Just MAMMALS Limited
Ecological Consultancy

PRELIMINARY ECOLOGICAL APPRAISAL

Land at Corbett Street

Treherbert
CF42 5EL



ON BEHALF OF:

Amity Planning Consultants

Site Address	Land at Corbett Street, Treherbert, CF42 5EL	
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1 Executive Summary

1.1 Proposals have been submitted to construct fourteen affordable housing units on a small parcel of land at Corbett Street, Treherbert. In order to assess the habitats on site, as well as the presence or potential presence of protected species, a Preliminary Ecological Appraisal was undertaken in May 2026.

1.2 Prior to clearance of the site to accommodate the proposed development, further surveys must be undertaken for reptiles. Seven inspection visits must be conducted during appropriate weather conditions, and at temperatures between 9ºC and 18ºC. Further survey work will also be required for bats in the form of a Ground Level Tree Assessment, utilising an endoscope and ladder as required, which can be undertaken at any time of year. Further survey may also be required for birds, depending on whether vegetation clearance can be timed to be undertaken outside of the bird nesting season.

1.3 In order to comply with current Planning Policy Wales (PPW) 12, it will be necessary to provide enhancements for biodiversity. Proposals for measures to promote wildlife and nature conservation are contained in this report.

2 Introduction

2.1 Proposals have been submitted to construct fourteen affordable housing units on a small parcel of land at Corbett Street, Treherbert. The land is dominated by grassland, with scattered willow (*Salix sp.*) and dense scrub along the eastern site boundary. The site is located around National Grid Reference SS 94476 98193 at an altitude of approximately 202m Above Ordnance Datum.

2.2 This report makes recommendations concerning the ecological value of the site, as well as the need for further survey work as appropriate. The habitats present were assessed, and the potential presence of protected species was considered.

3 Survey Team Experience

3.1 Lead surveyor and author of this report, is Daniel White. Following qualification with distinction from the University of South Wales with an MSc in Wildlife and Conservation Management in 2021, Daniel joined Just Mammals Limited and is currently employed as an ecologist. As an enthusiastic herpetologist, Daniel has experience surveying for all widespread amphibian and reptile species in Britain, in addition to protected great crested newts and sand lizards. Beyond herpetofauna, Daniel has several field seasons experience surveying for dormice, badgers and bats, including aerial inspection of bat roosts, in addition to undertaking various botanical surveys. Daniel is an Associate Member of CIEEM.

4 Survey Methodology

4.1 A Preliminary Ecological Appraisal (PEA) was conducted on 22 May 2026. Details of the survey activities and weather conditions are provided in Table 1. Prior to the site visit, a desktop study was undertaken, which involved a standard search area of a 2km radius from the site (around a central grid reference) using the MAGIC website. Details of statutory sites designated for nature conservation were obtained. A record search was also commissioned from the Local Biological Records Centre.

4.2 The assessment comprised a survey employing the Phase 1 habitat survey methodology. This is a standardised technique for classifying and mapping British habitats. All areas within the site were inspected and assessed for indicators of ecological value, including the presence and/or field signs of any protected or rare habitats and species. The site was walked over, recording plant species and features onto a custom-made recording sheet. Habitats and notes were drawn onto a map of the survey site and photographs were taken. A coloured Phase 1 habitat map was produced (see Figure 2, Appendix I).

5 Site Description

5.1 Situated toward the north east of the town of Treherbert, Rhondda, the site comprises areas of grassland and scrub, with a small number of trees scattered across the site. The landscape surrounding the site includes the urban environment of Treherbert to the west and south, with ffridd habitat and coniferous plantations along the mountainside to the north and east. Despite the sites close proximity to the mountainside, connectivity to the site for terrestrial wildlife is limited by roads to north, west, and south, with residential housing to the east.

6 Survey Constraints

6.1 No major constraints were encountered during the assessment. All areas of the site were accessible by the surveyor for the purposes of the survey.

