

# MONA OFFSHORE WIND PROJECT

## Environmental Statement

### Volume 7, Annex 3.1: Onshore ecology desk study technical report

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Image of an offshore wind farm

MONA OFFSHORE WIND PROJECT

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### Acronyms

| Acronym | Description  |
|---------|--|
| BAP     | Biodiversity Action Plan   |
| Bern2   | Bern Convention on the Conservation of European Wildlife and Natural Habitats, Appendix 2 - Strictly protected fauna species             |
| Bern3   | Bern Convention on the Conservation of European Wildlife and Natural Habitats, Appendix 3 - Protected fauna species                      |
| Bonn2   | Bonn Convention on the Conservation of Migratory Species of Wild Animals, Appendix 2 - Migratory Species to be the subject of agreements |
| CHS2    | The Conservation of Habitats and Species Regulations 2010, Schedule 2 - European Protected Species of Animals                            |
| CHS4    | The Conservation of Habitats and Species Regulations 2010, Schedule 4 - Animals which may not be captured or killed in certain ways      |
| CITES-A | Convention on International Trade in Endangered Species, Annex A - Species threatened with extinction                                    |
| CITES-B | Convention on International Trade in Endangered Species, Annex B - Species that may become extinct unless trade is closely controlled    |
| GBNNSIP | Great Britain Non-native Species Inventory Portal Checklist of Non-native Species  |
| HDir2   | Habitats Directive, Annex II - Species requiring designation of Special Areas of Conservation  |
| HDir4   | Habitats Directive, Annex IV - Species in need of strict protection  |
| HDir5   | Habitats Directive, Annex V - Species where population management is decided by individual countries                                     |
| ID      | Identification   |
| INNS    | Invasive Non-native Species  |
| IUCN    | International Union for Conservation of Nature   |
| JNCC    | Joint Nature Conservation Committee  |
| LBAP    | Local Biodiversity Action Plan   |
| LBAP-A  | Local Biodiversity Action Plan Anglesey  |
| LBAP-C  | Local Biodiversity Action Plan Conwy   |
| LBAP-D  | Local Biodiversity Action Plan Denbighshire  |
| LBAP-E  | National Park Authority Local Biodiversity Action Plan Eryri   |
| LBAP-F  | Local Biodiversity Action Plan Flintshire  |
| LBAP-G  | Local Biodiversity Action Plan Gwynedd   |

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| Acronym       | Description  |
|---------------|--|
| LBAP-T        | Biodiversity Action Plan North and Mid Wales Trunk Road                    |
| LBAP-W        | Local Biodiversity Action Wrexham Plan                                     |
| LC            | Least Concern  |
| LI-           | Locally Important Species in Vice Counties                                 |
| LI-48[EX]     | Locally Important Species in Vice-County 48 Merionethshire                 |
| LI-48[LR]     | Locally Important Species in Vice-County 48 Merionethshire                 |
| LI-48[LS]     | Locally Important Species in Vice-County 48 Merionethshire                 |
| LI-49[LR]     | Locally Important Species in Vice-County 49 Caernarvonshire                |
| LI-49[LS]     | Locally Important Species in Vice-County 49 Caernarvonshire                |
| LI-50[LR]     | Locally Important Species in Vice-County 50 Denbighshire                   |
| LI-50[LS]     | Locally Important Species in Vice-County 50 Denbighshire                   |
| LI-51[EX]     | Locally Important Species in Vice-County 51 Flintshire                     |
| LI-51[LR]     | Locally Important Species in Vice-County 51 Flintshire                     |
| LI-51[LS]     | Locally Important Species in Vice-County 51 Flintshire                     |
| LI-52[EX]     | Locally Important Species in Vice-County 52 Anglesey                       |
| LI-52[LR]     | Locally Important Species in Vice-County 52 Anglesey                       |
| LI-52[LS]     | Locally Important Species in Vice-County 52 Anglesey                       |
| LI-BR         | Bryophyte Rarity List for Vice-Counties                                    |
| LI-BR-48[EX]  | Bryophyte Rarity List for Vice-County 48 Merionethshire (Locally extinct)  |
| LI-BR-48[LR]  | Bryophyte Rarity List for Vice-County 48 Merionethshire (Locally rare)     |
| LI-BR-49[LR]  | Bryophyte Rarity List for Vice-County 49 Caernarvonshire                   |
| LI-VP-        | Rare Plant Register for Vice Counties                                      |
| LI-VP-48[LE]  | Rare Plant Register for Vice-County 48 Merionethshire (Locally Extinct)    |
| LI-VP-48[LNS] | Rare Plant Register for Vice-County 48 Merionethshire (Locally Not Scarce) |
| LI-VP-48[LR]  | Rare Plant Register for Vice-County 48 Merionethshire (Locally Rare)       |
| LI-VP-48[LS]  | Rare Plant Register for Vice-County 48 Merionethshire (Locally Scarce)     |
| LI-VP-49[LE]  | Rare Plant Register for Vice-County 49 Caernarvonshire (Locally Extinct)   |



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| Acronym       | Description  |
|---------------|--|
| LI-VP-49[LR]  | Rare Plant Register for Vice-County 49 Caernarvonshire (Locally Rare)          |
| LI-VP-49[LS]  | Rare Plant Register for Vice-County 49 Caernarvonshire (Locally Scarce)        |
| LI-VP-49[NLS] | Rare Plant Register for Vice-County 49 Caernarvonshire (Not Locally Scarce)    |
| LI-VP-50[LNS] | Rare Plant Register for Vice-County 50 Denbighshire (Locally near scarce)      |
| LI-VP-50[LR]  | Rare Plant Register for Vice-County 50 Denbighshire (Locally rare)             |
| LI-VP-50[LS]  | Rare Plant Register for Vice-County 50 Denbighshire (Locally scarce)           |
| LI-VP-51[LR]  | Rare Plant Register for Vice-County 51 Flintshire (Locally rare)               |
| LI-VP-51[LS]  | Rare Plant Register for Vice-County 51 Flintshire (Locally scarce)             |
| LI-VP-52[EX]  | Rare Plant Register for Vice-County 52 Anglesey (Extinct)                      |
| LI-VP-52[LR]  | Rare Plant Register for Vice-County 52 Anglesey (Locally Rare)                 |
| LI-VP-52[LS]  | Rare Plant Register for Vice-County 52 Anglesey (Locally Scarce)               |
| LI-VP-52[PX]  | Rare Plant Register for Vice-County 52 Anglesey (Possibly or Probably Extinct) |
| LNR           | Local Nature Reserve   |
| LWS           | Local Wildlife Sites   |
| MAGIC         | Multi Agency Geographic Information for the Countryside                        |
| MLWS          | Mean Low Water Springs   |
| NNR           | National Nature Reserve  |
| NT            | Near Threatened  |
| PBA           | Protection of Badgers Act 1992   |
| R             | Rare   |
| RDB-NB        | Red Data Book listing (not based on IUCN guidelines) - Notable B               |
| RDB-NR        | Red Data Book listing (not based on IUCN guidelines) - Nationally Rare         |
| RDB-NS        | Red Data Book listing (not based on IUCN guidelines) - Nationally Scarce       |
| RL-DD         | IUCN Red List of Threatened Species - Data Deficient                           |
| RL-EN         | IUCN Red List of Threatened Species - Endangered                               |
| RL-NT         | IUCN Red List of Threatened Species - Near Threatened                          |
| RL-VU         | IUCN Red List of Threatened Species - Vulnerable                               |

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| Acronym    | Description   |
|------------|---|
| S7         | Environment (Wales) Act 2016 (Section 7)  |
| SAC        | Special Area of Conservation  |
| SPA        | Special Protection Area   |
| SSSI       | Site of Special Scientific Interest   |
| VU         | Vulnerable  |
| WCA        | Wildlife and Countryside Act 1981   |
| WCA5       | Wildlife & Countryside Act 1981 Schedule 5 - Animals which are protected  |
| WCA8       | Wildlife & Countryside Act 1981 Schedule 8 - Plants which are protected   |
| WCA9       | Wildlife & Countryside Act 1981 Schedule 9 - Animals and plants which may not be released/planted or allowed to escape/grow in the wild |
| WRL-LI[NT] | Lichen Red Data List for Wales (Near Threatened)  |
| WRL-TM[EN] | IUCN compliant Red List for Britain's Terrestrial Mammals (Endangered)  |
| WRL-TM[NT] | IUCN compliant Red List for Britain's Terrestrial Mammals (Near Threatened)   |
| WRL-TM[VU] | IUCN compliant Red List for Britain's Terrestrial Mammals (Vulnerable)  |
| WRL-VP[DD] | Vascular Plant Red Data List for Wales (Data Deficient)   |
| WRL-VP[NT] | Vascular Plant Red Data List for Wales (Near Threatened)  |
| WRL-VP[VU] | Vascular Plant Red Data List for Wales (Vulnerable)   |

## Units

| Unit | Description |
|------|-------------|
| km   | Kilometre   |

# 1 ONSHORE ECOLOGY DESK STUDY TECHNICAL REPORT

## 1.1 Introduction

- 1.1.1.1 This document forms Volume 7, Annex 3.1 Onshore ecology desk study technical report of the Environmental Statement for the Mona Offshore Wind Project.
- 1.1.1.2 The purpose of this technical report is to present the methodology and results of the onshore ecology desk study undertaken in 2023 for the Mona Offshore Wind Project. The results of the desk study have been used to inform Volume 3, Chapter 3: Onshore ecology of the Environmental Statement.
- 1.1.1.3 Two separate areas have been defined for the purposes of this technical report. These include the 'study area', which describes the geographical extent subject to desk based research, and the 'survey area', which describes the area of land subject to Site-specific surveys. The extent of the study area was selected to ensure data was collected for the Mona Onshore Development Area and the surroundings that may support relevant habitats and species and may reasonably be affected by the Mona Offshore Wind Project. The extent of the study area and the survey area were discussed and agreed with the onshore ecology Expert Working Group.
- 1.1.1.4 For the purposes of this technical report and the ease of geographic reference, the Mona Onshore Development Area has been separated into nine distinct sections, as shown in Figure 1.1 below.

## 1.2 Study area

- 1.2.1.1 The onshore ecology desk study area, which describes the geographical extent subject to desk based research, comprises the Mona Onshore Development Area, landward of Mean Low Water Springs (MLWS) and a series of buffers, each specific to a group of ecological features ('the onshore ecology desk study area'). The buffers used to inform the onshore ecology desk study are:
- A 20 km buffer around the Mona Onshore Development Area for internationally designated sites, including Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites
  - A 5 km buffer around the Mona Onshore Development Area, for nationally designated sites, including Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)
  - A 2 km buffer around the Mona Onshore Development Area for locally designated sites, including Local Nature Reserves (LNRs) and Local Wildlife Sites (LWSs)
  - A 2 km buffer around the Mona Onshore Development Area for records of protected or notable species (except for notable plant and invertebrate species)
  - A 1 km buffer around the Mona Onshore Development Area for records of protected or notable plant and invertebrate species.
- 1.2.1.2 The location and geographic extent of the onshore ecology desk study area, including the buffer distances identified above is presented in Figure 1.2 below.



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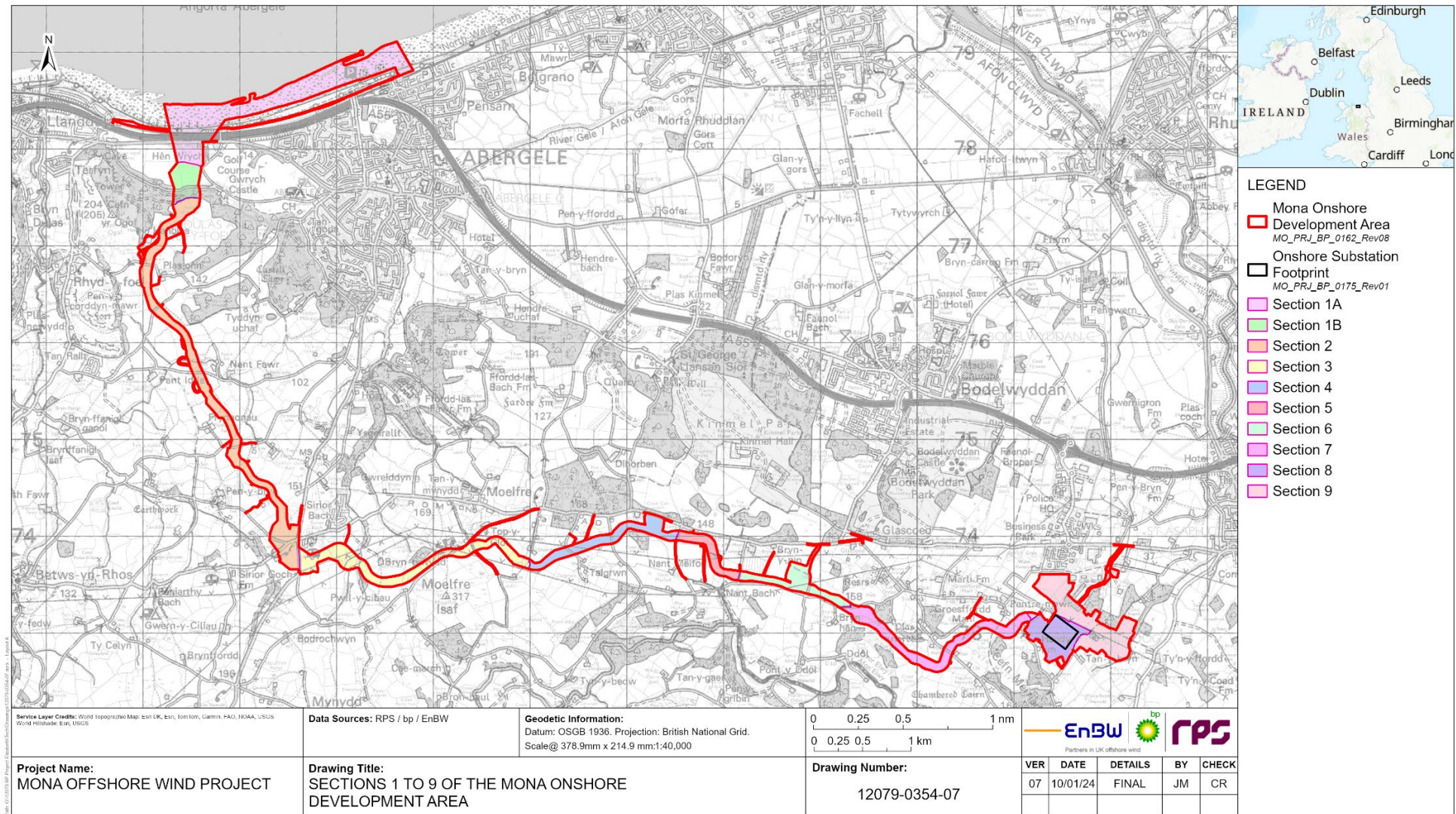
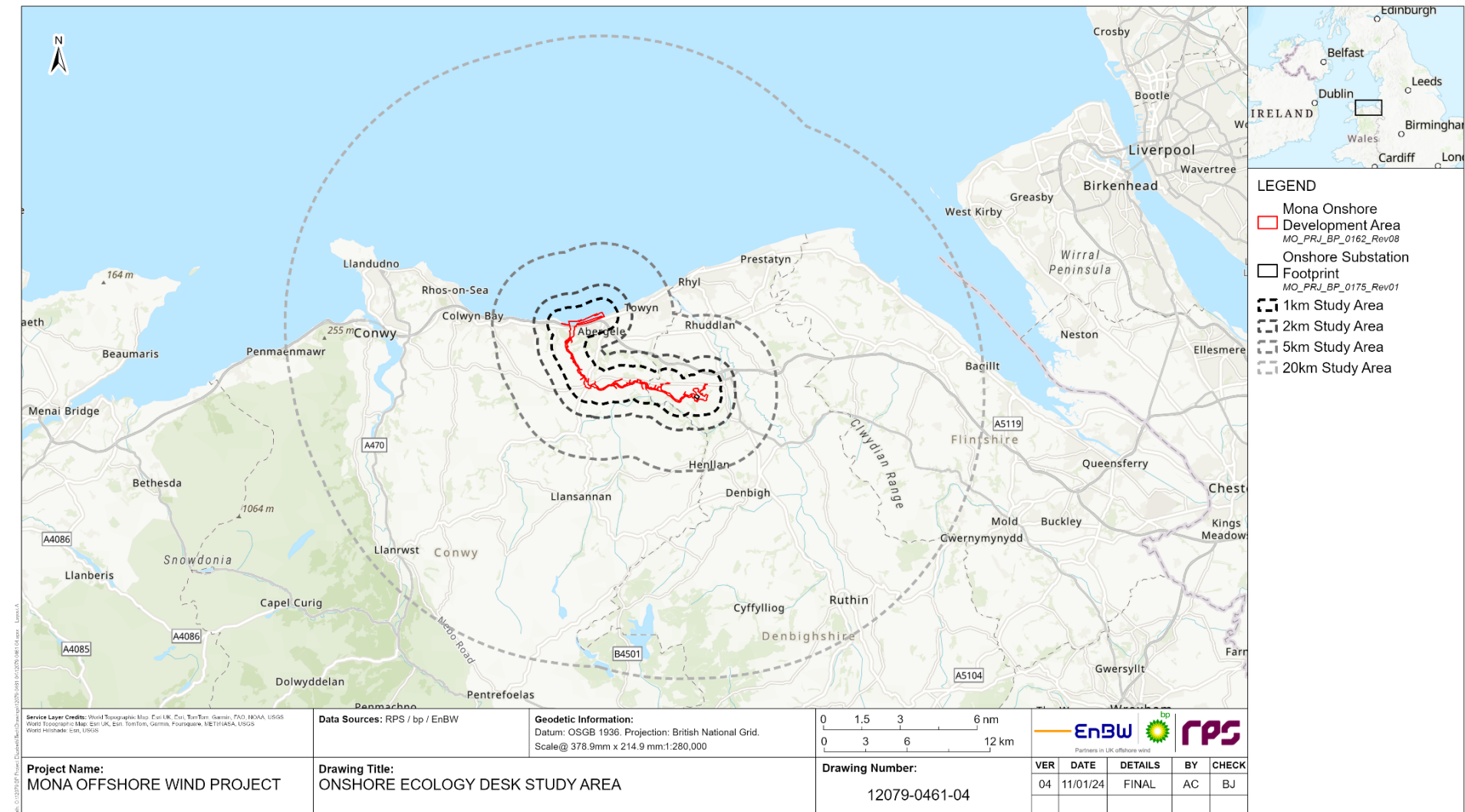


Figure 1.1: Sections 1 to 9 of the Mona Onshore Development Area



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**Figure 1.2: Onshore ecology desk study area.**

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### 1.3 Methodology

#### 1.3.1 Desk study

- 1.3.1.1 Historical data from the onshore ecology desk study area was requested in August 2023 from the North Wales Environmental Information Service (Cofnod) (Cofnod, 2023) for statutory and non-statutory designated sites, ancient woodlands, traditional orchards, and protected and notable species.
- 1.3.1.2 The desk study was undertaken in accordance with the relevant guidance provided by Chartered Institute of Ecology and Environmental Management (CIEEM, 2017).
- 1.3.1.3 Standard industry practice accepts that ecological data becomes less reliable after ten years. However, given the wide extent of the onshore ecology desk study area and the rural nature of the project, the precautionary approach was adopted, and the Mona Offshore Wind Project has considered data from 2010 to 2023 (i.e. 13 years' worth of data).
- 1.3.1.4 Supplementary information on statutory and non-statutory designated sites within the onshore ecology desk study area was obtained from the Multi Agency Geographic Information for the Countryside (MAGIC) interactive mapping system (Defra, 2023) and DataMap Wales (NRW, 2023).
- 1.3.1.5 The citations and additional information on the designated features of the SPAs and SACs in the onshore ecology desk study area were obtained from the Joint Nature Conservation Committee (JNCC) website. The citations for the SSSIs were obtained from Cofnod.
- 1.3.1.6 The desktop sources used to inform this technical report are summarised at Table 1.1 below.

**Table 1.1: Summary of key desktop sources.**

| Title   | Source  | Year        | Author           |
|---|---|-------------|------------------|
| Historical biological records   | Cofnod  | 2023        | Cofnod           |
| DataMap Wales   | Welsh Government  | 2023        | Welsh Government |
| UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats | CIEEM   | 2023        | Reason and Wray  |
| Distribution of the Dormouse <i>Muscardinus avellanarius</i> in Wales   | Peoples Trust for Endangered Species                            | 2023        | PTES             |
| Plant distribution maps   | Botanical Society of Britain and Ireland (BSBI)                 | 2023        | BSBI             |
| Red List  | International Union for the Conservation of Nature              | 2023        | IUCN             |
| Great Crested Newt Survey Report  | Burbo Bank Extension Offshore Windfarm – Onshore Infrastructure | 2022 - 2023 | RPS              |

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| Title  | Source   | Year | Author                |
|--|--|------|-----------------------|
| Great Crested Newt Survey Report                             | Awel Y Môr Offshore Wind Farm Environmental Statement Annexe | 2022 | RWE Renewables        |
| St Asaph Business Park Monitoring GCN Report                 | St. Asaph Business Park Monitoring                           | 2023 | Biodiversity Advanced |
| St. Asaph Solar Farm Great Crested Newt Surveys              | St. Asaph Solar Farm   | 2022 | SLR                   |
| Invertebrate database  | Pantheon   | 2023 | Pantheon              |
| UK Protected Area Joint Nature Conservation Committee (JNCC) | JNCC website   | 2023 | JNCC                  |

### 1.3.2 Limitations

- 1.3.2.1 The desk top sources used to inform this technical report comprise third party controlled data, purchased for the purposes of onshore ecology desk study only. The Applicant cannot be held liable for any inaccuracies in this data.
- 1.3.2.2 Desk study data shows where species have been recorded. The absence of records, however, may be due to the absence of surveys in that area or a lack of reporting of results and incidental sighting. The absence of data does not therefore mean an absence of a species. The findings of this technical report have not been relied upon alone to determine species presence or absence but have been used in conjunction with Extended phase 1 Habitat Surveys (see Volume 7, Annex 3.2: Extended phase 1 Habitat Survey technical report of the Environmental Statement) and habitat and species specific surveys.

## 1.4 Results

### 1.4.1 Statutory designated sites

#### Internationally designated sites

- 1.4.1.1 There were 11 internationally designated sites within 20 km of the Mona Onshore Development Area. The name of each site, its designation, the distance from the Mona Onshore Development Area and a description is presented in Table 1.2 below. Their location in relation the Mona Onshore Development Area and their geographic extent are illustrated in Figure 1.3.
- 1.4.1.2 Of the 11 internationally designated sites identified, Bae Lerpwl/ Liverpool Bay coincides with the Mona Onshore Development Area. The ten other internationally designated sites are located outside the Mona Onshore Development Area.

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**Table 1.2: Internationally designated sites within 20 km of the Mona Onshore Development Area.**

| Site name   | Designation | Distance from the Mona Onshore Development Area (km) | Description  |
|---|-------------|--|--|
| Bae Lerpwl / Liverpool Bay                              | SPA         | 0.00   | Liverpool Bay / Bae Lerpwl SPA, East of the Irish Sea, borders the coastlines of north-west England and north Wales. Running as a broad arc from Morecambe Bay to the east coast of Anglesey. It is designated for the protection of red-throated diver <i>Gavia stellata</i> , common scoter <i>Melanitta nigra</i> , and little gull <i>Hydrocoloeus minutus</i> in the non-breeding season; common tern <i>Sterna hirundo</i> and little tern <i>Sterna albifrons</i> in the breeding season, and an internationally important waterbird assemblage.  |
| Coedwigoedd Dyffryn Elwy / Elwy Valley Woods            | SAC         | 0.81   | Elwy Valley Woods is one of three sites selected to represent Tilio-Acerion Forest across its geographic range on the Carboniferous limestone of north Wales, and is an example of the habitat with an outstanding lower-plant flora. The canopy is quite varied: ash <i>Fraxinus excelsior</i> is the most common tree, but there is also occasional small-leaved lime <i>Tilia cordata</i> and wild service-tree <i>Sorbus torminalis</i> . There is a rich calcicolous understorey and ground flora, and rare bryophytes include <i>Bryum canariense</i> , <i>Cololejeunea rossettiana</i> , <i>Plagiochila britannica</i> , <i>Platydictya confervoides</i> and <i>Isothecium striatulum</i> . The woods have developed along steep valley-sides and ravines that are also important for their cave systems and Pleistocene fossil mammal assemblages. |
| Coedwigoedd Penrhyn Creuddyn / Creuddyn Peninsula Woods | SAC         | 9.48   | Creuddyn Peninsula Woods is designated for its Tilio-Acerion forests of slopes, screes and ravines. Creuddyn Peninsula Woods developed on a series of craggy Carboniferous limestone hills and is an example of a large Tilio-Acerion forest at the westerly-most edge of its range, at this latitude in the UK. Semi-natural dry grasslands and scrubland facies on calcareous substrates, and English yew <i>Taxus baccata</i> woods are also present and are qualifying features of the SAC, but not the primary reason for its designation.  |
| Llwyn   | SAC         | 9.78   | Llwyn is one of the largest examples of alluvial forest in Wales. The woodland has formed on level ground on the floodplain of the River Clywedog, and has a canopy of alder <i>Alnus glutinosa</i> , which transitions to ash dominance on relatively drier ground.   |
| Y Fenai a Bae Conwy / Menai Strait and Conwy Bay        | SAC         | 10.58  | Menai Strait and Conwy Bay is designated for the presence of sandbanks, which are always slightly covered by sea water, mudflats and sandflats not covered by seawater at low tide, and reefs. Large shallow inlets and bays and submerged or partially submerged sea caves are also present as qualifying features but not a primary reason for its designation.  |



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| Site name                                    | Designation      | Distance from the Mona Onshore Development Area (km) | Description   |
|--|------------------|--|---|
| Aber Dyfrdwy / Dee Estuary                   | SAC, SPA, Ramsar | 11.05  | <p>The primary reasons for designation of the Dee Estuary as an SAC are the presence of mudflats and sandflats not covered by seawater at low tide, Salicornia and other annuals colonising mud and sand, and Atlantic salt meadows. Other habitats present as a qualifying feature (but not primary reason for designation) include estuaries, annual vegetation of drift lines, vegetated sea cliffs of the Atlantic and Baltic Coasts, embryonic shifting dunes, shifting dunes along the shoreline with European beachgrass <i>Ammophila arenari</i>, fixed coastal dunes with herbaceous vegetation, and humid dune slacks. Species present as a qualifying feature (but not primary reason for designation) include sea lamprey <i>Petromyzon marinus</i>, river lamprey <i>Lampetra fluviatilis</i> and petalwort <i>Petalophyllum ralfsii</i>.</p> <p>The site also qualifies as an SPA and Ramsar as it is used regularly by 1% or more of the Great Britain populations of bar-tailed godwit <i>Limosa lapponica</i>, common tern, little tern, and sandwich tern <i>Sterna sandvicensis</i>. The site also qualifies as an SPA it is used regularly by 1% or more of the biogeographical populations of redshank <i>Tringa tetanus</i>, shelduck <i>Tadorna tadorna</i>, teal <i>Anas crecca</i>, pintail <i>Anas acuta</i>, oystercatcher <i>Haematopus ostralegus</i>, grey plover <i>Pluvialis squatarola</i>, knot <i>Calidris canutus islandica</i>, dunlin <i>Calidris alpina</i>, black-tailed godwit <i>Limosa limosa islandica</i>, curlew <i>Numenius arquata</i>, and redshank.</p> |
| Mynydd Helygain / Halkyn Mountain            | SAC              | 13.54  | <p>Halkyn Mountain comprises the most extensive recorded area of the metalliferous National Vegetation Classification (NVC) type OV37 <i>Festuca ovina</i> – <i>Minuartia verna</i> grassland community in Wales and is designated for the presence of Calaminarian grasslands of the <i>Violetalia calaminariae</i>, as well as the presence a large great crested newt <i>Triturus cristatus</i> breeding population. European dry heaths, semi-natural dry grasslands and scrubland facies on calcareous substrates, and Molinia meadows on calcareous peaty or clayey-silt-laden soils are also present as qualifying features but are not primary reasons for designation.</p>   |
| Pen y Gogarth / Great Orme's Head            | SAC              | 14.15  | <p>Great Orme's Head is designated for its European dry heaths and semi-natural dry grasslands and scrubland facies on calcareous substrates. This site is the finest example of limestone heath in the UK and supports one of the largest stands in the UK of Avenula Grassland NVC type CG1 <i>Festuca ovina</i> – <i>carlina vulgaris</i> grassland. Vegetated sea cliffs are also a qualifying feature, but not a primary reason for its designation.</p>   |
| Coedwigoedd Dyffryn Alun / Alyn Valley Woods | SAC              | 17.43  | <p>Alyn Valley Woods holds one of the largest continuous areas of Tilio-Acerion forest in Wales, and is one of three sites selected to represent the geographic range and variation of the habitat on the Carboniferous limestone of north Wales. Semi-natural dry grasslands and scrubland facies on calcareous substrates, and alluvial forests with alder and ash are also present as qualifying features but are not primary reasons for its designation.</p>   |

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| Site name   | Designation | Distance from the Mona Onshore Development Area (km) | Description   |
|---|-------------|--|---|
| Mwyngloddiau Fforest Gwydir / Gwydyr Forest Mines | SAC         | 18.82  | Mwyngloddiau Fforest Gwydir / Gwydyr Forest Mines SAC is primarily designated for the presence of Calaminarian grasslands of the <i>Violetalia calaminariae</i> . A lesser horseshoe <i>Rhinolophus hipposideros</i> bat colony is also present which is a qualifying feature of the SAC, but not a primary reason for its designation.   |
| Eryri / Snowdonia                                 | SAC         | 18.75  | Eryri / Snowdonia SAC is primarily designated for the following habitats: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Siliceous alpine and boreal grasslands, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Siliceous scree of the montane to snow levels <i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i> , Calcareous rocky slopes with chasmophytic vegetation, and Siliceous rocky slopes with chasmophytic vegetation. Species included as primary reasons for the designation include slender green feather-moss, <i>Drepanocladus vernicosus</i> and floating water-plantain <i>Luronium natans</i> . Several other habitats are present that are qualifying features but are not primary reasons for its designation. |

### Nationally designated sites

- 1.4.1.3 There are six nationally designated sites within 5 km of the Mona Onshore Development Area. The name of each site, its designation, the distance from the Mona Onshore Development Area and a description is presented in Table 1.3 below. Their location in relation the Mona Onshore Development Area and their geographic extent are illustrated in Figure 1.4.
- 1.4.1.4 Of the six statutory designated sites identified, Llanddulas Limestone and Gwrych Castle Wood SSSI and Traeth Pensarn SSSI coincide with the Mona Onshore Development Area. The remaining four designated sites are located outside the Mona Onshore Development Area.

**Table 1.3: Nationally designated sites within 5 km of the Mona Onshore Development Area.**

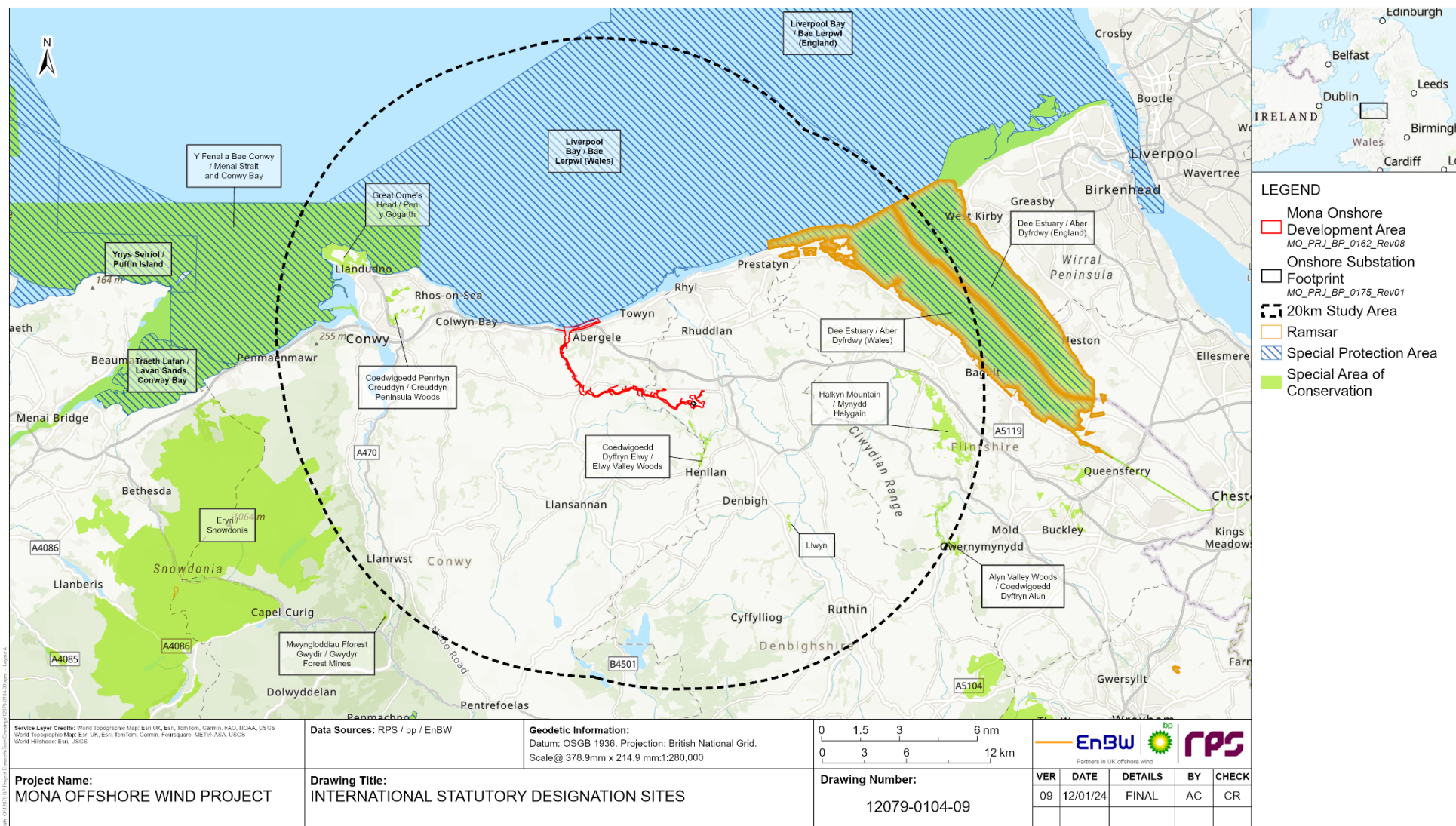
| Site name                                   | Designation | Distance from the Mona Onshore Development Area (km) | Description   |
|---|-------------|--|---|
| Llanddulas Limestone and Gwrych Castle Wood | SSSI        | 0.00   | This site is of special interest for its limestone (calicolous) grassland, heath and woodland communities, the first two of which comprise some of the largest examples in Wales as well as its populations of vascular plants; bryophytes; butterflies; moths and a winter roost of lesser horseshoe bat.  |
| Traeth Pensarn                              | SSSI        | 0.00   | This site is of special interest for its vegetated shingle beach plant communities. The site supports both 'pioneer' and 'stable vegetated' shingle, extending approximately 1.7 km along the Pensarn beach, from the promenade westward towards Llanddulas.  |
| Coedydd ac Ogofau Elwy a Meichion           | SSSI        | 0.81   | The site is of special interest for its semi-natural broadleaved woodland, its rare flowering plant assemblage, its scarce bryophyte assemblage, and the geological and palaeontological interest of Galltfaenan, Cefn and Pontnewydd Caves. The caves also provide roosting habitat for Natterer's bat <i>Myotis nattereri</i> , brown long-eared bat <i>Plecotus auritus</i> , common pipistrelles ( <i>Pipistrellus pipistrellus</i> ), and lesser horseshoe bats. |
| Coed y Gopa                                 | SSSI        | 0.82   | The site occupies a prominent carboniferous limestone hill. There is a disused stone quarry in the south-east corner. The many natural caves and underground mine workings provide opportunities for roosting bats including a large hibernaculum of lesser horseshoe bats, and smaller numbers of Natterer's bat and Daubenton's bat <i>Myotis daubentonii</i> .   |
| Mynydd Marian                               | SSSI        | 2.48   | Mynydd Marian is of special interest for its range of limestone grassland communities and its population of the dwarf race of silver studded blue butterfly <i>Plebejus argus ssp. caernensis</i> .   |
| Coedydd Derw Elwy                           | SSSI        | 3.92   | Coedydd Derw Elwy is of special interest for its semi-natural broadleaved woodland. Most of the site is comprised of sessile oak <i>Quercus petraea</i> , downy birch <i>Betula pubescens</i> , and wood-sorrel <i>Pxalis acetosella</i> .  |

### Locally designated sites

- 1.4.1.5 The onshore ecology desk study confirmed that there were no locally designated statutory sites (e.g. LNRs) within 2 km of the Mona Onshore Development Area. The location and geographic extent of LNRs in proximity to the Mona Onshore Development Area are presented in Figure 1.5 of this technical report below.

