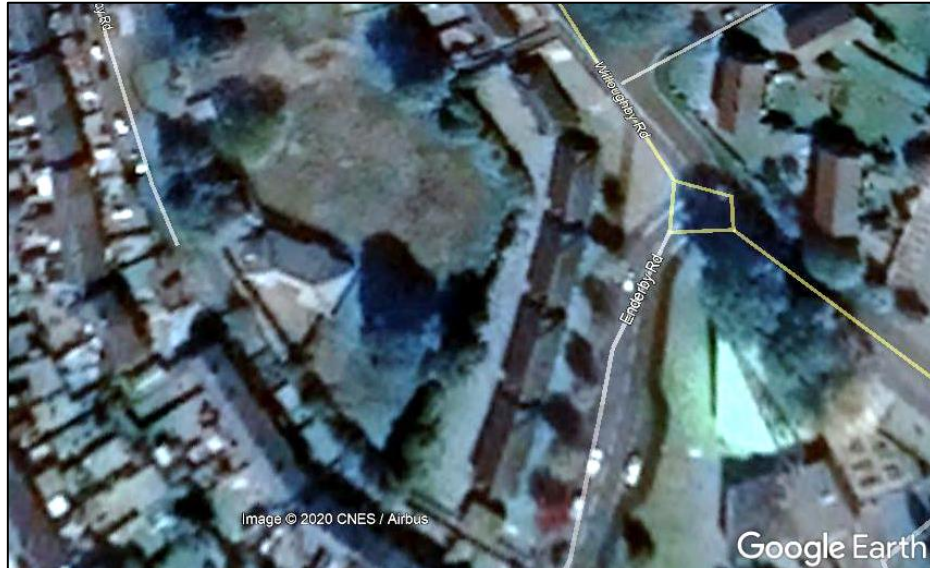


Biodiversity Management Plan

Dragonby Road, Scunthorpe

29th May 2020



Prepared by:

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Purpose and Description	Originated	Checked	Reviewed	Date
For Planning	Robert Bell MCIEEM [REDACTED]	P Middleton MCIEEM [REDACTED]	Robert Bell MCIEEM [REDACTED]	29/05/20

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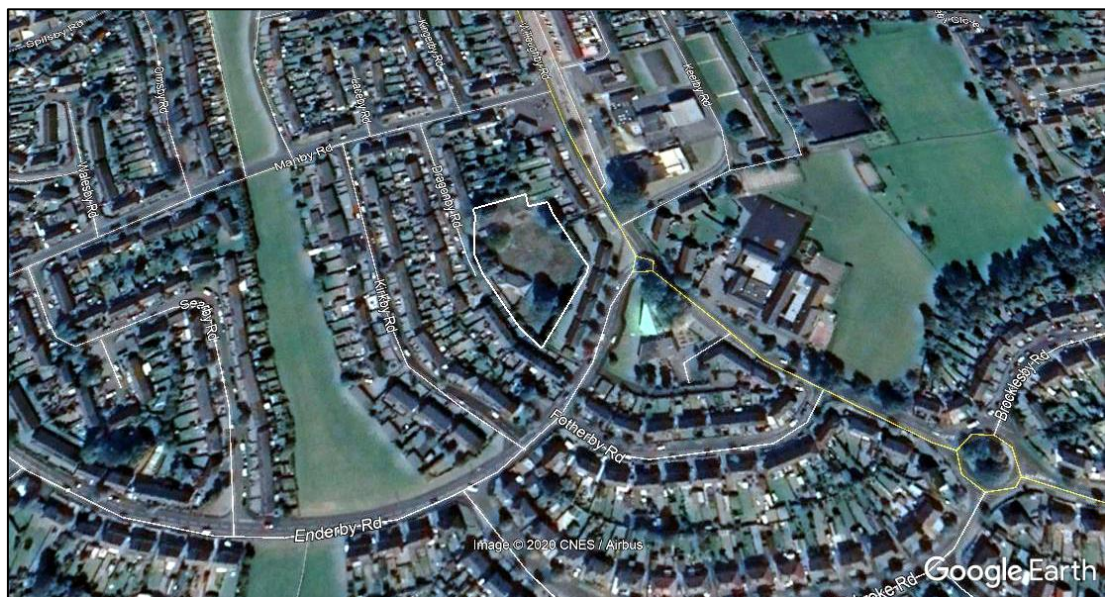
1. Summary