7 Desktop Study

7.1 No part of the site is within a statutory designated site of conservation value (e.g. a Site of Special Scientific Interest (SSSI); Special Area of Conservation (SAC); Special Protection Area (SPA); or National Nature Reserve (NNR)). One statutory designated site of conservation value is present within 1km, namely Mynydd Ty-isaf, Rhondda SSSI situated approximately 680m south-west. Mynydd Ty-isaf is designated for its arctic alpine plants and other plants of local distribution in Wales, and provides nesting sites for Schedule 1 raptors.

7.2 Several non-statutory designated sites can be found within 1km, including Mynydd Ystradffernol, Treorchy Slopes, Treherbert Slopes, Mynydd Tyle-coch, Mynydd Blaenrhondda and Mynydd TyIsaf Sites of Importance for Nature Conservation (SINC's). Numerous ancient woodland sites can also be found within 1km, including six ancient semi-natural woodlands, eight plantation on ancient woodland sites, eight Natural Resources Wales (NRW) Priority Areas for woodland and one ancient woodland site of unknown category. A national B-line, designated for the protected of British pollinators, can also be found within 1km.

7.3 A record search was commissioned from the South East Wales Biodiversity Records Centre (SEWBReC) unique reference code (0267-107) to ascertain whether protected species have been recorded at, or close to, the site. While no protected species were recorded for the site itself, 293 records were returned for species within 1km, including 200 priority species, 44 species of conservation concern, 12 locally important species and 37 invasive non-native species. The results are summarised below:

- **Bats** – accounted for 32 species records, including common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), lesser horseshoe (*Rhinolophus hipposideros*), in addition to other unidentified pipistrelle species. The closest record of a roost is a pipistrelle roost at 27 Park Place, Treherbert, approximately 950m west;
- **Terrestrial mammals** – accounted for three records of hedgehog (*Erinaceus europaeus*), and European protected otter (*Lutra lutra*). The closest record of a mammal to the site is of a hedgehog recorded at John Street, over 250m south-east;
- **Birds** – accounted for 192 records, including Schedule 1 protected brambling (*Fringilla montifringilla*), crossbill (*Loxia curvirostra*), fieldfare (*Turdus pilaris*), goshawk (*Astur gentilis*), red kite (*Milvus milvus*), peregrine (*Falco peregrinus*), black redstart (*Phoenicurus ochruros*) and redwing (*Turdus iliacus*). The closest record to the site is of a peregrine over 300m north within the forestry plantations on Mynydd Ystradffernol;
- **Reptiles** – accounted for four records of slow worm (*Anguis fragilis*) and viviparous lizard (*Zootoca vivipara*). The closest reptile sighting to the site is of a slow worm less than 370m south-east;
- **Amphibians** – accounted for seven records of common frog (*Rana temporaria*) and palmate newt (*Lissotriton helveticus*). The closest record of an amphibian is of a common frog approximately 215m south-west;
- **Fish** – accounted for three records of brown trout (*Salmo trutta*) within the Nant Orci, less than 1km north-east;
- **Invertebrates** – accounted for 14 species records, including priority small heath (*Coenonympha pamphilus*) and grayling (*Hipparchia semele*), locally important emerald damselfly (*Lestes sponsa*), golden-ringed dragonfly (*Cordulegaster boltonii*), keeled skimmer (*Orthetrum coerulescens*), black darter (*Sympetrum danae*) and dark green fritillary (*Speyeria aglaja*). The closest record of a priority invertebrate is of a small heath, 300m north;
- **Vascular plants** – accounted for 53 species records, including priority native corn spurrey (*Spergula arvensis*), bluebell (*Hyacinthoides non-scripta*), wood cranes-bill (*Geranium sylvaticum*), charlock (*Sinapis arvensis*) and little kneeling eyebright (*Euphrasia confusa*), in addition to invasive non-native Himalayan balsam (*Impatiens glandulifera*) and Japanese knotweed (*Fallopia japonica*). The closest record of a notable vascular plant is of corn spurrey recorded less than 400m south-west of the site;
- **Bryophytes** – accounted for five records, including species of conservation concern, namely cape thread-moss (*Orthodontium lineare*) and locally important chalk comb-moss (*Ctenidium molluscum*), in addition to invasive non-native (*Campylopus introflexus*).