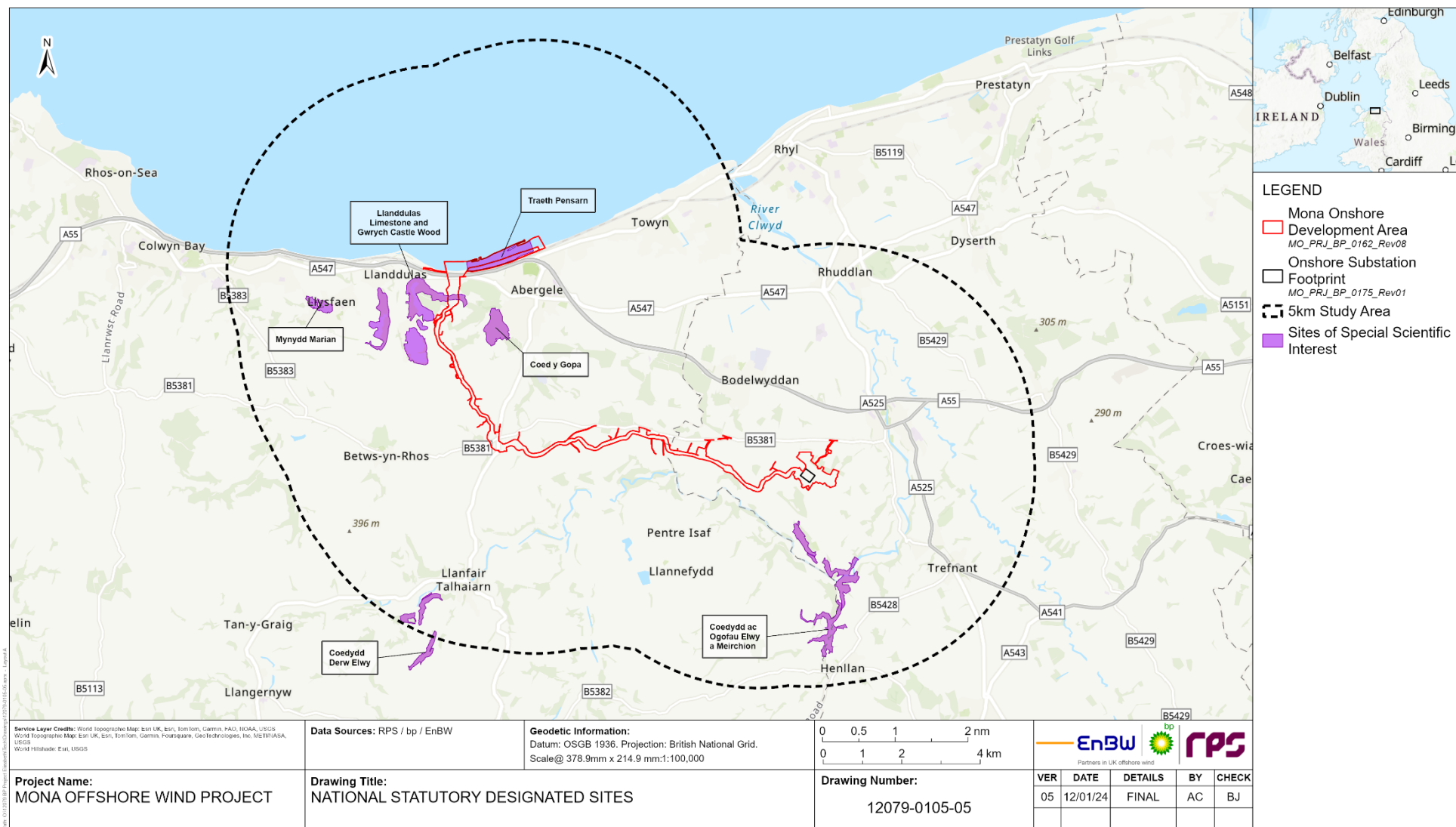


## MONA OFFSHORE WIND PROJECT



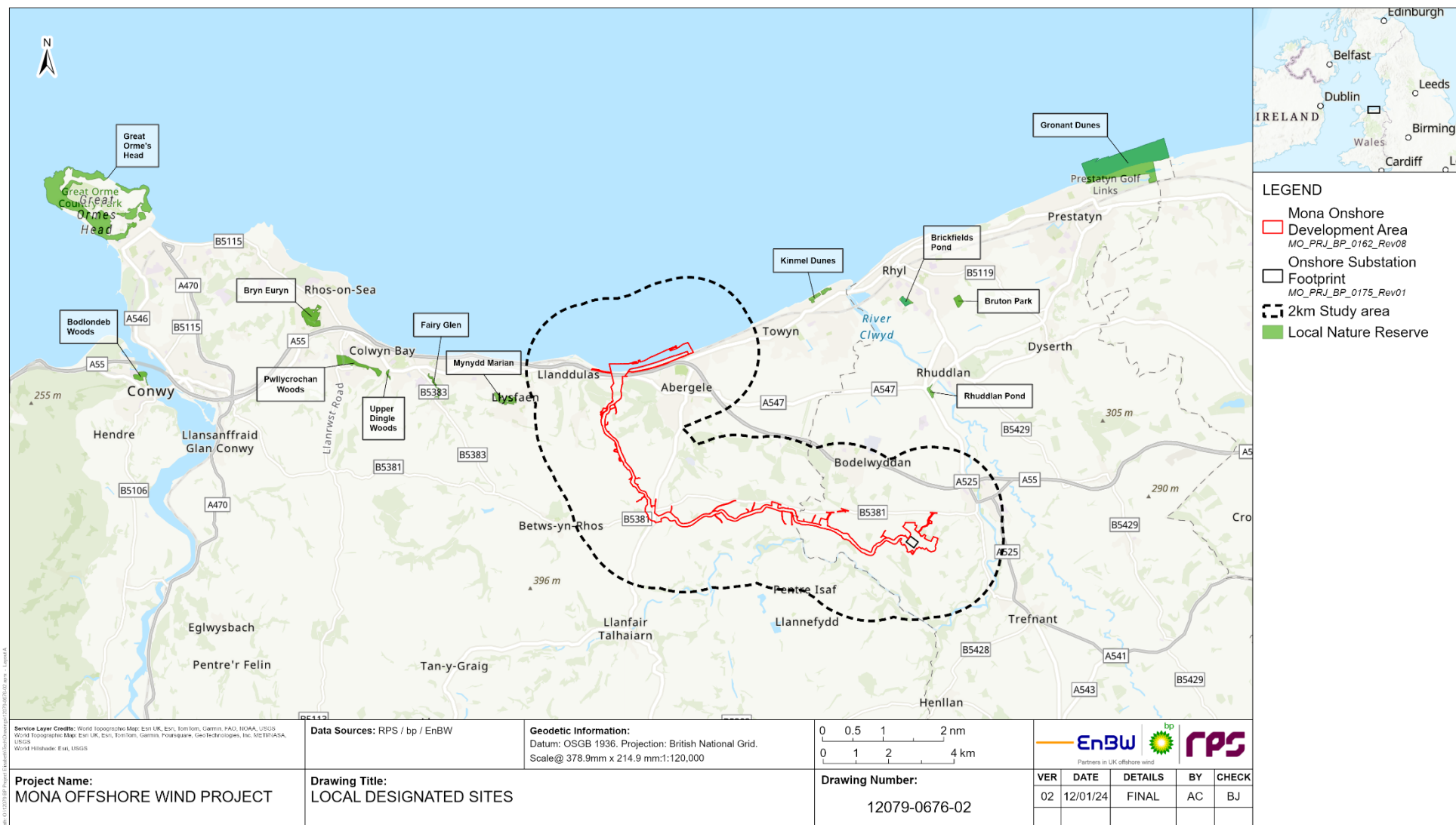
**Figure 1.3: Internationally designated sites within 20 km of the Mona Onshore Development Area.**

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**Figure 1.4: Nationally designated sites within 5 km of the Mona Onshore Development Area.**

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**Figure 1.5: Locally designated sites (statutory) within 2 km of the Mona Onshore Development Area.**



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### 1.4.2 Non-statutory designated sites

#### Locally designated sites

- 1.4.2.1 There are 77 non-statutory locally designated sites within 2 km of the Mona Onshore Development Area.
- 1.4.2.2 The name of each site, its designation, the distance from the Mona Onshore Development Area and a description is presented in Table 1.4 below. Their location in relation the Mona Onshore Development Area and their geographic extent are illustrated in Figure 1.6.
- 1.4.2.3 Of the 77 LWSs identified, two coincide with the eastern extent of the Mona Onshore Development Area, which are Coed Cord LWS and Coed y Saeson LWS.

**Table 1.4: LWSs located within 2 km of the Mona Onshore Development Area.**

| Site Name                        | Designation | Distance from the Mona Onshore Development Area (km) |
|----------------------------------|-------------|--|
| Coed Cord                        | LWS         | 0.00   |
| Coed y Saeson                    | LWS         | 0.00   |
| Pensarn Reedbed                  | LWS         | 0.03   |
| Coed Betws Lodge                 | LWS         | 0.06   |
| Tan-yr-ogof Farm                 | LWS         | 0.09   |
| Pwll Coed Cae Mach               | LWS         | 0.12   |
| Siror Hir Dingles                | LWS         | 0.12   |
| Pentre Mawr Park Pools & Reedbed | LWS         | 0.13   |
| Moelfre Isaf Heath               | LWS         | 0.13   |
| Moelfre Isaf heath fragments     | LWS         | 0.16   |
| Abergele Golf Course 4           | LWS         | 0.16   |
| Coed Y Waen                      | LWS         | 0.19   |
| Pwll Coed Pen y Bryn             | LWS         | 0.23   |
| Hen Wrych Pond                   | LWS         | 0.24   |
| Bryn Meiriadog                   | LWS         | 0.25   |
| Pwll Rookery                     | LWS         | 0.30   |
| Abergele Golf Course 2           | LWS         | 0.37   |
| Tan y mynydd                     | LWS         | 0.38   |
| Abergele Golf Course 3           | LWS         | 0.41   |
| Dinorben Lodge Quarry            | LWS         | 0.43   |
| North Wales Holiday Camp         | LWS         | 0.46   |
| Glascoed                         | LWS         | 0.48   |

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| Site Name                             | Designation | Distance from the Mona Onshore Development Area (km) |
|---------------------------------------|-------------|--|
| Coed Pen-y-bryn                       | LWS         | 0.48   |
| Coed Wig                              | LWS         | 0.50   |
| Moelfre Isaf heath fragments          | LWS         | 0.52   |
| Afon Gele Grassland                   | LWS         | 0.53   |
| St Cynbryd's Church Verge             | LWS         | 0.54   |
| Abergele grazing marsh                | LWS         | 0.55   |
| Coed Meibion                          | LWS         | 0.58   |
| Ty'n-y-Coed Rough                     | LWS         | 0.60   |
| Glascoed                              | LWS         | 0.62   |
| Moelfre Isaf heath fragments          | LWS         | 0.66   |
| Abergele Golf Course 1                | LWS         | 0.70   |
| Afon Gele                             | LWS         | 0.71   |
| Coed Bron Haul                        | LWS         | 0.72   |
| Coed Ysgerirallt                      | LWS         | 0.75   |
| Ty'n-y-Coed Rough                     | LWS         | 0.78   |
| Coed Tan-y-bryn                       | LWS         | 0.78   |
| Llyn Tyddyn Uchaf                     | LWS         | 0.81   |
| Coed Fron and Eryl Hall Wood          | LWS         | 0.92   |
| Pwll Fardre                           | LWS         | 0.95   |
| Pwllau Graig                          | LWS         | 0.98   |
| Ffordd Llindir                        | LWS         | 1.12   |
| Berthglyn Pond                        | LWS         | 1.14   |
| Mynydd y Gaer                         | LWS         | 1.14   |
| Coed Parc y Meirch / Coed Ty Croes    | LWS         | 1.14   |
| Coed Nant-y-graig                     | LWS         | 1.22   |
| Coed Kendrick                         | LWS         | 1.28   |
| Abergele Hospital Grounds             | LWS         | 1.31   |
| Coed y Gopa Extension                 | LWS         | 1.32   |
| Coed Ty Brith                         | LWS         | 1.33   |
| Coed Bont Newydd                      | LWS         | 1.44   |
| Mynydd Bodrochwyn / Bron Heulog Heath | LWS         | 1.44   |
| Coed y Geufron                        | LWS         | 1.48   |
| Coed Mawr                             | LWS         | 1.48   |

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| Site Name                       | Designation | Distance from the Mona Onshore Development Area (km) |
|---------------------------------|-------------|--|
| Coed Parc Kimmel                | LWS         | 1.52   |
| Fferam Ffordd Las Bach          | LWS         | 1.55   |
| Llanddulas limestone            | LWS         | 1.56   |
| Nant Glyd                       | LWS         | 1.59   |
| Pwll Parc Kimmel                | LWS         | 1.63   |
| The Warren                      | LWS         | 1.64   |
| Mount Road Churchyard, St Asaph | LWS         | 1.67   |
| Mynydd y Gaer Grassland         | LWS         | 1.68   |
| Llyn Brynffanigi Uchaf          | LWS         | 1.69   |
| Coed PlasUchaf                  | LWS         | 1.71   |
| Chapel Wood/Coed Mawr           | LWS         | 1.78   |
| Coed Peniarth Fawr              | LWS         | 1.80   |
| Geuallt Isaf Wood               | LWS         | 1.81   |
| Coed Mynydd Bodrochwyn          | LWS         | 1.81   |
| Coed Nant Ddu                   | LWS         | 1.84   |
| Cynant Ganol, eastern pond      | LWS         | 1.88   |
| Cynant Ganol, western pond      | LWS         | 1.88   |
| Isallt crags and Bryn Gwylan    | LWS         | 1.89   |
| Afon Elwy (N1)                  | LWS         | 1.89   |
| Trawscoed                       | LWS         | 1.90   |
| Bryn Plas Uchaf                 | LWS         | 1.93   |
| Ffordd Las                      | LWS         | 1.99   |

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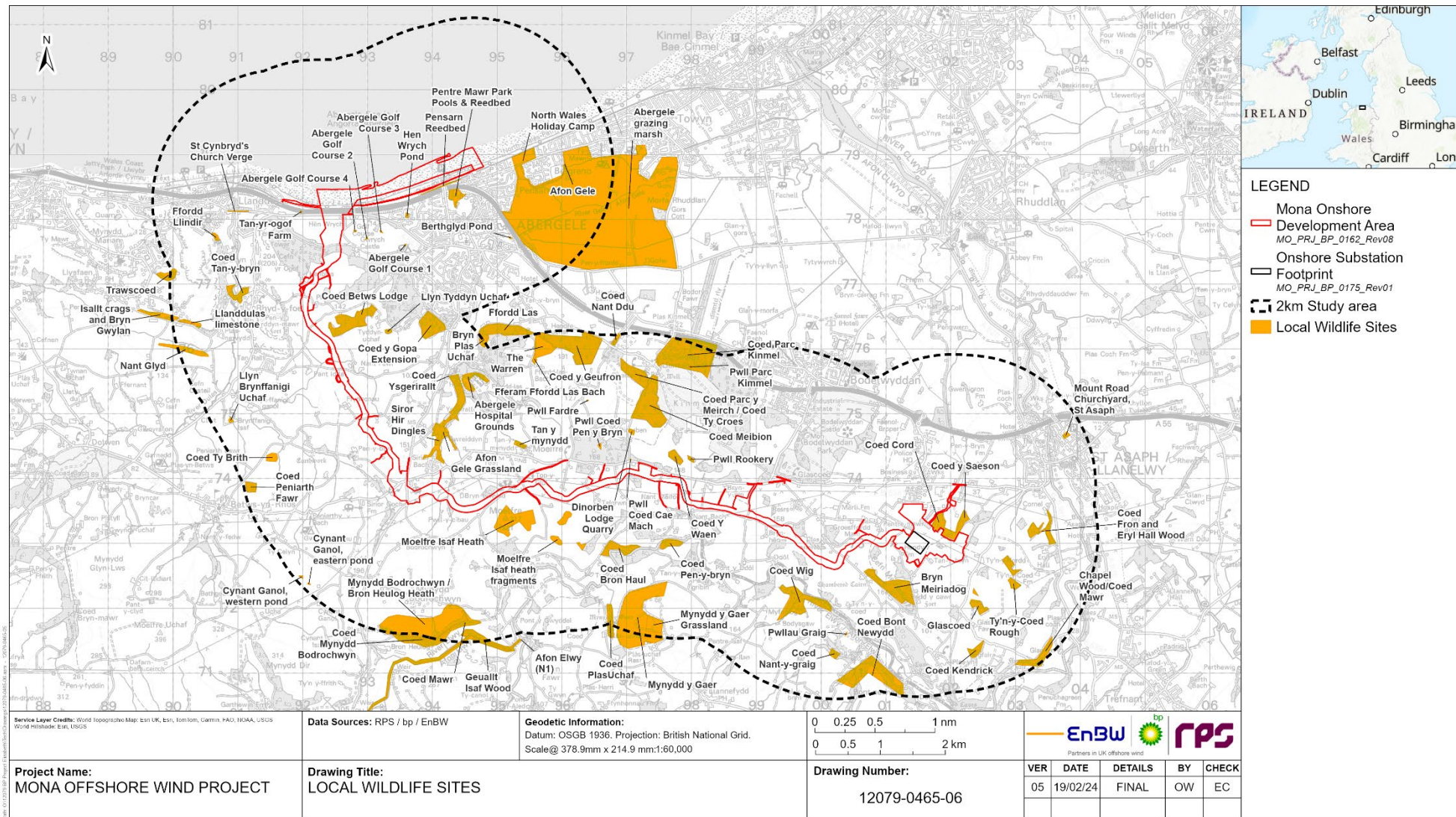


Figure 1.6: Locally designated sites (non-statutory) within 2 km of the Mona Onshore Development Area.



### 1.4.3 Habitats of Principal Importance

- 1.4.3.1 In Wales, Section 7 of the Environment (Wales) Act 2016 affords 55 habitats due regard in the planning system. All habitats listed under Section 7 of the Environment (Wales) Act 2016 are Habitats of Principal Importance (SPI) in Wales and represent rare and notable habitats. Public bodies and local planning authorities have a legal duty to conserve SPI and HPI when exercising their duties.

#### Ancient Woodland

- 1.4.3.2 There are 156 ancient woodlands within 2km of the Mona Onshore Development Area. Of the areas of ancient woodland identified, 5 are within the Mona Onshore Development Area. The location in relation to the Mona Onshore Development Area and their geographic extent are illustrated in Figure 1.7 below.
- 1.4.3.3 It is acknowledged that an ancient woodland may comprise one or more woodland compartments. A woodland compartment maybe defined by the quality or age of the ancient woodland, or the associated habitat management practices. The exact number of ancient woodlands within the onshore ecology desk study area is therefore subjective and dependent on how an ancient woodland is defined. This assessment groups contiguous ancient woodland compartments as one woodland.

#### Traditional orchard

- 1.4.3.4 There are 24 traditional orchards within 2 km of the Mona Onshore Development Area. Of these, none are within the Mona Onshore Development Area. Orchards vary in their size, age and quality, and some have been subject to detailed survey, whereas others have been identified and assessed from aerial imagery. For the purposes of this assessment all traditional orchards that have been categorised as HPI have been included. All orchards that have been categorised as 'probably' traditional orchards have been assumed to be HPI in line with the precautionary approach. No other orchard types have been assumed to be HPI. The location in relation to the Mona Onshore Development Area and their geographic extent are illustrated in Figure 1.8 below.

#### Wood Pasture and Parkland

- 1.4.3.5 There is one area of wood pasture and three areas of parkland within 2 km of the Mona Onshore Development Area. Two areas of parkland are within the Mona Onshore Development area. Their relation to the Mona Onshore Development Area and their geographic extent are illustrated in Figure 1.9 Below.

#### Lowland Calcareous Grassland

- 1.4.3.6 There are 9 areas of lowland calcareous grassland within 2 km of the Mona Onshore Development Area. None of these were within the Mona Onshore Development Area. Their relation to the Mona Onshore Development Area and their geographic extent are illustrated in Figure 1.9 below.
- 1.4.3.7 It is acknowledged that lowland calcareous grassland may comprise one or more grassland compartments (e.g. sub-sections of fields, field or adjacent fields). A grassland compartment may be defined by quality, extent or its management practices. The exact number of lowland calcareous grasslands within the onshore ecology desk study area is therefore subjective and dependent on how this type of grassland is

## MONA OFFSHORE WIND PROJECT

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defined. This assessment groups contiguous lowland calcareous grassland compartments as one grassland.

### **Lowland Dry Acid Grassland**

- 1.4.3.8 There are 39 areas of lowland dry acid grassland within 2 km of the Mona Onshore Development Area. Of these, one lies within the Mona Onshore Development Area. Their relation to the Mona Onshore Development Area and their geographic extent are illustrated in Figure 1.9 below.

### **Lowland Heath**

- 1.4.3.9 There are 34 areas of lowland heath within 2 km of the Mona Onshore Development Area. None of the lowland heath was within the Mona Onshore Development Area. The relation to the Mona Onshore Development Area and their geographic extent are depicted below in Figure 1.9.

### **Open Mosaic Habitat on previously Developed Land**

- 1.4.3.10 There are five areas of open mosaic habitat on previously developed land located within 2 km of the Mona Onshore Development Area. None of this habitat was within the Mona Onshore Development Area. The geographic extent and relation to the Mona Onshore Development Area is shown in Figure 1.10 below.

### **Lowland Fens and Reedbeds**

- 1.4.3.11 There are four areas of lowland fens and reedbeds within 2 km of the Mona Onshore Development Area. None of this habitat was within the Mona Onshore Development area. The location of these lowland fens and reedbeds and their geographic extent are illustrated in Figure 1.10 below.

### **Coastal Vegetated Shingle**

- 1.4.3.12 There is one area of coastal vegetated shingle within 2 km of the Mona Onshore Development Area. The habitat was within the Mona Onshore Development Area, the position of this area and its geographic extent is illustrated in Figure 1.10 below.

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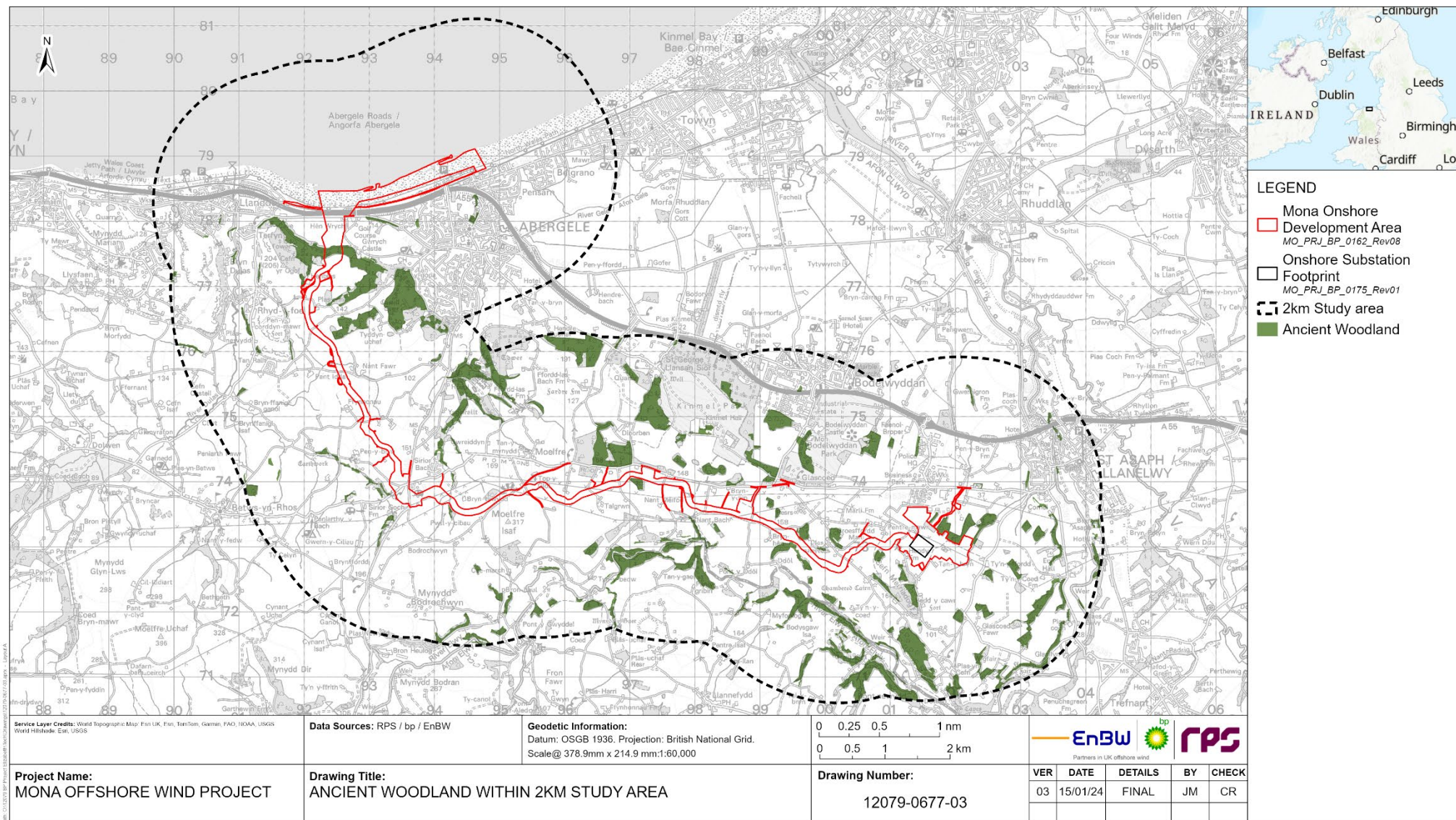


Figure 1.7: Ancient woodland within 2 km of study area.



## MONA OFFSHORE WIND PROJECT

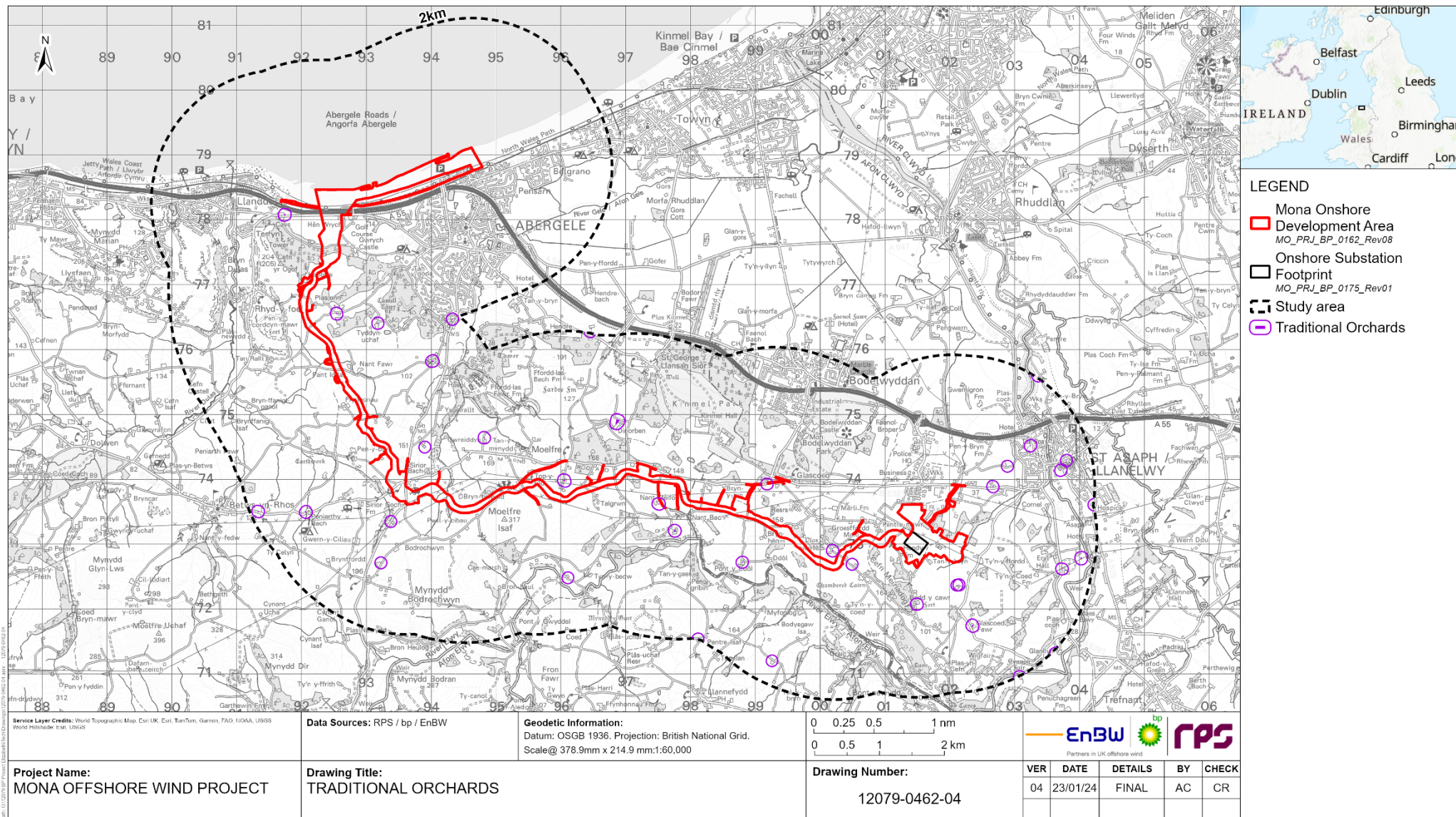


Figure 1.8: Traditional orchards.



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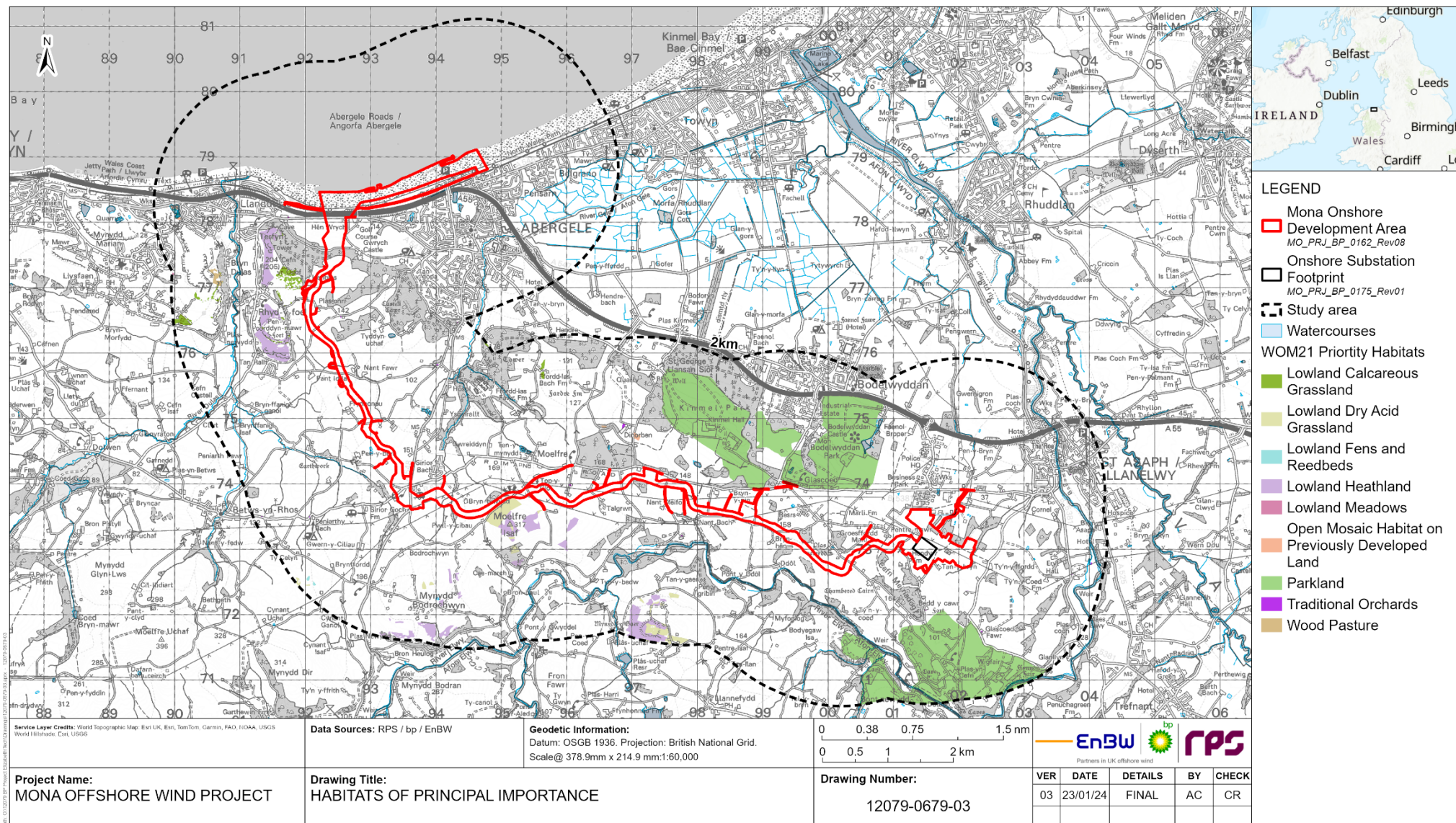


Figure 1.9: Habitats of Principal Importance.