- 1.1.1 The Biodiversity Management Plan (BMP) was commissioned by Victoria Shaw of Farrar Bamforth Associates Ltd on behalf of the client Hesley Group on 22nd May 2020.
- 1.1.2 This BMP is required to inform a proposed development of six residential care bungalows on approximately 0.44ha of land, located off Dragonby Road, Scunthorpe. The document has been produced to support the discharge of Condition 12 of the planning permission (PA/2019/2001).
- 1.1.3 A landscape plan has been produced for this scheme. The landscaping plan includes the retention and protection of existing site trees. In addition, three new shrub beds will be planted with a mix of eight ornamental species selected for their appeal to insect pollinators.
- 1.1.4 This BMP includes the installation of two building integrated sparrow boxes, two building integrated bat boxes and two integrated swift boxes. In addition, hedgehog holes will be cut at the junction of new fences, in order to allow continued hedgehog access through the site.
- 1.1.5 Removal of shrub vegetation adjacent to Dragonby Rd will either be undertaken outside the bird nesting season (March to August) or preceded by a nesting bird check to be undertaken by an ecologist.

2. Introduction

2.1.1 The Biodiversity Management Plan (BMP) was commissioned by Victoria Shaw of Farrar Bamforth Associates Ltd on behalf of the client Hesley Group on 22nd May 2020. This BMP is required to inform a proposed development of six residential care bungalows on approximately 0.44ha of land, located off Dragonby Road, Scunthorpe (Ordnance Survey Grid Reference: SE 88487 07891). The site location is shown in Figure 1.

Figure 1. Site location with approximate site boundary shown by white line



2.1.2 This document has been produced to support the discharge of Condition 12 of the planning permission (PA/2019/2001), which states:

12. 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 bat roosting features to be installed in new dwellings.*
- b) details of nesting sites to be installed to support swifts and house sparrows.*
- c) restrictions to lighting to avoid impacts on bat roosts, bat foraging areas, bird nesting sites and sensitive habitats.*
- d) prescriptions for the planting and aftercare of trees and shrubs of high biodiversity value.*
- e) proposed timings of the above works in relation to the completion of buildings.*

Reason – to conserve and enhance biodiversity in accordance with policies CS5 and CS17 of the Core Strategy

- 2.1.3 No site visit was undertaken or was considered necessary to meet the specified objectives of Condition 12.

3. Purpose and Conservation Objectives

3.1.1 The strategy is to achieve the following:

- To ensure the optimal benefits to biodiversity are achieved in line with the aims of NPPF Section 15.
- To inform the development of a landscaping plan that includes tree retention and wildlife friendly shrub planting, in order to provide additional foraging opportunities on site.
- To provide bat roost provision suitable for common crevice dwelling species of bats.
- To provide new bird nesting opportunities suitable for use by house sparrow *Passer domesticus* and swift *Apus apus*.
- To ensure boundary treatments do not obstruct the movement of hedgehogs *Erinaceus europaeus*.

4. Detailed Scheme Prescription

Wildlife friendly planting and tree protection

- 4.1.1 A group of four existing native broadleaf trees at the southern end of the site and one tree in the centre of the site (Appendix 1) will be retained. These trees should be protected during construction in accordance with measures prescribed in 'British Standard 5837 (2012): Trees in relation to design, demolition and construction'. Root Protection Zones (RPZs) should be calculated and implemented to prevent harm to these features. Heras fencing should be installed along the edge of the RPZs prior to any other works commencing on site and contractors should be informed not to enter these areas.
- 4.1.2 The landscaping plan is shown in Appendix 1. Proposals include the planting of three new shrub beds will be planted with a mix of eight ornamental species selected for their appeal to insect pollinators. Species selected for these areas include lavender *Lavandula angustifolia*, heather *Erica carnea* and Californian lilac *Caenothus thyrsiflorus*. Away from these areas, soft landscaping will comprise lawns planted with a mix of three native grass species.

