6
Wootton Hall
Vicarage Lane
Wootton
North Lincolnshire
DN39 6SH

Date: 6th May 2020

Reference no: CE0806

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Document Control Sheet

Client: John Halmshaw Partners
Project: Unit 6, Wootton Hall, Vicarage Lane, Wootton, North Lincolnshire, DN39 6SH
Title: Biodiversity Management Plan

REPORT CONTROL SHEET

General Report Information	
Date of site risk assessment	
Lead ecologist signature	
Date report issued	6th May 2020
Report approved by	Roger Curtis FdSc

Report Version Control

Version	Date	Author	Description
1.0	6th May 2020	Roger Curtis	Original version

Contents

1.0 INTRODUCTION

This Biodiversity Management Plan has been prepared to aid the discharge of planning condition no 8 relating to the approved planning application Ref no PA/2016/1429, on behalf of John Halmshaw Partners, Wootton Hall, Vicarage Lane, Wootton, North Lincolnshire, DN39 6SH.

It is understood that the exact start date of the proposed development is uncertain at the time of the writing of this plan. However the sequence of dates are illustrative and the sequence of events would still stand and the seasons, but not necessarily Imminent.

1.1 Site Description

Wootton Hall is set within approximately 11ha of landscaped grounds made up of lawns, shrub and flower borders, mature and semi-mature native and non-native trees to the west and to the east a mixture of coniferous plantation and broadleaved woodlands; 3ha of which listed as Priority Habitat Inventory - Deciduous Woodland (England).

The study site is centred at Grid reference TA085 163 and concentrates on two survey areas; a walled garden and buildings set around gravel courtyards within the centre of the grounds

Directly to the north of the study buildings is a well maintained lawn with a small section of species poor evergreen ornamental hedging, which is bounded by a narrow shelter belt of semi-natural mature broadleaved trees, beyond which is found intensively farmed agricultural fields.

Along the eastern boundary of the study site are mature a semi-mature broadleaved trees and beyond an area of recently planted coniferous woodland leading to intensively farmed agricultural land.

Agricultural fields lie to the south of the survey area with the village of Wootton beyond. Immediately along the western boundary are Wootton Hall, the extensive grounds with further agricultural fields beyond.

1.2 Aims.

This plan is a schedule of objectives, actions and timings to produce measures in relation to the protection of protected and/or notable species, and to conserve and enhance features of nature conservation importance within and around the development footprint, in accordance with policies CS5 and CS17 of the North Lincolnshire Core Strategy.

1.3 Key Contacts

Ecologist	**Curtis Ecology** **Roger Curtis**	**Nova Scotia Farm** **The Valley** **Rimswell** **East Riding of Yorkshire** **HU19 2BZ**	**T: 01964 614295** **M: 07716260006** **Email: roger@curtisecology.co.uk**

2.0 Management Operations during Year 1.

This plan is compiled on the understanding that the development will commence during the spring of 2020 and will take approximately 1 year to complete.

2.1 Objective – Avoidance measures to nesting bird species during the construction phase of the development.

2.1.1 – Initial building conversion works and ground clearance works

2.1.1.1. Actions

- Suitably Qualified Ecologist (SQE) to give a toolbox talk to the contractors prior to the commencement of any construction/ ground clearance works.

- A copy of this Biodiversity Management Plan is to be left on site at all times for reference/contacts details and be available to any personnel involved in the project during both the construction and landscaping phases of the proposed development.

- A walkover assessment of the development site is to be undertaken by the SQE immediately prior to any ground clearance and /or conversion works been undertaken

- Any active nests located will have a 5 metre exclusion zone marked out by the SQE around the active nest site using either 1m high stakes or high visibility tape for ground nesting site, or a 5 metre exclusion zone marked out on the building using high visibility tape attached to the building. The nest site will remain untouched until either the young have fledged or the nest is naturally abandoned. Only once this has occurred can work recommence within the respective exclusion zones.

