THE ENVIRONMENT PARTNERSHIP



BOWNESS ROAD

ROCHDALE

BIODIVERSITY ENHANCEMENT SCHEME

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DRAWINGS

G8389.001 - Biodiversity Enhancement Scheme

1.0 Introduction

1.1 TEP have been commissioned by Engie to prepare a biodiversity enhancement scheme for a proposed development at Bowness Road in Rochdale, Greater Manchester. The proposals comprise the construction of 41 residential properties and associated access and landscaping as shown in the Proposed Layout (BYA Limited Drawing JR008384_BYA_00_00_DR_A_0018).

1.2 The planning application was approved in July 2020 (Rochdale Borough Council Application Ref: 19/01487/FUL). This biodiversity enhancement scheme addresses Condition 13 of the planning permission:

> *"No above ground works shall take place until a scheme of biodiversity enhancements for the site including, but not limited to, provision for bird boxes, bat boxes, bug hotels, wildflower seeding and hedgehog habitat (including provision of 'Hedgehog Highways') has been submitted to and approved in writing by the Local Planning Authority. The duly approved scheme shall be implemented in full prior to first occupation of the dwellings and retained thereafter*
>
> *Reason: In the interests of enhancing biodiversity and habitat provision within the site in accordance with Policy G7 of the adopted Rochdale Core Strategy and the National Planning Policy Framework."*

1.3 The Ecological Assessment (TEP Report Ref 7797.002) recommended enhancement measures for bats, birds, invertebrates and hedgehogs which will be addressed in this biodiversity enhancement strategy. The wildflower seeding element of condition 13 will be addressed in separate landscaping proposals.

2.0 Bat Box Specifications

2.1 It is considered that eight bat boxes will be sufficient to enhance the site for these species.

2.2 Bat boxes have been chosen to suit the assemblage of bats identified from local environmental record centre data (TEP Report Ref: 7797.001). These include pipistrelle species and Daubenton's bat.

2.3 Given the limited number of retained trees within the proposed development area it is proposed that bat boxes are attached to buildings. Specifications of the bat roost boxes recommended for installation on buildings are provided below.

Ibstock Enclosed Bat Box 'C'	
"The Enclosed Bat Box 'C' from Ibstock is designed for the pipistrelle bat. It is ideal for new builds as it can be integrated directly into the brickwork to produce a discrete but attractive home for bats. The inside of the box is designed to create several roosting zones which are ideal for crevice dwelling bats such as the pipistrelle. The bottom entrance means that no maintenance is required as droppings will simply fall out the bottom. This Ibstock Bat Box C is available in two sizes and three colours. Choose from smooth red, smooth blue or smooth cream brick. The box has an attractive bat motive on the front and is both durable and fully frost resistant." Dimensions: Small Box - 215 x 215mm; Large Box - 215 x 290mm.	 Smooth Red Small 215 x 215 mm

Siting of Bat Boxes

2.4 The bat boxes should be sited in accordance with Drawing G8389.001. Failure to do so may result in boxes being sited in sub-optimal positions that could lead to a lower up-take by bats.

2.5 Bat boxes must be installed at heights of 3 metres or above.

2.6 It must be ensured that there is unobstructed access for bats entering and leaving the bat box.

2.7 Bat boxes (for summer roosting) should be sited on south and west facing walls where no direct artificial light will shine on the box.

2.8 All bat boxes must be installed prior to occupation of the development.

2.9 The siting of bat boxes must not conflict with door and/or window locations for health and safety reasons.

2.10 All bat boxes must be installed in line with the manufacturer's specifications to ensure no hazard is posed to occupants of the building or members of the public.

3.0 Bird Box Specifications

3.1 It is considered that eight bird boxes will be sufficient to enhance the site for these species. These will include five sparrow terraces.

3.2 Bird boxes have been chosen to suit the assemblage of birds identified from local environmental record centre data (TEP Report Ref: 7797.001). These include house sparrow and starling.