## 1.4.4 Protected and notable species

1.4.4.1 Protected and notable species refers to any species specially protected or listed under the following legislation or which is identified as being of nature conservation concern in the lists referred to below:

### Protected species

- The Conservation of Habitats and Species Regulations 2017 Schedule 2 (European Protected Species) (CHS2) and Schedule 4 (Animals which may not be captured or killed in certain ways) (CHS4)
- Schedules 5, 8 and 9 of the Wildlife and Countryside Act 1981 (as amended) (referred to as WCA5, WCA8 and WCA9 respectively)
- The Protection of Badgers Act 1992 (PBA)
- Environment (Wales) Act 2016 (Section 7) (S7)
- Bern Convention on the Conservation of European Wildlife and Natural Habitats, Appendix 2 - Strictly protected fauna species (Bern2), Appendix 3 - Protected fauna species (Bern3)

### Notable species

- Red list based on The International Union for Conservation of Nature (IUCN) guidelines – Critically Endangered (CE), Data Deficient (DD), Endangered (EN), Extinct (EX), Least Concern (LC), Near Threatened (NT), Rare (R), Vulnerable (VU)
- UK Biodiversity Action Plan (BAP) Priority Species
- Great Britain Non-native Species Inventory Portal Checklist of Non-native Species
- Habitats Directive - Annex II - Species requiring designation of Special Areas of Conservation (HDir2), Annex IV - Species in need of strict protection (HDir4), Annex V - Species where population management is decided by individual countries (HDir5)
- Invasive Non-native species (INNS)
- Local Biodiversity Action Plan (LBAP)
- Locally Important Species in Vice-Counties (LI-)
- Bryophyte Rarity List for Vice-County (LI-BR-)
- Rare Plant Register for Vice-Counties (LI-VP-).

1.4.4.2 Noteworthy records of protected and otherwise important species are described in the following sections of this technical report below and a full summary of these species can be found in Appendix A of this technical report.

### Flora

1.4.4.3 The onshore ecology desk study identified one plant species protected under WCA8 that had historically been recorded within the Mona Onshore Development Area, bluebell *Hyacinthoides non-scripta*.

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1.4.4.4 The onshore ecology desk study identified ten flora species, comprising 164 records, that are of national importance and were recorded within the onshore ecology desk study area. Species of national importance include species listed in a national Biodiversity Action Plan, cited in an IUCN Red Data Book as Nationally Scarce, listed as Critically Endangered or Endangered by IUCN or listed as nationally important on the Rare Plant Register or the Vascular Plant Red Data List. All ten species had been recorded within the Mona Onshore Development Area. The records, common name, Latin name, their conservation status and how many records were from within the Mona Onshore Development Area are presented in Table 1.5 below.

1.4.4.5 The onshore ecology desk study returned hundreds of records of notable flora species that were of county or local importance within 1 km of the Mona Onshore Development Area. Given their number, the data are presented in Appendix A of this technical report.

**Table 1.5: Flora of national importance within the Mona Onshore Development Area.**

| Number of records | Number of records within Mona Onshore Development Area | Common name           | Latin name                       | Conservation status  |
|-------------------|--|-----------------------|----------------------------------|--|
| 40                | 2  | Alexanders            | <i>Smyrniololus atrum</i>        | GBNNSIP, LI-48[LS], LI-VP-48[LS]   |
| 7                 | 1  | Autumn Lady's tresses | <i>Spiranthes spiralis</i>       | LBAP-C, LBAP-G, LI-48[LS], LI-49[LS], LI-50[LR], LI-51[LS], LI-52[LS], LI-VP-48[LS], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LS], LI-VP-52[LS], RL-NT |
| 47                | 2  | Bluebell              | <i>Hyacinthoides non-scripta</i> | LBAP-A, LBAP-C, LBAP-E, LBAP-F, LBAP-T, WCA8   |
| 11                | 3  | Chicory               | <i>Cichorium intybus</i>         | GBNNSIP, LI-49[LR], LI-50[LS], LI-51[LS], LI-VP-49[LR], LI-VP-50[LNS], LI-VP-51[LS]  |
| 8                 | 1  | Scented Mayweed       | <i>Matricaria chamomilla</i>     | GBNNSIP, LI-48[LS], LI-VP-48[LS]   |
| 9                 | 1  | Scentless Mayweed     | <i>Tripleurospermum inodorum</i> | GBNNSIP, LI-48[LS], LI-VP-48[LS]   |
| 11                | 1  | Weld                  | <i>Reseda luteola</i>            | GBNNSIP, LI-48[LS], LI-VP-48[LS]   |
| 18                | 3  | White Campion         | <i>Silene latifolia</i>          | GBNNSIP, LI-48[LS], LI-VP-48[LS]   |
| 9                 | 1  | Wild Leek             | <i>Allium ampeloprasum</i>       | GBNNSIP, LBAP-C, LI-50[LS], LI-52[LR], LI-VP-49[LE], LI-VP-50[LS], LI-VP-52[LR], RDB-NS, WRL-VP[VU]  |
| 3                 | 1  | Wormwood              | <i>Artemisia absinthium</i>      | GBNNSIP, LI-48[LS], LI-VP-48[LS], LI-VP-50[LNS]  |



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1.4.4.6 Flora of national importance recorded within 1 km of the Mona Onshore Development Area are presented in Figure 1.10 to Figure 1.12, and Appendix A of this technical report. The Identification (ID) numbers for each species of flora presented in Figure 1.10 to Figure 1.12 are presented in Table 1.6 below.

**Table 1.6: Flora species of national importance within 1 km of the Mona Onshore Development Area and associated ID numbers presented in Figure 1.10 to Figure 1.12.**

| ID | ENGLISH               | ID | ENGLISH  | ID | ENGLISH                  |
|----|-----------------------|----|--|----|--------------------------|
| 1  | Alexanders            | 26 | Field Pansy  | 51 | Scentless Mayweed        |
| 2  | Annual Beard-grass    | 27 | Field Woundwort                                      | 52 | Scots Pine               |
| 3  | Autumn Lady's-tresses | 28 | Fig-leaved Goosefoot                                 | 53 | Sea-buckthorn            |
| 4  | Black-bindweed        | 29 | Flowering-rush                                       | 54 | Sharp-leaved Fluellen    |
| 5  | Black-poplar          | 30 | Fly Orchid   | 55 | Sheep's-bit              |
| 6  | Black Bent            | 31 | Good-King-Henry                                      | 56 | Small Nettle             |
| 7  | Bladder Campion       | 32 | Greater Burdock                                      | 57 | Small Scabious           |
| 8  | Bluebell              | 33 | Greater Butterfly-orchid                             | 58 | Southern Crestwort       |
| 9  | Box                   | 34 | Green-winged Orchid                                  | 59 | Spiked Speedwell         |
| 10 | Broad-leaved Osier    | 35 | Green Field-speedwell                                | 60 | Spring Cinquefoil        |
| 11 | Butcher's-broom       | 36 | <i>Helianthemum oelandicum</i> subsp. <i>Incanum</i> | 61 | Stinking Hellebore       |
| 12 | Caper Spurge          | 37 | Henbit Dead-nettle                                   | 62 | Strawberry Clover        |
| 13 | Chaffweed             | 38 | Juniper  | 63 | Tall Melilot             |
| 14 | Charlock              | 39 | Keeled-fruited Cornsalad                             | 64 | Vervain                  |
| 15 | Chicory               | 40 | Lesser Butterfly-orchid                              | 65 | Weld                     |
| 16 | Cladophora glomerata  | 41 | Lesser Periwinkle                                    | 66 | Welsh Poppy              |
| 17 | Corn Marigold         | 42 | Mountain Currant                                     | 67 | Western Spiked Speedwell |
| 18 | Corn Spurrey          | 43 | Musk Stork's-bill                                    | 68 | White Campion            |

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| ID | ENGLISH                                  | ID | ENGLISH             | ID | ENGLISH         |
|----|--|----|---------------------|----|-----------------|
| 19 | Cornish Heath                            | 44 | Pale St John's-wort | 69 | White Horehound |
| 20 | Cotton Thistle                           | 45 | Prickly Lettuce     | 70 | White Willow    |
| 21 | Cyperus Sedge                            | 46 | Rat's-tail Fescue   | 71 | Wild-oat        |
| 22 | Dwarf Mouse-ear                          | 47 | Reindeer Moss       | 72 | Wild Cabbage    |
| 23 | Elecampane                               | 48 | Rock Whitebeam      | 73 | Wild Leek       |
| 24 | Euphorbia amygdaloides<br>subsp. Robbiae | 49 | Rough Hawk's-beard  | 74 | Wormwood        |
| 25 | Euphrasia arctica                        | 50 | Scented Mayweed     |    |                 |

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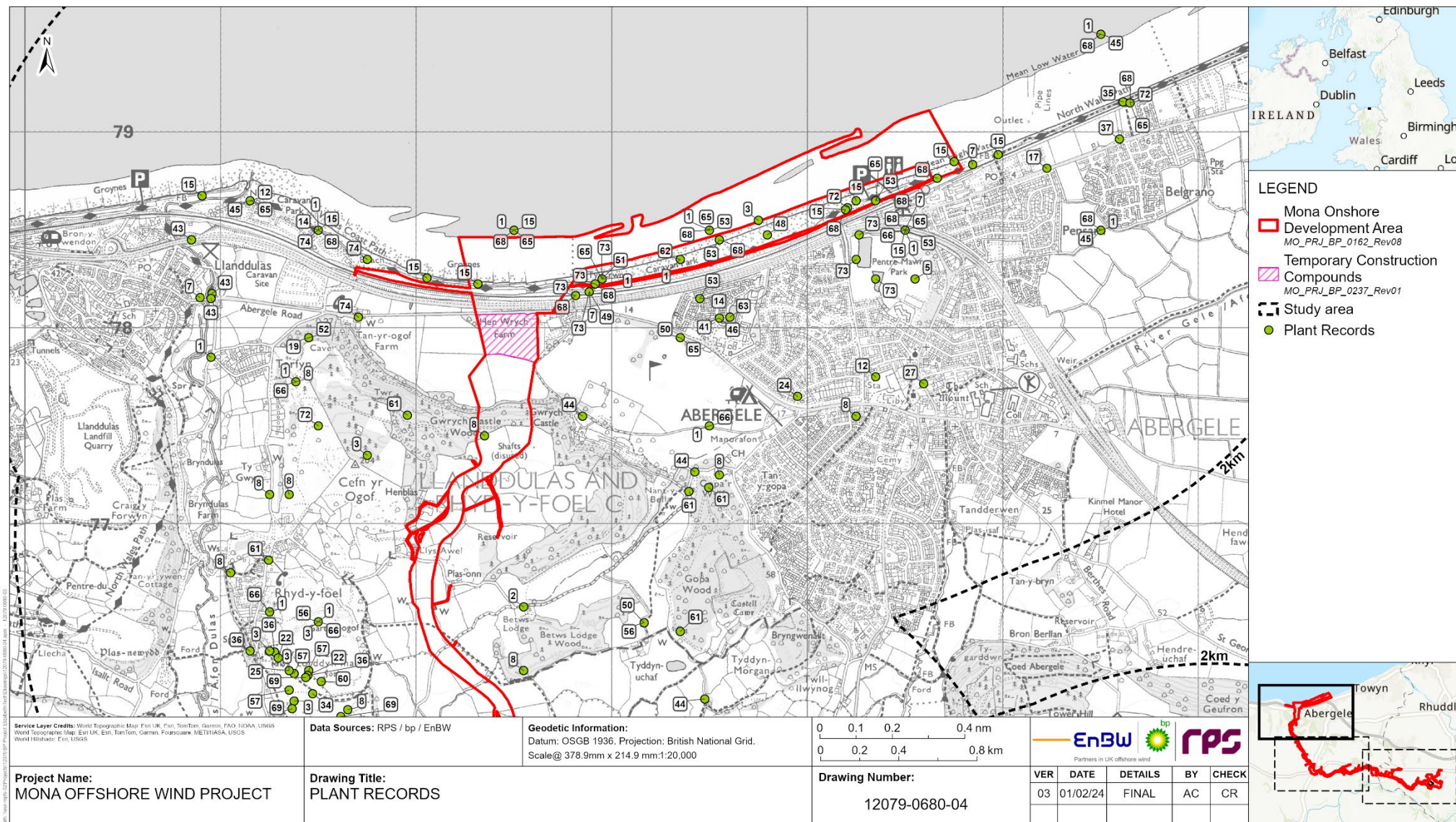


Figure 1.10: Plant records.



## MONA OFFSHORE WIND PROJECT

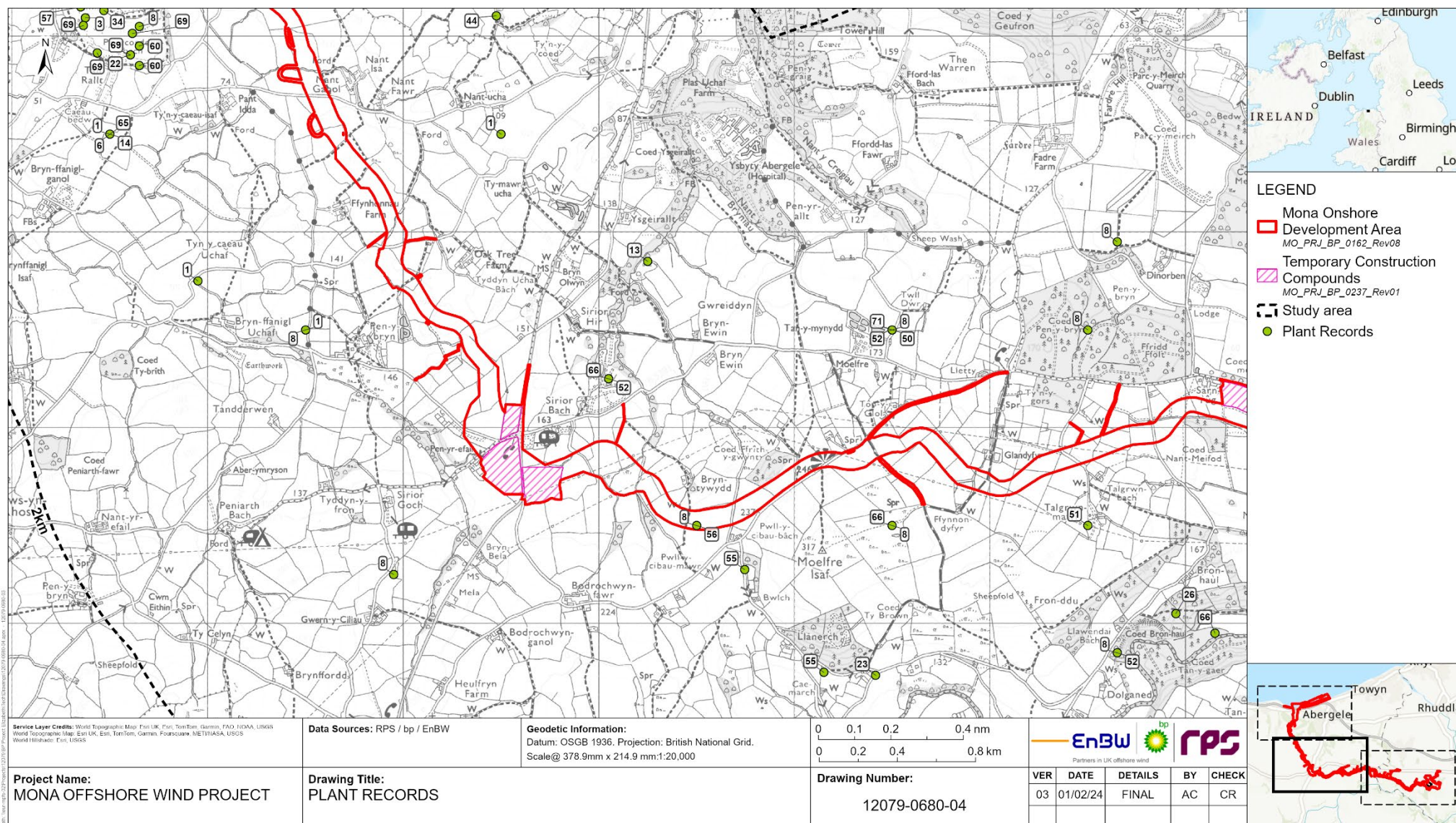


Figure 1.11: Plant records.



## MONA OFFSHORE WIND PROJECT

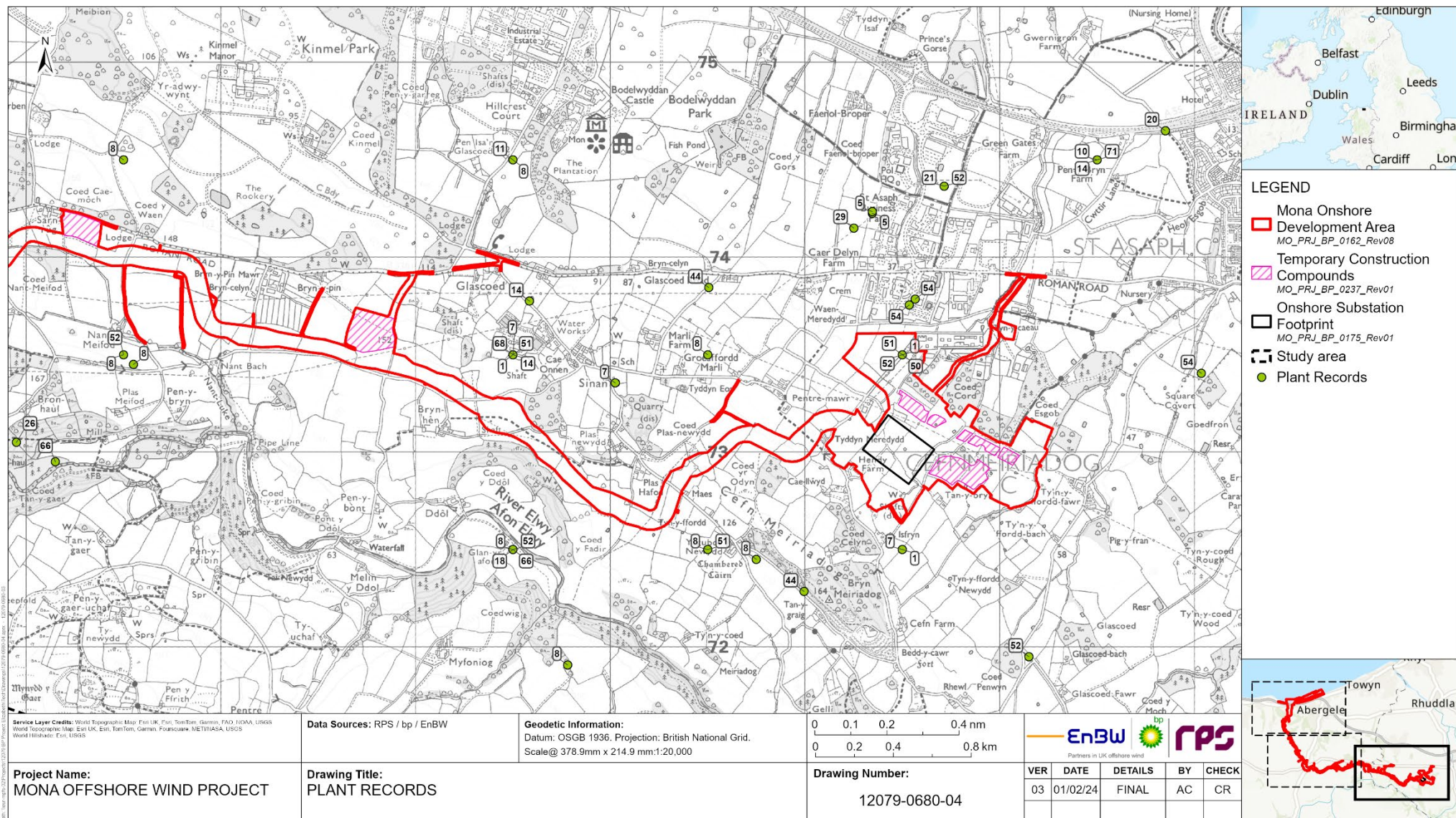


Figure 1.12: Plant records.

### Terrestrial invertebrates

- 1.4.4.7 The onshore ecology desk study identified two protected terrestrial invertebrate species within the Mona Onshore Development Area, White-letter Hairstreak *Satyrrium w-album* and Silver-studded Blue *Plebejus argus*. Both species are protected under the WCA5.
- 1.4.4.8 The onshore ecology desk study identified 19 terrestrial invertebrate species, comprising 30 records, that are of national importance and were recorded within onshore ecology desk study area. Species of national importance include protected species, species listed in a national Biodiversity Action Plan, and species cited in an IUCN Red Data Book as Nationally Scarce. One of the records were recorded within the Mona Onshore Development Area, Common Darter *Sympetrum striolatum*. The records, common name, Latin name, their conservation status and if they were located within the Mona Onshore Development Area are presented in Table 1.7 below.
- 1.4.4.9 The onshore ecology desk study returned hundreds of records of notable terrestrial invertebrate species that were of county or local importance within 1km of the Mona Onshore Development Area. Given their number, the data are presented in Appendix A of this technical report.

## MONA OFFSHORE WIND PROJECT

**Table 1.7: Records of notable terrestrial invertebrates within 1 km of the Mona Onshore Development Area.**

| Number of records | Within Mona Onshore Development Area (Yes/No) | Common Name               | Latin Name                      | Conservation Status  |
|-------------------|---|---------------------------|---------------------------------|----------------------|
| 1                 | No  | Chalk carpet              | <i>Scotopteryx bipunctaria</i>  | BAP, S7              |
| 6                 | No  | Cinnabar                  | <i>Tyria jacobaeae</i>          | BAP                  |
| 1                 | No  | Coastal Pearl             | <i>Mecyna asinalis</i>          | RDN-NB               |
| 7                 | Yes (1 record)                                | Common Darter             | <i>Sympetrum striolatum</i>     | RL-DD                |
| 1                 | No  | Dark Brocade              | <i>Mniotype adusta</i>          | BAP, S7              |
| 1                 | No  | Dingy Skipper             | <i>Erynnis tages</i>            | BAP, RL-VU, S7       |
| 1                 | No  | Dusky Brocade             | <i>Apamea remissa</i>           | BAP, S7              |
| 1                 | No  | Ghost Moth                | <i>Hepialus humuli</i>          | BAP, S7              |
| 1                 | No  | Grayling                  | <i>Hipparchia Semele</i>        | BAP, RL-VU, S7       |
| 1                 | No  | Large Wainscot            | <i>Rhizedra lutosa</i>          | BAP, S7              |
| 1                 | No  | Latticed Heath            | <i>Chiasmia clathrate</i>       | BAP, S7              |
| 1                 | No  | Mouse Moth                | <i>Amphipyra tragopoginis</i>   | BAP, S7              |
| 1                 | No  | Shaded Broad-bar          | <i>Scotopteryx chenopodiata</i> | BAP, S7              |
| 1                 | No  | Shaded Broad-bar          | <i>Scotopteryx chenopodiata</i> | BAP, S7              |
| 1                 | No  | Shoulder-striped Wainscot | <i>Leucania comma</i>           | BAP, S7              |
| 1                 | No  | Silver-studded Blue       | <i>Plebejus argus</i>           | BAP, RL-VU, S7, WCA5 |
| 1                 | No  | Small Heath               | <i>Coenonympha pamphilus</i>    | BAP, RL-NT, S7       |
| 1                 | No  | Wall                      | <i>Lasiommata megera</i>        | BAP, RL-NT, S7       |
| 1                 | No  | White-letter Hairstreak   | <i>Satyrrium w-album</i>        | BAP, S7, WCA5        |

1.4.4.10 The terrestrial invertebrate species of national importance recorded within 1 km of the Mona Onshore Development Area are presented in Figure 1.13 to Figure 1.15, and Appendix A of this technical report. The ID numbers for each species of flora are presented in Table 1.8 below.

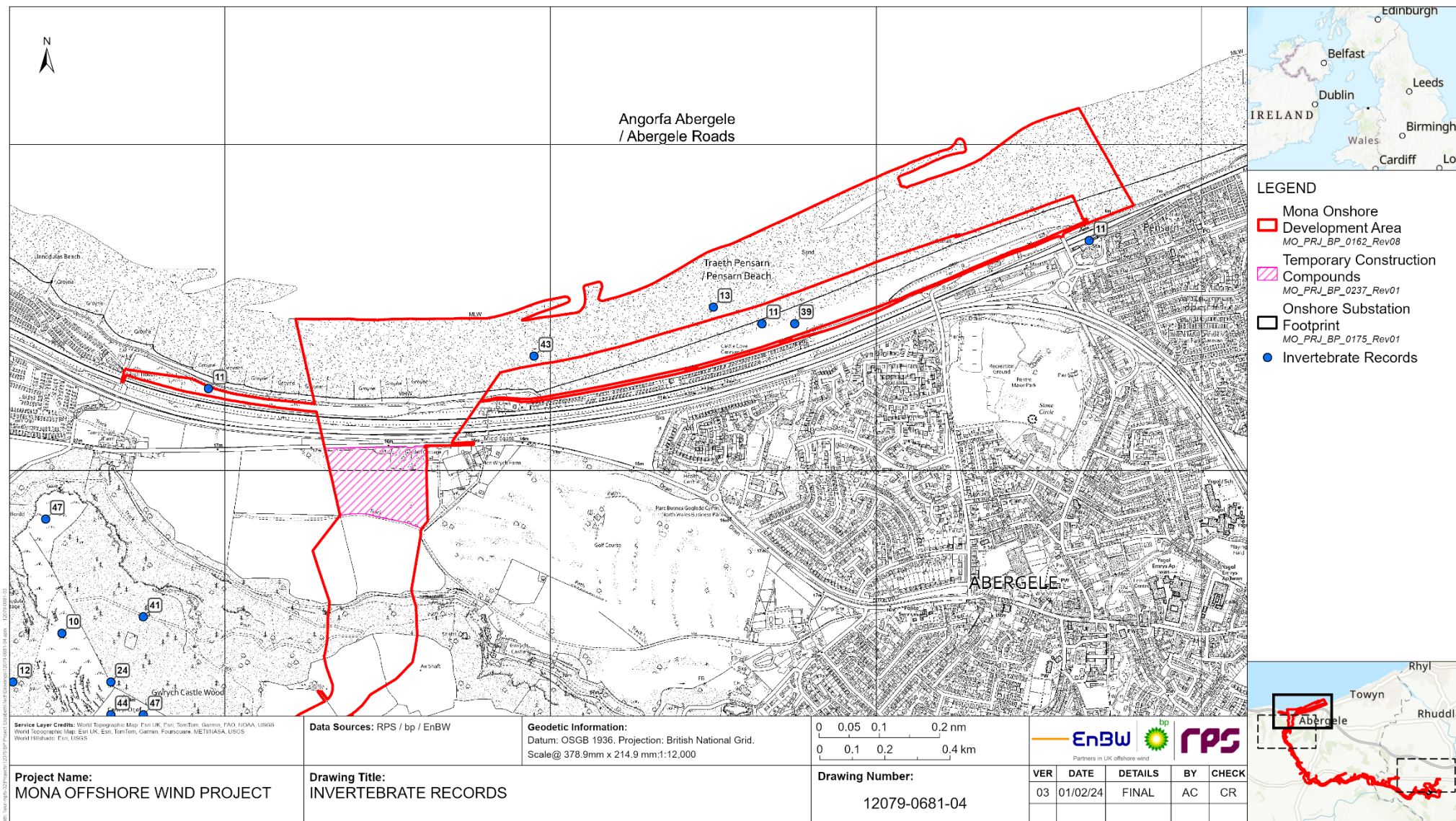


## MONA OFFSHORE WIND PROJECT

**Table 1.8: Terrestrial invertebrates species of national importance within 1 km of the Mona Onshore Development Area and associated ID numbers presented in Figure 1.13 to Figure 1.15.**

| ID | ENGLISH                 | ID | ENGLISH                   |
|----|-------------------------|----|---------------------------|
| 1  | August Thorn            | 26 | Grey Dagger               |
| 2  | Beaded Chestnut         | 27 | Hedge Rustic              |
| 3  | Blood-vein              | 28 | Large Wainscot            |
| 4  | Brindled Beauty         | 29 | Latticed Heath            |
| 5  | Broom Moth              | 30 | Mottled Rustic            |
| 6  | Brown-spot Pinion       | 31 | Mouse Moth                |
| 7  | Buff-tailed Bumblebee   | 32 | Oak Hook-tip              |
| 8  | Buff Ermine             | 33 | Plebejus argus caernensis |
| 9  | Centre-barred Sallow    | 34 | Powdered Quaker           |
| 10 | Chalk Carpet            | 35 | Rosy Rustic               |
| 11 | Cinnabar                | 36 | Rustic                    |
| 12 | Coastal Pearl           | 37 | Sallow                    |
| 13 | Common Darter           | 38 | September Thorn           |
| 14 | Dark Brocade            | 39 | Shaded Broad-bar          |
| 15 | Dingy Skipper           | 40 | Shoulder-striped Wainscot |
| 16 | Dot Moth                | 41 | Silver-studded Blue       |
| 17 | Dusky-lemon Sallow      | 42 | Silver-Studded Blue       |
| 18 | Dusky Brocade           | 43 | Sitona macularius         |
| 19 | Dusky Thorn             | 44 | Small Heath               |
| 20 | Feathered Gothic        | 45 | Small Phoenix             |
| 21 | Figure of Eight         | 46 | Small Square-spot         |
| 22 | Garden Tiger            | 47 | Wall                      |
| 23 | Ghost Moth              | 48 | White-letter Hairstreak   |
| 24 | Grayling                | 49 | White Ermine              |
| 25 | Green-brindled Crescent |    |                           |

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**Figure 1.13: Invertebrate records.**



# MONA OFFSHORE WIND PROJECT

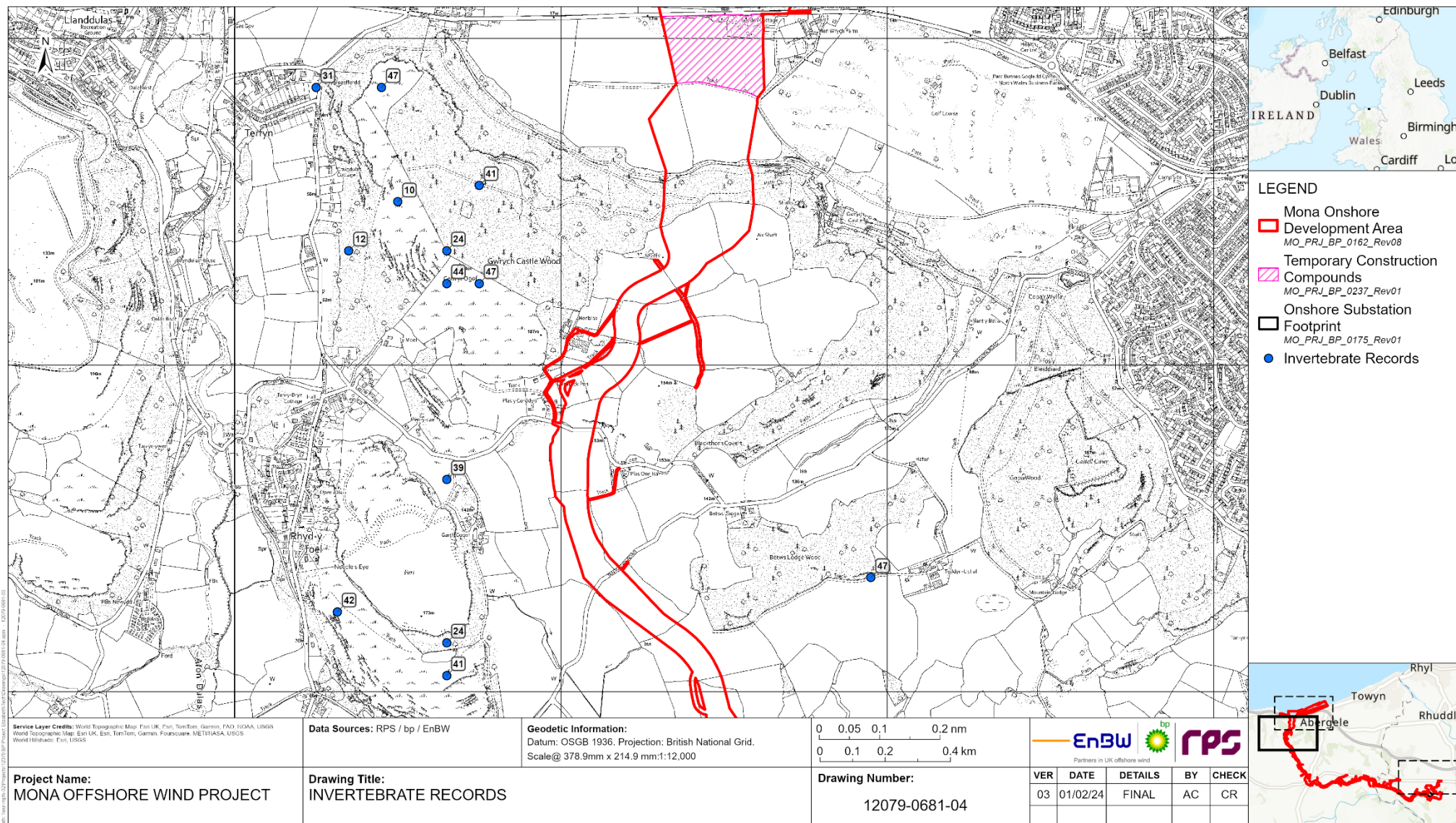
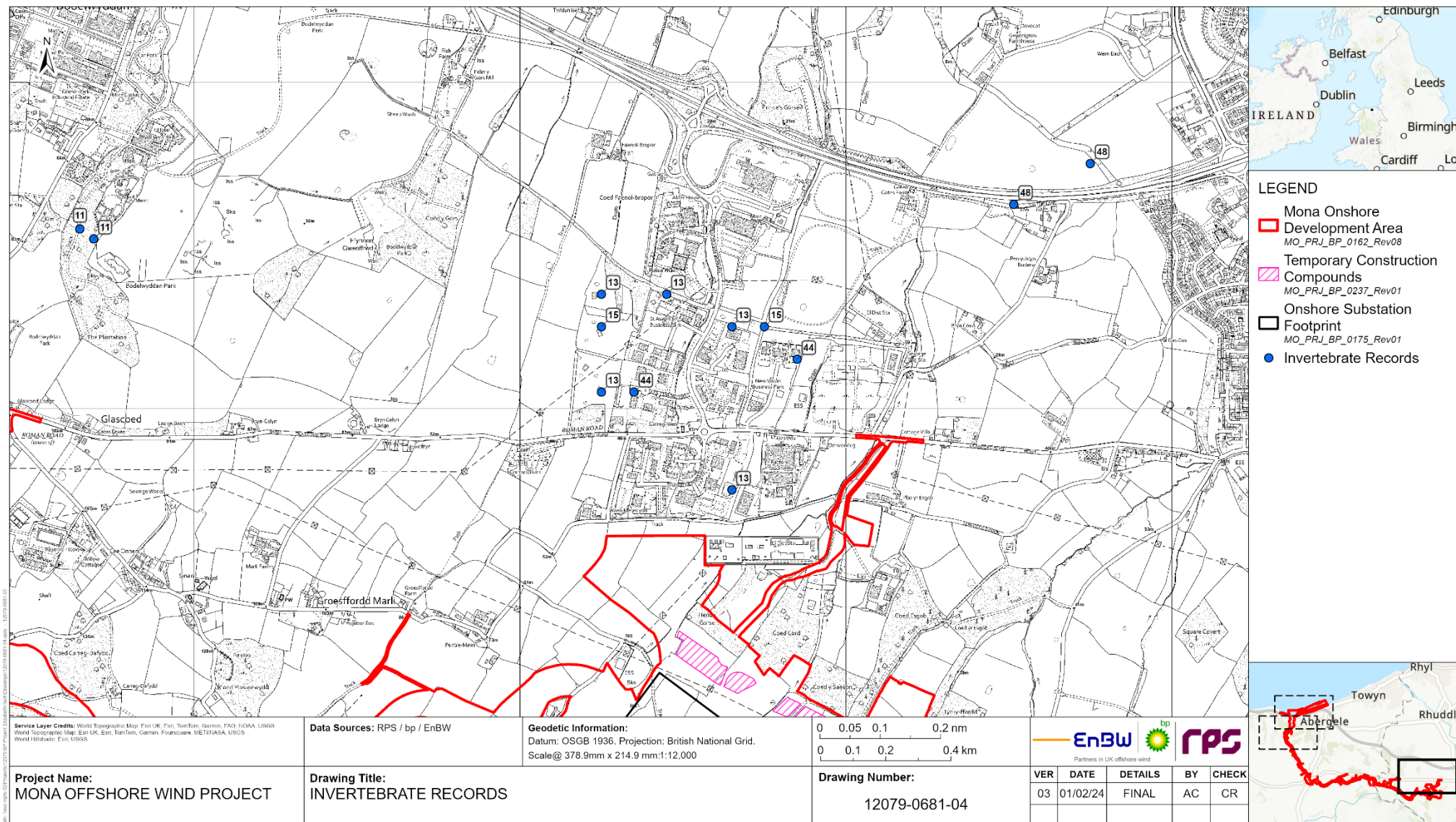


Figure 1.14: Invertebrate records.