2.1.1.2 Timings

- Immediately prior to any ground clearance of building conversion works commencing

2.1.2. During the construction phase of the development

2.1.2.1 Actions

- During the construction phase of the development if any active nests are found, then all wok must stop within the vicinity of the active nest and the SQE immediately contacted to advise and/or visit the development site.

- Only once the active nesting site has been marked out with the exclusion zone as described above, can works re-commence within the vicinity of the nest site. The active nest will remain untouched until either the young have fledged or the nest is naturally abandoned. Only once this has occurred can works recommence within the exclusion zone.

2.1.2.2 Timings

- For the lifetime of the construction period

2.2 Objective – Avoidance measures to bats during the construction phase of the development

2.2.1 Actions

- Suitably Qualified Ecologist (SQE) to give a toolbox talk to the contractors prior to the commencement of any construction/ ground clearance works.

- A copy of this Biodiversity Management Plan is to be left on site at all times for reference/contacts details and be available to any personnel involved in the project during both the construction and landscaping phases of the proposed development.

- If at any time during the conversion of Unit 6 any Bat species are found within the development site then all work must stop immediately within the vicinity of the find.

- The Site Manager/Site Forman must be informed of the find immediately and the Suitably Qualified Ecologist must be contacted to be advised of the situation. The Suitably Qualified Ecologist will immediately visit the site unless already present to assess the situation.

- Upon visiting the site if the Bat is in immediate danger then the licenced Suitably Qualified Ecologist will remove it to a safe location and out of imminent danger.

UNDER NO CIRCUMSTACES SHOULD ANY MEMBER OF THE SITE MANGEMENT TEAM OR SITE WORKER REMOVE OR HANDLE THE BAT.

Natural England will be contacted by the licenced Suitably Qualified Ecologist and advised of the situation and to receive advice from them with regard to the way forward for the project.

Natural England contact details are:-

Natural England,
4th Floor,
Foss House
Kings Pool
1-2 Peasholme Green.
York
YO1 7PX
Tel: 0300 060 1911
Email:enquiries@naturalengland.org.uk
Only once advice has been sought and received in writing or via email from Natural England can work re-commence with the vicinity of the find.

2.2.1.2 Timings

- For the lifetime of the construction/conversion works

2.3 Objectives - Installation of Bird Boxes

2.3.1. Actions

- 2 x Vivara Pro Woodstone House Sparrow nest boxes are to be installed on the east elevation of Unit 6 as illustrated in Appendices 3 & 4.

- The nest boxes are to be positioned above eaves level, at a minimum height of 2 m above ground level. The front of the nest boxes will face in an easterly direction, so to avoid direct sunlight entering the entrance holes.

- 1 x Vivara Pro Woodstone Oval Open Nest Box and 1 x Vivara Pro Seville 32mm Woodstone nest boxes are to be located within the northern and eastern woodland margins as illustrated in Appendix 3.

- Each nest boxes is to be positioned on a suitable tree at a minimum height of 2 m above ground level.

- The front of the nest boxes will face in either a northerly or easterly direction, so to avoid direct sunlight entering the entrance holes.

2.3.2. Timings

- Installation of all the nest boxes are to be undertaken within 4 weeks, following the completion of all the construction and final landscaping works.

2.4 Objectives - Installation of Bat Boxes

2.4.1 Actions

- 1 x Large Multi Chamber WoodStone Bat Box and 2 x Low Profile Woodstone Bat Box are to be installed on suitable trees on the margin of the woodland to the north and east of Unit 6 as illustrated in Appendix 3 of this plan.

- The bat boxes will be positioned at least 3m above ground level with the front of the box facing either west or south.

- Any minor branches which are obscuring the front of the boxes will be cut back/removed to facilitate a clear flight line into the box entrance

2.4.2. Timings

- The 1 x Large Multi Chamber WoodStone Bat Box and 2 x Low Profile Woodstone Bat Box bat boxes are to be installed within 4 weeks of all the construction works and final landscaping works being completed.

