HORIZON NUCLEAR POWER

WYLFA NEWYDD

ENERGY WORKING FOR BRITAIN

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Wylfa Newydd

Horizon Nuclear Power (Wylfa) Ltd

Technical Summary Report - Other Mammals

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Executive Summary

Horizon Nuclear Power Wylfa Ltd. (Horizon) is currently planning to develop a new nuclear power station on Anglesey (the Wylfa Newydd Generating Station) as identified in the National Policy Statement for Nuclear Power Generation (EN-6). The Wylfa Newydd Project (the Project) will require a number of applications to be made under different legislation to different regulators. Jacobs UK Ltd. (Jacobs) was commissioned to collect baseline data to inform the various applications, assessments and permits that will be submitted for approval to construct and operate the Wylfa Newydd Generating Station.

This technical summary report provides a single resource regarding all survey and background data available for badger (*Meles meles*); brown hare (*Lepus europaeus*); harvest mouse (*Micromys minutus*); hedgehog (*Erinaceus europaeus*); pine marten (*Martes martes*); polecat (*Mustela putorius*); and red squirrel (*Sciurus vulgaris*) in the study area that comprises the Wylfa Newydd Development Area and the surrounding 500m.

These species were identified as potentially being present in the study area due to their geographical distribution and habitat requirements. If present, the species could be affected by the Wylfa Newydd Project. The significance of their presence is due to the protection they receive under a variety of wildlife legislation that protects the animals themselves, and in some cases their habitats as well. All seven species listed above are material considerations within the planning process.

Data gathering to inform this report has included a review of:

- background data from the local records centre;
- habitat assessment survey results;
- species specific field surveys; and
- incidental records.

The background data search was provided by Cofnod (North Wales Environmental Information Service) and included all biological records from the study area and a 2.5km search radius from the boundary. The search found that there are records of brown hare, hedgehog and polecat, and that there is a record of a single dead badger from 2009. The data search did not return records of harvest mouse, pine marten or red squirrel. However, data from Mammals in a Sustainable Environment project (MISE, 2015) suggest that harvest mouse is present on north Anglesey.

A habitat assessment was achieved by completing Phase 1 Habitat Surveys of the study area. These results show that there is suitable habitat for badger, brown hare, harvest mouse, hedgehog and polecat within the study area; this includes rough grassland, woodland and field boundaries. The survey also recorded limited amounts of habitat with the potential to support pine marten and red squirrel in the form of small patches of coniferous plantation.

The single badger record from Cofnod is the only evidence of badger presence within the study area and follows six years of ecological surveys. Badgers are a species that are often very easy to detect due to the obvious and often abundant field signs that betray their presence. The lack of any evidence of the species ever having been recorded during field surveys is therefore considered to be sufficient to prove that badger is absent from the study area.

Surveys for brown hare were completed in 2010, 2011 and 2012 using a transect methodology. These recorded the species being resident across much of the study area. The species has also regularly been recorded incidentally during other surveys between 2009 and 2015. The population of brown hares is therefore considered to be stable and is likely to be within normal density parameters for the species in the study area. This would give a population of hares within the total study area of between 95 – 190, based on one per 2ha and one per 4ha respectively.

Surveys for harvest mouse were carried out due to the species often being under-recorded, and the potential for recording false negatives in the background data search. The surveys involved searching the areas of habitat with the highest potential to support the species in the study area. This included taller grassland areas and areas of dense rush. Harvest mouse was not recorded and has not been recorded incidentally. It is considered highly likely that the species is absent from the study area.

Hedgehog surveys were completed in 2011 and 2012 and involved the use of print trapping and walked transects. The species was recorded throughout the study area and has also been frequently encountered during nocturnal surveys for other species. Hedgehog is therefore considered to be common within the study area, and habitats for both foraging and hibernating should be considered within any impact assessment for the Wylfa Newydd Project. The population in the study area is likely to be 150 individuals based on an normal population density of one individual per 2.5 hectares.

The distribution of pine martens in the UK currently shows that the species is not found on Anglesey and that the nearest populations are found in Snowdonia. While it is considered that there are very small fragments of woodland with the potential to support the species, the likelihood of the species crossing the Menai Strait and across the relatively open habitats of Anglesey to occupy the study area is considered to be remote. The species is therefore considered to be absent from the study area, and no further surveys are considered necessary.

Polecat surveys were commissioned in 2010 and trapping surveys were completed for four consecutive years. Polecat were caught in 2010, 2011 and 2012 and were tagged using Passive Integrated Transponder (PIT) tags and then released, and no animals were caught in 2013. The PIT tagging found that there was a peak of four animals in the study area at any one time, which is a typical population density for an area the size of the study area. The negative result in 2013 is not thought to be conclusive that the species is now absent from the study area. It is therefore proposed that future impact assessments should presume the presence of a population of polecat within normal population densities, rather than attempting to prove absence by way of additional survey effort.

Red squirrels are known to be present on Anglesey with records concentrated in the more densely wooded areas in the eastern and southern quarters of the island. However, the species requires near continuous woodland in order to survive and disperse into new areas. Ordnance survey mapping of the island shows that there is a lack of woodland connectivity between known populations and the study area. Therefore the likelihood of natural colonisation of the study area by red squirrels in the future is considered to be low, and no further surveys are required.

The conclusions of this report are that badger, pine marten and red squirrel are absent from the study area and would not be affected by the Project. The data suggests that there is a sufficiently low likelihood of harvest mouse being present that they should not be considered as an ecological receptor within any impact assessment for the Project; however, they should still be mentioned in generic mitigation approaches as a species that the study area could be enhanced for in the future. Finally, this report suggests population estimates for brown hare, hedgehog and polecat within the study area on which impact assessments can be based.

1. Introduction

This report is intended to provide a technical summary of the data collected on badger, brown hare, harvest mouse, hedgehog, pine marten, polecat and red squirrel within the Wylfa Newydd Development Area and the surrounding 500m. This area is referred to as the 'study area' in this report, and is shown in Figure 6.1 (Appendix A). The group of species considered in this report is made up of the terrestrial mammals that receive 'lower' levels of legal protection, and does not include bats, otter (*Lutra lutra*) or water vole (*Arvicola amphibius*), each of which are considered in a separate report.

1.1 Overview

Horizon Nuclear Power Wylfa Ltd. (Horizon) is currently planning to develop a new nuclear power station on Anglesey as identified in the National Policy Statement for Nuclear Power Generation (EN-6). The Wylfa Newydd Project (the Project) comprises the proposed new nuclear power station (the Wylfa Newydd Generating Station), including the reactors, associated plant and ancillary structures and features, together with all of the development needed to support its delivery, such as highway improvements, worker accommodation and specialist training facilities. The Project will require a number of applications to be made under different legislation to different regulators. As a nationally significant infrastructure project under the Planning Act 2008, the construction and operation must be authorised by a development consent order.

Jacobs UK Ltd. (Jacobs) was commissioned by Horizon to undertake a full ecological survey programme within the vicinity of the Power Station Site. This work has included the gathering of baseline data to inform the various applications, assessments and permits that will be submitted for approval to construct and operate the Power Station and Associated Development.

1.2 Wylfa Newydd Project

The Project includes the Wylfa Newydd Generating Station and Associated Development[1]. The Wylfa Newydd Generating Station includes two UK Advanced Boiling Water Reactors to be supplied by Hitachi-GE Nuclear Energy Ltd, associated plant and ancillary structures and features. In addition to the reactors, development on the Power Station Site (the indicative area of land and sea within which the majority of the permanent Wylfa Newydd Generating Station buildings, plant and structures would be situated) would include steam turbines, control and service buildings, operational plant, radioactive waste storage buildings, ancillary structures, offices and coastal developments. The coastal developments will include a Cooling Water System (CWS) and breakwater, and a Marine Off-Loading Facility (MOLF).

1.3 Site Description

The Wylfa Newydd Development Area (the indicative areas of land and sea, including the Power Station Site, the Wylfa NPS[2] Site and the surrounding areas that would be used for the construction and operation of the Wylfa Newydd Generating Station) covers an area of approximately 380ha. It is bounded to the north by the coast and the existing Magnox power station (the Existing Power Station). To the east, it is separated from Cemaes by a narrow corridor of agricultural land. The A5025 and residential properties define part of the south-east boundary, with a small parcel of land spanning the road to the north-east of Tregele. To the south and west, the Wylfa Newydd Development Area abuts agricultural land, and to the west it adjoins the coastal hinterland.

The Wylfa Newydd Development Area includes the headland south of Wylfa Head candidate Wildlife Site. There is one designated site for nature conservation within the Wylfa Newydd Development Area: the Tre'r Gof Site of Special Scientific Interest (SSSI). It is also within 1km of the Cae Gwyn SSSI, Cemlyn Bay Special Area of

[1] Development needed to support delivery of the Wylfa Newydd Generating Station is referred to as Associated Development. This includes highway improvements along the A5025, park and ride facilities for construction workers, Logistics Centre, Temporary Workers' Accommodation, specialist training facilities, Horizon's Visitor Centre and media briefing facilities.

[2] The site identified on Anglesey by the National Policy Statement for Energy EN-6/NPS EN-6 as potentially suitable for the deployment of a new nuclear power station.

Conservation (SAC) and SSSI, and the Ynys Feurig, the Skerries and Cemlyn Bay Special Protection Area (SPA).

Tre'r Gof is a small basin mire adjacent to the Existing Power Station, west of Cemaes. The area receives mineral-enriched waters from the surrounding boulder clay leading to the development of notable flora. It is the botanical interest that provides the reason for the designation of the site as an SSSI.

Cae Gwyn SSSI is located immediately to the south of the site to the west of Llanfechell. The site comprises two wetland areas separated by an outcrop of rock with heathland vegetation. The southern wetland is confined by a rock basin and is dominated by bogmoss (*Sphagnum* spp.) and a wide variety of common wetland herbs. The northern wetland has a different flora containing denser areas of willow (*Salix* spp.) and common reed (*Phragmites communis*).

1.4 Aims and Objectives

The aim of this technical summary is to provide a single resource regarding all survey and background data available for badger, brown hare, harvest mouse, hedgehog, pine marten, polecat and red squirrel, with the objective of informing the Ecological Chapter of the Environmental Impact Assessment (EIA) for development of the Project.

The aim of the report will be achieved by reviewing:

- background data from the local records centre;
- scoping assessment of survey work undertaken to date;
- habitat assessment survey results;
- species specific field surveys; and
- incidental records.

1.5 Summary of Survey Work

Surveys in the study area for the target species have taken place since 2010 and are summarised in Table 1.1. These data are supplemented by incidental records that have been collated from 2013 until 2015. Surveys that assess the potential of the habitats in the study area to support the target species have also taken place, and are discussed in Section 2. The table shows that no species-specific surveys have been carried out for badger, pine marten and red squirrel. This is because of the results of the background data search and habitat assessment as presented in Section 3, which are discussed further in Section 4.