1SP Schwegler Sparrow Terrace	
"The Sparrow Terrace has been designed to help redress the balance of falling house sparrow numbers. The current UK population of 6 million pairs is half what it was in 1980 and this is thought to be due to habitat destruction and lack of suitable nesting spaces. Sparrows are social birds and like to nest in company. This terrace provides ideal nesting opportunities for three families. Made of Schwegler's revolutionary wood-concrete mix, this terrace is durable, breathable and will last many decades. It may also occasionally attract tits, redstarts and spotted flycatchers. The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of houses in built-up areas, and on industrial and agricultural buildings such as barns, sheds and factories. Due to its weight (15kg), it is not suitable for fences or garden sheds. Ideally place the terrace two metres or more above the ground. Either install on the surface of the wall using the plugs and screws provided, or install directly into the wall (see the images tab for illustrations). Cleaning is advisable but not necessary. The front panel can be removed by turning the screw hook. The Sparrow Terrace is available in either Stone or Brown." External Dimensions: H 24.5 cm; W 43 cm; D 20 cm.	

Traditional Wooden Bird Nest Box	
"Our own range of wooden bird nest boxes have been custom designed and manufactured from substantial 2cm thick FSC-certified European Redwood. These simple, breathable wooden bird boxes have a sloping roof and four drainage holes and are ideal for providing crucial nesting spaces for the smaller garden birds. The 32mm entrance hole will attract a wide range of garden birds including great tits, house sparrows and nuthatches. Nest boxes also provide vital roosting spaces for birds during the cold winter months and the thick walls of these nest boxes will ensure that roosting birds stay warm. The boxes can be expected to last 5-10 years and are constructed using stainless steel staples which will not rust. These boxes can be installed on a tree or wall and should be placed two to four metres above ground. There should be a clear flight path to the entrance hole and the boxes should be placed so that the entrance is not exposed to strong sunlight or winds" External Dimensions: H 26 cm; W 14 cm; D 18 cm.	

Siting of Bird Boxes

3.3 The bird boxes should be sited in accordance with Drawing G8389.001. Failure to do so may result in boxes being sited in sub-optimal positions that could lead to a lower up-take by birds.

3.4 Bird boxes must be installed 1.5 metres or higher (up to 3 metres) above ground level. Boxes may be positioned higher in areas where there may be a high cat population.

3.5 It must be ensured that there is unobstructed access for birds entering and leaving the bird box.

3.6 Bird boxes should ideally be placed on north and east facing walls. In order to avoid the prevailing wind, no bird boxes should be sited on the west of buildings.

3.7 The siting of bird boxes must not conflict with door and/or window locations for health and safety reasons.

3.8 All bird boxes must be installed prior to occupation of the development.

3.9 All bird boxes must be installed in line with the manufacturer's specifications to ensure no hazard is posed to occupants of the building or members of the public.

4.0 Hedgehog Highway Specification

4.1 Hedgehog highways will be incorporated within the scheme by maintaining gaps under garden gates and fences in accordance with Drawing G8389.001. This will enable hedgehogs to move through the site.

4.2 Gaps can be intentionally left or cut during the construction of fences and walls. Specialist hedgehog gravel boards can also be installed. Pipes and tubes can also be used to maintain gaps depending on fencing or wall material, as shown below.

Hedgehog Gravel Board	
This unique Hedgehog gravel board is for wildlife lovers and is a must for the garden. It allows hedgehogs to pass from garden to garden as they please. Just install one Hedgehog Gravel Board on each side of the garden to allow a natural hedgehog pathway. Width: 6ft. Height: 150mm. Thickness: 22mm. Available from Jarrett Fencing.	

Hedgehog Tunnel	
13cm by 13cm is sufficient for any hedgehog to pass through. This will be too small for nearly all pets. A piece of appropriately sized pipe or tubing can be installed as in the image.	

4.3 Signs should be installed along the hedgehog highway to ensure that gaps and holes are maintained and not blocked or obstructed.

Hedgehog Highway Signs	
Laser cut from recycled acrylic, these 'Hedgehog Highway' signs can be attached to either side of the hedgehog hole in your garden fence or wall. With these in place, everyone will know why there's a hole in your fence and no one will block it up or fill it in. Available from PTES	

Eco Hedgehog Hole Fence Plate	
Once you have made your hole in the fence or wall, you can fix the Eco Hedgehog Hole Plate to the fence, ensuring that the hole does not get blocked or stretched. The plate has six screw holes, three along each side, which can be used to fix the plate to your fence or wall. Additional holes can be made in the plastic if required. The Eco Hedgehog Hole Plate is made from 100% recycled plastic, which is mostly derived from plastic waste from farms across the UK. The plastic hedgehog hole is UV-stabilised so will not rot or degrade over time. Available from NHBS	

5.0 Bug House Specifications

5.1 Two insect houses will be incorporated into the public, landscaped areas on site to enhance insect habitat. Locations of the insect houses are shown in Drawing G8389.001.