3.0. Management Operations during Year 2 – onwards.

3.1. Objectives – Nesting Birds

3.1.1 Actions

- Retention of the installed nesting features
- Following installation, any bird boxes which may become damaged or unusable, shall be replaced with a new box of the same type and installed in the same location as the original.

3.1.2 Timings

- Once installation is complete, all the bird nest box is to be remain in situe thereafter.
- Following installation, any bird boxes which may become damaged or unusable, shall be replaced with a new box of the same type and installed in the same location as the original.

3.2 Objectives – Bats

3.2.1 Actions

- Retention of the installed bat boxes.
- If the bat box has become damaged or lost it will be replaced with the same type of bat box in the same location.
- Any damaged bat boxes will be checked by a Suitably Qualified Ecologist prior to removal/replacement to ensure there are no bats present

3.2.2 Timings

- Once installation is complete, the bat boxes are to remain in-situe thereafter.

3.3 Objectives – Hedgehogs

- Although there is a 2m high wall to be constructed between Unit 6 and Unit 4, if any Hedgehogs are to use the gardens for foraging or resting, then this will be facilitated by the northern boundary English Yew hedge

3.4 Objectives - Wildlife Friendly Landscaping.

- Planting of native species will help to extend the existing wildlife habitat which in turn will increase the diversity and species composition compatible with the needs of fauna such as invertebrates, small mammals, bats and birds, in terms of floral diversity, commuting and foraging capacity.

3.4.1. Native Trees

- At the time of the production of this Biodiversity Management Plan the exact soft landscaping scheme was not known to ourselves.

- Were possible final landscaping should incorporate native species of trees and shrubs.

- Planting of native species will help the creation of new as well as the extension to the existing wildlife habitats, which in turn will increase the diversity and species composition compatible with the needs of fauna, such as invertebrates, small mammals, bats and birds, in terms of floral diversity, habitat and foraging capacity.

3.4.1.1 Actions.

- Planting of native species of trees found within the local province are to be considered in the first instance. However it is considered that the client may wish to plant no-native species within the garden area of the residential dwelling.

- Prior to the planting scheme commencing any existing vegetation should be strimmed to encourage vigorous regrowth. Approximate 2 weeks post strimming the vegetative regrowth should be sprayed with a systemic herbicide based on Glyphosate. The herbicide should be applied via a knapsack sprayer during suitable weather conditions and applied by a suitably qualified/trained person wearing the appropriate personnel protective clothing.

- The bare rooted tree whips are to be planted and be comprised of a mix of the following species: Bird Cherry *(Prunus padus),* Crab Apple *(Malus sylvestris),* Common Alder *(Alnus glutinosa),* Downy Birch *(Betula pubescens),* Field Maple *(Acer campestre),* Hornbeam *(Capinus betulus)* and Wild Cherry *(Prunus avium).* The size of the whips should be approximately 60cm – 90 cm high as this size of whip generally has a good survival and growth rate.

- Planting spacings are to be approximately 3m between the rows and 3 m between the trees within the rows. Each tree is to be protected by a Tubex 1.2 m high tree guard with a wooden stake to give protection both from fauna as well as severe weather conditions especially during the initial years post planting and should aid early establishment.

- Do not plant into frozen or waterlogged ground.

- Prior to planting and during the planting stage always keep the plants in bags to prevent the roots drying out.

- When planting always ensure the roots of the plants are firmly healed into the ground and avoid air pockets.

- During the following 5 year growing seasons post initial planting, any tree whips that have died or become diseased, removed or damaged during that particular growing season shall be replaced with the same species and of a similar size.

3.4.1.2 Timings

- The Native trees are to be planted during the first plant dormant period of November – March after all the construction and hard landscaping works have been completed.

- During the following 5 year seasons post initial planting, any trees or shrubs which have died, become diseased, removed or damaged during that years growing season shall be replaced with the same species and of a similar size, during the plant dormant period between November – March.

