

Preliminary Ecological Assessment



Project: Land at Mon Bank, Newport

Instructed by: Monmouthshire Housing Association

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1. Introduction

The client is seeking planning permission for two separate parcels of land at Mon Bank, Newport to create a residential housing development. The development proposals have not yet been finalised but will be for an affordable housing scheme split across both parcels of land. For ease of reference within this report the parcels will be referred to separately with Plot A being centred at ST3041686815 and Plot B being centred at ST3031586724. The development site sits on the north western outskirts of a larger housing development.

Plot A currently consists of scattered scrub, marshy grassland, semi improved grassland, tree line and dense scrub. Plot B has a large area of gravel hardstanding with short perennial vegetation around the edges central to the plot. The edges of the site are a mixture of scrub and tall ruderal vegetation. This report will assess the potential of the land within the site boundary to support protected habitats and species and the implications that any future development proposals could have on them.

1.1 Site Description

The proposed development site comprises two parcels of land located on the north / north west edge of a wider housing development known as Mon Bank. The two parcels of land are separated by the main access road into the wider development site. The road runs over a bridge, which spans a below railway line, from the B4237 which runs north west past the development site. Plot A is broadly flat but does slope steeply downwards along the northern boundary. Plot B is also broadly flat but slope upwards along the northern boundary to the road. It slopes steeply downwards along the east and southern edge of the plot.

A public footpath runs along the north and eastern edge of Plot A. Roads form the southern boundary of the site with the residential housing of Mon bank extending to the south and east. The site adjoins an area of grassland along the eastern edge which extends eastwards. Plot B is bounded by a railway line and works yard to the west and an access road to the south, east and north. The plot is bounded by 6ft high metal palisade fencing along the south and east boundaries.

1.2 Survey Constraints

The optimal time period to carry out ground-based visual assessments of trees for bat roosting potential is between December to March inclusive, when broad-leaved trees are devoid of leaves and features are more readily visible. It should be noted that ground based

assessments are inherently constrained and potential roosting features present upon the skyward facing surfaces of limbs and branches will most likely be missed.

The site visit was completed during November which is outside of the optimal survey season for habitat assessments. However it was still possible to make broad habitat assessments of the land within the development site boundary.

1.3 Surveyor Experience

Aislinn Harris is a full member of Chartered Institute of Ecology and Environmental Management (CIEEM). Aislinn is an ecologist with 13 years experience undertaking a wide range of flora and fauna surveys. All survey work is undertaken following JNCC Phase 1 Survey Guidelines and CIEEM Guidelines for Preliminary Ecological Appraisal (2nd Ed 2017). Aislinn is a licenced bat ecologist Great Crested Newt and Dormouse ecologist with a wide variety of experience undertaking ecological surveys.

2. Desktop Study

A data search was undertaken via Aderyn (Reference: 0234-615) for the proposed development site and surrounding area. A 2km buffer zone was searched and records returned within 500m of site are noted below:

- Hedgehog - closest record approximately 100m away to the south east,
- Common Lizard - closest record approximately 300m away to the north,
- Slow Worm - closest record approximately 360m away to the north,
- Common Pipistrelle - maternity roost approximately 360m away to the north,
- Serotine, Noctule, Common and Soprano Pipistrelle - limited details available with record assumed commuting / foraging records,
- Common Toad - closest record 450m away to the west,
- Species listed under Section 7 (S7) of the Environment (Wales) Act 2016 (EWA 2016) include; Herring Gull,

Records of note returned for the rest of the buffer zone are detailed below:

- Otter
- Birds: Species listed under Schedule 1 of the Wildlife & Countryside Act 1981 (WCA1.1 and WCA1.2) include; Redwing and Kingfisher
- Bird species listed under Section 7 (S7) of the Environment (Wales) Act 2016 (EWA 2016) include; House Sparrow, Dunnock, Starling , Lapwing and Reed Bunting
- Invertebrate species listed under Section 7 (S7) of the Environment (Wales) Act 2016 (EWA 2016) include; Lackey, Buff Ermine, Dark Brocade, Rustic and Blood-vein.

2.1 Protected Sites

A data search for species records was undertaken for the proposed development site and surrounding area. The search also considered statutory and non-statutory protected sites.

Statutory Protected Sites

A single Special Area of Conservation (SAC) is present within the search area. The River Usk SAC is present approximately 1.3km away to the east at its closest point. The River Usk is also a Site of Special Scientific Interest (SSSI). The SSSI Boundary follows the SAC boundary and is located approximately 1.3km away to the east at its closest point.

The Gwent Levels SSSI is located approximately 1.4km to the south of site at its closest point.

The Allt-Yr-Yn Local Nature Reserve (LNR) is located approximately 1.9km to the north of site at its closest point.

Non-Statutory Protected Sites

There are 11 Sites of Importance for Nature Conservation (SINC) within 2km of the site, the closest of which is the Gaer Pond SINC located approximately 530m to the west of the development site. Other SINC sites in the area and an approximate distance from the development site are listed below:

- Gaer Fort (1.1km)
- Allt-yr-yn (1.7km)
- Barrack Hill (1.8m)
- Marshall's (1.6m)
- Afon Ebbw River (1km)
- Coed y Glasllwch (1.8km)

There is a single Regionally Important Geodiversity Sites (RIGS) within the search area. The Allt-Yr-Yn RIGS is located approximately 1.7km to the north of site at its closest point.

There are 12 areas of Ancient Semi Natural Woodland (ASNW) within 2km of the site. These woodlands have been identified as Priority Areas by Natural Resources Wales (NRW) as they comprise mostly broadleaved native trees and shrubs believed to have been in existence for over 400 years. The nearest such area lies approximately 700m away to the west of the proposed development site.