Table 1.1 Summary of Survey Work

Target	2010	2011	2012	2013
Brown hare (Arup, 2012a)	Transect surveys	Transect surveys	-	-
Harvest mouse (Arup, 2012b)	Nest searches	-	-	-
Hedgehog (Arup, 2012c)	-	Transect surveys	-	-
Polecat (Arup, 2012d; Arup 2012e; Jacobs, 2013a)	Trapping and PIT (winter 2010-2011 season)	Trapping and PIT (winter 2010-2011 season)	Trapping and PIT (winter 2011-2012 season)	Trapping and PIT (winter 2012-2013 season)

1.6 Legal Status

The legislation protecting the mammal species discussed in this report is summarised in Table 1.2 with full descriptions provided in Appendix B. There are also specific pieces of legislation that apply to badgers and brown hare that are described in more detail in Table 1.2, below.

Table 1.2 Legal Protection of Target Species

Species	Wild Mammals (Protection) Act 1996	Natural Environment and Rural Communities (NERC) Act 2006	Wildlife and Countryside Act 1981 (as amended)	Conservation of Habitats and Species Regulations 2010 (as amended)
Badger	Yes	-	Schedule 6	-
Brown hare	Yes	Section 42	-	-
Harvest mouse	Yes	Section 42	-	-
Hedgehog	Yes	Section 42	Schedule 6	-
Pine marten	Yes	Section 42	Schedule 5 & 6	Schedule 4
Polecat	Yes	Section 42	Schedule 6	Schedule 4
Red squirrel	Yes	Section 42	Schedule 5 & 6	-

Badgers share the same protection as other mammal species that receive a basic level of protection from cruelty under the Wild Mammals (Protection) Act 1996. However, badgers also receive specific protection from The Protection of Badgers Act 1992, which is based primarily on the need to protect badgers from baiting and deliberate harm or injury. It also contains the restrictions that apply more widely and include the following criminal offences:

- wilfully (or attempted) killing, injuring, taking, possessing or cruelly ill-treating a badger;
- intentionally or recklessly interfering with a sett.

Sett interference includes damaging or destroying a sett, obstructing access to a sett and disturbing a badger whilst it is occupying a sett. It is not illegal, and therefore a licence is not required, to carry out disturbing activities in the vicinity of a sett if no badger is disturbed and no sett is damaged or obstructed.

Brown hare also receive limited protection via the Ground Game Act 1880 and Hares Preservation Act 1892 which makes the sale of brown hare illegal between 1st March and 31st July. However, this is of limited applicability to the conservation status of the species within the study area.

1.7 Conservation Initiatives

Brown hares and red squirrel are listed as part of Anglesey's Local Biodiversity Action Plan (UKBARS, 2015). This initiative aims to secure partnership work between local people and organisations to ensure local biodiversity resources are valued and looked after in the future. The action plan sets out work to be undertaken to help important habitats and species and is currently undergoing a review for 2010-2015. Red squirrel populations have also recently been boosted by reintroduction programmes in conjunction with Friends of the Anglesey Red Squirrels in 2008 (Menter Mon, 2015).

2. Methodology

2.1 Background Data Search

A background data search was requested in order to inform the scope of surveys required to inform future EIA and Habitats Regulations Assessments. This was requested from Cofnod and included all legally protected and notable species records, including the target mammal species, within 2.5km of the study area. This data was then analysed and mapped where necessary.

Data was also sought from freely available online sources where necessary, and from incidental sightings of species during other surveys (Appendix C).

2.2 Habitat Assessment Surveys

Habitats within the Wylfa Newydd Development Area were surveyed in 2009 using the Joint Nature Conservation Committee Phase 1 Habitat Survey methodology (Arup 2009). This was repeated in 2013 and extended to a 500m buffer around the Wylfa Newydd Development Area by Jacobs (2013). This method classifies habitat types according to broad criteria and can be used to assess the suitability of habitats to record protected species. The results from the 2013 surveys are summarised in Section 3 as these provide the most recent full audit of the habitats found.

2.3 Field Survey

The scope of the field surveys was informed by analysis of the background data search and high level assessment of the habitats within the study area from aerial photography. This included an assessment of likely habitat connections within the wider landscape. This scoping determined that field surveys were required for brown hare, harvest mouse, hedgehog and polecat, but that surveys were not necessary for badger, pine marten and red squirrel. Summaries of the survey methodologies adopted are provided below.

2.3.1 Brown Hare

For the purposes of the hare surveys, the site was divided into two separate transects, as shown in Figure 6.2. Each transect was walked twice on a seasonal basis commencing in the autumn of 2010. The autumn and winter surveys were carried out during daylight hours, whereas the spring and summer surveys were carried out at twilight using a spot-light. These transects were designed to give good visibility of areas of suitable habitat using binoculars. This approach limited disturbance which could result in animals being counted on multiple occasions during the same transect.

Habitat surveys of each area were also carried out on a seasonal basis to record land management variables. Sward height and field boundary quality was mapped to ascertain any patterns between hare distribution and those habitat variables. Field boundaries were assessed on the basis of composition, structure and connectivity. Sward height was categorised from one to five, with '*one'* being extremely short turf, generally from high density sheep, horse or rabbit grazing and '*five'* being woodland. The potential influence of levels of disturbance due to dog walkers etc. was also assessed.

2.3.2 Harvest Mouse

Surveys for harvest mouse were carried out over two days in October 2010. The survey method involved a fingertip search of targeted areas of suitable habitat for nests woven by this species. The autumn season was specifically chosen for the surveys as vegetation begins to die back which makes nests easier to locate, but harvest mice are still likely to be active and their nests intact. The location of the individual survey sites is shown in Figure 6.3.

2.3.3 Hedgehog

Three different techniques were used to determine the presence or likely absence of hedgehog in the study area. The survey methods were also designed to provide population estimates within the study area. Monthly survey transects were conducted in the study area, as shown in Figure 6.4.

The routes walked varied each time in an effort to cover as much of the ground as possible. However, certain features known to be attractive to hedgehogs were given more focus. For example, gardens, areas of previous incidental sightings and field boundaries were surveyed more intensively. The survey technique used involved walking for five minutes and then stopping to listen for sounds of hedgehogs foraging. This was repeated for transects lasting three hours. Transects were not started until at least one hour after sunset to give time for animals to emerge and begin foraging.

Spot-lighting surveys were used where there was a long-distance field of view. Spot-lighting was undertaken in conjunction with survey transects on a monthly basis. There was also some additional spot-lighting data generated during surveys undertaken for brown hares in the study area.

Footprint tunnels were positioned around the study area as shown in Figure 6.5. Three footprint-tunnel survey sessions were conducted, each lasting for six consecutive nights and using either 10 or 20 tunnels, as shown in Table 2.1. The method was an adaptation of that reported by the Mammal Society (2015).

Table 2.1 Numbers of Footprint Tunnels Used During Surveys

Season	Numbers of Tunnels
April – May	10
June – July	20
August - September	10

All tunnels were set on the ground and placed alongside linear features, e.g. roadside verges, field boundaries or ditches. The tubes were then baited with hotdogs in the middle of the tunnel. An ink pad, comprising black powder paint and vegetable oil, is positioned to either side of the bait along with sheets of blank paper on which the footprints are recorded.

Once the tunnels had been baited and set, they were closed and positioned. Where the substrate allowed, they were then pegged down using tent pegs. In most situations, they were then covered with lengths of half drain pipe to help protect the tunnels.

The survey area was approximately one square kilometre, focussing on the eastern half of the study area. The justification for focussing on this area is due to the higher density of incidental records and more frequent positive transect survey results. The tunnels were checked daily with the bait replenished and paper changed as necessary. Any paper with footprints on was collected and taken for identification.

2.3.4 Polecat

An initial habitat assessment was undertaken to determine likely habitat features that polecats could use for hunting, laying up and commuting. The assessment was based on the information from the 2009 Phase 1 Habitat Survey report (Arup, 2009). The habitat assessments were also used to determine potential trap locations. The locations for the traps set in spring and autumn are shown in Figure 6.6.

Distribution surveys of polecats are difficult, relying on labour intensive, live-trapping methods. The number of traps used within a certain area and the number of nights over which they are set, will determine the chances of catching all resident animals (Birks & Kitchener, 1999). This has to be balanced by the time and resource requirement that live trapping entails and also the fact that some animals will be entering traps regularly from day one. This can therefore potentially alter their natural behaviour over the whole trapping period which could have negative effects on the results analysis.

Each winter between 2010 and 2013, trapping was completed in October and March. During each survey month, 16 traps were set and checked for a period of seven days (i.e. 112 trap nights per month and 224 per season).

This survey used double-entry cage traps designed for mink, although only one end was set, effectively making them single-entry. Each measured approximately 76cm x 15cm x 15cm, was made from metal mesh and had sprung doors. Hay was used around the traps, enabling any animals caught to pull it in through the bars of the cage and provide themselves with bedding. Many of the traps and hay were placed beneath lengths of half plastic drainpipe to prevent incursion from the weather, damage from livestock and provide a dark, less stressful environment. Pieces of chicken were used as bait and changed after three days if undisturbed.

Most polecat activity is during the night, so traps were checked first thing in the morning, to ensure that animals did not remain trapped longer than necessary.

Sprung traps were initially examined *in-situ* through the door. Polecats usually pull the hay into the trap, dig the soil / substrate around the trap door and may be visible due to their distinctive white cheek patches. The traps were then pulled from their positions using tent pegs and a hessian sack placed over the trap; this keeps the trap relatively dark and animals calm. Noise was kept to a minimum. Specially designed wooden 'combs' were used to secure the animal at the rear of the trap whilst a net bag was placed over the door. The hessian bag was then removed from the trap, placed over the net bag and the 'comb' removed. The animal can then be moved into the bag and a plastic plasterer's float used to prevent the animal from moving back again or biting the surveyor. The bag was secured shut and the animal immobilized at one end. The animal can then be scanned quickly for the presence of a PIT tag, the unique number of which was recorded if present. If no tag was present, a rubber-edged wire mesh restraint was put over the animal and a PIT tag inserted under the skin in the scruff of the neck immediately behind the head. Animals were then weighed in the mesh bag before being released. The whole process took approximately five minutes using a trained, licensed ecologist and assistant.

The weight of the animal can be sexually dimorphic, and also be used to monitor any loss / gain of condition over the period of the survey. Birks and Kitchener (1999) give figures of 550g – 1050g for female polecats and 950g – 1850g for males. However, there is an overlap where sex determination is not possible and juveniles must be taken into account.

2.4 Limitations

2.4.1 Brown Hare Surveys

During the transect surveys there was significant disturbance to brown hare individuals and the habitats that support them caused by ground investigation works and associated human activity in the study area. This included a cessation of grazing across much of the study area. The value of habitat suitability survey results is therefore considered to be negligible due to the dynamic nature of the habitats present.

Similarly, the transect survey results also provided limited insight into what is known about the study area. Brown hare populations can be assessed from transect data by using "distance sampling", which determines densities of animals across whole landscapes. However, this could not be applied in the study area to due to the terrain. Distance sampling modelling requires long vistas and the relatively small fields of Anglesey are therefore not conducive to producing accurate results. Therefore, the brown hare population estimates are based on the total number of brown hare seen each year, and uses normalised populations from background data as a frame of reference.