Nesting bird protection

- 4.1.3 Shrub vegetation alongside Dragonby Rd has potential to support nesting birds. These shrubs should either be removed outside the main bird nesting period (March to August) or vegetation should be subject to a nesting bird check, to be undertaken by an ecologist, immediately prior to removal works commencing.

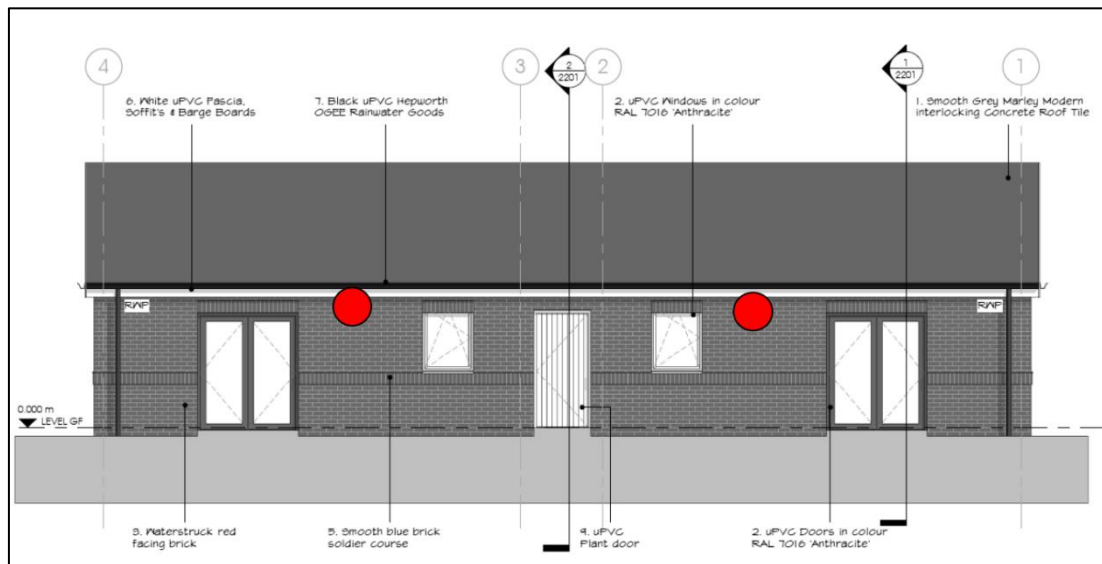
House sparrow nest boxes

- 4.1.4 The locations for two new Vivara Pro WoodStone House Sparrow Nest Boxes (Plate 1) are shown in Appendix 2 and Figure 2. The units will be installed on the northeast elevations of Plots 5 & 6, close to wall top height. The location of these boxes has

been selected to avoid full exposure to sun that might result in the over-heating of nests.

- 4.1.5 The Vivara Pro WoodStone Nest Box is a solid box made of insulating concrete which provides an internal space for up to two nests at one time. These units can be seamlessly integrated into the fabric of a building as it is built. The access hole is specifically designed to accommodate house sparrows. This box can be purchased from NHBS (<https://www.nhbs.com/vivara-pro-woodstone-house-sparrow-nest-box>).
- 4.1.6 House sparrows are sociable opportunists that survive in most UK habitats, from towns and cities to farmland and countryside. Substantial declines in both urban and rural populations have occurred in recent years (estimated 71% decrease between 1977 and 2008). Consequently, this species is classed as a Red Listed Species of Conservation Concern.