There are four areas of Restored Ancient Woodland (RAW) within 2km of the site. These Woodlands are predominately broadleaved now and are believed to have been continually wooded for over 400 years. They will have gone through a phase where canopy cover will have been more than 50% non-native conifer tree species and now have a canopy of more than 50% broadleaf. The closest such area of woodland lies approximately 1.1km to the south west of the proposed development site.

Approximately 54.40% of the land within the 2km buffer zone is defined as a B-Line. B-Lines are non-statutory protected sites which aim to restore and create wildflower habitats forming stepping stones that link existing wildlife areas together creating a network of habitats across the landscape benefiting not only pollinators but a host of other wildlife.

Approximately 80% of Plot A lies within the B-Lines boundary and Plot B lies adjacent to the B-Lines designation but not within the area.

Hedgerow habitat is present within the site boundary. Hedgerow is a section 7 habitat of importance for protection under The Environment (Wales) Act 2016. Therefore any impacts to hedgerow must be avoided. If impacts are unavoidable hedgerow translocation and or replacement hedgerow planting must be provided.

2.2 Potential Impacts to Protected Sites

Given the localised nature of the development proposals there is unlikely to be any impact on statutory or non statutory designated sites within the local area.

It is noted that hedgerow is a section 7 habitat of importance for protection under The Environment (Wales) Act 2016. Whilst the hedgerow at both Plot A and Plot B is ornamental the section 7 habitat list covers any hedgerow habitat. Any hedgerow loss must be avoided and appropriately mitigated for if undertaken. The hedgerow at Plot A and Plot B sits just outside of the development boundary however grounds works can still affect the root systems of woody species. Additional hedgerow planting within the site of native species with an appropriate aftercare regime must be provided if any hedgerow loss is planned. The translocation of already established hedgerow should also be considered.

3. Phase 1 Survey

3.1 Habitats

A walkover survey of the site was completed on the **23rd November 2023**. All areas of the site were accessible. A species list can be found in Appendix 1, photographs of the site can be found in Appendix 2 and a map of the habitats found within the site is provided in Appendix 3.

Plot A - ST3041686815

This larger plot of land is predominantly grassland which is beginning to scrub over. Given the time of year the site visit was undertaken, determining the type of grassland present was tricky. The land appears to have been historically disturbed as tyre tracks, since vegetated over, were evident. The ground was wet underfoot in places and the occasional small areas of pooled water was noted to the east of the site. This could indicate the grassland maybe marshy grassland. Species indicative of marshy grassland such as hard rush, silverweed, pendulous sedge, toad rush, hairy sedge and glaucous sedge were noted. However these species were not dominant across the sward.



Fig.1 - Example view of wetter grassland area



Fig.2 - Example view of grassland area

Species recorded within the grassland sward also included Bristly Ox-tongue, Ribwort Plantain, Creeping Cinquefoil, Dove's-foot Crane's-bill, Creeping Buttercup, Meadow Vetchling, Ragwort, a species of St John's-wort, False Oat Grass, a species of Willowherb, Cock's-foot, Creeping Thistle, Ox-eye Daisy, a species of Clover, Dandelion, a Melilot species, Creeping Bent, Cut-leaved Crane's-bill, Bird's-foot Trefoil, Bush Vetch, Hedge Woundwort, Wild Carrot and Hoary Mustard. On balance, due to the historic disturbance of the site and the suboptimal time of year to undertake habitat surveys, the habitat has been classified as **species rich semi improved grassland** with wetter flushes.

Along the northern edge of the site, the ground slopes steeply downwards to the north to the adjacent public footpath. A small bund which has vegetated over, approximately 0.5m high, is present along the top of the bank. The ground in this area is a mixture of **bramble scrub** and **semi improved grassland**. The grassland is tussocky and doesn't appear to be maintained. Species observed in the **semi improved grassland** include Cock's-foot, Ragwort, a species of Dock thought to be Curled Dock and a species of Willowherb.



Fig.3 - Northern bank looking west



Fig.4 - Northern bank looking east

Willow and Buddleja **scrub** are scattered across the eastern half of the site. The eastern and north western boundary of the site have a narrow band of **dense willow scrub** present which will likely progress into a tree line in the near future.



Fig.5 - View of Scattered scrub looking east



Fig.6 - Dense scrub along the north west boundary

The site is bounded by a **post and wire fence** line. Along the western edge of the site, adjacent to the road, a **non native hedgerow** has been planted. The hedgerow is thought to

form part of the soft landscaping scheme designed and implemented as part of the wider housing development.



Fig.7 - Non native hedgerow along western boundary

Plot B - ST3031586724

A large portion of this site is **gravel hardstanding** which sits central to the site creating a flat plateau. The edges of the hardstanding are starting to vegetate over with **short perennial vegetation** present. Species noted in this habitat type include a species of Melliott, Creeping Cinquefoil, Bristly Ox-tongue, a species of St John's-wort, a species of Clover, Creeping Buttercup, Black Medick, Ribwort Plantain, Colt's-foot and Creeping Bent.



Fig.8 - Gravel hardstanding / short perennial vegetation



Fig.9 - Scrub covered bank

The shorter vegetation quickly grades into **tall ruderal vegetation**. The areas of tall ruderal vegetation are taller with Pendulous Sedge, teasel, Tufted Hair-grass, Ragwort, Cock's-foot, Creeping Thistle and Hard Rush recorded.

The land along the southern and eastern edges of the site slopes steeply downwards from the central plateau. The land at the base of the slope and extending approximately half way up the bank is considered to be **scrub**. Species noted within the **scrub** habitat include Buddleia, Bramble, teasel, Pampas Grass, Traveller's Joy, at least 1 species of willow tree and Gorse. The bank was too steep to safely access therefore a visual inspection from the top of the bank was undertaken. The south and eastern boundaries lie directly adjacent to the railway line and are bounded with a 6ft high **palisade fence** for security.