2.4.2 Harvest Mouse

There are considered to be no constrains on the data provided by the results of the harvest mouse survey.

2.4.3 Hedgehog

Hedgehogs are a relatively difficult animal to study due to their nocturnal habits and lack of obvious field signs. There is currently no commonly accepted survey methodology widely used by consultants or researchers. There are, however, several different proven survey techniques and the methods used in these surveys have taken advantage of several of these. The use of several different techniques allows the results to be collated and a comprehensive picture of the species distribution on the site compiled.

2.4.4 Polecat

Not all polecats resident in an area will necessarily be caught during a seven-night live-trapping session. Likewise, if a particular trap site is not successful at catching polecats during the survey period, it does not mean that the animals are not present in that area at other times. The ecological behaviour of the species at different times of year means that polecat distribution and numbers can vary and this will need to be taken into account in any impact assessment based on these results.

Some animals are caught on numerous occasions over a trapping survey and are termed “trap-happy” and other animals caught only once, or not at all, and are termed “trap-shy”. Any conclusions from the surveys regarding population estimates must therefore take this behaviour into account. By undertaking the trapping study both in spring and autumn, it is hoped that information can be gathered on seasonal differences in population size and distribution and will limit the impacts of “trap-happy” and “trap-shy” animal behaviour.

The survey effort made during each year from 2010 – 2012 was not the same. Traps have not been placed in exactly the same locations and during the same time periods. The results therefore cannot be directly compared.

3. Results

3.1 Desk Survey

There are no records of harvest mouse, pine marten, polecat or red squirrel in the study area from Cofnod or from incidental records.

There is a single record of a dead badger from 2009 being recorded on the A5025 to the south of the topic study area. This is the only evidence obtained of the species ever having been present within 2.5km of the Wylfa Newydd Development Area.

The data from Cofnod showed that there are 147 records of brown hare within 2.5km of the boundary of the study area since 1967 and 17 records from incidental observations of hares between 2013 and 2015. The species is therefore considered to have been established in the study area for many decades.

In addition to the desk study results from Cofnod, a search of harvest mouse records returned a total of 30 records from the whole of Wales (Tapping, 2013) and a consensus in the literature that the distribution of the species is poorly understood (UKBARS, 2015). This led to MISE (2015) initiating a project to determine a more accurate understanding of the population distribution of the species. The data they provided does include a record from near to the study area, but the resolution is not precise enough to be more exact. This is shown in Figure 3.1 and is discussed further in Sections 4 and 5.

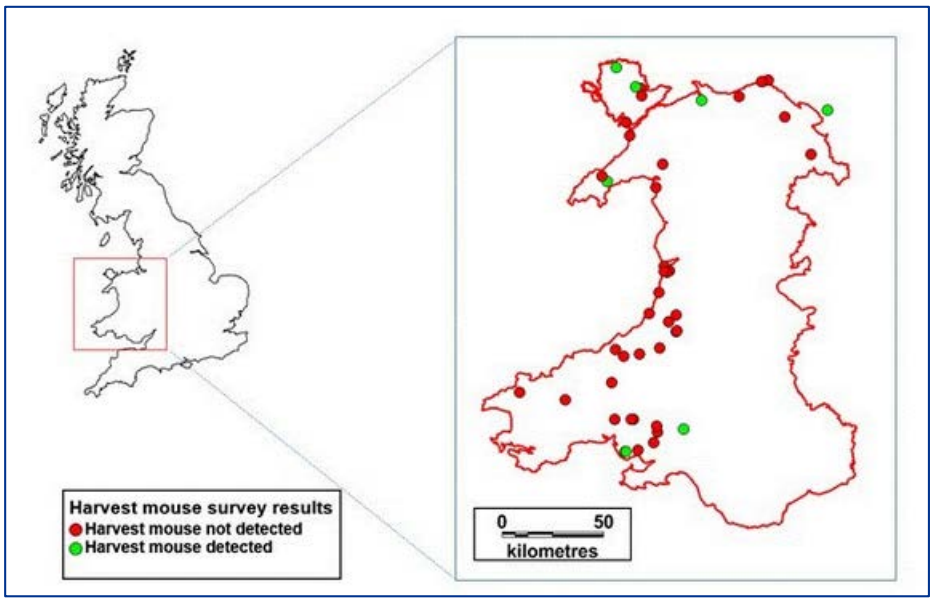

Figure 3.1 Welsh Harvest Mouse Records (after MISE, 2015)

There are 79 records of hedgehog from within 2.5km of the study area and seven records from surveys carried out between 2013 and 2014. The spread and frequency of the records suggest that the species is likely to be found in all areas of suitable habitat within the study area.

There are two records of polecat from 1994 and 1998 within the search area, and one record of a scat that was attributed to polecat on the shingle bar at Cemlyn Lagoon by Jacobs surveyors in 2014 (see Appendix C). There are also records of dead individuals being seen on the A5025 by surveyors driving to and from the study area, but these records have not formally been included in the incidental sightings database for the study area.

3.2 Habitat Assessment

The majority of land within the study area (78.35%) comprised low-quality agricultural habitats (arable, improved grassland, poor semi-improved grassland) totalling 479.3ha. However, there was 37ha of semi-improved neutral grassland (6.1% of the study area) which was mainly herb-rich hay meadows. The remainder of the study area mainly comprised the following habitat types (see Figure 6.7):

- woodland – Broadleaved (semi-natural) / broadleaved (plantation) / coniferous (plantation);
- scrub – Dense continuous / scattered;
- grassland – Acid / unimproved / semi-improved / marsh;
- tall ruderal;
- dwarf shrub heath;
- fen / basin mire;
- standing water / running water; and
- coastal grassland and heathland.

The significance of the composition of the habitat composition within the study area is discussed in Section 4.

3.3 Field Survey

3.3.1 Brown Hare Field Survey Results

The results of the transect surveys from 2010 and 2011 are shown in Table 3.1 and Figure 6.8. Figure 6.8 also shows the incidental records from 2013 to 2015.

Table 3.1 Brown Hare Transect Survey Results

Survey Season	Individual Records from Transect 1	Individual Records from Transect 2
October / November 2010	2	0
January / February 2011	4	1
April / May 2011	6	2
July / August 2011	12	0
Total	24	3

During the transect surveys the vast majority of habitats within the study area comprised short sward grassland grazed by cows, or very short sward vegetation grazed by rabbit. Neither habitat was considered to provide optimal habitat for hare as they provided very little cover. The vegetation cover associated with field boundaries was found to vary widely.

The results from background data, incidental sighting and transects did not show any clear correlations between the habitats present and records of the species. This is discussed further in Section 4, with particular emphasis on the level of disturbance and dynamism of landscape management within the study area affecting brown hare distribution.

3.3.2 Harvest Mouse Field Survey Results

No harvest mice or their nests were recorded during the field surveys.

3.3.3 Hedgehog Field Survey Results

The eight monthly transects recorded a total of four hedgehogs, all in the vicinity of Ty Croes. The print trapping surveys returned 12 positive results and there were an additional nine incidental records (including corpses) during the survey period. The combined results are shown in Figure 6.9.

3.3.4 Polecat Field Survey Results

A summary of the field surveys carried out in the three winter seasons between 2010 and 2013 is provided in Table 3.2, and the locations of the captures are shown in Figure 6.10. The animals shown in Table 3.2 were generally caught several times, but the detail of the number of recaptures is not thought likely to significantly contribute to an understanding of the population and has therefore been omitted.

The results from the first season of survey found that the areas of habitat east of the Existing Power Station and south of Wylfa Head candidate Wildlife Site, and habitats west of Wylfa A around Porth-y-pistyll were where polecat were most commonly caught. In the second season, polecat were only caught in the southern half of the study area, but the data relating to the specific location of traps in 2011-2012 has not been made available to inform this report. In all successful trapping months, the traps that were associated with areas containing high rabbit populations were consistently the most productive. The negative result from 2012-2013 is thought unlikely to be particularly significant, and several years of concurrent negative results would be required to confidently prove absence. This is discussed further in Section 4.

Table 3.2 Polecat Field Survey Results

Record	2010 October	2011 March	2011 October	2012 March	2012 October	2013 March
Total individual males caught	3	1	1	0	0	0
Total individual females caught	1	0	1	1	0	0

4. Discussion

4.1 Badger

The only evidence of the species ever having been present within 2.5km of the development area comes from a single dead individual on the A5025 in 2009. Badgers are highly susceptible to road mortality as they often forage over a wide range in a single night. It is likely that more records would have been returned if there was a sett in the vicinity of the study area. Field signs in areas where they are present are also often very obvious. Setts, latrines, bedding, hairs snagged on push-throughs and paths are all features that signify that badgers are present. It is considered that should badger be present within the study area then these field signs would have been seen during daytime surveys (e.g. during transects for breeding and over-wintering birds), or the animals themselves would have been recorded during night-time bat activity surveys.

4.2 Harvest Mouse

The surveys did not record any harvest mouse nests and the background data search only returned a single record of the species, in the generalised area of north Anglesey (see Figure 3.1). It is therefore likely that the species is absent or is present in very small and localised populations that are difficult to detect.

4.3 Pine Marten

The distribution of pine martens in the UK currently shows that the species is not found on Anglesey and that the nearest populations are found in Snowdonia (The Vincent Wildlife Trust, 2015). While it is considered that there are very small fragments of woodland with the potential to support pine martens, the likelihood of the species crossing the Menai Strait and across the relatively open habitats of Anglesey to occupy the site is considered to be remote.

4.4 Red Squirrel

Red squirrels are known to be present on Anglesey with records concentrated in the more densely wooded areas in the eastern and southern quarters of the island (Red Squirrels Trust Wales, 2015). These populations have recently been boosted by reintroduction programmes in conjunction with Friends of the Anglesey Red Squirrels in 2008 (Menter Mon, 2015). However, the species requires near continuous woodland in order to survive and disperse into new areas. Freely available online mapping of the island shows that there is a lack of woodland connectivity between known populations and the topic study area. Therefore the likelihood of natural colonisation of the study area by red squirrels in the future is considered to be low.

4.5 Population Estimates for Brown Hare, Hedgehog and Polecat

The results from the brown hare, hedgehog and polecat surveys all show that the species are present, and have been recorded with sufficient frequency to suggest that populations have existed in the vicinity of the study area for many years. The surveys also show that the target species are dynamic and react to changes in habitat suitability as evidenced by the lack of consistency within the results of each of the three studies.

There are significant limitations in the amount of interpretation that can be made following the results from all the studies. The main limitation is that it is not possible to infer accurate population sizes based on the results. For brown hare and hedgehog, this is due to the difficulty with which the species can be surveyed (see Section 2.4), and for polecat, the species was recorded in such low numbers as to make population estimates by statistical analysis unlikely to be accurate. The likely populations and future impacts assessments are therefore informed not only by the survey data available, but are also heavily influenced by the known generalised ecology of each species.