Figure 2. Sparrow box locations indicated by red circles

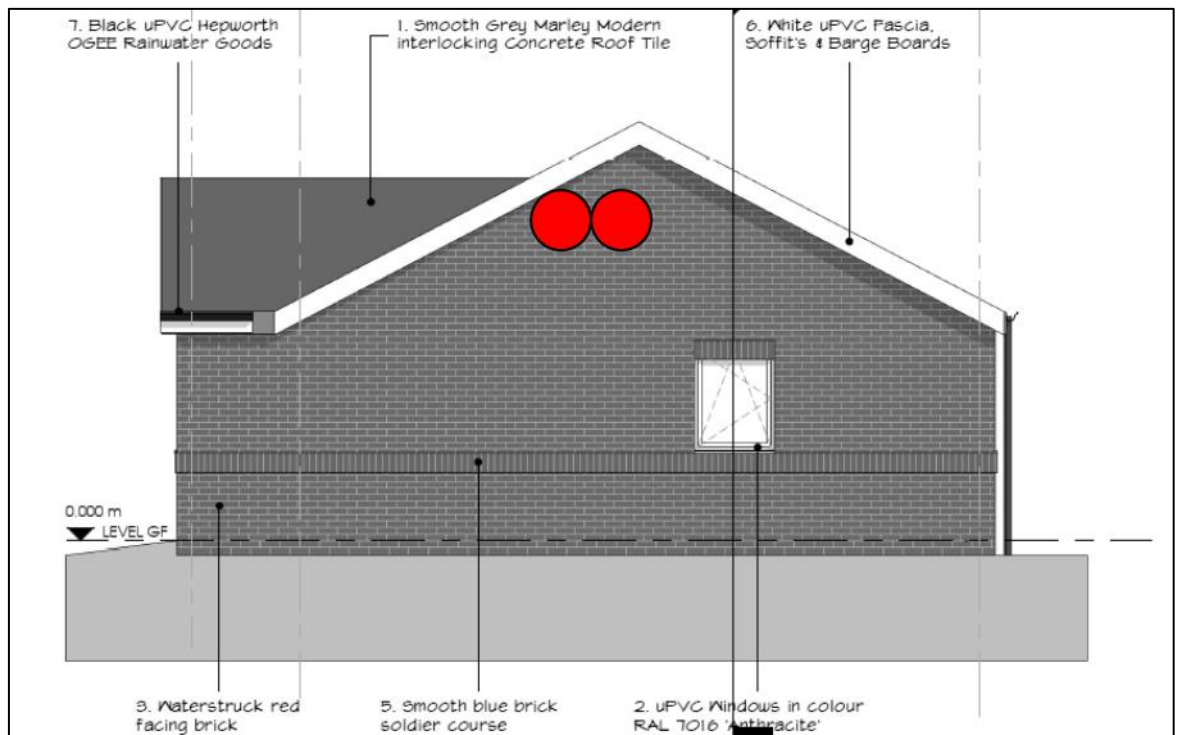


Bat roost boxes

- 4.1.7 The locations for two Build-In Woodstone Bat Boxes is shown in Appendix 2 and in Figure 3. These units will both be installed on the southeast gable of Plot 6, adjacent to each other and as close to the gable apex as possible. Bat box locations on south and west elevations typically experience higher levels of uptake, particularly by pipistrelle bats.
- 4.1.8 The proposed box location has also been selected as the darkest part of the site, with no lighting proposed for this gable. It is however accepted that due to the site's future function, with vulnerable residents present, relatively high levels of artificial lighting are required for safety. The site is relatively small and located in a suburban area with existing relatively high levels of artificial lighting.
- 4.1.9 As with the other units specified, the Build-in WoodStone Bat Box is made of concrete and wood fibres and is integrated into the building during construction. It is particularly appealing to crevice roosting bats species. This box can be purchased from NHBS (<https://www.nhbs.com/build-in-woodstone-bat-box>). It is important that these boxes are installed close to wall top height and not over windows or doors.

4.1.10 UK bats are known to have suffered historic declines in abundance and modern building methods can result in new buildings lacking potential bat roost locations or presenting a risk of entanglement in modern roofing membranes. The provision of integrated boxes increases the number of safe roosting options for bats in the local area, with these features likely to persist for the duration of the time that the dwelling is in occupation.

