

Welsh Government

M4 Corridor around Newport

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Appendix 10.26

Hazel Dormouse Survey 2015

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Summary

- S.1** RPS has undertaken a hazel dormouse survey of land along the route of the proposed M4 Corridor around Newport (M4CaN) between Castleton and Magor to inform the ecological baseline for Environmental Impact Assessment (EIA) of the Scheme. The EIA is reported in the M4CaN Environmental Statement (ES) of which this document is an appendix to the chapter on Ecology and Nature Conservation.
- S.2** A dormouse survey previously undertaken by Arup on behalf of Welsh Government in 2014 is reported separately in Appendix 10.9 of the M4CaN ES.
- S.3** This report describes the dormouse survey that was undertaken from May to November 2015 using standard Dormouse Conservation Handbook (Bright *et al.*, 2006) methods.
- S.4** Dormice have continued to be recorded in Arup survey sites within the New Park Farm and Castleton areas. A single dormouse nest was recorded within the hedgerow south of Tata Steelworks where no evidence of dormouse has previously been recorded. No evidence of dormice has been recorded within the Arup tubes in the Magor area.
- S.5** Within the 2015 new survey areas, no dormice have been recorded in the new areas at Tata Steelworks or at Pye Corner. Possible evidence of dormouse, was found within a tube within the proposed Ifton Quarry, no other dormouse evidence was found in this area.
- S.6** Dormouse presence has been recorded in all the other 2015 new survey areas. These areas are north of Junction 23A and between Junctions 28 and 29 of the existing M4 motorway.
- S.7** Dormouse nests and live dormice were frequently recorded at the western end of the new section of motorway, whereas dormouse nests have only been recorded twice at the eastern end..
- S.8** As dormouse is a European protected species, mitigation measures must be put in place prior to any construction works that could affect their habitats to protect the animals.
- S.9** Further monitoring of dormouse will be required pre-construction to inform the Method Statement which will be needed to support a European Protected Species licence application.

1 Introduction

- 1.1.1** RPS has undertaken a hazel dormouse survey of land along the route of the proposed M4 Corridor around Newport (M4CaN) between Castleton and Magor to inform the ecological baseline for environmental impact assessment (EIA) of the Scheme. The target species was hazel dormouse *Muscardinus avellanarius* hereafter known as 'dormouse'. The survey included land generally within 500 metres of the proposed alignment following the methodology set out in the Dormouse Conservation Handbook (Bright *et al.*, 2006). The EIA is reported in the M4CaN Environmental Statement (ES) of which this document is an appendix to the chapter on Ecology and Nature Conservation.
- 1.1.2** A dormouse survey previously undertaken by Arup on behalf of the Welsh Government in 2014 is reported separately in Appendix 10.9 of the M4CaN Environmental ES (see Appendix 9.1 in the ES Scoping Report (ES Appendix 5.1)) and RPS (see ES Chapter 10). The conclusions of that review and the requirements for additional surveys in 2015 were set out in the Scope of Ecology Surveys Report (see Appendix 9.1 of the ES Scoping Report). This was discussed with Natural Resources Wales and they were further consulted on the scope of the proposed surveys through the consultation on the ES Scoping Report.
- 1.1.3** This document reports the findings of the dormouse survey which was undertaken from May to November 2015.
- 1.1.4** This report document outlines the previous survey carried out and the reasons for this additional survey (Section 2), describes the methods used in the survey (Section 3) and the findings of the survey (Section 4). A discussion of the survey findings is provided in Section 5.

2 Previous Survey

2.1 Introduction

2.1.1 The dormouse survey carried out by Arup in 2014 is reported in Appendix 10.9 of the ES.

2.1.2 The objectives of the survey were as follows.

- To identify the presence of dormice within the study area.
- To identify areas where mitigation or compensation may need to be considered depending on the nature of any scheme.
- To identify further studies that may be required to ensure that dormice are fully considered within the development of the Scheme.

2.1.3 The study area for the purpose of this survey was based on a 500 m buffer around the physical extents of the scheme alignment studied in 2007/8 including the route alignment proposed at that time, potential junctions and water treatment areas. The preferred route announced by the Welsh Government in July 2014 is located within the centre of this corridor.

2.2 2014 Survey Methods

2.2.1 Nest tube surveys were completed during 2014 in five discrete areas and checked four to seven times to record dormouse presence. The areas were selected taking into account the habitat preferences of the species and records of where dormice have previously been encountered.

2.2.2 Survey sites were selected to repeat previous surveys undertaken and to include the additional areas of potentially suitable habitat that had been identified.

2.2.3 Tubes were initially placed in two woodlands at the western end of the route (at New Park Farm). However, these were subsequently removed to avoid duplicating work being undertaken elsewhere.

2.2.4 The selected survey sites were grouped into areas as follows.

- **New Park Farm area:** comprising New Park Farm north (A), New Park Farm south (B) and A48(M) verges (D).
- **Castleton area:** comprising hedgerows and verges south of Pen-y-lan Farm (C), Pound Hill (E), and Spring Court woodland (K).
- **Coedkernew area:** comprising Berryhill Farm (F) and the Church Lane woodland (G).
- **Gwent Levels area:** comprising Pye Corner (L) and hedgerows south of Tata Steelworks (M).
- **Magor area:** comprising Magor Vicarage (H); hedgerows and verges south of Upper Grange Farm (H); south of M4 J23A services (H) and verges north of Rockfield Farm, Undy (I).