4.5.1 Brown Hare Population Estimates

The brown hare is a common yet currently declining species throughout farmland in the UK (North Wales Wildlife Trust, 2008), and populations are estimated to have dropped by 75% since the 1940s (Tapper and Hobson, 2002). A generalised population density of brown hare in the UK is only one per 2ha – 4ha (Macdonald and Barratt, 1993). However, the Mammals of the British Isles Handbook suggests that there is a higher density of hare on Anglesey than the mainland (Harris and Yalden, 2008). It should be noted this can be much greater during the spring breeding season in localised areas when males and females aggregate (Macdonald and Barratt, 1993).

The survey data summarised in this report found that the highest number of sightings was from the southern half of the study area in July and August 2011 in fields where the sward height was shorter. Areas with higher levels of disturbance generally had lower number of brown hare records. Aggregations of males and females have not been recorded in the Wylfa Newydd Project Development Area.

It is therefore considered that the population of brown hare within the study area is at or above the generalised level of the UK, with an estimated population between 95 (one per 4ha) and 190 (one per 2ha) based on a study area of 380ha.

4.5.2 Hedgehog Population Estimates

Surveys for hedgehog were completed in the Wylfa Newydd Development Area in 2010 and 2011 by Arup (Arup, 2012c). The results from these surveys found that the species was fairly ubiquitous throughout the whole study area, and evidence of breeding in the form of juvenile hedgehog footprints was also reported. The species has also been recorded during other nocturnal surveys, e.g. bat and great crested newt (*Triturus cristatus*) surveys, and dead hedgehogs have been regularly recorded on roads around the Wylfa Newydd Development Area.

There are no data on the population on Anglesey but it is suggested that the species is potentially doing marginally better than on the mainland due to the low (or largely absent) badger population which are known predators of the species.

The species is therefore considered to be present in the Wylfa Newydd Development Area and is likely to be at a population density which is normally one per 2.5ha (but ranging between 0.3 and two per hectare) (Macdonald and Barratt, 1993). Based on a normal population density, this would give an approximate population of 152 individuals within the Wylfa Newydd Development Area.

4.5.3 Polecat Population Estimates

Surveys for polecat by Arup have recorded the species in the Wylfa Newydd Development Area in 2011 and 2012, and only four individual animals have ever been caught in any given year (Arup, 2012d). Surveys in 2013 did not capture any animals.

The average lifespan of polecat females at birth is 8.1 months and breeding is once yearly comprising 2-12 young (Macdonald and Barratt, 1993). The species also has large home ranges (16ha – 500ha) indicating that it lives at low population densities.

The slow reproductive rate, high mortality rate in the first year, and low population densities (Macdonald and Barratt, 1993) make it extremely hard to determine exactly what a likely population could be for the Wylfa Newydd Development Area but it is likely to typically range between zero and five. Determining the exact numbers would be extremely difficult and, despite using the best methods available, trapping surveys have only provided very limited data. However, it is considered that the survey data suggests that presence of polecat may be influenced by prey availability, primarily rabbits (*Oryctolagus cuniculus*). Therefore the densities of rabbit could be used as indicators of the likely presence of polecat in the future, and inform risk assessments of likely harm to animals during construction phases of the Project.

5. Conclusions and Recommendations

This report provides evidence in support of the presence or likely absence of seven species of terrestrial mammal that were identified as being potential ecological receptors that could be affected by construction and operation activities within the Wylfa Newydd Development Area.

The study area provides ideal habitat for badger in the form of small areas of woodland for cover and sett building and open pasture and rank grassland for foraging. However, the only evidence of the species being present in the study area is from a dead animal found in 2009. The lack of incidental records of field signs, roadkill or live animals during extensive nocturnal surveys for other species groups (e.g. bats and great crested newts), suggest that the species is absent from the study area and would not be affected by the Project.

The survey data show that brown hare are common and widespread within the study area and that the population size may range between 95 and 190 individuals. The species should therefore be a material consideration in the impact assessment of the Project.

The survey information and Cofnod evidence suggest that harvest mouse are absent from the study area. However, the species has been recorded in the north of Anglesey (MISE, 2015), and therefore it may be present in low numbers in isolated populations that are hard to detect. The potential for the species to be present should therefore not be completely discounted. However, the lack of confirmation of species presence means that harvest mouse as a species should not be considered as an ecological receptor in their own right for the purposes of the Project impact assessment.

Hedgehogs are common and widespread within the study area with a population size, based on a normal density, of 152 individuals. Impacts on the species should therefore be considered within any impact assessment for the Project.

Records of pine marten were not found in the background data search and these animals have never been recorded in the study area. The nearest known populations of pine marten to the study area are in Snowdonia and are therefore separated by the Menai Strait. The habitats across Anglesey are also not conducive to colonisation by the species as there is a lack of dense connected woodland, a habitat that the species has a strong affinity with. There is also only a small amount of woodland in the study area that is not large enough to have the capability to support a viable population. The species is therefore considered to be absent and would not be affected by the Project.

Polecats have been recorded in the study area in numbers that are within the bounds of the normal population for an area the size of the study area. This would give an estimated population of between zero and five animals at any one time. The data from 2013 trapping surveys returned zero animals but the numbers from previous years of survey suggest that the species is probably still present but were simply not detected. The species should be considered in any impact assessment for the Project.

Based on historic records of red squirrel, the suitability of habitat present within the Wylfa Newydd Development Area, and the availability of habitat connecting the Wylfa Newydd Development Area with the wider landscape, it is considered that the likelihood of red squirrel naturally colonising the study area is low.

6. References

Arup. (2009). *Phase 1 and Protected Species Survey – Wylfa Power Station*. Unpublished report on behalf of Horizon Nuclear Power (Wylfa) Ltd.

Arup. (2012a). *Brown Hare Survey Report*. Unpublished report on behalf of Horizon Nuclear Power (Wylfa) Ltd.

Arup, (2012b). *Harvest Mouse Survey Report*. Unpublished report on behalf of Horizon Nuclear Power (Wylfa) Ltd.

Arup. (2012c). *Report on Hedgehog Surveys 2010 & 2011*. Unpublished report on behalf of Horizon Nuclear Power (Wylfa) Ltd.

Arup. (2012d). *Report on Polecat Survey 2010-2011*. Unpublished report on behalf of Horizon Nuclear Power (Wylfa) Ltd.

Arup. (2012e). *Polecat Survey Report 2012*. Unpublished report on behalf of Wylfa Nuclear Power (Wylfa) Ltd.

Birks, J.D.S. and Kitchener, A.C. eds. (1999). *The Distribution and Status of the Polecat Mustela putorius in Britain in the 1990s*, The Vincent Wildlife Trust: London.

Chartered Institute of Ecology and Environmental Management (CIEEM). (2006). *Guidelines for Ecological Impact Assessment*. CIEEM: Winchester.

Harris, S. and Yalden, D. (2008). *Mammals of the British Isles Handbook*, 4th Edition, The Mammal Society.

Jacobs. (2013a). *Consultancy Report: Polecat (Mustela putorius) Baseline Surveys 2013*. Unpublished report on behalf of Horizon Nuclear Power (Wylfa) Ltd. Ref. W202.01-S5-PAC-REP-00003.

Jacobs. (2013b). *Consultancy Report – Phase 1 Habitat Survey Report 2013*. Unpublished report on behalf of Horizon Nuclear Power (Wylfa) Ltd. Ref. W202.01-S5-PAC-REP-00015.

Legislation.gov.uk. (2015). [online]. Available at: http://www.legislation.gov.uk [Accessed: 08/12/15].

Macdonald, D. and Barrett, P. (1993). *Collins Field Guide Mammals of Britain and Europe*, Collins: London.

Menter Mon. (2015). *Menter Mon*. [Online]. Available at: http://www.mentermon.com/red-squirrels.htm [Accessed: 28/07/2015].

MISE. (2015). *Searching for Britain's Smallest Rodent – The Harvest Mouse (Micromys minutus)*. [Online]. Available at: http://www.miseproject.ie/the-mise-times-2/searching-for-britains-smallest-rodent-the-harvest-mouse-llygod-yr-%C5%B7d-micromys-minutus/ [Accessed: 07/08/15].

North Wales Wildlife Trust. (2008). *Anglesey Brown Hare Project 2007-2008*. [Online]. Available at: http://www.northwaleswildlifetrust.org.uk/what-we-do/living-landscapes/living-landscape-projects/brown-hare-project [Accessed: 28/07/2015].

Red Squirrels Trust Wales. (2015). *Red Squirrels Trust Wales*. [Online]. Available at: http://www.redsquirrels.info/map-holder [Accessed: 22/07/2015].

Tapper, S. and Hobson, D. (2002). *Conserving the Brown Hare*, The Game Conservancy Trust: Hampshire.

Tapping, R. (2013). *Harvest Mice in Wales – where might they be*, Science Report No. 1036. Cofnod.

The Mammal Society. (2015). *Footprint Tunnel Survey.* [Online]. Available at: http://www.mammal.org.uk/footprint_tunnel_survey [Accessed: 14/07/15].

The Vincent Wildlife Trust. (2015). *Pine Marten (Martes martes)*, *The Vincent Wildlife Trust*. [Online]. Available at: http://www.vwt.org.uk/species/pine-marten/ [Accessed: 22/07/2015].

UKBARS. (2015). link to lists of Anglesey Local Biodiversity Action Plan (LBAP) species. [Online]. Available at: https://ukbars.defra.gov.uk/archive/plans/lbap_plans.asp?LBAP=%7b42A89BF7-2E26-4C14-8253-40937ACA129D%7d [Accessed: 28/07/2015].