Fig.10 - Palisade fencing along south east boundary



Fig.11 - Bank sloping upwards to hedgerow

Along the northern boundary of the site the land slope upwards to a **post and wire fence** with a **non native hedgerow** planted along the outer boundary of the fence line. The **hedgerow** is planted with the same ornamental shrub and in Plot A. The habitat along the rising slope is considered to be **tall ruderal vegetation**. Species noted include Pendulous Sedge, Yarrow, Everlasting-pea, Creeping Thistle, also False Oat-grass, Cock's-foot and young Buddleia saplings.

3.2 Great Crested Newts

Great crested newts (*Triturus cristatus*) are a European protected species and are protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,

- Deliberate disturbance of a breeding site or resting place,
- Deliberate taking or destroying of eggs,
- Damage or destruction of a breeding site or resting place.

Great crested newts (GCN) are listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale a great crested newt. Great crested newt and common toad are listed in section 7 of the Environment (Wales) Act 2016 which makes them key species to sustain and improve biodiversity.

There are no records for the presence of GCN within 2km of the proposed development site. There are no waterbodies present within the site boundary. There are no visible ponds visible within 500m of the site however garden ponds in residential properties may be present.

Both Plot A and Plot B have the potential to be used by amphibians such as GCN during their terrestrial life stages. The habitats within the site boundary are suitable for commuting, foraging and overwinter use. GCN generally like to have a necklace of suitable waterbodies for breeding purposes within a local area. Given the apparent lack of ponds within the locale and lack of local records it is considered unlikely that GCN are present within the development site. **No further survey recommendations are made for this species.**

3.3 Dormouse

The dormouse (*Muscardinus avellanarius*) is a European protected species and is protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Dormouse is listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale a native dormouse. Dormouse is listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

There are no records for the presence of Dormouse within 2km of the proposed development site. The proposed development site has some limited habitat connectivity

into the wider landscape. Plot B lies adjacent to the vegetated railway corridor. Plot A lies in close proximity to the railway line and vegetation lining the adjacent public footpath. Both Plot A and Plot B are in close proximity to Belle Vue Park but are separated by the B4237. It is known that Dormouse will cross roads but it is not their favoured behaviour. The habitat connectivity within the site is considered to be low..

The vast majority of the land within Both Plot A and Plot B is considered to be unsuitable for use by Dormouse being mostly grassland, short perennial vegetation, gravel hardstanding and tall ruderal vegetation. A small portion of both Plot A and Plot B contains scrub habitat which dormouse are known to favour. However, the scrub habitat is not extensive enough to support a population of dormouse. The non native hedgerow in both plots could provide commuting habitat but is unlikely to be used for foraging purposes.

Given the lack of local dormouse records, limited suitable habitat within both plots and low levels of habitat connectivity the presence of dormouse within the site boundary is considered to be unlikely. **No further survey recommendations are made for this species.**

3.4 Bats

All British bats are a European protected species and are protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Schedule 5 of The Wildlife and Countryside Act (1981) also protects all species of British bat and their roosting locations. British bats are protected from intentional or reckless disturbance and or obstruction of their roosting places. Barbastelle, Bechstein, Noctule, Brown Long-eared, Common Pipistrelle, Soprano Pipistrelle, Greater Horseshoe and Lesser Horseshoe Bats are also listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

The nearest recorded bat roost is approximately 330m north of Plot A and is for a Common Pipistrelle maternity roost. There are records for Noctule, Serotine, Common and Soprano Pipistrelle bat approximately 400m to the north of Plot A. The records are assumed to be for foraging and commuting behaviour by all species.

There are no buildings present within either Plot A or Plot B.

Tree Assessment

Any trees present within Plot A and Plot B were subject to a cursory ground level assessment for the potential presence of roosting bats. Should any tree be considered likely to have above low potential for roosting use, further detailed survey work will be recommended following the ground based visual assessment methodology provided in the BCT Survey Guidelines 2023 (4th Ed).

The young trees present within the scrub habitat of both Plot A and Plot B were considered to be unsuitable for roosting use by bats. The trees were young with smooth slender trunks and branches. No lifted bark, gaps or cracks were noted in any of them during the site visit.

No further survey recommendations are made for trees and bats.

Habitat Assessment

The site is considered likely to be used by small numbers of common bat species for foraging and commuting use. The site is considered to sit in an urban environment being surrounded by residential housing and industrial estates in the wider landscape. However the River Usk is located approximately 1.3km to the east and is likely to be well used by bats. Belle Vue Park sits to the north east of site and the adjacent railway corridor does provide some connectivity in the local area.

On balance, both Plot A and Plot B are considered to have low potential to be used by bats. Further survey work is not proposed based on the overall small size of the development site and low potential for use. **A sensitive site design and consideration to a sensitive lighting strategy for nocturnal species such as bats will be required.** Measures must be taken to reduce and avoid light spill into any retained adjacent vegetation.

3.5 Otters

The Common Otter (*Lutra lutra*) is a European protected species and is protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Otter are listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale an otter. Otter is listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

Several records for the presence of Otter returned from the data trawl, the nearest of which is situated approximately 830m away to the south and is for a live sighting.

Otters tend to prefer secluded locations for their holts to help prevent them being disturbed by other animals. It is accepted that Otters can travel long distances from river corridors to find acceptable holt sites.

The majority of both Plot A and Plot is open grassland, gravel hardstanding, short perennial and tall ruderal vegetation which are considered to be unsuitable for use by Otter. These habitat types are open and exposed to weather and disturbance by predators. The hedgerow and scrub could possibly provide some cover for use by Otter however no mammal paths were noted during the on site survey. No gaps were noted in the hedgerows and they are not considered dense enough to conceal an otter holt or resting site. Both Plot A and Plot B are likely to be disturbed by locals using the land for recreational purposes such as dog walking. **No further survey recommendations are made for this species.**

3.6 Badger

Badgers are protected under the Protection of Badgers Act 1992. In summary they are protected from:

- Taking, killing or injuring;
- Cruelty;
- Interfering with a badger sett;
- The selling and possession of badgers;
- Marking or ringing.