2.2.5 The locations and results of Arup surveys are shown in Figure 1.

- 2.2.6** A combination of survey methods was used as recommended in DMRB Volume 10, Section 4, Part 6 (HA 97/01): Nature Conservation Management in Relation to Dormice (Highways Agency, 2001). The surveys for dormice comprised searches for gnawed hazel nuts (where hazel was present); searches for other evidence of dormice, such as nests; and the placement and monitoring of nest tubes. The surveys also followed the methodology set out in the Dormouse Conservation Handbook (Bright *et al.*, 2006).

Hazel Nut Searches

- 2.2.7** Within areas of suitable habitat where fruiting hazel trees were present, searches for hazelnuts characteristically chewed by dormouse were made. Areas surveyed included New Park Farm north (A), the A48(M) verges (D), Spring Court woodland (K) and the verge south of M4 J23A services (H). These areas were considered to constitute the most suitable areas for this survey due to the presence of fruiting hazel trees.

- 2.2.8** Searches were carried out within five 10 m x 10 m quadrats for twenty minutes each, or until 100 nuts (not opened by birds or squirrels) had been collected. This survey technique readily establishes dormouse activity within an area.

Nest Tube Survey

- 2.2.9** Surveys consisted of putting nest tubes in areas of woodland and suitable hedgerows within the survey area. Tubes were set out in April/May 2014 and checked on a monthly basis until November 2014. As stated in 'Nature Conservation Management in Relation to Dormice' (Highways Agency, 2001a), tubes were installed and left *in situ* during the active season (May until November) in shrubs, hedgerows and trees. The numbers of tubes used per area depended on the site, but they were set out in woodland or shrub in a grid system of 20 m squares and in hedgerows at approximately 10-20 m intervals. These were then checked monthly for the presence of dormice and recently constructed dormouse nests.

- 2.2.10** A total of 310 nest tubes were installed at targeted locations along the route during April/May 2014. In July 2014 the tubes at New Park Farm woodland were removed to allow for dormouse monitoring with respect to the M4 Motorway Widening Scheme. All 42 of these tubes were re-mounted in July 2014 within areas L and M described above.

- 2.2.11** Each visit to check tubes and boxes was carried out by a licensed surveyor accompanied by an accredited agent or assistant. All evidence of dormice and their activity was recorded and mapped. Where individual dormice were found, the sexes of animals were determined and their weights measured. Evidence of other small mammal activity was also recorded where this occurred. During the November check where torpid dormice were found, the sex of the animal was not determined to avoid undue disturbance.

Survey Effort

- 2.2.12** In accordance with the Dormouse Conservation Handbook (Bright *et al.*, 2006) each of the four original survey areas was surveyed monthly between May and November to obtain a score of at least 20 over the survey season. This was achieved as follows.

- New Park Farm area: 42 tubes surveyed for three months and 36 tubes surveyed for seven months giving a score of 24.
- Castleton area: 59 tubes surveyed for seven months and 14 tubes surveyed for four months giving a score of 33.
- Coedkernew area: 106 tubes surveyed for seven months giving a score of 51.
- Magor area: 67 tubes surveyed for seven months giving a score of 32.

2.2.13 The Gwent Levels area was surveyed between August and November scoring a total of 9 over this period.

Limitations

2.2.14 No access was permitted to Gwaunhonsbrown Farm for the entire survey season. All surrounding areas were surveyed and this limitation did not adversely affect the conclusions of the survey.

2.2.15 At the site to the south of Pen-y-lan Farm, a number of the nest tubes were damaged by cattle. These were replaced once but further damage occurred. Therefore to minimise the risk to dormice the decision was made to remove the affected tubes from the survey. This is not thought to have adversely affected the conclusions of the survey due to the number of tubes placed within the wider connected habitat and the historic presence of dormice within the area.

2.2.16 As the Gwent Levels area was only surveyed for the latter part of the survey period and only achieved a score of 9, results from this area are limited. However, this area was not considered likely to support dormice and this area was only included in the 2014 survey programme to gain additional evidence to support the understanding that dormice are absent from the Levels.

Results

2.2.17 Dormice were confirmed to be present at the western end of the survey area, within the New Park Farm area and the Castleton area. The survey results provided evidence that dormice are present to the north and south of the M4 and also to the north and south of the A48(M), indicating connectivity of the habitat along the verges to the west, where known populations of dormice exist and possibility to the north and south of these major roads.

2.2.18 No dormice were recorded within the Berryhill Farm and Church Lane woodlands. This may be due to the lack of suitable habitat connections between known populations and these areas and also the limited understory and sheep grazing having an adverse impact on the food availability of these woodlands.

2.2.19 No dormice were recorded within the Gwent Levels

2.2.20 No dormice were recorded within the Magor area despite having suitable habitat situated north of the M4. This may be due to the lack of habitat linkages such as hedgerows between potentially suitable habitat and known existing populations of dormice.

2.2.21 Based on these results it was considered that a breeding population is resident within the woodlands and hedgerows in the New Park Farm area and the Castleton area. The sub-populations are likely to be small, as suitable habitat is limited by the overall size of the woodland. However, the survey results indicate

that here is a possible metapopulation of dormice which is likely to benefit from the habitat connectivity between these areas, due to evidence of dormice within the motorway verges.

