

# MONA OFFSHORE WIND PROJECT

## Preliminary Environmental Information Report

Volume 7, annex 18.1: Terrestrial ecology desk study



April 2023  
Final

Image of an offshore wind farm

**Document status**

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
Rev01	Draft for Client review	RPS	bp/EnBW		09/02/2023
Rev02	For Client review	RPS	bp/EnBW		27/02/2023
Rev03	Final	RPS	bp/EnBW	bp/EnBW	09/03/2023

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## Acronyms

Acronym	Description
BAP	UK Biodiversity Action Plan Priority Species
CE	Critically Endangered
CHS2	The Conservation of Habitats and Species Regulations 2017 (Annex 4)
DD	Data deficient
Defra	Department for Environmental and Rural Affairs
EN	Endangered
EX	Extinct
GCN	Great Crested Newt
INNS	Invasive non-native species
IUCN	The International Union for Conservation of Nature
JNCC	Joint Nature Conservation Committee
LC	Least concern
LNR	Local Nature Reserve
LSS	Land Substation
LSS2	Land Substation Option 2
LSS7	Land Substation Option 7
LWS	Local Wildlife Site
MAGIC	Multi-Agency Geographic Information for the Countryside
NN	Nationally Notable
NNA	Nationally Notable A
NNB	Nationally Notable B
NNRs	National Nature Reserves
NRW	Natural Resources Wales
NS	Nationally Scarce
NT	Near threatened
NVC	National Vegetation Classification
OS	Ordnance Survey
PBA	The Protection of Badgers Act 1992
PEIR	Preliminary Environmental Information Report
pSAC	Possible SAC
pSPA	Potential SPA
R	Rare
S7	Environment (Wales) Act 2016 (Section 7)

Acronym	Description
SAC	Special Area of Conservation
SI	Suitability Index
SSSI	Site of Special Scientific Interest
VU	Vulnerable
WCA	Wildlife and Countryside Act 1981 (as amended)

## Units

Unit	Description
km	Kilometre(s)
m	Metre(s)
%	Percentage
m <sup>2</sup>	Square metres

## 1 INTRODUCTION

1.1.1.1 The purpose of this technical report is to present the methodology and results of the terrestrial ecology desk study undertaken in 2022 for the Mona Offshore Wind Project.

1.1.1.2 This technical report has been used to inform the volume 3, chapter 18: Onshore ecology of the Preliminary Environmental Information Report (PEIR).

### Terrestrial ecology desk study search area

1.1.1.3 For the purposes of this technical report, the Mona Proposed Onshore Development Area has been separated into nine sections, as shown in Figure 1.1 below. As described in volume 1, chapter 3: Project description of the PEIR, two alternative locations have been identified for the Mona Onshore Substation, Land Substation (LSS) Option 2 (LSS2) and LSS Option 7 (LSS7). As such, Section 8 and 9 of the Mona Proposed Onshore Development Area have been sub-divided into LSS2 Section 8, LSS7 Section 8, LSS2 Section 9 and LSS7 Section 9.

1.1.1.4 These sections were informed through discussions with the Applicant and approximately followed the boundaries presented in the Work Plans – Onshore. This also allows the location of ecological features to be more accurately described in relation to the Mona Proposed Onshore Development Area.

1.1.1.5 The terrestrial ecology desk study search area comprises land within the Mona Proposed Onshore Development Area, in addition to the following:

- Internationally designated sites located within 20 kilometres (km) of the Mona Proposed Onshore Development Area, including Special Areas of Conservation (SACs), possible SACs (pSACs), Special Protection Areas (SPAs), potential SPAs (pSPAs) and Ramsar sites
- Nationally designated sites located within 5km of the Mona Proposed Onshore Development Area, including Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)
- Locally designated site located within 2km of the Mona Proposed Onshore Development Area, including Local Nature Reserves (LNRs) and Local Wildlife Sites (LWSs)
- Records of protected or notable species located within 2km of the Mona Proposed Onshore Development Area
- Records of protected or notable plants/invertebrates located within 1km of the Mona Proposed Onshore Development Area.

1.1.1.6 The location and geographic extent of the terrestrial ecology desk study search area used to inform this technical report is presented in Figure 1.2 below.

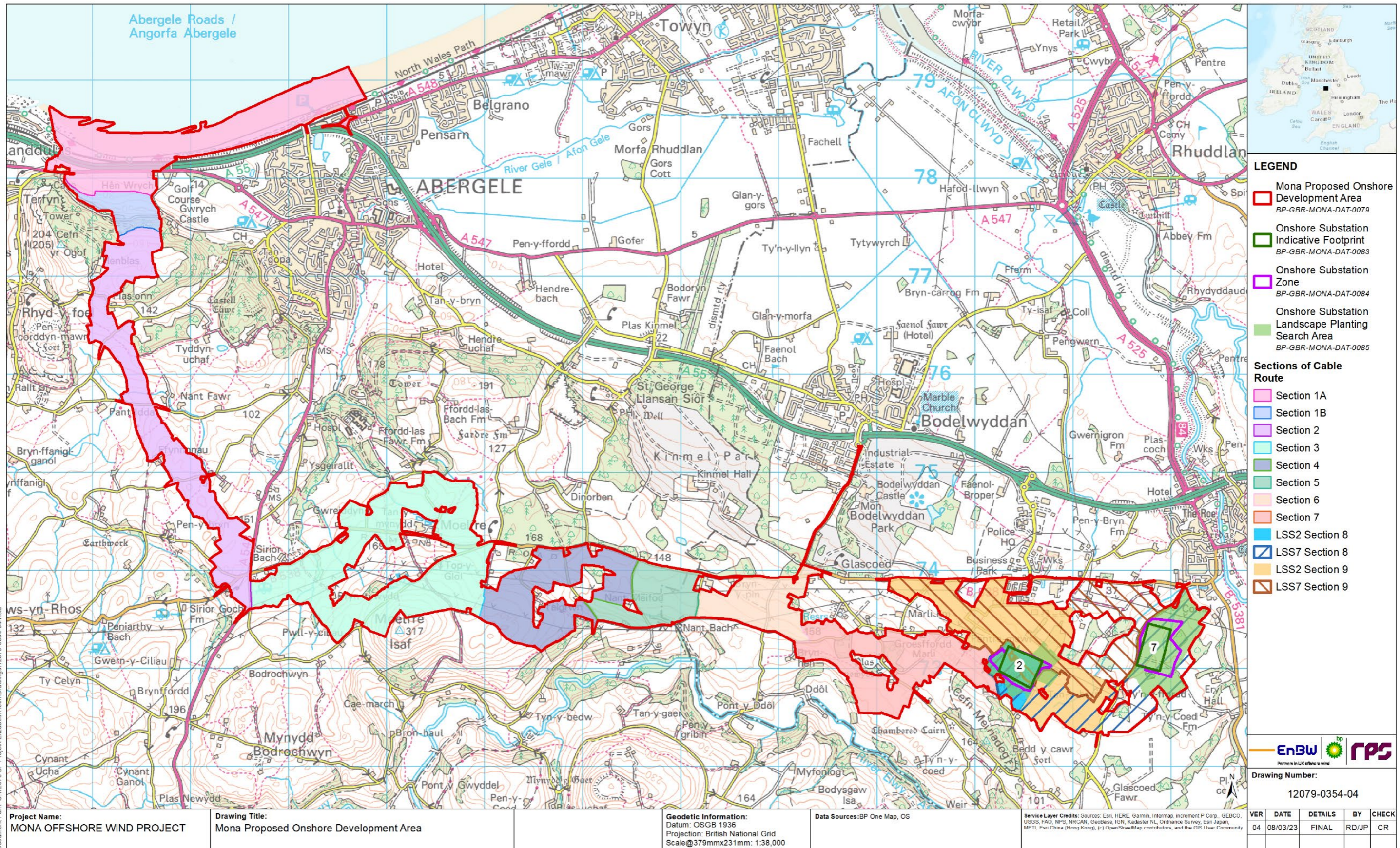


Figure 1.1: Mona Proposed Onshore Development Area.

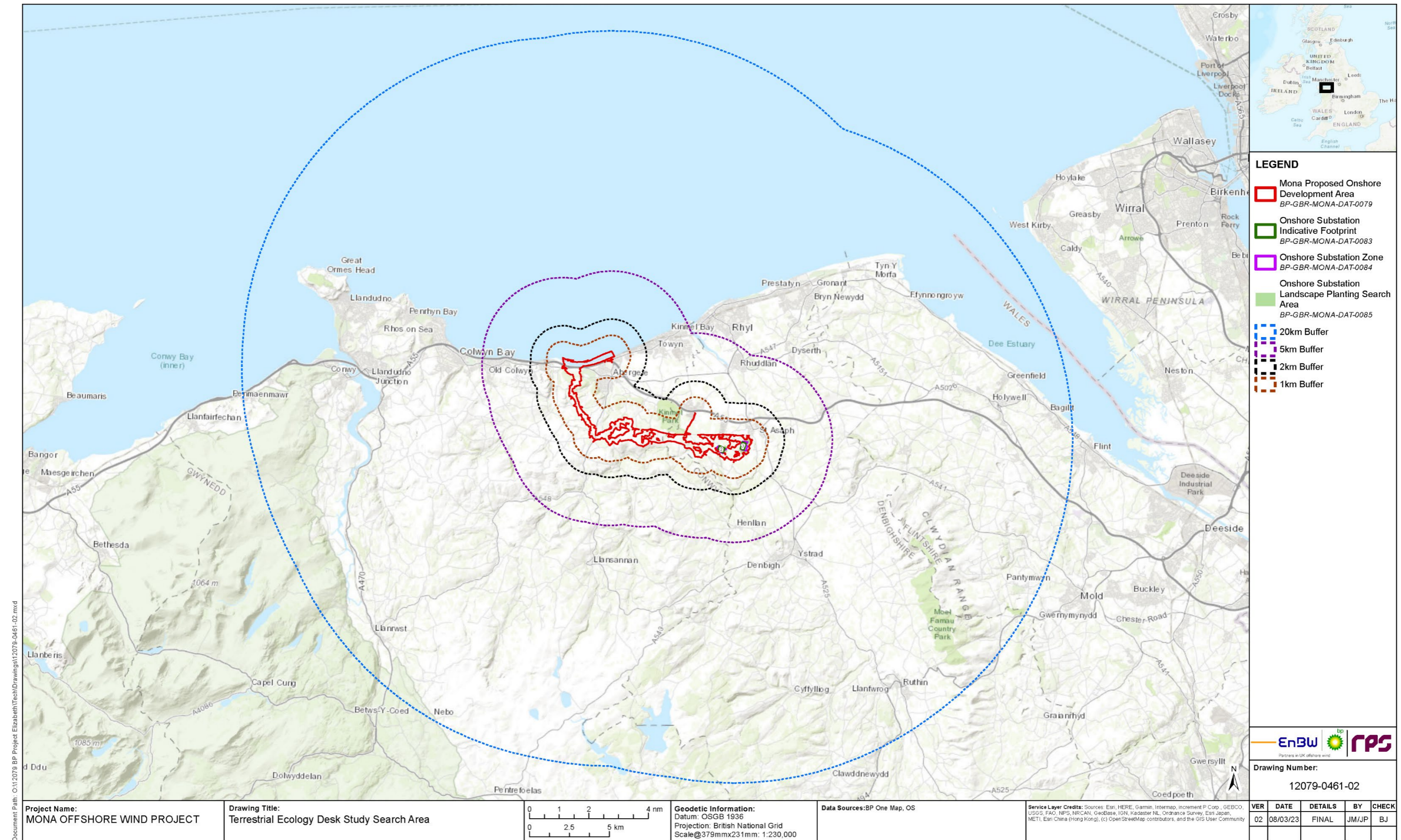


Figure 1.2: Terrestrial ecology desk study search area.

## 1.2 Methodology

### Data request

- 1.2.1.1 Data was requested in March 2022 from the North Wales Environmental Information Service (Cofnod) (Cofnod, 2022) for Category 1 Species, Category 2 Species, Category 3 Species, Invasive Non-Native Species (INNS), statutory designated sites, non-statutory designated sites, ancient woodland, and traditional orchards located within the terrestrial ecology desk study search area. For the purposes of this technical report and in accordance with standard industry practice, only data acquired between 2010 to 2022 has been considered.
- 1.2.1.2 In addition to the data request described above; the Multi Agency Geographic Information for the Countryside (MAGIC) interactive mapping system (Defra, 2023) dataset was consulted regarding statutory sites designated for nature conservation, including SPAs, SACs, NNRs, SSSIs and LNRs located within the terrestrial ecology desk study search area<sup>1</sup>.
- 1.2.1.3 The UK Protected Areas page of the Joint Nature Conservation Committee (JNCC) website was also consulted to obtain citations and information on the designated features of SPAs and SACs located within the terrestrial ecology desk study search area. With regard to SSSI citations, these were obtained directly from Cofnod as part of the wider data request.
- 1.2.1.4 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
Cofnod	Cofnod website	2023	Cofnod
MAGIC	Defra	2023	Defra
UK Protected Area JNCC	JNCC website	2023	JNCC

- 1.2.1.5 Since this data request was made to Cofnod in March 2022, the Mona Proposed Onshore Development Area has been refined and now covers a smaller geographical area. Therefore, the data provided in this technical report covers a greater geographical area than required to inform volume 3, chapter 18: Onshore ecology of the PEIR.
- 1.2.1.6 As such, following submission of the PEIR, a revised data request will be issued to Cofnod based upon the most up-to-date design of the Mona Offshore Wind Project. This revised data request will be used to inform volume 3, chapter 18: Onshore ecology of the Environmental Statement, where appropriate.

### Limitations

- 1.2.1.7 The desk top sources used to inform this technical report comprise third party controlled data, purchased for the purposes of terrestrial ecology desk study only. The Applicant cannot be held liable for any inaccuracies in this data. Whilst the records show where a species has been recorded, they do not confirm where a species is absent. A lack of records in a particular area may be due to no surveys having been undertaken or results of surveys and incidental sightings having not been reported. Therefore, 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 Phase 1 Habitat Surveys (see volume 7, annex 18.2: Phase 1 Habitat Surveys of the PEIR) to inform where further detailed surveys are required.

<sup>1</sup> The MAGIC interactive mapping system provided by Defra provides information regarding statutory sites designated for nature conservation, including SPAs, SACs, NNRs, SSSIs and LNRs located within both England and Wales.



## 2 RESULTS

### 2.1 Statutory designated sites

#### 2.1.1 Internationally designated sites

2.1.1.1 The desk study identified 11 internationally designated sites located within the terrestrial ecology desk study search area (i.e. within 20km of the Mona Proposed Onshore Development Area). The name, designation, distance, and description of these internationally designated sites is provided in Table 2.1 below. The location and geographic extent of these internationally designated sites in relation to the terrestrial ecology desk study search area is presented in Figure 2.1 of this technical report below.

**Table 2.1: Internationally designated sites located within 20km of the Mona Proposed Onshore Development Area.**

Site name	Designation	Distance to Mona Proposed Onshore Development Area (km)	Description
Coedwig oedd Dyffryn Elwy/Elwy Valley Woods	SAC	0.7	Elwy Valley Woods is one of three sites selected to represent <i>Tilio-Acerion</i> Forest across its geographic range on the Carboniferous limestone of north Wales and is an example of habitat with an outstanding lower-plant flora. The canopy is quite varied: ash <i>Fraxinus excelsior</i> is the commonest 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.
Llwyn	SAC	9.2	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> , with transitions to ash <i>Fraxinus excelsior</i> dominance on relatively drier ground.
Coedwig oedd Penrhyn Creuddyn /Creuddyn Peninsula Woods	SAC	9.3	Creuddyn Peninsula Woods has been designated for its <i>Tilio-Acerion</i> forests of slopes, screes and ravines. Creuddyn Peninsula Woods has developed on a series of craggy Carboniferous limestone hills and is a large example of <i>Tilio-Acerion</i> Forest near its west extreme at this latitude in the UK. Semi-natural dry grasslands and scrubland facies on calcareous substrates, and <i>Taxus baccata</i> woods are also present and are qualifying features of the SAC, but not the primary reason for selection of the site.
Y Fenai a Bae Conwy/Menai Strait and	SAC	10.3	Menai Strait and Conwy Bay has been designated for the presence of sandbanks which are slightly covered by sea water at all time, mudflats and sandflats not covered by seawater at low tide, and reefs. Large shallow inlets and bays and submerged or

Site name	Designation	Distance to Mona Proposed Onshore Development Area (km)	Description
Conwy Bay			partially submerged sea caves are also present as qualifying features but not a primary reason for selection of the site.
Aber Dyfrdwy/Dee Estuary	SPA, SAC, Ramsar	10.5	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 selection of the site) 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 <i>Ammophila arenaria</i> , fixed coastal dunes with herbaceous vegetation, and humid dune slacks. Species present as a qualifying feature (but not primary reason for selection of the site) include sea lamprey, river lamprey and petalwort.  The site also qualifies as an SPA as it is used regularly by 1% or more of the Great Britain populations of bar-tailed godwit <i>Limosa lapponica</i> , common tern <i>Sterna hirundo</i> , little tern <i>Sterna albifrons</i> , and sandwich tern <i>Sterna sandvicensis</i> . The site also qualifies as 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.
Mynydd Helygain/Halkyn Mountain	SAC	12.4	Halkyn Mountain has 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 GCN <i>Triturus cristatus</i> breeding population. European dry heaths, semi-natural dry grasslands and scrubland facies on calcareous substrates, and <i>Molinia</i> meadows on calcareous peaty or clayey-silt-laden soils are also present as qualifying features but are not primary reasons for designation.
Pen y Gogarth/ Great Orme's Head	SAC	13.9	Great Orme's Head is designated for its European dry heaths and semi-natural dry grasslands and scrubland facies on calcareous substrates. This north Wales site is the finest example of limestone heath in the UK and supports one of the largest stands in the UK of CG1 <i>Festuca ovina</i> – <i>carlina vulgaris</i> grassland. Vegetated sea cliffs are also a qualifying feature, but not a primary reason for selection of this site.
Coedwig oedd Dyffryn Alun/Alyn Valley Woods	SAC	16.6	Alyn Valley Woods holds one of the largest continuous areas of <i>Tilio-Acerion</i> 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 <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> are

Site name	Designation	Distance to Mona Proposed Onshore Development Area (km)	Description
			also present as qualifying features but are not primary reasons for designation.
Bae Lerpwl/Liverpool Bay	SPA	0.0	Liverpool Bay/Bae Lerpwl SPA is in the east Irish Sea, bordering the coastlines of northwest England and north Wales, and running as a broad arc from Morecambe Bay to the east coast of Anglesey. It is classified 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.
Mwyngloddiau Fforest Gwydir/Gwydyr Forest Mines	SAC	18.7	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 bat colony is also present which is a qualifying feature of the SAC, but not a primary reason for site selection.
Eryri/Snowdonia	SAC	18.7	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, and floating water-plantain. Several other habitats are present that are qualifying features, but not primary reasons for selection of the site.

**2.1.2 Nationally designated sites**

2.1.2.1 The desk study identified six nationally designated sites located within the terrestrial ecology desk study search area (i.e. within 5km of the Mona Proposed Onshore Development Area). The name, designation, distance, and description of these nationally designated sites is provided in Table 2.2 below. The location and geographic extent of these nationally designated sites in relation to the terrestrial ecology desk study search area is presented in Figure 2.2. of this technical report below.

2.1.2.2 Of the six nationally designated sites located within the terrestrial ecology desk study search area, Llanddulas Limestone and Gwrych Castle Wood SSSI and Traeth Pensarn SSSI are located within the Mona Proposed Onshore Development Area itself.

**Table 2.2: Nationally designated sites within 5km of the onshore cable corridor.**

Site name	Designation	Distance to Mona Proposed Onshore Development Area (km)	Description
Llanddulas Limestone and Gwrych Castle Wood	SSSI	0.0	This site is of special interest for limestone (calicolous) grassland, heath and woodland communities, the first two of which comprise some of the largest examples in Clwyd, as well as its populations of vascular plants; bryophytes; butterflies; moths and a winter roost of lesser horseshoe bat.
Traeth Pensarn	SSSI	0.0	This site is of special interest for its vegetated shingle beach plant communities. The site supports both 'pioneer' and 'stable vegetated' shingle, extending approximately 1.7km along the Pensarn beach, from the promenade westward towards Llanddulas.
Coed y Gopa	SSSI	0.6	The site occupies a prominent Carboniferous Limestone hill, there is a disused stone quarry in the southeast corner. The many natural cave and underground mine workings provide opportunities for bat roosting area including a large hibernaculum of lesser horseshoe bats, and smaller numbers of Natterer's bat <i>Myotis nattereri</i> and Daubenton's bat <i>Myotis daubentonii</i> .
Coedydd ac Ogofau Elwy a Meirchion	SSSI	0.7	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.
Mynydd Marian	SSSI	2.3	Mynydd Marian is of special interest for its range of limestone (calicolous) grassland communities as well as its population of the dwarf race of silver studded blue butterfly <i>Plebejus argus ssp. caermensis</i> .

Site name	Designation	Distance to Mona Proposed Onshore Development Area (km)	Description
Coedydd Derw Elwy	SSSI	3.7	Coedydd Derw Elwy is of special interest for its semi-natural broadleaved woodland. The majority of the site is comprised of sessile oak, downy birch, and wood-sorrel.

**2.1.3 Locally designated sites**

2.1.3.1 The desk study identified that there were no LNRs located within the terrestrial ecology desk study search area (i.e. within 2km of the Mona Proposed Onshore Development Area). The location and geographic extent of LNRs in relation to the terrestrial ecology desk study search area is presented in Figure 2.3 of this technical report below.