5.2 It should be ensured that insect houses are not located immediately adjacent to bat and bird boxes to minimise predation. Insect houses should be positioned close to lawns or areas sheltered by planting.

Insect House	
A small double chambered Insect House, ideal for attracting solitary insects such as the leafcutter and mason bee, which are non-aggressive, and encourage pollination in the garden. Also ideal for the overwintering of ladybirds and lace wings. Made from FSC Certified timber it is solid and durable and will provide refuge and nesting points for a variety of insects. Easy installation onto the external wall of a house. Width: 16cm. Height: 10cm. Thickness: 7cm. Available from Wildcare Ecology Supplies.	

Insect House	
Beneficial to insects including ladybirds, lacewings and solitary bees that will pollinate plants and control aphids and other pests. Made from sustainable timber with a variety of textures, nooks and hollows, it makes a suitable habitat for multiple species to live in harmony. The lift-up lid makes it easy to fill with nesting material such as bark or straw for additional comfort. Holes and bee tubes can be used by pollinating bees such as mason bees or leafcutter bees. Position next to a lawn or sheltered flower bed, or inside a planter. Width: 14cm. Height: 23.8cm. Thickness: 12.8cm. Available from Crocus.	

6.0 Sensitive Lighting Strategy

6.1 Habitats which provide key bat foraging and commuting habitat on site should remain dark in order to benefit bats and other nocturnal and crepuscular species.

6.2 A Sensitive Lighting Strategy shall be implemented during construction to avoid adverse impacts on bats. This will ensure that habitats that provide key bat foraging/commuting habitat or potential roosting sites remain unlit during construction, or otherwise ensure that an increase in existing light spill on to retained habitats is avoided.