2.3 Desk Study

2.3.1 Evidence of previous dormouse presence within the vicinity of the proposed route has been identified from a desk study of records centre information (SEWBRcC) and results of previously undertaken studies in the area (including surveys undertaken by Jacobs for the M4 widening between Junctions 29 and 32 in 2005/2006 and the Arup studies undertaken in 2007/8).

2.3.2 Previous records are all west of the survey area and information provided by Jacobs revealed that dormice were present within 9 of the 11 woodlands surveyed adjacent to the M4 widening between Junctions 29 and 32. The majority of dormouse activity was concentrated between the central and eastern areas of the M4 Widening Project, and mostly occurred to the north of the existing M4 corridor.

2.3.3 Surveys in 2007/2008 revealed that dormice were also present further east within the hedgerows around Pen-y-lan Farm and Gwaunhonsbrown Farm in Castleton. No records of dormice exist at the eastern end of the study area and there are no records of dormice on the Gwent Levels.

2.3.4 There are historic records of dormice within Penhow Woodlands and Slade Wood which are located at the eastern end of the study area.

2.4 Requirements for Further Survey

2.4.1 The Arup report recommended, where populations of dormice have been identified, that monitoring through continued use of nest tubes be undertaken during 2015 to ensure any scheme assessment is made using up to date data.

2.4.2 It was also recommended that surveys be continued in those areas where dormice were not recorded in order to ensure confidence in the likely absence of dormice from these areas.

2.4.3 The spatial coverage of the 2014 survey work should also be reviewed to ensure all potentially suitable habitats have been adequately surveyed.

2.4.4 Areas where the required amount of surveys had not been achieved over the 2014 season would require completion in 2015.

2.4.5 Survey of an area in the far eastern end of the area, where the proximity of woodland suggests survey of some of the hedgerows to the north east of Magor junction would be appropriate.

2.4.6 The survey effort should focus on areas not previously surveyed due to access restrictions and a review of the updated Phase 1 and aerial photographs could determine where this would be required.

2.4.7 Based on the above recommendations, RPS proposed that monitoring of tubes within the Castleton area should continue and in addition extend into connected hedgerows to further investigate the distribution of dormice in the area.

2.4.8 The survey within the Gwent Levels would be completed.

2.4.9 Further survey work would be carried out at the eastern end of the new section of motorway, north east of the Magor junction and at the eastern end of the proposed Ifton Quarry haul road.

3 2015 Survey Methods

3.1 Introduction

3.1.1 The dormouse survey was carried out over the period May to November 2015, which falls within the optimum period for this type of survey.

3.1.2 The survey area was based upon the proposed alignment of the new section of motorway where suitable habitat for dormouse was present.

3.2 Methodology

3.2.1 The survey method was based on the methodology described in the Dormouse Conservation Handbook (Bright *et al.*, 2006).

3.2.2 The survey involved targeted nest tube surveys and nut searches.

3.2.3 Continued monitoring of dormouse tubes in the Castleton area where dormouse have been recorded was extended into connected hedgerows to further investigate the distribution of dormouse in the area. The surveys which Arup had partially undertaken within the Gwent Levels were completed.

3.2.4 The rest of the survey effort required for 2015 focussed on areas of suitable habitat which were not previously surveyed due to access restrictions.

3.2.5 Additional targeted nest tube surveys were carried out within an area at the eastern end of the new section of motorway where the proximity of woodland suggests some survey of hedgerows to the north east of Magor junction would be appropriate, and in woodland close to the proposed Ifton Quarry haul road.

3.2.6 No other areas within the Gwent Levels were surveyed as the findings from the 2014 and 2015 preliminary surveys and Arup's previous consultation with NRW indicated that the area was deemed not suitable for dormice. This is due to the levels being relatively wet, characterised by a network of drainage ditches and historic floodplain grassland with no significant woodland areas, hedgerows or scrub areas large enough to support a viable population of dormice.

3.2.7 However, as a result of the identification of a dormouse nest in one of the tubes within the Gwent Levels during the survey, additional nest tubes were installed in the area at the south of the Tata Steelworks to further investigate the distribution of dormouse in this area.

3.3 Description of Survey Sites

3.3.1 The following areas were surveyed between May and November 2015. The locations of these survey areas are shown on Figure 1.

Table 3.1: Description of Arup Survey Sites

Survey site	Description
New Park Farm area	Continuing surveys of the A48(M) verges. Consists of plantation broadleaved woodland with hazel and dense bramble scrub.
Castleton area	Continuing surveys of Pen-y-lan Farm and Pound Hill. Pen-y-lan farm consists of plantation broadleaved woodland with bramble scrub, connected to well established species-poor hedgerows. Pound Hill is broadleaved plantation woodland with sparse bramble understory, connected to well established species poor hedgerows.
Gwent Levels area	Continuing surveys of Pye Corner and hedgerows south of Tata Steelworks. Pye Corner is a derelict laboratory site which has become overgrown with semi natural broadleaved woodland, planted coniferous trees and bramble scrub. The hedgerow south of tat steelworks is a species poor native intact hedgerow along a wet ditch.
Magor area	Continuing surveys on verges north of Rockfield Farm, Undy. Consists of plantation broadleaved woodland along the motorway verge and dense bramble scrub.