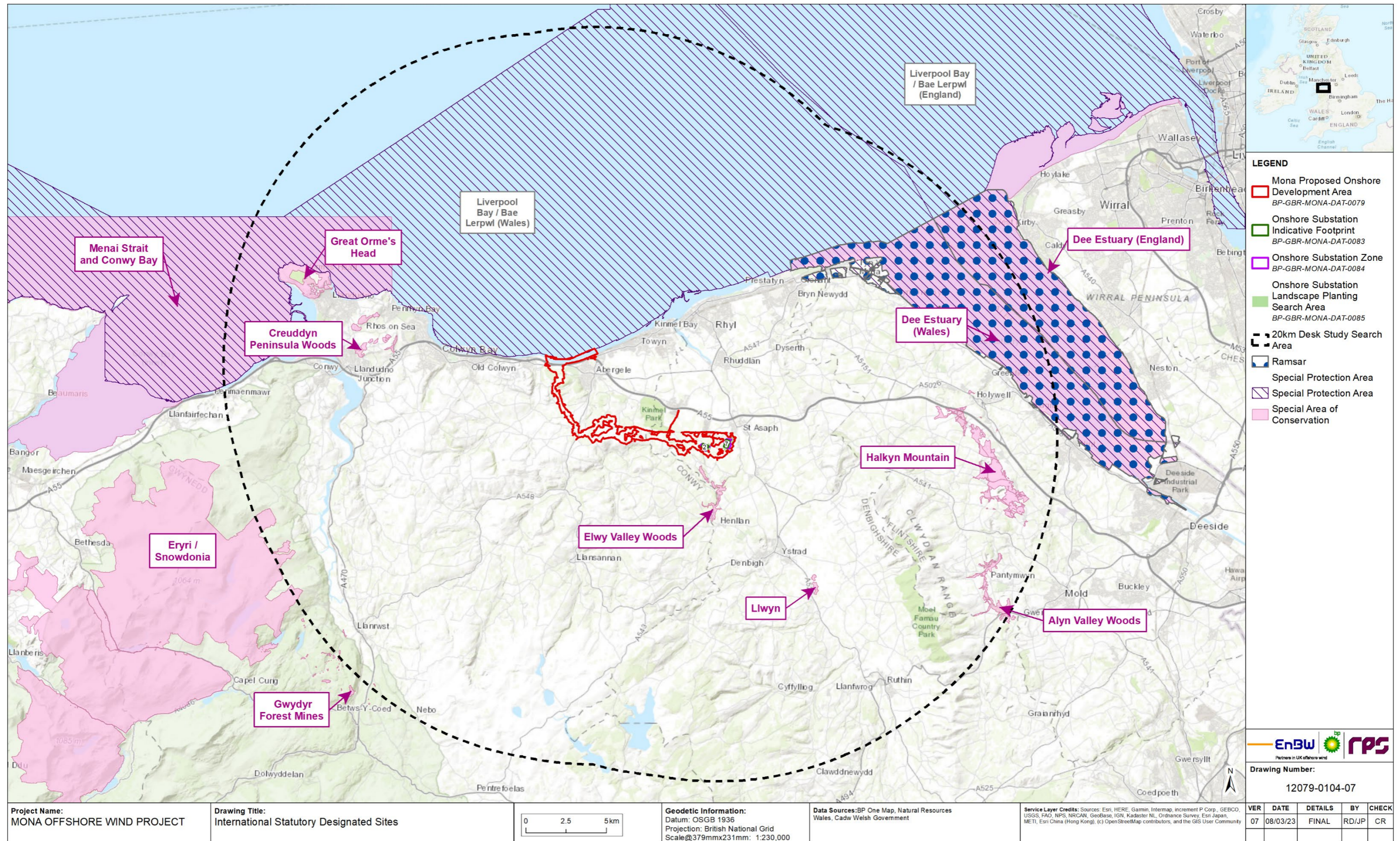


Figure 2.1: Internationally designated sites located within 20km of the Mona Proposed Onshore Development Area.

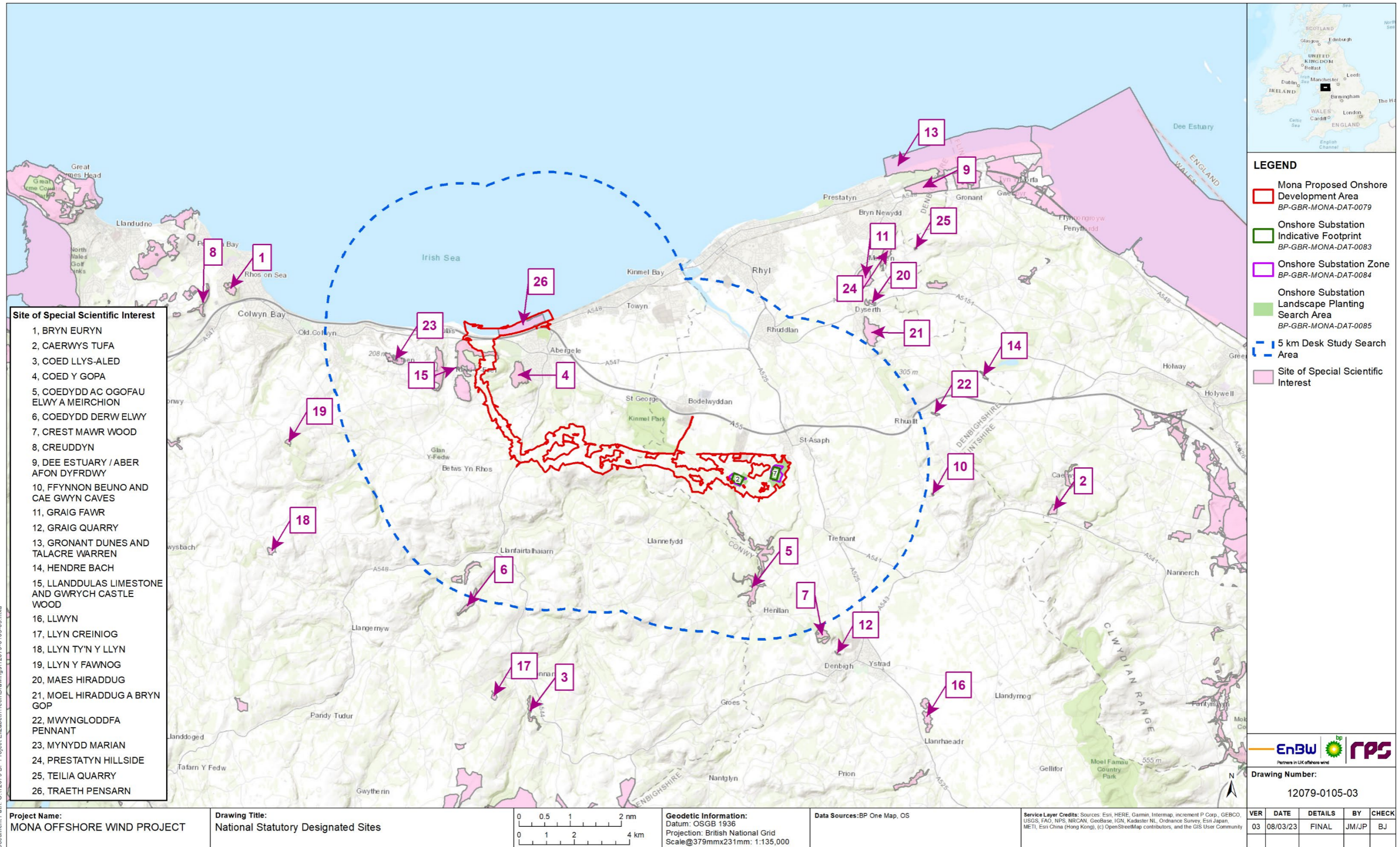


Figure 2.2: Nationally designated sites located within 5km of the Mona Proposed Onshore Development Area.

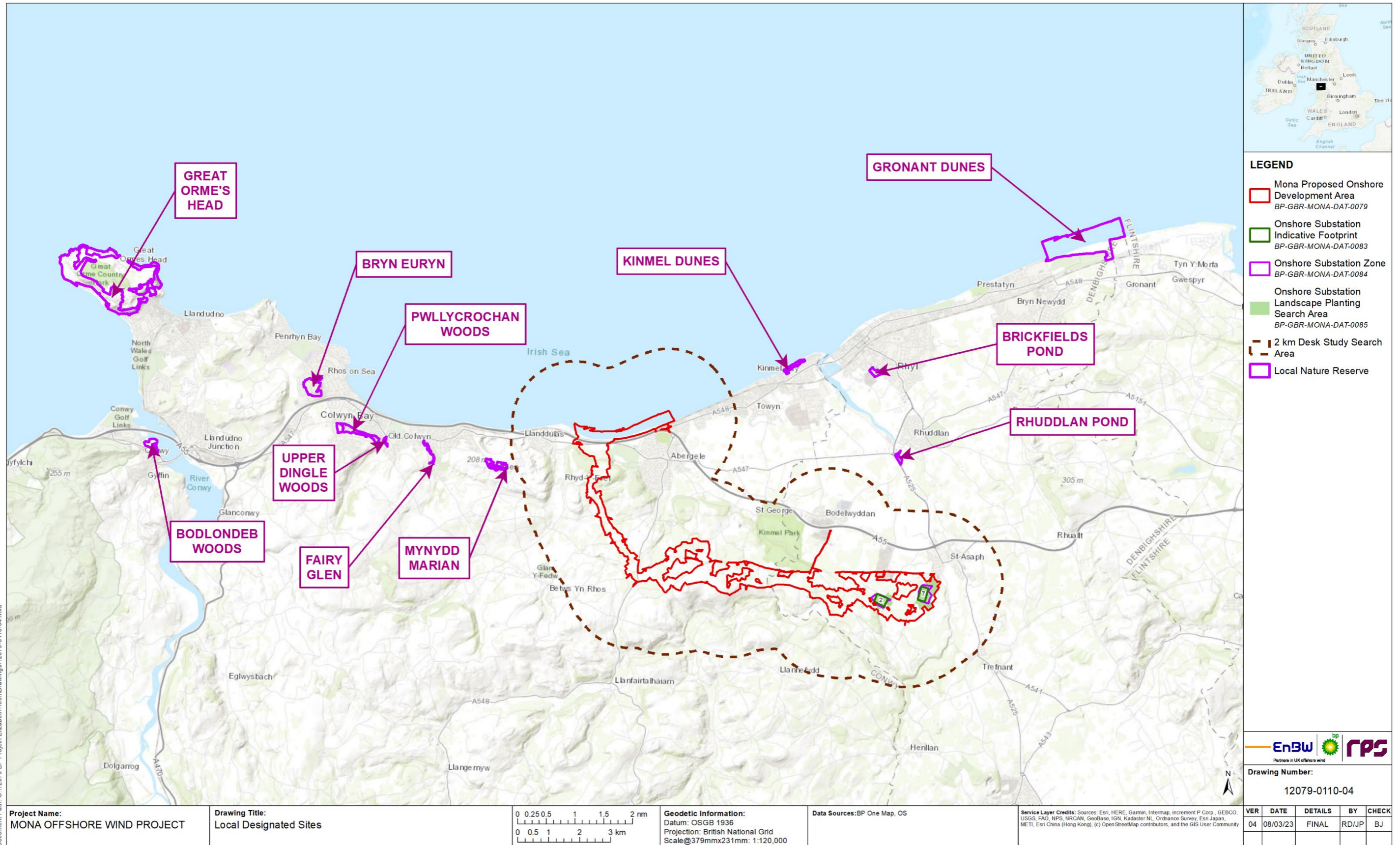


Figure 2.3: Locally designated sites located within 2km of the Mona Proposed Onshore Development Area.

## 2.2 Non-statutory designated sites

### 2.2.1 Locally designated sites

2.2.1.1 There are 76 non-statutory locally designated sites (LWSs) located within the terrestrial ecology desk study search area (i.e. within 2km of the Mona Proposed Onshore Development Area).

2.2.1.2 The name, designation, and distance for each of these LWSs is provided in Table 2.2 below. The location and geographic extent of these LWS sites in relation to the terrestrial ecology desk study search area is presented in Figure 2.4 of this technical report below. Of the 76 LWSs identified within the terrestrial ecology desk study search area, 10 LWSs are located within the Mona Proposed Onshore Development Area.

**Table 2.3: LWSs located within 2km of the Mona Proposed Onshore Development Area.**

Site Name	Distance to Mona Proposed Onshore Development Area (km)
Coed Betws Lodge	0.00
Coed Cord, block to NW and Coed y Saeson	0.00
Coed Fron and Eryl Hall Wood	0.00
Glascoed	0.00
Moelfre Isaf Heath	0.00
Moelfre Isaf heath fragments	0.00
Pensarn Reedbed	0.00
Tan y mynydd	0.00
Tan-yr-ogof Farm	0.00
Ty'n-y-Coed Rough	0.00
Pwll Coed Cae Mach	0.01
Siror Hir Dingles	0.05
Pentre Mawr Park Pools & Reedbed	0.06
Abergele Golf Course 4	0.13
Bryn Meiriadog	0.16
Coed Y Waen	0.17
Coed Bron Haul	0.20
Pwll Coed Pen y Bryn	0.21
Pwll Rookery	0.23
Hen Wrych Pond	0.24
Afon Gele Grassland	0.27
Abergele Golf Course 2	0.28

Site Name	Distance to Mona Proposed Onshore Development Area (km)
Coed Ysgerirallt	0.28
Coed Wig	0.30
Coed Pen-y-bryn	0.35
St Cynbryd's Church Verge	0.35
Dinorben Lodge Quarry	0.40
Abergele Golf Course 3	0.41
North Wales Holiday Camp	0.46
Abergele grazing marsh	0.53
Coed Meibion	0.58
Pwll Fardre	0.58
Abergele Hospital Grounds	0.61
Abergele Golf Course 1	0.70
Afon Gele	0.71
Coed Kendrick	0.75
Fferam Ffordd Las Bach	0.76
Llyn Tyddyn Uchaf	0.78
Coed Tan-y-bryn	0.81
The Warren	0.86
Pwllau Graig	0.87
Berthglyd Pond	0.88
Ffordd Llindir	0.88
Coed y Geufron	0.92
Mount Road Churchyard, St Asaph	0.93
Mynydd y Gaer	1.00
Coed Nant-y-graig	1.11
Coed Parc y Meirch / Coed Ty Croes	1.13
Coed PlasUchaf	1.13
Bryn Plas Uchaf	1.16
Coed y Gopa Extension	1.20
Coed Ty Brith	1.21
Ffordd Las	1.21
Mynydd Bodrochwyn / Bron Heulog Heath	1.22
Chapel Wood/Coed Mawr	1.24

Site Name	Distance to Mona Proposed Onshore Development Area (km)
Coed Mawr	1.26
Rickfield Wood/Coed Ddol fawr/Coed Llanddol/Maes Elwy Covert (R Elwy Woods)	1.30
Coed Bont Newydd	1.34
Coed Nant Ddu	1.47
Mynydd y Gaer Grassland	1.47
Nant Glyd	1.49
Llanddulas limestone	1.51
Coed Parc Kinmel	1.52
Llyn Brynffanigi Uchaf	1.55
St Georges Well	1.58
Coed Mynydd Bodrochwyn	1.59
Geuallt Isaf Wood	1.59
Pwll Parc Kimmel	1.63
Afon Elwy (N1)	1.67
Trawscoed	1.69
Cynant Ganol, eastern pond	1.71
Coed Peniarth Fawr	1.72
Cynant Ganol, western pond	1.74
Pwll Tan-y-bryn	1.76
Sychnant	1.82
Isallt crags and Bryn Gwylan	1.85

- Ancient semi natural woodland – broadleaf woodlands comprising mainly native tree and shrub species which are believed to have been in existence for over 400 years
- Plantation on ancient woodland site – sites which are believed to have been continuously wooded for over 400 years and currently have a canopy cover of more than 50 percent (%) non-native conifer tree species
- Restored ancient woodland site – woodlands which are predominantly broadleaves now and are believed to have been continually wooded for over 400 years. These woodlands will have gone through a phase when canopy cover was more than 50 % non-native conifer tree species and now have a canopy cover of more than 50 % broadleaf.

## 2.3.2 Traditional orchard

2.3.2.1 The desk study identified 80 areas defined as traditional orchard located within the terrestrial ecology desk study search area (i.e. within 2km of the Mona Proposed Onshore Development Area). Of these, 14 areas of traditional orchard are located within the Mona Proposed Onshore Development Area.

2.3.2.2 The location and geographic extent of traditional orchards in relation to the terrestrial ecology desk study search area is presented in Figure 2.6 below.

## 2.3 Habitats of principal importance

### 2.3.1 Ancient Woodland

2.3.1.1 A total of 398 ancient woodland sites are located within the terrestrial ecology desk study search area (i.e. within 2km of the Mona Proposed Onshore Development Area). Of these, 34 ancient woodland sites are located within the Mona Proposed Onshore Development Area. The location and geographic extent of ancient woodland sites in relation to the terrestrial ecology desk study search area is presented in 2.4 below.

2.3.1.2 The ancient woodland sites provided by Cofnod vary in nature, with the following types of woodland noted according to the Ancient Woodland Inventory (Natural Resources Wales, 2023):



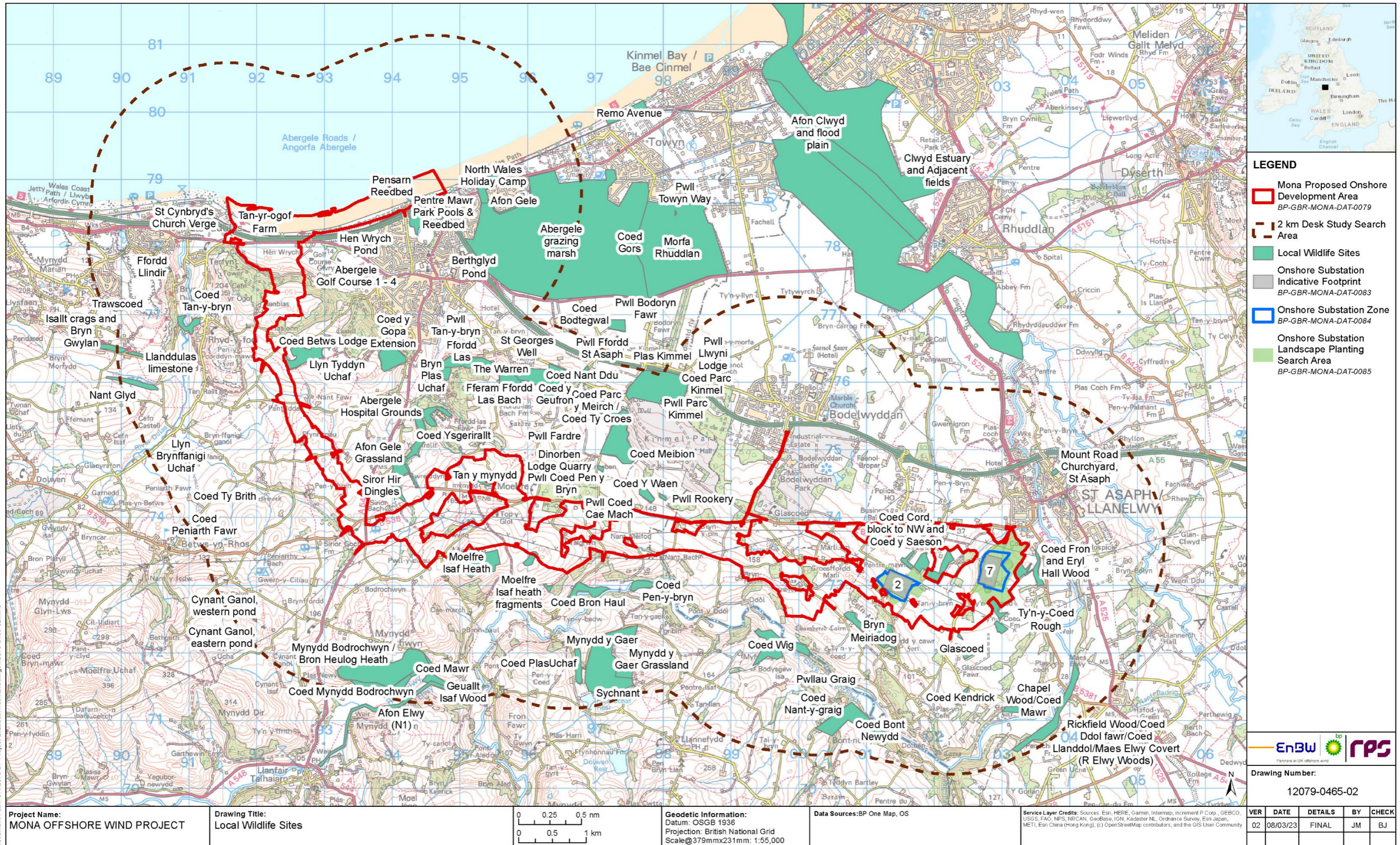


Figure 2.4: LWSs located within 2km of the Mona Proposed Onshore Development Area.

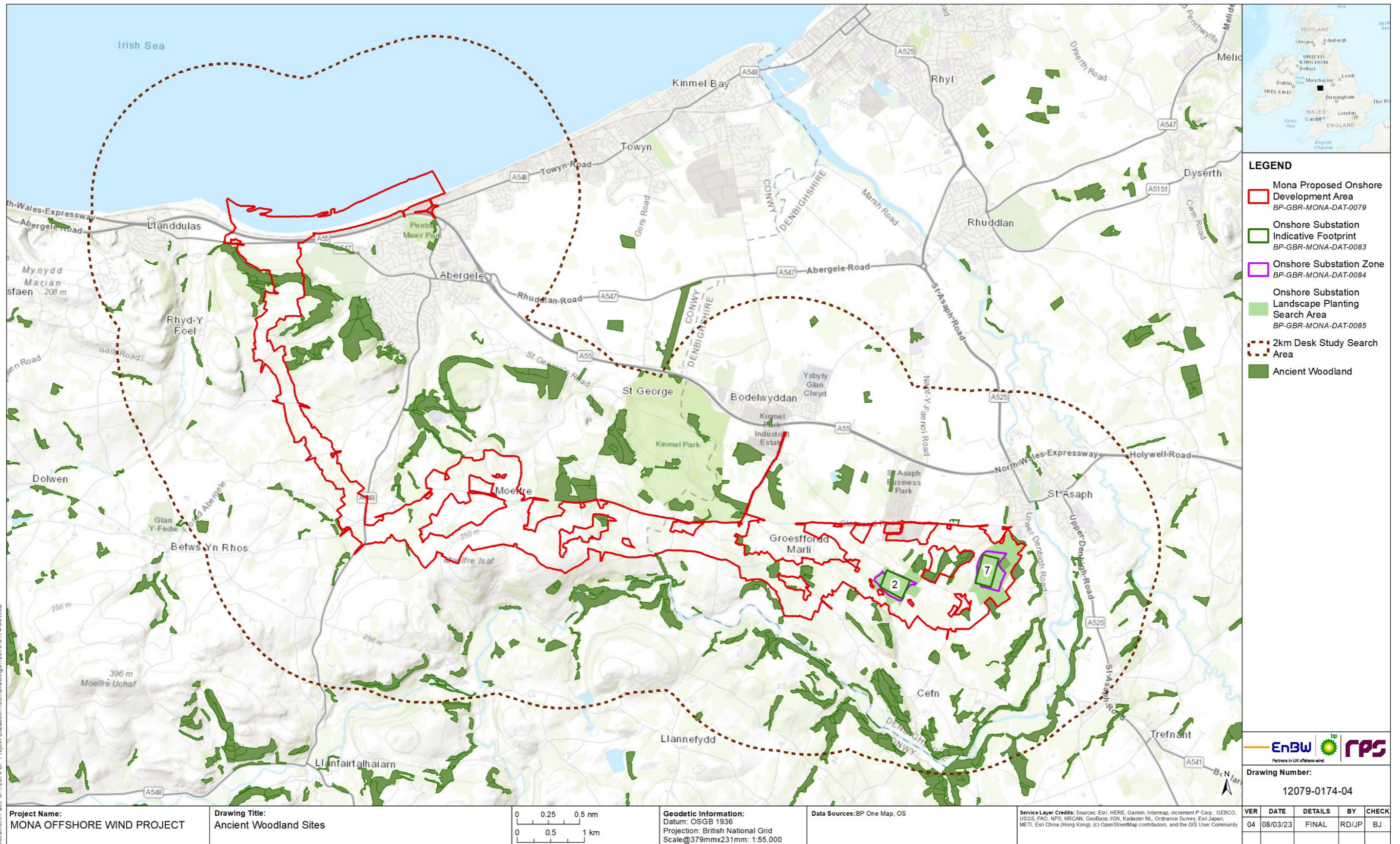


Figure 2.5: Areas of designated ancient woodland located within 2km of the Mona Proposed Onshore Development Area.