- **Lichens** – accounted for two records of priority *Usnea articulata* between 500-600m east on Pen-yr-englyn tip;
- **Fungi** – accounted for two records of locally important goblet waxcap (*Hygrocybe lepida*) and meadow coral (*Clavulinopsis corniculata*), with both records over 800m away.

8 Survey Results

8.1 Details of the conditions under which survey was conducted are given in Table 1. Wind speeds employ the Beaufort scale.

Table 1: Summary of Survey Activity and Weather Conditions

Survey Type and Location	Dates	Timing	Weather Conditions
Day time visual inspection, botanical survey and habitat assessment, including protected species assessment DW	22/05/2026	11:00 – 12:00 hours British Summer Time	Air temperature: 25°C Cloud cover: 3/8 oktas Wind speed: F1 – light air Conditions: Dry
Surveyors	Daniel White		

8.2 The site is divided into four different habitat types for recording purposes. Table 2 below provides details of the various habitats and the present species within each of them. A coloured Phase 1 habitat map was produced (see Figure 2, Appendix I).

Table 2: Habitat Results Table

Habitat	Phase 1 Classification	Description of Area and Typical Species
Type 1	B2.2 – Neutral grassland, semi-improved	Neutral grassland is the dominant onsite habitat, occurring across much of the site (excluding the eastern boundary). Present species include: • Yorkshire fog (*Holcus lanatus*), • Cock's foot (*Dactylis glomerata*), • Sweet vernal grass (*Anthoxanthum odoratum*), • Red fescue (*Festuca rubra*), • Pendulous sedge (*Carex pendula),* • Meadow buttercup (*Ranunculus acris*), • Creeping buttercup (*Ranunculus repens*), • Dandelion (*Taraxacum sp.*), • Broad-leaf dock (*Rumex obtusifolius*), • Curled dock (*Rumex crispus*), • Bush vetch (*Vicia sepium*), • Common vetch (*Vicia sativa*), • Greater trefoil (*Lotus pedunculatus*), • Birds-foot-trefoil (*Lotus corniculatus*), • Rosebay willowherb (*Chamaenerion angustifolium*), • Greater willowherb (*Epilobium hirsutum*), • Ribwort plantain (*Plantago lanceolata*), • Creeping thistle (*Cirsium arvense*), • Common ragwort (*Jacobaea vulgari*), • Hedge-woundwort (*Stachys sylvatica*), • Common figwort (*Scrophularia nodosa*), • Silver weed (*Argentina anserina*), • Common mouse-ear (*Cerastium fontanum*), • Cut-leaved cranesbill (*Geranium dissectum*), • Springy turf moss (*Rhytidiadelphus squarrosus*), • Bramble (*Rubus fruticosus*), • Grey willow (*Salix cinerea*). **Note:** Invasive non-native montbretia (*Crocosmia × crocosmiiflora*) and Japanese knotweed were recorded along the northern site boundary
Type 2	A2.1 – Scrub, dense/ continuous	Dense scrub is present along the sites eastern boundary, separating the site from residential housing. Present species include: • Bramble, • Grey willow, • Common hawthorn (*Crataegus monogyna*),

		• Ash (*Fraxinus excelsior*), • Dogwood (*Cornus sanguinea*), • Silver birch (*Betula pendula*), • Butterfly bush (*buddleia davidii*), • Creeping thistle, • Greater willowherb, • Nettle (*Urtica dioica*). **Note:** Invasive non-native cotoneaster was recorded in the southern section of this habitat
Type 3	B5 Marshy grassland	Small pockets of this habitat are present in the northern section of the site. Present species include: • Soft rush (*Juncus effusus*), • Hard rush (*Juncus inflexus*), • Flag iris (*Iris pseudacorus*), • Pendulous sedge (*Carex pendula*), • Greater willowherb, • Creeping buttercup, • Curled dock, • Cocks foot (*Dactylis glomerata*), • Bramble, • Grey willow. **Note:** Invasive non-native montbretia (*Crocosmia × crocosmiiflora*) was recorded in this habitat
Type 4	J4 Bare ground	A small area of bare ground is present on the western site boundary. Present species include: • Ribwort plantain, • Creeping thistle, • Fox and cubs (*Pilosella aurantiaca*).

