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Biodiversity Management Plan (BMP)

The Old School, Crowland

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On behalf of: Brightfield Crowland Ltd

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1.0 Introduction

1.1 Purpose of Report

This report presents a Biodiversity Management Plan (BMP) for The Old School, Postland Road, Crowland. The purpose of the BMP is to provide detailed guidance to ensure the survival, protection and management of important species and those protected by legislation that could be adversely affected by the development.

1.2 The site

The site is located at Postland Road, Crowland, Lincolnshire (National Grid Reference: TF 2419 1061) (hereafter referred to as "the site") which is approximately 0.2ha.

As per the Bat – Daytime Inspection Report (Lockhart and Garret, 2017), the site comprised a single building, hardstanding, amenity grassland and scattered trees.

The Site is surrounded by the town of Crowland to the east, west and south and by South View Primary School and an associated playing field to the north

1.3 Development Proposals

Full Planning Permission was granted by Holland District Council on 22nd August 2018 for the conversion of the building to three residential units (Ref: H02-1046-17).

1.4 Planning Condition

The development permission included a requirement (Planning Condition 8 & 9) to submit a Biodiversity Management Plan (BMP) for the site:

"8. No development shall take place until a Biodiversity Management Plan has been submitted to and approved in writing by the Local Planning Authority.

The plan shall include:

a) Details of measures to avoid harm to hedgehogs, bats and nesting birds during vegetation clearance and construction works;

b) Details of bat roosting features to be installed;

c) Details of nesting sites to be installed to support a variety of bird species;

d) Restrictions on lighting to avoid impacts on bat roosts, bat foraging areas bird nesting sites and sensitive habitats;

e) Prescriptions for the planting and aftercare of native trees and shrubs of high biodiversity value;

f) Proposed timings for the above works in relation to the completion of the dwellings.

Reason: To conserve and enhance biodiversity in accordance with policy SG 14 of the South Holland Local Plan and the National Planning Policy Framework.

9. The Biodiversity Management Plan shall be carried out in accordance with the approved details and timings, and the approved features shall be retained thereafter, unless

otherwise approved in writing by the local planning authority."

1.5 Purpose of Plan and Scope

The purpose of the BMP is to provide detailed guidance to ensure the survival, protection and management of important species and those protected by legislation that could be adversely affected by the development.

The BMP sets out how the nature conservation value and how habitats will be managed, enhanced and maintained, in line with relevant planning policy and legislation. It will cover the following:

- Background Information including previous surveys undertaken at the site.
- Legislation and policy relevant to the site.
- Influencing factors including natural and anthropogenic trends which could affect the management of the site and relevant legal constraints.
- Management plan which will set out the broad conservation management objectives for the site. It will also include management prescriptions and implementation.

2.0 Background Information

A daytime inspection of the site was undertaken in August 2017 by Lockhart Garret to assess suitability of the site to support bats.

Historic evidence of bats was found as well as a number of potential roosting features. As such the building was categorised as having high potential for roosting bats and three nocturnal surveys were recommended.

Nocturnal surveys were undertaken in June and July 2018 by Lockhart Garret to provide an assessment of use of the site by bats.

The old school building was confirmed as a roost for common and soprano pipistrelle, with peak counts of six common pipistrelle and four soprano pipistrelle.

A follow up daytime inspection survey was undertaken by Chris Vine on the 15th November 2018. During this visit a further brown long-eared feeding roost was recorded.

3.0 Factors Influencing Management

3.1 Natural Trends

The main natural trends likely to influence the management of the site are:

- Succession – a natural process where one habitat changes to another through the competition of plant species. Certain species are more vigorous than others and can outgrow others, reducing the biodiversity of the planting.
- Pests and disease – outbreaks can affect the species composition. Although this is unlikely on the site it is the maintenance team will be attentive for such outbreaks so that they can take the necessary action where required to address it.