Appendix A. Figures

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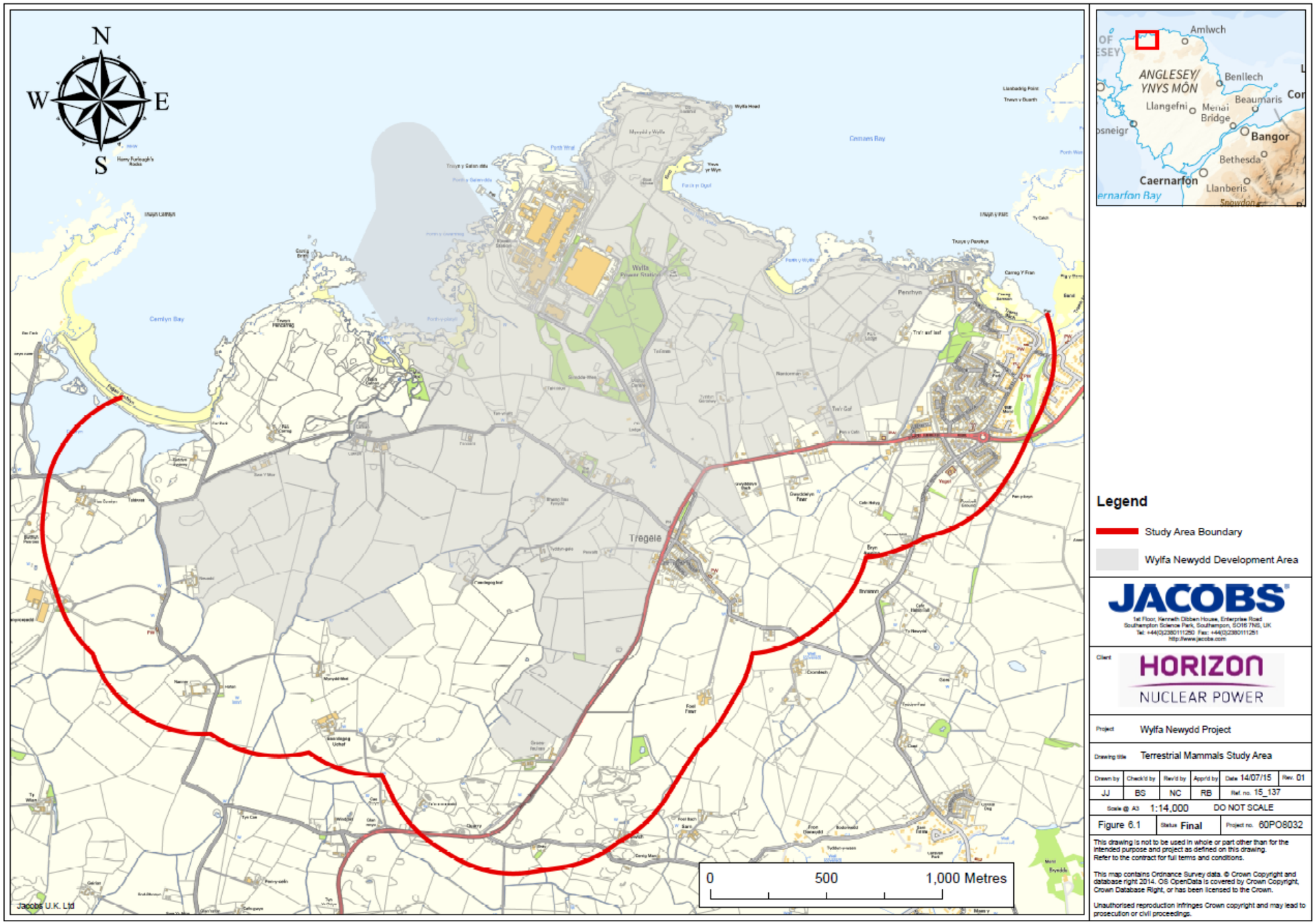