8.3 Ecological assessment included identification of the potential for protected species to be present. Several trees were recorded as present on site, principally along the eastern site boundary. No Potential Roost Features, bats or evidence of bats were recorded on any of the trees, however detailed inspection was not conducted during this preliminary assessment.

8.4 While no active nesting was recorded during the assessment, several bird species were recorded on and flying over site, namely house sparrow (*Passer domesticus*), blackbird (*Turdus merula*) and buzzard (*Buteo buteo*). Scattered trees and scrub on site represent suitable nesting habitat for many tree and shrub nesting bird species.

8.5 No reptiles or amphibians were observed during the survey, however the grassland and scrub habitat on site represents suitable habitat for foraging and provides shelter from predators. No standing water is present that could be used by breeding amphibians.

8.6 No evidence was found to confirm the presence of protected terrestrial mammals, with no field signs including setts, nests, holts, worn tracks, spraints, latrines/dung pits, hair or nut cases recorded, which may have indicated that species such as badgers (*Meles meles*), otters, or dormice (*Muscardinus avellanarius*) were utilising the site. Grassland and scrub on site provide usable foraging habitat for many mammals, though the absence of standing water means there is no suitable foraging habitat for protected aquatic mammals such as otter or water vole (*Arvicola amphibius*).

8.7 No priority invertebrate species were recorded during the assessment, however onsite floristic diversity does provide foraging opportunities for pollinating invertebrates.

9 Discussion and Conclusions

9.1 Proposals have been submitted to construct fourteen affordable housing units on land at Corbett Street, Treherbert. Proposals will involve the clearance of vegetation and onsite habitats, and consequently a PEA was carried out to assess the site for its ecological value, and potential presence of protected species. Desktop study, and field survey, were both used to evaluate the ecological value of the site, which was considered to be moderate.

9.2 The impacts of current proposals are expected to be localised in nature, and are not likely to impact protected sites within close proximity to the development. Mynydd Ty-isaf SSSI occurs more than 650m from the site. This distance between the site and Mynydd Ty-isaf, which is separated from the site by the presence of Treherbert village and the Afon Rhondda, is sufficient to negate any potential impacts.

9.3 Storm drains adjacent to the site likely empty into the Afon Rhondda to the south. To prevent pollution entering the river and impacting protected fish and mammal species, precautions must be taken during and following construction. Recommendations regarding the protection of the river are made below.

9.4 Invasive plant species were considered as part of the site appraisal. Three invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were found on site during the appraisal, namely Japanese knotweed, montbretia and cotoneaster. Japanese knotweed and montbretia were identified near the northern site boundary, with cotoneaster identified within scrub near the south-eastern boundary. It is an offence to 'plant or cause to grow in the wild any [plant] species named on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). A programme of eradication will need to be devised for these species, with recommendations made below.

9.5 No detailed inspection of trees on site has been carried out at this stage, and it is yet to be determined whether any trees are suitable to support roosting bats. All species of bats in Britain, and their places of rest (roosts) are protected under the provisions of the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2019 (Amendment) (EU Exit). Suitable provision for roosting bats must be considered within the proposals, and targeted assessment for roosting bats must be undertaken prior to the removal of on-site trees. Recommendations for survey are made below.

9.6 The presence of trees and scrub means suitable nesting habitat is present and birds will be expected to use the site for nesting between March and August. All nesting birds, their chicks, eggs, and nests, whilst in use or being built, are protected under the Wildlife and Countryside Act 1981 (as amended). Suitable provision for nesting birds must be considered within the proposals. Recommendations for such provision are made below.