3.4.2 Objectives - Retention and protection of the existing woodland.

3.4.2.1 Actions

- The woodland to the north and east is understood to remain untouched by the proposed development

- To mitigate any potential damage to the woodland to the north and east of Unit 6 it is recommended that any construction works in close proximity to them is undertaken in relation to Root Protection Zones to BS5837:2012 *Trees in Relation to Construction.*

3.4.2.2 Timings

- Root Protection Zones will be installed prior to ant land clearance works and will remain in situe until, all construction works have been completed.

3.4.3 Shrubs

3.4.3.1. Actions

- The planting of native species of shrubs found within the local province should be considered in the first instance, However it is considered that the client may wish to plant non-native species within the garden area of the new residential dwelling.

  The list of Shrubs below is not exhaustive, but have been recommended as they will provide a good food source for a range of birds, butterflies, moths, flies, dragonflies, spiders, bees and wasps.

  Buddleia sp*
  Common Dogwood *(Cornus sanguinea)*
  Guelder Rose *(Vibernum opulus)*
  Hazel *(Corylus avellana)*
  Honeysuckle *Loricera perickymenum*
  Holly *(Ilex aquifolium)*
  Jasmine sp*
  Spindle *(Euonymus europaes)*

  *Indicates this plant is an exotic or hybrid but will still be a beneficial species to have within the garden

- Do not plant into frozen or waterlogged ground.

- Prior to planting and during the planting stage always keep the plants in bags or original pots to prevent the roots drying out.

- When planting always ensure the roots of the plants are firmly healed into the ground and avoid air pockets.

3.4.3.2. Timings

- Shrubs and climbers are to be planted during either the first plant dormant period November – March for bare rooted plants, or anytime of the year for pot grown species.

- Planting should not commence until all the construction and hard landscaping has been completed.

- During the following 5 year seasons post initial planting, any shrubs or climbers which have died, or become diseased, during that years growing season should be replaced with the same or similar species and of a similar size. Any replacement planting required during the preceding 5 years should again be undertaken during the appropriate time of the year.

3.4.4 Objective – Hedgerow Planting

3.4.4.1 Actions

- It is understood that a new hedge line is to be planted along the northern boundary of Unit 6 garden as illustrated in Appendix 3 of this plan.

- Prior to the planting of the new hedgerow, a 1 m wide strip of the existing vegetation should be strimmed to encourage vigorous regrowth. Approximately 2 weeks post strimming the vegetative regrowth will be sprayed with a systemic herbicide based on Glyphosate to reduce competition for the new planting from the existing vegetation. The herbicide should be applied via a knapsack sprayer during suitable weather conditions and applied by a suitably qualified/trained person wearing the appropriate personnel protective clothing.

- The new hedgerow is understood to consist of the following species – English Yew *Taxus baccata.* The size of plants is recommended to be not less that 20 cm in height. It is recommended that if Rabbits are a problem then the plants can be protected with 60 cm mesh guards and 90 cm supporting canes.

- Planting layout should consist of a single row, with plants spaced at 2 -3 per metre run.

- Do not plant into frozen or waterlogged ground.

- Prior to and during the planting stage always keep the plants in bags to prevent the roots drying out.

- When planting always ensure the roots of the plants are firmly healed into the ground and avoid air pockets.
- The hedge will need watering sometimes in the first year of its life. If you are not sure, then if the earth is damp 2-3 cms (1") down there is no need to water. If it is dry, then water really well. Remember that lots, occasionally, is better than little and often.

- In the first winter after planting, firm down the soil after any hard frosts.

- If English Yew is planted in well-prepared ground and if it is not overwatered then it will become establish in a short period of time.

- Do not trim the top of the yew hedge until it has reached its final height. However the sides can be trimmed from the first spring after planting.

- Other than that, keep your yew hedge weed free, sit back, and watch it grow.

3.4.4.2 Timings

- Following the initial strimming of the existing vegetation, the application of the herbicide should be undertaken a minimum of 4 weeks prior to the planting of the hedgerow.

- The new English Yew hedge is best planted between September and October or between March and April, and after all construction and hard landscaping work has been completed.