# MONA OFFSHORE WIND PROJECT



**Figure 1.15: Invertebrate records.**



## MONA OFFSHORE WIND PROJECT

### Aquatic invertebrates and fish

- 1.4.4.11 The onshore ecology desk study did not identify any records of protected or notable aquatic invertebrates or fish within 2 km of the Mona Onshore Development Area.
- 1.4.4.12 The European eel is a Critically Endangered species in accordance with the International Union for Conservation of Nature's Red List. Critically Endangered species are facing an extremely high risk of extinction in the wild. The most recent record was of a European eel from 2009, located 440 m outside the Mona Onshore Development Area. No records were recorded within the Mona Onshore Development Area.

### Amphibians and reptiles

#### **Great Crested Newt (GCN)**

- 1.4.4.13 In total, 31 record of GCN were identified within 2 km of the Mona Onshore Development Area. Of these, the most recent record dates from 2023. The most recent record was identified in 2023 in a pond at the St Asaph Business Park, less than 500 m to the north of the Mona Onshore Development Area. Two records were within the Mona Onshore Development Area, north of the Onshore Substation. The locations of the GCN records within 2 km of the Mona Onshore Development Area are presented in Figure 1.16 of this technical report below.
- 1.4.4.14 GCN survey data from other sources was obtained from infrastructure projects and monitoring schemes that overlapped with or were in proximity to the Mona Onshore Development Area. These projects were located to the Eastern end of the Mona Onshore Development Area and include: Burbo Bank Extension Offshore Wind Farm, Awel Y Môr Offshore Wind Farm, St Asaph Business Park and St Asaph Solar Farm. The results are summarised in Volume 7, Annex 3.3: Great Crested Newt technical report.

#### **Other amphibians**

- 1.4.4.15 The location of other amphibian records, including common toad *Bufo bufo*, common frog *Rana temporaria*, smooth newt *Lissotriton vulgaris* and palmate newt *Lissotriton helveticus* within 2 km of the Mona Onshore Development Area are presented in Figure 1.17 of this technical report below. The number of records, common name, Latin name, legal protection and if they were located within the Mona Onshore Development Area are presented in Table 1.9 below.

**Table 1.9: Records of other notable amphibian species within 2 km of the Mona Onshore Development Area.**

| Number of records | Within Mona Onshore Development Area (Yes/No) | Common Name | Latin Name             | Conservation Status                                |
|-------------------|---|-------------|------------------------|--|
| 20                | Yes (5 records)                               | Common Frog | <i>Rana temporaria</i> | Bern3, HDir5, LBAP-A, LBAP-C, LBAP-F, LBAP-T, WCA5 |
| 18                | Yes (5 records)                               | Common Toad | <i>Bufo bufo</i>       | BAP, Bern3, LBAP-A, LBAP-C, LBAP-D,                |

## MONA OFFSHORE WIND PROJECT

| Number of records | Within Mona Onshore Development Area (Yes/No) | Common Name  | Latin Name                    | Conservation Status                                 |
|-------------------|---|--------------|-------------------------------|---|
|                   |   |              |                               | LBAP-F, LBAP-G, LBAP-T, S7, WCA5                    |
| 27                | Yes (6 records)                               | Palmate Newt | <i>Lissotriton helveticus</i> | Bern3, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-T, WCA5 |
| 25                | Yes (6 records)                               | Smooth Newt  | <i>Lissotriton vulgaris</i>   | Bern3, LBAP-C, LBAP-D, LBAP-F, LBAP-T, WCA5         |

### Reptiles

1.4.4.16 Three species of reptile were identified within 2 km of the Mona Onshore Development Area. Notably, a large population of grass snake *Natrix helvetica* north of the Onshore Substation and slow worm *Anguis fragilis* north-east of the onshore substation footprint. The location of reptile records within 2 km of the Mona Onshore Development Area are presented in Figure 1.18 of this technical report. The number of records, common name, Latin name, legal protection and if they were located within the Mona Onshore Development Area are presented in Table 1.10 below.

**Table 1.10: Records of notable reptile species within 2 km of the Mona Onshore Development Area.**

| Number of records | Within Mona Onshore Development Area (Yes/No) | Common Name   | Latin Name              | Conservation Status  |
|-------------------|---|---------------|-------------------------|--|
| 6                 | No  | Common Lizard | <i>Zootoca vivipara</i> | BAP, Bern3, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, LBAP-T, S7, WCA5 |
| 7                 | No  | Grass Snake   | <i>Natrix helvetica</i> | BAP, Bern3, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, LBAP-T, S7, WCA5 |
| 17                | No  | Slow Worm     | <i>Anguis fragilis</i>  | BAP, Bern3, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, LBAP-T, S7, WCA5 |

### Mammals

#### Bats

1.4.4.17 In total, 10 species of bat were identified within 2 km of the Mona Onshore Development Area. However, several records were not identified to the species level.



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There were 124 historical records of bats identified within 2km of the Mona Onshore Development Area.

1.4.4.18 There were 46 records of bat roosts within 2 km of the Mona Onshore Development Area, which included 11 record of lesser horseshoe bat *Rhinolophus hipposideros* roosts. Of the lesser horseshoe bat records identified, one was located in Elwy Valley Woods, one was in the Coed Y Gopa SSSI, and one was in the Llanddulas Limestone and Gwrych Castle Wood SSSI. No bats were recorded within the Mona Onshore Development Area. The details of records within 2 km of the Onshore Development Area are listed in Appendix A, Table A. 4 of this technical report.

1.4.4.19 The location of recorded bat roosts are presented in Figure 1.19 to Figure 1.22 and other protected or notable bat records from bat detectors, ringing/ tagging or droppings are presented in Figure 1.23 to Figure 1.26 of this technical report below.

### Other mammals

1.4.4.20 The desk study found records of water vole, otter, badger and hazel dormouse within 2 km of the Mona Onshore Development Area.

1.4.4.21 The desktop study confirmed that otter are distributed across Wales, but the population is in decline. Otter were present at 90% of the 1073 sites surveyed by Natural Resources Wales in 2010 but the occupancy had dropped to 70% in 2015 to 2018, indicating a decline of approximate 20% (Natural Resources Wales, 2021).

1.4.4.22 There were 19 historical records of otter from between 2011 and 2022 within the otter study area (i.e. within 2 km of the Mona Onshore Development Area). No otter records were recorded within the Mona Onshore Development Area.

1.4.4.23 The desktop study confirmed that water vole is the fastest declining mammal across the UK and populations in Wales have declined by 89% since 1995 (DataMapWales, 2023). Isolated patches of potential habitat are present across Wales. The north-west of Wales and the northern coast are recognised as having a high likelihood of being suitable for the species.

1.4.4.24 There were four records of water vole from between 2012 and 2019 within 2 km of the Mona Onshore Development Area (the water vole study area). No water vole records were recorded within the Mona Onshore Development Area.

1.4.4.25 There were 88 historical records of badger dated between 2013 and 2023 within the badger study area (i.e. within 2 km of the Mona Onshore Development Area). Six badger records were recorded within the Mona Onshore Development Area. No badger records were recorded within the Onshore Substation.

1.4.4.26 Wales is on the edge of the distribution range of hazel dormouse in Britain and records indicate a sparse distribution of the species in this country (Peoples Trust for Endangered Species, 2023). Hazel dormouse are widely distributed in Wales but individual populations are usually small and often isolated. Hazel dormouse are infrequently recorded in North Wales with few known populations, which are scattered (www.gwynedd.llyw.cymru). The species is more abundant in South Wales.

1.4.4.27 There were five historical records of hazel dormouse dated between 2010 and 2017 within the hazel dormouse study area. All five records were located outside the Mona Onshore Development Area but within the 2 km hazel dormouse study area buffer. Further information is provided in Annex 3.1 Onshore Ecology Desk Study.

1.4.4.28 Data for the following notable mammals was also identified within 2 km of the Mona Onshore Development Area:

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- One record of common shrew *Sorex araneus* was recorded outside the Mona Onshore Development Area.
- 23 records of fallow deer *Dama dama* were recorded outside the Mona Onshore Development Area.
- 91 record of hedgehog *Erinaceus europaeus*. One of these was within the Mona Onshore Development Area.
- Three records of hare *Lepus europaeus* were recorded outside the Mona Onshore Development Area.
- Seven records of polecat *Mustela putorius* were recorded outside the Mona Onshore Development Area.

1.4.4.29 The date ranges of these records are in Appendix A, Table A. 5 of this technical report.

1.4.4.30 The location of protected or notable other mammal records within 2 km of the Mona Onshore Development Area is presented in Figure 1.27 to Figure 1.29 of this technical report below, with the exception of badger which are kept confidential to avoid persecution of badgers. The number of records, common name, Latin name, legal protection and if they were located within the Mona Onshore Development Area are presented in Table 1.11 below.

**Table 1.11: Records of notable mammal species within 2 km of the Mona Onshore Development Area.**

| Number of records | Within Mona Onshore Development Area (Yes/No) | Common Name    | Latin Name                      | Conservation Status  |
|-------------------|---|----------------|---------------------------------|--|
| 88                | Yes (6 records)                               | Badger         | <i>Meles meles</i>              | Bern3, LBAP-C, LBAP-D, LBAP-F, LBAP-W, PBA   |
| 1                 | No  | Common Shrew   | <i>Sorex araneus</i>            | Bern3, LBAP-A, LBAP-C  |
| 23                | No  | Fallow Deer    | <i>Dama dama</i>                | Bern3, GBNN SIP, LBAP-C  |
| 3                 | No  | Hare           | <i>Lepus europaeus</i>          | BAP, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, S7  |
| 5                 | No  | Hazel Dormouse | <i>Muscardinus avellanarius</i> | BAP, Bern3, CHS2, HDir4, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, LBAP-T, RL-VU, S7, WCA5, WRL-TM[VU] |
| 91                | Yes (1 record)                                | Hedgehog       | <i>Erinaceus europaeus</i>      | BAP, Bern3, LBAP-A, LBAP-C, LBAP-F, LBAP-G, RL-VU, S7, WRL-TM[VU]                                    |
| 19                | No  | Otter          | <i>Lutra lutra</i>              | BAP, Bern2, CHS2, CITES-A, HDir2, HDir4, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F,                     |

## MONA OFFSHORE WIND PROJECT

| Number of records | Within Mona Onshore Development Area (Yes/No) | Common Name | Latin Name                | Conservation Status  |
|-------------------|---|-------------|---------------------------|--|
|                   |   |             |                           | LBAP-G, LBAP-T, LBAP-W, S7, WCA5, WRL-TM[VU]   |
| 7                 | No  | Polecat     | <i>Mustela putorius</i>   | BAP, Bern3, CHS4, HDir5, LBAP-C, LBAP-E, LBAP-F, LBAP-G, S7                              |
| 4                 | No  | Water Vole  | <i>Arvicola amphibius</i> | BAP, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, LBAP-T, RL-EN, S7, WCA5, WRL-TM[EN] |

- 1.4.4.31 To protect the welfare of badgers, all data regarding the location of active badger setts has been removed. Details are provided in the Volume 7, Annex 3.12: Badger technical report of the Environmental Statement. Volume 7, Annex 3.12: Badger technical report of the Environmental Statement is a confidential document and available upon request to those with a legitimate need to view this information.

## MONA OFFSHORE WIND PROJECT

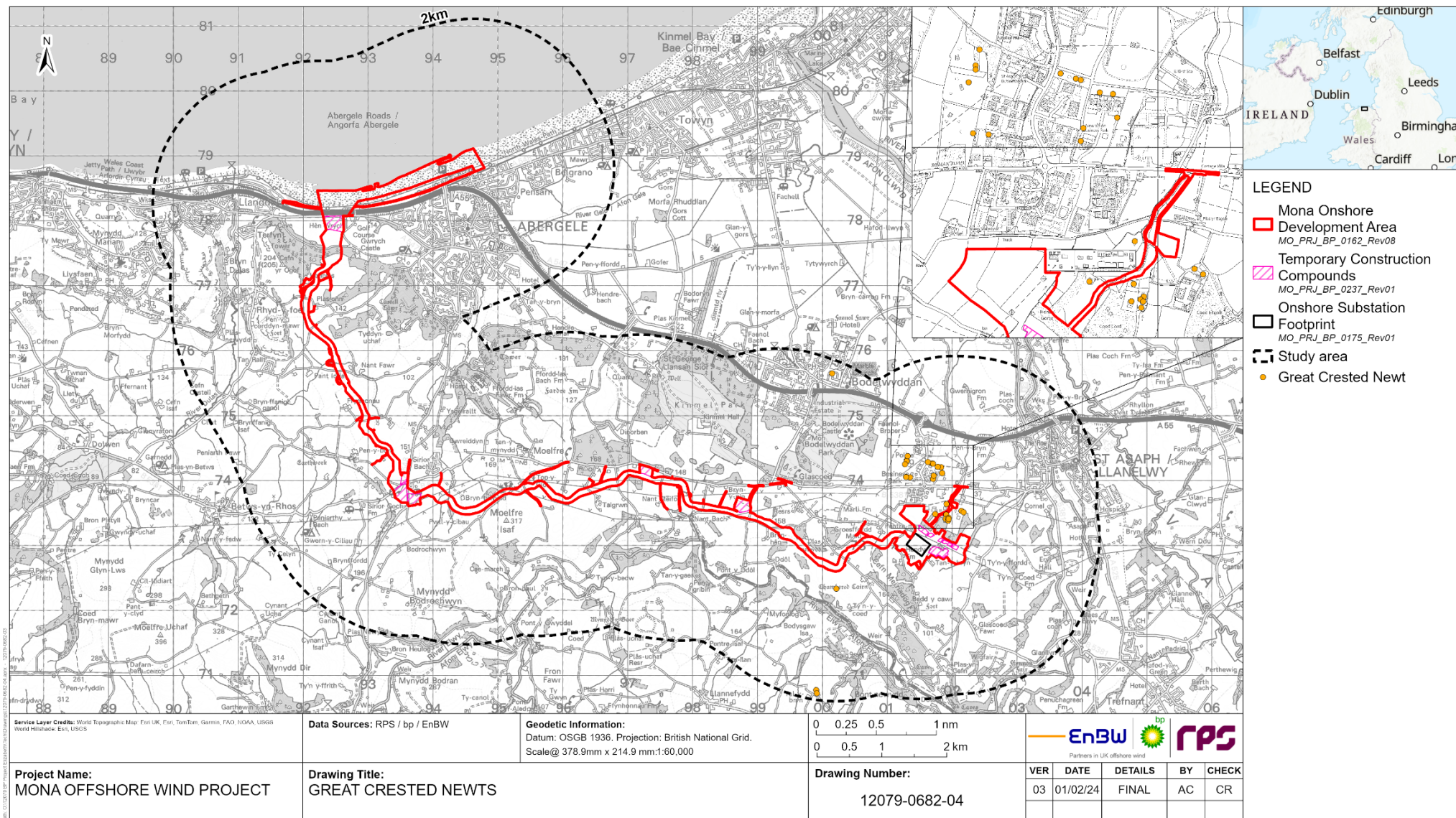


Figure 1.16: Great crested newt records.



# MONA OFFSHORE WIND PROJECT

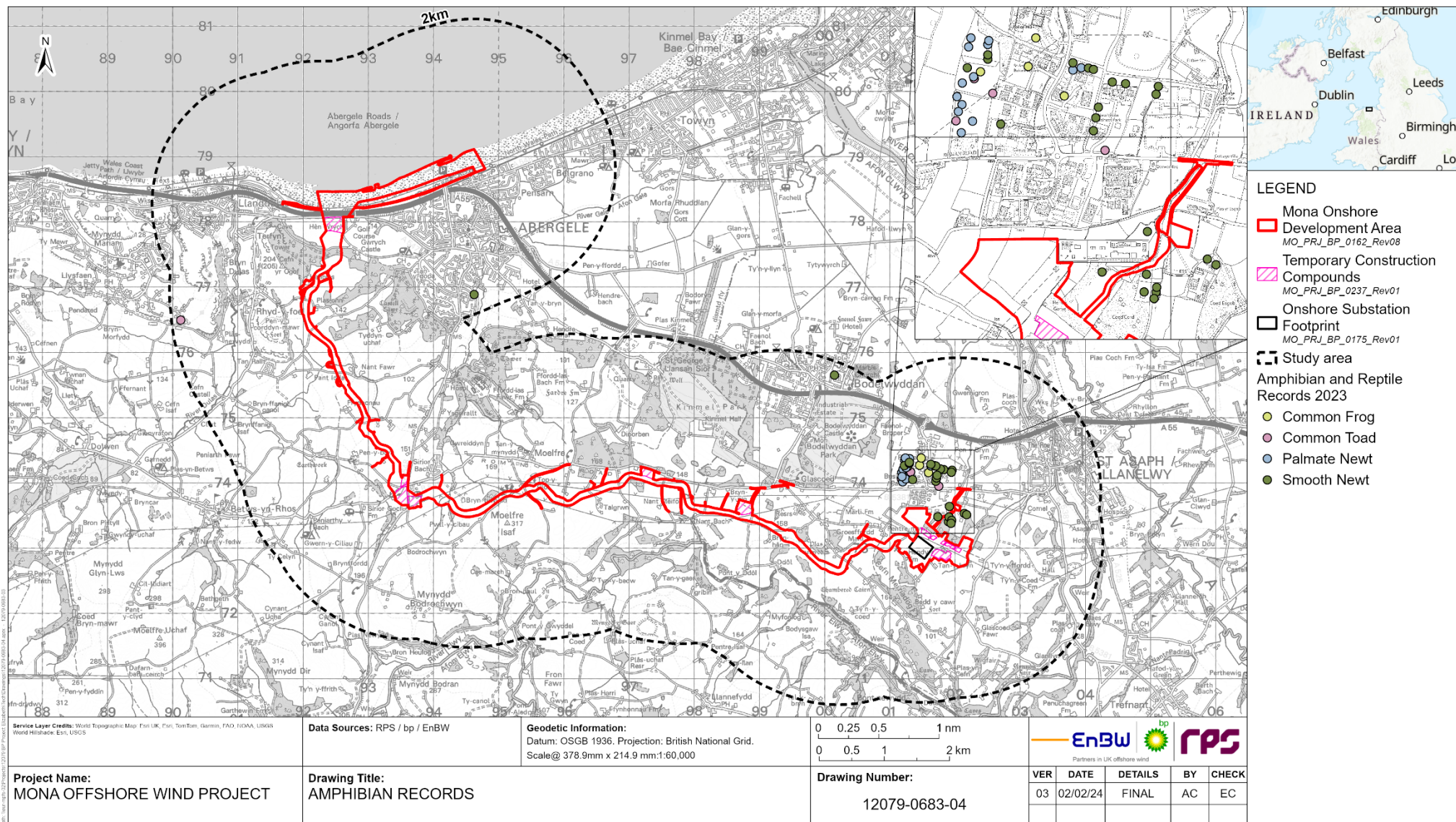


Figure 1.17: Amphibian records.



## MONA OFFSHORE WIND PROJECT

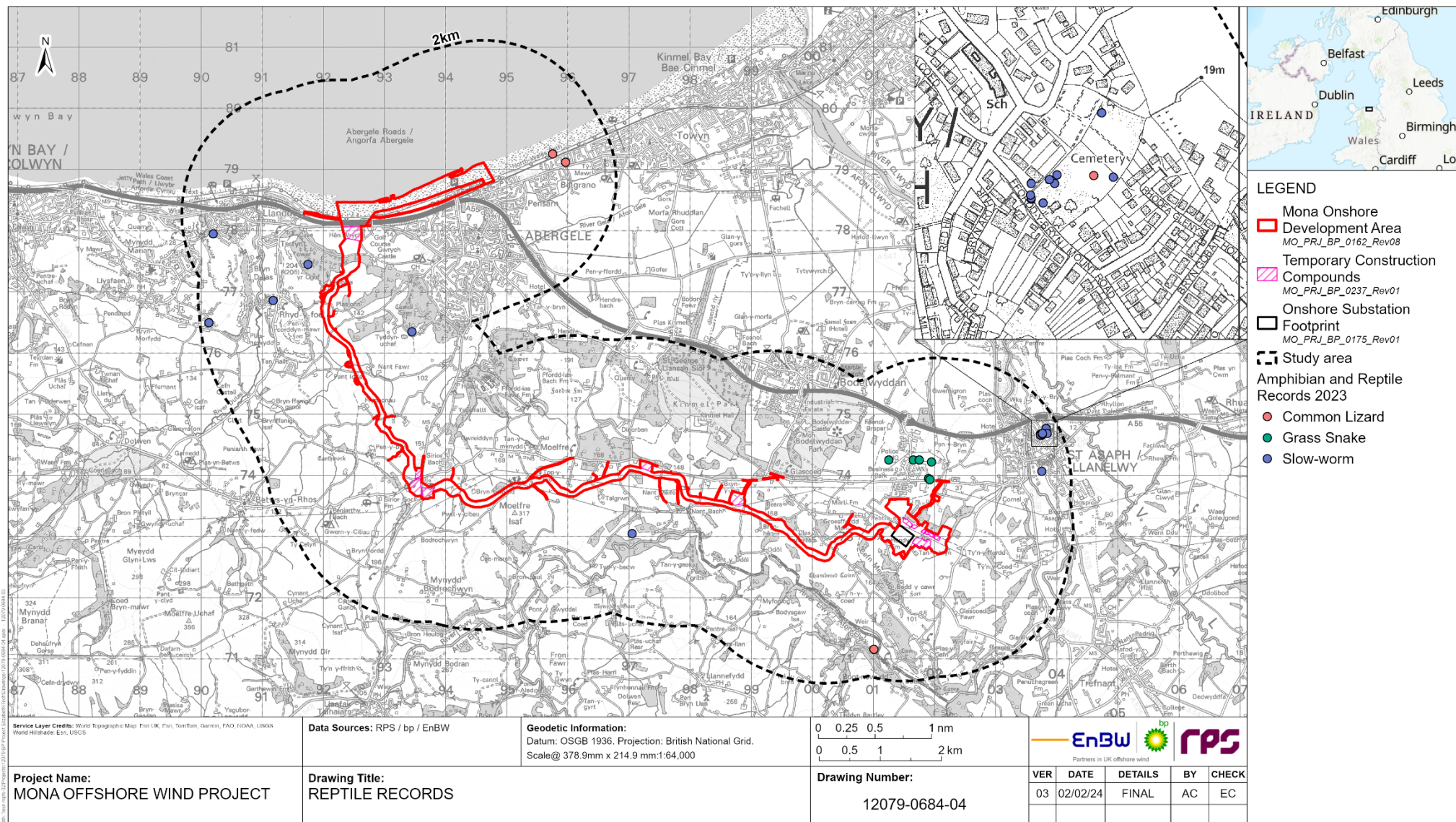


Figure 1.18: Reptile records.



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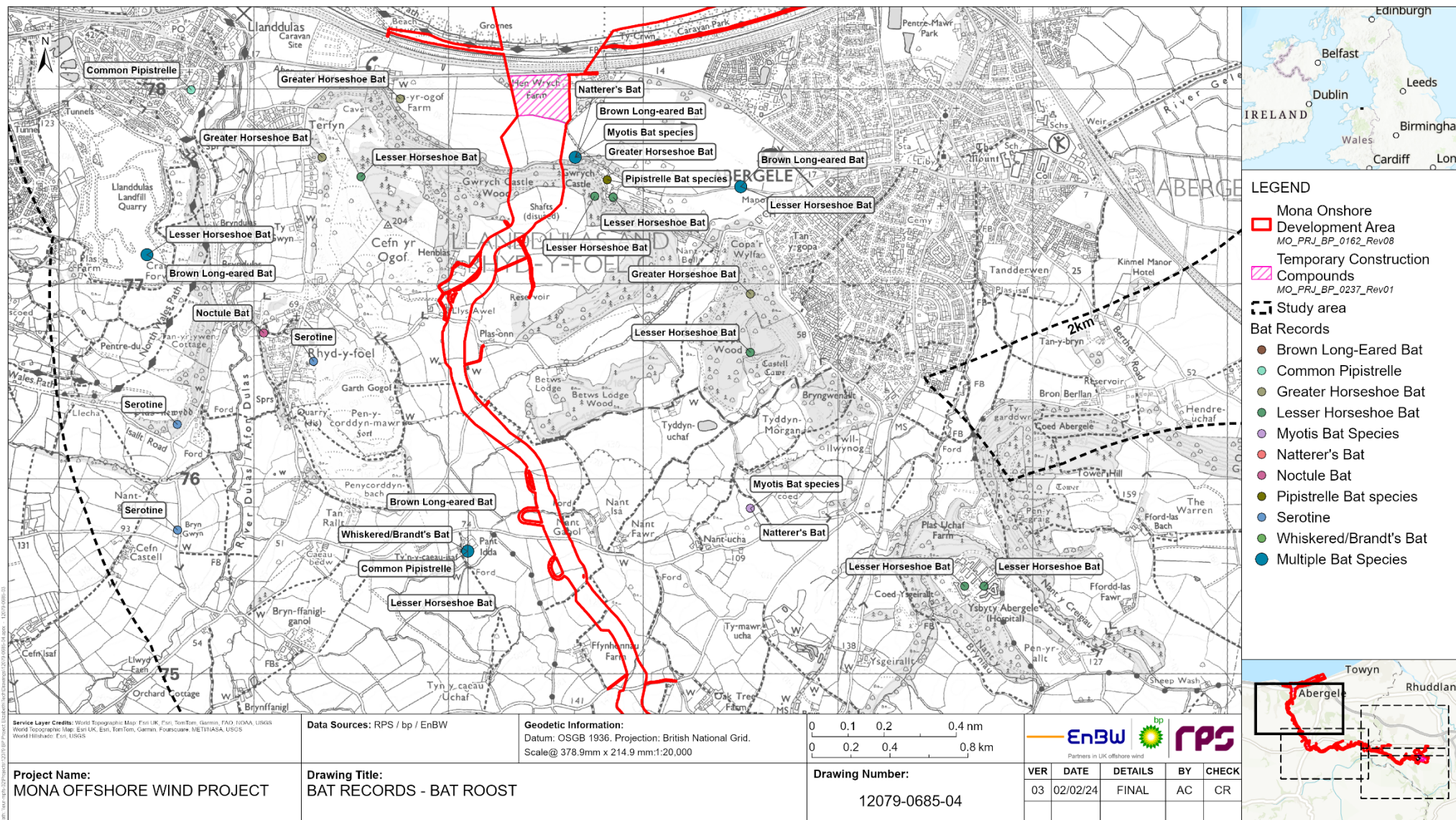


Figure 1.19: Bat records – bat roost.



# MONA OFFSHORE WIND PROJECT

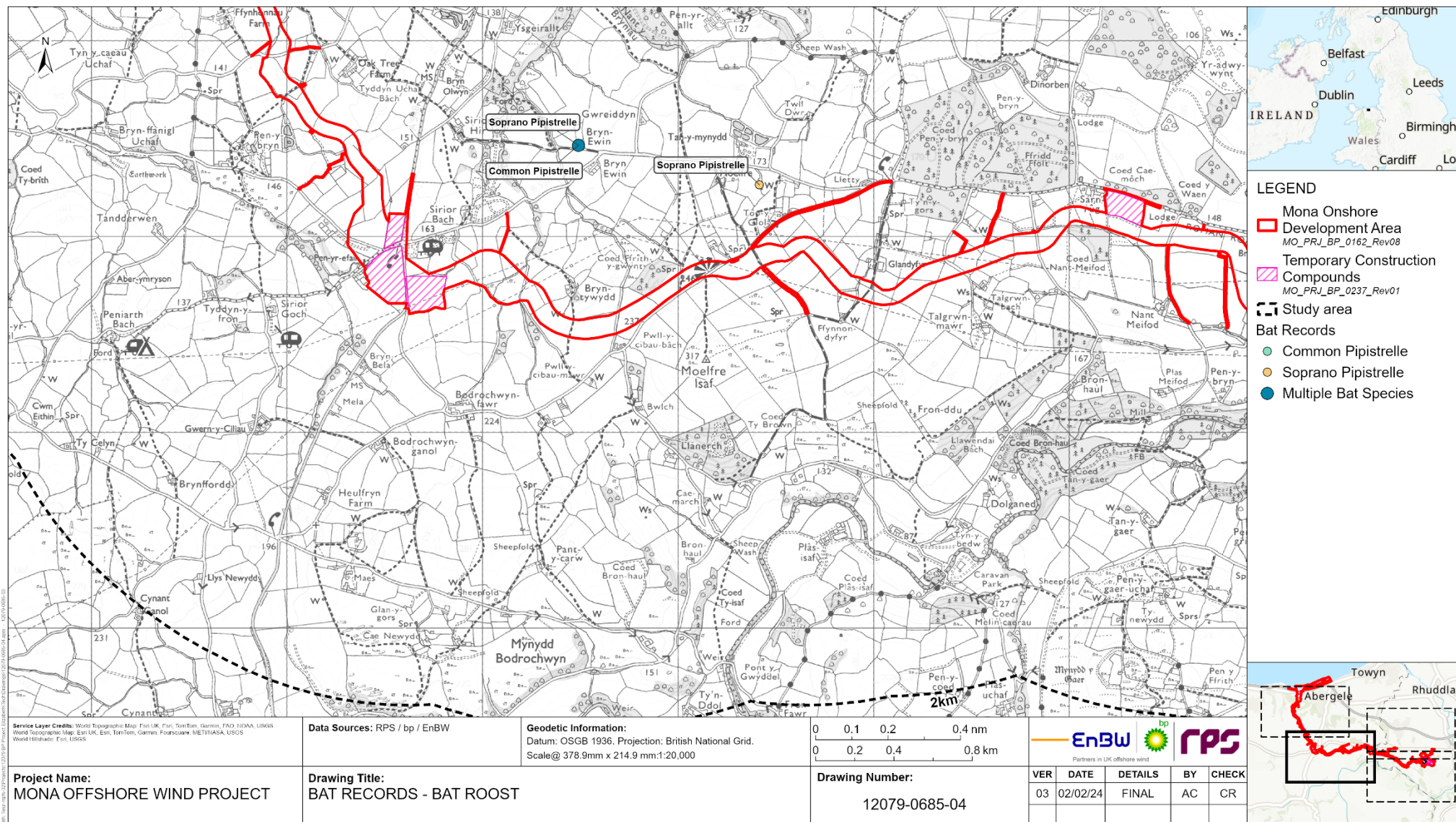


Figure 1.20: Bat records – bat roost.