9.7 Habitat on site is considered suitable for reptiles, with grassland and scrub offering valuable habitat for widespread reptile species through the provision of foraging resources and shelter from predators. While connectivity to the site is limited by roads and residential housing, the site is less than 40m from the mountainside and consequently it is possible that reptiles such as slow worms and common lizards have colonised the site. All widespread reptile species are included within Section 9 of the Wildlife and Countryside Act 1981, which protects them from intentional killing, injury or sale. All widespread reptiles are also listed as species of principal importance for maintaining and enhancing biodiversity in Wales under section 7 of the Environment (Wales) Act 2016, and are listed as target species in the United Kingdom Biodiversity Action Plan (UKBAP), meaning local councils must take steps to maintain and enhance populations of these species when carrying out their normal functions. Recommendations regarding the protection of reptiles on site are made below.

9.8 The site is suitable for amphibians such as protected great crested newts during their terrestrial life stage. However, the absence of standing water on site or in the surrounding landscape coupled with the lack of records for these species within 1km of the site suggests that great crested newts are not likely to be present.

9.9 No evidence to confirm the presence of protected mammals was identified on site. Several protected mustelid species and other nocturnal mammals may utilise the site for foraging and commuting on occasion, and therefore proposals must consider adopting precautions for nocturnal wildlife to facilitate their movement through the site during and following construction. Recommendations for which are made below.

9.10 Several priority invertebrates have been recorded within close proximity to the survey site, and it is likely that flowering plants on site support an assemblage of pollinating invertebrates and their predators. As proposals will only involve the loss of a relatively small area of habitat for invertebrates, detailed survey is considered unnecessary at this time. However, mitigation for the loss of pollinator resources are provided below.

10 Recommendations

10.1 Prior to clearance of the site to accommodate the proposed development, further surveys must be undertaken for reptiles and bats. Further survey work may also be required for birds, depending on whether the vegetation clearance can be timed to be undertaken outside of the bird nesting season. The following recommendations are divided into sections concerning invasive species control, further survey work, mitigation and enhancements.

Invasive species control

10.2 Treatment must be undertaken to eradicate the invasive species present on site, in order to prevent their wider dispersal. Several applications of an appropriate herbicide treatment following the recommended protocols may be necessary to eradicate Japanese knotweed. Small clumps of montbretia can be removed by hand, however care must be taken to leave no plant material behind as new plants can regrow from any remaining corms or bulbs. Care must be taken to avoid inadvertently spreading either of these invasive species and all cut material and other waste containing Japanese knotweed and montbretia must be treated as contaminated waste, and must be taken to a disposal centre that deals with invasive species.

10.3 Control methods for cotoneaster include treating exposed stumps with an appropriate herbicide during the growing season, mid-March to the end of October. All cut material and other waste containing cotoneaster must be either taken to a disposal centre that deals with non-native species or safely burnt on site. Advice on the application and choice of herbicide can be attained from a BASIS qualified agronomist. Further guidance on cotoneaster management can be found on the Plantlife Meadows' Hub. Further guidance on the eradication of Japanese knotweed can be accessed through the Welsh government public information leaflets referenced (Jones, 2020). An appropriately licensed and qualified contractor must be engaged for this process.

Further survey

10.4 Habitat on site is considered suitable for widespread reptile species, and consequently further survey will be required following the recognised methodology described in Froglife Advice Sheet 10 to determine which species, if any, are present. Specific recommendations for the site, such as relocation of any reptiles present, and the design of mitigation and compensatory habitat, will then depend on the outcome of such surveys. The optimal period to conduct reptile surveys is during the months of April, May and September, though surveys can be undertaken at other times of the year during suitable weather conditions. Seven inspection visits must be conducted during appropriate weather conditions, and at temperatures between 9ºC and 18ºC.

10.5 Any trees on site requiring removal as part of the proposals will need to be proceeded by a Ground Level Tree Assessment for bats, utilising an endoscope and ladder as required, and undertaken by an appropriately qualified ecologist. Ground level assessments can be undertaken at any time of year.

10.6 As habitat on site has been assessed as suitable for nesting birds, vegetation clearance must be scheduled to be undertaken outside of the bird nesting season where possible, which runs from March to August. If any vegetation requires removal within the bird nesting season, this must first be checked by a suitably qualified ecologist. If during any vegetation removal an active nest is discovered, all works within a minimum 5m radius (exact radius to be determined by the ecologist on site) of the nest must be immediately stopped, and not recommenced until all chicks have fledged.