Badgers are also listed on schedule 6 of the Wildlife and Countryside Act 1981 as amended.

Badgers tend to have a variety of setts with different uses and functions within the territory for the family unit. In general there is usually a main sett which the family will use the most. There are then annex, subsidiary and or outlier setts which depending on family structures and environmental pressures may be used at different times of the year. As female badgers tend to have their cubs over winter the disturbance and damage of badger setts is prohibited between December and June inclusive. NRW are the licensing body for any actions which may contravene the above legislation.

A single badger record was returned with the data search. The record is approximately 1.7km north of the site and is for badger scat found on site.

Badgers favour a dry sloping site for digging their setts preferably within woodland or even under a large hedgerow bank. Badgers are creatures of habit and tend to follow regular pathways between their setts and foraging grounds. No evidence of the presence of Badger such as hairs snagged on fencing, latrines, digging or evidence of regular pathways were found within the proposed development site. No gaps were noted in the hedgerows and they are not considered dense enough to conceal a badger sett. **No further survey recommendations are made for this species.**

3.7 Birds

All breeding birds are protected under schedule 1 of the Wildlife and Countryside Act (1981) as amended. Under this Act it is an offence to:

- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy the egg of any wild bird.

Enhanced protection is afforded to species listed on Schedule 1 of the Act, this additional protection makes it an offence to:

- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

The grassland and tall ruderal vegetation within Plot A and the gravel hardstanding, short perennial and tall ruderal vegetation of Plot B are considered to be unsuitable for use nesting use by bird species. Nesting opportunities occur in the hedgerows and scrub habitat across both Plot A and Plot B. The hedgerow, scrub, grassland, short perennial and tall ruderal vegetation of both Plot A and Plot B are likely to be used by local commuting and foraging bird species.

The development proposals are likely to impact the majority of habitats within both plots of land. **A precautionary approach to the removal of habitat with bird nesting potential will be required. Compensation measures for the loss of bird foraging and nesting habitat will be required.**

3.8 Reptiles and Amphibians

Reptiles such as the Slow Worm, Common Lizard, Adder and Grass Snake are protected under the Wildlife and Countryside Act 1981(as amended). They are protected from killing, injuring and sale. They are also listed in section 6 of The Environment (Wales) Act 2016.

The four widespread species of amphibian i.e. the Smooth and Palmate Newts, Common Frog and Common Toad, are protected under the Wildlife and Countryside Act 1981 (as amended) by Section 9(5) of the Wildlife and Countryside Act 1981. This section prohibits sale of these species. Common Toad is listed in section 6 of The Environment (Wales) Act 2016.

Records for the presence of amphibians records, excluding GCN, have been returned as part of the data search. There are limited records within 2km of the development site and this is thought to indicate a lack of recording rather than an absence of presence. The closest reptile record to the site is for Common Lizard approximately 290m north of Plot A in Stow Park. There are a cluster of Slow Worm and Common lizard records associated with Stow Park. The closest amphibian record to the site is for Common Toad approximately 430m away to the west of Plot B.

Reptiles prefer a mosaic of habitats with diverse vegetation structure creating open areas and nearby cover to provide protection from predators and the elements. Common amphibian species require still pools of water for breeding purposes and damp conditions with foraging habitat during their terrestrial life stages.

When considered reptile and amphibian use of Plot A the site is considered to have at least moderate potential for use by such species. The grassland and scattered scrub provide foraging and commuting habitat. Whilst the bank along the northern boundary of the site is north facing and likely not as warm and sunny, it is still suitable for reptile use and likely to have limited disturbance. The dense scrub also provides some hibernation potential for reptiles and amphibians. Plot A does have some habitat connectivity with similar habitat extending to the east and south east along the public footpath.

Plot B is considered to have more limited potential for reptile and amphibian use. The majority of the site is gravel hard standing and short perennial vegetation which provides no cover for foraging and commuting animals. The scrub and tall ruderal vegetation do provide cover and can be used for foraging. The dense scrub habitat could also be used for hibernation purposes. The ground within Plot B appears to be well draining without pools of water and is considered to have low potential for use by amphibians.

Consideration has been given to the need to undertake reptile surveys within the site to support any future planning applications for the site. The requirement for reptile surveys will depend on the proposed development layout and areas of habitat which could be impacted on. It would seem likely that the majority of land within Plot A will be affected by any development proposals. Given the topography of Plot B it maybe possible to retain the scrub habitat around the periphery of the development site.

Reptile surveys are recommended to support any future planning application for the proposed development of Plot A. However if a suitable amount of habitat can be retained unaffected by the development proposals it maybe possible to assume presence and design a reptile mitigation strategy to retain and enhance herptile populations on site.

Providing a suitable scheme of mitigation and enhancement measures can be integrated into the development of Plot B, reptile surveys are not recommended in this instance. Instead it is suggested that **the presence of a moderate number of reptiles within the site boundary is assumed and that a reptile mitigation strategy is implemented.** A reptile mitigation strategy will also take steps to ensure that species such as Common Toad are not harmed.

3.9 Other Mammals

Other notable mammal species listed under S7 of the Environment (Wales) Act 2016 which returned records within 2km include Hedgehog (approximately 85m).

Hedgehog is considered likely to be present within the site at least on occasion. Hedgehog is considered to be a species of principal importance, for the purpose of maintaining and enhancing biodiversity in relation to Wales. As such consideration must be given to this species in any plans proposed for the site.