Figure 3. Bat box locations indicated by red circles



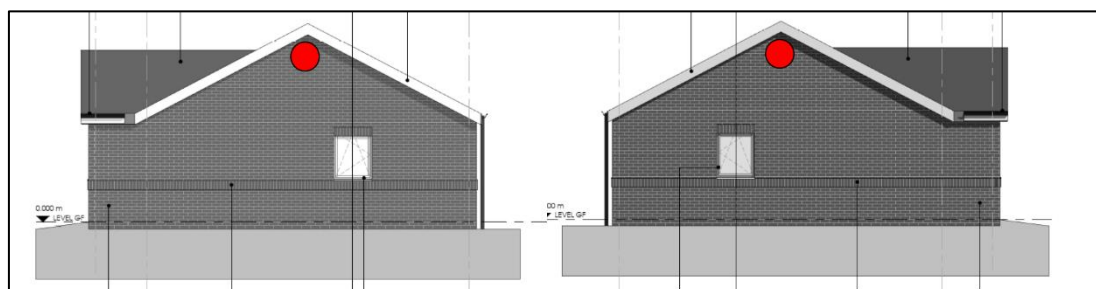
Swift nest boxes

4.1.11 The locations for two new WoodStone Build-in Swift Nest Box B units are shown in Appendix 2 and Figure 4. Units will be installed on the west gable of Plot 1 and the east gable of Plot 2. These locations are not in full sun and gables have been selected to give the highest locations possible on this site.

4.1.12 This box design is a solid box made of insulating concrete and wood fibres which provides an internal space for one nest. These units can be seamlessly integrated into the fabric of a building as it is built. The access hole is specifically designed to accommodate swift. This box can be purchased from NHBS (<https://www.nhbs.com/woodstone-build-in-swift-nest-box-b>). It is important that these boxes are installed close to wall top height.

4.1.13 Swifts are summer visitors to the UK. Each year they make the long journey from their wintering grounds in Africa to breed, before returning again in August. Swifts mate for life and breeding pairs will meet up each Spring at the same nest site. These nests are made high under the eaves of old buildings. Many modern and refurbished buildings now have much more effective sealing of the eaves, meaning that nesting spaces are becoming more difficult to find. This species is classed as an Amber Listed Species of Conservation Concern.

Figure 4. Swift box locations indicated by red circles



Hedgehog access holes

4.1.14 In order to allow hedgehogs to move freely through the site, it is important that holes are created in the base of new fences. These holes should be cut at the base of fence junctions, in the locations shown on Appendix 2. Each hole should be 130mm x 130mm in size.

4.1.15 Hedgehogs are declining rapidly within the UK and part of the reason for the decline in urban areas is the lack of habitat connectivity and road casualties. The creation of access routes through the development serves the dual purpose of keeping hedgehogs away from roads whilst retaining access to foraging areas within the animal's home range.

5. Timetable of Works

Table 1. Works timetable

Development activities and timing		
Activity	Timing	Notes
Protection of retained trees	At start of works	Tree protection fencing should be installed prior to any construction works commencing
Nesting bird protection	Outside nesting period (March - August) or preceded by nesting bird check	Any nesting bird check to be undertaken by an ecologist
Planting of new shrubs	November 2020 to March 2021	To be undertaken in accordance with Appendix 1
House sparrow nest boxes	During construction when walls are almost complete	To be installed in locations shown in Appendix 2
Bat roost boxes	During construction when walls are almost complete	To be installed in locations shown in Appendix 2. No lighting to be installed on southeast gable of Plot 6
Swift boxes	During construction when walls are almost complete	To be installed in locations shown in Appendix 2
Hedgehog holes	At completion of construction phase	To be installed in locations shown in Appendix 2

Persons responsible for implementation of works

- 5.1.1 The landowner and developer (Hesley Group) is responsible for the purchase of materials and implementation of all measures detailed in this document.

Aftercare and long-term maintenance

- 5.1.2 No maintenance is required for the sparrow, bat, swift and hedgehog provisions, although annual clearance of old nest material from the house sparrow boxes is recommended, if possible.
- 5.1.3 New tree and shrub species should be watered as appropriate following planting and during periods of drought. In autumn 2021, all areas of tree and shrub planting should be inspected and any dead or dying specimens should be replaced. Do not cut back tree or shrubs in the first three years following initial planting to prevent induced stress, aiding the establishment of these plants.