## MONA OFFSHORE WIND PROJECT

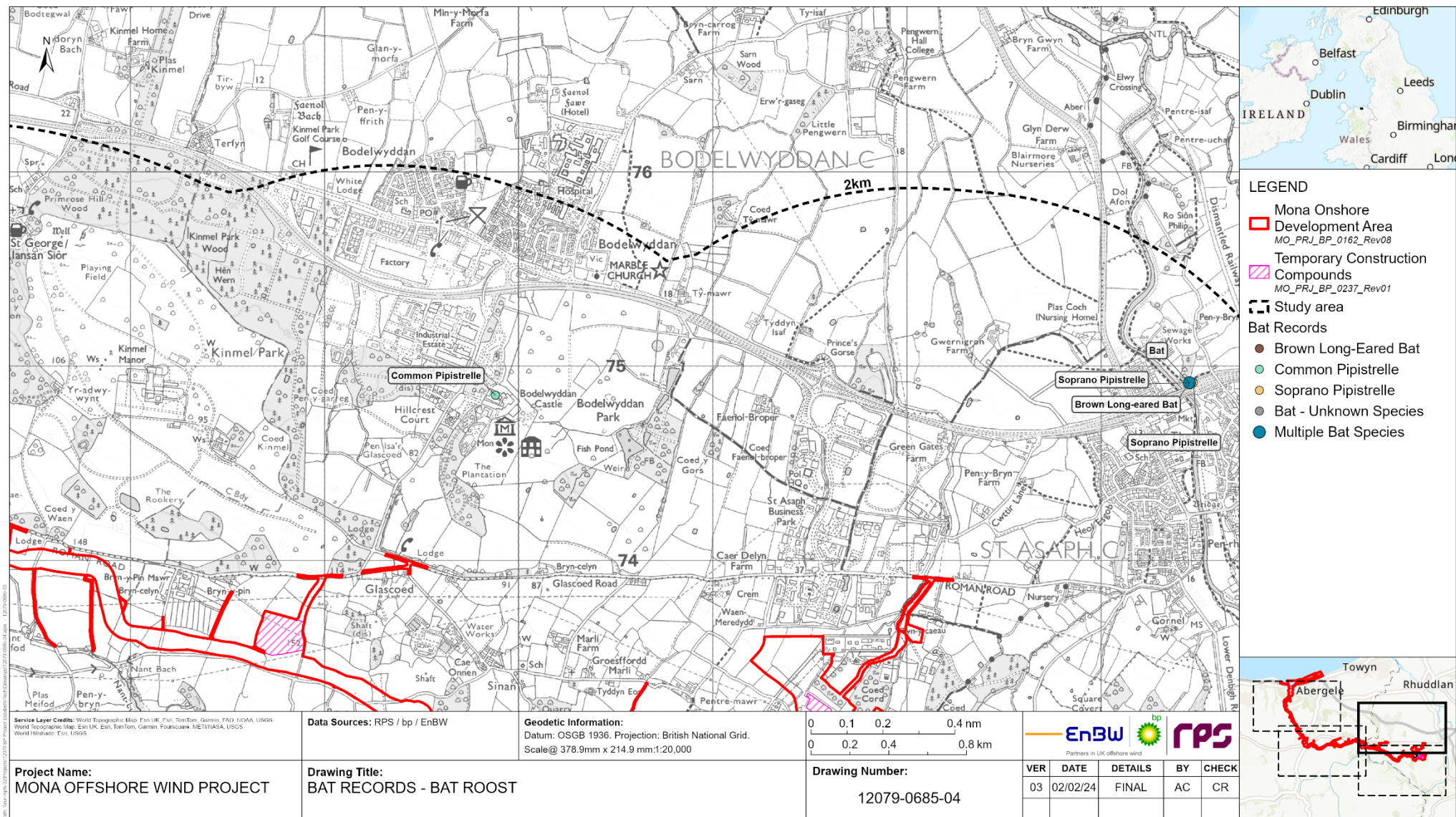


Figure 1.21: Bat records – bat roost.



## MONA OFFSHORE WIND PROJECT

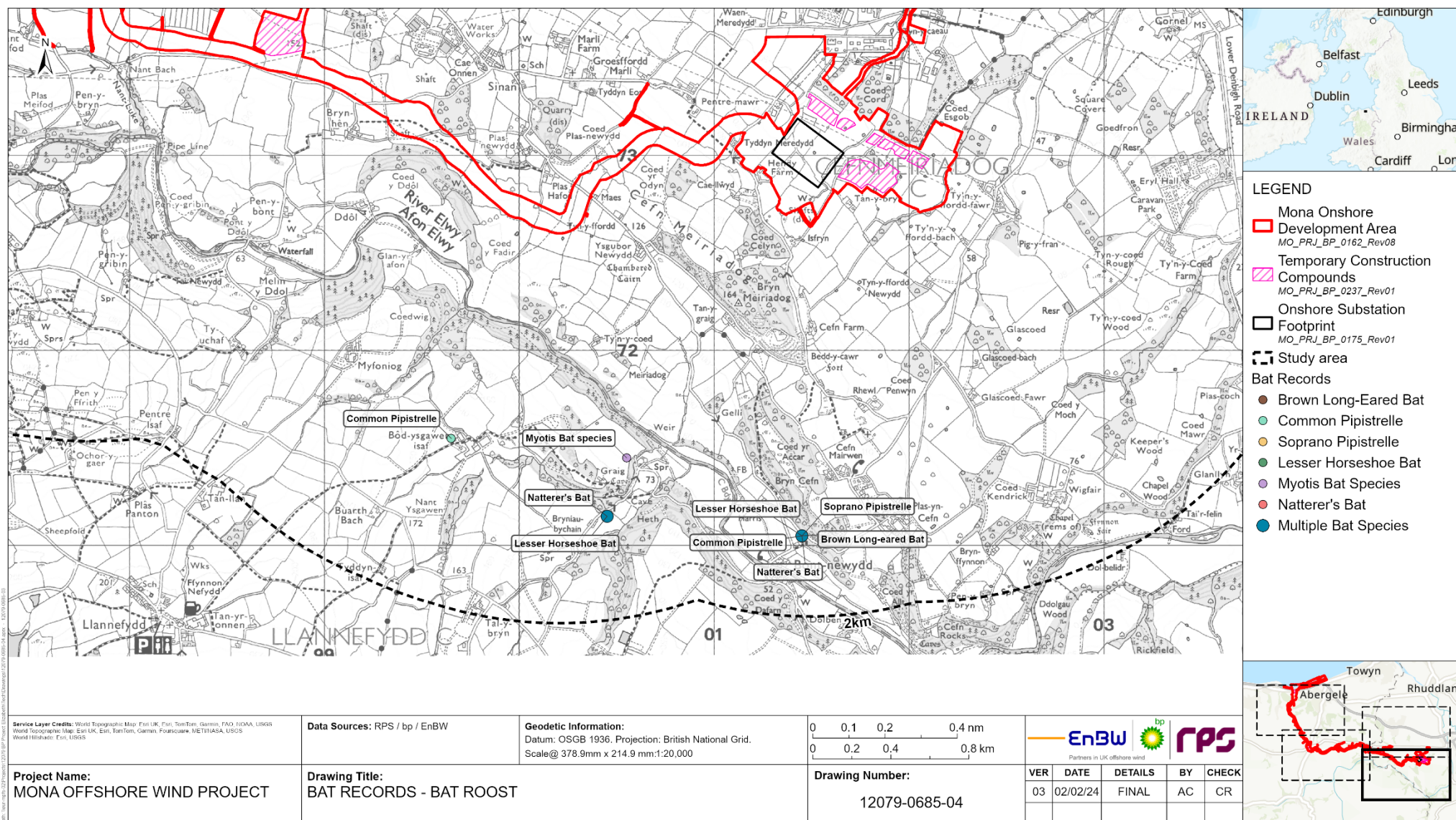


Figure 1.22: Bat records – bat roost.



## MONA OFFSHORE WIND PROJECT

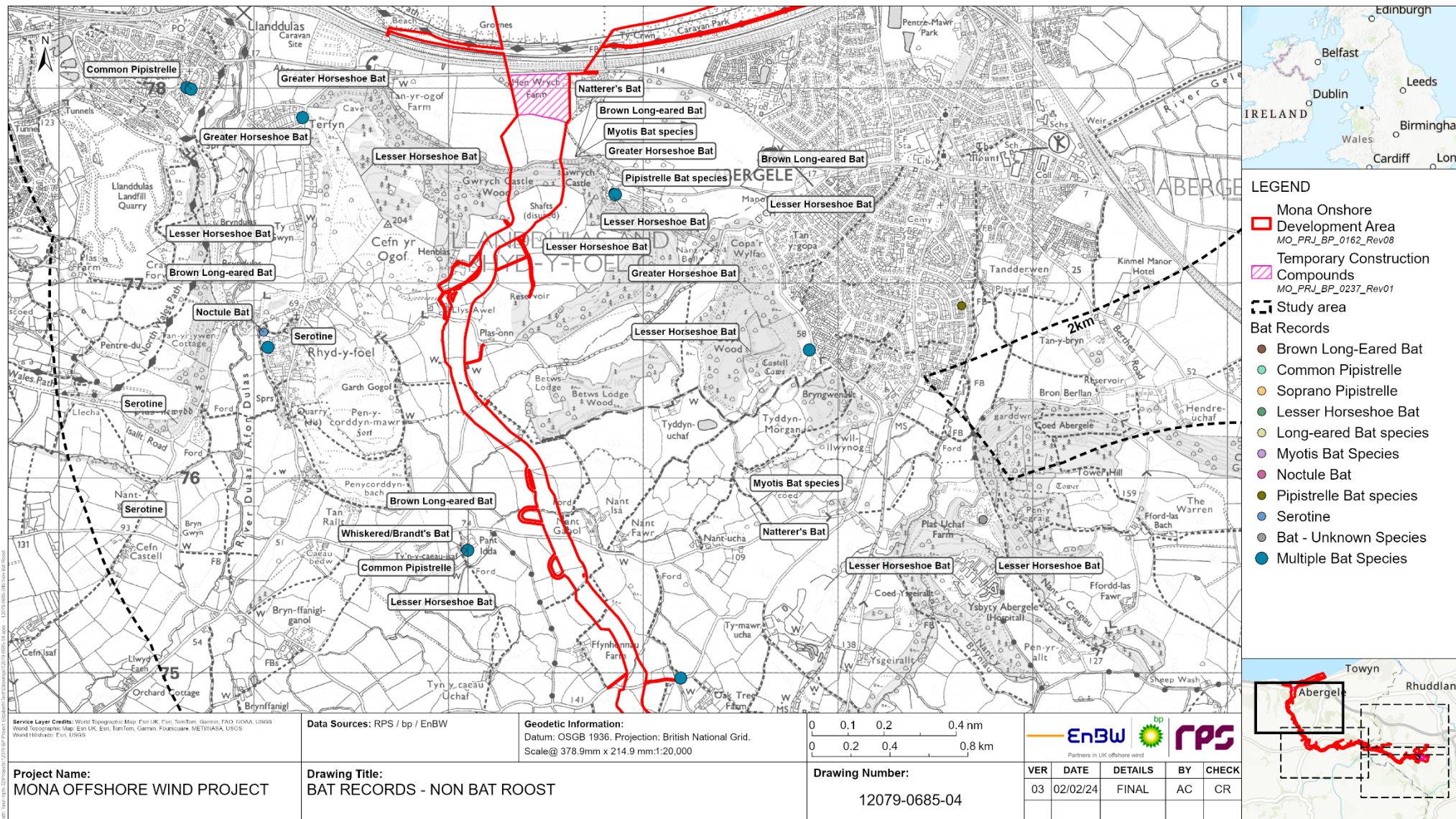


Figure 1.23: Bat records – non bat roost.



# MONA OFFSHORE WIND PROJECT

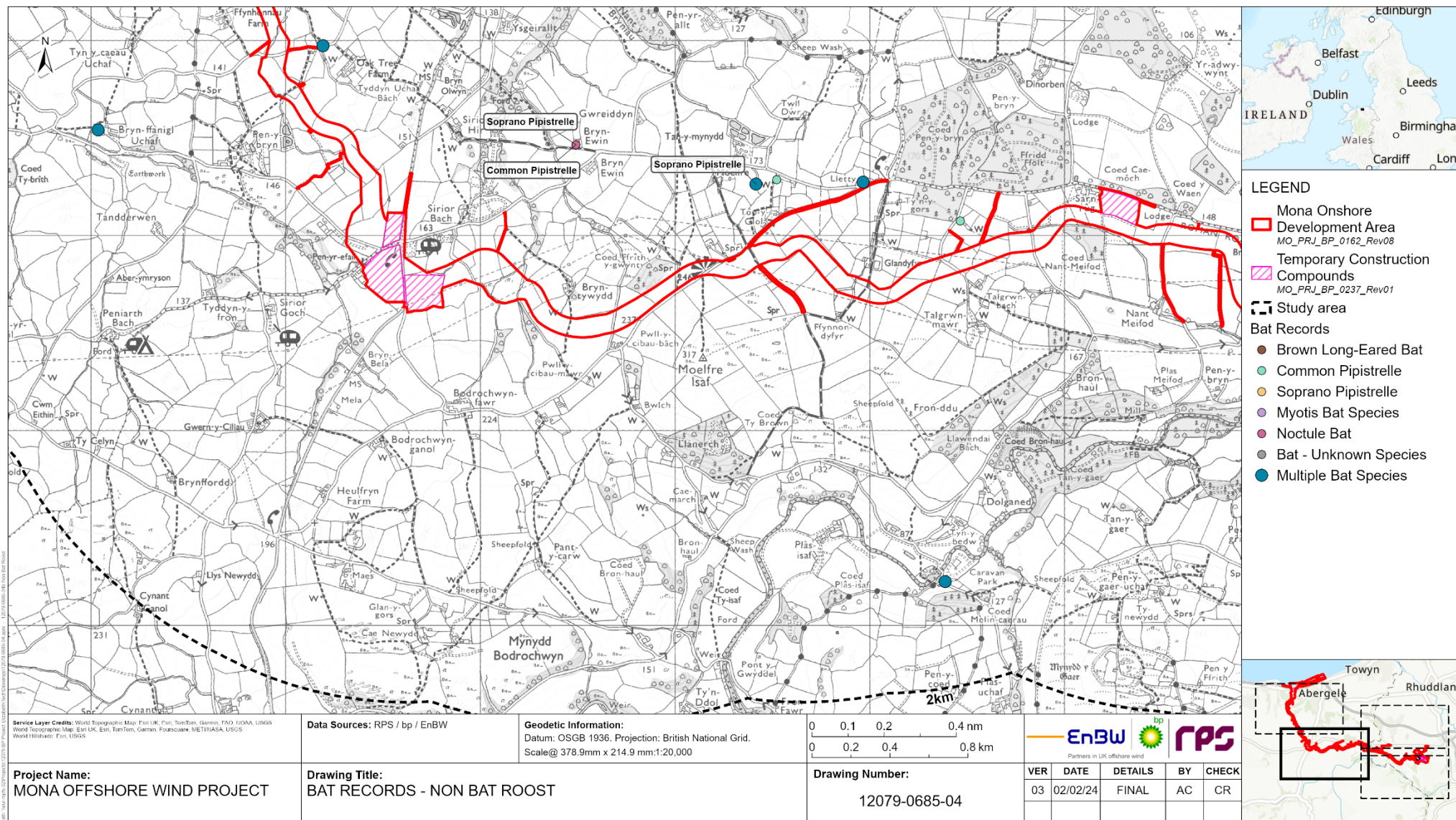


Figure 1.24: Bat records – non bat roost.



## MONA OFFSHORE WIND PROJECT

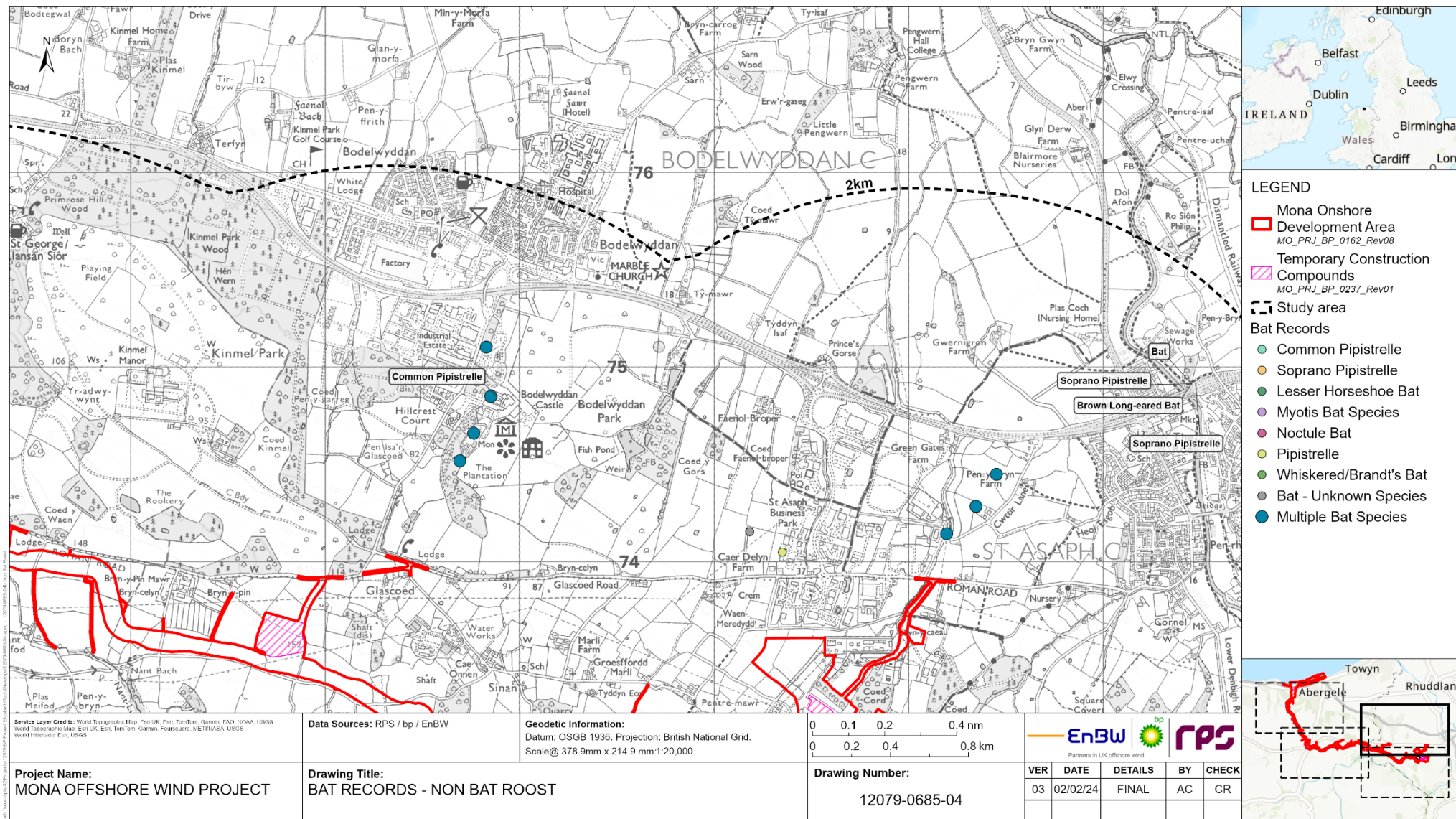


Figure 1.25: Bat records – non bat roost.



## MONA OFFSHORE WIND PROJECT

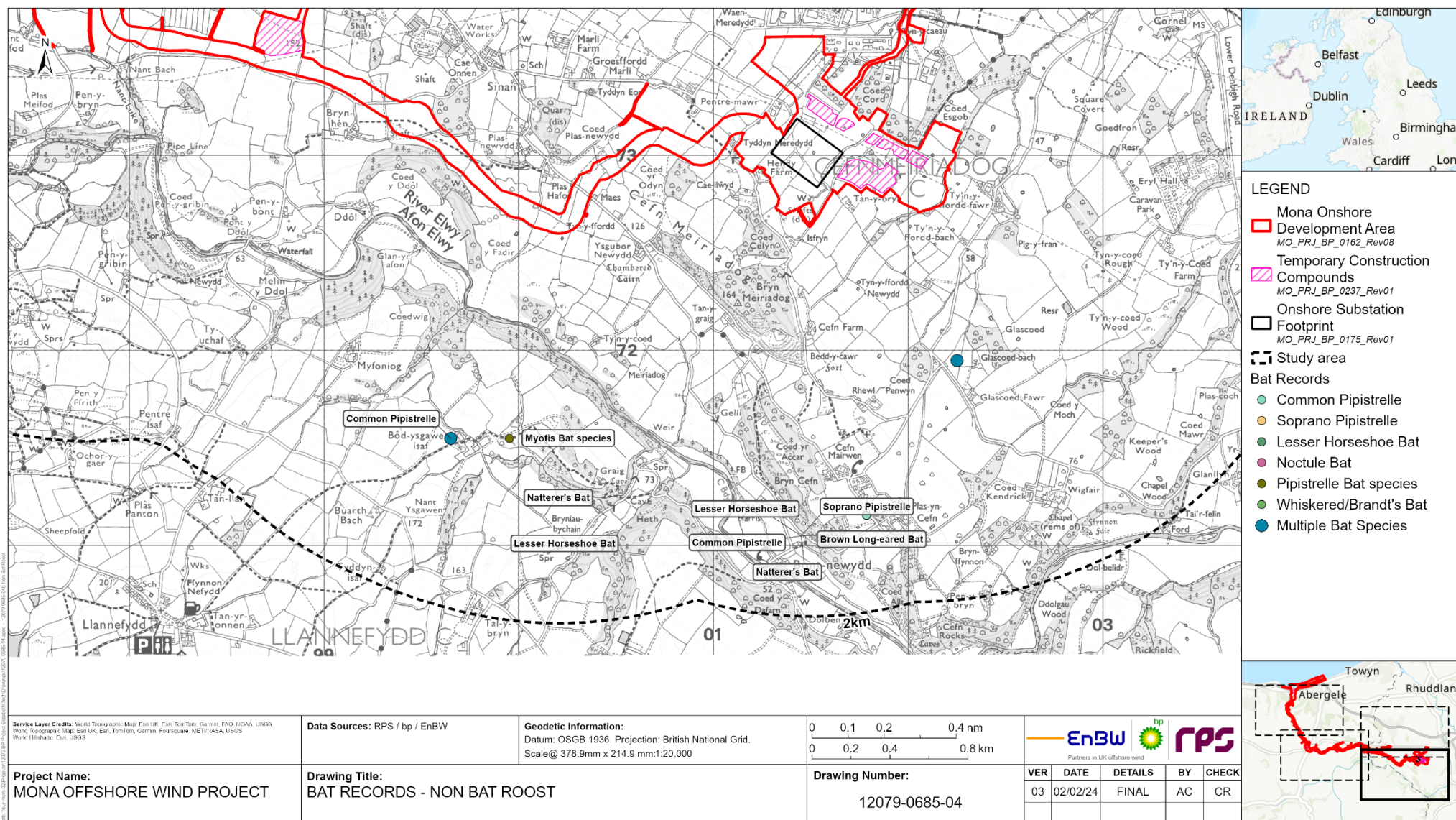


Figure 1.26: Bat records – non bat roost.



# MONA OFFSHORE WIND PROJECT

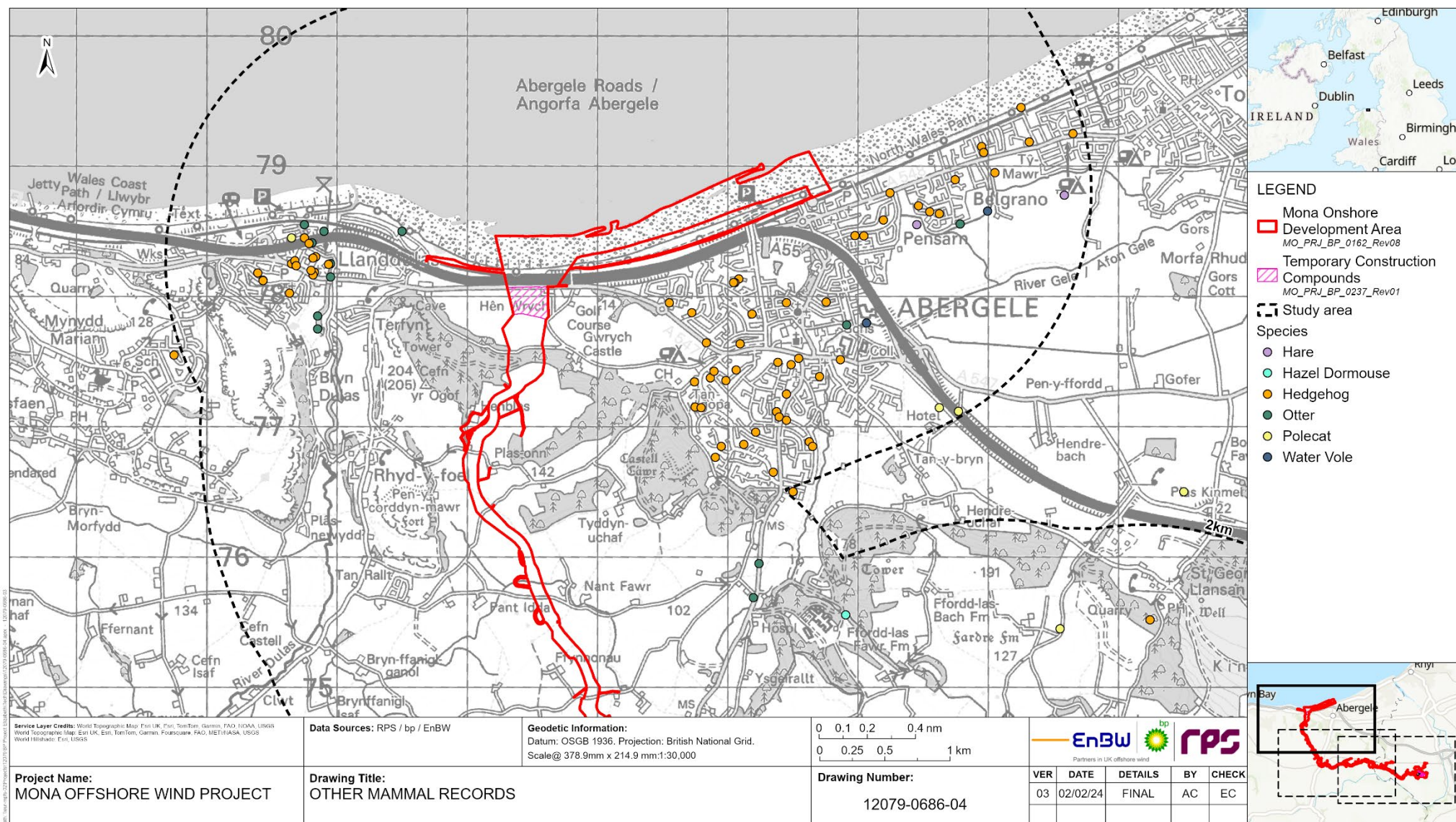


Figure 1.27: Other mammal records.



## MONA OFFSHORE WIND PROJECT

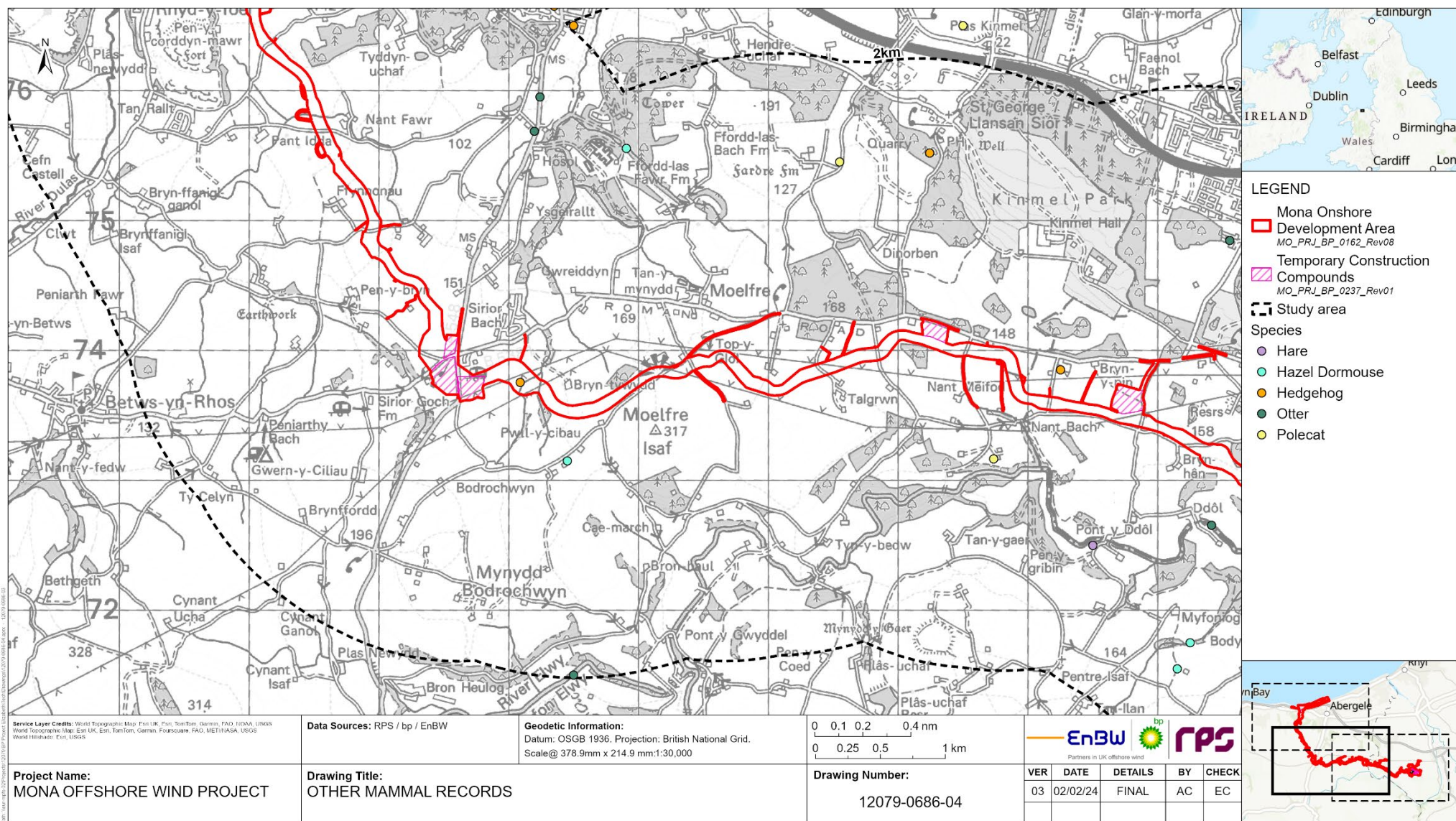


Figure 1.28: Other mammal records.



# MONA OFFSHORE WIND PROJECT

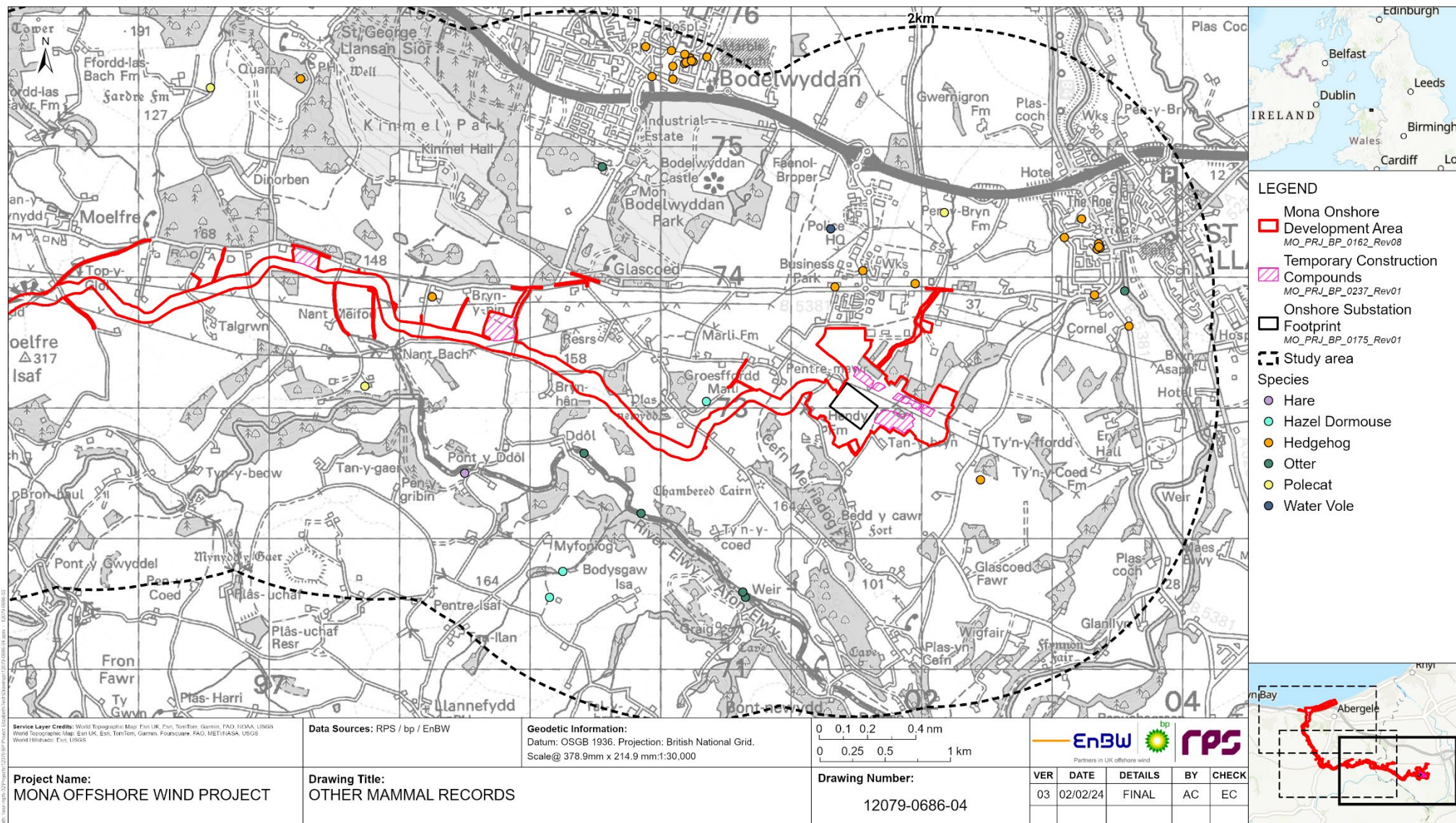


Figure 1.29: Other mammal records.