3.2 Anthropogenic Trends

The main anthropogenic trends likely to influence the management of the site are:

- Management Resources – the funding, personnel and equipment available to manage the site can change over time, thus affecting; the feasibility of undertaking the management prescriptions described in the next section – Management and Monitoring.
- Pollution – air and water-borne pollutants can potentially alter species composition and ultimately reduce biodiversity on the site.
- Introduced Species – species introduced/ planted in the area will alter the species composition if they have a competitive advantage over species on site.

4.0 Legislation

4.1 Statutory Legislation

The Conservation of Habitats and Species Regulations 2017, or the 'Habitat Regulations 2017', transposes European Directives into English and Welsh legislation. Under these regulations, wild animals of a European Protected Species and their breeding sites or resting places are protected. It is an offence to deliberately capture, injure or kill any such wild animal and in the case of great crested newts, deliberately take or destroy their eggs. It is also an offence to deliberately damage or destroy a breeding site or resting place of any such wild animal.

Wild animals of a European Protected Species are protected from disturbance. Disturbance of such wild animals includes in particular any disturbance which is likely:

(a) To impair their ability:

- *to survive, to breed or reproduce, or to rear or nurture their young; or*
- *in the case of animals of a hibernating or migratory species, to hibernate or migrate, or*

(b) To affect significantly the local distribution or abundance of the species to which they belong.

The Wildlife and Countryside Act 1981 (as amended) adds further protection to wildlife in England and Wales under Part 1. It is unlawful to intentionally kill, injure or take any wild bird or take, damage or destroy the nest of any wild bird whilst the nest is in use or being built. If the bird is included on the Schedule 1 list, it is additionally an offence to intentionally disturb its nest during the breeding season.

Certain species of animal are protected under the Wildlife and Countryside Act 1981 (as amended) by being included in Schedule 5 in respect of certain offences under Section 9. Such offences include:

9(1) Intentional killing, injuring or taking of a Schedule 5 animal,

9(4a) Damage to, destruction of, obstruction of access to any structure or place used by a Schedule 5 animal for shelter or protection,

9(4b) Disturbance of a Schedule 5 animal occupying such a structure or place.

Badgers are primarily protected by The Protection of Badgers Act 1992, under which it is a criminal offence to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so and to intentionally or recklessly interfere with a sett.

Under the Hedgerow Regulations 1997 it is an offence to remove most hedgerows without permission from the Local Planning Authority. Permission for the removal of hedgerows may

be refused if the Local Planning Authority determines any hedgerow to be 'important' under criteria listed in Part II of Schedule 1 of the Regulations.

4.2 Planning Policy

The National Planning Policy Framework relating to biodiversity (NPPF) is both guidance for local governing authorities on the content of their Local Plans and material consideration in determining planning applications. The NPPF has replaced much existing planning policy guidance, including Planning Policy Statement 9: Biological and Geological Conservation. However, the government circular 06/05: 'Biodiversity and Geological Conservation- Statutory Obligations and their impact within the Planning System', which accompanied PPS9 remains valid.

The NPPF places much emphasis on sustainable development and the need for the planning system to perform a number of roles including 'improving biodiversity' by protection of designated sites, priority habitats and priority species, ancient woodland and veteran trees.

The NPPF places more emphasis on ecological networks and their creation and states that the planning system should:

- Avoid, mitigate and compensate for significant harm to biodiversity and protect Sites of Special Scientific Interest and irreplaceable habitats such as ancient woodland.
- Provide a net gain for biodiversity wherever possible and contribute to the Government's commitment to halt the loss of biodiversity.

4.3 Notable Species and Habitats

The UK Biodiversity Action Plan (UK BAP) was drafted for 'Priority' species and habitats in which specific conservation targets were set and are regularly reviewed. UK BAP features do not receive any legal protection per se but have biodiversity value within a national context. The UK BAP also serves as a framework for local biodiversity conservation efforts. UK BAP priority species and habitats were those that were identified as being the most threatened and requiring conservation action under the UK BAP. The original lists of UK BAP priority species and habitats were created between 1995 and 1999, and were subsequently updated in 2007, following a 2-year review of UK BAP processes and priorities, which included a review of the UK priority species and habitats lists. As a result of new drivers and requirements, the 'UK Post-2010 Biodiversity Framework', published in July 2012, has now succeeded the UK BAP. The UK BAP lists of priority species and habitats remain, however, important and valuable reference sources. Notably, they have been used to help draw up statutory lists of priorities in England and BAP species and habitats are still referred to at a local level (JNCC, 2013).