Appendix 1. Landscape Plan



Shrubs	Nursery Stock Size;	Height	Pot Size	Density
V.t	Viburnum Tinus	60-90cm	3L	Plant 1 per m ²
C.t.v.r	Geanthus thyrsiflorus var.repens	60-90cm	3L	Plant 1 per m ²
H.a.g	Hebe Autumn Glory	25-30cm	2L	Plant 3 per m ²
V.d	Viburnum Davidii	25-30cm	2L	Plant 3 per m ²
E.c	Erica carnea	25-30cm	2L	Plant 3 per m ²
H.h.s	Hedera Helix Sagittifolia	25-30cm	2L	Plant 3 per m ²
S.j	Spiraea japonica	25-30cm	2L	Plant 3 per m ²
L.m	Lavandula Munstead	25-30cm	2L	Plant 3per m ²
Trees				
E.t	Existing Trees to be retained shown blue			

LANDSCAPING SPECIFICATION

Plant Material
All plant material shall be a minimum conform to the most recent of the following BS's or the equivalent European Standards: BS 3436-1:1992 (trees and shrubs); BS 3436-2:1990 (roses); BS 3436-4:2007 (forest trees) BS 3436-4:1998 (bulbs, corms and tubers); BS 3436-10:1990 (groundcover plants). The plant material shall also meet the National Plant Specification standards.

Packaging and Delivery
Packaging and delivery of plant material shall be in accordance with the Code of Practice published by the JCL, and shall be adequately stored and protected prior to planting.

Species
Species and size of plant material is to comply with the accompanying schedule. The contractor is to obtain approval before substituting any of the species listed, otherwise the substitutes may be rejected.

Shrubs and Herbaceous Plants
These shall be first quality well rooted, non-refrigerated stock with well developed branch and root system and not pot-bound. Shrubs and herbaceous plants shall be pit-planted with 1 no. slow release fertiliser tablet at spacings indicated.

Watering
All planting is to be well watered on completion.
All planting to conform to the current BS 4428:1984, and be guaranteed for the first growing season and a show of leaf in the second.

Maintenance
The contractor is to carry out maintenance to the planted areas for the first 12 months after Practical Completion. This shall include fortnightly visits between March-October inclusive and once monthly between November-February inclusive. At each visit all weeds to be removed by hand including the root. The ground should be watered to field capacity in dry periods and to ensure all good establishment. Any broken or dead branches to be pruned off carefully. Remove all litter and rubbish at each visit. Check all tree stakes and ties and repair as necessary.

Seeding
Seeded areas to have minimum 150mm depth of topsoil and be thoroughly cultivated with all rubbish, weeds, roots and stones over 30mm removed to contractors own tip. The ground surface is to be brought to a smooth firm fine tilth free from humps and hollows to finish 25mm above surrounding hard surfaces.

Ryegrass based general mix to be Pro Master 120 Sloughouth (or similar approved) with 60% Esquire perennial ryegrass, 35% Pinafore slender creeping red fescue, 5% Highland brown top bent, sowing rate: 35-50g/m².

Seed is to be spread in 2 no. batches in transverse directions and raked into the soil. An appropriate fertiliser is to be spread at the manufacturers recommended rate at the time of the first cut. The first cut shall be made when growth has reached 100mm and the height reduced to 25mm. Subsequent cuts shall be made when growth has reached 50mm and height reduced to 25mm. Seed is to be a low maintenance amenity mix spread at manufacturers recommended rate and to be ARCADE certified, complying with requirements of BS 4428:1984.

Maintenance
The contractor is to carry out maintenance and grass cutting to the sward for 12 months after Practical Completion. This shall include fortnightly cuts reducing sward height to 25mm between March and October and once monthly from November to February inclusive. Any areas of poor germination shall be treated as necessary and over seeded at the contractor's expense. The sward will be considered complete when all areas are covered with growing grass.