3.3.2

The following areas were surveyed between June/July and November 2015. The locations of these survey areas are shown on Figure 1.

Table 3.2: Description of New Survey Sites

Survey site	Description
Cefn Llogell (A)	Species –rich hedgerows lining small road, plantation woodland alongside A48 (M), dense scrub lining bridleway. Species include holly, bramble, elder, hawthorn, dogwood, hazel, oak, goat willow, field maple, ash, rose, alder and buddleia
Gwaunshonbrown Farm (B)	Species – rich hedgerows. Species include hazel, hawthorn, ivy, holly, field maple, willow and bramble.
Hedge of Penylan Road (C)	Species –rich hedgerow. Species include bramble, hawthorn, elder, holly, ash, hazel and goat willow.
By Pwll Diwaelod (D)	Semi natural Broadleaved woodland and connecting hedgerow. Species include hazel, holly, hawthorn and willow. Hedgerow species include elder, hawthorn, bramble, hazel and alder.
Roggiett Brake Quarry Wood (E)	Semi natural Broadleaved Woodland and Pine plantation. Species include field maple, hazel, elm, ivy, sycamore and holly.
Quarry Woods (F)	Small section of semi natural broadleaved woodland. Species include hawthorn, field maple, rose, elm, hazel, bramble, oak, ivy and ash.
Central Area J28-29 (G)	Broadleaved semi natural woodland dissected by A48 (M) and M4. Species include hazel, hawthorn, alder, sycamore, hazel, oak, ash and goat willow.
Minnetts Lane site (H)	Species poor hedgerow and two small areas of semi natural broadleaved woodland. Species include elder, blackthorn, field maple, hazel, hawthorn and holly
Knollbury area east end (I)	Species poor hedgerow. Species include holly, hazel, hawthorn, rose and elder.
M4 Road verge (nr New Park farm) (J)	Plantation woodland. Species include hazel, dogwood, hawthorn, sycamore, oak and ash.
Pound Hill Road Verges (K)	Plantation woodland. Species include dogwood, hawthorn, field maple and oak.
Knollbury woodland and fields (L)	Two sections of Semi natural broadleaved woodland and species hedgerows. Species include hazel, hawthorn, sycamore, holly, privet, elder, field maple, blackthorn and elm.
Pye Corner Farm	Mixture of scattered scrub and hedgerow. Species include willow,

Survey site	Description
(M)	bramble, hawthorn and ash.
Tata Steelworks (N)	Species poor hedgerow and scattered scrub. Species include bramble, hawthorn, willow, sycamore, blackthorn and buddleia.

3.4 Survey Methods

3.4.1 A combination of survey methods was used as recommended in DMRB Volume 10, Section 4, Part 6 (HA 97/01): Nature Conservation Management in Relation to Dormice (Highways Agency, 2001). The surveys for dormice comprised searches for gnawed nuts (where hazel was present); searches for other evidence of dormice, such as nests; and the placement and monitoring of nest tubes. The surveys also followed the methodology set out in the Dormouse Conservation Handbook (Bright, *et al.*, 2006).

Targeted Nest Tube Surveys

3.4.2 Nest tubes constructed from stiff black plastic with a plywood tray inside are readily used by dormice and offer a means of detecting animals in the absence of gnawed hazel nuts. Nests are often the first indication that dormice are using the tubes, these can be identified by their woven structure and the incorporation of green leaves collected from the tree canopy as opposed to dark brown leaves collected by other species from the woodland floor.

3.4.3 All areas known to have, or identified as having, potential to support dormice were subject to a nest box tube survey as described in the Natural England's Dormouse Conservation Handbook and Natural England's Research Report 524 (English Nature, 2003). Nest tubes were attached to appropriate branches of trees and shrubs at intervals of 10-20 metres.

3.4.4 Nest tubes were inspected in accordance with best practice guidelines, by an experienced ecologist. Any evidence of dormouse activity including animals, nests or gnawed nuts was recorded.

3.4.5 Dormouse nests are woven from strips of honeysuckle bark, or similar material, and frequently have whole leaves incorporated into their outer layers. These are often collected fresh and are either green or faded to grey. The nests are spherical and lack an obvious entrance hole. This distinguishes them from a wren's nest or harvest mouse nests, both of which have distinct entrance hole and are normally made of shredded grass.

Hazel Nut Searches

3.4.6 Several species of rodents open hazelnuts but only the dormouse leaves a small round opening. Dormouse tooth marks will be found around the rim of the hole, smoothing it out, with a few tooth marks on the nut surface. There are no transverse tooth marks across the rim of the nut shell. Dormouse tooth marks may be visible to the naked eye, but use of a magnifying glass is recommended. Mice and voles also gnaw nuts, but these are generally irregular in shape and have a different pattern of surrounding tooth marks. However, most hazelnuts are opened by squirrels, which shatter them and leave a sharp, jagged irregular opening to the nut.

3.4.7 Dormice gnaw nuts up in the canopy, dropping shells to the ground below. Their nuts will therefore tend to be scattered and more often found below the hazel canopy rather than close to the base of the tree or shrub. Mice and voles often store nuts in caches, dormice do not.