Figure 6.1 Study area

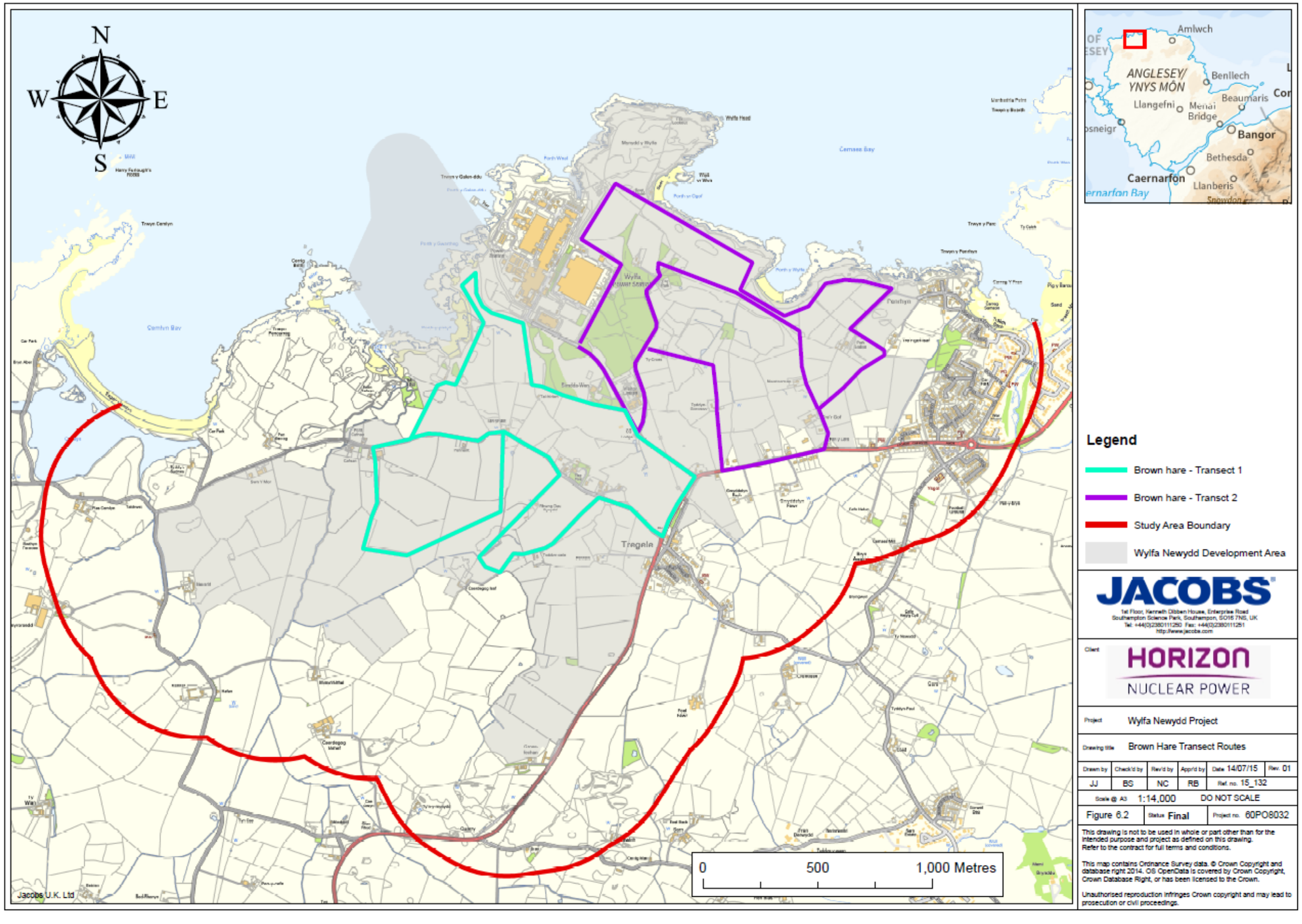

Figure 6.2 Brown Hare Transect Routes

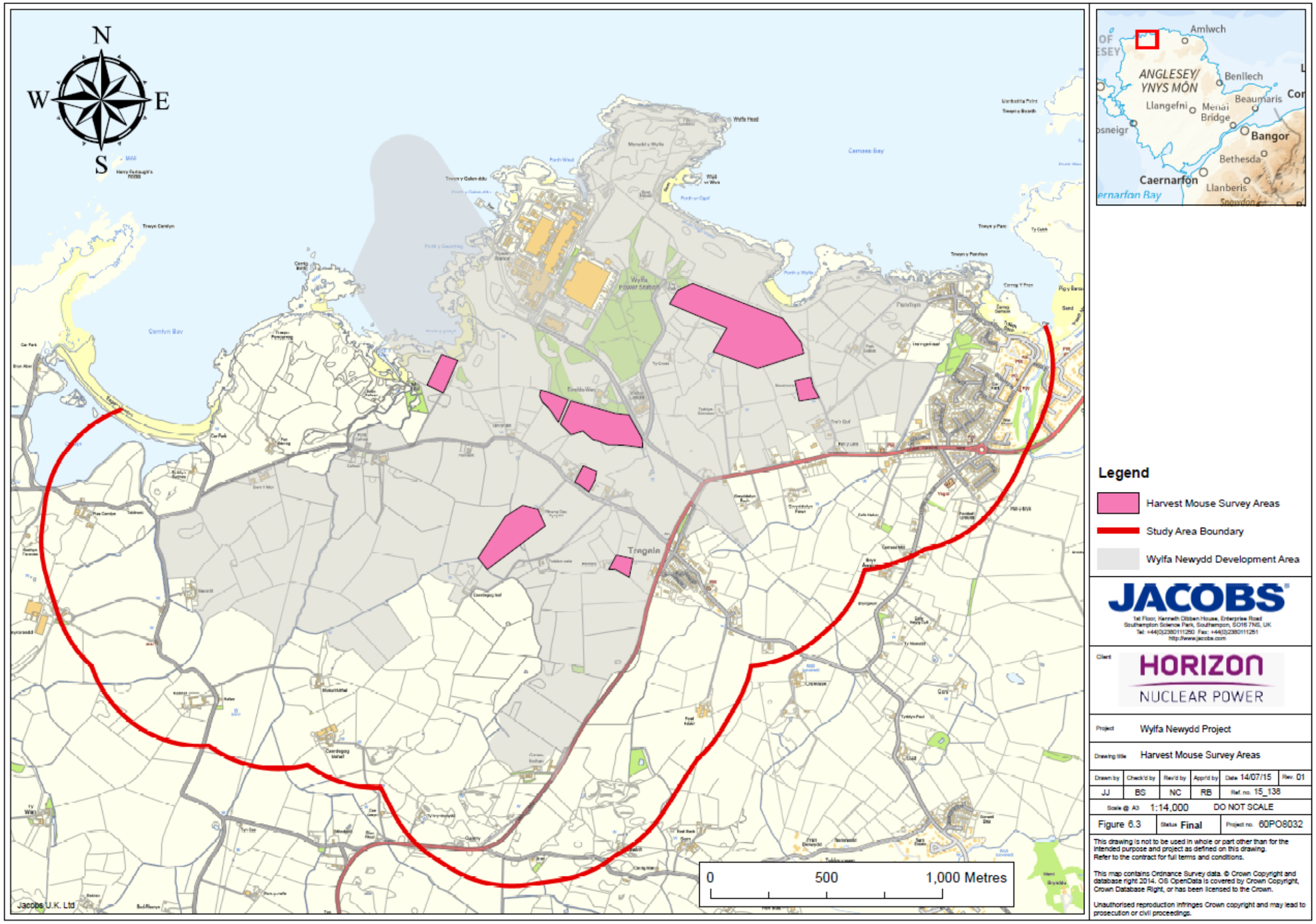

Figure 6.3 Harvest Mouse Survey Locations

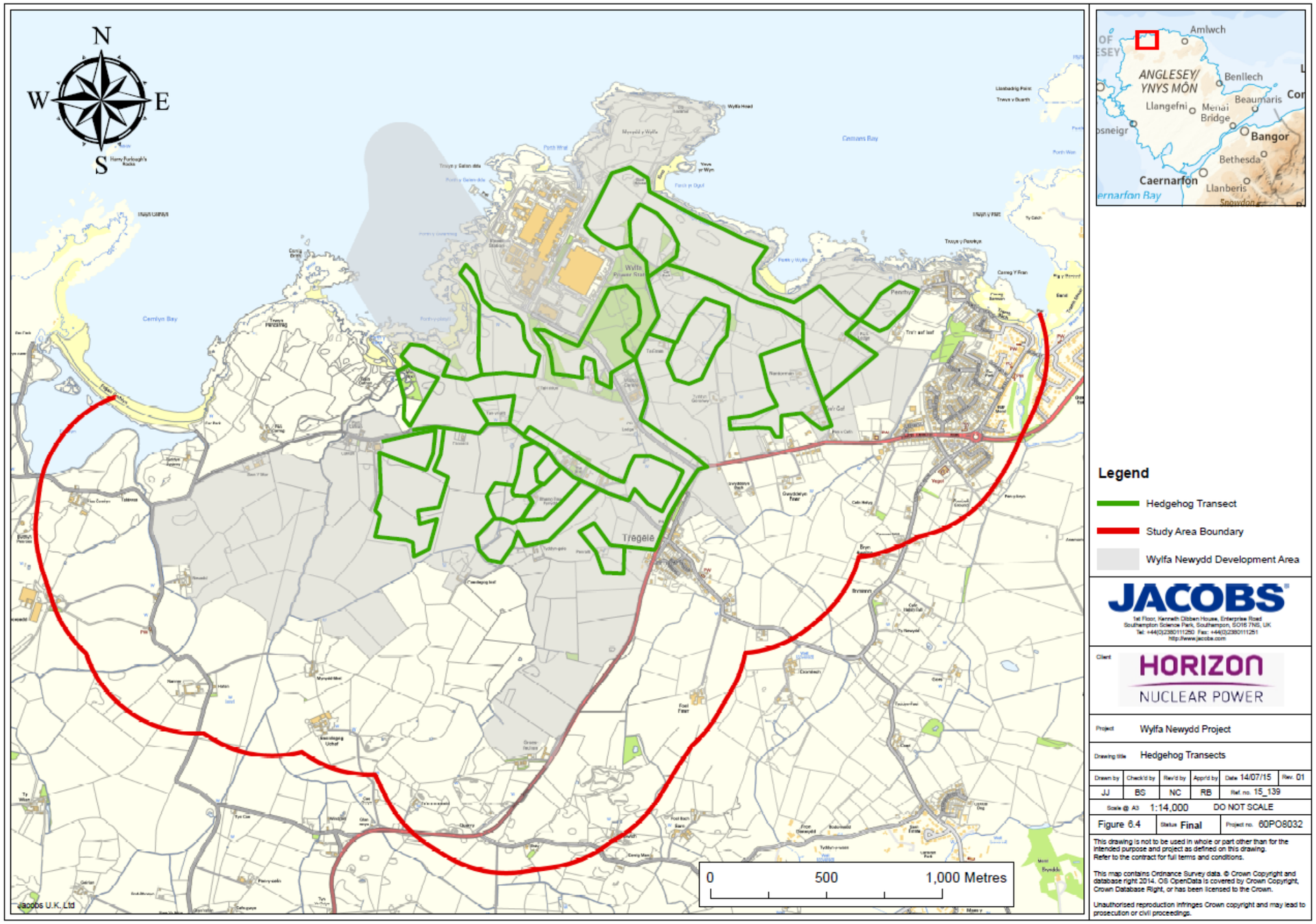

Figure 6.4 Hedgehog Transect Routes