Figure 2.6: Areas of traditional orchard located within 2km of the Mona Proposed Onshore Development Area.

## 2.4 Protected and other notable species

2.4.1.1 Protected or notable species comprise any species protected or listed under the following legislation or identified as being of nature conservation concern in the lists referred to below:

- Protected species:
  - The Conservation of Habitats and Species Regulations 2017 (Annex 4) (European Protected Species) (CHS2)
  - Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981 (as amended) (referred to as WCA1, WCA5 and WCA8 respectively)
  - The Protection of Badgers Act 1992 (PBA)
  - Environment (Wales) Act 2016 (Section 7) (S7)
  - UK Biodiversity Action Plan Priority Species (BAP).
- Other 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)
  - Rare and scarce species not based on IUCN criteria – Nationally Notable (NN), Nationally Notable A (NNA), Nationally Notable B (NNB), Nationally Scarce (NS)
  - UK Biodiversity Action Plan (BAP) Priority Species.

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

### 2.4.2 Flora

2.4.2.1 The desk study identified two protected or otherwise notable plant species within the terrestrial ecology desk study search area (i.e. within 1km of the Mona Proposed Onshore Development Area). These were bluebells *Hyacinthoides non-scripta*, protected under WCA8; and common mouse-ear *Cerastium fontanum*, which is a BAP species. Of these species, only bluebells were identified within the Mona Proposed Onshore Development Area.

2.4.2.2 The location of protected or otherwise notable plant records within the terrestrial ecology desk study search area is presented in Figure 2.7 to Figure 2.18 of this technical report below.

### 2.4.3 Terrestrial invertebrates

2.4.3.1 The desk study identified a two records of white-letter hairstreak *Satyrium w-album*, two counts of 12 species of butterflies and one count of seven species of butterflies located terrestrial ecology desk study search area (i.e. within 1km of the Mona Proposed Onshore Development Area). The location of protected or otherwise notable

terrestrial invertebrate records within the terrestrial ecology desk study search area is presented in Figure 2.7 to Figure 2.18 of this technical report below.

### 2.4.4 Aquatic invertebrates and fish

2.4.4.1 The desk study did not identify any records of aquatic invertebrates or fish located within the terrestrial ecology desk study search area.

### 2.4.5 Amphibians and reptiles

2.4.5.1 The data provided by Cofnod contained 29 records of Great Crested Newt (GCN) sightings within the terrestrial ecology desk study search area (i.e. within 2km of the Mona Proposed Onshore Development Area). Several adult and juvenile individuals have been identified, with the densest population of GCN located within and to the north of Section 9 - LSS 2 and Section 9 - LSS 7. Egg count surveys have shown that this population of GCN is breeding, with eggs found in several locations and egg laying behaviour observed. The most recent record provided by Cofnod dates from 2020.

2.4.5.2 Three species of reptile were identified within the terrestrial ecology desk study search. Notably, a large population of slow worm *Anguis fragilis* was identified 1km northwest of Section 8 - LSS 7 and Section 9 – LSS 7.

2.4.5.3 The location of protected or otherwise amphibian and reptile records within the terrestrial ecology desk study search area is presented in Figure 2.19 to Figure 2.22 of this technical report below.

### 2.4.6 Mammals

#### Bats

2.4.6.1 Nine species of bat were identified within the terrestrial ecology desk study search area (i.e. within 2km of the Mona Proposed Onshore Development Area). Several records were not identified to the species level, which could result in an overestimation of species types.

2.4.6.2 There were 44 records of bat roosts within the terrestrial ecology desk study search area. These included two records of lesser horseshoe bat roosts. One of these records of lesser horseshoe bat roosts is in Section 2 of the Mona Proposed Onshore Development Area and falls within the Llanddulas Limestone and Gwrych Castle Wood SSSI. The second record of a lesser horseshoe bat roost is to the south of Sections 7, Section 8 – LSS 2, Section 8 – LSS 7, Section 9 – LSS 2 and Section 9 LSS 7 of the Mona Proposed Onshore Development Area, where more than 100 individuals were recorded.

2.4.6.3 The location of protected or otherwise notable bat records within the terrestrial ecology desk study search area is presented in Figure 2.23 to Figure 2.26 of this technical report below.

#### Other mammals

2.4.6.4 Eight other species of protected mammal were identified within the terrestrial ecology desk study search area. These include: Hedgehogs *Erinaceus europaeus*; otter *Lutra lutra*; badgers *Meles meles*; and hazel dormouse *Muscardinus avellanarius*. Notably,

there was a hazel dormouse record within section 7 of the Mona Proposed Onshore Development Area, where four nests were found, with one being occupied at the time of the inspection. In addition, several active badger setts were recorded within the terrestrial ecology desk study search area, although the exact locations are not provided in this technical report for confidentiality reasons.

2.4.6.5 The location of protected or otherwise notable other mammal records within the terrestrial ecology desk study search area is presented in Figure 2.27 to Figure 2.30 of this technical report below.

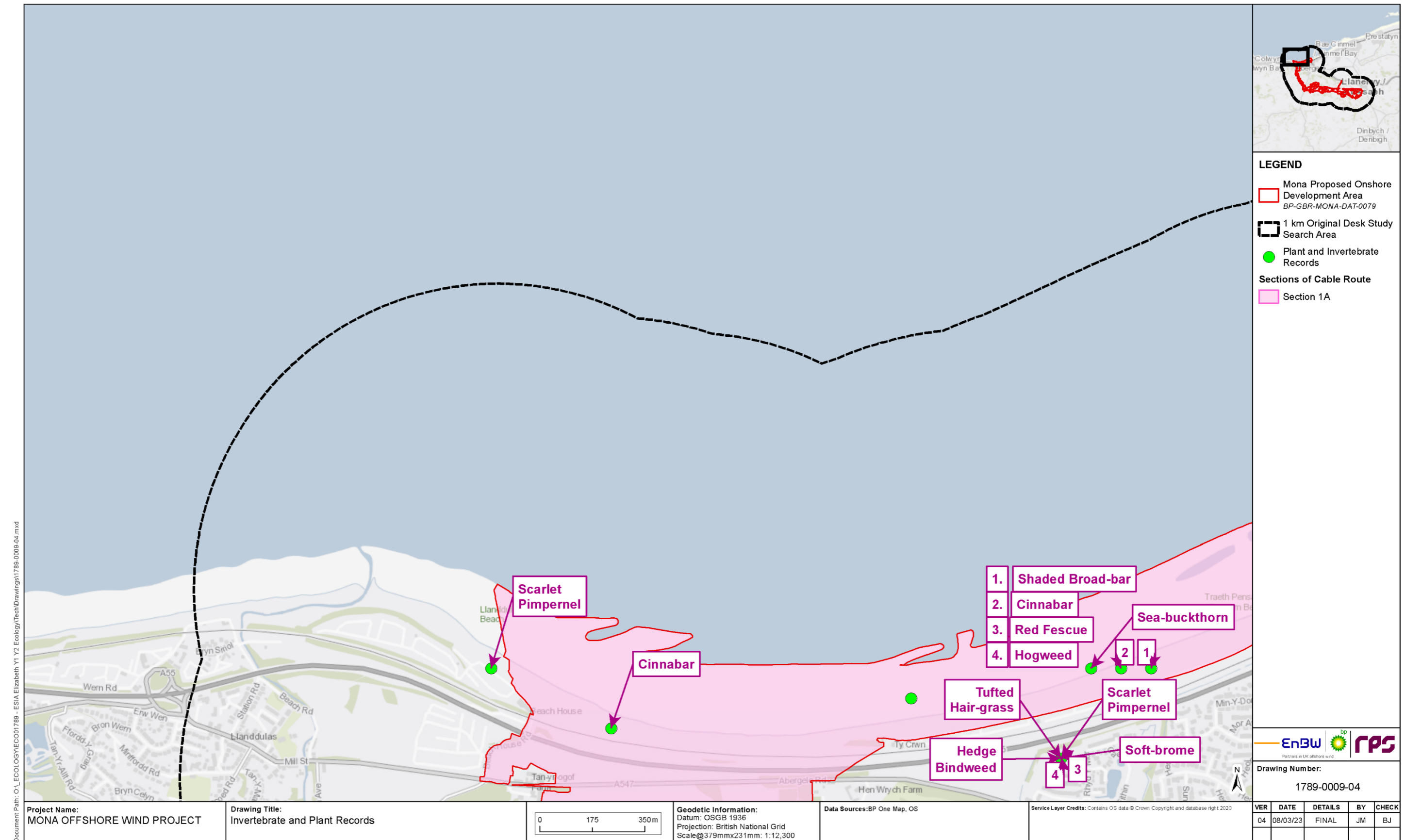


Figure 2.7: Invertebrate and plant records within 1km of the Mona Proposed Onshore Development Area.

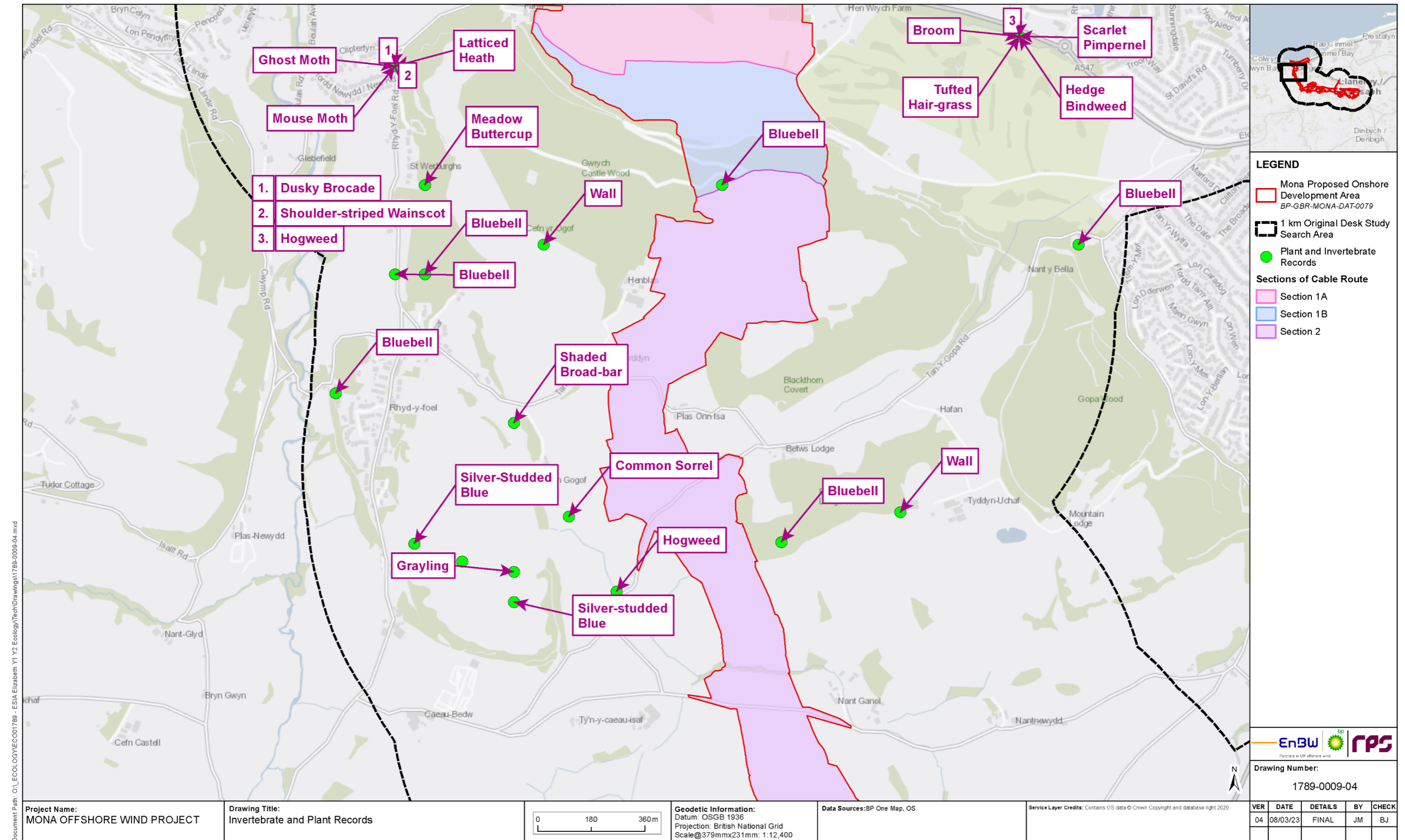


Figure 2.8: Invertebrate and plant records within 1km of the Mona Proposed Onshore Development Area.

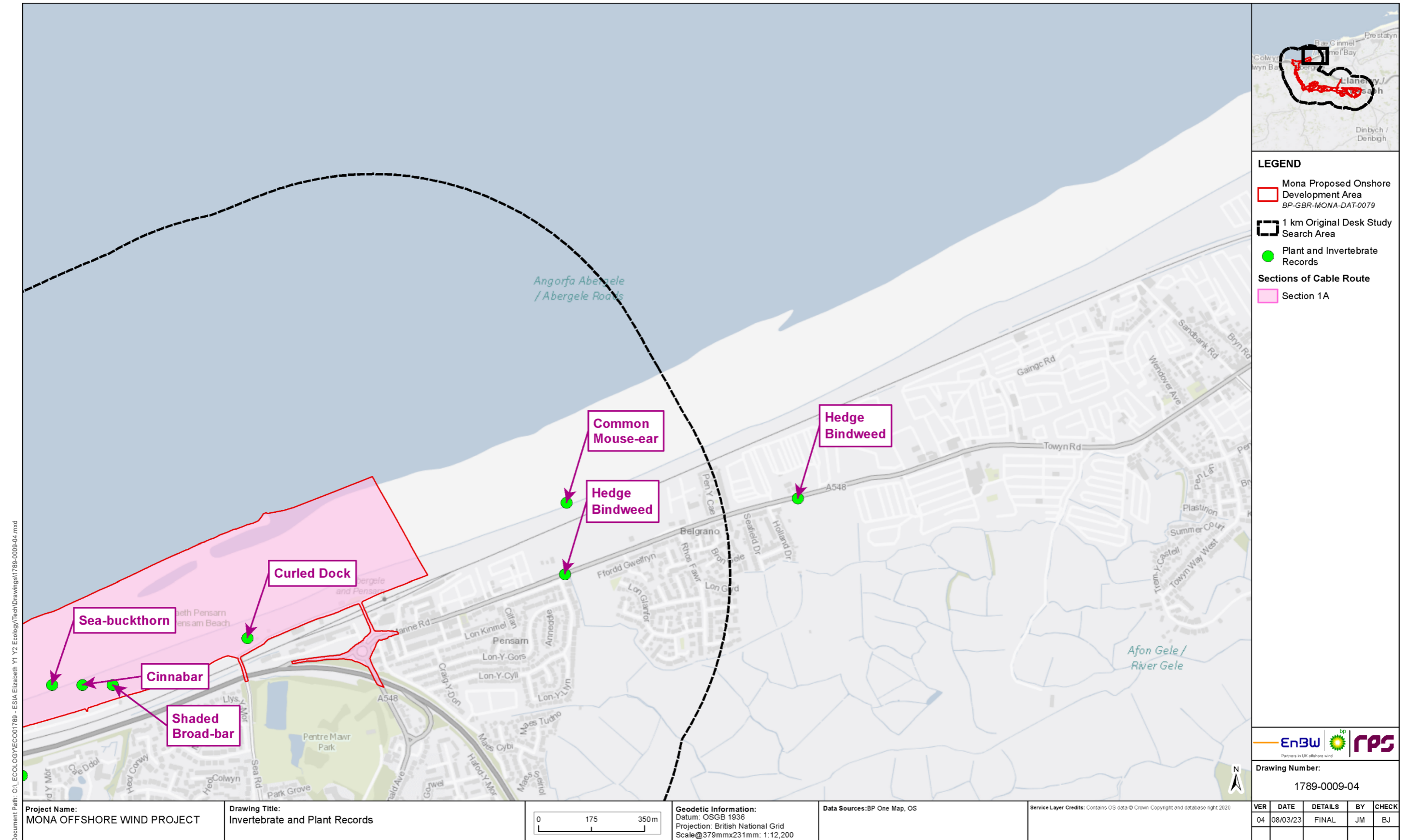


Figure 2.9: Invertebrate and plant records within 1km of the Mona Proposed Onshore Development Area.



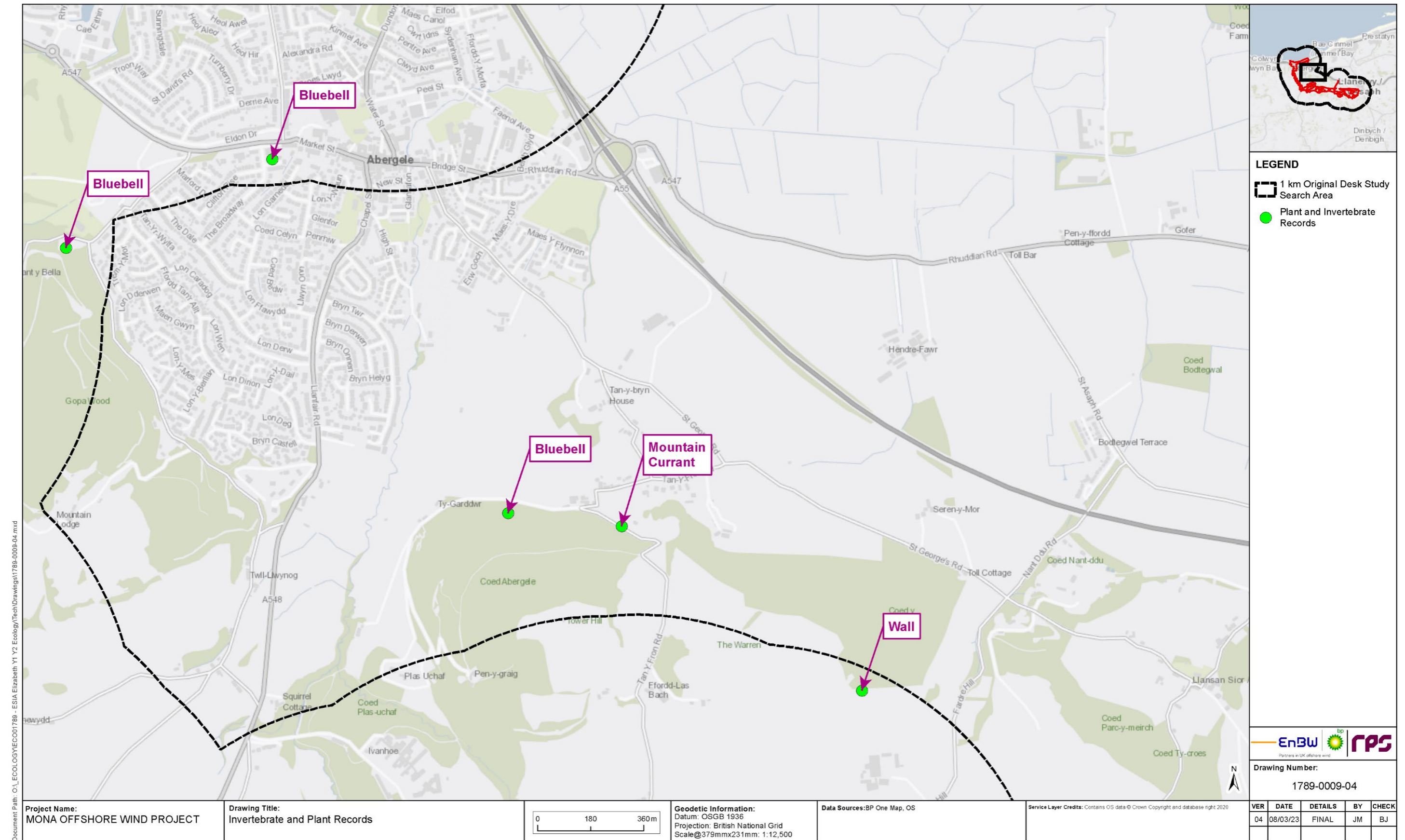


Figure 2.10: Invertebrate and plant records within 1km of the Mona Proposed Onshore Development Area.

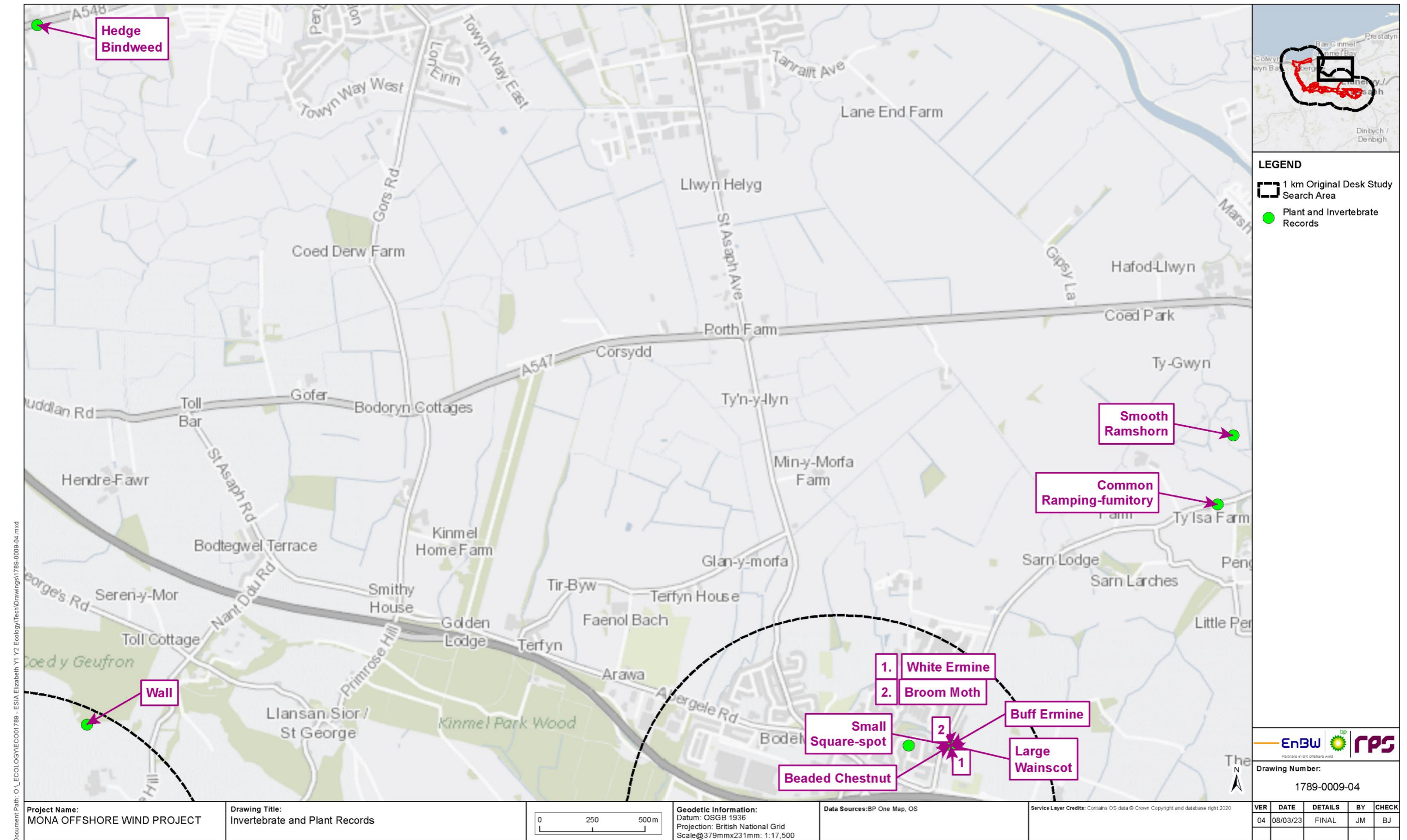


Figure 2.11: Invertebrate and plant records within 1km of the Mona Proposed Onshore Development Area.