3.4.8 Hazelnut searches were undertaken at several locations along the proposed route. The locations of the survey sites are shown on Figure 3.

3.4.9 Within each location 100 hazel nuts that have been opened by small rodents (avoiding caches and nuts opened by squirrels) were collected. If there were not many hazels in the area, all the nuts that could be found were collected.

3.4.10 The nuts were then taken away and looked at with the use of a microscope if required to determine whether any had been opened by dormice. It is considered that if the sample contains no nuts that have been opened by dormice it is concluded that it is highly probably dormice are not present.

3.5 Survey Effort

3.5.1 Survey effort for nest tubes can be quantified by applying the method stated in English Nature's Research Report 524 (English Nature, 2003). This methodology uses the table below to score each month according to the value of surveying.

Table 3.3: Index of probability of finding dormice present in nest boxes/tubes in any one month

Month	Index
May	4
June	2
July	2
August	5
September	7
October	2
November	2

3.5.2 Using 50 nest tubes as a standard and Table 3.3 as an index of the 'value' of different months for surveying, a score can be devised as an indicator of the thoroughness of a survey.

3.5.3 These values are based on standard of 50 tubes and therefore should be adjusted according to the number of tubes installed. For example, 100 tubes left out between September and November score 22 (7+ 2 + 2, multiplied by 2) because double the tubes are used. Natural Resources Wales recommend a score of 20 to indicate a through survey.

3.5.4 In accordance with the Dormouse Conservation handbook (Bright *et al.*, 2006) the following survey areas were defined.

Table 3.4: Survey Areas

Survey area	Survey sites included
Haul Road to Ifton Quarry	Roggiett Brake Quarry Wood (E), Quarry Woods (F), Minnetts Lane site (H)
North of M4 and east of Junction 23A	Knollbury area east end (I), Knollbury woodland and fields (L) in addition to Arup Magor area

Survey area	Survey sites included
Tata Steel site and Pye Corner	TATA Steelworks (N) and ARUP Pye Corner Farm (M) in addition to Arup Gwent Levels area
North of M4 and east of Junction 29	Cefn Llogell (A)
North of M4 and east of Junction 29	Gwaunshonbrown Farm (B), Pound Hill Road Verges (K) in addition to Arup Castleton area in addition to Arup Castleton area
North of M4 Junction 29	Hedge of Penylan Road (C), M4 Road verge (nr New Park farm) (J) in addition to Jacobs results
South of M4 and west of Junction 29	By Pwll Diwaelod (D), Central Area J28-29 (G) in addition to Arup New Park farm area.

3.5.5 The scores for these survey areas over the survey season were as follows.

Haul Road to Ifton Quarry

3.5.6 These nest tube locations are within one survey area due to their proximity and presence of suitable connecting habitat. The total number of nest tubes was 188 surveyed from July to November. Survey effort = 67.68.

North of M4 and east of Junction 23A

3.5.7 These nest tube locations are within one survey area due to their proximity and presence of suitable connecting habitat. The total number of nest tubes was 135 surveyed from July to November. Survey effort = 48.6.

Tata Steel site and Pye Corner

3.5.8 These nest tube locations are within one survey area due to their proximity and presence of suitable connecting habitat. The total number of existing Arup tubes was 10 surveyed from April to November. Survey effort = 4.8. The total number of nest tubes was 90 surveyed from September to November 2015. Survey effort = 19.8.

3.5.9 The total survey effort for the area is therefore 24.6.

North of M4 and East of Junction 29

3.5.10 These nest tube locations are within one survey area due to their proximity and presence of suitable connecting habitat. The total number of nest tubes was 83 surveyed from June to November. Survey effort = 33.2.

North of M4 and East of Junction 29

3.5.11 These nest tube locations are within one survey area due to their proximity and the presence of suitable connecting habitat. The total number of nest tubes was 42 (28 surveyed from June to November). Survey effort = 11.2. 14 were surveyed from July to November. Survey effort = 5.04.

3.5.12 Total number of existing Arup tubes was 34 surveyed from May to November. Survey effort = 16.32.

3.5.13 Therefore, the total survey effort for the area is 32.56.

North of M4 Junction 29

- 3.5.14** These nest tube locations are within one survey area due to their proximity and the presence of suitable connecting habitat. The total number of nest tubes was 65 surveyed from July to November. Survey effort = 23.4.

South of M4 and West of Junction 29

- 3.5.15** These nest tube locations are within one survey area due to their proximity and presence of suitable connecting habitat. The total number of nest tubes was 95 29 surveyed from June to November. Survey effort = 11.6. 66 were surveyed from July to November. Survey effort = 23.76.
- 3.5.16** Total survey effort for area is 35.36.
- 3.5.17** In addition, Arup tubes have continued to be monitored in this area, where accessible.