The National Environment and Rural Communities (NERC) Act 2006: Section 41 of The NERC Act requires the Secretary of State to publish a list of habitats and species which are of

principal importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England, as required by the Act.

The Section 41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of The NERC Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Section 17 of The Crime and Disorder Act (1998) places a duty on the local authority to inter alia "exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent, crime in its area"; this includes prevention of wildlife crime.

The South Holland District Local Plan states: "It is an aim of this plan that a diversity of natural environments and landscapes, reflecting the character of the district are protected and enhanced. The key to the conservation of wildlife through land use planning is the protection of the habitats on which it depends". (The South Holland District Council 2006).

5.0 Management Aims and Objective

The primary biodiversity objective is to maintain ecological connectivity of the site with adjacent habitats and to avoid potential adverse impacts on local species through the creation a range of features within the site to serve as resting, shelter, foraging and commuting habitat for a range of species. To this end, existing boundary vegetation will be retained to provide interlinking green corridors.

The general principle aims for managing the site are as follows:

- To introduce sensitive management policies which will enhance the visual and ecological appeal of the site and create a high-quality landscape setting for the new building.
- To encourage appropriate use of the site by residents.
- To ensure that the long-term health and vigour of the new planting is optimised in the future.
- To retain existing ecological connectivity for biodiversity.
- To provide enhanced habitat for species such as bats, birds and hedgehogs.
- Positively contribute to local, regional and national wildlife policy.

The specific objectives of the BMP are as follows:

- To ensure bats, birds and hedgehogs are safeguarded during vegetation clearance works and construction works;
- To provide guidance on the most suitable timing for works in relation to protected species;
- To provide guidance on suitable lighting schemes in relation to protected species; and
- Encourage populations of notable and protected species including bats and birds that may encounter the site through provision of bird and bat boxes; retention of existing mature trees and the planting and aftercare of native trees and shrubs of high biodiversity value.

The objectives will be met by completing the Management Instructions detailed in Section 6.

6.0 Species Specific Management Information

6.1 Bats

A European Protected Species (EPS) derogation licence, in this case a bat 'low impact' licence (CL21) will be required in order to carry out any works which have the potential to impact upon roosting bats.

The licence process will ensure that bats are safeguarded and mitigated during any vegetation or construction works.

It is proposed that access to roosting features at the east and west gable ends are retained for bats and that a discrete cavity be installed using rough timber. This cavity will be boarded over internally. This should be done prior to internal renovation works in the building, so that access to a roost is maintained.

Additionally, it is also proposed that access to ridge tiles on the roof is also retained during any roofing works and in perpetuity.

All linear features on the borders of the development must not be impacted by construction lighting. It is recommended all lighting proposed for the development, both during construction and post completion, in relation to these ecological features is installed in accordance with the Bat Conservation Trust – Bats and lighting in the UK (2009) which includes:

- Use of low-pressure sodium lamps, LEDs or high-pressure sodium instead of mercury or metal halide lamps;
- Lighting should be directed to where it is needed, and light spillage avoided;
- Avoid direct lighting of bat boxes; and
- The height of lighting columns in general should be as short as is possible.

In addition, in order to enhance the area for bat species in line with the requirements of the NERC Act (2006) it is recommended that two bat boxes are erected onto two of the retained trees at least 4m from the ground. These should be erected pre-construction.

- The provision is for two Schwegler 1FF Module bat boxes to be incorporated onto two of the retained boundary trees along the western boundary.

The bat box should be positioned according to the following prescriptions:

- Boxes should be situated in a location which receives a minimum 6-8 hours of sunlight (south / south-east);
- The box should be positioned in an area relatively free of obstacles to give the bat a clear line of flight;
- The box should be positioned in locations where they cannot be accessed by

domestic animals or easily interfered with by humans; and

- The box should be located in a dark area away from artificial lighting.