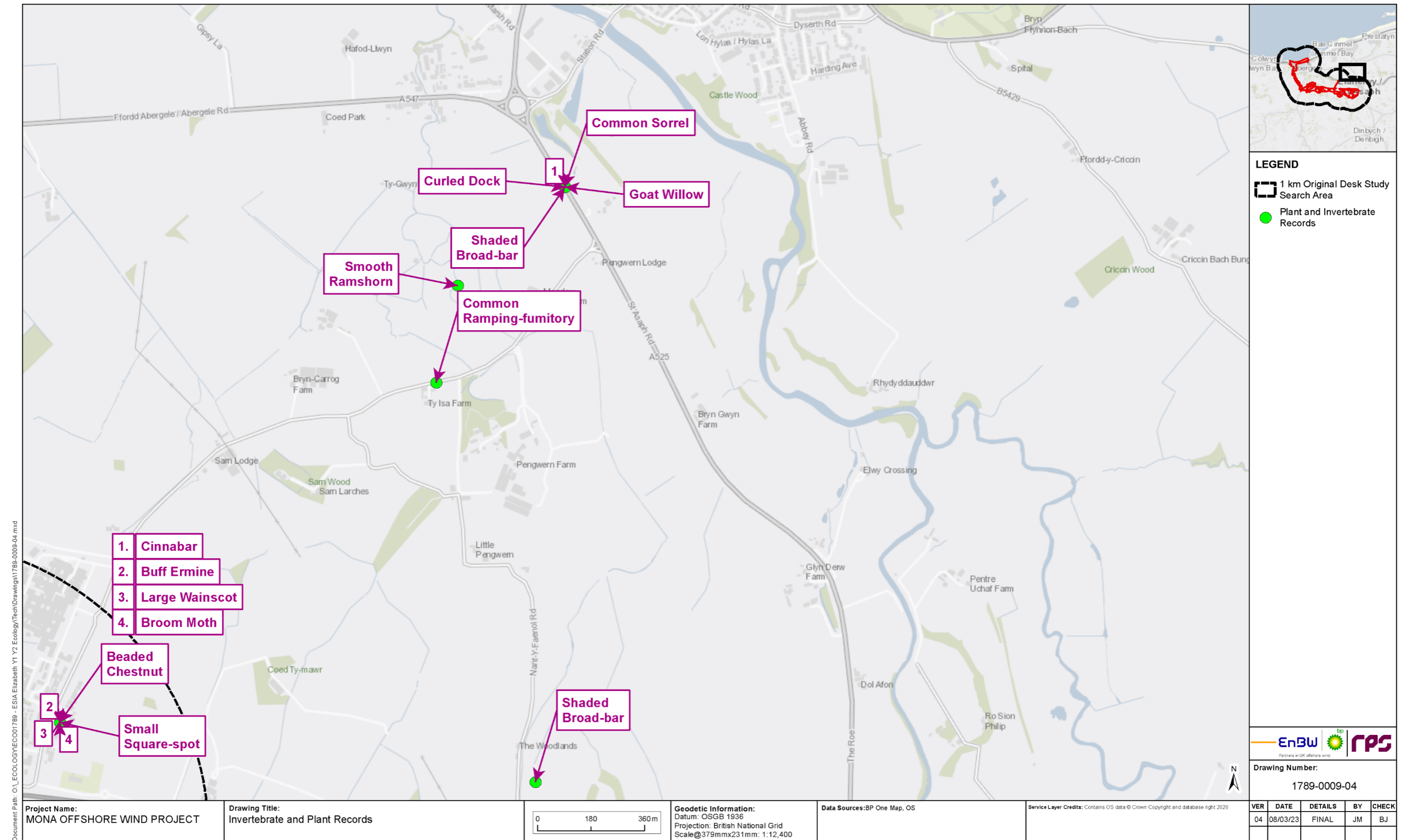


Figure 2.12: Invertebrate and plant records within 1km of the Mona Proposed Onshore Development Area.

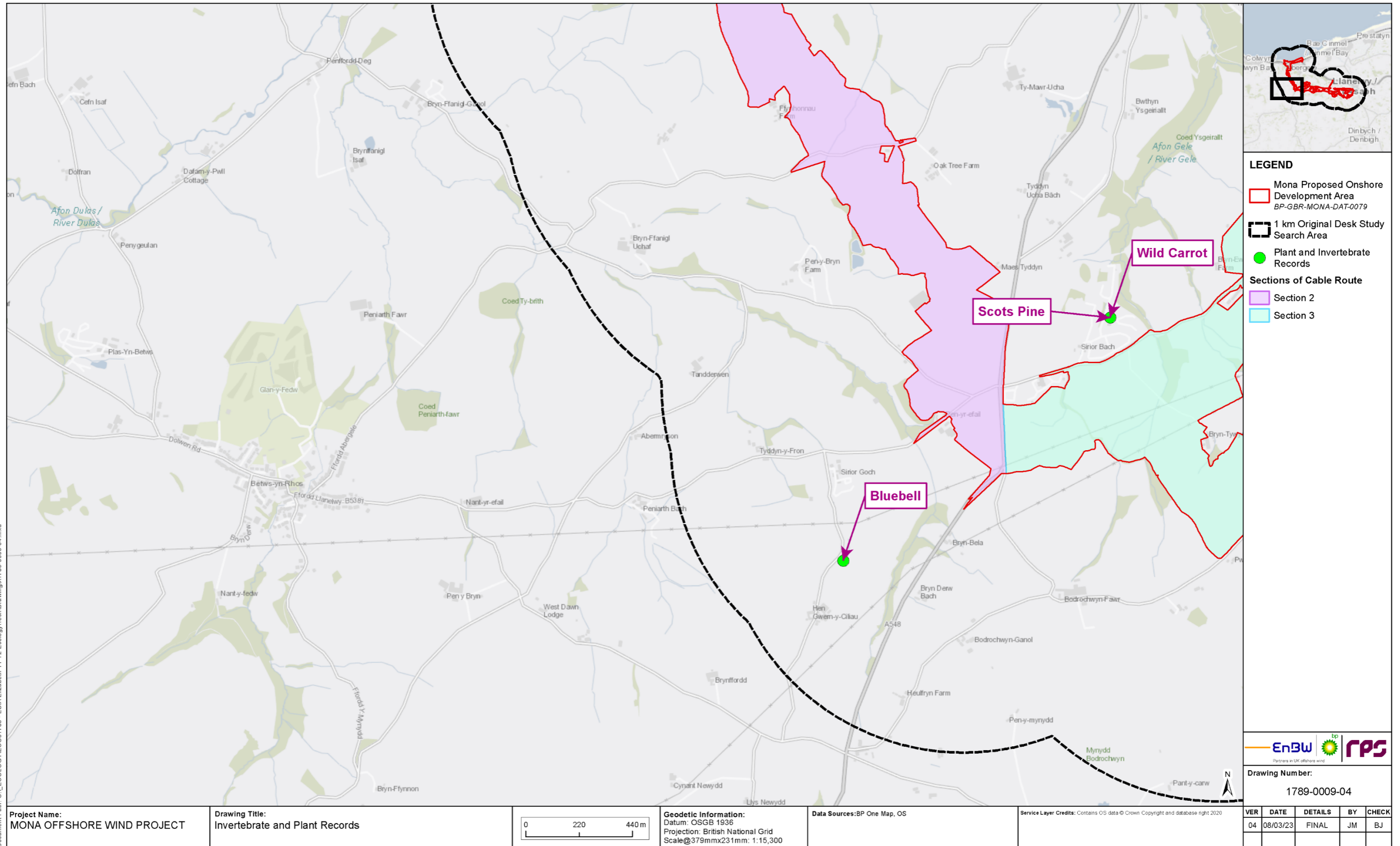


Figure 2.13: Invertebrate and plant records within 1km of the Mona Proposed Onshore Development Area.

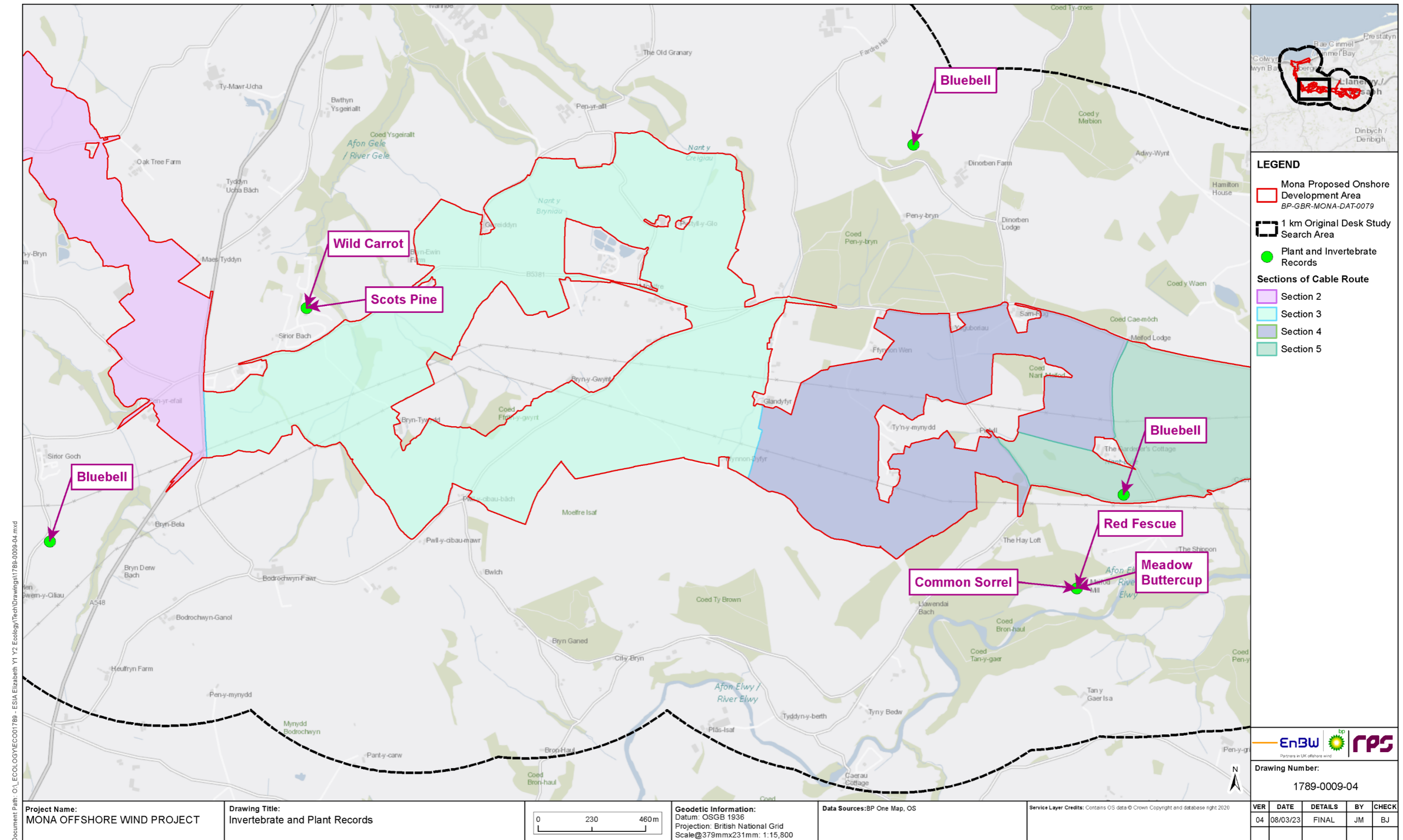


Figure 2.14: Invertebrate and plant records within 1km of the Mona Proposed Onshore Development Area.

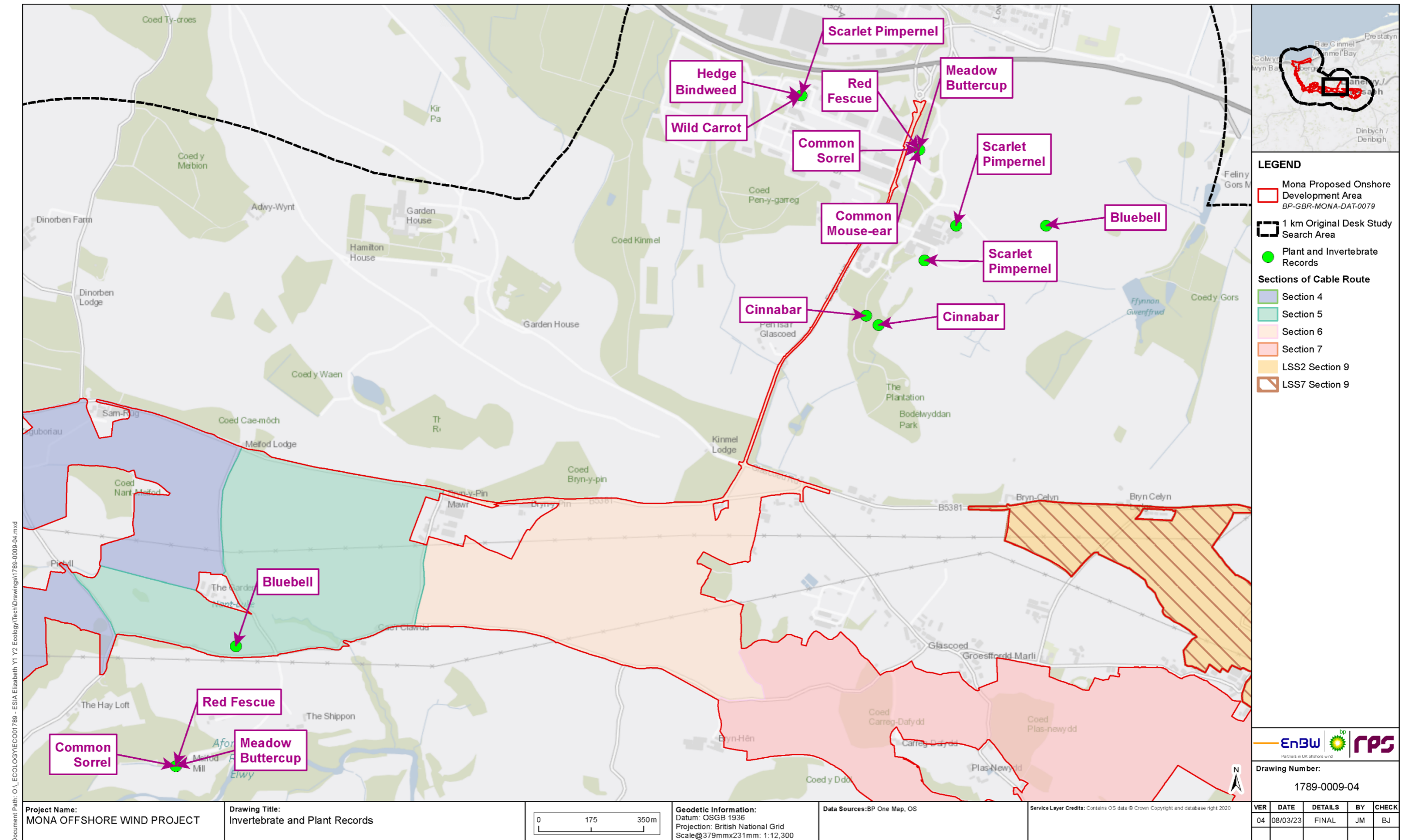


Figure 2.15: Invertebrate and plant records within 1km of the Mona Proposed Onshore Development Area.

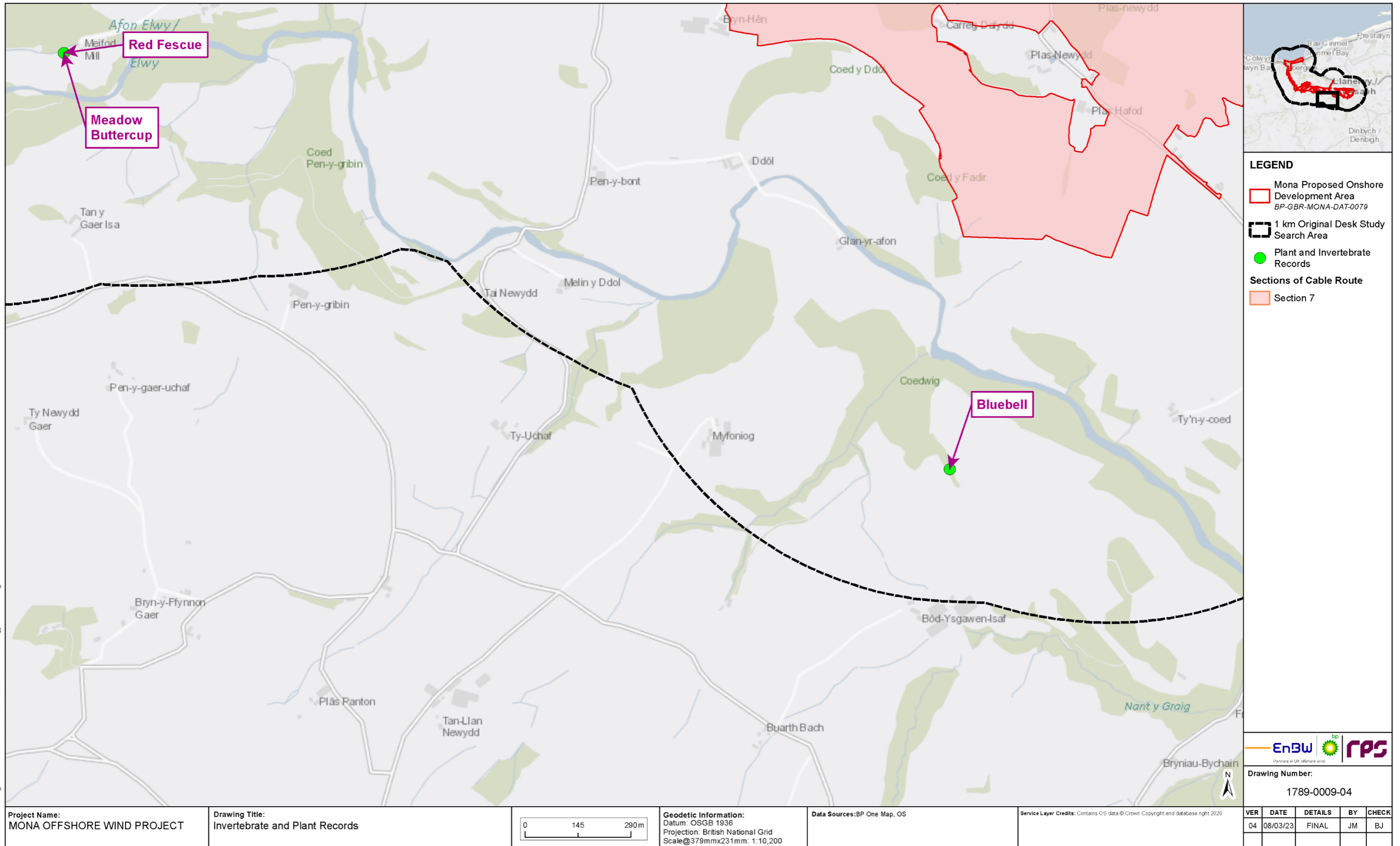


Figure 2.16: Invertebrate and plant records within 1km of the Mona Proposed Onshore Development Area.

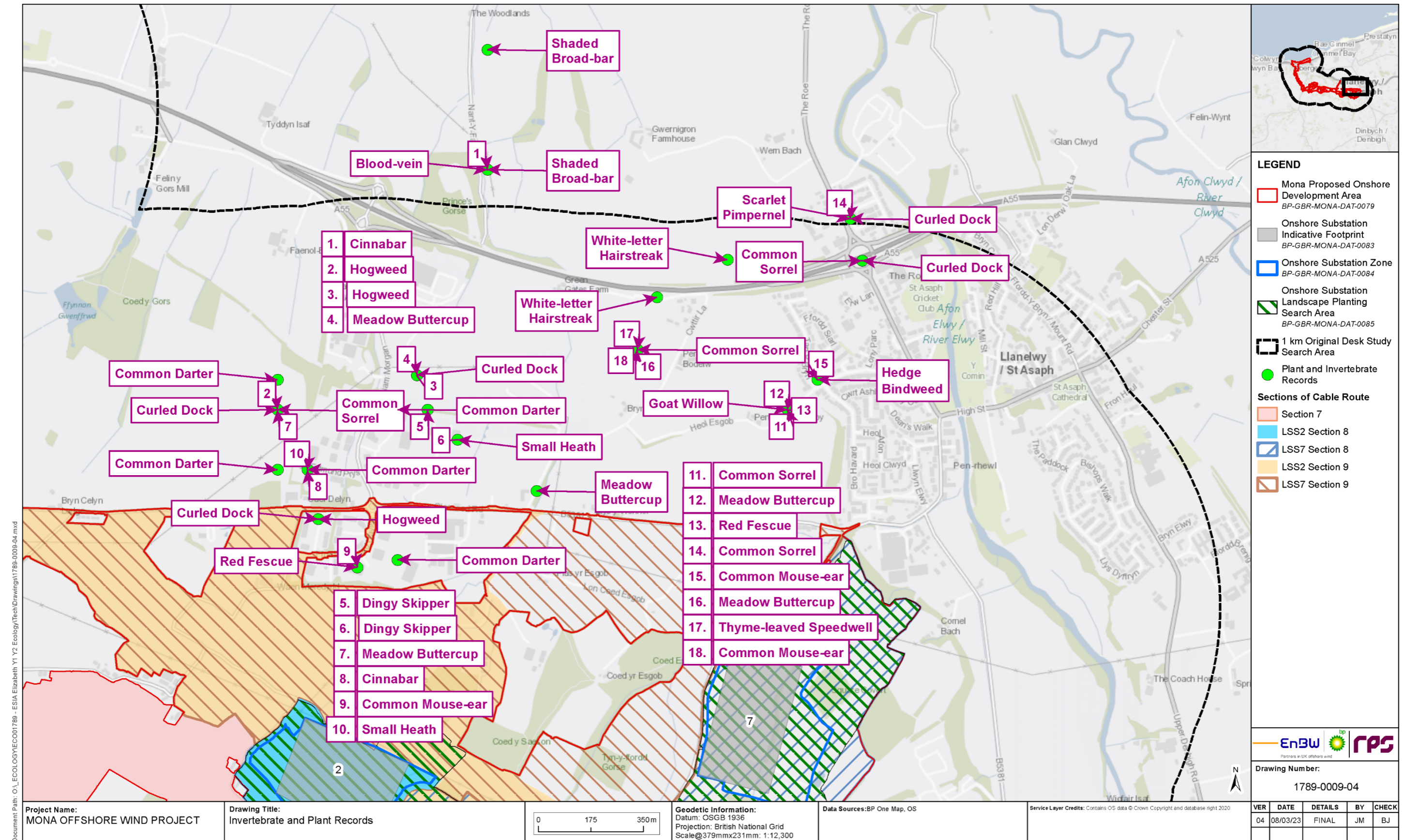


Figure 2.17: Invertebrate and plant records within 1km of the Mona Proposed Onshore Development Area.