Mitigation

10.7 Habitat mitigation on site must focus on replacing trees and associated nesting sites that will be lost to the development. Landscaping must therefore incorporate the planting of at least ten tree and shrub species. Species planted must be native to the region, therefore supporting local biodiversity and acting as a seed source for the colonisation of the surrounding landscape. Taking into account the conditions present on site, Table 3 below includes a list of suitable native tree species, which can be planted as part of the landscaping process. At least six different species from Table 3 must be incorporated into the planting scheme for the site, to ensure varied flowering and fruiting times. It is essential that such plants are sourced locally, in order to reduce the likelihood of importing diseases. Guidance on the selection of trees and establishment for landscape planting can also be taken from the Woodland Trust: Tree Species Handbook.

Table 3: List of Recommended Native Trees

Common Name	Scientific Name

Alder	*Alnus glutinosa*
Alder buckthorn	*Frangula alnus*
Aspen	*Populus tremula*
Bird cherry	*Prunus padus*
Blackthorn	*Prunus spinosa*
Crab apple	*Malus sylvestris*
Downy birch	*Betula pubescens*
Eared willow	*Salix aurita*
Elder	*Sambucus nigra*
Field maple	*Acer campestre*
Goat willow	*Salix caprea*
Grey willow	*Salix cinerea*
Guelder rose	*Viburnum opulus*
Common hawthorn	*Crataegus monogyna*
Hazel	*Corylus avellana*
Holly	*Ilex aquifolium*
Rowan	*Sorbus aucuparia*
Sessile oak	*Quercus petraea*
Silver birch	*Betula pendula*
Small-leaved lime	*Tilia cordata*
Wild cherry	*Prunus avium*
Wild pear	*Pyrus communis*
Wild service tree	*Sorbus torminalis*
Yew	*Taxus baccata*

10.8 To replace the pollinator resource lost to the development, mitigation must include sowing wildflowers that benefit British pollinators as part of the sites landscaping process. Recent research into species that are used by wild bees (Nichols, Goulson and Holland, 2019) has demonstrated that a mix of 18 wildflower species was sufficient to support 100% of bee species observed. Table 4 below includes a list of the 18 wildflowers that were found to support the highest diversity of bee species surveyed. Wildflower seeds and plug plants must where possible be of local provenance, to limit the import of disease and preserve regional genetic variation. Suitable seeds and plugs must be obtained from regional supplies like Celtic Wildflowers, Welsh Organic Wildflowers or similar organisations.

Table 4: Recommended Wildflowers to Support Wild Bees

Common Name	Scientific Name
Kidney vetch	*Anthyllis vulneraria*
Harebell	*Campanula rotundifolia*
Greater knapweed	*Centaurea scabiosa*
Rough chervil	*Chaerophyllum temulum*
Pignut	*Conopodium majus*
Bindweed	*Convolvulus arvensis*
Smooth hawksbeard	*Crepis capillaris*
Wild carrot	*Daucus carota*
Meadow cranesbill	*Geranium pratense*
Hedgerow cranesbill	*Geranium pyrenaicum*
Musk mallow	*Malva moschata*
Wild marjoram	*Origanum vulgare*
Poppy	*Papaver rhoeas*
Primrose	*Primula vulgaris*
Charlock	*Sinapsis arvensis*
Perennial sow-thistle	*Sonchus arvensis*
Dandelion	*Taraxacum agg.*
Scentless mayweed	*Tripleurospermum inodorum*

10.9 Additionally, to mitigate for the loss of nesting habitat for birds, notably sparrows that have been recorded on site, at least four sparrow terraces must be installed on the more northern of the two newly constructed buildings. Boxes must be positioned at the eaves and must be affixed to a north-eastern elevation, away from prevailing wind and the midday sun.