6.2 Nesting Birds

Works to any vegetation should be undertaken outside of the nesting bird season, which is generally March-August (inclusive). If this is not possible, a check 48 hours ahead of works for active nests should be carried out. Any nests in the process of being built or those actively in use should be left undisturbed until the young have fully fledged or nest has naturally been abandoned. In the case of nests in the trees and hedgerow, an appropriate exclusion zone will be determined by a suitable experienced ecologist.

In order to enhance the overall site for this species group, it is recommended that a minimum of four bird boxes are installed on the site pre-construction.

- Schwegler 1B Nest Boxes will be sited on two of the retained boundary trees along the eastern boundary, a minimum of 2-3m from the ground. One box will have a 32mm entrance hole to attract great and blue tits and sparrows. The other box will have 26mm entrance hole to attract blue tits and wren. All other species are prevented from using the nest box due to the smaller entrance hole.
- A further two Schwegler 1SP sparrow terraces will be sited on the north aspect of the building and can be installed within a brick or concrete wall or can be installed on the surface of a wall, a minimum of 2-3m from the ground.

All bird boxes are to be installed according to the following prescriptions:

- Located on the northern / north-eastern elevation of buildings/trees
- Close to the eaves and adjacent to one another; and,
- Boxes should face open green space giving the birds' direct access to suitable foraging habitat.

All bird boxes are to be located on northerly, easterly or aspect of the new buildings or trees. This is to keep them out of direct sunlight and becoming too hot; birds may abandon nests if they become too hot.

In accordance with the lighting scheme for bats, none of the boundary features are to be impacted by construction lighting. In addition, lighting will avoid areas of the building or retained trees where bird boxes are to be installed.

6.3 Hedgehogs

Any ground vegetation clearance works pose a risk of injuring/killing individual hedgehogs. Hedgehogs may become trapped in any open trenches/pits created during the course of the works.

The vegetation clearance should be undertaken by hand, avoiding frosty days when hedgehogs may be hibernating. Any trenches/pits created during the works should be

covered nightly to prevent hedgehogs from becoming trapped.

Any fencing and other hard landscaping will be designed into the development plan to avoid creation of impenetrable barriers to hedgehog foraging such as larch lap fencing with concrete strips along the bottom i.e. gaps under fencing to be retained.

7.0 Landscape Planting and Management

7.1 Landscape planting

The following guidelines are to be incorporated into the specifications for landscape planting:

- All native trees and shrubs shall be of British, local provenance (Forestry Commission, (2003)).
- All preparation for, and planting of transplants, shrubs and feathered/ standard/ extra heavy standard trees shall only be carried out during the period 1st November to 31st March.
- Fruiting species to be sown within development. The variety of species selected will provide a long overall fruiting season and sufficient cross pollination to ensure trees crop well.

An initial list of suitable trees and shrubs is provided in Table One below. It should be noted that the lists are not exhaustive and other species/ varieties could be considered.

7.2 Native trees and shrub planting

The planting of native trees and shrubs will be undertaken throughout the site to create boundary features between the properties and to improve the amenity value. These will also provide nesting and foraging habitats for a range of passerine bird species, as well as benefiting bats. Fruiting trees and shrubs will provide a seasonal food sources for birds and small mammals. The mix of native species will also provide a nectar source and breeding habitats for a range of insects.

Table One: Suggested Native Tree, Shrub Species and Climbers List

Common name	**Scientific name**
Large trees, small trees and shrubs	
Alder	*Alnus glutinosa*
Ash	*Fraxinus excelsior*
Bird cherry	*Prunus padus*
Blackthorn	*Prunus spinosa*
Common dogwood	*Cornus sanguinea*
Dog rose	*Rosa canina*
Elder	*Sambucus nigra*
English oak	*Quercus robur*
Field maple	*Acer campestre*