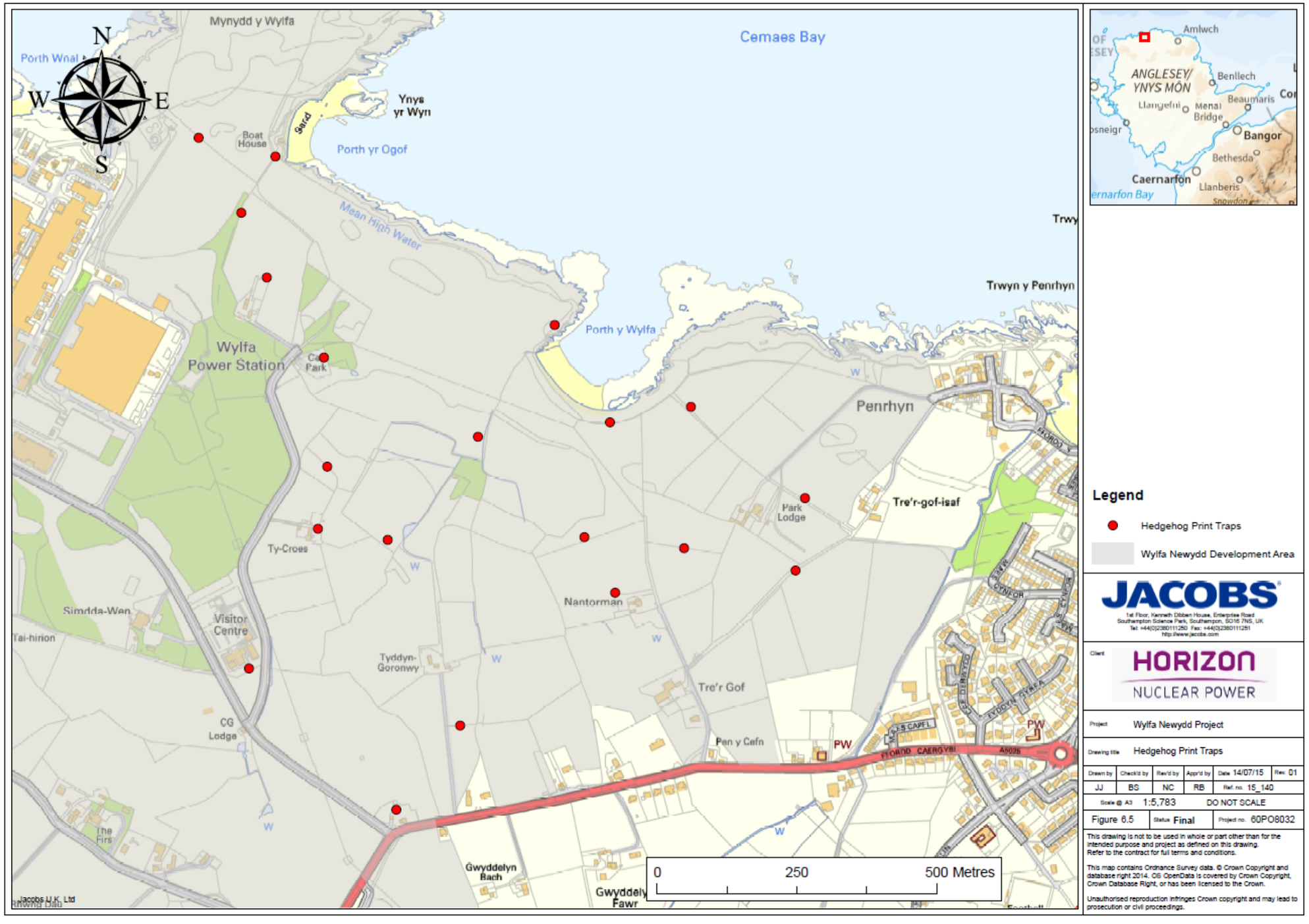

Figure 6.5 Hedgehog Print-trap Locations

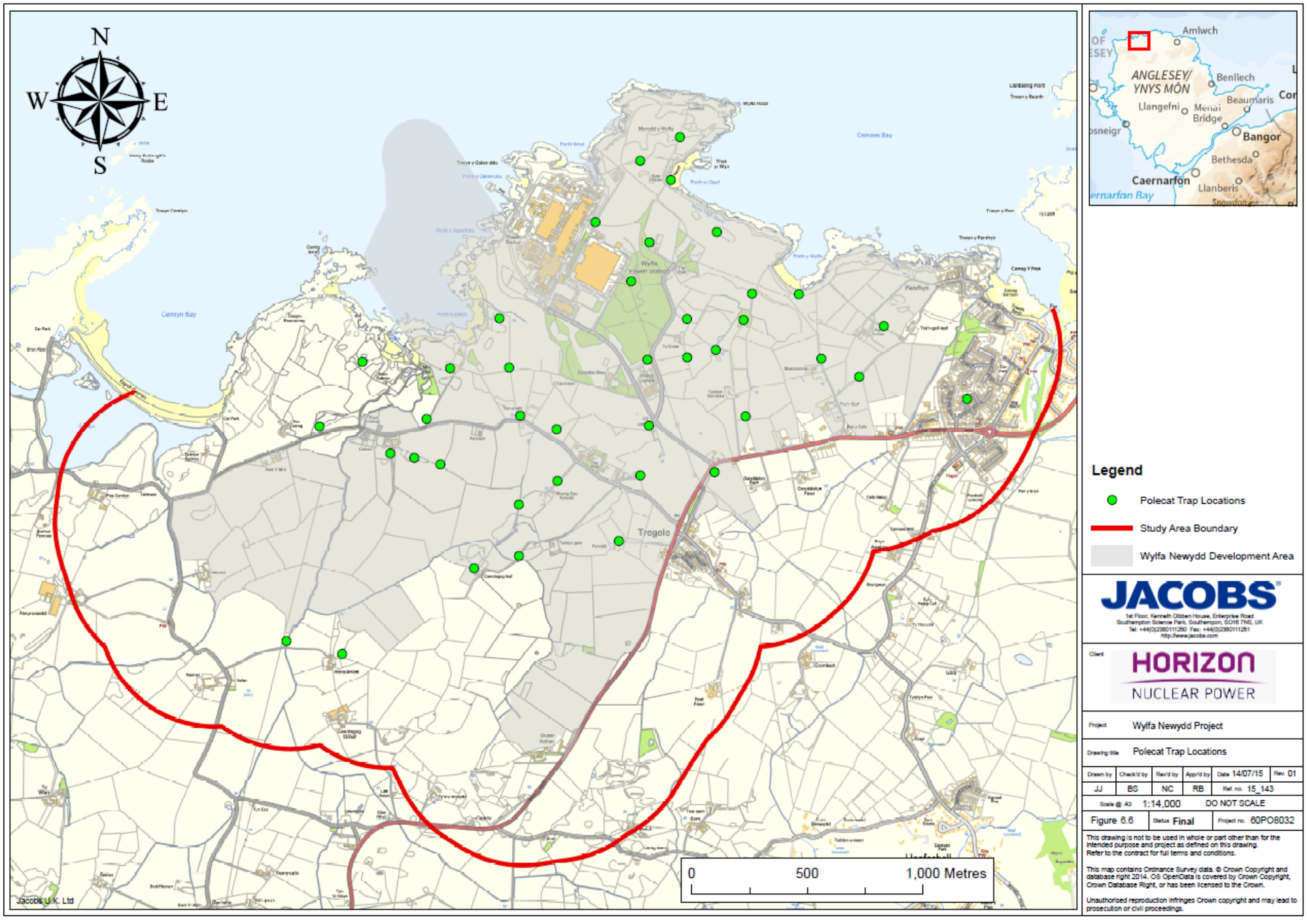

Figure 6.6 Polecat Trap Locations

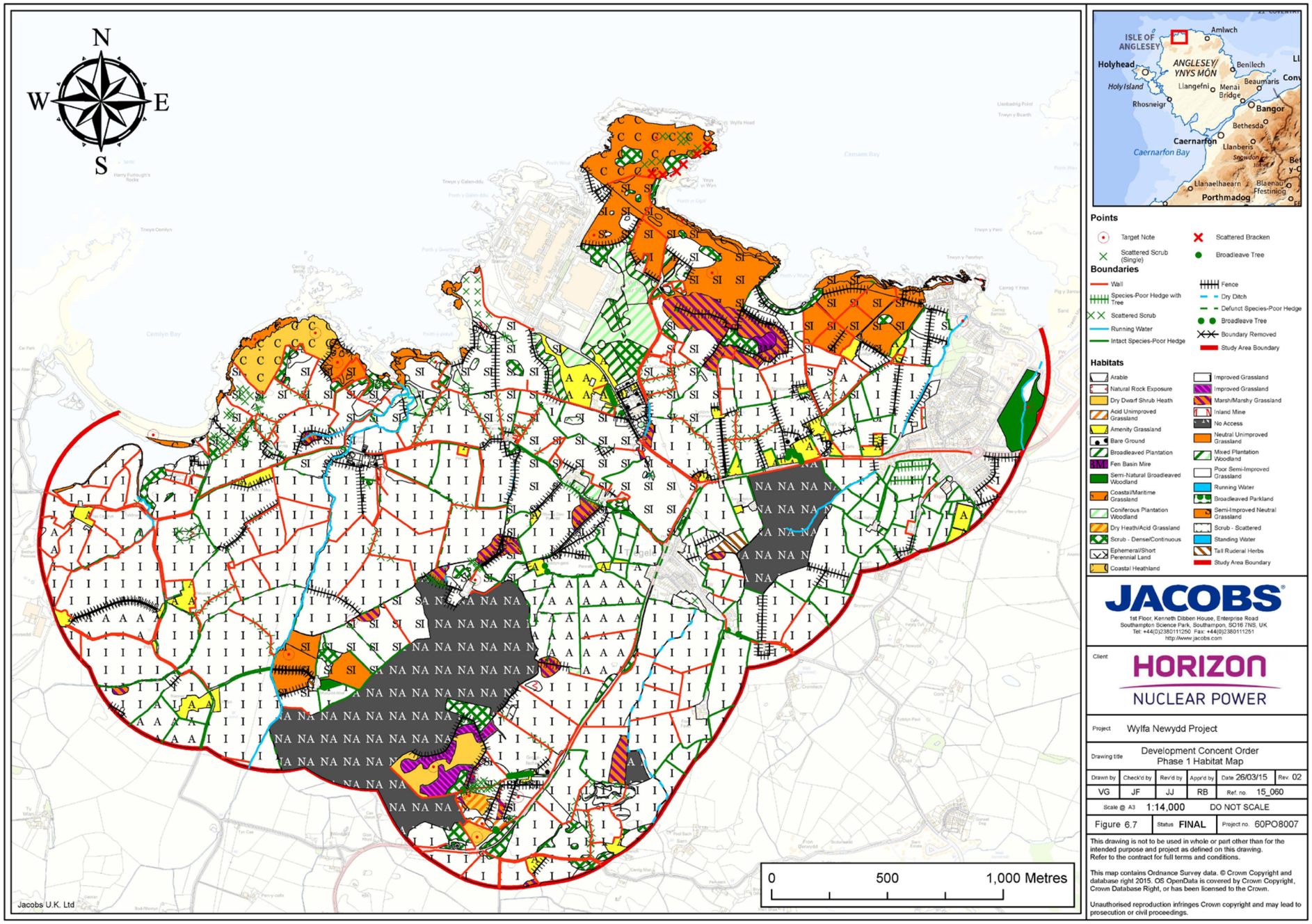

Figure 6.7 Phase 1 Habitat Survey Map (from Jacobs, 2013b)