## 1.5 Summary and conclusions

### 1.5.1 Designated sites

- 1.5.1.1 The onshore ecology desk study identified 11 internationally designated sites within 20 km, 6 nationally designated sites within 5 km and 72 non-statutory designated sites within 2 km of the Mona Onshore Development Area. No locally important statutory designated sites were present within 2 km. Of the designated sites identified, one SPA, two SSSIs and two LWS are located within the Mona Onshore Development Area.
- 1.5.1.2 The onshore ecology desk study identified 353 ancient woodlands and 66 traditional orchards within 2 km of the Mona Onshore Development Area. Of these 12 ancient woodlands are within the Mona Onshore Development Area. There are no traditional orchards within the Mona Onshore Development Area.
- 1.5.1.3 Other habitats of principal importance were also identified within 2 km of the Mona Onshore Development Area including: wood pasture and parkland, lowland calcareous grassland, lowland heath, lowland dry acid grassland, grazing marsh, lowland fens and reedbeds and coastal vegetated shingle.

### 1.5.2 Protected and other notable species

- 1.5.2.1 The onshore ecology desk study confirmed the presence of a number of protected species within Mona Onshore Development Area.
- 1.5.2.2 Ten flora species were identified, comprising 164 records that are of national importance, including Bluebell which is protected under WCA8. Two protected terrestrial invertebrate species were recorded within the Mona Onshore Development Area, White-letter Hairstreak *Satyrrium w-album* and Silver-studded Blue *Plebejus argus*. Both species are protected under the WCA5. 19 terrestrial invertebrate species of national importance were recorded within the desk study area.
- 1.5.2.3 31 records of GCN were recorded within 2 km of the Mona Onshore Development Area. Two records were within the Mona Onshore Development Area. Other amphibians including common frog, common toad, smooth newt and palmate newt were all recorded within the Mona Onshore Development Area. Three species of reptiles were identified within 2 km of the Mona Onshore Development Area. A large population of grass snake and slow worm near the proposed Onshore Substation.
- 1.5.2.4 124 historical records of bats including 46 bat roosts were recorded within 2 km of the Mona Onshore Development Area. Other mammals included hedgehogs, otter, badgers, and hazel dormouse. Badgers and otters were both recorded within the Mona Onshore Development Area.

## 1.6 References

Chartered Institute of Ecology and Environmental Management (CIEEM) (2017) Guidelines for Preliminary Ecological Assessment. Chartered Institute of Ecology and Environmental Management, Winchester.

Cofnod (2023) North Wales Environmental Information Service. Available at: <https://www.cofnod.org.uk/Home>. Accessed: September 2023.

Environment (Wales) Act (2016).

IUCN Standards and Petitions Committee (2022) Guidelines for Using the IUCN Red List Categories and Criteria. Version 15.1. Prepared by the Standards and Petitions Committee

Joint Nature Conservation Committee (JNCC) (2018) Taxon Designations 20180725 Spreadsheet. Joint Nature Conservation Committee, Peterborough

Joint Nature Conservation Committee (JNCC) (2023) Coedwigoedd Dyffryn Elwy/ Elwy Valley Woods. Designated Special Area of Conservation (SAC). Available at: <https://sac.jncc.gov.uk/site/UK0030146>. Accessed: September 2023.

Legislation.gov.uk. Wildlife and Countryside Act 1981. [online] Available at: <http://www.legislation.gov.uk/ukpga/1981/69/contents> [Accessed September 2023].

Legislation.gov.uk. The Protection of Badgers Act 1992. [online] Available at: <https://www.legislation.gov.uk/ukpga/1992/51> [Accessed September 2023].

MagicMap (2023) Magic Map Application. Available at: <https://magic.defra.gov.uk/MagicMap.aspx>. Accessed: September 2023.

Natural Resources Wales (2023) Ancient Woodland Inventory. Available at: <https://naturalresources.wales/evidence-and-data/research-and-reports/ancient-woodland-inventory/?lang=en>. Accessed: September 2023.

Natural Resources Wales (2023) Datamap Wales. Available at: <https://datamap.gov.wales/>. Accessed: September 2023.

UK BAP (2010). UK Biodiversity Action Plan. UK BAP, available from [www.jncc.defra.gov.uk](http://www.jncc.defra.gov.uk).

## MONA OFFSHORE WIND PROJECT

# A.1. Summary of protected and notable species records within 2 km of Mona Onshore Development Area.

## A.1.1 Plants and lichens

Table A. 1 Plants and lichens.

| Group           | Scientific Name            | Common Name       | Number and date of records   | Conservation Status  |
|-----------------|----------------------------|-------------------|------------------------------|--|
| Flowering Plant | <i>Acer campestre</i>      | Field Maple       | 12 records from 2010 to 2019 | LI-48[LS], LI-49[LS], LI-VP-48[LS], LI-VP-49[LS]   |
| Flowering Plant | <i>Aethusa cynapium</i>    | Fool's Parsley    | 3 records from 2013 to 2015  | LI-48[LR], LI-VP-48[LR]  |
| Flowering Plant | <i>Agrimonia procera</i>   | Fragrant Agrimony | 1 record from 2018 to 2018   | LBAP-G, LI-48[LS], LI-49[LR], LI-50[LR], LI-51[LS], LI-VP-48[LS], LI-VP-49[LR], LI-VP-50[LS], LI-VP-51[LR] |
| Flowering Plant | <i>Agrostis gigantea</i>   | Black Bent        | 2 records from 2014 to 2016  | GBNNSIP, LI-48[LS], LI-VP-48[LS], LI-VP-50[LNS]  |
| Flowering Plant | <i>Allium ampeloprasum</i> | Wild Leek         | 9 records from 2011 to 2021  | GBNNSIP, LBAP-C, LI-50[LS], LI-52[LR], LI-VP-49[LE], LI-VP-50[LS], LI-VP-52[LR], RDB-NS, WRL-VP[VU]        |
| Flowering Plant | <i>Allium vineale</i>      | Wild Onion        | 2 records from 2015 to 2015  | LI-48[LR], LI-51[LS], LI-VP-48[LR], LI-VP-50[LNS]  |
| Moss            | <i>Aloina aloides</i>      | Common Aloe-moss  | 1 record from 2019 to 2019   | LBAP-C, LBAP-F, LI-48[LR], LI-BR-48[LR]  |
| Flowering Plant | <i>Ammophila arenaria</i>  | Marram            | 8 records from 2014 to 2021  | LI-50[LR], LI-VP-50[LS], LI-VP-51[LS]  |



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| Group           | Scientific Name               | Common Name           | Number and date of records   | Conservation Status   |
|-----------------|-------------------------------|-----------------------|------------------------------|---|
| Flowering Plant | <i>Anacamptis morio</i>       | Green-winged Orchid   | 4 records from 2011 to 2021  | CITES-B, LBAP-A, LBAP-C, LBAP-F, LBAP-G, LI-48[LR], LI-49[LS], LI-50[LR], LI-51[LS], LI-52[LS], LI-VP-48[LR], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LS], LI-VP-52[LS], RL-NT |
| Flowering Plant | <i>Anacamptis pyramidalis</i> | Pyramidal Orchid      | 30 records from 2014 to 2022 | LI-48[LS], LI-VP-48[LS], LI-VP-50[LNS]  |
| Moss            | <i>Anomodon viticulosus</i>   | Rambling Tail-moss    | 15 records from 2012 to 2020 | LI-48[LR], LI-BR-48[LR]   |
| Flowering Plant | <i>Anthriscus caucalis</i>    | Bur Chervil           | 2 records from 2015 to 2015  | LI-49[LS], LI-50, LI-52[LR], LI-VP-49[LS], LI-VP-50[LR], LI-VP-51[LR], LI-VP-52[LS]   |
| Flowering Plant | <i>Anthyllis vulneraria</i>   | Kidney Vetch          | 9 records from 2015 to 2021  | LI-48[LS], LI-VP-48[LS], LI-VP-50[LNS]  |
| Flowering Plant | <i>Aphanes australis</i>      | Slender Parsley-piert | 2 records from 2021 to 2021  | LI-51[LR], LI-VP-51[LS]   |
| Flowering Plant | <i>Apium graveolens</i>       | Wild Celery           | 2 records from 2020 to 2020  | LI-48[LS], LI-49[LR], LI-50, LI-52[LS], LI-VP-48[LS], LI-VP-49[LR], LI-VP-50[LS], LI-VP-51[LS], LI-VP-52[LR]  |
| Flowering Plant | <i>Arabis hirsuta</i>         | Hairy Rock-cress      | 3 records from 2011 to 2022  | LI-48[LR], LI-52[LS], LI-VP-48[LR], LI-VP-50[LNS], LI-VP-51[LR], LI-VP-52[LS]   |
| Flowering Plant | <i>Arctium lappa</i>          | Greater Burdock       | 1 record from 2017 to 2017   | GBNNSIP, LI-51[LR], LI-VP-50[LNS], LI-VP-51[LS]   |
| Flowering Plant | <i>Artemisia absinthium</i>   | Wormwood              | 3 records from 2015 to 2021  | GBNNSIP, LI-48[LS], LI-VP-48[LS], LI-VP-50[LNS]   |

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| Group           | Scientific Name                          | Common Name              | Number and date of records   | Conservation Status   |
|-----------------|--|--------------------------|------------------------------|---|
| Flowering Plant | <i>Arum italicum</i>                     | Italian Lords-and-Ladies | 2 records from 2012 to 2017  | LBAP-D  |
| Flowering Plant | <i>Asparagus</i>                         |                          | 1 record from 2021 to 2021   | LI-51[LS]   |
| Flowering Plant | <i>Aster tripolium</i>                   | Sea Aster                | 1 record from 2015 to 2015   | LI-50[LS]   |
| Flowering Plant | <i>Atriplex glabriuscula</i>             | Babington's Orache       | 4 records from 2015 to 2020  | LI-48[LR], LI-50[LR], LI-51[LR], LI-VP-48[LR], LI-VP-50[LS], LI-VP-51[LR]         |
| Flowering Plant | <i>Atriplex littoralis</i>               | Grass-leaved Orache      | 1 record from 2015 to 2015   | LBAP-C, LBAP-G, LI-48[LR], LI-49[LR], LI-VP-48[LR], LI-VP-49[LR], LI-VP-50[LNS]   |
| Flowering Plant | <i>Atriplex prostrata x glabriuscula</i> |                          | 3 records from 2015 to 2022  | LI-50, LI-VP-50[LR]   |
| Flowering Plant | <i>Avena fatua</i>                       | Wild-oat                 | 2 records from 2015 to 2019  | GBNNSIP, LI-49[LR], LI-VP-49[LR]  |
| Flowering Plant | <i>Barbarea vulgaris</i>                 | Winter-cress             | 6 records from 2011 to 2017  | LI-48[LS], LI-VP-48[LS]   |
| Flowering Plant | <i>Beta vulgaris subsp. maritima</i>     | Sea Beet                 | 15 records from 2014 to 2021 | LI-48[LS], LI-VP-48[LS], LI-VP-50[LNS]  |
| Flowering Plant | <i>Blackstonia perfoliata</i>            | Yellow-wort              | 14 records from 2014 to 2021 | LBAP-G, LI-48[LR], LI-49[LS], LI-52[LS], LI-VP-48[LR], LI-VP-49[LS], LI-VP-52[LS] |
| Flowering Plant | <i>Bolboschoenus maritimus</i>           | Sea Club-rush            | 2 records from 2017 to 2021  | LI-50[LS], LI-VP-50[LNS]  |
| Flowering Plant | <i>Brassica nigra</i>                    | Black Mustard            | 4 records from 2014 to 2017  | LI-48[LR], LI-VP-48[LR], LI-VP-50[LNS]  |

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| Group           | Scientific Name           | Common Name                | Number and date of records  | Conservation Status   |
|-----------------|---------------------------|----------------------------|-----------------------------|---|
| Flowering Plant | <i>Brassica oleracea</i>  | Wild Cabbage               | 3 records from 2012 to 2020 | LBAP-A, LBAP-C, LI-49[LS], LI-50[LR], LI-52[LS], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LR], LI-VP-52, RDB-NS |
| Flowering Plant | <i>Bromopsis erecta</i>   | Upright Brome              | 1 record from 2022 to 2022  | LBAP-C, LI-49[LR], LI-50[LS], LI-51[LS], LI-52[LR], LI-VP-49[LR], LI-VP-50[LS], LI-VP-51[LS], LI-VP-52[LR]  |
| Flowering Plant | <i>Bromopsis ramosa</i>   | Hairy-brome                | 31 record from 2013 to 2021 | LI-48[LS], LI-VP-48[LS]   |
| Flowering Plant | <i>Bromus racemosus</i>   | Smooth Brome               | 1 record from 2016 to 2016  | LBAP-G, LI-49[LR], LI-50[LR], LI-51[LR], LI-52[LR], LI-VP-49[LR], LI-VP-50[LS], LI-VP-51[LR], LI-VP-52[LR]  |
| Moss            | <i>Bryum argenteum</i>    | Silver-moss                | 5 records from 2012 to 2019 | LBAP-C  |
| Flowering Plant | <i>Butomus umbellatus</i> | Flowering-rush             | 2 records from 2012 to 2015 | LBAP-C, LI-51[LR], LI-VP-49[LE], LI-VP-50[LS], LI-VP-51[LR], WRL-VP[VU]                                     |
| Flowering Plant | <i>Buxus sempervirens</i> | Box                        | 2 records from 2019 to 2022 | LBAP-C, RDB-NR, RL-DD   |
| Flowering Plant | <i>Cakile maritima</i>    | Sea Rocket                 | 1 record from 2014 to 2014  | LI-50[LR], LI-51[LS], LI-VP-50[LS], LI-VP-51[LS]  |
| Flowering Plant | <i>Callitriche brutia</i> | Pedunculate Water-starwort | 1 record from 2018 to 2018  | LI-49[LS], LI-50, LI-51[LR], LI-52[LR], LI-VP-49[LS], LI-VP-51[LS]  |
| Flowering Plant | <i>Carduus nutans</i>     | Musk Thistle               | 8 records from 2014 to 2019 | LI-48[LS], LI-49[LS], LI-52[LS], LI-VP-48[LS], LI-VP-49[LS]   |



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| Group           | Scientific Name                     | Common Name        | Number and date of records   | Conservation Status   |
|-----------------|-------------------------------------|--------------------|------------------------------|---|
| Flowering Plant | <i>Carduus tenuiflorus</i>          | Slender Thistle    | 4 records from 2015 to 2021  | LI-48[LR], LI-50[LR], LI-VP-48[LR], LI-VP-50[LS], LI-VP-51[LS]  |
| Flowering Plant | <i>Carex acutiformis</i>            | Lesser Pond-sedge  | 2 records from 2014 to 2015  | LBAP-G, LI-49[LS], LI-VP-49[LS], LI-VP-50[LNS]  |
| Flowering Plant | <i>Carex arenaria</i>               | Sand Sedge         | 3 records from 2014 to 2015  | LBAP-C, LI-50[LS], LI-VP-50[LS], LI-VP-51[LS]   |
| Flowering Plant | <i>Carex divulsa subsp. divulsa</i> | Grey Sedge         | 4 records from 2019 to 2023  | LBAP-G, LI-49[LR], LI-VP-48[LE], LI-VP-49[LR]   |
| Flowering Plant | <i>Carex divulsa subsp. leersii</i> | Many-leaved Sedge  | 2 records from 2015 to 2019  | LI-49[LS], LI-50[LS], LI-VP-49[LS], LI-VP-50[LS]  |
| Flowering Plant | <i>Carex pseudocyperus</i>          | Cyperus Sedge      | 1 record from 2016 to 2016   | LBAP-G, LI-48[LR], LI-49[LR], LI-52[LR], LI-VP-48[LR], LI-VP-49[LR], LI-VP-51[LS], LI-VP-52[LS], WRL-VP[NT] |
| Flowering Plant | <i>Carex riparia</i>                | Greater Pond-sedge | 2 records from 2015 to 2021  | LBAP-G, LI-48[LS], LI-49[LS], LI-50[LS], LI-VP-48[LS], LI-VP-49[LS], LI-VP-50[LNS], LI-VP-51[LS]            |
| Flowering Plant | <i>Carex spicata</i>                | Spiked Sedge       | 11 records from 2012 to 2021 | LBAP-G, LI-48[LR], LI-49[LS], LI-VP-48[LR], LI-VP-49[LS], LI-VP-52[PX]                                      |
| Flowering Plant | <i>Catapodium marinum</i>           | Sea Fern-grass     | 2 records from 2015 to 2021  | LBAP-C, LI-48[LS], LI-51[LR], LI-VP-48[LS], LI-VP-50[LS], LI-VP-51[LS]                                      |

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| Group           | Scientific Name                   | Common Name          | Number and date of records   | Conservation Status  |
|-----------------|-----------------------------------|----------------------|------------------------------|--|
| Flowering Plant | <i>Centunculus minimus</i>        | Chaffweed            | 1 record from 2013 to 2013   | LBAP-G, LI-48[LS], LI-49[LR], LI-50[LR], LI-VP-48[LS], LI-VP-49[LR], LI-VP-50[LR], LI-VP-51[LS], RL-NT, WRL-VP[VU]         |
| Flowering Plant | <i>Cerastium pumilum</i>          | Dwarf Mouse-ear      | 4 records from 2015 to 2021  | LBAP-C, LI-49[LS], LI-50[LR], LI-VP-49[LS], LI-VP-50[LR], LI-VP-51[LR], RDB-NS, RL-NT, WRL-VP[NT]                          |
| Flowering Plant | <i>Cerastium semidecandrum</i>    | Little Mouse-ear     | 5 records from 2011 to 2021  | LI-50[LS], LI-51[LS], LI-VP-50[LNS]  |
| Fern            | <i>Ceterach officinarum</i>       | Rustyback            | 1 record from 2018 to 2018   | LI-50[LS], LI-51[LS], LI-VP-51[LS]   |
| Flowering Plant | <i>Chenopodium bonus-henricus</i> | Good-King-Henry      | 1 record from 2019 to 2019   | GBNNSIP, LBAP-G, LI-48[LS], LI-49[LS], LI-50[LR], LI-52[LR], LI-VP-48[LS], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LS], RL-VU |
| Flowering Plant | <i>Chenopodium ficifolium</i>     | Fig-leaved Goosefoot | 1 record from 2019 to 2019   | GBNNSIP, LBAP-G, LI-49[LR], LI-50[LS], LI-VP-49[LR]  |
| Flowering Plant | <i>Chenopodium rubrum</i>         | Red Goosefoot        | 3 records from 2014 to 2018  | LBAP-G, LI-49[LS], LI-51[LS], LI-52[LS], LI-VP-49[LS]  |
| Flowering Plant | <i>Cichorium intybus</i>          | Chicory              | 11 records from 2012 to 2021 | GBNNSIP, LI-49[LR], LI-50[LS], LI-51[LS], LI-VP-49[LR], LI-VP-50[LNS], LI-VP-51[LS]  |
| Lichen          | <i>Cladonia rangiferina</i>       | Reindeer Moss        | 1 record from 2015 to 2015   | HDir5, WRL-LI[NT]  |

## MONA OFFSHORE WIND PROJECT

| Group           | Scientific Name   | Common Name           | Number and date of records   | Conservation Status  |
|-----------------|---|-----------------------|------------------------------|--|
| Alga            | <i>Cladophora glomerata</i>                               |                       | 1 record from 2016 to 2016   | RL-NT  |
| Flowering Plant | <i>Clinopodium vulgare</i>                                | Wild Basil            | 12 records from 2011 to 2022 | LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Cornus sanguinea</i>                                   | Dogwood               | 8 records from 2011 to 2021  | LI-52[LS]  |
| Flowering Plant | <i>Cornus sanguinea subsp. sanguinea</i>                  |                       | 4 records from 2014 to 2017  | LI-52[LS]  |
| Flowering Plant | <i>Crambe maritima</i>                                    | Sea-kale              | 13 records from 2014 to 2021 | LBAP-A, LBAP-C, LI-48[LR], LI-49[LS], LI-50[LS], LI-51[LR], LI-VP-48[LR], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LR] |
| Flowering Plant | <i>Crepis biennis</i>                                     | Rough Hawk's-beard    | 1 record from 2021 to 2021   | LBAP-C, LI-50[LS], LI-VP-50[LS], WRL-VP[DD]  |
| Flowering Plant | <i>Crithmum maritimum</i>                                 | Rock Samphire         | 13 records from 2015 to 2021 | LI-48[LS], LI-50[LR], LI-51[LR], LI-VP-48[LS], LI-VP-50[LS], LI-VP-51[LS]  |
| Flowering Plant | <i>Cruciata laevipes</i>                                  | Crosswort             | 38 records from 2010 to 2023 | LBAP-G, LI-49[LS], LI-52[LS], LI-VP-49[LS], LI-VP-52[LS]   |
| Moss            | <i>Ctenidium molluscum</i>                                | Chalk Comb-moss       | 7 records from 2019 to 2019  | LBAP-C, LI-BR-48[LR]   |
| Flowering Plant | <i>Dactylorhiza fuchsii x praetermissa = D. x grandis</i> |                       | 1 record from 2022 to 2022   | LI-50[LR], LI-VP-50[LS]  |
| Flowering Plant | <i>Dactylorhiza praetermissa</i>                          | Southern Marsh-orchid | 6 records from 2015 to 2022  | LBAP-G, LI-48[LR], LI-49[LR], LI-50[LR], LI-VP-48[LR], LI-VP-49[LR], LI-VP-50[LS], LI-VP-51[LS], LI-VP-52[LR]      |



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| Group           | Scientific Name               | Common Name               | Number and date of records   | Conservation Status  |
|-----------------|-------------------------------|---------------------------|------------------------------|--|
| Flowering Plant | <i>Daphne laureola</i>        | Spurge-laurel             | 20 records from 2011 to 2022 | LBAP-G, LI-49[LS], LI-52[LS], LI-VP-49[LS], LI-VP-50[LNS]  |
| Moss            | <i>Didymodon vinealis</i>     | Soft-tufted Beard-moss    | 1 record from 2020 to 2020   | LI-48[LR], LI-BR-48[LR]  |
| Flowering Plant | <i>Dipsacus fullonum</i>      | Wild Teasel               | 19 records from 2011 to 2021 | LI-48[LR], LI-VP-48[LR]  |
| Fern            | <i>Dryopteris cambrensis</i>  |                           | 2 records from 2020 to 2020  | LI-50[LR], LI-VP-50[LS]  |
| Fern            | <i>Dryopteris carthusiana</i> | Narrow Buckler-fern       | 1 record from 2019 to 2019   | LI-51[LS], LI-52[LS], LI-VP-51[LS]   |
| Flowering Plant | <i>Echium vulgare</i>         | Viper's-bugloss           | 1 record from 2021 to 2021   | LBAP-G, LI-48[LS], LI-49[LS], LI-50[LS], LI-51[LS], LI-52[LS], LI-VP-48[LS], LI-VP-49[LS], LI-VP-50[LNS], LI-VP-51[LS], LI-VP-52[LS] |
| Flowering Plant | <i>Elymus caninus</i>         | Bearded Couch             | 11 records from 2013 to 2019 | LI-52[LS], LI-VP-52[LR]  |
| Flowering Plant | <i>Elytrigia juncea</i>       | Sand Couch                | 5 records from 2014 to 2021  | LBAP-C, LI-50[LR], LI-VP-50[LS], LI-VP-51[LR]  |
| Flowering Plant | <i>Epilobium roseum</i>       | Pale Willowherb           | 3 records from 2015 to 2019  | LBAP-G, LI-49[LR], LI-VP-49[LR], LI-VP-50[LNS], LI-VP-51[LR]   |
| Flowering Plant | <i>Epilobium tetragonum</i>   | Square-stalked Willowherb | 2 records from 2017 to 2019  | LI-48[LR], LI-49[LR], LI-VP-48[LR], LI-VP-49[LR], LI-VP-50[LNS]  |
| Flowering Plant | <i>Epipactis helleborine</i>  | Broad-leaved Helleborine  | 9 records from 2010 to 2021  | LBAP-G, LI-48[LS], LI-49[LS], LI-52[LR], LI-VP-48[LS], LI-VP-49[LS], LI-VP-52[LS]  |

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| Group           | Scientific Name                              | Common Name       | Number and date of records   | Conservation Status  |
|-----------------|--|-------------------|------------------------------|--|
| Horsetail       | <i>Equisetum telmateia</i>                   | Great Horsetail   | 21 records from 2011 to 2021 | LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Erica vagans</i>                          | Cornish Heath     | 1 record from 2022 to 2022   | LI-50[LR], RDB-NR, RL-NT   |
| Flowering Plant | <i>Erigeron acris</i>                        | Blue Fleabane     | 9 records from 2015 to 2021  | LBAP-G, LI-48[LR], LI-49[LS], LI-52[LS], LI-VP-48[LR], LI-VP-49[LS], LI-VP-50[LNS]                       |
| Flowering Plant | <i>Erodium maritimum</i>                     | Sea Stork's-bill  | 2 records from 2019 to 2022  | LBAP-A, LI-48[LR], LI-51[LR], LI-52[LS], LI-VP-48[LR], LI-VP-50[LR], LI-VP-51[LS]                        |
| Flowering Plant | <i>Erodium moschatum</i>                     | Musk Stork's-bill | 3 records from 2017 to 2022  | GBNNSIP, LBAP-A, LI-49[LS], LI-50[LR], LI-52[LR], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LS], LI-VP-52[LS] |
| Flowering Plant | <i>Eryngium maritimum</i>                    | Sea-holly         | 12 records from 2014 to 2021 | LI-50[LR], LI-51[LR], LI-VP-50[LS], LI-VP-51[LS]   |
| Moss            | <i>Eucladium verticillatum</i>               | Whorled Tufa-moss | 2 records from 2016 to 2016  | LI-48[EX], LI-BR-48[EX]  |
| Flowering Plant | <i>Euphorbia amygdaloides subsp. robbiae</i> |                   | 2 records from 2020 to 2020  | CITES-B, GBNNSIP, LI-50[LR], LI-51[LS]   |
| Flowering Plant | <i>Euphorbia lathyris</i>                    | Caper Spurge      | 5 records from 2017 to 2022  | CITES-B, GBNNSIP, LBAP-G, LI-49[LS], LI-51[LR], LI-VP-49[LS]   |
| Flowering Plant | <i>Euphorbia paralias</i>                    | Sea Spurge        | 4 records from 2014 to 2020  | CITES-B, LBAP-C, LI-50[LR], LI-51[LS], LI-VP-50[LS], LI-VP-51[LS]  |
| Flowering Plant | <i>Euphrasia arctica</i>                     |                   | 2 records from 2019 to 2021  | LI-VP-48[LS], LI-VP-50[LNS], LI-VP-52, RL-NT   |

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| Group           | Scientific Name                      | Common Name                 | Number and date of records  | Conservation Status   |
|-----------------|--------------------------------------|-----------------------------|-----------------------------|---|
| Flowering Plant | <i>Fallopia convolvulus</i>          | Black-bindweed              | 2 records from 2010 to 2014 | GBNNSIP, LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Festuca rubra subsp. juncea</i>   |                             | 1 record from 2021 to 2021  | LBAP-G, LI-49[LS], LI-VP-49[LS]   |
| Flowering Plant | <i>Filago minima</i>                 | Small Cudweed               | 2 records from 2021 to 2021 | LBAP-C, LBAP-D, LI-48[LR], LI-49[LS], LI-50[LR], LI-51[LR], LI-52[LS], LI-VP-48[LR], LI-VP-49[LS], LI-VP-50[LS], LI-VP-52[LS] |
| Moss            | <i>Fissidens exilis</i>              | Slender Pocket-moss         | 1 record from 2019 to 2019  | LI-50[LR], LI-51[EX], LI-52[LR]   |
| Flowering Plant | <i>Fumaria bastardii</i>             | Tall Ramping-fumitory       | 8 records from 2015 to 2020 | LI-48[LS], LI-VP-48[LS]   |
| Flowering Plant | <i>Galeopsis bifida</i>              | Bifid Hemp-nettle           | 1 record from 2014 to 2014  | LI-51[LR], LI-VP-51[LR]   |
| Flowering Plant | <i>Galium mollugo subsp. erectum</i> | Upright Hedge Bedstraw      | 4 records from 2010 to 2021 | LI-48[LS], LI-52[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Gentianella amarella</i>          | Autumn Gentian              | 1 record from 2016 to 2016  | LBAP-D, LI-49[LR], LI-50[LS], LI-VP-49[LR], LI-VP-50[LNS], LI-VP-51[LS], LI-VP-52   |
| Flowering Plant | <i>Geranium columbinum</i>           | Long-stalked Crane's-bill   | 4 records from 2011 to 2021 | LBAP-G, LI-48[LR], LI-49[LS], LI-51[LR], LI-VP-48[LR], LI-VP-49[LS], LI-VP-50[LNS], LI-VP-51[LR]                              |
| Flowering Plant | <i>Geranium pusillum</i>             | Small-flowered Crane's-bill | 7 records from 2014 to 2022 | LBAP-G, LI-48[LR], LI-49[LS], LI-51[LS], LI-52[LS], LI-VP-48[LR], LI-VP-49[LS], LI-VP-52[LS]                                  |



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| Group           | Scientific Name                               | Common Name         | Number and date of records   | Conservation Status  |
|-----------------|---|---------------------|------------------------------|--|
| Flowering Plant | <i>Geranium sanguineum</i>                    | Bloody Crane's-bill | 6 records from 2011 to 2022  | LI-48[LR], LI-50[LR], LI-VP-48[LR], LI-VP-50[LS], LI-VP-51[LS]   |
| Flowering Plant | <i>Glaucium flavum</i>                        | Yellow Horned-poppy | 15 records from 2015 to 2022 | LI-48[LS], LI-50[LR], LI-51[LR], LI-52[LS], LI-VP-48[LS], LI-VP-50[LS], LI-VP-51[LR], LI-VP-52[LS]                                       |
| Flowering Plant | <i>Glebionis segetum</i>                      | Corn Marigold       | 1 record from 2014 to 2014   | GBNNSIP, LBAP-G, LI-48[LR], LI-49[LR], LI-50[LR], LI-52[LS], LI-VP-48[LR], LI-VP-49[LR], LI-VP-50[LS], LI-VP-51[LS], LI-VP-52[LS], RL-VU |
| Flowering Plant | <i>Glyceria notata</i>                        | Plicate Sweet-grass | 4 records from 2015 to 2020  | LBAP-G, LI-48[LR], LI-49[LS], LI-VP-48[LR], LI-VP-49[LS], LI-VP-50[LNS]  |
| Flowering Plant | <i>Helianthemum nummularium</i>               | Common Rock-rose    | 17 records from 2010 to 2022 | LBAP-G, LI-48[LR], LI-49[LS], LI-VP-48[LR], LI-VP-49[LS], LI-VP-50[LNS]  |
| Flowering Plant | <i>Helianthemum oelandicum</i>                | Hoary Rock-rose     | 7 records from 2012 to 2022  | LBAP-A, LBAP-C, LBAP-F, LI-50[LR], LI-52[LR], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LS], LI-VP-52   |
| Flowering Plant | <i>Helianthemum oelandicum subsp. incanum</i> |                     | 4 records from 2021 to 2021  | LI-49[LS], LI-51[LS], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LS], LI-VP-52[LR], RDB-NS   |
| Flowering Plant | <i>Helictotrichon pratense</i>                | Meadow Oat-grass    | 2 records from 2021 to 2021  | LI-49[LS], LI-50[LS], LI-51[LR], LI-52[LR], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LS], LI-VP-52[LR]                                       |

## MONA OFFSHORE WIND PROJECT

| Group           | Scientific Name                     | Common Name             | Number and date of records   | Conservation Status  |
|-----------------|-------------------------------------|-------------------------|------------------------------|--|
| Flowering Plant | <i>Helictotrichon pubescens</i>     | Downy Oat-grass         | 4 records from 2019 to 2022  | LI-50[LS], LI-VP-50[LNS]   |
| Flowering Plant | <i>Helleborus foetidus</i>          | Stinking Hellebore      | 18 records from 2010 to 2022 | LBAP-C, LBAP-D, LI-51[LS], LI-52[LS], LI-VP-51[LS], RDB-NS                   |
| Flowering Plant | <i>Hieracium hypochaeroides</i>     | Cat's-ear Hawkweed      | 1 record from 2021 to 2021   | LI-50[LS]  |
| Flowering Plant | <i>Hieracium sabaudum</i>           | Autumn Hawkweed         | 1 record from 2021 to 2021   | LI-50[LR], LI-VP-50[LS]  |
| Flowering Plant | <i>Hippophae rhamnoides</i>         | Sea-buckthorn           | 7 records from 2015 to 2020  | INNS, LBAP-C, RDB-NS   |
| Moss            | <i>Homalothecium lutescens</i>      | Yellow Feather-moss     | 4 records from 2017 to 2019  | LI-48[LR], LI-BR-48[LR]  |
| Flowering Plant | <i>Honckenya peploides</i>          | Sea Sandwort            | 8 records from 2014 to 2021  | LI-50[LR], LI-51[LS], LI-VP-50[LS], LI-VP-51[LR]                             |
| Moss            | <i>Hookeria lucens</i>              | Shining Hookeria        | 1 record from 2019 to 2019   | LBAP-C   |
| Flowering Plant | <i>Hordeum secalinum</i>            | Meadow Barley           | 3 records from 2015 to 2019  | LBAP-G, LI-49[LS], LI-VP-49[LS], LI-VP-51[LS]                                |
| Flowering Plant | <i>Hyacinthoides non-scripta</i>    | Bluebell                | 47 records from 2010 to 2023 | LBAP-A, LBAP-C, LBAP-E, LBAP-F, LBAP-T, WCA8                                 |
| Moss            | <i>Hygroamblystegium fluviatile</i> | Brook-side Feather-moss | 2 records from 2019 to 2020  | LBAP-C, LI-52[EX]  |
| Flowering Plant | <i>Hypericum hirsutum</i>           | Hairy St John's-wort    | 19 records from 2011 to 2021 | LI-48[LR], LI-49[LR], LI-VP-48[LR], LI-VP-49[LR], LI-VP-51[LS], LI-VP-52[LR] |