Goat willow	*Salix caprea*
Guelder-rose	*Viburnum opulus*
Hawthorn	*Crataegus monogyna*
Hazel	*Corylus avellana*
Holly	*Ilex aquifolium*
Oak	*Quercus robur & Q. petrea*
Scots pine	*Pinus sylvestris*
Silverbirch	*Betula pendula*
Whitebeam	*Sorbus aria*
Wild cherry	*Prunus avium*
Climbers	
European honeysuckle	*Lonicera caprifolium*
Italian honeysuckle	*L. etrusca superba*
Japanese honeysuckle	*L. japonica halliana*
Honeysuckle (native)	*L. periclymenum...*
White jasmine	*Jasminium otiicinale*
Dogrose	*Rosa canina*
Sweetbriar	*R. rubiginosa*
Fieldrose	*R. arvensis*
Ivy	*Hedera helix*
Bramble	- many species

7.3 Amenity shrub planting

Amenity wildlife friendly shrub planting should be established across the site, providing additional nectar source for a range of insect species, thus benefitting mammal (bats) and bird species.

Table Two: Suggested Amenity Shrub Species and Rock Plants for Walls List

Common name	Scientific name
Barberry	*Berberis wilsoniae*
Arrowwood 'Dawn'	*Viburnum bodnantense 'Dawn'*
Bladder campion	*S. vulgaris*
Cherry laurel 'Zabeliana'	*Prunus laurocerasus 'Zabeliana'*
Cherry pie	*Heliotropun x hybndurr*
Cotinus 'Grace' / smokewood 'Grace'	*Cotinus*
David viburnum	*Viburnum davidii*
Dogwood 'Midwinter Fire'	*Cornus sanguinea 'Midwinter Fire'*
English lavender 'Loddon Pink'	*Lavandula angustifolia 'Loddon Pink'*
Escallonia 'Crimson Spire'	*Escallonia rubra macrantha*
Evening primrose	*Oenothera biennis*
Forsythia 'Lynwood Variety'	*Forsythia intermedia 'Lynwood'*
Japanese spirea Golden Princess	*Spiraea japonica 'Golden Princess'*
Large-flowered St John's wort	*Hypericum kouytchense*
Mexican orange blossom	*Choisya ternata*
Night-scented catchfly	*S. noctiflora*
Night-scented stock	*Matthiola bicornis*
Nottingham catchfly	*Silene nutans*
Rose 'Scabrosa'	*Rosa rugosa 'Scabrosa'*
Rose 'Schneezwerg'	*Rosa rugosa 'Schneezwerg'*
Soapwort	*Saponaria officinalis*
St John's wort 'Hidcote'	*Hypericum 'Hidcote'*
Sweet rocket	*Hesperis natronalis*
Tobacco plant	*Nicotiana affinis*
Winged spindle tree	*Euonymus alatus*
Rock plants for walls	
Ivy-leaved toadflax	*Cymbana muralis*

Wall pennywort	*Umbilicus rupestris*
Stonecrop	*Sedum acre bertianum*

7.4 Habitat management

Table Three below summarises the habitat management and appropriate timing of activities. This builds upon the typical annual maintenance operations but is refined to avoid conflict with ecologically sensitive periods.

Table Three: Habitat Management and Appropriate Timing

Task	Month											
	J	F	M	A	M	J	J	A	S	O	N	D
General Landscape Operations												
Weeding.												
Watering.												
Litter removal.												
Removal of fallen leaves – Check for the presence of hedgehogs prior to disposal. Excess to be composted in a dedicated locality or removed off site.												
Re-firming plants (as required).												
Pest and disease control – Avoid use of pesticide and herbicides as much as possible. If required use targeted chemicals and application.												
Native Trees												
Check condition and treat (as required)												
Structural pruning (as required) – Check for nesting birds prior to any works taking place. Excess arisings composted in a dedicated locality or chipped and used on site for mulching if required.												
Top up mulch (for the first three years and three years after replanting).												
Apply fertiliser.												
Replace damaged/vandalised/unhealthy stock.												
Shrub and Herbaceous Planting												
Pruning (timing dependant on species) – Check for nesting birds prior to any works taking place. Excess arisings to be composted in a dedicated locality or chipped and used on site for mulching if required.												
Top up mulch (for the first three years and three years after replanting).												
Apply fertiliser.												
Thin out planting. – Check for nesting birds prior to any works taking place. Excess arisings to be composted in a dedicated locality or chipped and used on site for mulching if required.												
Cut back herbaceous (subject to species) – Check for nesting birds and hedgehogs prior to any works taking place.												
Lift/divide herbaceous (subject to species) - – Check for hedgehogs prior to any works taking place.												
Replace damaged/vandalised/unhealthy stock (annually)												