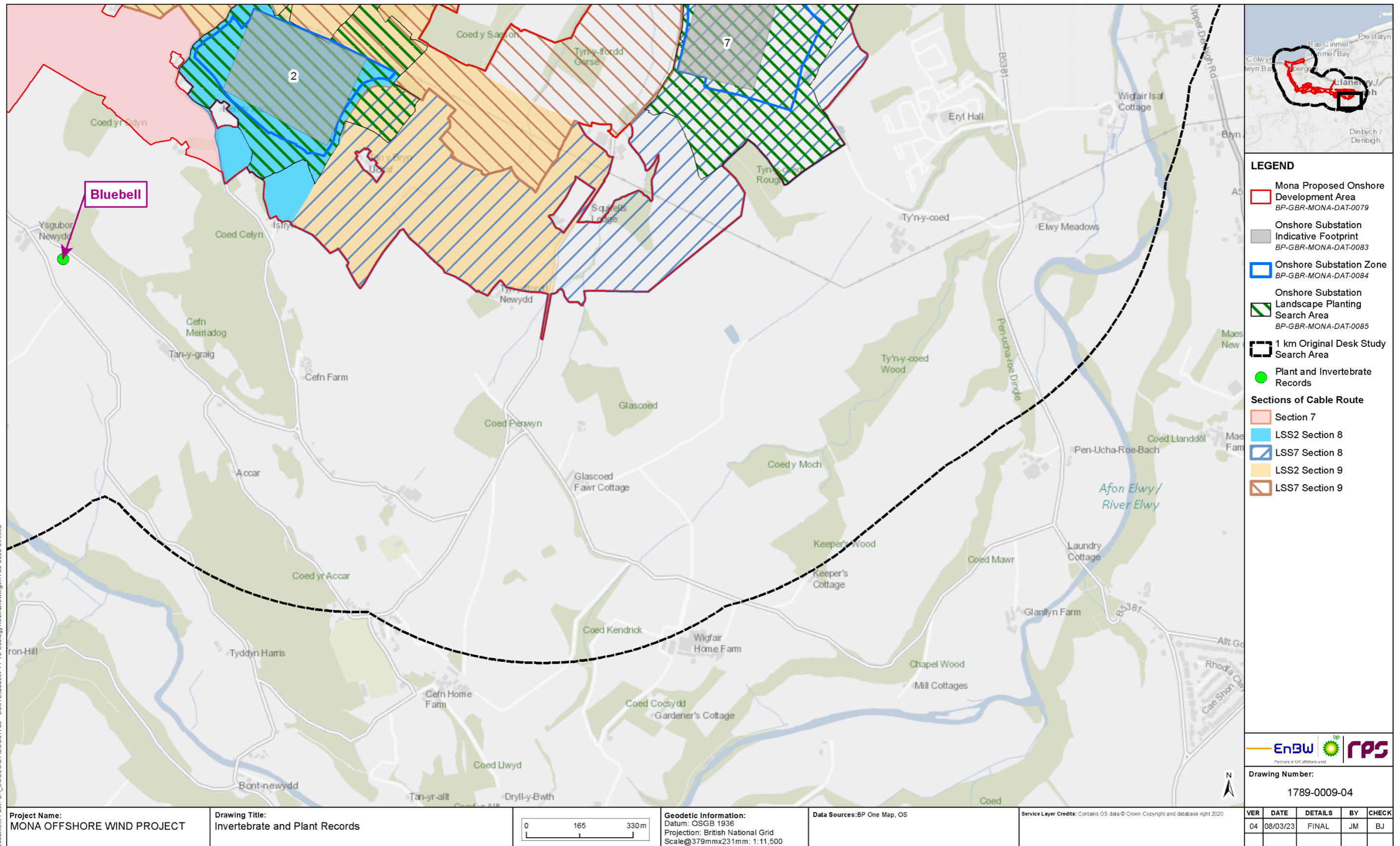


Figure 2.18: Invertebrate and plant records within 1km of the Mona Proposed Onshore Development Area.

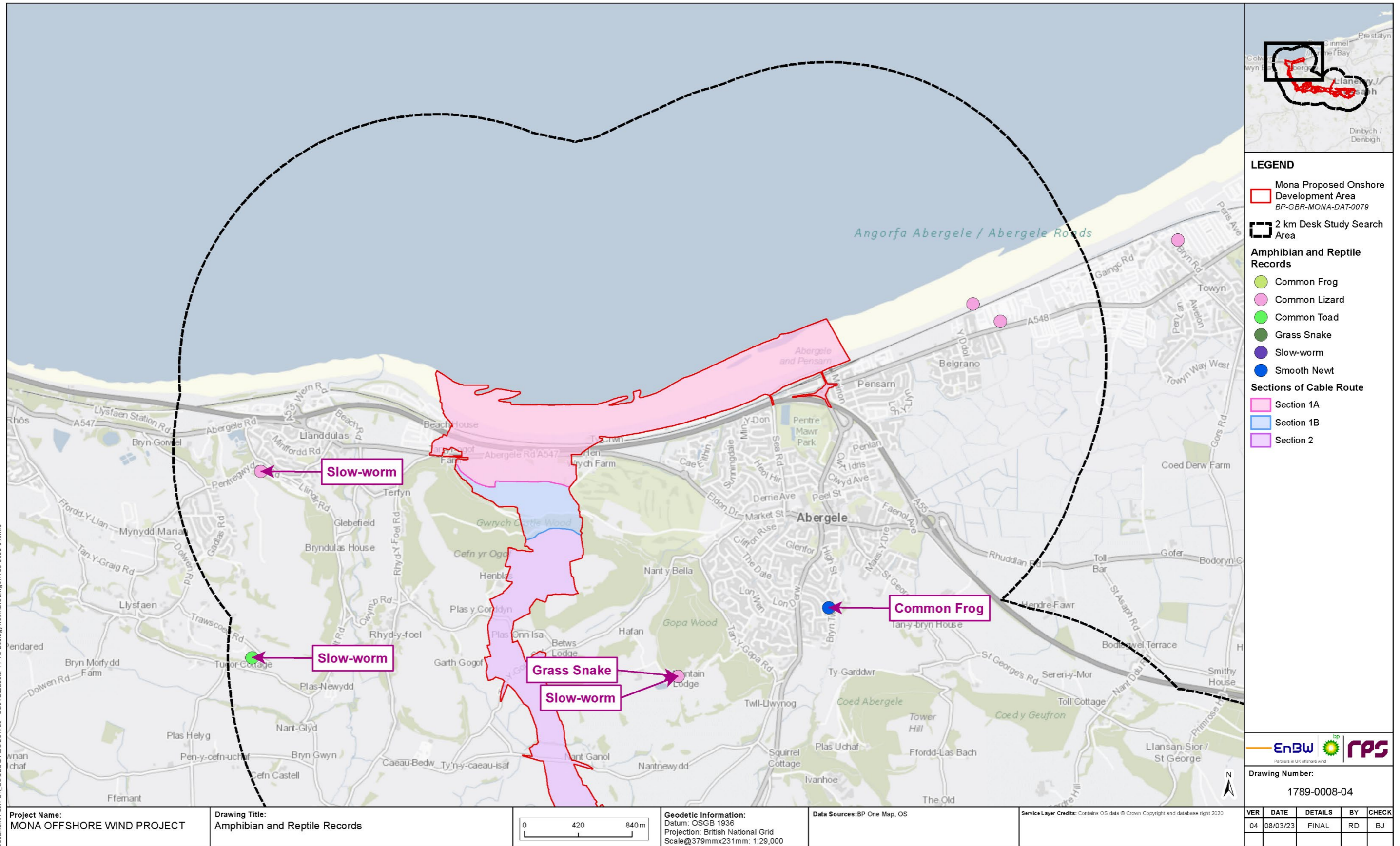


Figure 2.19: Amphibian and reptile records within 2km of the Mona Proposed Onshore Development Area.

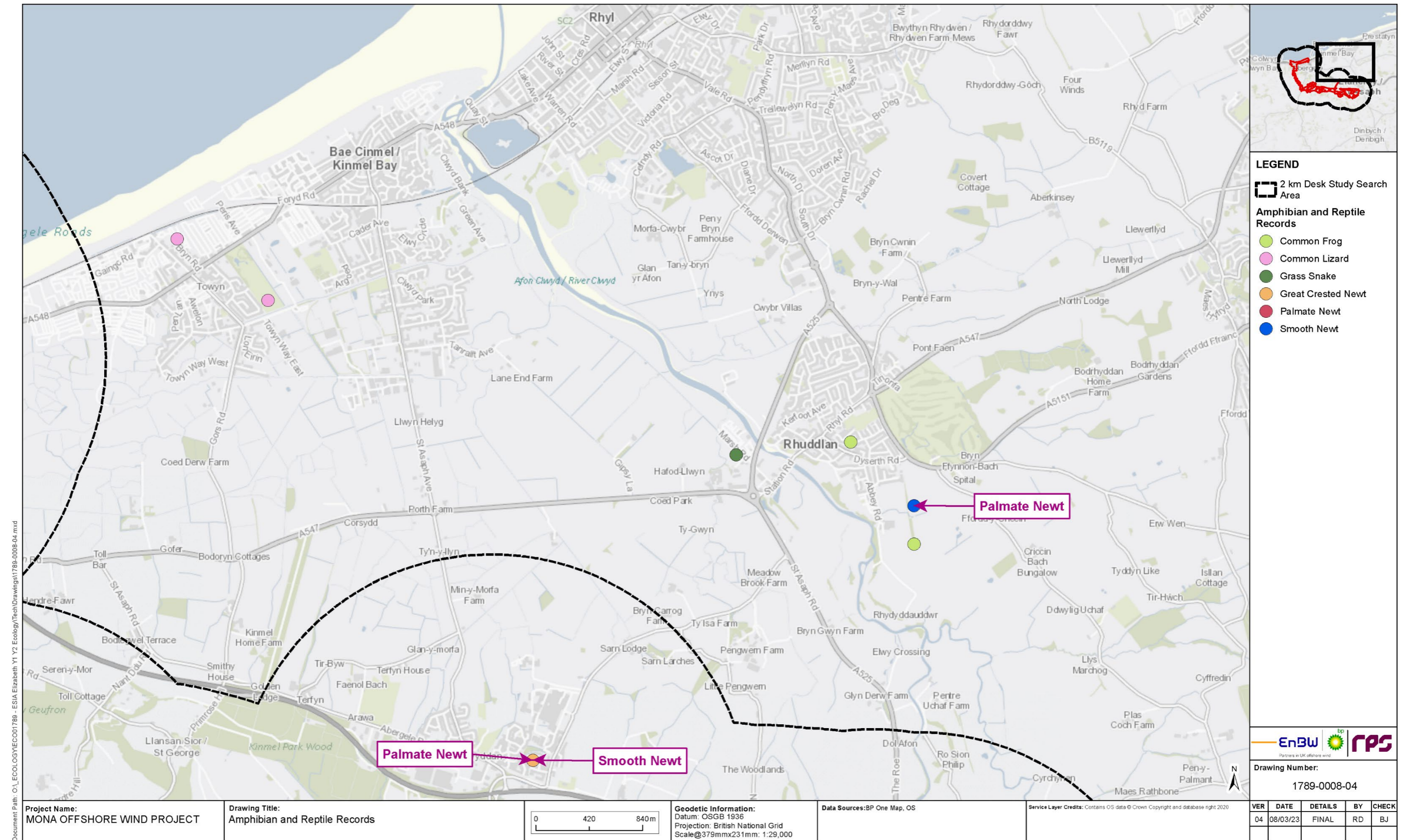


Figure 2.20: Amphibian and reptile records within 2km of the Mona Proposed Onshore Development Area.

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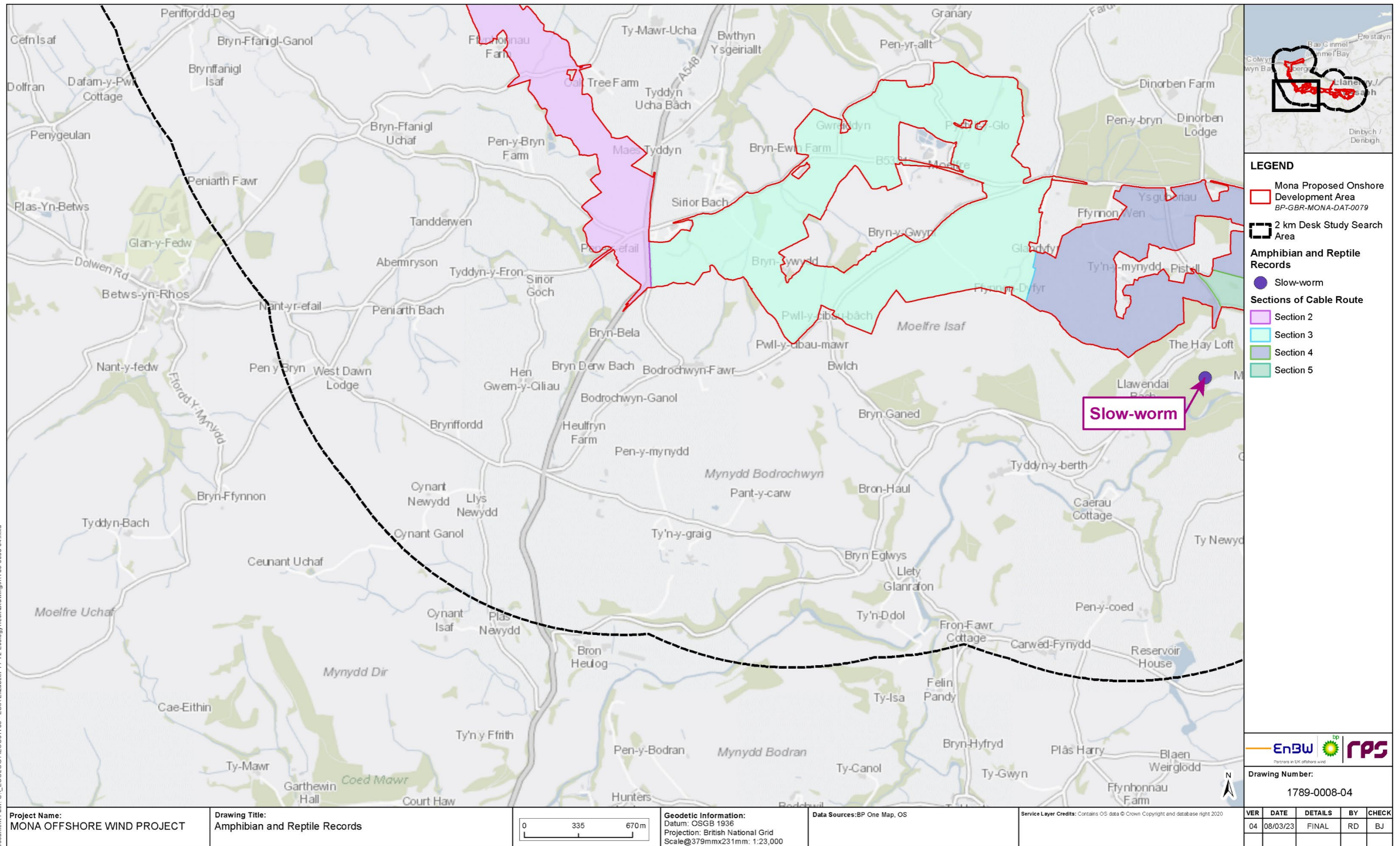


Figure 2.21: Amphibian and reptile records within 2km of the Mona Proposed Onshore Development Area.

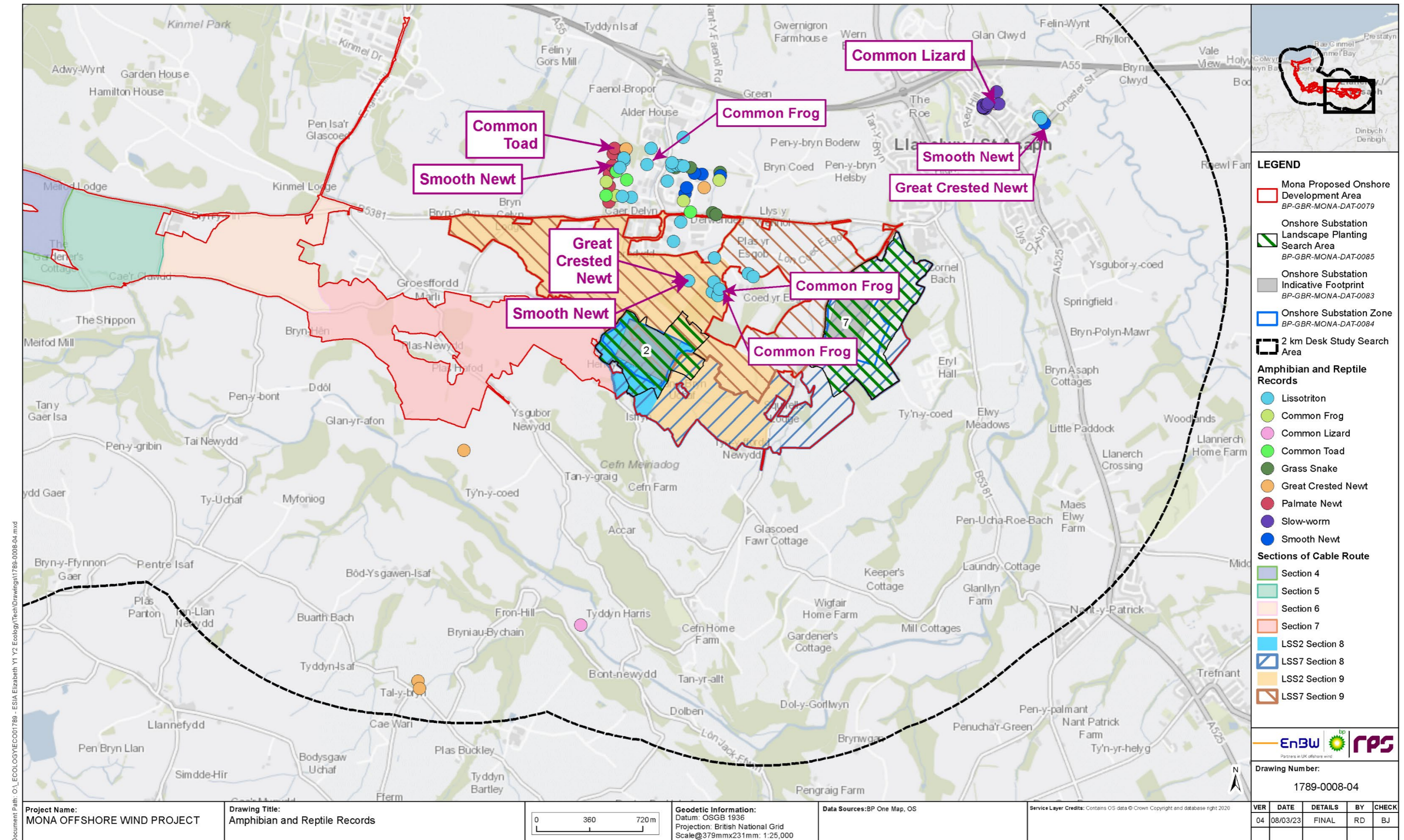


Figure 2.22: Amphibian and reptile records within 2km of the Mona Proposed Onshore Development Area.