3.6 Limitations

- 3.6.1** Access for nest tube installation and checking of tubes previously installed by Arup was available from mid-May 2015.
- 3.6.2** Access arrangements and subsequent inductions onto Tata Steelworks land were not completed until August 2015. The additional tubes were installed at Tata Steelworks following the discovery of a dormouse nest in September 2015
- 3.6.3** At the Knollbury woodland and fields, a number of the nest tubes were damaged by cattle part way through the survey. The tubes were not replaced to minimise the risk to dormice, if any are present. This is not thought to have adversely affected the conclusions of the survey due to the number of tubes placed within the wider connected habitat.
- 3.6.4** A few other nest tubes were damaged during the survey in some areas by horses or other factors, but again it is thought that this would not adversely affected the conclusions due to the number of tubes within that survey area and the presence of dormice already confirmed at that location.
- 3.6.5** In some of the proposed search areas there was little or no hazel so not many nuts were collected. Access into some of the proposed search areas was not possible due to the road layout and barriers.

4 Results

4.1 Introduction

4.1.1 The results of the dormouse survey are discussed below, where summaries of each of the survey areas have been provided. Full results are provided in Annexes A and B.

4.1.2 The locations of evidence of dormouse presence are shown on Figure 2.

Arup Survey Sites

4.1.3 The survey of the following areas was continued during 2015. Dormice had previously been recorded at the New Park Farm and Castleton areas. No dormice had been recorded within the Gwent Levels and Magor areas.

New Park Farm Area

4.1.4 A single dormouse was recorded during the June visit within this area. Dormouse nests have been recorded during further visits undertaken in July and September. An old dormouse nest and two dormice were recorded during the November survey.

Castleton Area

4.1.5 A single dormouse was present in the area south of Pen-y-lan Farm in June and dormouse nests have been recorded during further visits undertaken in July, September and November.

4.1.6 No evidence of dormouse was recorded in the Pound Hill area during the June, July and November surveys. A dormouse was present and three dormouse nests were recorded during the September survey.

Gwent Levels Area

4.1.7 Access was only granted in this area in August. A dormouse nest was recorded within a hedgerow south of Tata Steelworks. The tubes around Pye Corner were not present/easily found so these were replaced. These survey areas were extended in August 2015. The results from these areas are discussed below under the Tata Steel site and Pye Corner section.

Magor Area

4.1.8 The area was surveyed during June, August, October and November. Not all the original Arup tubes were found, so further tubes were placed in the surrounding area to compensate for this. No evidence of dormouse was recorded within this area. The results of the extended area are discussed below under the North of M4 and east of Junction 23A sections.

New Survey Sites

4.1.9 Nest tubes were installed in the following areas and surveys carried out during 2015. The results of the new survey areas are provided below.

Haul Road to Ifton Quarry

- 4.1.10 Roggiett Brake Quarry Woods:** Nest tubes were installed in May 2015 and surveyed between August and November. No evidence of dormouse has been recorded.
- 4.1.11 Quarry Woods:** Nest tubes were installed in May 2015 and surveyed between August and November. No evidence of dormouse has been recorded.
- 4.1.12 Minnetts Lane Site:** Nest tubes were installed in June 2015 and surveyed between August and November. During the November survey seed heads of Old man's beard (*Clematis vitalba*) were found within one of the tubes, which may indicate the possible presence of dormouse, but it cannot be confirmed. No other evidence of dormouse has been recorded in this area.

North of M4 and East of Junction 23A

- 4.1.13 Knollbury Area (East End) Near Bencroft Road:** Nest tubes were installed in June 2015 and surveyed between August and November. No evidence of dormouse was recorded during the August survey. A single dormouse nest (the same nest) was recorded during the September and November survey.
- 4.1.14 Knollbury Woodland and Fields:** Nest tubes were installed in June 2015 and surveyed during August and November. No evidence of dormouse was recorded during the August survey. The same single dormouse nest was recorded during the October and November survey, although a wood mouse was present during October.

Tata Steel Site and Pye Corner

- 4.1.15 Pye Corner Farm:** Access was granted to the Arup survey area during July 2015. As no nest tubes were found, further nest tubes were installed in the surrounding area. These tubes were surveyed in August and November and no evidence of dormouse was found.
- 4.1.16 Tata Steelworks:** Nest tubes were installed in August 2015 as an extension to the Gwent Levels survey area and after a dormouse nest had been recorded with a hedgerow south of the steelworks. The tubes were surveyed in September and November and a likely dormouse nest was recorded within scrub along an access track within Tata land.

North of M4 and East of Junction 29

- 4.1.17 Cefn Llogell:** Nest tubes were installed in May 2015 and surveyed during July and November. Four dormouse nests were recorded during the survey in July. Five live dormice and nine nests were recorded in September and seventeen potential dormouse nests from old to new recorded in November.

North of M4 and East of Junction 29

- 4.1.18 Gwaunshonbrown Farm:** Nest tubes were installed in May 2015 and surveyed between July and November. Two dormouse nests were recorded during the survey in July; five dormouse nests were recorded each in September and November.

4.1.19 Pound Hill Road Verges: Nest tubes were installed in June 2015 and surveyed between July and November. Three dormouse nests were recorded in November.

North of M4 Junction 29

4.1.20 Hedge off Penylan Road: Nest tubes were installed in May 2015 and surveyed between July and November. One dormouse nest was recorded during the survey in July. This was recorded again in September. Two different dormouse nests were recorded in November.

4.1.21 M4 Road Verge near New Park Farm: Nest tubes were installed in June 2015 and surveyed between July and November. One dormouse nest with a dormouse present was recorded during the survey in July. Five live dormouse and five dormouse nests were recorded in September. Thirteen dormouse nests were recorded in November, including one with an adult and juvenile present.