Separation Layer
Terram 1000 under paving between sand/cement layer and hardcore as weed protection barrier

Rev	Description	Date	By	Rw
T04	Updated for the Biodiversity Management Plan	28.05.20	VS	TB
T03	Grass seed spec and extents shown	24.04.20	VS	TB
T02	Updated Tender Issue	30.01.20	GW	TB
T01	TENDER ISSUE	08.01.20	GW	TB

Dragonby Road, Scunthorpe
at Dragonby Road
Scunthorpe
DN17 2LD
for



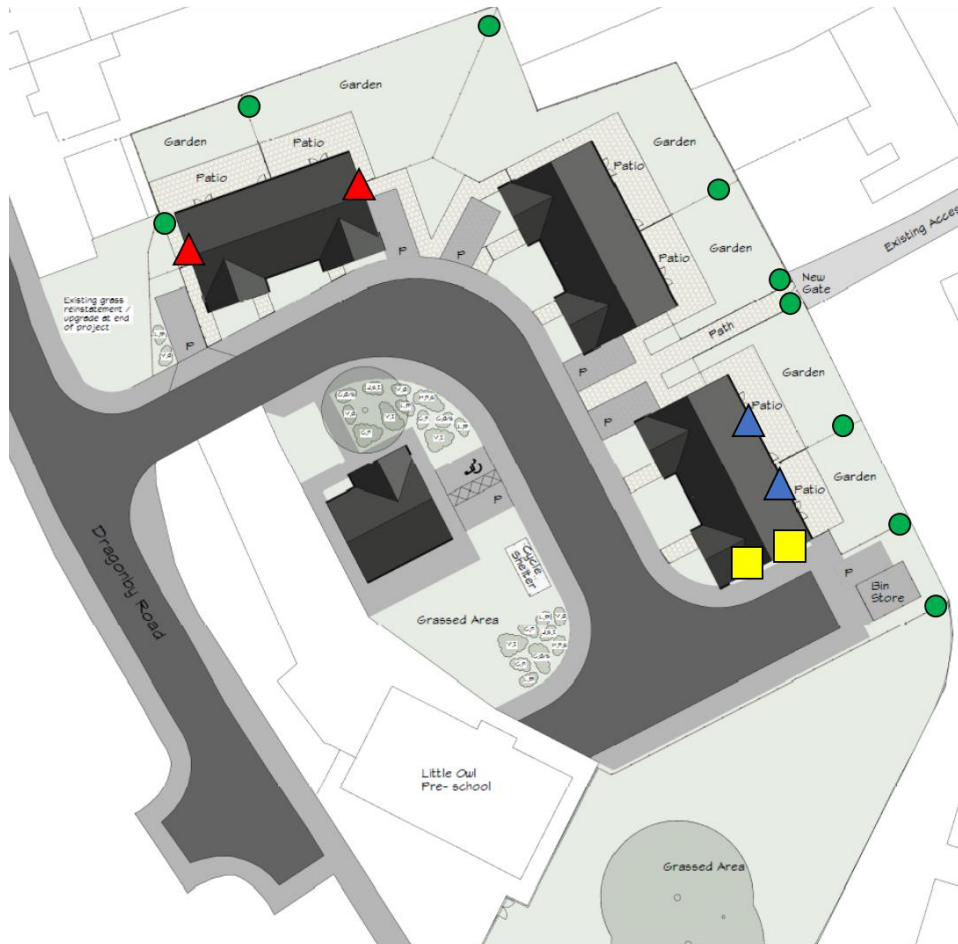
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Landscaping Layout Plan


Project	Originator	Zone	Level	Type	Role	Number	Revision
19C25	FBA	ZZ	XX	DR	A	9601	T04
Drawn	Date	Suitability	Revision Status	Scale of A1			
GW	Nov 19	D2	Tender	As indicated			

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Appendix 2. Bat, Bird and Hedgehog Hole Plan




Key

Vivara Pro WoodStone House Sparrow Nest Box locations 



WoodStone Build-in Swift Nest Box B locations 



Build-In WoodStone Bat Box 



13cm x 13cm square hole cut in fence in these locations 