8.0 Implementation Schedule

Table Four below sets out an implementation schedule for the timing of management prescriptions in relation to the construction period. Year 0 in the table reflects a requirement to undertake works prior to the commencement of construction.

Table Four: Five Year Management and Maintenance Habitats Programme

Task	Year					
	0	1	2	3	4	5
General Landscape Operations						
Weeding.						
Watering.						
Litter removal.						
Removal of fallen leaves – Check for the presence of hedgehogs prior to disposal. Excess to be composted in a dedicated locality or removed off site.						
Re-firming plants (as required).						
Pest and disease control – Avoid use of pesticide and herbicides as much as possible. If required use targeted chemicals and application.						
Native Trees						
Planting of native trees						
Check condition and treat (as required)						
Structural pruning (as required) – Check for nesting birds prior to any works taking place. Excess arisings composted in a dedicated locality or chipped and used on site for mulching if required.						
Top up mulch (for the first three years and three years after replanting).						
Apply fertiliser.						
Replace damaged/vandalised/unhealthy stock.						
Shrub and Herbaceous Planting						
Amenity shrub and herbaceous planting						
Pruning (timing dependant on species) – Check for nesting birds prior to any works taking place. Excess arisings to be composted in a dedicated locality or chipped and used on site for mulching if required.						
Top up mulch (for the first three years and three years after replanting).						
Apply fertiliser.						
Thin out planting. – Check for nesting birds prior to any works taking place. Excess arisings to be composted in a dedicated locality or chipped and used on site for mulching if required.						
Cut back herbaceous (subject to species) – Check for nesting birds and hedgehogs prior to any works taking						
Lift/divide herbaceous (subject to species) - – Check for hedgehogs prior to any works taking place.						
Replace damaged/vandalised/unhealthy stock (annually)						
Bat Boxes						
Install bat boxes						
Bird Boxes						
Install bird boxes						

9.0 References

British Standards Institute (BSI) (2013). BS42020 - Biodiversity Code of Practice for Planning and Development. BSI, London.

Forestry Commission, (2003). Recent Changes to the Control of Forest Reproductive Material.

HM Government (1981). Wildlife and Countryside Act 1981 (as amended).

HM Government (2000). Countryside and Rights of Way Act, 2000.

HM Government (2005). ODPM Circular 06/05 Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.

HM Government (2006). Natural Environment and Rural Communities Act 2006.

HM Government (2010). Conservation of Habitats and Species Regulations 2010.

HM Government (2012) National Planning Policy Framework. Department for Communities and Local Government.