6.3 The Strategy will address four key design principles:

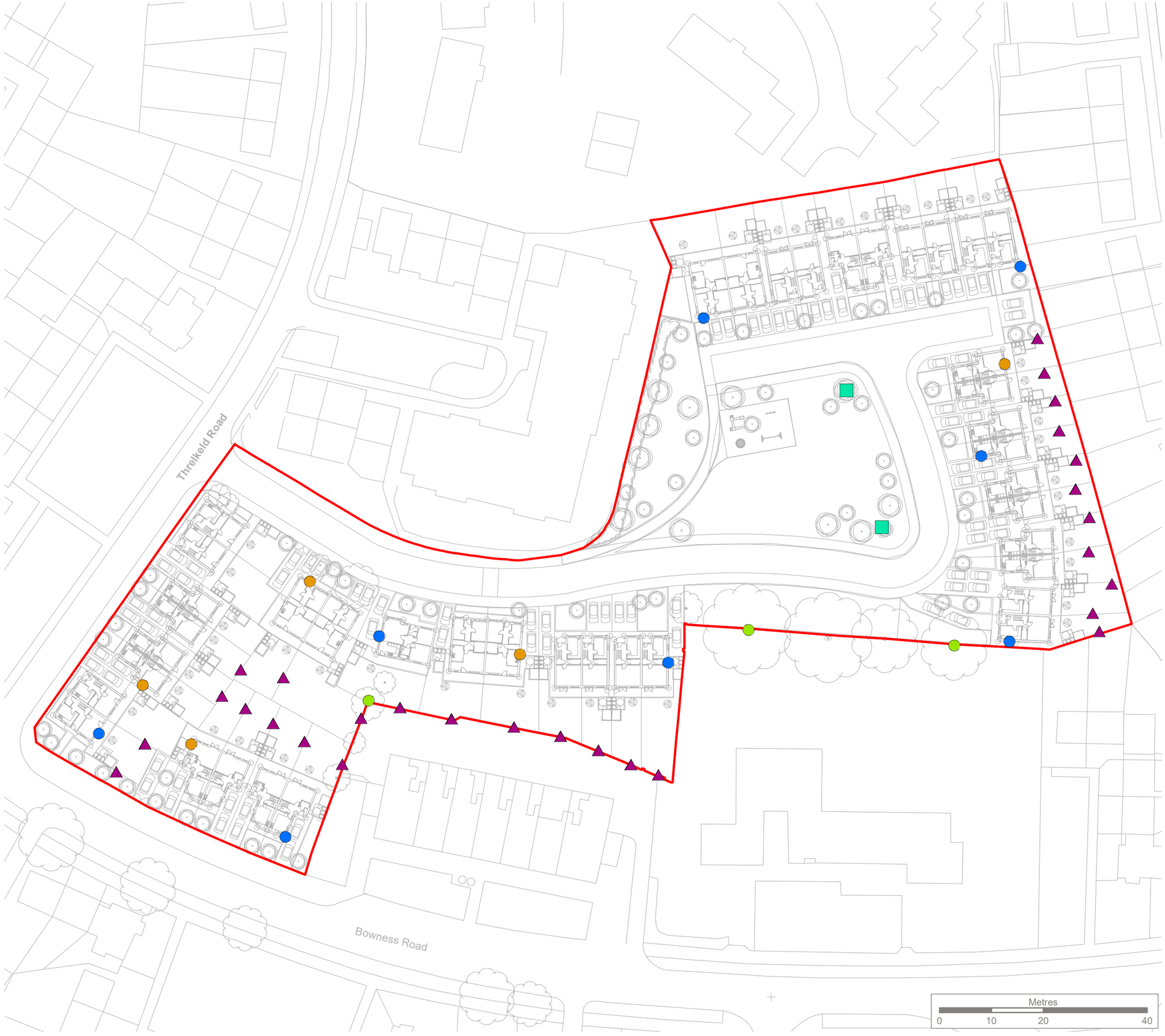
- Use of unnecessary lighting will be avoided.
- Spatial spread of lighting – the horizontal and vertical spread of artificial light will be minimised, and take into account both primary and reflected light sources. Directional lighting can be achieved by angle and orientation of beam, use of a cowl, louvre or other light shield, or a combination of these.
- Timing and duration of lighting – timers and bespoke dimming regimes may be used to ensure that luminaires are reduced at times of predicted low use. These can be set to change with the seasons and therefore reflect the shifting time of dusk and dawn throughout the year. Motion sensors provide further control to ensure that areas are illuminated only when required.
- Intensity and colour of lighting – light intensity will be as low as possible whilst meeting the objectives of the intended function. The colour of lighting will need to take into account the sensitivity of the ecological receptors on site. Light sources selected should emit zero ultra-violet light wherever possible. Interim guidance from the Bat Conservation Trust (2014) recommends that white and blue spectrum light should be avoided or, where white lights are required, these should be of warm/neutral colour and have a peak wavelength above 550 nanometers. Narrow spectrum light sources should be used (to lower the range of species affected by lighting).

6.4 The Sensitive Lighting Strategy is of particular relevance to construction during the autumn and spring when bats are active, and when working hours fall within an hour of dusk or dawn and artificial lighting is required.

6.5 The Sensitive Lighting Strategy should continue to be implemented post-construction. Post-construction, the strategy will ensure that any newly created bat foraging/commuting habitat will be unlit, or otherwise avoid increasing existing light spill to these areas.

DRAWINGS

G8389.001 - Biodiversity Enhancement Scheme



KEY

Site boundary

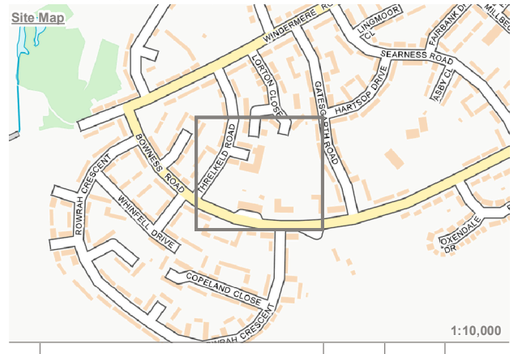
Biodiversity Enhancement Proposals

- Ibstock Enclosed bat box 'C' or 1FQ Schwegler bat box
- Traditional wooden bird nest box
- 1SP Schwegler sparrow terrace or woodstone build-in open nest box
- Hedgehog highway
- Insect house

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Masterplan received from the client.

Site Map



Rev	Description	Drawn	Approved	Date

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Project
Bowness Road, Rochdale

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Biodiversity Enhancement Scheme

Drawing Number
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CW	MK	GH	1:750 @ A3	24/08/2020

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