South of M4 and West of Junction 29

4.1.22 By Pwll Diwaelod: Nest tubes were installed in May 2015 and surveyed between August and November. No evidence of dormouse has been recorded.

4.1.23 Central Area at J28-29: Nest tubes were installed in June 2015 and surveyed between July and November. A live dormouse was recorded in a wood mouse nest during the September survey. A wood mouse nest was recorded during the November survey.

Hazel Nut Searches

4.1.24 Hazel nut searches were carried out between 2nd and 20th November 2015 in additional locations to the nest tube surveys, undertaken in 2015. The locations, the number of nuts collected and the number opened by dormice are provided in the table below. The survey locations are shown on Figure 3.

Table 4.1: Hazelnut Survey Areas and Results

Survey area	Description	Number of nuts opened by mammals collected	Number of confirmed Dormouse opened nuts
A	Occasional small hazel on roundabout, occasionally fresh hazelnuts which were mostly uneaten. No hazel in verge to west or east.	20	0
B	Occasional small to mid-hazel trees with fresh, uneaten hazelnuts frequently found.	33	0
C	Few mid-size hazel trees, hazelnuts mostly old.	115	0
D	No hazel trees.	0	0
E	No hazel to the east of St Brides road, small hazel trees to the west with frequent uneaten fresh hazelnuts.	7	0
F	Occasional/frequent hazel trees to the north, few uneaten or fresh	70	0

Survey area	Description	Number of nuts opened by mammals collected	Number of confirmed Dormouse opened nuts
	hazelnuts found.		
G	Occasional small to mid-size hazel trees, fresh uneaten or squirrel eaten hazelnuts frequent.	25	0
H	Not accessed.	0	0
I	Occasional mid-size hazel trees, hazelnuts mostly old.	32	0
J	Very few mid-size hazel trees, hazelnuts mostly old.	16	0
K	Very small few hazel trees, hazelnuts mostly old.	8	0
L	Occasional mid-size hazel trees, hazelnuts mostly old.	58	0
M	Abundant small and mid-size hazel trees, few hazelnuts found.	37	0
N	Small to mid-size hazels abundant/dominant at western end. Hazel trees much sparser further east where woodland has a distinct canopy and sprawling bramble and ivy ground flora.	46	0
O	Frequent small and mid-size hazel trees, frequent fresh hazelnuts	100	3
P	No hazel trees.	0	0
Q	No hazel trees.	0	0
R	No hazel trees.	0	0

4.1.25 Dormouse gnawed hazelnuts were only found at Location O, which is south of the A48, west of Pound Hill in Castleton.

4.1.26 Several of the areas had either no hazel or no mammal opened hazelnuts, therefore no nuts were collected. Access could not be gained to Location H due to the road layout and barriers.

New Park Farm Results (Atkins)

4.1.27 The M4 widening scheme monitoring within the New Park Farm north and New Park Farm south areas which was previously undertaken by Jacobs in 2014 was continued by Atkins in 2015.

4.1.28 These sites were surveyed in March, May, August and October 2015. No evidence of any dormouse activity has been discovered at the New Park Farm south site. Within the road verge at the New Park Farm north site four dormice (one adult female and three juveniles (one female and 2 male) were recorded in a single box in October. No other evidence of dormouse was found.

5 Discussion

5.1 Introduction

5.1.1 The 2015 dormouse survey focused on the continued monitoring of Arup nest tubes in areas where dormouse had previously been recorded and also in areas where dormouse had not been recorded to ensure confidence in the likely absence of dormouse from these areas. The survey included areas where the required amount of survey effort had not been achieved during the 2014 survey season.

5.1.2 In addition, survey effort was focused at the far eastern end of the new section of motorway near Magor, near the proposed Ifton Quarry haul road and other areas not previously surveyed during 2014. The survey in the area of the Castleton Junction was also extended into connected hedgerows to further investigate the distribution of dormouse in that area.

5.2 Survey Findings

5.2.1 Dormice have continued to be recorded in Arup survey sites within the New Park Farm and Castleton areas. A single dormouse nest was recorded within the hedgerow south of Tata Steelworks, where no evidence of dormouse had previously been recorded. No dormice have been recorded in the Arup tubes in the Magor area.

5.2.2 Within the 2015 new survey areas, no dormice have been recorded within the new areas at Tata Steelworks or Pye Corner. Possible evidence of dormouse was found within a tube within the proposed Ifton Quarry, no other dormouse evidence was found in this area.

5.2.3 Dormouse presence has been recorded in all the other 2015 new survey areas. These areas are both north and south of the existing M4 motorway between Junctions 28 and 29 at the western end and north of the M4 east of Junction 23A at the eastern end of the new section of motorway.

5.2.4 Dormouse nests and live dormice were frequently recorded at the western end of the new section of motorway throughout the survey period, whereas dormouse nests have only been recorded between September and November at the eastern end and only two confirmed nests have been recorded within this area.

5.2.5 Dormouse gnawed hazelnuts were only found at one location during the survey. This location was within the western part of the new section of motorway, south of the A48, west of Pound Hill in Castleton, within the same roadside verge where dormouse have been confirmed during the nest tube surveys.