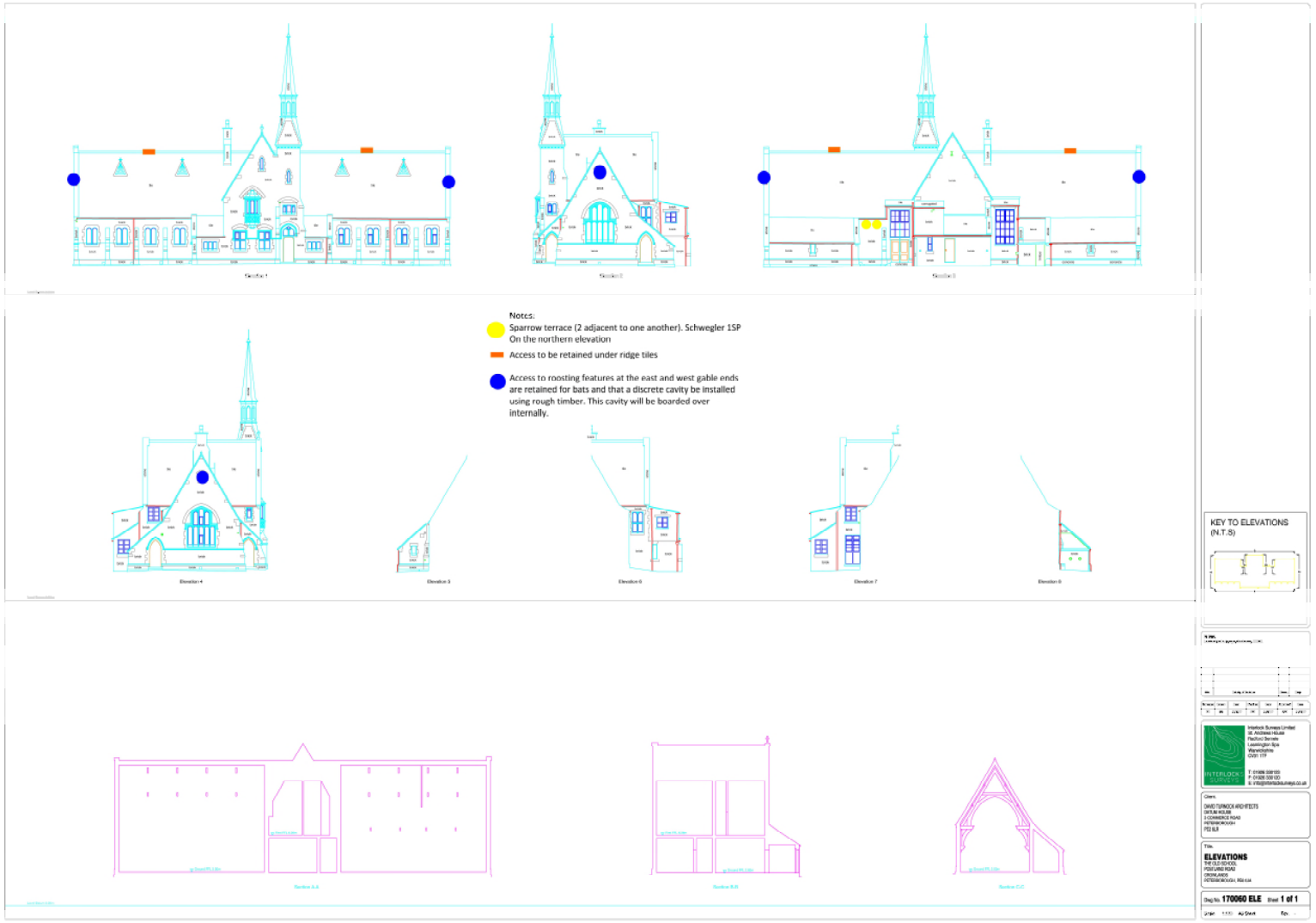
Lockhart Garret (2017) Bat – Daytime Inspection Report. 17-1462