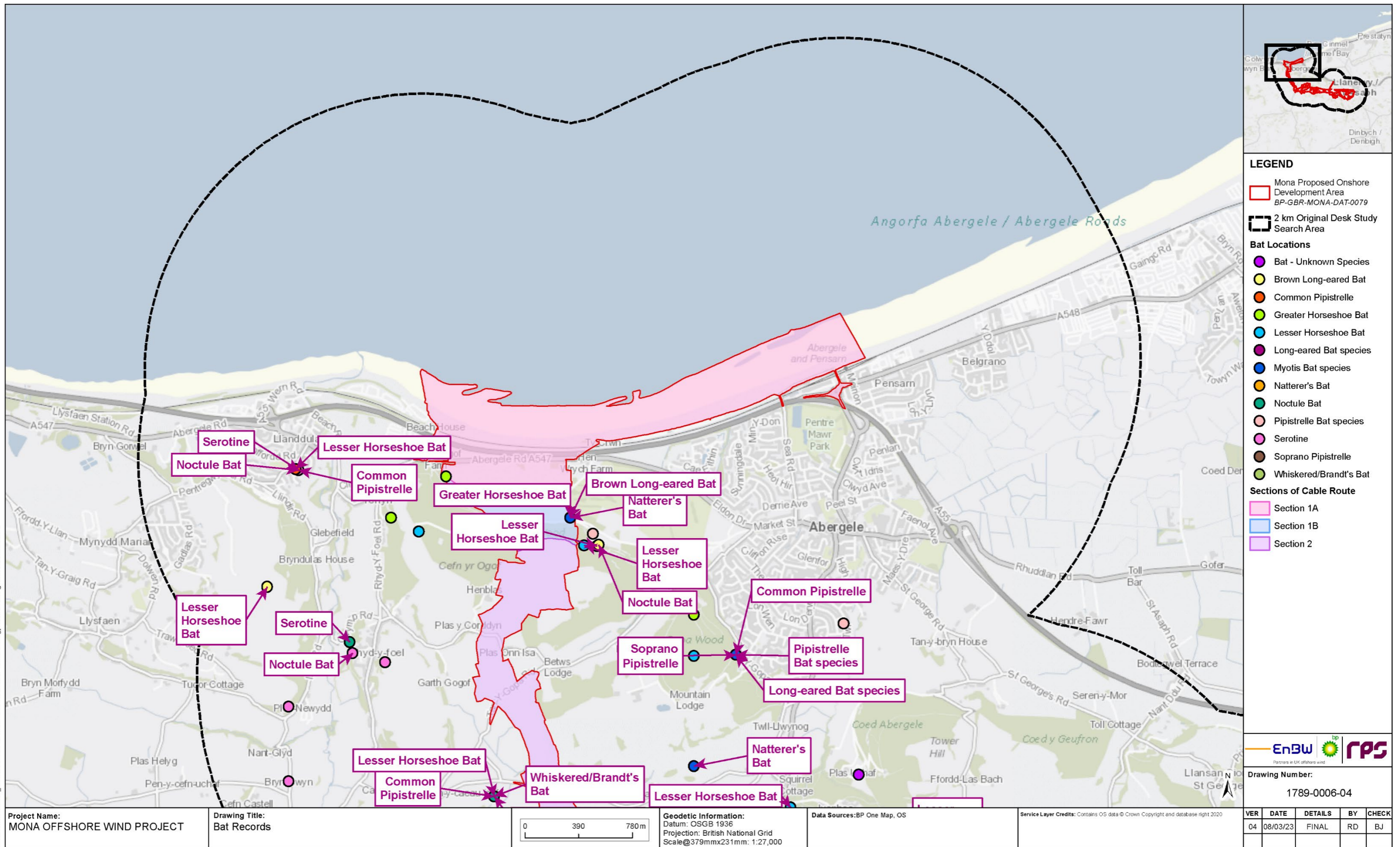


Figure 2.23: Bat records within 2km of the Mona Proposed Onshore Development Area.

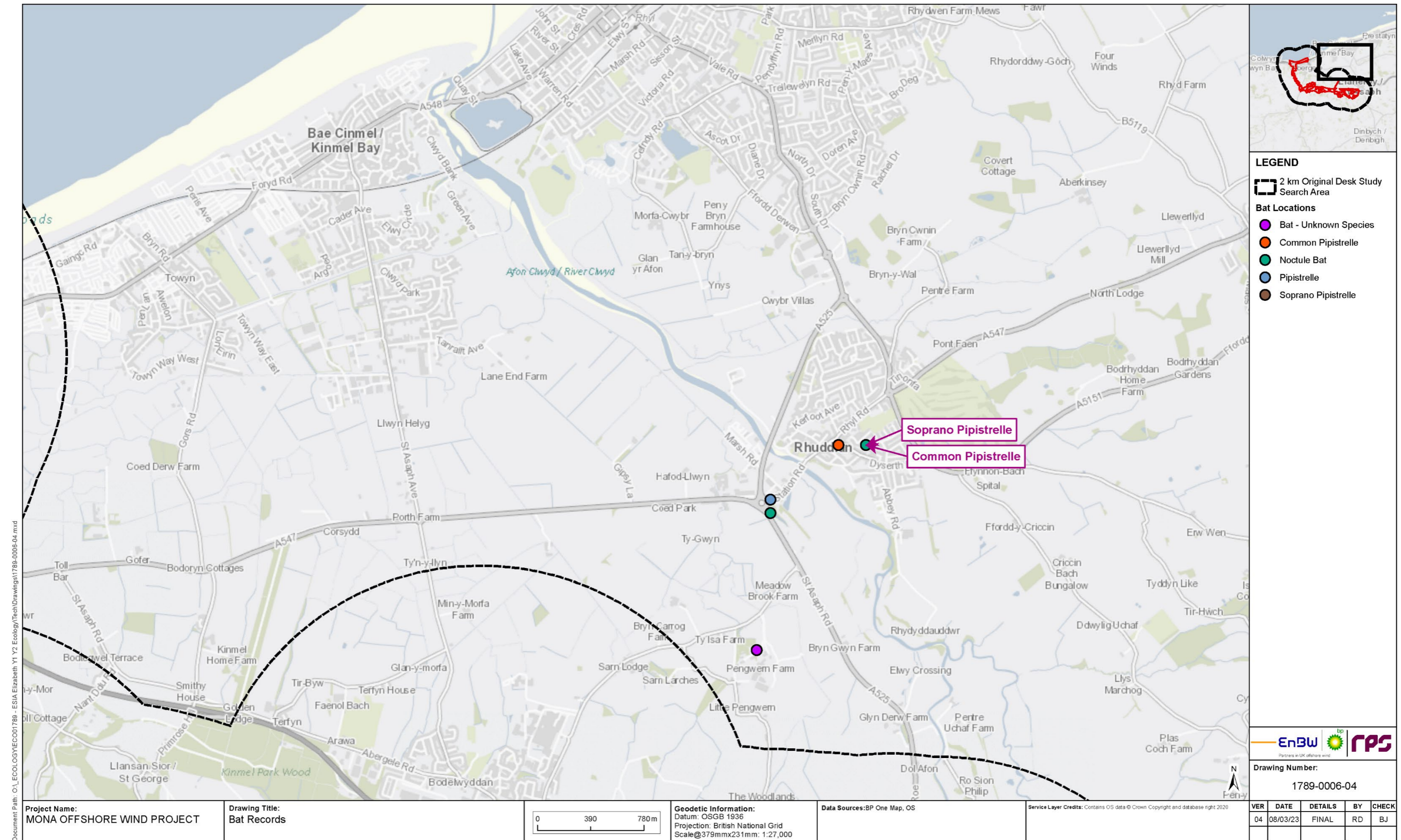


Figure 2.24: Bat records within 2km of the Mona Proposed Onshore Development Area.

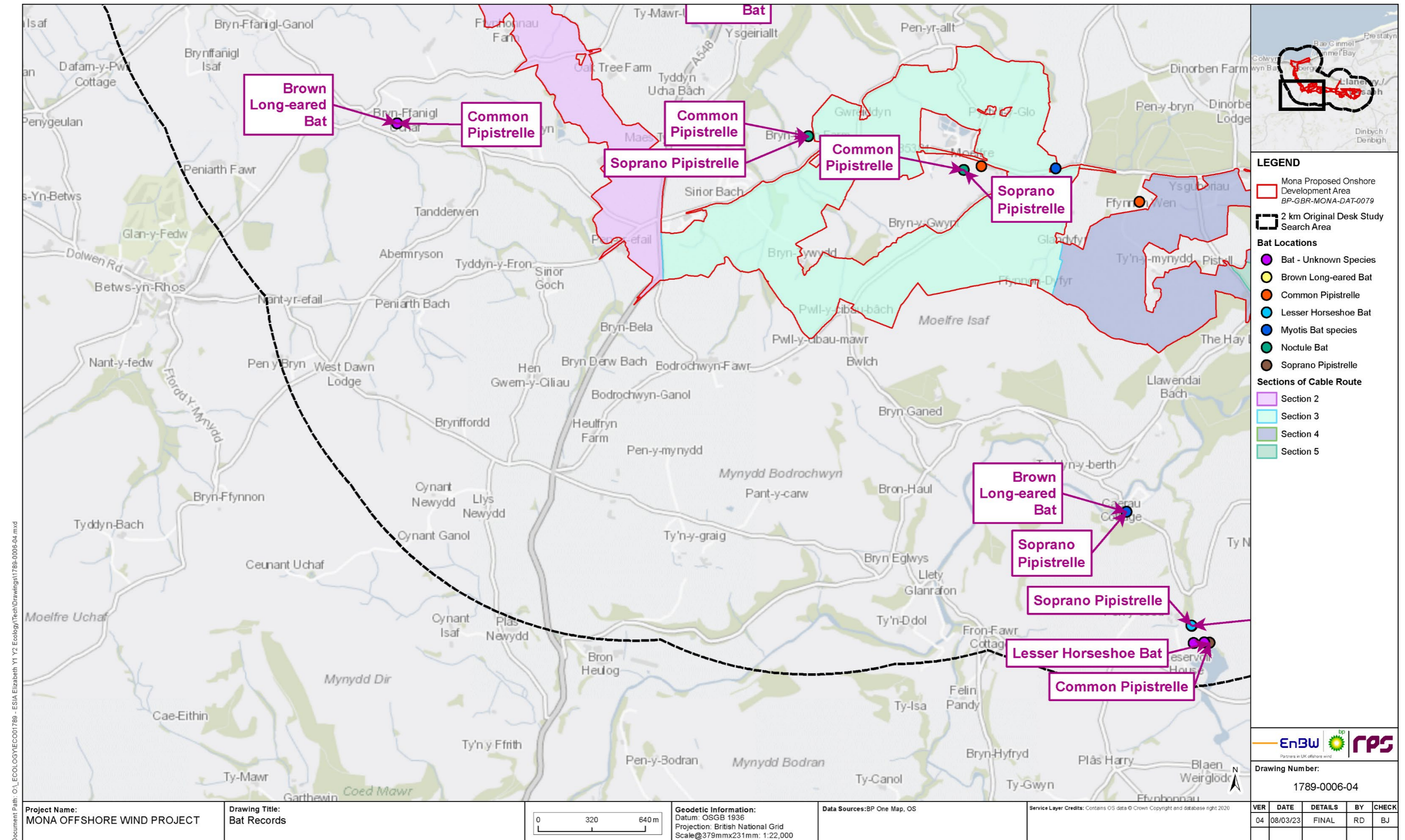


Figure 2.25: Bat records within 2km of the Mona Proposed Onshore Development Area.



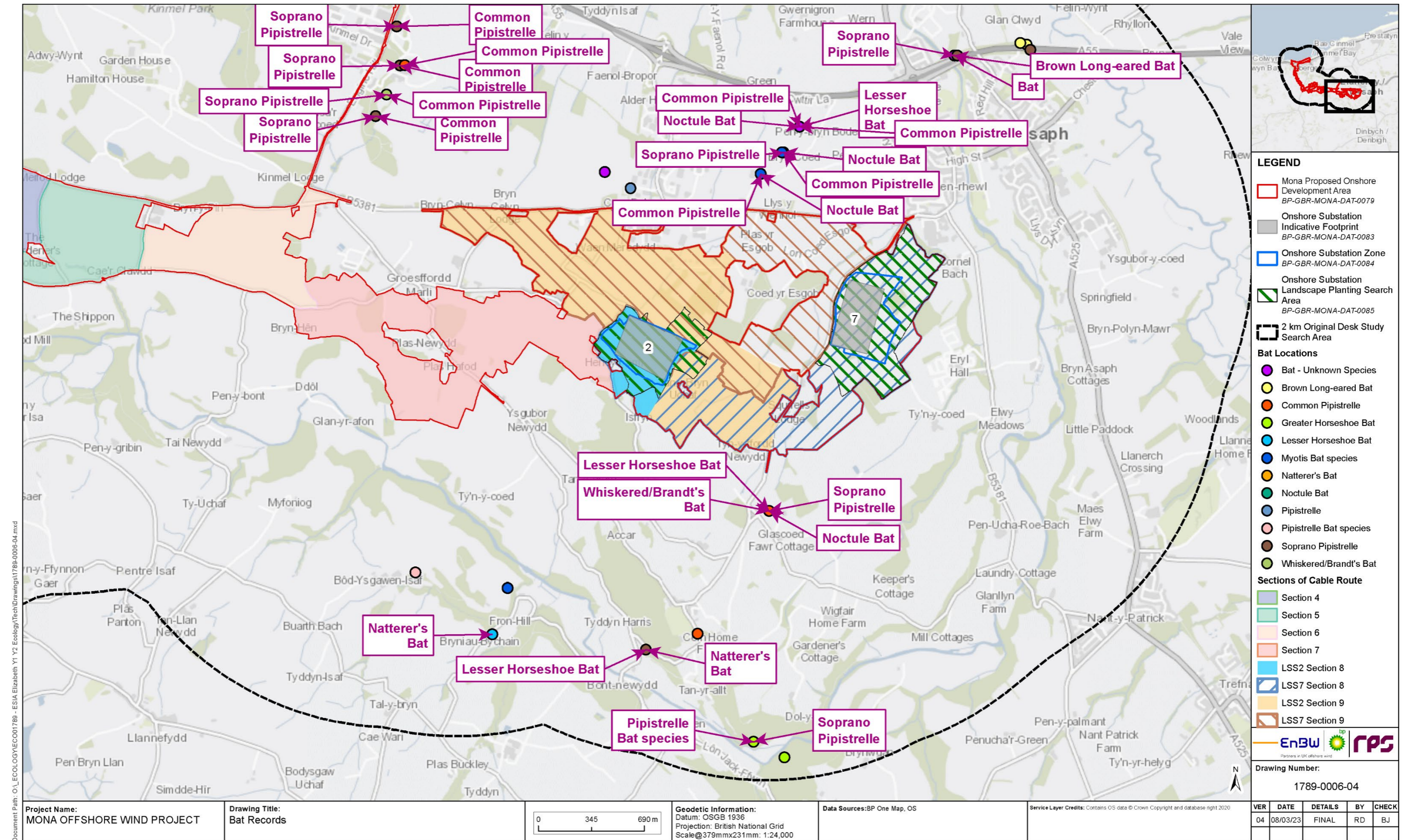


Figure 2.26: Bat records within 2km of the Mona Proposed Onshore Development Area.

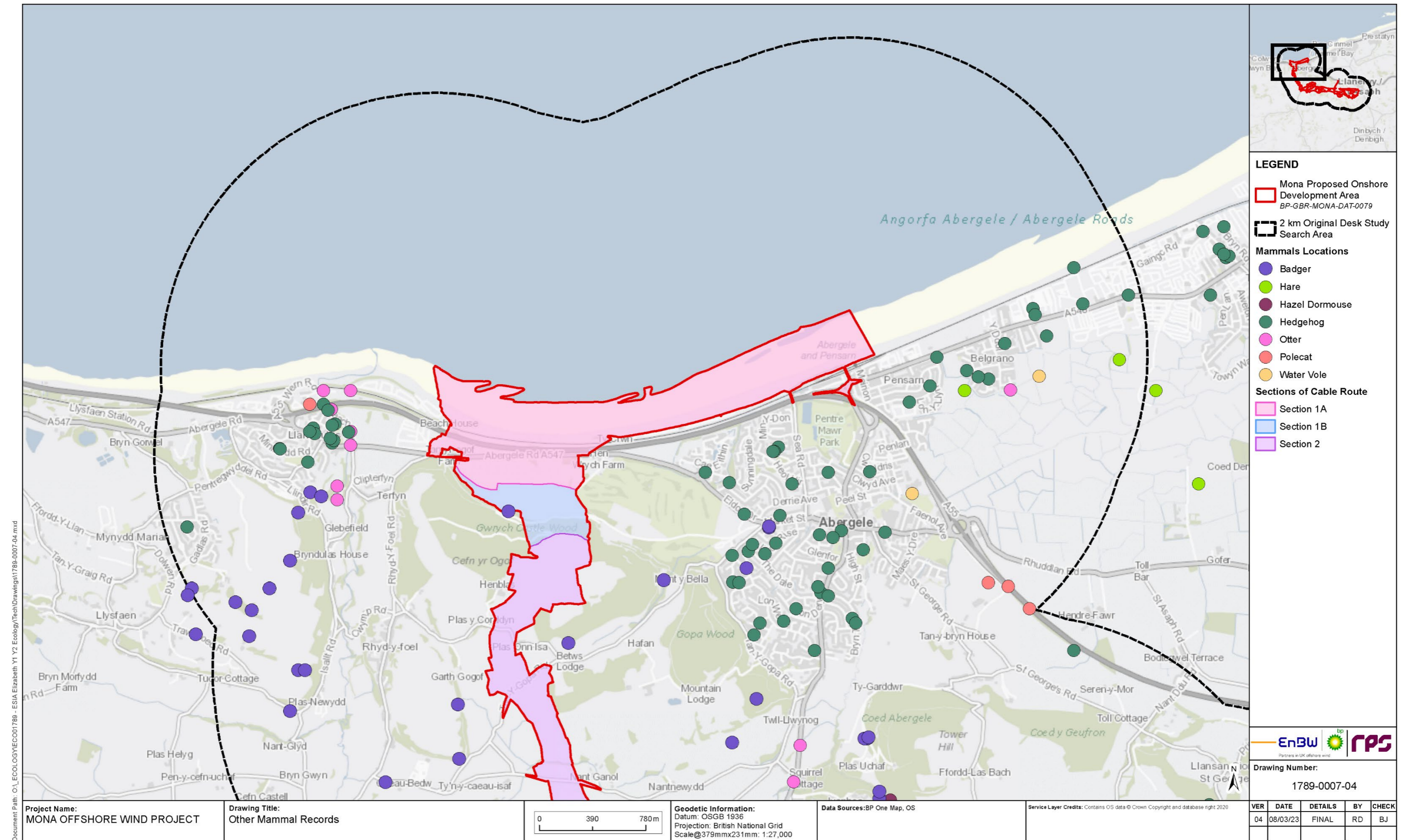


Figure 2.27: Other mammal records (excluding bats) within 2km of the Mona Proposed Onshore Development Area.

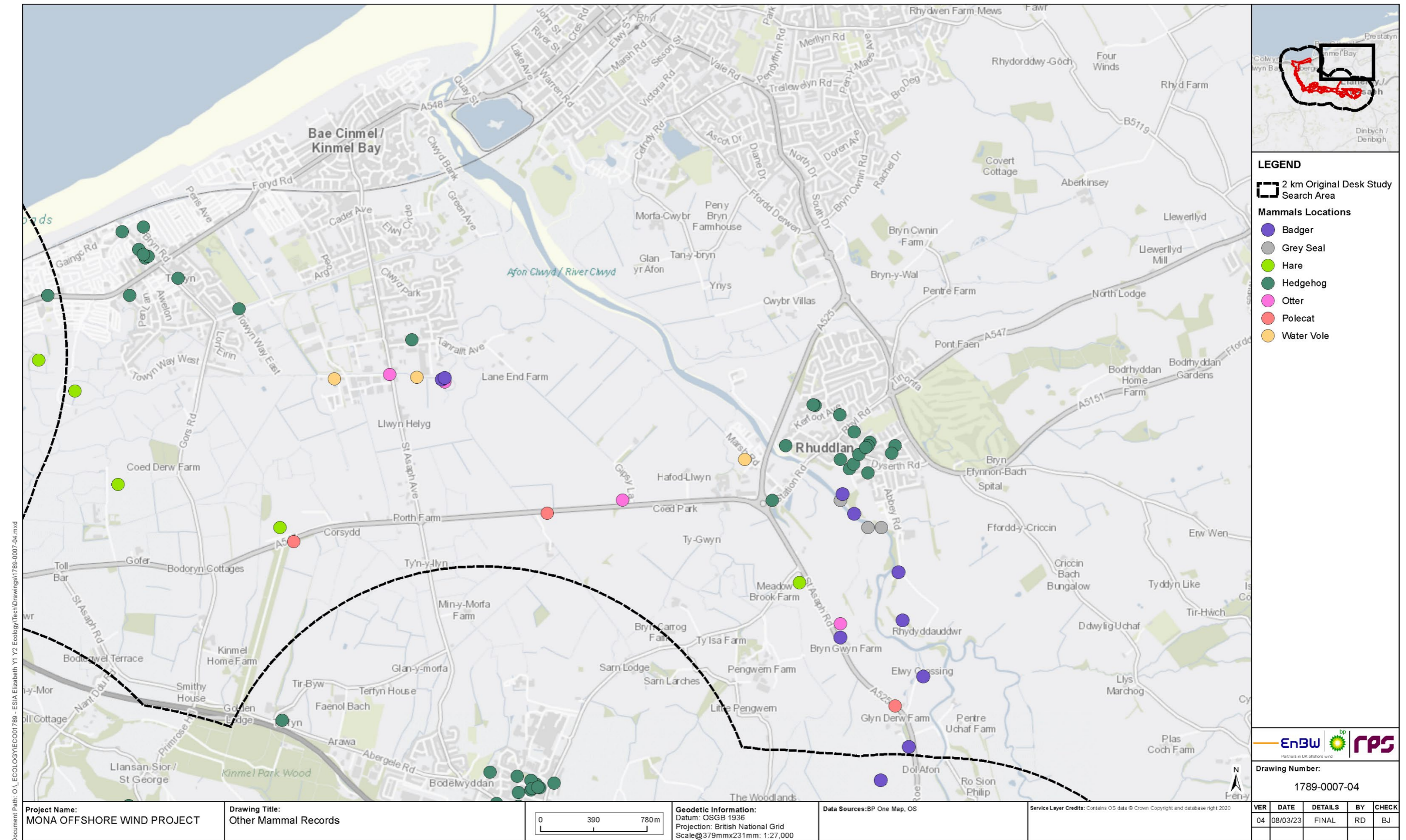


Figure 2.28: Other mammal records (excluding bats) within 2km of the Mona Proposed Onshore Development Area.