3.10 Invertebrates

A number of records for various types of invertebrate returned from the data trawl within 2km. Notable species records, those species that are listed under S7 of the Environment

(Wales) Act 2016, returned from the data trawl and include Lackey, Buff Ermine, Dark Brocade, Rustic, Blood-vein

Plot A	
Habitat Element	Grade
Decaying Wood – H1	E – Negligible/Absent
Rotational Management – H2	D - Minor
Nectar Resources – H3	D - Minor
Wet Substrates – H4	C - Moderate
Other Water Habitats – H5	E – Negligible/Absent
Structural Patchwork – H6	C - Moderate
Still Air (S) – H7	D - Minor
Still Air (H) – H8	D - Minor
Connectivity – H9	C - Moderate
Ecoclimes – H10	E – Negligible/Absent
Bare Earth – H11	D - Minor

The habitats of the site were assessed for their potential to support invertebrates using the Invertebrate Habitat Potential Assessment (IHPA) as found in CIEEM inpractice Issue 112, June 2021. The IHPA protocol has been produced to allow ecologists without specialised entomological expertise to identify key habitats and features likely to support

important invertebrate assemblages. Full details of habitat types can be found in Appendix 5.

Plot B	
Habitat Element	Grade
Decaying Wood – H1	E – Negligible/Absent
Rotational Management – H2	D - Minor
Nectar Resources – H3	D - Minor
Wet Substrates – H4	E – Negligible/Absent
Other Water Habitats – H5	E – Negligible/Absent
Structural Patchwork – H6	D - Minor
Still Air (S) – H7	D - Minor
Still Air (H) – H8	D - Minor
Connectivity – H9	D - Minor
Ecoclines – H10	E – Negligible/Absent
Bare Earth – H11	C - Moderate

Plot A - Based on the Invertebrate Habitat Potential Assessment (IHPA) the site, in its current state, is considered to have potential to support common and widespread generalist species of invertebrate only.

Plot B - Based on the Invertebrate Habitat Potential Assessment (IHPA) the site, in its current state, is considered to have potential to support common and widespread generalist species of invertebrate only.

4. Recommendations and Mitigation

The client is seeking planning permission for two separate parcels of land at Mon Bank, Newport to create a residential housing development. The development proposals have not yet been finalised but will be for an affordable housing scheme split across both parcels of land. The development site is split into two parcels of land, referred to as Plot A and Plot B within this report.

Broad recommendations are made below to help inform the design process. **Once the development proposals are progressed and further survey work and enhancement measures agreed within the site, further ecological input may be required.** Our general recommendations are:

- Plot A is considered to have at least moderate potential to be used by common reptile species. A **refugia survey** of the site will be required to establish the presence or likely absence of reptiles and other amphibian species within the site boundary. Artificial refugia must be set out within suitable habitat within the site boundary following advice given in Froglife Advice Sheet 10.
- Plot B has potential to support low numbers of common reptile species. Dependent on the development proposals it may be possible to assume the presence of a small population of reptiles on site and design a reptile mitigation strategy. A **Reptile Mitigation Strategy** will be required and agreed with the LPA ecologist prior to vegetation clearance works commencing across the site. Measures suitable for reptiles must be included within the site design to allow movement across the site post development work completion. A reptile mitigation strategy will include, but not be limited to: -
 - Habitat clearance measures such as sensitive timing of works and a two stage vegetation cut and destructive searching of tree roots if required.
 - Timing of works to avoid the reptile hibernation period November to March inclusive
 - Retention of any habitat in the north of the site, if possible, during construction works,
 - Suitable enhancement measures for reptiles within the future development
- In order to ensure the hedgerows around site are protected a suitable buffer is required between them and the closest development point ie engineering works and location of garden boundaries. Retaining the hedgerows and trees will benefit a range of species ie Hedgehog and Reptiles, and help to create habitat connectivity

which will provide a biodiversity benefit to the development site. **A buffer of at least 3m from any hedgerow is recommended.**

- Hedgerow is a section 7 habitat of importance for protection under The Environment (Wales) Act 2016. Any hedgerow loss must be avoided and appropriately mitigated for if undertaken. Additional hedgerow planting within the site of native species with an appropriate aftercare regime must be provided. It is generally recommended that for hedgerow is replaced on a 2:1 basis.
- All excavations within the site will be securely covered over if left unattended. Any excavations that have a depth in excess of 0.5m and that are left open overnight will have a means of escape let for any mammals (e.g. badger, hedgehog) that may fall into them. A wooden board or equivalent will be left from the bottom to the top of the hole at an angle no steeper than 45°. This will allow any mammal to escape and avoid increased stress from being trapped.
- The hedgerow and scrub within and adjacent to the site have potential for use by nesting birds. Any tree or scrub removal must be completed outside of the bird nesting season of March to August inclusive. If this is not achievable an ecologist must inspect any vegetation with the potential for birds to be present for active birds' nests prior to removal works beginning. If an active nest is identified a buffer zone of at least 5m around the nest must be observed until the chicks have fledged. Only then can the vegetation be removed. Greater buffer zones around nests may be required depending on the species and habitat the nest is within.
- Careful consideration must be given to the use of lighting within the development site, as this can adversely affect the activity of a variety of fauna, particularly foraging bats, nesting birds and invertebrates. Light spillage into adjacent semi-natural habitats must be avoided and brightness kept to the lowest permissible level in the areas adjacent to such habitats. All lighting must meet recommendations in the BCT Guidance Note 08/23 Bats and artificial lighting in the UK document
- A portion of Plot A sits within a wider B-Lines designation. Effort must be made to include native species within all landscaping proposals and to secure habitat connectivity around the development site

The Environment Act (Wales) 2016 places a duty on competent authorities such as Newport City Council to conserve and enhance biodiversity. Chapter 6 of Planning Policy Wales (version 12), paragraph 6.2.5 requires Green Infrastructure considerations to be included with all planning applications. Development proposals must detail how green

infrastructure considerations which are proportionate to the scale and nature of the plans are being provided.