10.10 Nocturnal mammals may utilise the site on occasion for foraging or commuting, and therefore any trenches dug forming part of any groundworks during construction must be covered overnight or left with a 45º sloping side to prevent any animal from becoming trapped. Similarly, any unconnected pipes must be capped overnight to prevent any animal from becoming stuck. All new fencing installed around the site must also include gaps to facilitate the movement of mammals through the site following completion of the development.

10.11 The likely presence of nocturnal animals requires considerate design of a sensitive lighting scheme for the development. While new lighting must be avoided if possible, any new lighting columns

considered necessary must be affixed with cowls, hoods, or shrouds, to minimise upward light spill. Luminosity will be limited to the absolute minimum required by Health and Safety standards and will be timed to be extinguished for as long a period as possible at night. All lights must face downwards, and must not point directly at natural features, such as the woodland edge along the sites southern boundary. The ILP (2023) guidance notes provide details on lighting requirements for nocturnal animals.

Enhancements

10.1 Enhancements make a positive contribution to local biodiversity and promote Net Benefits for Biodiversity targets as laid out in PPW 12, and Section 6 of the Environment (Wales) Act 2016.

10.2 Enhancements must include the installation of swift bricks and bee bricks; five swift bricks on the more southern of the new buildings, and four bee bricks in each of the proposed new buildings. Swift bricks are nest boxes designed to blend seamlessly into a brick wall, with only a small opening visible and are intended to be used by species like swifts, which are currently included on the UK red list, having suffered significant population declines in recent years. Swift bricks must be situated as high as possible within the walls of the property on the north-eastern elevation, thus avoiding locations receiving the longest periods of direct sunlight. Bee bricks contain cavities of various sizes and can be used in place of standard bricks in the construction of walls, to create egg laying habitat for solitary bees. Bee bricks must be located in south facing walls at a minimum height of 1m above the ground. The NHBS website includes guidance on the installation of both of these features.

10.3 Sustainable drainage features are planned for inclusion within the development area along the southern boundary, and as such we recommend that a retention pond is included in this area and the site enhanced through the management of this feature as a wildlife pond. This must include the provision of gentle sloping sides so that wildlife can easily access and exit the pond, the planting of native marginal and aquatic plant species around the margins to provide foraging opportunities and cover for wildlife, and the installation of advisory boards around the feature to inform the public of the importance of these features for wildlife and to advise against the introduction of fish, which will predate wildlife and lower the biodiversity value of the pond. Guidance on the creation of wildlife ponds, to be incorporated into the retention ponds design, can be found in the 'Creating Garden Ponds for Wildlife' document produced by the Freshwater Habitats Trust.

10.4 Additional proposals for biodiversity mitigation and enhancement on site will be made following the completion of detailed reptile and bat surveys on site.

11 Bibliography

Anon. (2010). 'Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit'. Joint Nature Conservation Committee, Peterborough

Anon. (2017). 'Guidelines for Preliminary Ecological Appraisal – 2nd Edition'. Chartered Institute of Ecology and Environmental Management, Winchester

Anon. (2023). 'Guidance Note 08/23: Bats and Artificial Lighting at Night – Bat Conservation Trust. Institute of Lighting Professionals, Rugby

Anon. (2013). 'Creating Garden Ponds for Wildlife'. Freshwater Habitats Trust, Oxford

Hotchkiss, A., and Herbert, S. (2022). 'Tree Species Handbook'. The Woodland Trust, Grantham

Jones, D. (2020). 'Public Information on Invasive Species in Wales: Japanese Knotweed'. Welsh Government, Cardiff

Nichols, R.N., Goulson, D. and Holland, J.M. (2019). The best wildflowers for wild bees. Journal of Insect Conservation, 23, pp.819–830