MONA OFFSHORE WIND PROJECT

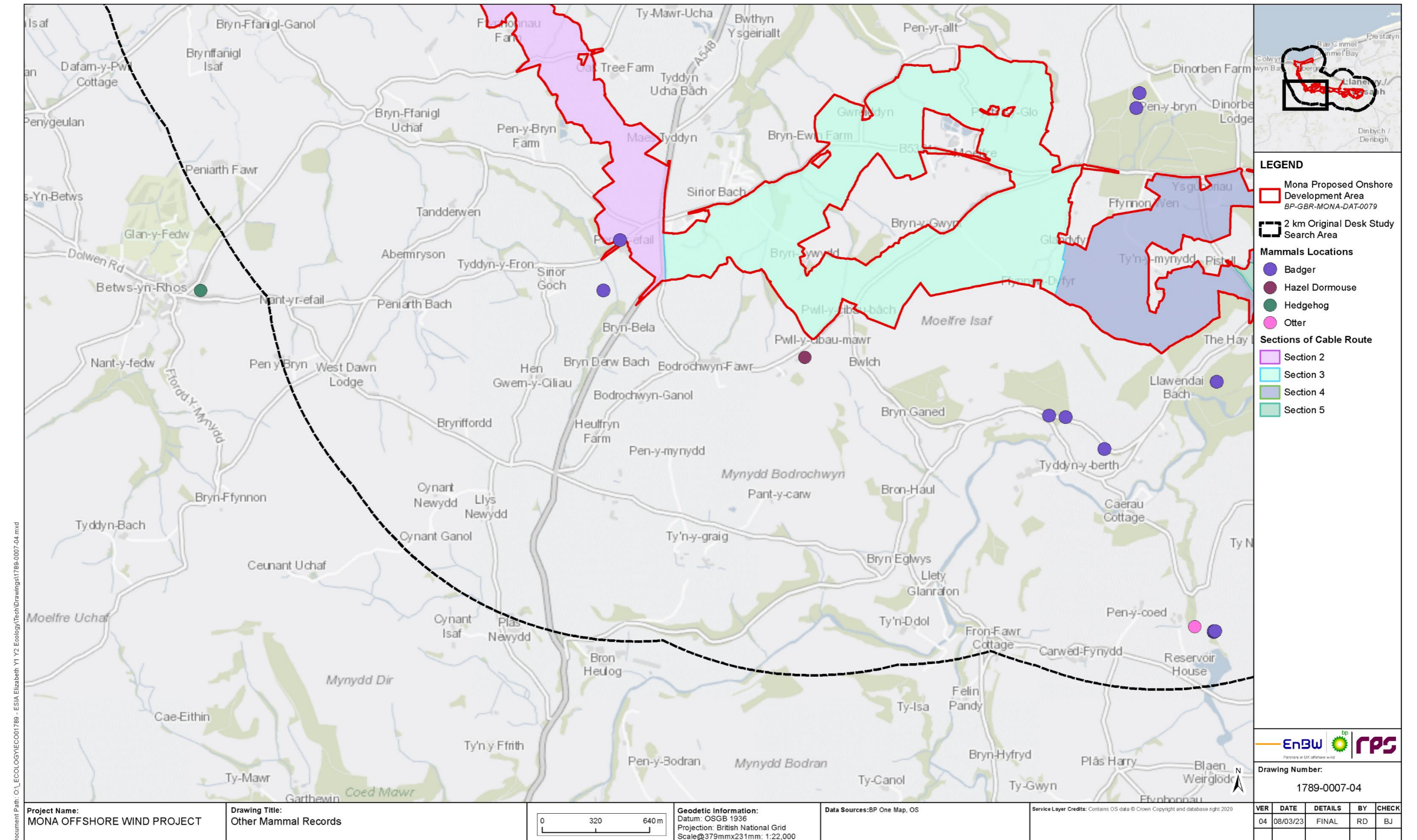


Figure 2.29: Other mammal records (excluding bats) within 2km of the Mona Proposed Onshore Development Area.

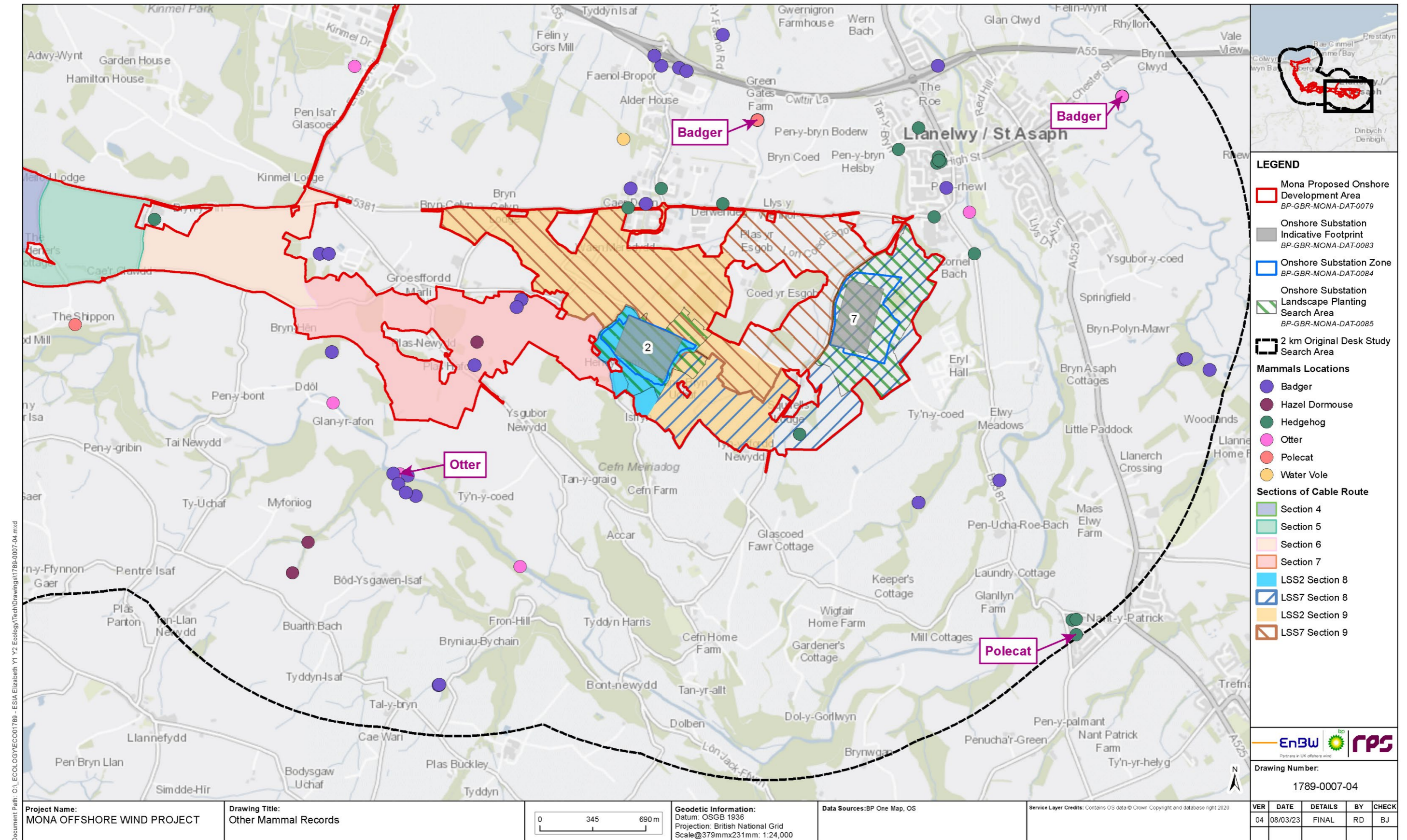


Figure 2.30: Other mammal records (excluding bats) within 2km of the Mona Proposed Onshore Development Area.

### 3 SUMMARY

#### 3.1 Designated sites

3.1.1.1 The desk study identified 11 internationally designated sites located within 20km of the Mona Proposed Onshore Development Area, six nationally designated sites (SSSIs) located within 5km of the Mona Proposed Onshore Development Area and 76 non-statutory locally designated sites (e.g. LWSs) located within 2km of the Mona Proposed Onshore Development Area. No LNRs were located within 2km of the Mona Proposed Onshore Development Area. Of these designated sites, two SSSIs and 10 LWSs are located within the Mona Proposed Onshore Development Area.

3.1.1.2 The desk study also identified 398 areas designated as ancient woodland and 88 areas defined as traditional orchard located within the terrestrial ecology desk study search area. Of these, 34 areas of ancient woodland and 14 areas of traditional orchard are located within the Mona Proposed Onshore Development Area.

#### 3.2 Protected and other notable species

3.2.1.1 The desk study has confirmed the presence of protected or otherwise notable species within terrestrial ecology desk study search area. These include:

- Flora – bluebells and common mouse-ear
- Terrestrial invertebrates – butterfly species
- Amphibians and reptiles – GCN and slow worm
- Bats – nine bat species and bat roosts
- Other mammals – hedgehog, badgers, and hazel dormouse.

3.2.1.2 Notable findings of the desk study include the presence a dense breeding population of GCN and large lesser horseshoe bat roosts located within the terrestrial ecology desk study search area.

#### 3.3 References

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

Joint Nature Conservation Committee (JNCC) (2023) Coedwigoedd Dyffryn Elwy/Elwy Valley Woods. Designated Special Area of Conservation (SAC). Available: <https://www.cofnod.org.uk/Home>. Accessed: January 2023.

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

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

## Appendix A: Protected and notable species records received from Cofnod located within 2km of the Mona Proposed Onshore Development Area

### Plants and lichens.

Table A 1: Plants and lichens.

Group	Scientific Name	Common Name	Date and number of records	Conservation Status
Flowering Plant	<i>Allium ampeloprasum</i>	Wild Leek	3 records from 2011 to 2018	GBNNSIP, LBAP-C, RDB-NS
Moss	<i>Aloina aloides</i>	Common Aloe-moss	1 record from 2019	LBAP-C, LBAP-F
Moss	<i>Amblystegium confervoides</i>	Tiny Feather-moss	2 records from 2019	LBAP-D
Flowering Plant	<i>Anacamptis morio</i>	Green-winged Orchid	2 records from 2011 to 2012	CITES-B, LBAP-A, LBAP-C, LBAP-F, LBAP-G, RL-NT
Flowering Plant	<i>Anchusa arvensis</i>	Bugloss	1 record from 2014	GBNNSIP, LBAP-G
Flowering Plant	<i>Arctium lappa</i>	Greater Burdock	One record from 2017	GBNNSIP
Flowering Plant	<i>Armeria maritima</i>	Thrift	1 record from 2021	BAP, LBAP-A, RDB-NR, RL-CR
Flowering Plant	<i>Artemisia absinthium</i>	Wormwood	1 record from 2015	GBNNSIP
Fern	<i>Asplenium trichomanes</i>	Maidenhair Spleenwort	4 records, from 2011 to 2015	RDB-NR, RL-NT, S7
Flowering Plant	<i>Anagallis arvensis</i>	Scarlet Pimpernel	9 records, from 2014 to 2017	GBNNSIP, RDB-NS
Flowering Plant	<i>Atriplex littoralis</i>	Grass-leaved Orache	2 records from 2015 to 2021	LBAP-C, LBAP-G
Flowering Plant	<i>Atriplex portulacoides</i>	Sea-purslane	1 record from 2017	LBAP-G
Flowering Plant	<i>Blackstonia perfoliata</i>	Yellow-wort	9 records from 2014 to 2017	LBAP-G
Moss	<i>Brachythecium glareosum</i>	Streaky Feather-moss	1 record from 2017	LBAP-C
Flowering Plant	<i>Bromus hordeaceus</i>	Soft-brome	2 records, from 2014 to 2015	RDB-NS

Group	Scientific Name	Common Name	Date and number of records	Conservation Status
Flowering Plant	<i>Bromus racemosus</i>	Smooth Brome	One record from 2016	LBAP-G
Moss	<i>Bryum argenteum</i>	Silver-moss	6 records from 2012 to 2019	LBAP-C
Flowering Plant	<i>Bryum argenteum</i>	Flowering-rush	2 records from 2012 to 2015	LBAP-C
Flowering Plant	<i>Calystegia sepium</i>	Hedge Bindweed	3 records, from 2015 to 2016	RDB-NS
Flowering Plant	<i>Carex acutiformis</i>	Lesser Pond-sedge	2 records from 2014 to 2015	LBAP-G
Flowering Plant	<i>Carex arenaria</i>	Sand Sedge	4 records from 2014 to 2015	LBAP-C
Flowering Plant	<i>Carex distans</i>	Distant Sedge	2 records from 2014 to 2017	LBAP-C
Flowering Plant	<i>Carex divulsa subsp. divulsa</i>	Grey Sedge	1 record from 2017	LBAP-G
Flowering Plant	<i>Carex pseudocyperus</i>	Cyperus Sedge	1 record from 2016	LBAP-G
Flowering Plant	<i>Carex riparia</i>	Greater Pond-sedge	3 records from 2010 to 2021	LBAP-G
Flowering Plant	<i>Carex spicata</i>	Spiked Sedge	6 records from 2012 to 2019	LBAP-G
Flowering Plant	<i>Catapodium marinum</i>	Sea Fern-grass	1 record from 2015	LBAP-C
Flowering Plant	<i>Centunculus minimus</i>	Chaffweed	1 record from 2013	LBAP-GRL-NT
Flowering Plant	<i>Cerastium fontanum</i>	Common Mouse-ear	13 records, from 2014 to 2021	BAP, RDB-NR, RL-VU
Flowering Plant	<i>Cerastium pumilum</i>	Dwarf Mouse-ear	1 record from 2015	LBAP-C, RDB-NS, RL-NT
Flowering Plant	<i>Chenopodium ficifolium</i>	Fig-leaved Goosefoot	1 record from 2019	GBNNSIP, LBAP-G
Flowering Plant	<i>Chenopodium rubrum</i>	Red Goosefoot	1 record from 2014	LBAP-G
Flowering Plant	<i>Cruciata laevipes</i>	Crosswort	26 records from 2010 to 2018	LBAP-G
Moss	<i>Ctenidium molluscum</i>	Chalk Comb-moss	8 records from 2019	LBAP-C



Group	Scientific Name	Common Name	Date and number of records	Conservation Status
Flowering Plant	<i>Cytisus scoparius</i>	Broom	4 records from 2011 to 2015	RDB-NR, RL-NT
Flowering Plant	<i>Dactylorhiza praetermissa</i>	Southern Marsh-orchid	1 record from 2015	LBAP-G
Flowering Plant	<i>Daphne laureola</i>	Spurge-laurel	6 records from 2011 to 2015	LBAP-G
Flowering Plant	<i>Daucus carota</i>	Wild Carrot	5 records from 2011 to 2017	GBNNSIP, RDB-NS
Flowering Plant	<i>Deschampsia cespitosa</i>	Tufted Hair-grass	2 records from 2014 to 2015	RL-DD
Fern	<i>Dryopteris affinis</i>	Scaly Male-fern	1 record in 2014	RL-DD
Flowering Plant	<i>Eleocharis palustris</i>	Common Spike-rush	3 records from 2013 to 2016	RL-DD
Flowering Plant	<i>Elytrigia juncea</i>	Sand Couch	2 records from 2014 and 2018	LBAP-C
Flowering Plant	<i>Epilobium roseum</i>	Pale Willowherb	2 records from 2015	LBAP-G
Flowering Plant	<i>Epipactis helleborine</i>	Broad-leaved Helleborine	7 records from 2010 to 2017	LBAP-G
Flowering Plant	<i>Erigeron acris</i>	Blue Fleabane	3 records from 2015	LBAP-G
Flowering Plant	<i>Euphorbia lathyris</i>	Caper Spurge	2 records from 2017 to 2021	GBNNSIP, LBAP-G
Flowering Plant	<i>Euphorbia paralias</i>	Sea Spurge	2 records from 2015 and 2014	LBAP-C
Flowering Plant	<i>Festuca rubra</i>	Red Fescue	15 records from 2011 to 2019	GBNNSIP, RL-DD
Flowering Plant	<i>Fumaria muralis</i>	Common Ramping-fumitory	14 records from 2013 to 2021	RDB-NR, RL-VU
Flowering Plant	<i>Gentianella amarella</i>	Autumn Gentian	1 record from 2016	LBAP-D, RL-NT
Flowering Plant	<i>Geranium columbinum</i>	Long-stalked Crane's-bill	2 records from 2011 and 2016	LBAP-G
Flowering Plant	<i>Geranium pusillum</i>	Small-flowered Crane's-bill	5 records from 2014 to 2017	LBAP-G
Flowering Plant	<i>Glebionis segetum</i>	Corn Marigold	1 record from 2014	GBNNSIP, LBAP-G, RL-VU
Flowering Plant	<i>Glyceria fluitans x notata = G. x pedicellata</i>	Hybrid Sweet-grass	1 record from 2021	LBAP-G
Flowering Plant	<i>Glyceria notata</i>	Plicate Sweet-grass	2 records from 2015	LBAP-G
Flowering Plant	<i>Helianthemum nummularium</i>	Common Rock-rose	10 records from 2010 to 2016	LBAP-G

Group	Scientific Name	Common Name	Date and number of records	Conservation Status
Flowering Plant	<i>Helianthemum oelandicum</i>	Hoary Rock-rose	4 records from 2012 to 2016	BAP, LBAP-A, LBAP-C, LBAP-F, RDB-NR, RDB-NS, RL-VU
Flowering Plant	<i>Helleborus foetidus</i>	Stinking Hellebore	10 records from 2010 to 2018	LBAP-C, LBAP-D, RDB-NS
Flowering Plant	<i>Heracleum sphondylium</i>	Hogweed	55 records from 2011 to 2021	RL-DD
Flowering Plant	<i>Hippophae rhamnoides</i>	Sea-buckthorn	4 records from 2015 to 2018	INNS, LBAP-C, RDB-NS
Moss	<i>Hookeria lucens</i>	Shining Hookeria	1 record from 2019	LBAP-C
Flowering Plant	<i>Hordeum secalinum</i>	Meadow Barley	8 records from 2013 to 2017	LBAP-G
Flowering Plant	<i>Hyacinthoides non-scripta</i>	Bluebell	40 records, from 2011 to 2018	LBAP-A, LBAP-C, LBAP-F, LBAP-S, LBAP-T, WCA8
Moss	<i>Hygroamblystegium fluviatile</i>	Brook-side Feather-moss	2 records from 2019 and 2020	LBAP-C
Flowering Plant	<i>Hypericum maculatum</i>	Imperforate St John's-wort	5 records from 2011 to 2014	RL-DD
Flowering Plant	<i>Hypericum montanum</i>	Pale St John's-wort	5 records from 2015 and 2016	LBAP-A, LBAP-C, LBAP-D, RL-NT
Flowering Plant	<i>Inula conyzae</i>	Ploughman's-spikenard	7 records from 2010 to 2016	LBAP-G
Flowering Plant	<i>Jacobaea erucifolia</i>	Hoary Ragwort	9 records from 2013 to 2017	LBAP-G
Flowering Plant	<i>Juncus gerardii</i>	Saltmarsh Rush	2 records from 2017	LBAP-C
Flowering Plant	<i>Juncus maritimus</i>	Sea Rush	1 record from 2017	LBAP-C
Conifer	<i>Juniperus communis</i>	Juniper	1 record from 2014	BAP, LBAP-C, LBAP-D, RDB-NR, RL-CR, S7
Flowering Plant	<i>Kickxia elatine</i>	Sharp-leaved Fluellen	2 records from 2016	GBNNSIP, LBAP-C, LBAP-G
Moss	<i>Kindbergia praelonga</i>	Common Feather-moss	1 records from 2018	LBAP-C
Flowering Plant	<i>Lactuca serriola</i>	Prickly Lettuce	12 records from 2014 to 2021	GBNNSIP, LBAP-C
Liverwort	<i>Lejeunea lamacerina</i>	Western Pouncewort	2 records from 2019 and 2020	LBAP-C
Flowering Plant	<i>Lemna trisulca</i>	Ivy-leaved Duckweed	1 record from 2016	LBAP-G
Flowering Plant	<i>Leymus arenarius</i>	Lyme-grass	2 records from 2014 and 2015	LBAP-C
Flowering Plant	<i>Lysimachia nummularia</i>	Creeping-Jenny	4 records from 2015 to 2017	LBAP-G
Flowering Plant	<i>Malva arborea</i>	Tree-mallow	1 record from 2015	LBAP-C, LBAP-D
Flowering Plant	<i>Marrubium vulgare</i>	White Horehound	8 records from 2012 to 2016	LBAP-C, LBAP-D, RDB-NS
Flowering Plant	<i>Meconopsis cambrica</i>	Welsh Poppy	8 records from 2011 to 2016	LBAP-C, LBAP-D, RDB-NS
Flowering Plant	<i>Medicago arabica</i>	Spotted Medick	2 records from 2014 and 2015	LBAP-G
Flowering Plant	<i>Mentha aquatica</i>	Water Mint	13 records from 2013 to 2018	LBAP-A
Liverwort	<i>Metzgeria pubescens</i>	Downy Veilwort	3 records from 2012 to 2016	LBAP-C
Moss	<i>Mnium stellare</i>	Starry Thyme-moss	2 records from 2016	LBAP-C
Flowering Plant	<i>Moenchia erecta</i>	Upright Chickweed	1 record from 2010	LBAP-A, LBAP-C, LBAP-D

Group	Scientific Name	Common Name	Date and number of records	Conservation Status
Flowering Plant	<i>Myrica gale</i>	Bog-myrtle	1 record from 2015	LBAP-C, LBAP-D
Flowering Plant	<i>Nymphaea alba</i>	White Water-lily	1 record from 2018	LBAP-G
Flowering Plant	<i>Odontites vernus</i>	Red Bartsia	16 records from 2014 to 2018	RDB-NS
Flowering Plant	<i>Oenanthe lachenalii</i>	Parsley Water-dropwort	3 records from 2014 and 2015	LBAP-C, LBAP-G
Flowering Plant	<i>Ophrys apifera</i>	Bee Orchid	6 records from 2012 to 2021	CITES-B, LBAP-G
Flowering Plant	<i>Ophrys insectifera</i>	Fly Orchid	1 record from 2010	BAP, RL-VU, S7
Flowering Plant	<i>Orobanche hederace</i>	Ivy Broomrape	17 records from 2010 to 2016	LBAP-A, LBAP-C
Moss	<i>Orthotrichum pulchellum</i>	Elegant Bristle-moss	1 record from 2020	LBAP-C, LBAP-F
Flowering Plant	<i>Parapholis strigosa</i>	Hard-grass	1 record from 2014	LBAP-C
Conifer	<i>Pinus sylvestris</i>	Scots Pine	8 records from 2011 to 2021	RDB-NS
Moss	<i>Plagiomnium cuspidatum</i>	Woodsy Thyme-moss	1 record from 2020	LBAP-C
Flowering Plant	<i>Platanthera chlorantha</i>	Greater Butterfly-orchid	3 records from 2010 and 2011	LBAP-G, RL-NT
Flowering Plant	<i>Poa compressa</i>	Flattened Meadow-grass	1 record from 2015	LBAP-G
Flowering Plant	<i>Polygala vulgaris</i>	Common Milkwort	2 records in 2015	RL-DD
Flowering Plant	<i>Polygonum oxyspermum</i>	Ray's Knotgrass	1 record from 2015	LBAP-A, LBAP-C, LBAP-G
Fern	<i>Polypodium cambricum</i>	Southern Polypody	1 record from 2012	LBAP-A, LBAP-C, LBAP-F, LBAP-G
Fern	<i>Polypodium vulgare x interjectum = P. x mantoniae</i>	Polypody	2 records from 2014 and 2016	LBAP-G
Flowering Plant	<i>Populus nigra</i>	Black-poplar	1 record from 2010	GBNNSIP, LBAP-T
Flowering Plant	<i>Populus nigra subsp. betulifolia</i>	Black-poplar	18 records from 2012 to 2018	GBNNSIP, LBAP-C, LBAP-D, LBAP-F, LBAP-S, LBAP-W
Flowering Plant	<i>Potentilla anglica x reptans = P. x mixta</i>	Hybrid Cinquefoil	5 records from 2014 to 2016	LBAP-G
Flowering Plant	<i>Potentilla tabernaemontani</i>	Spring Cinquefoil	1 record from 2021	LBAP-A, LBAP-C, LBAP-D, RDB-NS
Flowering Plant	<i>Primula veris x vulgaris = P. x polyantha</i>	False Oxlip	1 record from 2012	LBAP-G
Flowering Plant	<i>Prunus padus</i>	Bird Cherry	1 record from 2018	LBAP-G
Flowering Plant	<i>Puccinellia distans</i>	Reflexed Salt-marsh-grass	2 records from 2017	LBAP-C, LBAP-D, LBAP-G, RDB-NS
Flowering Plant	<i>Puccinellia maritima</i>	Common Saltmarsh-grass	2 records from 2017 and 2021	LBAP-C
Flowering Plant	<i>Ranunculus acris</i>	Meadow Buttercup	37 records from 2011 to 2019	RL-DD
Flowering Plant	<i>Ranunculus flammula</i>	Lesser Spearwort	For records from 2015 to 2015	RDB-NR, RDB-NS, RL-DD
Flowering Plant	<i>Ranunculus penicillatus</i>	Stream Water-crowfoot	1 record from 2011	LBAP-C, RDB-NS
Lichen	<i>Ramonia dictyospora</i>	-	1 record, in 2011	BAP, RDB-NS, RL-NT, S7
Flowering Plant	<i>Raphanus raphanistrum subsp. maritimus</i>	Sea Radish	10 records from 2014 to 2021	LBAP-G
Flowering Plant	<i>Rhinanthus minor</i>	Yellow-rattle	10 records from 2015 to 2018	LBAP-A, RL-DD