- During the following 5 year seasons post initial planting, any plants that have died or become diseased, removed or damaged during that particular growing season shall be replaced with the same species and of a similar size.

- Any replacement planting required during the following 5 years should again be undertaken during the plant season as described above.

3.5 Objectives – Lighting Strategy.

Excessive external lighting can have a negative effect of bat foraging activity and nesting birds. Therefore the following have been advised:-

- No external lighting is shone directly towards the woodland to the north and east of Unit 6 to facilitate a dark corridor as illustrated in Appendix 5.

- If any new external lighting on Unit 6 to be installed will be fitted with a downward facing hood at an angle of less than 70 degrees to reduce light spillage. Light sources should also be fitted with a ultra-violet filter or the use of high or low pressure sodium lamps should be considered. All lamps should be fitted with a time adjustable motion sensor to reduce the period any lighting is on for.

- Any new external lighting installed on Unit 6 will not be shone directly towards the newly installed Sparrow terrace nest boxes

4.0 REFERENCES AND BIBLIOGRAPHY

Arboricultural Association

Collins, J. (Ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London

Countryside and Rights of Way Act 2000 – HMSO

Conservation (Natural Habitats etc) Regulations 1994 as amended 2017

Michell-Jones, A.J. and McLeish A.P. (Eds). (2004). *Bat Worker's Manual (3rd Edition).* Joint Nature Conservation Committee, Peterborough, UK

Michell-Jones, A.J. (2004). *Bat Mitigation Guidelines.* English Nature, Peterborough, UK

National Planning Policy Framework (2019) Department of Communities and Local Government

ODMP Circular 06/2005 Biodiversity and Geological Conservation

Wildlife and Countryside Act 1981 -HMSO

5.0 APPENDICES

Appendix 1. Bird Box Information

1. Vivara Pro Woodstone House Sparrow Nest Box

Designed for both House and Tree Sparrows. The box consists of 2 individual compartments, the front panel is easily removed for annual cleaning. And this box design can be fixed to an external wall or can be built into a wall during construction.

Dimensions: 42 x 16 x 21 cm.

2**.** Vivara Pro Seville 32mm Woodstone Nest Box

This box is suitable small bird species including Great Tit, Blue Tit, Coal Tit, Redstart, Nuthatch, Pied Flycatcher, Tree and House Sparrows

Dimensions:
Width: 20cm, Height: 31cm, Length: 20cm
Weight: 6.9kg

3. Vivara Pro Woodstone Oval Open Nest Box

This box is suitable for most small bird species
The nest box is made from Woodstone which gives it good thermal properties internally and has a long life expectancy.

Appendix 2. Bat Box Information

1. Low Profile Woodstone Bat Box

This bat box is suitable for crevice dwelling bats and can accommodate up to 15 Common pipistrelle The box is suitable for hanging from a tree or building