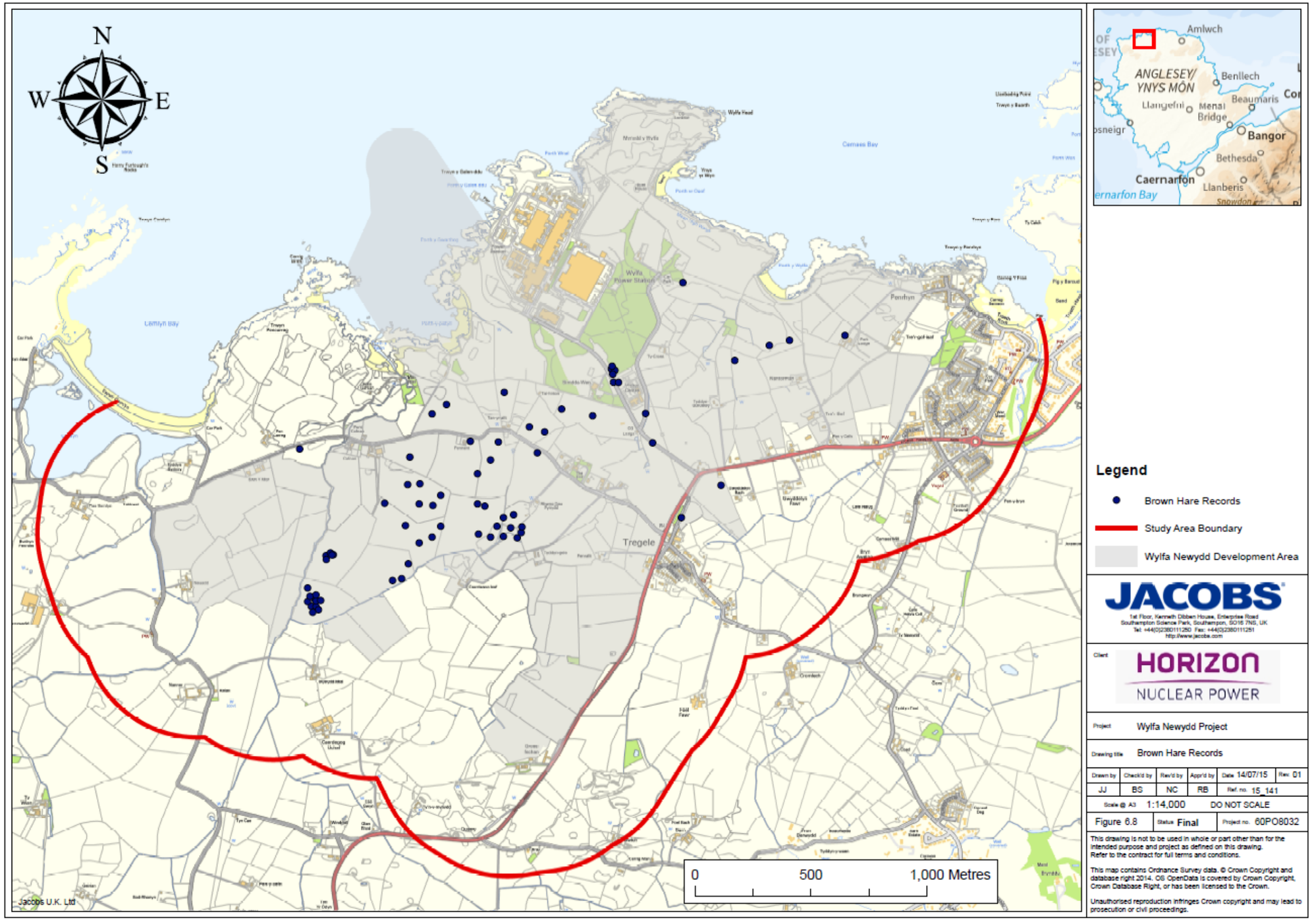

Figure 6.8 Brown Hare Transect Survey Results and Incidental Sightings

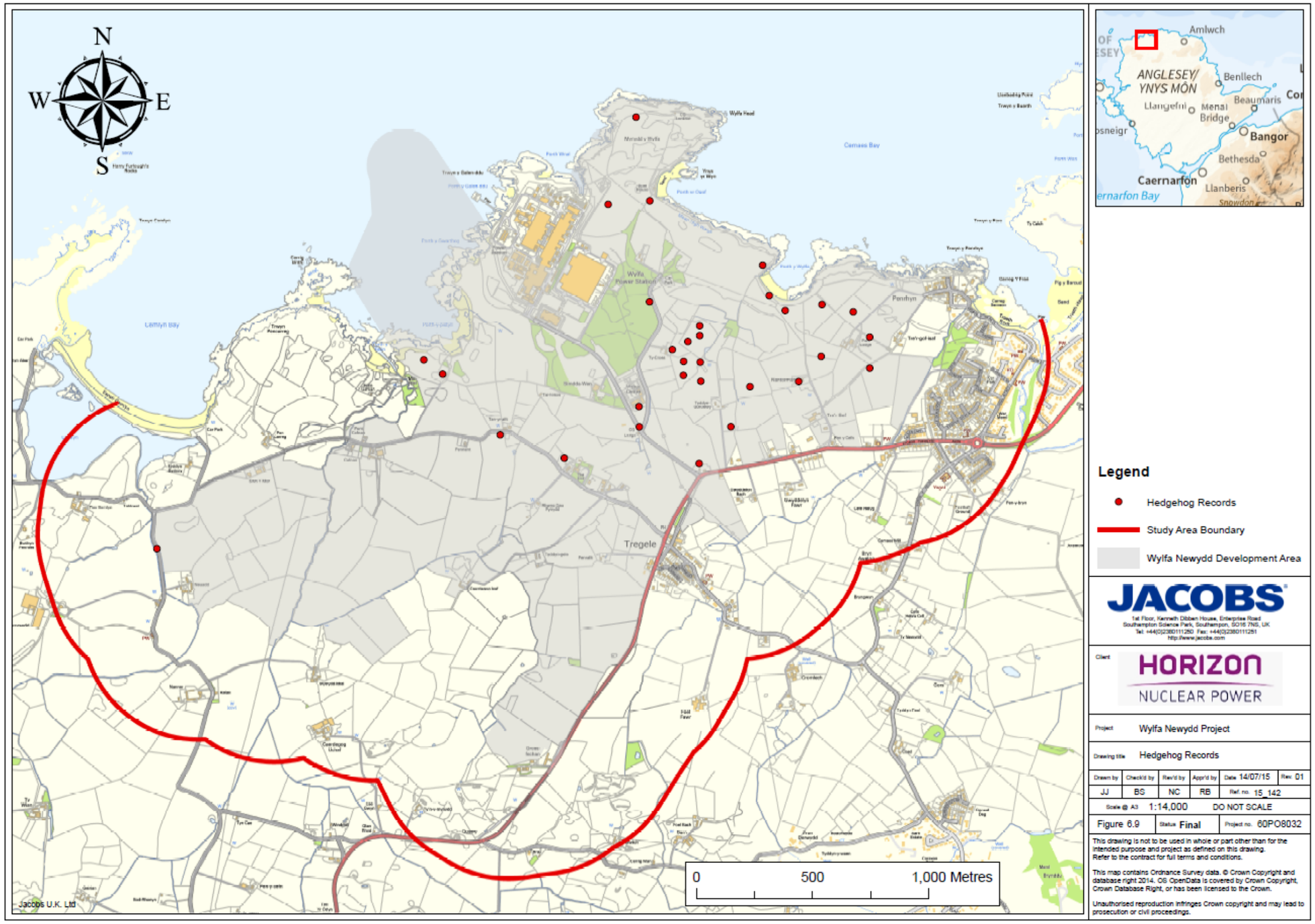

Figure 6.9 Hedgehog Combined Survey Results

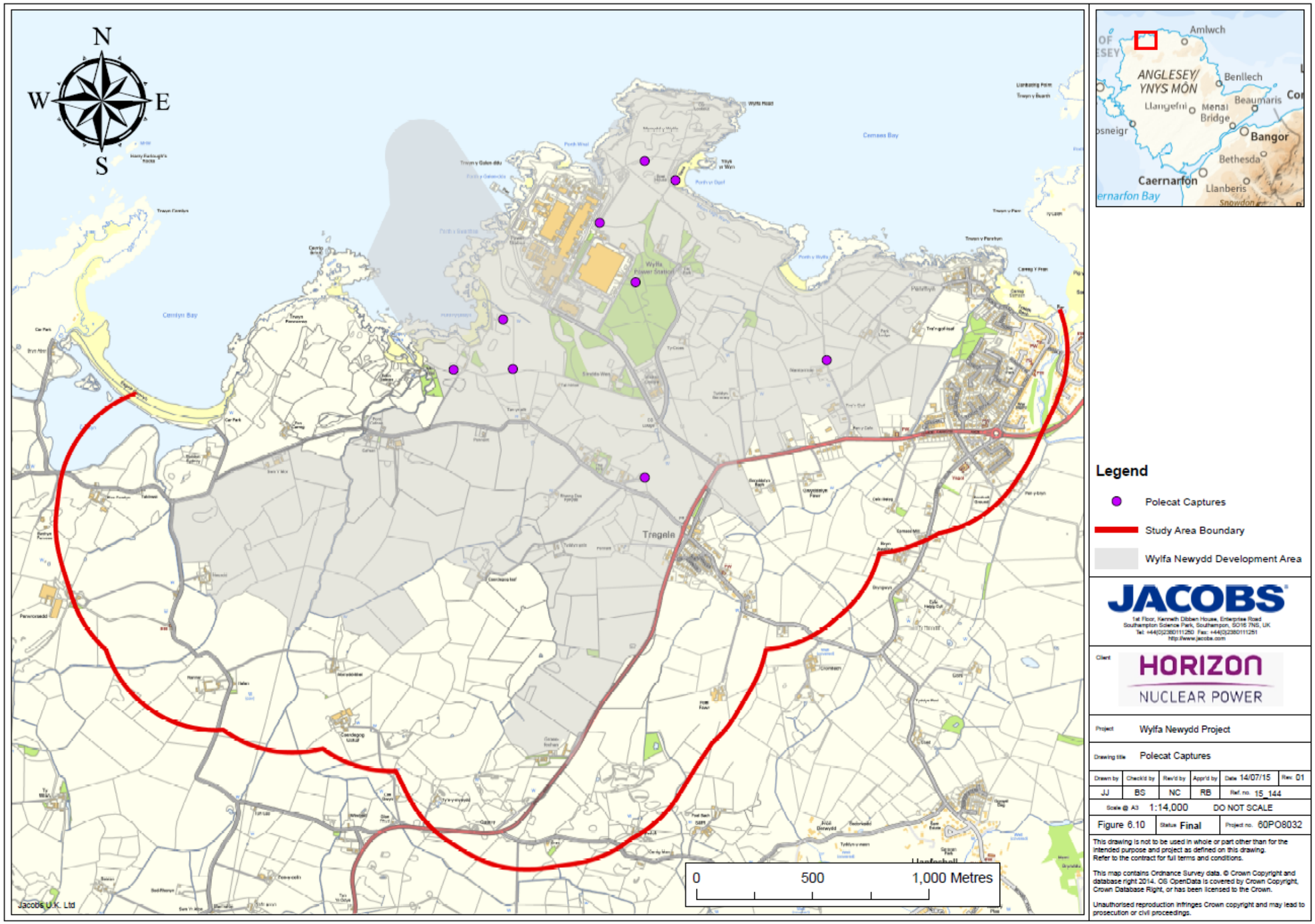

Figure 6.10 Polecat Survey Results

Appendix B. Legislation

A summary of the relevant pieces of legislation pertaining to the species discussed in this report has been provided in the following sections. The descriptions of the legislation have been obtained from www.legislation.gov.uk (2015).

Wild Mammals (Protection) Act 1996

The Wild Mammals (Protection) Act 1996 makes illegal any act of mutilation, kicking, beating, nailing, or otherwise impaling, stabbing, burning, stoning, crushing, drowning, dragging, asphyxiating against a wild mammal with intent to inflict unnecessary suffering. In the context of the construction industry, it is the potential for animals to become entombed in buried burrows and dens that is of particular relevance. Identification of potentially active burrows should therefore be a consideration during the planning of any groundworks that could trap and thereby asphyxiate any animals within.

The Natural Environment and Rural Communities Act 2006

The Natural Environment and Rural Communities (NERC) Act 2006 places a statutory duty on public bodies to take, or promote the taking by others, steps to further the conservation of the listed habitats and species. In Wales, this is sanctioned by Section 42 which lists habitats and species of principal importance. Brown hare, harvest mouse, hedgehog, pine marten, polecat and red squirrel are all listed on Section 42 making them material considerations in the planning process.

The Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (as amended) is the principal piece of UK legislation relating to the protection of wildlife. It consolidates and amends existing national legislation to implement the Council Directive 92/43/EEC on the Conservation of natural habitats and of wild flora and fauna (Habitats Directive) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive) in Great Britain.

The Act makes it an offence (subject to exceptions) to intentionally kill, injure, or take, possess, or trade in any wild animal listed in Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. The Act also prohibits certain methods of killing, injuring or taking wild animals listed in Schedule 6.

Conservation of Habitats and Species Regulations 2010 (as amended)

The Conservation of Habitats and Species Regulations 2010 (as amended) (SI No. 2010/490) update and supersede The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). The 2010 Regulations are the principal means by which the Habitats Directive is transposed in England and Wales.

Regulation 41 relates to the protection of European protected species listed under Schedule 2 of the Regulations. Taken together, it is an offence to undertake the following acts with regard to European protected species:

- deliberately capture, injure or kill any wild animal of a European protected species;
- deliberately disturb animals of any such species in such a way as to be likely to:
  - Impair their ability to survive, breed, rear or nurture their young, hibernate or migrate; or
  - Affect significantly the local distribution or abundance of the species to which they belong;
- deliberately take or destroy the eggs of such an animal; or
- damage or destroy a breeding site or resting place of such an animal.

The disturbance offence is generally taken to refer to a discernible effect at population level and biogeographic level, rather than simply to an individual animal. However, in certain circumstances the disturbance of one individual animal may have population-level effects.

The Conservation of Habitats and Species Regulations 2010 (as amended) also make it an offence (subject to exceptions) to deliberately pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 5.

However, the actions listed above can be made lawful through the granting of licences (European Protected Species Licence) by the appropriate authorities (Natural Resources Wales in Wales). Licences may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority has determined that the following regulations are satisfied:

- The works under the licence are being carried out for the purposes of "*preserving public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment*".
- There is "*no satisfactory alternative*".
- The action "*will not be detrimental to the maintenance of the population of the species concerned at favourable conservation status in their natural range*".

To apply for a licence, the following information is required:

- The species concerned.
- The size of the population at the site (note this may require a survey to be carried out at a particular time of the year).
- The impact(s) (if any) that the development is likely to have upon the populations.
- What measures can be conducted to mitigate for the impact(s).

Appendix C. Incidental Records

Date	Location	Species	English name	Number seen	Surveyor/s	Additional Notes	Grid reference
22/03/13	Not given	*Lepus europaeus*	Hare	5	CEP - Chris	5 hares in field	SH 34122 92401
27/05/13	Not given	*Erinaceus europaeus*	Hedgehog	1	CEP - Chris	Animal near visitor centre (Adult)	SH 35504 93163
30/05/13	Not given	*Erinaceus europaeus*	Hedgehog	1	CEP - Kate	Animal in garden of nant Orman (Adult)	SH 36204 93338
31/05/13	Not given	*Lepus europaeus*	Hare	1	CEP - Chris	1 hare in field	SH 3449 92486
31/05/13	Not given	*Lepus europaeus*	Hare	1	CEP - Chris	1 hare in field	SH 34129 92386
31/05/13	Not given	*Lepus europaeus*	Hare	1	CEP - Chris	1 hare in field	SH 34207 92623
31/05/13	Not given	*Lepus europaeus*	Hare	1	CEP - Chris	1 hare in field	SH 34804 92721
05/06/13	Wylfa Head	*Erinaceus europaeus*	Hedgehog	1	CEP - Chris	Animal on headland (Adult)	SH 35417 94343
07/06/13	Gardeners Cottage	*Erinaceus europaeus*	Hedgehog	1	CEP - Chris	Animal in field behind gardeners cottage (Adult)	SH 34577 93451
16/06/13	Cemlyn Road	*Lepus europaeus*	Hare	1	CEP - Sam	Adult on Cemlyn Road	SH 33987 93046
01/07/13	Cafnan Farm	*Lepus europaeus*	Brown Hare	1	Not given	Not given	Not given
01/07/13	Tre'r gof	*Lepus europaeus*	Hare	1	CEP - Sam	Adult on road to SSSI	SH 35542 93196
17/07/13	Visitor Centre	*Lepus europaeus*	Hare	1	CEP - Chris	Adult on grass by Visitor Centre	SH35409 93358
18/07/13	Visitor Centre	*Lepus europaeus*	Hare	1	CEP - Chris	Adult & leveret by Visitor Centre	SH 35409 93358
19/07/13	Visitor Centre	*Lepus europaeus*	Hare	2	CEP - Chris	2 leverets by visitor centre	SH 35409 93358
29/07/13	Not given	*Lepus europaeus*	Hare	1	CEP - Chris	1 leveret by visitor centre	SH 35409 93358
01/08/13	Not given	*Lepus europaeus*	Hare	1	CEP - Chris	Running across road	SH 34817 93096
01/08/13	Not given	*Lepus europaeus*	Hare	1	CEP - Chris	Running across road	SH 35599 93058
02/08/13	Not given	*Erinaceus europaeus*	Hedgehog	1	CEP - Chris	Adult on Wylfa Head	SH 35500 94496
06/08/13	Not given	*Lepus europaeus*	Hare	2	CEP - Chris	2 hares grazing in field opposite Tyddyn Gele	SH 350 927
22/01/14	South of Tregele	*Lepus europaeus*	Brown Hare	1	Jonathan Jackson	Not given	Not given
18/03/14	Dalar Hir	*Erinaceus europaeus*	Hedgehog	Prints	Mark Jackson	Not given	Not given
09/07/14	Jam Factory Road	*Erinaceus europaeus*	Hedgehog	2	Mark Jackson	dead on road	Not given
15/09/14	Cemlyn Lagoon	*Mustela putorius*	Polecat	1	Mark Jackson	Possible polecat scat was found	Not given