Group	Scientific Name	Common Name	Date and number of records	Conservation Status
Flowering Plant	<i>Ribes alpinum</i>	Mountain Currant	1 record in 2015	LBAP-C, LBAP-D, LBAP-F, RDB-NS
	<i>Rorippa microphylla</i>	Narrow-fruited Water-cress	2 records from 2015 and 2016	LBAP-C
Flowering Plant	<i>Rosa canina x caesia = R. x dumalis</i>	.	2 records from 2014	LBAP-G
Flowering Plant	<i>Rosa rubiginosa</i>	Sweet-briar	1 record from 2017	LBAP-G
Flowering Plant	<i>Rubia peregrina</i>	Wild Madder	11 records from 2010 to 2017	LBAP-C
Flowering Plant	<i>Rumex acetosa</i>	Common Sorrel	30 records from 2011 to 2021	GBNNSIP, RDB-NR, RL-DD
Flowering Plant	<i>Rumex crispus</i>	Curled Dock	39 records from 2011 to 2021	RDB-NS
Flowering Plant	<i>Rumex crispus x obtusifolius = R. x pratensis</i>	.	1 record from 2016	LBAP-G
Flowering Plant	<i>Salix caprea</i>	Goat Willow	13 records from 2011 to 2018	RDB-NS
Flowering Plant	<i>Salix viminalis x caprea = S. x smithiana</i>	Broad-leaved Osier	1 record from 2015	GBNNSIP, LBAP-G
Flowering Plant	<i>Salvia verbenaca</i>	Wild Clary	1 record from	LBAP-C, LBAP-D
Flowering Plant	<i>Schoenoplectus tabernaemontani</i>	Grey Club-rush	1 record from	LBAP-C
Flowering Plant	<i>Sorbus torminalis</i>	Wild Service-tree	1 record from	LBAP-G
Flowering Plant	<i>Spartina anglica</i>	Common Cord-grass	2 records	INNS, LBAP-C
Flowering Plant	<i>Spergula arvensis</i>	Corn Spurrey	1 record from 2011	LBAP-G, RL-VU
Flowering Plant	<i>Spergularia media</i>	Greater Sea-spurrey	3 records from 2014 to 2021	LBAP-C
Flowering Plant	<i>Spiranthes spiralis</i>	Autumn Lady's-tresses	5 records from 2013 to 2016	LBAP-C, LBAP-G, RL-NT
Flowering Plant	<i>Stachys arvensis</i>	Field Woundwort	1 record from 2014	GBNNSIP, LBAP-G, RL-NT
Flowering Plant	<i>Stachys sylvatica x palustris = S. x ambigua</i>	Hybrid Woundwort	1 record from 2017	LBAP-G
Moss	<i>Syntrichia ruralis var. ruraliformis</i>	Sand-hill Screw-moss	11 records from 2019	LBAP-C
Moss	<i>Thamnobryum alopecurum</i>	Fox-tail Feather-moss	2 records from 2010 to 2012	LBAP-C
Flowering Plant	<i>Thlaspi arvense</i>	Field Penny-cress	1 record from 2014	GBNNSIP, LBAP-G
Moss	<i>Tortella nitida</i>	Neat Crisp-moss	5 records from 2017 and 2019	LBAP-C, LBAP-F
Flowering Plant	<i>Trifolium fragiferum</i>	Strawberry Clover	1 record from 2015	RL-VU
Flowering Plant	<i>Ulex gallii</i>	Western Gorse	10 records from 2014 to 2016	LBAP-A, LBAP-C, LBAP-S
Flowering Plant	<i>Veronica serpyllifolia</i>	Thyme-leaved Speedwell	19 records from 2011 to 2019	RL-NT
Flowering Plant	<i>Veronica spicata</i>	Spiked Speedwell	1 record from 2011	LBAP-D, RDB-NR, RDB-NS, WCA8
Flowering Plant	<i>Vicia bithynica</i>	Bithynian Vetch	1 record from 2019	LBAP-D, RDB-NS, RL-VU
Flowering Plant	<i>Vicia lathyroides</i>	Spring Vetch	1 record from 2016	LBAP-C, LBAP-G
Flowering Plant	<i>Vicia tetrasperma</i>	Smooth Tare	5 records from 2014 to 2017	LBAP-G
Flowering Plant	<i>Vinca minor</i>	Lesser Periwinkle	3 records from 2010 and 2015	GBNNSIP, LBAP-G

Group	Scientific Name	Common Name	Date and number of records	Conservation Status
Flowering Plant	<i>Vulpia myuros</i>	Rat's-tail Fescue	3 records from 2015 and 2021	GBNNSIP, LBAP-G
Moss	<i>Weissia controversa</i>	Green-tufted Stubble-moss	5 records from 2020 and 2019	LBAP-D
Moss	<i>Weissia longifolia</i>	Crisp Beardless-moss	1 record from 2017	LBAP-D

## Terrestrial invertebrates

Table A 2: Terrestrial invertebrates.

Group	Taxon Name	Common Name	Date and number of records	Conservation Status
Insect - Dragonfly (Odonata)	<i>Aeshna cyanea</i>	Southern Hawker	20 records, from 2010 to 2020	LBAP-S
Insect - Dragonfly (Odonata)	<i>Aeshna juncea</i>	Common Hawker	16 records, from 2010 to 2019	LBAP-S
Insect - Dragonfly (Odonata)	<i>Aeshna mixta</i>	Migrant Hawker	15 records, from 2010 to 2018	LBAP-S
Insect - Moth	<i>Agrotis trux</i>	Crescent Dart	1 record from 2014	LBAP-D
Insect - Dragonfly (Odonata)	<i>Anax imperator</i>	Emperor Dragonfly	18 records from 2010 to 2018	LBAP-S
Insect - Butterfly	<i>Aricia agestis</i>	Brown Argus	2 records from 2011 and 2019	LBAP-D
Insect - Hymenopteran	<i>Bombus hortorum</i>	Small Garden Bumblebee	4 records from 2011 to 2015	LBAP-F
Insect - Hymenopteran	<i>Bombus lapidarius</i>	Red-tailed Bumblebee	10 records from 2010 to 2020	LBAP-F
Insect - Hymenopteran	<i>Bombus lucorum</i>	White-tailed Bumblebee	7 records from 2011 to 2017	LBAP-F
Insect - Hymenopteran	<i>Bombus pascuorum</i>	Common Carder Bee	5 records from 2012 to 2017	LBAP-F
Insect - Hymenopteran	<i>Bombus pratorum</i>	Early Bumblebee	7 records from 2011 to 2014	LBAP-F
Insect - Hymenopteran	<i>Bombus terrestris</i>	Buff-tailed Bumblebee	8 records from 2012 to 2020	LBAP-F
Insect - Moth	<i>Callimorpha dominula</i>	Scarlet Tiger	2 records in 2018 and 2020	LBAP-G
Insect - Dragonfly (Odonata)	<i>Calopteryx splendens</i>	Banded Demoiselle	14 records from 2010 to 2018	LBAP-S
Insect - Dragonfly (Odonata)	<i>Calopteryx virgo</i>	Beautiful Demoiselle	19 records from 2010 to 2019	LBAP-S
Insect - Butterfly	<i>Celastrina argiolus</i>	Holly Blue	39 records from 2011 to 2021	LBAP-C
Insect - Dragonfly (Odonata)	<i>Coenagrion puella</i>	Azure Damselfly	29 records from 2010 to 2019	LBAP-S
Insect - Dragonfly (Odonata)	<i>Cordulegaster boltonii</i>	Golden-ringed Dragonfly	1 record from 2017	LBAP-S
Insect - Dragonfly (Odonata)	<i>Enallagma cyathigerum</i>	Common Blue Damselfly	18 records from 2010 to 2018	LBAP-S
Insect - Moth	<i>Euxoa tritici</i>	White-line Dart	1 record in 2016	BAP, LBAP-G, S7
Insect - Butterfly	<i>Favonius quercus</i>	Purple Hairstreak	7 records from 2010 to 2018	LBAP-C
Insect - Dragonfly (Odonata)	<i>Ischnura elegans</i>	Blue-tailed Damselfly	28 records from 2010 to 2018	LBAP-S
Insect - Dragonfly (Odonata)	<i>Lestes sponsa</i>	Emerald Damselfly	5 records from 2012 to 2018	LBAP-S
Insect - Dragonfly (Odonata)	<i>Libellula depressa</i>	Broad-bodied Chaser	23 records from 2010 to 2019	LBAP-S

Group	Taxon Name	Common Name	Date and number of records	Conservation Status
Insect - Dragonfly (Odonata)	<i>Libellula quadrimaculata</i>	Four-spotted Chaser	18 records from 2010 to 2019	LBAP-S
Insect - Dragonfly (Odonata)	<i>Orthetrum cancellatum</i>	Black-tailed Skimmer	6 records from 2010 to 2020	LBAP-S
Insect - Dragonfly (Odonata)	<i>Pyrrhosoma nymphula</i>	Large Red Damselfly	25 records from 2010 to 2020	LBAP-S
Insect - Butterfly	<i>Speyeria aglaja</i>	Dark Green Fritillary	7 records from 2015 to 2020	LBAP-F, LBAP-G
Insect - True Fly (Diptera)	<i>Stratiomys potamida</i>	Banded General	1 record in 2017	RDB-N
Insect - Dragonfly (Odonata)	<i>Sympetrum striolatum</i>	Common Darter	8 records from 2011 to 2018	LBAP-S, RL-DD
Insect - Dragonfly (Odonata)	<i>Sympetrum danae</i>	Black Darter	2 records in 2019	LBAP-S
Insect - Dragonfly (Odonata)	<i>Sympetrum sanguineum</i>	Ruddy Darter	5 records in 2019	LBAP-S
Insect - Moth	<i>Tyria jacobaeae</i>	Cinnabar	1 record in 2012	BAP, LBAP-G, S7

## Aquatic invertebrates and fish

Table A 3: Aquatic invertebrates and fish

Group	Taxon Name	Common Name	Date and number of records	Conservation Status
Bony Fish (Actinopterygii)	<i>Gasterosteus aculeatus</i>	Three-spined Stickleback	1 record from 2013	LBAP-C
Bony Fish (Actinopterygii)	<i>Phoxinus phoxinus</i>	Minnow	1 record from 2018	LBAP-C
Bony Fish (Actinopterygii)	<i>Scardinius erythrophthalmus</i>	Rudd	1 record from 2016	LBAP-C
Cartilagenous Fish (Chondrichthyes)	<i>Scyliorhinus canicula</i>	Lesser Spotted Dogfish	1 record from 2014	LBAP-C

## Amphibians and reptiles

Table A 4: Amphibians and reptiles.

Group	Taxon Name	Common Name	Date and number of records	Conservation Status
Amphibian	<i>Rana temporaria</i>	Common Frog	22 records from 2010 to 2021	Bern3, HDir5, LBAP-A, LBAP-C, LBAP-F, LBAP-T, WCA5
Reptile	<i>Zootoca vivipara</i>	Common Lizard	8 records from 2011 to 2021	BAP, Bern3, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-G, LBAP-S, 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
Reptile	<i>Natrix helvetica</i>	Grass Snake	7 records from 2011 to 2021	BAP, Bern3, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-G, LBAP-S, LBAP-T, S7, WCA5

Group	Taxon Name	Common Name	Date and number of records	Conservation Status
Amphibian	<i>Triturus cristatus</i>	Great Crested Newt	29 records from 2011 to 2020	BAP, Bern2, CHS2, HDir2, HDir4, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-S, LBAP-T, LBAP-W, S7, WCA5
Amphibian	<i>Lissotriton helveticus</i>	Palmate Newt	29 records from 2011 to 2020	Bern3, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-T, WCA5
Reptile	<i>Anguis fragilis</i>	Slow-worm	14 records from 2014 to 2021	BAP, Bern3, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-G, LBAP-S, LBAP-T, S7, WCA5
Amphibian	<i>Lissotriton vulgaris</i>	Smooth Newt	28 records from 2010 to 2020	Bern3, LBAP-C, LBAP-D, LBAP-F, LBAP-T, WCA5

## Terrestrial mammals

Table A 5: Terrestrial mammals.

Taxon Name	Common Name	Date and number of records	Conservation Status
<i>Meles meles</i>	Badger	88 records from 2010 to 2021	Bern3, LBAP-C, LBAP-D, LBAP-F, LBAP-W, PBA
<i>Chiroptera</i>	Bat (unidentified)	9 records from 2011 to 2018	Bern2, Bonn2, CHS2, HDir4, LBAP-T, WCA5
<i>Plecotus auritus</i>	Brown Long-eared Bat	11 records from 2011 to 2020	BAP, Bern2, Bonn2, CHS2, HDir4, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-G, S7, WCA5
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	24 records from 2010 to 2021	Bonn2, CHS2, HDir4, LBAP-A, LBAP-D, LBAP-F, LBAP-G, LBAP-S, S7, WCA5
<i>Sorex araneus</i>	Common Shrew	2 records from 2013 to 2020	Bern3, LBAP-A, LBAP-C
<i>Dama dama</i>	Fallow Deer	9 records from 2011 to 2021	Bern3, GBNNSIP, LBAP-C
<i>Rhinolophus ferrumequinum</i>	Greater Horseshoe Bat	6 records from 2010 to 2018	BAP, Bern2, Bonn2, CHS2, HDir2, HDir4, S7, WCA5
<i>Lepus europaeus</i>	Hare	7 records from 2010 to 2018	BAP, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-G, LBAP-S, S7
<i>Muscardinus avellanarius</i>	Hazel Dormouse	5 records from 2010 to 2017	BAP, Bern3, CHS2, HDir4, LBAP-C, LBAP-D, LBAP-F, LBAP-G, LBAP-S, LBAP-T, RL-VU, S7, WCA5
<i>Erinaceus europaeus</i>	Hedgehog	121 records from 2010 to 2021	BAP, Bern3, LBAP-A, LBAP-C, LBAP-F, LBAP-G, RL-VU, S7
<i>Rhinolophus hipposideros</i>	Lesser Horseshoe Bat	19 records from 2010 to 2020	BAP, Bern2, Bonn2, CHS2, HDir2, HDir4, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-G, LBAP-S, LBAP-W, S7, WCA5
<i>Myotis</i>	Myotis (unidentified species)	11 records from 2010 to 2020	Bern2, Bonn2, CHS2, HDir4, WCA5
<i>Myotis nattereri</i>	Natterer's Bat	4 records from 2011 to 2015	Bern2, Bonn2, CHS2, HDir4, LBAP-C, LBAP-D, LBAP-F, LBAP-G, LBAP-S, WCA5
<i>Nyctalus noctula</i>	Noctule Bat	16 records from 2010 to 2021	BAP, Bern2, Bonn2, CHS2, HDir4, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-G, LBAP-S, S7, WCA5

Taxon Name	Common Name	Date and number of records	Conservation Status
<i>Lutra lutra</i>	Otter	23 records from 2011 to 2021	BAP, Bern2, CHS2, CITES-A, HDir2, HDir4, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-G, LBAP-S, LBAP-T, LBAP-W, S7, WCA5
<i>Pipistrellus pipistrellus</i>	Pipistrelle (unidentified species)	8 records from 2010 to 2021	Bern2, Bern3, Bonn2, CHS2, HDir4, LBAP-C, S7, WCA5
<i>Mustela putorius</i>	Polecat	12 records from 2012 to 2021	BAP, Bern3, CHS4, GBNSIP, HDir5, LBAP-C, LBAP-F, LBAP-G, LBAP-S, S7
<i>Eptesicus serotinus</i>	Serotine	6 records from 2010 to 2012	Bern2, Bonn2, CHS2, HDir4, LBAP-G, RL-VU, WCA5
<i>Pipistrellus pygmaeus</i>	Soprano Pipistrelle	22 records from 2010 to 2021	BAP, Bern2, Bonn2, CHS2, HDir4, LBAP-A, LBAP-D, LBAP-F, LBAP-G, LBAP-S, S7, WCA5
<i>Neomys fodiens</i>	Water Shrew	1 record from 2018	Bern3, LBAP-A, LBAP-C, LBAP-F, LBAP-G
<i>Arvicola amphibius</i>	Water Vole	7 records from 2012 to 2019	BAP, LBAP-A, LBAP-C, LBAP-D, LBAP-F, LBAP-G, LBAP-S, LBAP-T, RL-EN, S7, WCA5
<i>Mustela nivalis</i>	Weasel	1 record from 2021	Bern3, LBAP-A, LBAP-C, LBAP-F
<i>Myotis mystacinus/brandtii</i>	Whiskered/Brandt's Bat	3 records from 2012 to 2019	Bern2, Bonn2, CHS2, HDir4, LBAP-C, RL-DD, WCA5

## Invasive non-native species

Table A 6: Invasive non-native species

Group	Taxon Name	Common Name	Date and number of records	Conservation Status
Terrestrial mammal	<i>Neovison vison</i>	American Mink	12 records from 2011 to 2018	GBNSIP, INNS, WCA9
Flowering Plant	<i>Elodea canadensis</i>	Canadian Waterweed	1 record from 2014	GBNSIP, INNS, WCA9
Flowering Plant	<i>Prunus laurocerasus</i>	Cherry Laurel	12 records from 2011 to 2019	GBNSIP, INNS
Flowering Plant	<i>Spartina anglica</i>	Common Cord-grass	2 records from 2014 and 2017	INNS, LBAP-C
Bony Fish (Actinopterygii)	<i>Carassius auratus</i>	Goldfish	1 record from 2013	GBNSIP, INNS
Insect - Beetle (Coleoptera)	<i>Harmonia axyridis</i>	Harlequin Ladybird	15 records from 2010 to 2022	GBNSIP, INNS
Flowering Plant	<i>Impatiens glandulifera</i>	Himalayan Balsam	45 records from 2010 to 2021	GBNSIP, INNS
Flowering Plant	<i>Cotoneaster simonsii</i>	Himalayan Cotoneaster	4 records from 2015 and 2017	GBNSIP, INNS, WCA9
Flowering Plant	<i>Leycesteria formosa</i>	Himalayan Honeysuckle	1 record from 2015	GBNSIP, INNS
Flowering Plant	<i>Fallopia japonica</i>	Japanese Knotweed	10 records from 2011 to 2018	GBNSIP, INNS, WCA9
Flowering Plant	<i>Rosa rugosa</i>	Japanese Rose	8 records from 2015 to 2021	GBNSIP, INNS, WCA9
Flowering Plant	<i>Mimulus guttatus</i>	Monkeyflower	2 records from 2011 and 2015	GBNSIP, INNS
Flowering Plant	<i>Crococsmia pottsii x aurea = C. x crocosmiiflora</i>	Montbretia	12 records from 2011 to 2017	GBNSIP, INNS, WCA9



Group	Taxon Name	Common Name	Date and number of records	Conservation Status
Flowering Plant	<i>Epilobium brunnescens</i>	New Zealand Willowherb	1 record from 2010	GBNNSIP, INNS
Flowering Plant	<i>Cortaderia selloana</i>	Pampas-grass	1 record from 2015	GBNNSIP, INNS
Flowering Plant	<i>Myriophyllum aquaticum</i>	Parrot's-feather	1 record from 2013	GBNNSIP, INNS
Flowering Plant	<i>Hippophae rhamnoides</i>	Sea-buckthorn	4 records from 2015 and 2018	INNS, LBAP-C, RDB-NS
Flowering Plant	<i>Cotoneaster microphyllus</i>	Small-leaved Cotoneaster	5 records from 2011 to 2020	INNS, WCA9
Flowering Plant	<i>Hyacinthoides hispanica</i>	Spanish Bluebell	2 records from 2012 and 2015	GBNNSIP, INNS
Flowering Plant	<i>Allium triquetrum</i>	Three-cornered Garlic	5 records from 2012 and 2015	GBNNSIP, INNS, WCA9
Flowering Plant	<i>Lamiastrum galeobdolon subsp. argentatum</i>	Variiegated Yellow Archangel	6 records from 2012 and 2015	GBNNSIP, INNS, WCA9
Flowering Plant	<i>Cotoneaster horizontalis</i>	Wall Cotoneaster	3 records from 2011 and 2015	GBNNSIP, INNS, WCA9
Fern	<i>Azolla filiculoides</i>	Water Fern	3 records from 2012 and 2017	GBNNSIP, INNS, WCA9
Flowering Plant	<i>Sedum album</i>	White Stonecrop	21 records from 2015 to 2019	GBNNSIP, INNS

## Conservation status abbreviations

Table A 7: Conservation status abbreviations used in tables above.

Abbreviation	Meaning
BAP:	UK Biodiversity Action Plan Priority Species
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
CITES-C:	Convention on International Trade in Endangered Species, Annex C - Species subject to regulation
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
INNS:	Invasive Non-native Species

Abbreviation	Meaning
LBAP-A:	Anglesey Local Biodiversity Action Plan
LBAP-C:	Conwy Local Biodiversity Action Plan
LBAP-D:	Denbighshire Local Biodiversity Action Plan
LBAP-F:	Flintshire Local Biodiversity Action Plan
LBAP-G:	Gwynedd Local Biodiversity Action Plan
LBAP-S:	Snowdonia National Park Authority Local Biodiversity Action Plan
LBAP-T:	North and Mid Wales Trunk Road Agent Biodiversity Action Plan
LBAP-W:	Wrexham Local Biodiversity Action Plan
PBA:	Protection of Badgers Act 1992
RDB-N:	Red Data Book listing (not based on IUCN guidelines) - Notable
RDB-NA:	Red Data Book listing (not based on IUCN guidelines) - Notable A
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-CR:	IUCN Red List of Threatened Species - Critically Endangered
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-PX:	IUCN Red List of Threatened Species - Possibly Extinct
RL-RE:	IUCN Red List of Threatened Species - Regionally Extinct
RL-VU:	IUCN Red List of Threatened Species - Vulnerable
S7:	Environment (Wales) Act 2016 (Section 7)
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