Dimensions: (H) 440 x (W) 290 x (D) 90 mm
Weight: 4.7kg

2. Large Multi Chamber WoodStone Bat Box

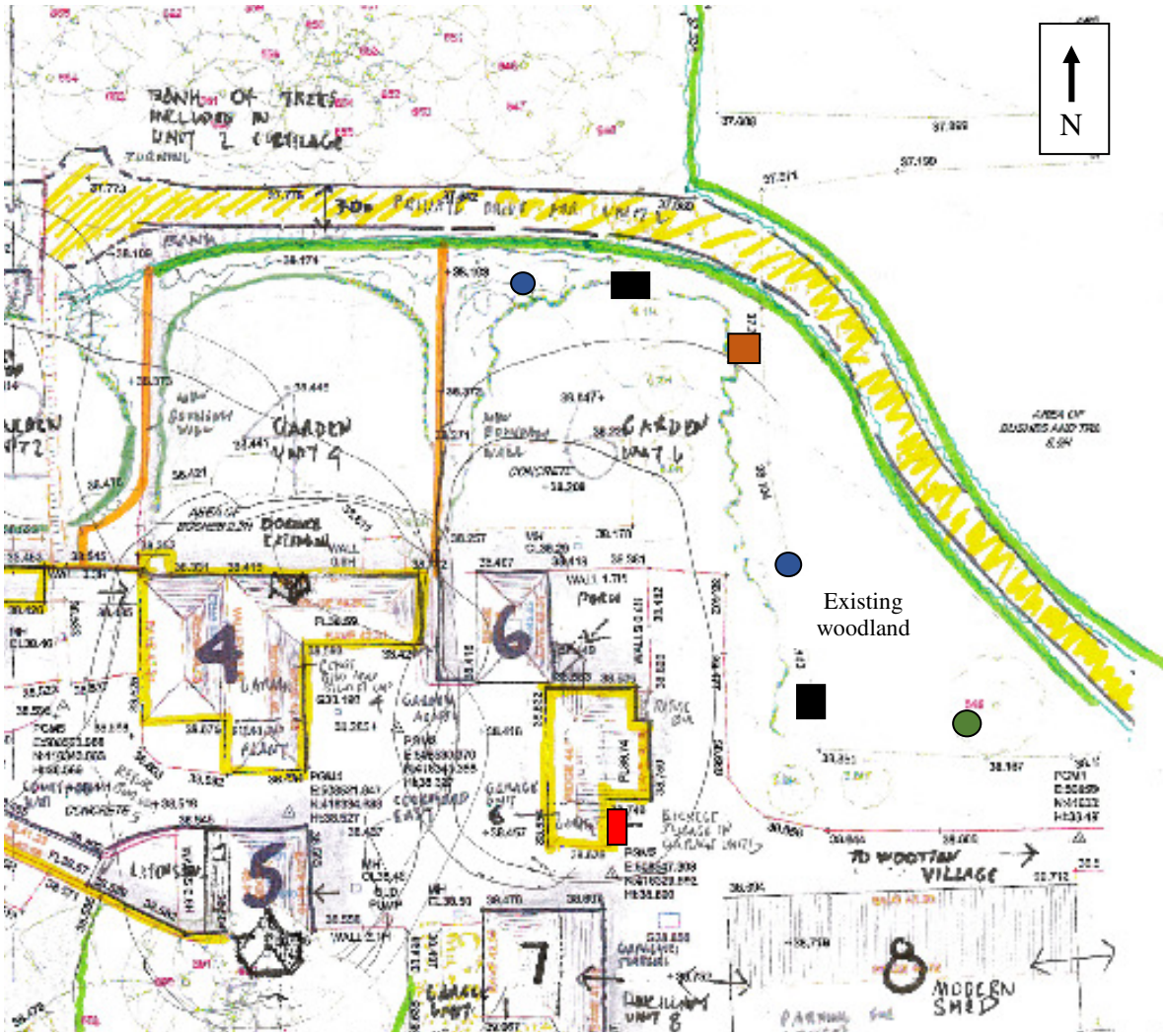
Suitable for the following species:

On buildings: Common pipistrelle, Nathusius's pipistrelle, Soprano pipistrelle

On trees: Common pipistrelle, Nathusius's pipistrelle, Soprano pipistrelle, Noctule, Brown long-eared bat, and Natterer's bats. The box is multi chambered internally and is suitable for summer roosting or a maternity roost.

External dimensions: 15cm x 27.5cm x 16cm
Internal dimensions: 11cm x 19cm x 11cm
Weight: 4kg.

Appendix 3. Proposed locations for the Bat & Bird Boxes



Legend

- Vivara Pro Seville 32mm Woostone Nest Box
- Vivara Pro Woodstone House Sparrow Nest Box
- Vivara Pro Woodstone Oval Open Nest Box
- Low Profile Woodstone Bat Box
- Large Multi Chamber WoodStone Bat Box

Appendix 4. East elevations drawing of Unit 6 with the proposed location of the two Vivara Pro Woodstone House Sparrow nest boxes illustrated by the red rectangle.

Appendix 5. Site plan illustrating the proposed dark corridors illustrated by the red hatching.