Plantlife Meadows Hub. Cotoneaster Control. Plantlife, Sailsbury

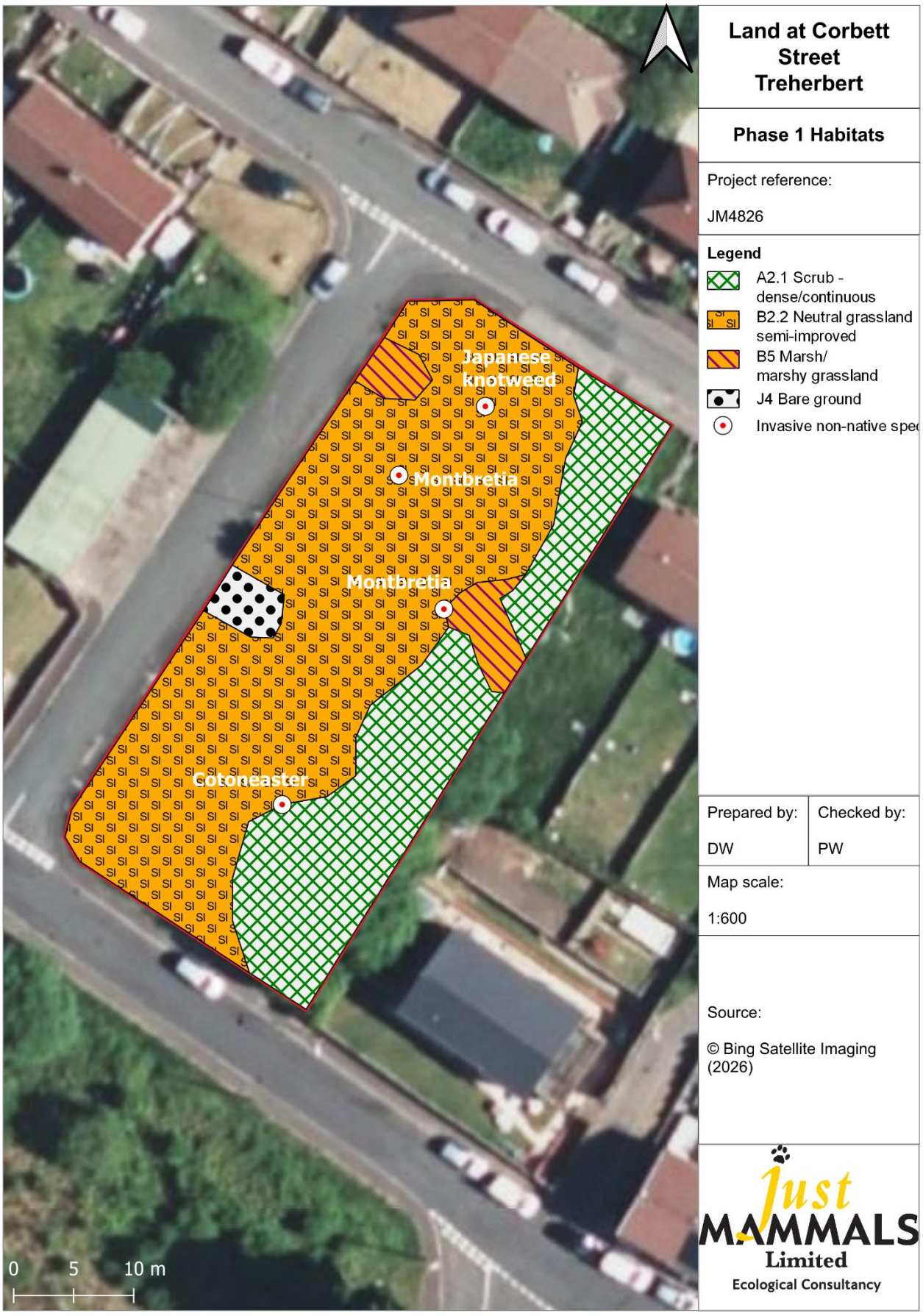
Rose, F. (1981). 'The Wildflower Key'. Frederick Warne, London

Appendix I Site Maps and Plans

Figure 1: Aerial view of the site



Figure 2: Phase 1 Habitat Map



Appendix II Site Photographs

Plate 1: Grassland on site, looking south-west



Plate 2: Dense scrub on northern boundary



Plate 3: Small patch of marshy grassland



Plate 4: Birds-foot-trefoil in grassland



Plate 5: Small area of bare ground



Plate 6: Japanese knotweed



Plate 7: Montbretia within marshy grassland



Plate 8: Cotoneaster on the scrub boundary



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