Green infrastructure currently within Plot A can be found in the scrub habitat which bounds the north and eastern boundary of the site. A non native hedgerow along the western boundary connect to the scrub habitat. The scattered scrub and semi improved grassland across the site have a biodiversity function for wildlife and have connectivity to similar habitat which extends to the east, wrapping around the wider housing development.

Plot B is slightly more isolated from surrounding habitat but does sit adjacent to a railway line. The vegetation along the railway corridor provides some habitat connectivity to the wider landscape. The palisade fencing around Plot B is likely to restrict mammal movement through the site and adjacent habitats. The band of scrub around the south and western boundary of the site is considered to have the highest biodiversity and green infrastructure value.

Plans to show how green infrastructure will be incorporated into the development site are not available at present. However it is suggested that habitat connectivity around the periphery of both Plots A and B is provided. Habitat connectivity can be created by leaving a buffer of undeveloped land at least 3m wide around each site. The buffer zone can then be managed to benefit wildlife in the long term. Native tree planting and the use of hedgerows instead of fencing or walls were possible would also help create green infrastructure within both sites.

The Environment Act (Wales) 2016 places a duty on competent authorities such as Newport City Council to conserve and enhance biodiversity. The below bullet points are some simple measures that could be achieved to enhance the biodiversity of the both Plots A and B. It is advised that as many features as possible are created within the development:

- The provision of integrated bird boxes within any new buildings created on site. At least 25% of new structures should include nesting provision for birds. A variety of bird boxes should be used but all boxes must be placed at least 2m high from ground floor.
- The provision of integrated bat boxes within any new buildings created on site. At least 25% of new structures should include roosting provision for bats. Integrated boxes are welcome but consideration to the creation of roosting provision with a roof should also be given. For example garage roof spaces can be lined with a bitumen based roofing felt and suitable bat access points included to the space between the roofing felt and roof tiles.

- The provision of a buffer zone around the periphery of the site. The buffer zone will be managed to benefit wildlife and ideally connect to adjacent suitable vegetation.
- Creating tree lined roads and footpaths which dissect the development site and connect to adjacent habitat help to increase habitat connectivity and provide green infrastructure features within the site. Green open spaces have a recreational and visual impact within development sites.
- All fencing across the site will be hedgehog friendly in design. A friendly design is considered to allow passage of small animals across the site. Close board or mesh fencing should provide either a continuous gap between the bottom of the fence and ground of approximately 13cm or 13cm by 13cm gaps cut every 3m along fencing.
- On going long term management of hedgerow and any habitat buffer provided within and around the periphery of the development site can create a habitat enhancement. A suitable low intensity cutting regime for grassland habitat would help ensure the areas do not become scrub. Hedgerow and the wildlife that use them benefit from being cut once every two years between the months of November to February inclusive.
- The creation of at least 1 pond within each plot of land would create a new habitat type within the site. Ponds are a priority habitat and benefit a wide range of flora and fauna. A pond can be engineered and located in an accessible area to help reduce health and safety worries.

Appendix 1 – Plant Species Recorded

Plot A			
Species	Common Name	Species	Common Name
Trees & Scrub		<i>Vicia sepium</i>	Bush Vetch
<i>Salix fragilis</i>	Crack Willow	<i>Vicia sp</i>	Vetch sp
<i>Rubus fruticosus</i>	Bramble	<i>Stacey's sylvatica</i>	Hedge Woundwort
<i>Cotoneaster sp</i>	Cotoneaster sp	<i>Hirschfeldia incana</i>	Hoary Mustard
<i>Buddleja davidii</i>	Buddleja	<i>Cortaderia sp</i>	Pampas Grass
<i>Rosa sp</i>	Rose sp	<i>Daucus carota</i>	Wild Carrot
<i>Salix sp</i>	Willow sp	<i>Potentilla anserina</i>	Silverweed
Herbaceous Plants		<i>Care flacca</i>	Glaucous Sedge
<i>Geranium robertianum</i>	Herb Robert	<i>Urtica dioica</i>	Common Nettle
<i>Helminthotheca</i>	Bristly Ox-tongue	Grasses	
<i>Plantago lanceolata</i>	Ribwort Plantain	<i>Dactylis glomerata</i>	Cock's-foot
<i>Potentilla reptans</i>	Creeping Cinquefoil	<i>Agrostis stolonifera</i>	Creeping Bent
<i>Geranium molle</i>	Dove's-foot Crane'sbill	<i>Arrhenatherum elatius</i>	False Oat-grass
<i>Care pendula</i>	Pendulous Sedge		
<i>Ranunculus repens</i>	Creeping Buttercup		
<i>Juncus inflexus</i>	Hard Rush		
<i>Lathyrus pratensis</i>	Meadow Vetchling		
<i>Senecio jacobaea</i>	Ragwort		
<i>Hypericum perforatum</i>	St John's Wort sp		
<i>Cirsium arvense</i>	Creeping Thistle		
<i>Leucanthemum vulgare</i>	Ox-eye Daisy		
<i>Trifolium sp</i>	Clover sp		
<i>Care hirta</i>	Hairy Sedge		
<i>Taraxacum officinale</i>	Dandelion		
<i>Juncus bufonius</i>	Toad Rush		
<i>Melilotus sp</i>	Melliot sp		
<i>Lotus corniculatus</i>	Bird's-foot Trefoil		