Lockhart Garret (2018) Bat – Nocturnal Survey Report. 18-0866

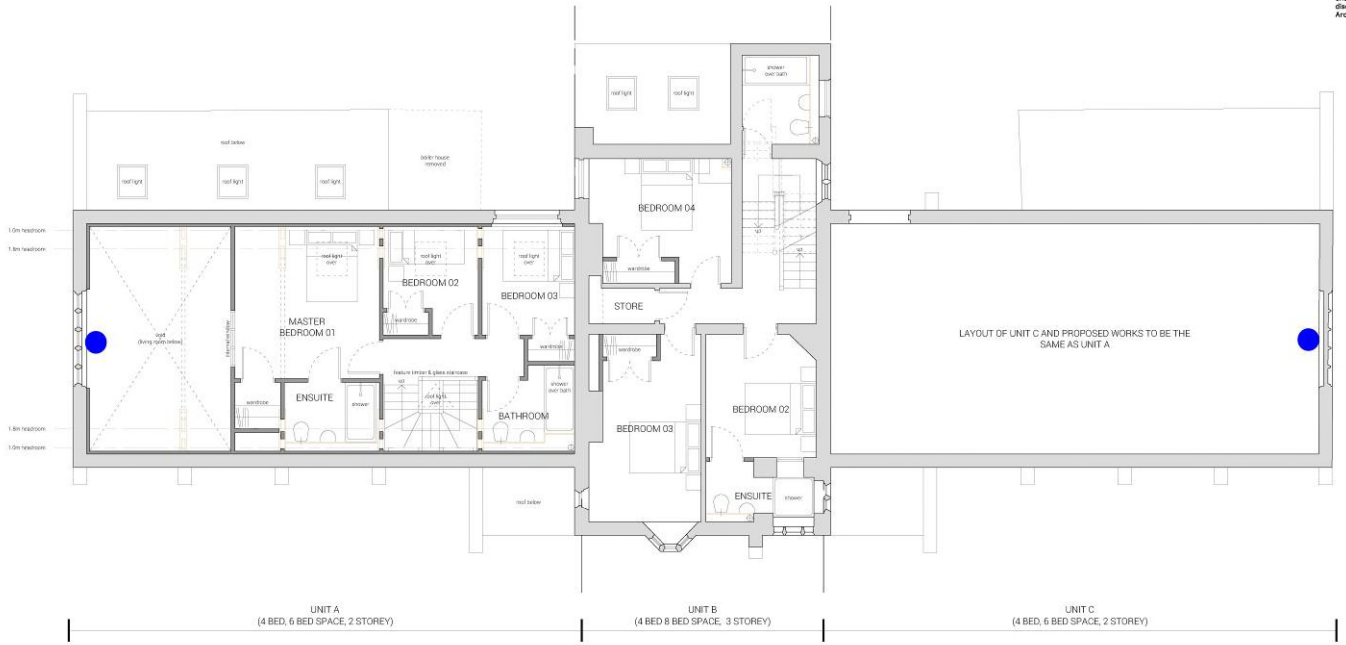
NNSS (2015) Non-native species legislation. http://www.nonnativespecies.org//index.cfm?pageid=67 [Accessed 14/12/2015].

Appendix One: Ecological Mitigation/Enhancement Locations




Notes:
Sparrow terrace (2 adjacent to one another). Schwegler 1SP On the northern elevation
Access to be retained under ridge tiles
Access to roosting features at the east and west gable ends are retained for bats and that a discrete cavity be installed using rough timber. This cavity will be boarded over internally.
KEY TO ELEVATIONS (N.T.S)
ELEVATIONS
170060 ELE
1 of 1

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Notes:

Access to roosting features at the east and west gable ends are retained for bats and that a discrete cavity be installed using rough timber. This cavity will be boarded over internally.

revision	note	date
P01	Planning issue	02.11.17
F03	preliminary issue for comment	02.08.17
F02	preliminary issue for comment	19.07.17
F01	preliminary issue for comment	27.06.17

client
Mike Green

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The Old School, Postland Road, Crowland

drawing title
Proposed First Floor Plan

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Planning

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1:50 @ A1	June 2017	
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Appendix Two: Photographs



East and west gable end features to be retained for bats



Ridge tile access to be maintained for bats



Location of Schwegler 1SP sparrow terraces



Retained lime trees suitable for bat and bird boxes

Appendix Three: Examples of Potential Site Enhancements/Mitigation

Recommended Bird Boxes



Example of Schwegler 1B Nest Box two with 26 mm holes and two with 32mm holes to cater for a range of species should be provided and installed on posts at a height of 2 metres.



Example of Schwegler 1SP sparrow terrace which provides insulated accommodation for the house sparrow and the tree sparrow. Intended for installation within a brick or concrete wall, or can be installed on the surface of a wall. May also be used by other small birds including tits.

Recommended Bat Boxes



Schwegler 1FF Module bat box. Boxes should be placed in a south-to- south-westerly orientation at a height of 4-6m above ground level, with all lighting angled away to avoid direct illumination of the box. Branches should be cleared to provide an unrestricted flight path to and from the box.

Hedgehog



Example of access provision for hedgehogs into site.