## MONA OFFSHORE WIND PROJECT

| Group           | Scientific Name            | Common Name           | Number and date of records   | Conservation Status  |
|-----------------|----------------------------|-----------------------|------------------------------|--|
| Flowering Plant | <i>Hypericum montanum</i>  | Pale St John's-wort   | 9 records from 2011 to 2022  | LBAP-A, LBAP-C, LBAP-D, LI-49[LS], LI-52[LS], LI-VP-49[LS], LI-VP-50[LNS], LI-VP-51[LS], LI-VP-52[LS], RL-NT                           |
| Flowering Plant | <i>Inula conyzae</i>       | Ploughman's-spikenard | 26 records from 2010 to 2022 | LBAP-G, LI-48[LR], LI-49[LS], LI-VP-48[LR], LI-VP-49[LS]   |
| Flowering Plant | <i>Inula helenium</i>      | Elecampane            | 1 record from 2019 to 2019   | GBNNSIP, LBAP-G, LI-49[LS], LI-50, LI-51[LR], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LR]   |
| Flowering Plant | <i>Iris foetidissima</i>   | Stinking Iris         | 26 records from 2010 to 2023 | LI-51[LS]  |
| Flowering Plant | <i>Jacobaea erucifolia</i> | Hoary Ragwort         | 12 records from 2015 to 2022 | LBAP-G, LI-48[LR], LI-49[LS], LI-52[LS], LI-VP-48[LR], LI-VP-49[LS], LI-VP-52[LS]  |
| Flowering Plant | <i>Jasione montana</i>     | Sheep's-bit           | 5 records from 2015 to 2019  | LI-VP-51[LR], WRL-VP[NT]   |
| Flowering Plant | <i>Juncus inflexus</i>     | Hard Rush             | 24 records from 2011 to 2020 | LI-48[LR], LI-VP-48[LR]  |
| Conifer         | <i>Juniperus communis</i>  | Juniper               | 1 record from 2014 to 2014   | BAP, LBAP-C, LBAP-D, LI-50[LR], LI-52[LR], LI-VP-48[LNS], LI-VP-50[LR], LI-VP-51, LI-VP-52, S7   |
| Flowering Plant | <i>Kickxia elatine</i>     | Sharp-leaved Fluellen | 3 records from 2016 to 2018  | GBNNSIP, LBAP-C, LBAP-G, LI-48[LR], LI-49[LR], LI-50[LR], LI-51[LR], LI-52[LS], LI-VP-48[LR], LI-VP-49[LR], LI-VP-50[LS], LI-VP-52[LS] |



## MONA OFFSHORE WIND PROJECT

| Group           | Scientific Name               | Common Name         | Number and date of records  | Conservation Status   |
|-----------------|-------------------------------|---------------------|-----------------------------|---|
| Moss            | <i>Kindbergia praelonga</i>   | Common Feather-moss | 5 records from 2012 to 2018 | LBAP-C  |
| Flowering Plant | <i>Knautia arvensis</i>       | Field Scabious      | 2 records from 2016 to 2019 | LI-48[LS], LI-VP-48[LS]   |
| Flowering Plant | <i>Koeleria macrantha</i>     | Crested Hair-grass  | 3 records from 2015 to 2019 | LI-48[LR], LI-VP-48[LR], LI-VP-50[LS]                                   |
| Flowering Plant | <i>Lactuca serriola</i>       | Prickly Lettuce     | 8 records from 2014 to 2021 | GBNNSIP, LBAP-C, LI-51[LS]  |
| Flowering Plant | <i>Lactuca virosa</i>         | Great Lettuce       | 4 records from 2021 to 2022 | LBAP-C, LI-50[LR], LI-VP-50[LR]   |
| Flowering Plant | <i>Lamium amplexicaule</i>    | Henbit Dead-nettle  | 1 record from 2014 to 2014  | GBNNSIP, LI-48[LR], LI-50[LR], LI-VP-48[LR], LI-VP-50[LS], LI-VP-51[LS] |
| Flowering Plant | <i>Lathyrus linifolius</i>    | Bitter-vetch        | 6 records from 2011 to 2021 | LI-52[LS], LI-VP-52[LS]   |
| Flowering Plant | <i>Lathyrus nissolia</i>      | Grass Vetchling     | 3 records from 2015 to 2021 | LI-49[LR], LI-50[LS], LI-VP-49[LR], LI-VP-51[LS]                        |
| Liverwort       | <i>Lejeunea lamacerina</i>    | Western Pouncewort  | 2 records from 2019 to 2020 | LBAP-C, LI-51[LR]   |
| Flowering Plant | <i>Lemna trisulca</i>         | Ivy-leaved Duckweed | 1 record from 2016 to 2016  | LBAP-G, LI-49[LR], LI-VP-49[LR]   |
| Flowering Plant | <i>Leontodon hispidus</i>     | Rough Hawkbit       | 1 record from 2015 to 2015  | LI-52[LS], LI-VP-52[LS]   |
| Flowering Plant | <i>Lepidium heterophyllum</i> | Smith's Pepperwort  | 5 records from 2016 to 2020 | LI-51[LS], LI-VP-51[LS]   |
| Flowering Plant | <i>Leymus arenarius</i>       | Lyme-grass          | 6 records from 2014 to 2022 | LBAP-C, LI-48[LR], LI-50[LR], LI-VP-48[LR], LI-VP-50[LS]                |

## MONA OFFSHORE WIND PROJECT

| Group           | Scientific Name                | Common Name        | Number and date of records   | Conservation Status   |
|-----------------|--------------------------------|--------------------|------------------------------|---|
| Flowering Plant | <i>Linum bienne</i>            | Pale Flax          | 6 records from 2015 to 2022  | LI-49[LR], LI-50[LR], LI-51[LS], LI-52[LS], LI-VP-49[LR], LI-VP-50[LS], LI-VP-51[LR], LI-VP-52[LS]                          |
| Flowering Plant | <i>Lithospermum officinale</i> | Common Gromwell    | 2 records from 2010 to 2019  | LI-49[LR], LI-50[LS], LI-51[LR], LI-52[LS], LI-VP-49[LR], LI-VP-50[LS], LI-VP-51[LR]  |
| Liverwort       | <i>Lophocolea semiteres</i>    | Southern Crestwort | 1 record from 2019 to 2019   | GBNNSIP, LI-48[LR], LI-BR-48[LR]  |
| Flowering Plant | <i>Lysimachia nummularia</i>   | Creeping-Jenny     | 4 records from 2015 to 2018  | LBAP-G, LI-49[LS], LI-VP-49[LS]   |
| Flowering Plant | <i>Malva arborea</i>           | Tree-mallow        | 1 record from 2015 to 2015   | LBAP-C, LBAP-D, LI-50, LI-VP-50[LS], LI-VP-51[LR]   |
| Flowering Plant | <i>Marrubium vulgare</i>       | White Horehound    | 11 records from 2012 to 2022 | LBAP-C, LBAP-D, LI-48[LR], LI-49[LS], LI-50[LR], LI-VP-48[LR], LI-VP-49[LS], LI-VP-50[LS], LI-VP-52[EX], RDB-NS, WRL-VP[NT] |
| Flowering Plant | <i>Matricaria chamomilla</i>   | Scented Mayweed    | 8 records from 2010 to 2019  | GBNNSIP, LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Meconopsis cambrica</i>     | Welsh Poppy        | 16 records from 2011 to 2023 | LBAP-C, LBAP-D, LI-48[LS], LI-49[LS], LI-VP-48[LS], LI-VP-49[LS], RDB-NS  |
| Flowering Plant | <i>Medicago arabica</i>        | Spotted Medick     | 8 records from 2015 to 2021  | LBAP-G, LI-49[LS], LI-50[LR], LI-51[LR], LI-52[LR], LI-VP-48[LE], LI-VP-49[LS], LI-VP-51[LR], LI-VP-52[LS]                  |
| Flowering Plant | <i>Melilotus altissimus</i>    | Tall Melilot       | 1 record from 2020 to 2020   | GBNNSIP, LBAP-G, LI-49[LR], LI-VP-49[LR]  |

## MONA OFFSHORE WIND PROJECT

| Group           | Scientific Name                  | Common Name         | Number and date of records   | Conservation Status  |
|-----------------|----------------------------------|---------------------|------------------------------|--|
| Flowering Plant | <i>Mentha aquatica</i>           | Water Mint          | 6 records from 2013 to 2016  | LBAP-A   |
| Liverwort       | <i>Metzgeria pubescens</i>       | Downy Veilwort      | 3 records from 2012 to 2016  | LBAP-C, LI-48[LR], LI-51[LR], LI-BR-48[LR]   |
| Flowering Plant | <i>Milium effusum</i>            | Wood Millet         | 1 record from 2019 to 2019   | LBAP-G, LI-48[LS], LI-49[LS], LI-52[LR], LI-VP-48[LS], LI-VP-49[LS], LI-VP-52[LR]                            |
| Moss            | <i>Mnium stellare</i>            | Starry Thyme-moss   | 2 records from 2016 to 2016  | LBAP-C, LI-52[LR]  |
| Flowering Plant | <i>Moenchia erecta</i>           | Upright Chickweed   | 1 record from 2010 to 2010   | LBAP-A, LBAP-C, LBAP-D, LI-48[LR], LI-49[LS], LI-50[LS], LI-52[LR], LI-VP-48[LR], LI-VP-49[LS], LI-VP-52[LR] |
| Flowering Plant | <i>Mycelis muralis</i>           | Wall Lettuce        | 17 records from 2010 to 2021 | LI-52[LS]  |
| Flowering Plant | <i>Myosotis ramosissima</i>      | Early Forget-me-not | 9 records from 2011 to 2022  | LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Myrica gale</i>               | Bog-myrtle          | 1 record from 2015 to 2015   | LBAP-C, LBAP-D, LI-VP-50[LR], LI-VP-51[LR]   |
| Flowering Plant | <i>Narcissus pseudonarcissus</i> | Daffodil            | 1 record from 2020 to 2020   | LI-50[LS], LI-VP-51[LS]  |
| Flowering Plant | <i>Neottia ovata</i>             | Common Twayblade    | 2 records from 2014 to 2022  | LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Onopordum acanthium</i>       | Cotton Thistle      | 1 record from 2011 to 2011   | GBNNSIP, LI-49[LR], LI-51[LR], LI-VP-49[LR], LI-VP-50[LR], LI-VP-51[LS]                                      |



## MONA OFFSHORE WIND PROJECT

| Group           | Scientific Name                    | Common Name                  | Number and date of records   | Conservation Status  |
|-----------------|------------------------------------|------------------------------|------------------------------|--|
| Flowering Plant | <i>Ophrys apifera</i>              | Bee Orchid                   | 10 records from 2012 to 2022 | CITES-B, LBAP-G, LI-48[LR], LI-49[LS], LI-VP-48[LR], LI-VP-49[LS]                                  |
| Flowering Plant | <i>Ophrys insectifera</i>          | Fly Orchid                   | 2 records from 2010 to 2017  | BAP, LI-50[LR], LI-52[LR], LI-VP-50[LR], LI-VP-52[LR], RL-VU, S7, WRL-VP[VU]                       |
| Flowering Plant | <i>Orchis mascula</i>              | Early-purple Orchid          | 24 records from 2010 to 2023 | LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Orobancha hederæ</i>            | Ivy Broomrape                | 18 records from 2010 to 2021 | LBAP-A, LBAP-C, LI-48[LR], LI-50[LS], LI-52[LS], LI-VP-48[LR], LI-VP-52[LS]                        |
| Flowering Plant | <i>Orobancha minor</i>             | Common Broomrape             | 1 record from 2011 to 2011   | LI-49[LR], LI-50[LR], LI-51[LS], LI-52[LS], LI-VP-49[LR], LI-VP-50[LR], LI-VP-51[LS], LI-VP-52[LS] |
| Moss            | <i>Orthotrichum pulchellum</i>     | Elegant Bristle-moss         | 1 record from 2020 to 2020   | LBAP-C, LBAP-F   |
| Flowering Plant | <i>Persicaria lapathifolia</i>     | Pale Persicaria              | 2 records from 2014 to 2016  | LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Petasites hybridus</i>          | Butterbur                    | 6 records from 2010 to 2023  | LI-48[LS], LI-50[LR], LI-VP-48[LS]   |
| Conifer         | <i>Pinus sylvestris</i>            | Scots Pine                   | 18 records from 2011 to 2021 | RDB-NS   |
| Moss            | <i>Plagiomnium cuspidatum</i>      | Woodsy Thyme-moss            | 1 record from 2020 to 2020   | LBAP-C   |
| Flowering Plant | <i>Plantago maritima</i>           | Sea Plantain                 | 5 records from 2015 to 2021  | LI-50[LS]  |
| Moss            | <i>Plasteurhynchium striatulum</i> | Lesser Striated Feather-moss | 2 records from 2019 to 2020  | LI-49[LR], LI-50[LR], LI-52[LR], LI-BR-49[LR]  |

## MONA OFFSHORE WIND PROJECT

| Group           | Scientific Name               | Common Name                | Number and date of records   | Conservation Status   |
|-----------------|-------------------------------|----------------------------|------------------------------|---|
| Flowering Plant | <i>Platanthera bifolia</i>    | Lesser Butterfly-orchid    | 1 record from 2019 to 2019   | BAP, LBAP-C, LBAP-G, LI-48[LS], LI-49[LR], LI-50[LR], LI-51[LS], LI-52[LS], LI-VP-48[LS], LI-VP-49[LR], LI-VP-50[LR], LI-VP-51[LR], LI-VP-52[LS], RL-VU, S7 |
| Flowering Plant | <i>Platanthera chlorantha</i> | Greater Butterfly-orchid   | 5 records from 2010 to 2019  | LBAP-G, LI-49[LS], LI-50[LS], LI-51[LS], LI-52[LR], LI-VP-48[LNS], LI-VP-49[LS], LI-VP-50[LNS], LI-VP-51[LS], LI-VP-52[LR], RL-NT                           |
| Flowering Plant | <i>Poa angustifolia</i>       | Narrow-leaved Meadow-grass | 1 record from 2019 to 2019   | LBAP-D, LBAP-G, LI-49[LS], LI-50[LR], LI-51[LS], LI-VP-49[LS], LI-VP-50[LR], LI-VP-51[LR]   |
| Flowering Plant | <i>Poa compressa</i>          | Flattened Meadow-grass     | 2 records from 2015 to 2019  | LBAP-G, LI-48[LS], LI-49[LS], LI-52[LR], LI-VP-48[LS], LI-VP-49[LS], LI-VP-51[LR], LI-VP-52[LR]   |
| Flowering Plant | <i>Polygonum oxyspermum</i>   | Ray's Knotgrass            | 3 records from 2015 to 2019  | LBAP-A, LBAP-C, LBAP-G, LI-48[LS], LI-49[LS], LI-50[LR], LI-51[LR], LI-52[LS], LI-VP-48[LS], LI-VP-49[LS], LI-VP-50, LI-VP-51                               |
| Fern            | <i>Polypodium cambricum</i>   | Southern Polypody          | 4 records from 2012 to 2021  | LBAP-A, LBAP-C, LBAP-F, LBAP-G, LI-48[LR], LI-49[LS], LI-50[LS], LI-51[LR], LI-52[LS], LI-VP-48[LR], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LR], LI-VP-52[LS] |
| Fern            | <i>Polypodium interjectum</i> | Intermediate Polypody      | 41 records from 2011 to 2021 | LI-51[LS]   |

## MONA OFFSHORE WIND PROJECT

| Group           | Scientific Name   | Common Name        | Number and date of records   | Conservation Status  |
|-----------------|---|--------------------|------------------------------|--|
| Fern            | <i>Polypodium vulgare x interjectum</i> = <i>P. x mantoniae</i> | Polypody           | 2 records from 2014 to 2018  | LBAP-G, LI-49[LR], LI-50[LR], LI-VP-49[LR]   |
| Flowering Plant | <i>Polypogon monspeliensis</i>                                  | Annual Beard-grass | 1 record from 2021 to 2021   | RDB-NS   |
| Fern            | <i>Polystichum aculeatum</i>                                    | Hard Shield-fern   | 10 records from 2011 to 2021 | LI-49[LS], LI-52[LS], LI-VP-49[LS]   |
| Flowering Plant | <i>Populus nigra</i>  | Black-poplar       | 1 record from 2010 to 2010   | GBNNSIP, LBAP-T, LI-VP-52  |
| Flowering Plant | <i>Populus nigra subsp. betulifolia</i>                         | Black-poplar       | 12 records from 2012 to 2015 | GBNNSIP, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-W, LI-48[LS], LI-50[LS], LI-52[LR], LI-VP-48[LS], LI-VP-52[LR]                       |
| Flowering Plant | <i>Populus tremula</i>  | Aspen              | 1 record from 2013 to 2013   | LI-52[LS], LI-VP-52[LS]  |
| Liverwort       | <i>Porella platyphylla</i>                                      | Wall Scalewort     | 6 records from 2016 to 2020  | LI-49[LR], LI-BR-49[LR]  |
| Flowering Plant | <i>Potamogeton crispus</i>                                      | Curled Pondweed    | 2 records from 2014 to 2018  | LI-48[LR], LI-49[LS], LI-VP-48[LR], LI-VP-49[LS]   |
| Flowering Plant | <i>Potamogeton pectinatus</i>                                   | Fennel Pondweed    | 1 record from 2014 to 2014   | LI-48[LR], LI-49[LR], LI-VP-48[LR], LI-VP-49[LR], LI-VP-50[LS], LI-VP-51[LS]   |
| Flowering Plant | <i>Potentilla anglica x reptans</i> = <i>P. x mixta</i>         | Hybrid Cinquefoil  | 3 records from 2014 to 2016  | LBAP-G, LI-49[LR], LI-VP-49[LR], LI-VP-51  |
| Flowering Plant | <i>Potentilla tabernaemontani</i>                               | Spring Cinquefoil  | 5 records from 2019 to 2021  | LBAP-A, LBAP-C, LBAP-D, LI-49[LS], LI-50[LR], LI-51[LR], LI-52[LR], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LR], LI-VP-52[LR], RDB-NS |



## MONA OFFSHORE WIND PROJECT

| Group           | Scientific Name   | Common Name              | Number and date of records   | Conservation Status  |
|-----------------|---|--------------------------|------------------------------|--|
| Flowering Plant | <i>Primula veris</i>                                    | Cowslip                  | 16 records from 2011 to 2022 | LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Primula veris x vulgaris</i> = <i>P. x polyantha</i> | False Oxlip              | 3 records from 2012 to 2022  | LBAP-G, LI-49[LS], LI-VP-49[LS], LI-VP-51  |
| Flowering Plant | <i>Prunus padus</i>                                     | Bird Cherry              | 7 records from 2019 to 2021  | LBAP-G, LI-49[LS], LI-VP-49[LS]  |
| Flowering Plant | <i>Puccinellia distans</i>                              | Reflexed Saltmarsh-Grass | 3 records from 2017 to 2022  | LBAP-C, LBAP-D, LBAP-G, LI-48[LR], LI-49[LR], LI-51[LS], LI-52[LR], LI-VP-48[LR], LI-VP-49[LR], LI-VP-52[LR] |
| Flowering Plant | <i>Pulicaria dysenterica</i>                            | Common Fleabane          | 9 records from 2015 to 2019  | LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Ranunculus auricomus</i>                             | Goldilocks Buttercup     | 6 records from 2015 to 2021  | LI-48[LR], LI-49[LS], LI-52[LS], LI-VP-48[LR], LI-VP-49[LS], LI-VP-52[LS]                                    |
| Flowering Plant | <i>Ranunculus penicillatus</i>                          | Stream Water-crowfoot    | 1 record from 2011 to 2011   | LBAP-C, LI-48[LR], LI-50[LR], LI-51[LS], LI-VP-48[LR], LI-VP-49[LR], LI-VP-51[LS], LI-VP-52                  |
| Flowering Plant | <i>Ranunculus sceleratus</i>                            | Celery-leaved Buttercup  | 2 records from 2017 to 2021  | LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Raphanus raphanistrum subsp. maritimus</i>           | Sea Radish               | 17 records from 2014 to 2021 | LBAP-G, LI-48[LR], LI-49[LS], LI-50[LS], LI-52[LS], LI-VP-48[LR], LI-VP-49[LS], LI-VP-50[LS]                 |
| Flowering Plant | <i>Reseda lutea</i>                                     | Wild Mignonette          | 3 records from 2019 to 2022  | LBAP-G, LI-49[LR], LI-50[LR], LI-VP-49[LR], LI-VP-50[LS], LI-VP-51[LS]                                       |

## MONA OFFSHORE WIND PROJECT

| Group           | Scientific Name                                    | Common Name                | Number and date of records   | Conservation Status  |
|-----------------|--|----------------------------|------------------------------|--|
| Flowering Plant | <i>Reseda luteola</i>                              | Weld                       | 11 records from 2013 to 2021 | GBNNSIP, LI-48[LS], LI-VP-48[LS]   |
| Flowering Plant | <i>Rhamnus cathartica</i>                          | Buckthorn                  | 1 record from 2016 to 2016   | LI-50[LS], LI-51[LS], LI-VP-51[LS]   |
| Flowering Plant | <i>Rhinanthus minor</i>                            | Yellow-rattle              | 10 records from 2015 to 2022 | LBAP-A   |
| Flowering Plant | <i>Ribes alpinum</i>                               | Mountain Currant           | 1 record from 2010 to 2010   | LBAP-C, LBAP-D, LBAP-F, RDB-NS   |
| Flowering Plant | <i>Rorippa microphylla</i>                         | Narrow-fruited Water-cress | 2 records from 2015 to 2016  | LBAP-C, LI-50[LR], LI-VP-50[LS], LI-VP-51[LS]  |
| Flowering Plant | <i>Rosa arvensis x canina = R. x irregularis</i>   |                            | 1 record from 2016 to 2016   | LI-49[LS], LI-50[LS], LI-VP-49[LS], LI-VP-50[LS]   |
| Flowering Plant | <i>Rosa caesia subsp. caesia</i>                   | Hairy Dog-rose             | 3 records from 2015 to 2019  | LI-48[LR], LI-50[LR], LI-52[LR], LI-VP-48[LR], LI-VP-50[LS], LI-VP-51, LI-VP-52              |
| Flowering Plant | <i>Rosa caesia subsp. vosagiaca</i>                | Glaucous Dog-rose          | 2 records from 2014 to 2019  | LI-48[LS], LI-49[LR], LI-50[LR], LI-VP-48[LS], LI-VP-49[LR], LI-VP-50, LI-VP-51, LI-VP-52    |
| Flowering Plant | <i>Rosa canina x caesia = R. x dumalis</i>         |                            | 2 records from 2014 to 2014  | LBAP-G, LI-48[LR], LI-50[LS], LI-VP-48[LR], LI-VP-51   |
| Flowering Plant | <i>Rosa canina x sherardii = R. x rothschildii</i> |                            | 1 record from 2014 to 2014   | LI-48[LR], LI-49[LR], LI-50[LR], LI-VP-48[LR], LI-VP-49[LR], LI-VP-50[LS], LI-VP-51          |
| Flowering Plant | <i>Rosa micrantha</i>                              | Small-flowered Sweet-briar | 1 record from 2021 to 2021   | LBAP-G, LI-48[LS], LI-49[LR], LI-50[LS], LI-51[LR], LI-VP-48[LS], LI-VP-49[LR], LI-VP-51[LS] |

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| Group           | Scientific Name   | Common Name     | Number and date of records   | Conservation Status  |
|-----------------|---|-----------------|------------------------------|--|
| Flowering Plant | <i>Rosa mollis</i>  | Soft Downy-rose | 1 record from 2014 to 2014   | LI-48[LS], LI-VP-48[LS], LI-VP-51  |
| Flowering Plant | <i>Rosa rubiginosa</i>                                      | Sweet-briar     | 1 record from 2017 to 2017   | LBAP-G, LI-49[LS], LI-50[LS], LI-51[LR], LI-VP-49[LS], LI-VP-50[LR]                          |
| Flowering Plant | <i>Rubia peregrina</i>                                      | Wild Madder     | 21 records from 2010 to 2022 | LBAP-C, LI-48[LR], LI-50[LS], LI-51[LR], LI-52[LS], LI-VP-48[LR], LI-VP-51[LS], LI-VP-52[LS] |
| Flowering Plant | <i>Rumex crispus subsp. littoreus</i>                       |                 | 11 records from 2012 to 2019 | LI-48[LS], LI-50[LS], LI-VP-48[LS]   |
| Flowering Plant | <i>Rumex crispus x obtusifolius</i> = <i>R. x pratensis</i> |                 | 1 record from 2016 to 2016   | LBAP-G, LI-48[LS], LI-49[LR], LI-VP-48[LS], LI-VP-49[LR]                                     |
| Flowering Plant | <i>Ruscus aculeatus</i>                                     | Butcher's-broom | 1 record from 2012 to 2012   | HDir5, WRL-VP[VU]  |
| Flowering Plant | <i>Sagina apetala subsp. apetala</i>                        |                 | 14 records from 2014 to 2021 | LI-51[LR], LI-VP-51[LR]  |
| Flowering Plant | <i>Salix alba</i>   | White Willow    | 1 record from 2017 to 2017   | GBNNSIP, LI-49[LR], LI-VP-49[LR]   |
| Flowering Plant | <i>Salix caprea x cinerea</i> = <i>S. x reichardtii</i>     |                 | 1 record from 2014 to 2014   | LI-52[LR], LI-VP-52[LS]  |
| Flowering Plant | <i>Salix cinerea subsp. cinerea</i>                         | Grey Willow     | 1 record from 2016 to 2016   | LI-52[LR], LI-VP-52  |
| Flowering Plant | <i>Salix cinerea x aurita</i> = <i>S. x multinervis</i>     |                 | 2 records from 2013 to 2019  | LI-51[LR], LI-VP-51  |
| Flowering Plant | <i>Salix pentandra</i>                                      | Bay Willow      | 1 record from 2019 to 2019   | LI-48[LR], LI-50[LR], LI-51[LS], LI-VP-48[LR], LI-VP-51[LR]                                  |



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| Group           | Scientific Name   | Common Name        | Number and date of records   | Conservation Status   |
|-----------------|---|--------------------|------------------------------|---|
| Flowering Plant | <i>Salix viminalis x caprea</i> = <i>S. x smithiana</i>     | Broad-leaved Osier | 2 records from 2015 to 2019  | GBNNSIP, LBAP-G, LI-49[LR], LI-50[LS], LI-52[LS], LI-VP-49[LR]  |
| Flowering Plant | <i>Salvia verbenaca</i>                                     | Wild Clary         | 1 record from 2015 to 2015   | LBAP-C, LBAP-D, LI-49[LR], LI-51[LR], LI-52[LR], LI-VP-49[LR], LI-VP-50[LR], LI-VP-51[LR], LI-VP-52[LR] |
| Flowering Plant | <i>Scabiosa columbaria</i>                                  | Small Scabious     | 7 records from 2011 to 2021  | LI-49[LS], LI-VP-49[LS], LI-VP-50[LNS], LI-VP-51[LR], LI-VP-52[EX], WRL-VP[VU]                          |
| Flowering Plant | <i>Schoenoplectus lacustris</i>                             | Common Club-rush   | 1 record from 2020 to 2020   | LBAP-G, LI-49[LS], LI-50[LS], LI-VP-49[LS], LI-VP-51[LR]  |
| Flowering Plant | <i>Schoenoplectus tabernaemontani</i>                       | Grey Club-rush     | 1 record from 2015 to 2015   | LBAP-C, LI-50[LR], LI-VP-50[LS]   |
| Flowering Plant | <i>Scrophularia auriculata</i>                              | Water Figwort      | 4 records from 2012 to 2021  | LI-48[LR], LI-52[LS], LI-VP-48[LR]  |
| Flowering Plant | <i>Sedum anglicum</i>                                       | English Stonecrop  | 7 records from 2014 to 2019  | LI-51[LR], LI-VP-51[LS]   |
| Flowering Plant | <i>Sedum telephium</i>                                      | Orpine             | 2 records from 2016 to 2021  | LI-51[LR], LI-VP-51[LS]   |
| Flowering Plant | <i>Senecio cineraria x jacobaea</i> = <i>S. x albescens</i> |                    | 1 record from 2021 to 2021   | LI-50, LI-VP-50[LS]   |
| Flowering Plant | <i>Sherardia arvensis</i>                                   | Field Madder       | 16 records from 2011 to 2022 | LI-48[LS], LI-VP-48[LS]   |
| Flowering Plant | <i>Silaum silaus</i>  | Pepper-saxifrage   | 1 record from 2015 to 2015   | LI-50[LS], LI-VP-50[LS], LI-VP-51[LS]   |
| Flowering Plant | <i>Silene latifolia</i>                                     | White Champion     | 18 records from 2014 to 2021 | GBNNSIP, LI-48[LS], LI-VP-48[LS]  |

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| Group           | Scientific Name   | Common Name         | Number and date of records   | Conservation Status  |
|-----------------|---|---------------------|------------------------------|--|
| Flowering Plant | <i>Silene latifolia x dioica</i> = <i>S. x hampeana</i> | Hybrid Campion      | 4 records from 2017 to 2021  | LI-48[LR], LI-VP-48[LR]  |
| Flowering Plant | <i>Silene uniflora</i>                                  | Sea Campion         | 8 records from 2015 to 2022  | LI-48[LS], LI-50[LR], LI-VP-48[LS], LI-VP-50[LS], LI-VP-51[LR]   |
| Flowering Plant | <i>Silene vulgaris</i>                                  | Bladder Campion     | 11 records from 2014 to 2021 | WRL-VP[NT]   |
| Flowering Plant | <i>Sinapis arvensis</i>                                 | Charlock            | 13 records from 2010 to 2019 | GBNNSIP, WRL-VP[VU]  |
| Flowering Plant | <i>Smyrnium olusatrum</i>                               | Alexanders          | 39 records from 2011 to 2021 | GBNNSIP, LI-48[LS], LI-VP-48[LS]   |
| Flowering Plant | <i>Sorbus aria</i> agg.                                 | Common Whitebeam    | 2 records from 2011 to 2021  | LI-48[LR], LI-VP-48[LR]  |
| Flowering Plant | <i>Sorbus rupicola</i>                                  | Rock Whitebeam      | 2 records from 2020 to 2022  | LBAP-C, LBAP-D, LI-48[LR], LI-49[LS], LI-50[LS], LI-51[LR], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LS], RDB-NS, WRL-VP[VU] |
| Flowering Plant | <i>Sorbus torminalis</i>                                | Wild Service-tree   | 1 record from 2014 to 2014   | LBAP-G, LI-48[LR], LI-49[LR], LI-50[LS], LI-51[LS], LI-VP-48[LR], LI-VP-49[LR], LI-VP-50[LS], LI-VP-51[LR]               |
| Flowering Plant | <i>Spergula arvensis</i>                                | Corn Spurrey        | 1 record from 2011 to 2011   | LBAP-G, LI-VP-48[LNS], LI-VP-49[NLS], RL-VU, WRL-VP[NT]  |
| Flowering Plant | <i>Spergularia marina</i>                               | Lesser Sea-spurrey  | 2 records from 2017 to 2019  | LI-49[LS], LI-VP-49[LS]  |
| Flowering Plant | <i>Spergularia media</i>                                | Greater Sea-spurrey | 1 record from 2014 to 2014   | LBAP-C, LI-48[LS], LI-50[LS], LI-VP-48[LS], LI-VP-50[LS]   |

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| Group           | Scientific Name               | Common Name           | Number and date of records  | Conservation Status  |
|-----------------|-------------------------------|-----------------------|-----------------------------|--|
| Flowering Plant | <i>Spergularia rubra</i>      | Sand Spurrey          | 1 record from 2015 to 2015  | LI-51[LS], LI-VP-51[LS]  |
| Flowering Plant | <i>Spergularia rupicola</i>   | Rock Sea-spurrey      | 1 record from 2019 to 2019  | LBAP-C, LI-48[LR], LI-50[LR], LI-VP-48[LR], LI-VP-50[LS]   |
| Flowering Plant | <i>Spiranthes spiralis</i>    | Autumn Lady's-tresses | 7 records from 2013 to 2022 | LBAP-C, LBAP-G, LI-48[LS], LI-49[LS], LI-50[LR], LI-51[LS], LI-52[LS], LI-VP-48[LS], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LS], LI-VP-52[LS], RL-NT |
| Flowering Plant | <i>Stachys arvensis</i>       | Field Woundwort       | 1 record from 2014 to 2014  | GBNNSIP, LBAP-G, LI-48[LS], LI-VP-48[LS], LI-VP-49[NLS], LI-VP-50[LNS], LI-VP-51[LR], RL-NT, WRL-VP[VU]  |
| Flowering Plant | <i>Stellaria neglecta</i>     | Greater Chickweed     | 4 records from 2011 to 2021 | LI-48[LS], LI-VP-48[LS], LI-VP-51[LR]  |
| Flowering Plant | <i>Stellaria pallida</i>      | Lesser Chickweed      | 6 records from 2011 to 2015 | LI-48[LS], LI-51[LS], LI-52[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Tanacetum vulgare</i>      | Tansy                 | 5 records from 2012 to 2019 | LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Thalictrum minus</i>       | Lesser Meadow-rue     | 1 record from 2021 to 2021  | LI-50[LS], LI-51[LS], LI-52[LS], LI-VP-51[LR], LI-VP-52[LS]  |
| Moss            | <i>Thamnobryum alopecurum</i> | Fox-tail Feather-moss | 1 record from 2012 to 2012  | LBAP-C   |



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| Group           | Scientific Name                  | Common Name           | Number and date of records   | Conservation Status   |
|-----------------|----------------------------------|-----------------------|------------------------------|---|
| Flowering Plant | <i>Torilis nodosa</i>            | Knotted Hedge-parsley | 1 record from 2015 to 2015   | LI-49[LS], LI-50[LR], LI-51[LR], LI-52[LS], LI-VP-49[LS], LI-VP-50[LS], LI-VP-51[LR], LI-VP-52[LS]  |
| Moss            | <i>Tortella nitida</i>           | Neat Crisp-moss       | 5 records from 2017 to 2019  | LBAP-C, LBAP-F, LI-48[LR], LI-49[LR], LI-50[LR], LI-51[LR], LI-52[LR], LI-BR-48[LR], LI-BR-49[LR]   |
| Flowering Plant | <i>Tragopogon pratensis</i>      | Goat's-beard          | 22 records from 2011 to 2021 | LI-48[LS], LI-VP-48[LS]   |
| Flowering Plant | <i>Trifolium fragiferum</i>      | Strawberry Clover     | 3 records from 2015 to 2022  | LI-48[LS], LI-50[LR], LI-51[LS], LI-VP-48[LS], LI-VP-50[LS], LI-VP-51[LR], RL-VU  |
| Flowering Plant | <i>Trifolium medium</i>          | Zigzag Clover         | 8 records from 2013 to 2022  | LI-48[LS], LI-VP-48[LS]   |
| Flowering Plant | <i>Trifolium micranthum</i>      | Slender Trefoil       | 1 record from 2015 to 2015   | LI-48[LR], LI-VP-48[LR], LI-VP-51[LS]   |
| Flowering Plant | <i>Trifolium scabrum</i>         | Rough Clover          | 1 record from 2022 to 2022   | LBAP-C, LBAP-G, LI-48[LS], LI-49[LR], LI-50[LR], LI-51[LR], LI-52[LR], LI-VP-48[LS], LI-VP-49[LR], LI-VP-50[LR], LI-VP-51[LR], LI-VP-52[LS] |
| Flowering Plant | <i>Trifolium striatum</i>        | Knotted Clover        | 6 records from 2018 to 2022  | LI-48[LR], LI-50[LS], LI-VP-48[LR]  |
| Flowering Plant | <i>Triglochin maritimum</i>      | Sea Arrowgrass        | 1 record from 2021 to 2021   | LI-50[LR], LI-VP-50[LS]   |
| Flowering Plant | <i>Tripleurospermum inodorum</i> | Scentless Mayweed     | 9 records from 2011 to 2021  | GBNNSIP, LI-48[LS], LI-VP-48[LS]  |