Plot B	
Species	Common Name
Trees & Scrub	
<i>Alex europaeus</i>	Gorse
<i>Rubus fruticosus</i>	Bramble
<i>Buddleja davidii</i>	Buddleja
<i>Salix sp</i>	Willow sp
Herbaceous Plants	
<i>Geranium robertianum</i>	Herb Robert
<i>Helminthotheca echinoides</i>	Bristly Ox-tongue
<i>Plantago lanceolata</i>	Ribwort Plantain
<i>Potentilla reptans</i>	Creeping Cinquefoil
<i>Clematis vitalba</i>	Travellers Joy
<i>Care pendula</i>	Pendulous Sedge
<i>Ranunculus repens</i>	Creeping Buttercup
<i>Juncus inflexus</i>	Hard Rush
<i>Tussilago farfara</i>	Colt's-foot
<i>Senecio jacobaea</i>	Ragwort
<i>Hypericum perforatum</i>	St John's Wort sp
<i>Cirsium arvense</i>	Creeping Thistle
<i>Leucanthemum vulgare</i>	Ox-eye Daisy
<i>Trifolium sp</i>	Clover sp
<i>Care hirta</i>	Hairy Sedge
<i>Taraxacum officinale</i>	Dandelion
<i>Juncus bufonius</i>	Toad Rush
<i>Melilotus sp</i>	Melliot sp
<i>Lotus corniculatus</i>	Bird's-foot Trefoil
<i>Lathyrus sp</i>	Everlasting Pea
<i>Dipsacus fullonum</i>	Teasel
<i>Cortaderia sp</i>	Pampas Grass
Grasses	
<i>Dactylis glomerata</i>	Cock's-foot
<i>Agrostis stolonifera</i>	Creeping Bent
<i>Arrhenatherum elatius</i>	False Oat grass

Appendix 2 – Site Photographs

Plot A



Western portion of site where scattered scrub is absent



Southern boundary looking west



West boundary of site looking eastwards



Site looking south west

Plot B



Tall ruderal / scrub interface along south boundary



Scrub habitat along bank along west boundary



Site looking north east



East boundary looking north west



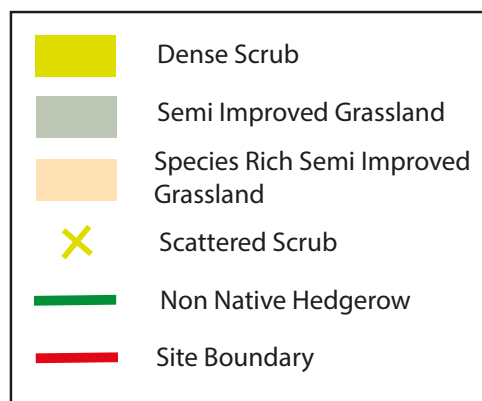
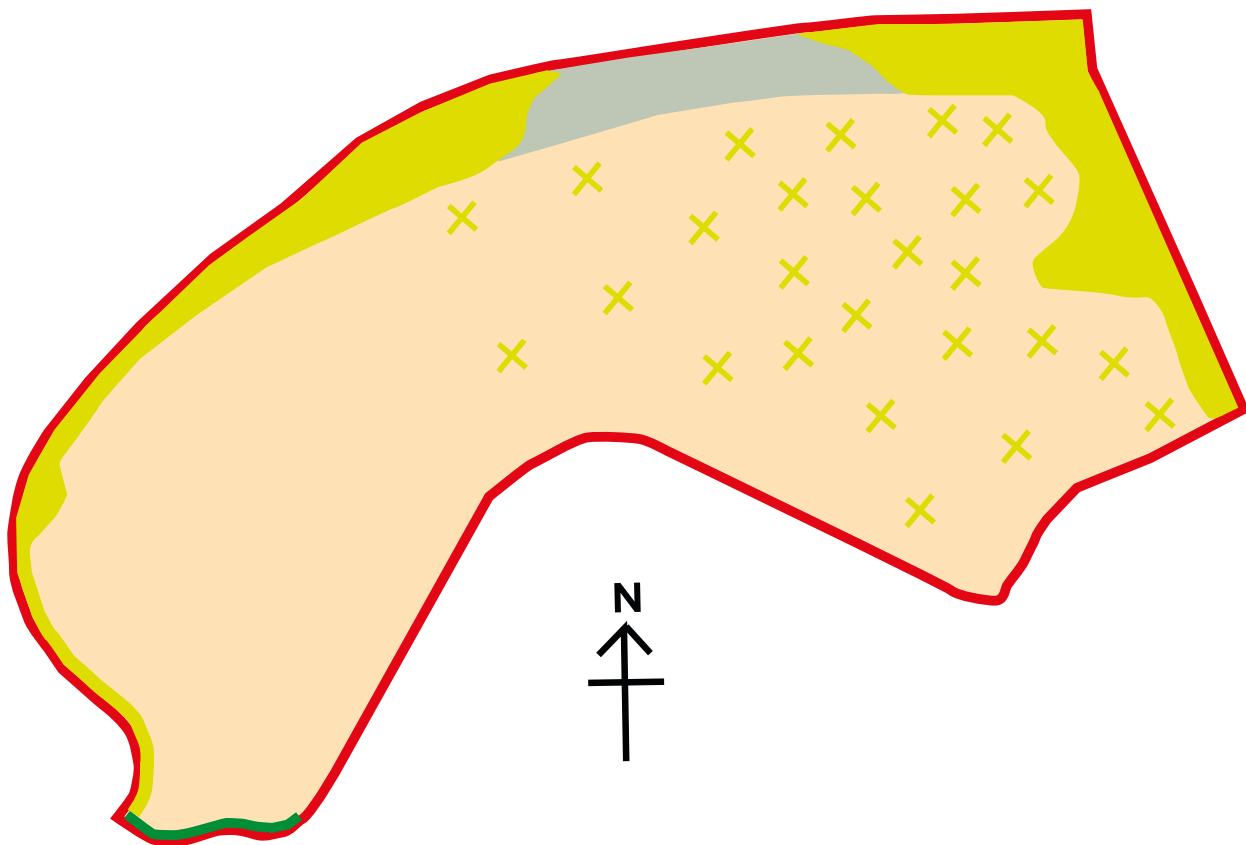
Scattered scrub along north eastern edge of site

Appendix 3– Site Habitat Map

LAND AT MON BANK, NEWPORT

Habitat Map - Plot A

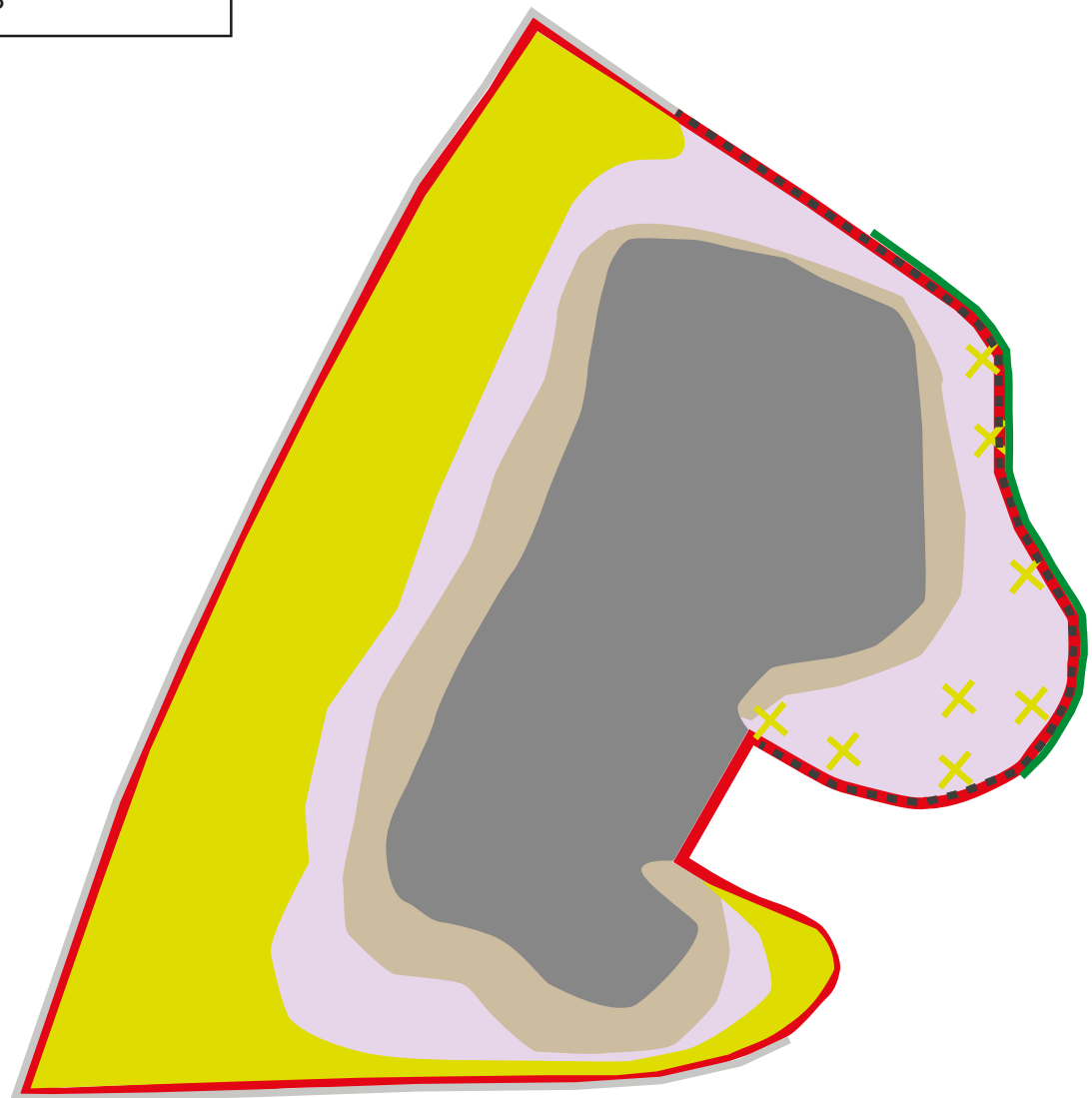
November 2023



LAND AT MON BANK, NEWPORT

Habitat Map - Plot B

November 2023



	Gravel Hardstanding		Tall Ruderal Vegetation
	Scrub		Short Perennial Vegetation
	Scattered Scrub		Hedgerow
	Post & Wire Fence		Pallisade Fence
	Site Boundary		

Appendix 4 - Aerial View of Site Location



Appendix 5 – Invertebrate Habitat Potential Assessment

Table 1. Summary of the 11 habitat elements assessed by IHP survey.

Habitat element	No.	Comments
Decaying Wood	HE1	In all its forms; from decaying wood on/in large trees to woodland floor debris
Rotational Management	HE2	Planned or serendipitous; and whether for nature conservation or other purposes
Nectar Resources	HE3	As a proxy for nectar- and pollen resources, as assessment of pollen resources is impracticable on a walk-through survey
Wet Substrates	HE4	Including marginal, marshy, muddy and seasonally inundated habitats, as well as flushes
Open Water Habitats	HE5	The open water element of rivers, lakes, ponds, streams, ditches, etc.
Structural Patchwork	HE6	Habitat mosaics, including, but by no means restricted to open mosaic habitats on previously developed land
Still Air (S)	HE7	Suntraps and still-air microclimates in open situations; the term 'still air' is used in preference to 'wind breaks' as many rigid wind breaks are likely to produce turbulent air in their lee
Still Air (H)	HE8	Humid still-air microclimates in sheltered and shaded situations
Connectivity	HE9	Landscape-scale connectivity between the site and external habitats
Ecoclines	HE10	A graded transition between two or more broad habitats
Bare Earth	HE11	Unshaded bare or sparsely vegetated well-drained substrate, regardless of soil type