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| Group           | Scientific Name              | Common Name              | Number and date of records   | Conservation Status  |
|-----------------|------------------------------|--------------------------|------------------------------|--|
| Flowering Plant | <i>Trisetum flavescens</i>   | Yellow Oat-grass         | 9 records from 2012 to 2022  | LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Typha angustifolia</i>    | Lesser Bulrush           | 1 record from 2015 to 2015   | LI-48[LR], LI-49[LR], LI-50[LR], LI-52[LS], LI-VP-48[LR], LI-VP-49[LR], LI-VP-50[LS], LI-VP-51[LS], LI-VP-52[LS] |
| Flowering Plant | <i>Ulex gallii</i>           | Western Gorse            | 17 records from 2014 to 2021 | LBAP-A, LBAP-C, LBAP-E   |
| Flowering Plant | <i>Ulmus procera</i>         | English Elm              | 6 records from 2012 to 2021  | LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Umbilicus rupestris</i>   | Navelwort                | 3 records from 2014 to 2019  | LI-51[LS], LI-VP-51  |
| Flowering Plant | <i>Urtica urens</i>          | Small Nettle             | 12 records from 2011 to 2021 | GBNNSIP, LI-48[LS], LI-VP-48[LS]   |
| Flowering Plant | <i>Valeriana dioica</i>      | Marsh Valerian           | 1 record from 2014 to 2014   | LI-48[LS], LI-49[LR], LI-50[LS], LI-VP-48[LS], LI-VP-49[LR], LI-VP-52[EX]  |
| Flowering Plant | <i>Valerianella carinata</i> | Keeled-fruited Cornsalad | 1 record from 2015 to 2015   | GBNNSIP, LI-50[LS], LI-51[LR]  |
| Flowering Plant | <i>Valerianella locusta</i>  | Common Cornsalad         | 3 records from 2015 to 2022  | LI-50[LS]  |
| Flowering Plant | <i>Verbena officinalis</i>   | Vervain                  | 1 record from 2021 to 2021   | GBNNSIP, LBAP-G, LI-49[LS], LI-50[LR], LI-51[LR], LI-52[LR], LI-VP-49[LS], LI-VP-50[LR], LI-VP-51, LI-VP-52[LR]  |
| Flowering Plant | <i>Veronica agrestis</i>     | Green Field-speedwell    | 2 records from 2014 to 2021  | GBNNSIP, LI-48[LS], LI-VP-48[LS]   |

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| Group           | Scientific Name                        | Common Name               | Number and date of records   | Conservation Status   |
|-----------------|--|---------------------------|------------------------------|---|
| Flowering Plant | <i>Veronica spicata</i>                | Spiked Speedwell          | 1 record from 2011 to 2011   | LBAP-D, LI-50[LR], LI-VP-48, LI-VP-49[LS], LI-VP-50[LR], LI-VP-51, WCA8                           |
| Flowering Plant | <i>Veronica spicata subsp. hybrida</i> | Western Spiked Speedwell  | 1 record from 2018 to 2018   | LI-48[LR], LI-49[LS], LI-51[LR], LI-VP-48[LR], LI-VP-49[LS], LI-VP-50[LR], LI-VP-51, RDB-NS, WCA8 |
| Flowering Plant | <i>Viburnum opulus</i>                 | Guelder-rose              | 9 records from 2012 to 2018  | LI-52[LS], LI-VP-52[LS]   |
| Flowering Plant | <i>Vicia tetrasperma</i>               | Smooth Tare               | 5 records from 2014 to 2022  | LBAP-G, LI-48[LS], LI-49[LR], LI-VP-48[LS], LI-VP-49[LR], LI-VP-51, LI-VP-52[LS]                  |
| Flowering Plant | <i>Vinca minor</i>                     | Lesser Periwinkle         | 3 records from 2010 to 2015  | GBNNSIP, LBAP-G, LI-49[LS], LI-VP-49[LS], LI-VP-51  |
| Flowering Plant | <i>Viola arvensis</i>                  | Field Pansy               | 2 records from 2014 to 2019  | GBNNSIP, LI-48[LS], LI-VP-48[LS]  |
| Flowering Plant | <i>Viola hirta</i>                     | Hairy Violet              | 4 records from 2010 to 2022  | LI-49[LS], LI-50[LS], LI-52[LS], LI-VP-49[LS], LI-VP-51   |
| Flowering Plant | <i>Viola odorata</i>                   | Sweet Violet              | 3 records from 2012 to 2015  | LI-48[LR], LI-VP-48[LR]   |
| Flowering Plant | <i>Viola reichenbachiana</i>           | Early Dog-violet          | 15 records from 2015 to 2023 | LI-52[LS]   |
| Flowering Plant | <i>Vulpia myuros</i>                   | Rat's-tail Fescue         | 1 record from 2015 to 2015   | GBNNSIP, LBAP-G, LI-49[LS], LI-52[LS], LI-VP-49[LS]   |
| Moss            | <i>Weissia controversa</i>             | Green-tufted Stubble-moss | 5 records from 2019 to 2020  | LBAP-D  |



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| Group | Scientific Name           | Common Name          | Number and date of records | Conservation Status  |
|-------|---------------------------|----------------------|----------------------------|----------------------|
| Moss  | <i>Weissia longifolia</i> | Crisp Beardless-moss | 1 record from 2017 to 2017 | LBAP-D, LI-BR-49[LR] |

### A.1.2 Terrestrial invertebrates

Table A. 2 Terrestrial invertebrates.

| Group                        | Scientific Name            | Common Name     | Number and date of records  | Conservation Status |
|------------------------------|----------------------------|-----------------|-----------------------------|---------------------|
| Insect - Moth                | <i>Acronicta psi</i>       | Grey Dagger     | 1 record from 2013 to 2013  | BAP, LBAP-G, S7     |
| Insect - Dragonfly (Odonata) | <i>Aeshna cyanea</i>       | Southern Hawker | 8 records from 2010 to 2020 | LBAP-E              |
| Insect - Dragonfly (Odonata) | <i>Aeshna grandis</i>      | Brown Hawker    | 1 record from 2022 to 2022  | LBAP-E, LBAP-G      |
| Insect - Dragonfly (Odonata) | <i>Aeshna juncea</i>       | Common Hawker   | 7 records from 2010 to 2019 | LBAP-E              |
| Insect - Dragonfly (Odonata) | <i>Aeshna mixta</i>        | Migrant Hawker  | 2 records from 2011 to 2011 | LBAP-E              |
| Insect - Moth                | <i>Agrochola lychnidis</i> | Beaded Chestnut | 2 records from 2010 to 2014 | BAP, LBAP-G, S7     |

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| Group                        | Scientific Name               | Common Name             | Number and date of records   | Conservation Status |
|------------------------------|-------------------------------|-------------------------|------------------------------|---------------------|
| Insect - Moth                | <i>Allophytes oxyacanthae</i> | Green-brindled Crescent | 2 records from 2011 to 2013  | BAP, LBAP-G, S7     |
| Insect - Moth                | <i>Amphipyra tragopoginis</i> | Mouse Moth              | 2 records from 2012 to 2016  | BAP, LBAP-G, S7     |
| Insect - Dragonfly (Odonata) | <i>Anax imperator</i>         | Emperor Dragonfly       | 14 records from 2010 to 2018 | LBAP-E              |
| Insect - Moth                | <i>Anchoscelis litura</i>     | Brown-spot Pinion       | 1 record from 2013 to 2013   | BAP, S7             |
| Insect - Moth                | <i>Apamea remissa</i>         | Dusky Brocade           | 2 records from 2011 to 2019  | BAP, LBAP-G, S7     |
| Insect - Moth                | <i>Arctia caja</i>            | Garden Tiger            | 1 record from 2011 to 2011   | BAP, LBAP-G, S7     |
| Insect - Butterfly           | <i>Aricia agestis</i>         | Brown Argus             | 2 records from 2011 to 2019  | LBAP-D              |
| Insect - Moth                | <i>Atethmia centrago</i>      | Centre-barred Sallow    | 1 record from 2014 to 2014   | BAP, LBAP-G, S7     |
| Insect - Hymenopteran        | <i>Bombus hortorum</i>        | Small Garden Bumblebee  | 1 record from 2012 to 2012   | LBAP-F              |
| Insect - Hymenopteran        | <i>Bombus lapidarius</i>      | Red-tailed Bumblebee    | 5 records from 2012 to 2022  | LBAP-F              |
| Insect - Hymenopteran        | <i>Bombus lucorum</i>         | White-tailed Bumblebee  | 1 record from 2017 to 2017   | LBAP-F              |

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| Group                        | Scientific Name             | Common Name           | Number and date of records   | Conservation Status |
|------------------------------|-----------------------------|-----------------------|------------------------------|---------------------|
| Insect - Hymenopteran        | <i>Bombus pascuorum</i>     | Common Carder Bee     | 3 records from 2012 to 2022  | LBAP-F              |
| Insect - Hymenopteran        | <i>Bombus pratorum</i>      | Early Bumblebee       | 2 records from 2012 to 2014  | LBAP-F              |
| Insect - Hymenopteran        | <i>Bombus terrestris</i>    | Buff-tailed Bumblebee | 4 records from 2012 to 2020  | LBAP-F              |
| Insect - Moth                | <i>Callimorpha dominula</i> | Scarlet Tiger         | 6 records from 2018 to 2023  | LBAP-G              |
| Insect - Dragonfly (Odonata) | <i>Calopteryx splendens</i> | Banded Demoiselle     | 1 record from 2018 to 2018   | LBAP-E              |
| Insect - Dragonfly (Odonata) | <i>Calopteryx virgo</i>     | Beautiful Demoiselle  | 5 records from 2011 to 2022  | LBAP-E              |
| Insect - Moth                | <i>Caradrina morpheus</i>   | Mottled Rustic        | 1 record from 2016 to 2016   | BAP, LBAP-G, S7     |
| Insect - Butterfly           | <i>Celastrina argiolus</i>  | Holly Blue            | 17 records from 2013 to 2022 | LBAP-C              |
| Insect - Moth                | <i>Ceramica pisi</i>        | Broom Moth            | 2 records from 2010 to 2015  | BAP, LBAP-G, S7     |
| Insect - Moth                | <i>Chiasmia clathrata</i>   | Latticed Heath        | 1 record from 2010 to 2010   | BAP, LBAP-G, S7     |
| Insect - Moth                | <i>Cirrhia gilvago</i>      | Dusky-lemon Sallow    | 1 record from 2013 to 2013   | BAP, S7             |

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| Group                        | Scientific Name               | Common Name             | Number and date of records   | Conservation Status    |
|------------------------------|-------------------------------|-------------------------|------------------------------|------------------------|
| Insect - Moth                | <i>Cirrhia icteritia</i>      | Sallow                  | 2 records from 2011 to 2013  | BAP, LBAP-G, S7        |
| Insect - Dragonfly (Odonata) | <i>Coenagrion puella</i>      | Azure Damselfly         | 16 records from 2010 to 2019 | LBAP-E                 |
| Insect - Butterfly           | <i>Coenonympha pamphilus</i>  | Small Heath             | 4 records from 2012 to 2022  | BAP, LBAP-G, RL-NT, S7 |
| Insect - Dragonfly (Odonata) | <i>Cordulegaster boltonii</i> | Golden-ringed Dragonfly | 1 record from 2017 to 2017   | LBAP-E                 |
| Insect - Moth                | <i>Diarsia rubi</i>           | Small Square-spot       | 2 records from 2010 to 2013  | BAP, LBAP-G, S7        |
| Insect - Moth                | <i>Diloba caeruleocephala</i> | Figure of Eight         | 1 record from 2015 to 2015   | BAP, S7                |
| Insect - Moth                | <i>Ecliptopera silaceata</i>  | Small Phoenix           | 1 record from 2014 to 2014   | BAP, LBAP-G, S7        |
| Insect - Dragonfly (Odonata) | <i>Enallagma cyathigerum</i>  | Common Blue Damselfly   | 12 records from 2010 to 2021 | LBAP-E                 |
| Insect - Moth                | <i>Ennomos erosaria</i>       | September Thorn         | 2 records from 2011 to 2013  | BAP, S7                |
| Insect - Moth                | <i>Ennomos fuscantaria</i>    | Dusky Thorn             | 2 records from 2011 to 2013  | BAP, LBAP-G, S7        |
| Insect - Moth                | <i>Ennomos quercinaria</i>    | August Thorn            | 1 record from 2013 to 2013   | BAP, LBAP-G, S7        |



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| Group                        | Scientific Name          | Common Name               | Number and date of records   | Conservation Status                    |
|------------------------------|--------------------------|---------------------------|------------------------------|--|
| Insect - Butterfly           | <i>Erynnis tages</i>     | Dingy Skipper             | 3 records from 2021 to 2022  | BAP, LBAP-C, LBAP-F, LBAP-G, RL-VU, S7 |
| Insect - Butterfly           | <i>Favonius quercus</i>  | Purple Hairstreak         | 8 records from 2010 to 2021  | LBAP-C                                 |
| Insect - Moth                | <i>Hepialus humuli</i>   | Ghost Moth                | 1 record from 2010 to 2010   | BAP, LBAP-G, S7                        |
| Insect - Butterfly           | <i>Hipparchia semele</i> | Grayling                  | 4 records from 2010 to 2022  | BAP, LBAP-G, RL-VU, S7                 |
| Insect - Moth                | <i>Hoplodrina blanda</i> | Rustic                    | 2 records from 2012 to 2013  | BAP, LBAP-G, S7                        |
| Insect - Moth                | <i>Hydraecia micacea</i> | Rosy Rustic               | 2 records from 2011 to 2013  | BAP, LBAP-G, S7                        |
| Insect - Dragonfly (Odonata) | <i>Ischnura elegans</i>  | Blue-tailed Damselfly     | 19 records from 2010 to 2018 | LBAP-E                                 |
| Insect - Butterfly           | <i>Lasiommata megera</i> | Wall                      | 9 records from 2011 to 2022  | BAP, LBAP-G, RL-NT, S7                 |
| Insect - Dragonfly (Odonata) | <i>Lestes sponsa</i>     | Emerald Damselfly         | 6 records from 2012 to 2020  | LBAP-E, LI-50                          |
| Insect - Moth                | <i>Leucania comma</i>    | Shoulder-striped Wainscot | 2 records from 2012 to 2020  | BAP, LBAP-G, S7                        |

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| Group                        | Scientific Name                  | Common Name          | Number and date of records   | Conservation Status                                  |
|------------------------------|----------------------------------|----------------------|------------------------------|--|
| Insect - Dragonfly (Odonata) | <i>Libellula depressa</i>        | Broad-bodied Chaser  | 12 records from 2010 to 2022 | LBAP-E   |
| Insect - Dragonfly (Odonata) | <i>Libellula quadrimaculata</i>  | Four-spotted Chaser  | 10 records from 2010 to 2019 | LBAP-E   |
| Insect - Moth                | <i>Lycia hirtaria</i>            | Brindled Beauty      | 1 record from 2016 to 2016   | BAP, LBAP-G, S7                                      |
| Insect - Moth                | <i>Mecyna asinalis</i>           | Coastal Pearl        | 1 record from 2022 to 2022   | RDB-NB   |
| Insect - Moth                | <i>Melanchra persicariae</i>     | Dot Moth             | 1 record from 2013 to 2013   | BAP, LBAP-G, S7                                      |
| Insect - Moth                | <i>Mniotype adusta</i>           | Dark Brocade         | 1 record from 2010 to 2010   | BAP, LBAP-G, S7                                      |
| Insect - Dragonfly (Odonata) | <i>Orthetrum cancellatum</i>     | Black-tailed Skimmer | 2 records from 2011 to 2020  | LBAP-E   |
| Insect - Moth                | <i>Orthosia gracilis</i>         | Powdered Quaker      | 2 records from 2012 to 2015  | BAP, LBAP-G, S7                                      |
| Insect - Butterfly           | <i>Plebejus argus</i>            | Silver-studded Blue  | 2 records from 2020 to 2023  | BAP, LBAP-C, LBAP-D, LBAP-E, LBAP-F, RL-VU, S7, WCA5 |
| Insect - Butterfly           | <i>Plebejus argus caernensis</i> |                      | 1 record from 2014 to 2014   | BAP, S7, WCA5  |
| Insect - Butterfly           | <i>Plebejus argus cretaceus</i>  | Silver-Studded Blue  | 2 records from 2020 to 2020  | BAP, S7, WCA5  |
| Insect - Dragonfly (Odonata) | <i>Pyrrhosoma nymphula</i>       | Large Red Damselfly  | 15 records from 2010 to 2020 | LBAP-E   |

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| Group                        | Scientific Name                 | Common Name             | Number and date of records   | Conservation Status          |
|------------------------------|---------------------------------|-------------------------|------------------------------|------------------------------|
| Insect - Moth                | <i>Rhizedra lutosa</i>          | Large Wainscot          | 2 records from 2010 to 2012  | BAP, LBAP-G, S7              |
| Insect - Butterfly           | <i>Satyrrium w-album</i>        | White-letter Hairstreak | 2 records from 2018 to 2018  | BAP, LBAP-F, RL-EN, S7, WCA5 |
| Insect - Moth                | <i>Scotopteryx bipunctaria</i>  | Chalk Carpet            | 1 record from 2021 to 2021   | BAP, LBAP-D, S7              |
| Insect - Moth                | <i>Scotopteryx chenopodiata</i> | Shaded Broad-bar        | 7 records from 2010 to 2022  | BAP, LBAP-G, S7              |
| Insect - Beetle (Coleoptera) | <i>Sitona macularius</i>        |                         | 1 record from 2010 to 2010   | RDB-NB                       |
| Insect - Butterfly           | <i>Speyeria aglaja</i>          | Dark Green Fritillary   | 5 records from 2019 to 2023  | LBAP-F, LBAP-G               |
| Insect - Moth                | <i>Spilosoma lubricipeda</i>    | White Ermine            | 2 records from 2010 to 2016  | BAP, LBAP-G, S7              |
| Insect - Moth                | <i>Spilosoma lutea</i>          | Buff Ermine             | 2 records from 2010 to 2013  | BAP, LBAP-G, S7              |
| Insect - Dragonfly (Odonata) | <i>Sympetrum danae</i>          | Black Darter            | 2 records from 2019 to 2019  | LBAP-E                       |
| Insect - Dragonfly (Odonata) | <i>Sympetrum sanguineum</i>     | Ruddy Darter            | 4 records from 2019 to 2019  | LBAP-E, LI-50                |
| Insect - Dragonfly (Odonata) | <i>Sympetrum striolatum</i>     | Common Darter           | 10 records from 2011 to 2021 | LBAP-E, RL-DD                |

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| Group         | Scientific Name           | Common Name      | Number and date of records  | Conservation Status |
|---------------|---------------------------|------------------|-----------------------------|---------------------|
| Insect - Moth | <i>Tholera cespitis</i>   | Hedge Rustic     | 1 record from 2018 to 2018  | BAP, LBAP-G, S7     |
| Insect - Moth | <i>Tholera decimalis</i>  | Feathered Gothic | 1 record from 2013 to 2013  | BAP, S7             |
| Insect - Moth | <i>Timandra comae</i>     | Blood-vein       | 2 records from 2013 to 2013 | BAP, S7             |
| Insect - Moth | <i>Tyria jacobaeae</i>    | Cinnabar         | 8 records from 2012 to 2020 | BAP, LBAP-G, S7     |
| Insect - Moth | <i>Watsonalla binaria</i> | Oak Hook-tip     | 1 record from 2013 to 2013  | BAP, LBAP-G, S7     |

### A.1.3 Aquatic invertebrates and fish

Table A. 3 Aquatic invertebrates and fish.

| Group                               | Taxon Name                         | Common Name            | Number and date of records | Conservation Status |
|-------------------------------------|------------------------------------|------------------------|----------------------------|---------------------|
| Bony Fish (Actinopterygii)          | <i>Scardinius erythrophthalmus</i> | Rudd                   | 1 record from 2018         | LBAP-C              |
| Cartilaginous Fish (Chondrichthyes) | <i>Scyliorhinus canicula</i>       | Lesser Spotted Dogfish | 1 record from 2014         | LBAP-C              |



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### A.1.4 Amphibians and reptiles

Table A. 4 Amphibians and reptiles.

| Group     | Scientific Name               | Common Name        | Date and number of records   | Conservation Status  |
|-----------|-------------------------------|--------------------|------------------------------|--|
| Reptile   | <i>Anguis fragilis</i>        | Slow-worm          | 17 records from 2010 to 2023 | BAP, Bern3, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, LBAP-T, S7, WCA5                     |
| Amphibian | <i>Bufo bufo</i>              | Common Toad        | 18 records from 2010 to 2020 | BAP, Bern3, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-G, LBAP-T, S7, WCA5                             |
| Amphibian | <i>Lissotriton</i>            | Newt sp.           | 25 records from 2011 to 2021 | Bern3, WCA5  |
| Amphibian | <i>Lissotriton helveticus</i> | Palmate Newt       | 27 records from 2011 to 2023 | Bern3, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-T, WCA5  |
| Amphibian | <i>Lissotriton vulgaris</i>   | Smooth Newt        | 25 records from 2010 to 2023 | Bern3, LBAP-C, LBAP-D, LBAP-F, LBAP-T, WCA5  |
| Reptile   | <i>Natrix helvetica</i>       | Grass Snake        | 7 records from 2011 to 2022  | BAP, Bern3, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, LBAP-T, S7, WCA5                     |
| Amphibian | <i>Rana temporaria</i>        | Common Frog        | 20 records from 2010 to 2023 | Bern3, HDir5, LBAP-A, LBAP-C, LBAP-F, LBAP-T, WCA5   |
| Amphibian | <i>Triturus cristatus</i>     | Great Crested Newt | 31 records from 2011 to 2023 | BAP, Bern2, CHS2, HDir2, HDir4, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-T, LBAP-W, S7, WCA5 |
| Reptile   | <i>Zootoca vivipara</i>       | Common Lizard      | 6 records from 2011 to 2021  | BAP, Bern3, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, LBAP-T, S7, WCA5                     |

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### A.1.5 Terrestrial mammals

Table A. 5 Terrestrial mammals.

| Group              | Scientific Name                 | Common Name    | Date and number of records   | Conservation Status   |
|--------------------|---------------------------------|----------------|------------------------------|---|
| Terrestrial Mammal | <i>Arvicola amphibius</i>       | Water Vole     | 4 records from 2012 to 2019  | BAP, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, LBAP-T, RL-EN, S7, WCA5, WRL-TM[EN]                                      |
| Terrestrial Mammal | <i>Chiroptera</i>               | Bat            | 5 records from 2012 to 2018  | Bern2, Bonn2, CHS2, HDir4, LBAP-T, WCA5   |
| Terrestrial Mammal | <i>Dama dama</i>                | Fallow Deer    | 23 records from 2011 to 2023 | Bern3, GBNN SIP, LBAP-C   |
| Terrestrial Mammal | <i>Eptesicus serotinus</i>      | Serotine       | 6 records from 2010 to 2012  | Bern2, Bonn2, CHS2, HDir4, LBAP-G, RL-VU, WCA5, WRL-TM[VU]  |
| Terrestrial Mammal | <i>Erinaceus europaeus</i>      | Hedgehog       | 91 records from 2010 to 2022 | BAP, Bern3, LBAP-A, LBAP-C, LBAP-F, LBAP-G, RL-VU, S7, WRL-TM[VU]   |
| Terrestrial Mammal | <i>Lepus europaeus</i>          | Hare           | 3 records from 2010 to 2012  | BAP, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, S7   |
| Terrestrial Mammal | <i>Lutra lutra</i>              | Otter          | 19 records from 2011 to 2022 | BAP, Bern2, CHS2, CITES-A, HDir2, HDir4, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, LBAP-T, LBAP-W, S7, WCA5, WRL-TM[VU] |
| Terrestrial Mammal | <i>Meles meles</i>              | Badger         | 88 records from 2010 to 2023 | Bern3, LBAP-C, LBAP-D, LBAP-F, LBAP-W, PBA  |
| Terrestrial Mammal | <i>Muscardinus avellanarius</i> | Hazel Dormouse | 5 records from 2010 to 2017  | BAP, Bern3, CHS2, HDir4, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, LBAP-T, RL-VU, S7, WCA5, WRL-TM[VU]                          |

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| Group              | Scientific Name                   | Common Name             | Date and number of records   | Conservation Status  |
|--------------------|-----------------------------------|-------------------------|------------------------------|--|
| Terrestrial Mammal | <i>Mustela putorius</i>           | Polecat                 | 7 records from 2012 to 2021  | BAP, Bern3, CHS4, HDir5, LBAP-C, LBAP-E, LBAP-F, LBAP-G, S7                              |
| Terrestrial Mammal | <i>Myotis</i>                     | Myotis Bat species      | 11 records from 2010 to 2020 | Bern2, Bonn2, CHS2, HDir4, WCA5  |
| Terrestrial Mammal | <i>Myotis mystacinus/brandtii</i> | Whiskered/Brandt's Bat  | 3 records from 2012 to 2019  | Bern2, Bonn2, CHS2, HDir4, LBAP-C, RL-DD, WCA5   |
| Terrestrial Mammal | <i>Myotis nattereri</i>           | Natterer's Bat          | 4 records from 2011 to 2015  | Bern2, Bonn2, CHS2, HDir4, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, WCA5                  |
| Terrestrial Mammal | <i>Nyctalus noctula</i>           | Noctule Bat             | 15 records from 2010 to 2020 | BAP, Bern2, Bonn2, CHS2, HDir4, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, S7, WCA5 |
| Terrestrial Mammal | <i>Pipistrellus</i>               | Pipistrelle Bat species | 4 records from 2011 to 2020  | Bern2, Bonn2, CHS2, HDir4, S7, WCA5  |
| Terrestrial Mammal | <i>Pipistrellus pipistrellus</i>  | Common Pipistrelle      | 24 records from 2010 to 2019 | Bonn2, CHS2, HDir4, LBAP-A, LBAP-D, LBAP-E, LBAP-F, LBAP-G, S7, WCA5                     |
| Terrestrial Mammal | <i>Pipistrellus pipistrellus</i>  | Pipistrelle             | 1 record from 2021 to 2021   | Bern2, Bern3, Bonn2, CHS2, HDir4, LBAP-C, S7, WCA5                                       |
| Terrestrial Mammal | <i>Pipistrellus pygmaeus</i>      | Soprano Pipistrelle     | 18 records from 2010 to 2020 | BAP, Bern2, Bonn2, CHS2, HDir4, LBAP-A, LBAP-D, LBAP-E, LBAP-F, LBAP-G, S7, WCA5         |
| Terrestrial Mammal | <i>Plecotus</i>                   | Long-eared Bat species  | 1 record from 2011 to 2011   | Bern2, Bonn2, CHS2, HDir4, WCA5  |
| Terrestrial Mammal | <i>Plecotus auritus</i>           | Brown Long-eared Bat    | 11 records from 2010 to 2020 | BAP, Bern2, Bonn2, CHS2, HDir4, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-G, S7, WCA5         |

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| Group              | Scientific Name                  | Common Name           | Date and number of records   | Conservation Status   |
|--------------------|----------------------------------|-----------------------|------------------------------|---|
| Terrestrial Mammal | <i>Rhinolophus ferrumequinum</i> | Greater Horseshoe Bat | 4 records from 2010 to 2013  | BAP, Bern2, Bonn2, CHS2, HDir2, HDir4, S7, WCA5, WRL-TM[NT]   |
| Terrestrial Mammal | <i>Rhinolophus hipposideros</i>  | Lesser Horseshoe Bat  | 17 records from 2010 to 2021 | BAP, Bern2, Bonn2, CHS2, HDir2, HDir4, LBAP-A, LBAP-C, LBAP-D, LBAP-E, LBAP-F, LBAP-G, LBAP-W, S7, WCA5 |
| Terrestrial Mammal | <i>Sorex araneus</i>             | Common Shrew          | 1 record from 2020 to 2020   | Bern3, LBAP-A, LBAP-C   |

### A.1.6 Invasive and non-native species

**Table A. 6 Invasive non-native species.**

| Group           | Scientific Name                  | Common Name               | Number and date of records   | Conservation Status |
|-----------------|----------------------------------|---------------------------|------------------------------|---------------------|
| Flowering Plant | <i>Allium triquetrum</i>         | Three-cornered Garlic     | 3 records from 2012 to 2015  | GBNNSIP, INNS, WCA9 |
| Flowering Plant | <i>Arbutus unedo</i>             | Strawberry-tree           | 1 record from 2000 to 2000   | INNS                |
| Crustacean      | <i>Austrominius modestus</i>     | Modest barnacle           | 7 records from 1990 to 2003  | GBNNSIP, INNS       |
| Fern            | <i>Azolla filiculoides</i>       | Water Fern                | 3 records from 2008 to 2012  | GBNNSIP, INNS, WCA9 |
| Flowering Plant | <i>Cortaderia selloana</i>       | Pampas-grass              | 2 records from 2015 to 2020  | GBNNSIP, INNS       |
| Flowering Plant | <i>Cotoneaster horizontalis</i>  | Wall Cotoneaster          | 11 records from 2011 to 2021 | GBNNSIP, INNS, WCA9 |
| Flowering Plant | <i>Cotoneaster integrifolius</i> | Entire-leaved Cotoneaster | 8 records from 1995 to 2019  | GBNNSIP, INNS, WCA9 |



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| Group                        | Scientific Name                                       | Common Name              | Number and date of records   | Conservation Status  |
|------------------------------|---|--------------------------|------------------------------|----------------------|
| Flowering Plant              | <i>Cotoneaster microphyllus</i>                       | Small-leaved Cotoneaster | 8 records from 2011 to 2021  | INNS, WCA9           |
| Flowering Plant              | <i>Cotoneaster simonsii</i>                           | Himalayan Cotoneaster    | 7 records from 2015 to 2021  | GBNNSIP, INNS, WCA9  |
| Crustacean                   | <i>Crangonyx pseudogracilis/floridanus</i>            |                          | 1 record from 2017 to 2017   | GBNNSIP, INNS        |
| Flowering Plant              | <i>Crassula helmsii</i>                               | New Zealand Pigmyweed    | 1 record from 1989 to 1989   | GBNNSIP, INNS, WCA9  |
| Flowering Plant              | <i>Crocsmia pottsii x aurea = C. x crocosmiiflora</i> | Montbretia               | 23 records from 2011 to 2021 | GBNNSIP, INNS, WCA9  |
| Flowering Plant              | <i>Elodea canadensis</i>                              | Canadian Waterweed       | 2 records from 1978 to 2014  | GBNNSIP, INNS, WCA9  |
| Mollusc                      | <i>Ensis leei</i>                                     | American jack knife clam | 1 record from 2022 to 2022   | GBNNSIP, INNS        |
| Flowering Plant              | <i>Epilobium brunnescens</i>                          | New Zealand Willowherb   | 1 record from 2010 to 2010   | GBNNSIP, INNS        |
| Flowering Plant              | <i>Fallopia japonica</i>                              | Japanese Knotweed        | 16 records from 1994 to 2022 | GBNNSIP, INNS, WCA9  |
| Flowering Plant              | <i>Fallopia sachalinensis</i>                         | Giant Knotweed           | 1 record from 1992 to 1992   | GBNNSIP, INNS, WCA9  |
| Insect - Beetle (Coleoptera) | <i>Harmonia axyridis</i>                              | Harlequin Ladybird       | 9 records from 2014 to 2022  | GBNNSIP, INNS        |
| Flowering Plant              | <i>Heracleum mantegazzianum</i>                       | Giant Hogweed            | 1 record from 2004 to 2004   | GBNNSIP, INNS, WCA9  |
| Flowering Plant              | <i>Hippophae rhamnoides</i>                           | Sea-buckthorn            | 9 records from 1995 to 2020  | INNS, LBAP-C, RDB-NS |
| Flowering Plant              | <i>Hyacinthoides hispanica</i>                        | Spanish Bluebell         | 4 records from 2012 to 2019  | GBNNSIP, INNS        |

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| Group              | Scientific Name  | Common Name                 | Number and date of records   | Conservation Status |
|--------------------|--|-----------------------------|------------------------------|---------------------|
| Flowering Plant    | <i>Hyacinthoides non-scripta x hispanica</i> = <i>H. x massartiana</i> |                             | 4 records from 2015 to 2017  | GBNNSIP, INNS       |
| Flowering Plant    | <i>Impatiens glandulifera</i>  | Himalayan Balsam            | 32 records from 1995 to 2022 | GBNNSIP, INNS, WCA9 |
| Flowering Plant    | <i>Lamiastrum galeobdolon</i> subsp. <i>argentatum</i>                 | Variegated Yellow Archangel | 10 records from 2012 to 2019 | GBNNSIP, INNS, WCA9 |
| Flowering Plant    | <i>Leycesteria formosa</i>   | Himalayan Honeysuckle       | 2 records from 2015 to 2021  | GBNNSIP, INNS       |
| Flowering Plant    | <i>Lysichiton americanus</i>   | American Skunk-cabbage      | 2 records from 2022 to 2022  | GBNNSIP, INNS       |
| Flowering Plant    | <i>Mimulus guttatus</i>  | Monkeyflower                | 5 records from 1968 to 2020  | GBNNSIP, INNS       |
| Terrestrial Mammal | <i>Neovison vison</i>  | American Mink               | 16 records from 1990 to 2018 | GBNNSIP, INNS, WCA9 |
| Flowering Plant    | <i>Prunus laurocerasus</i>   | Cherry Laurel               | 26 records from 1985 to 2021 | GBNNSIP, INNS       |
| Flowering Plant    | <i>Prunus lusitanica</i>   | Portugal Laurel             | 2 records from 2000 to 2011  | GBNNSIP, INNS       |
| Flowering Plant    | <i>Rhododendron ponticum</i>   |                             | 5 records from 1996 to 2021  | GBNNSIP, INNS, WCA9 |
| Flowering Plant    | <i>Rosa rugosa</i>   | Japanese Rose               | 12 records from 2015 to 2020 | GBNNSIP, INNS, WCA9 |
| Flowering Plant    | <i>Sedum album</i>   | White Stonecrop             | 25 records from 2015 to 2021 | GBNNSIP, INNS       |