5.3 Key Considerations

5.3.1 As dormouse is a European protected species, mitigation measures must be put in place prior to any construction works that could affect their habitats to protect the animals.

5.4 Further Surveys

- 5.4.1** Further monitoring of dormouse will be required pre-construction to inform the Method Statement which will be needed to support a European Protected Species licence application.

References

Bright, P.W., Mitchell, P. & Morris, P.A. 1994. *Dormouse distribution: survey techniques, insular ecology and selection of sites for conservation*. Journal of Applied Ecology. 31: 329–339

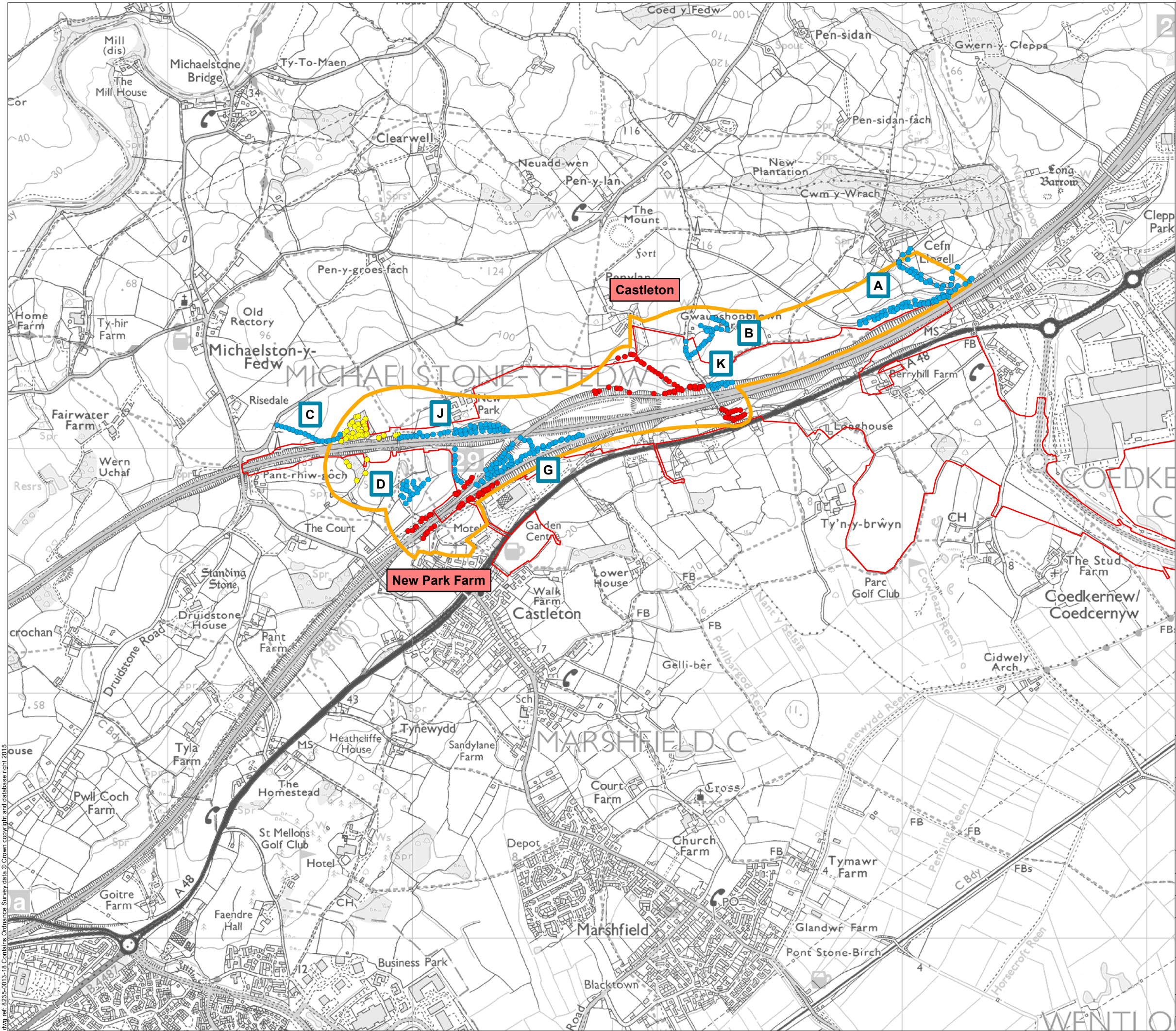
Bright, P.W., Morris, P.A and Mitchell-Jones, T, 2006. *The Dormouse Conservation Handbook- Second edition*. English Nature, Peterborough.

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Figures



- Legend**
- Limit of Permanent and Temporary Works for New Section of Motorway
 - Proposed Dormouse Nest Tube Survey Areas
 - Arup Dormouse nest tube survey ongoing
 - RPS survey locations
 - Atkins Dormouse box survey ongoing

The scheme shown reflects the design at time of survey


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Appendix 10.26 – Dormouse Survey

Dormouse Survey Area

Figure: 1a	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: MS	Checked: EW

Scale: A3 @ 1:15,000
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dwg ref. 8235-0013-18



- Legend**
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 - RPS survey locations
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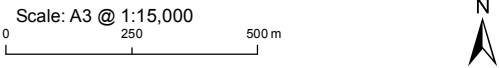
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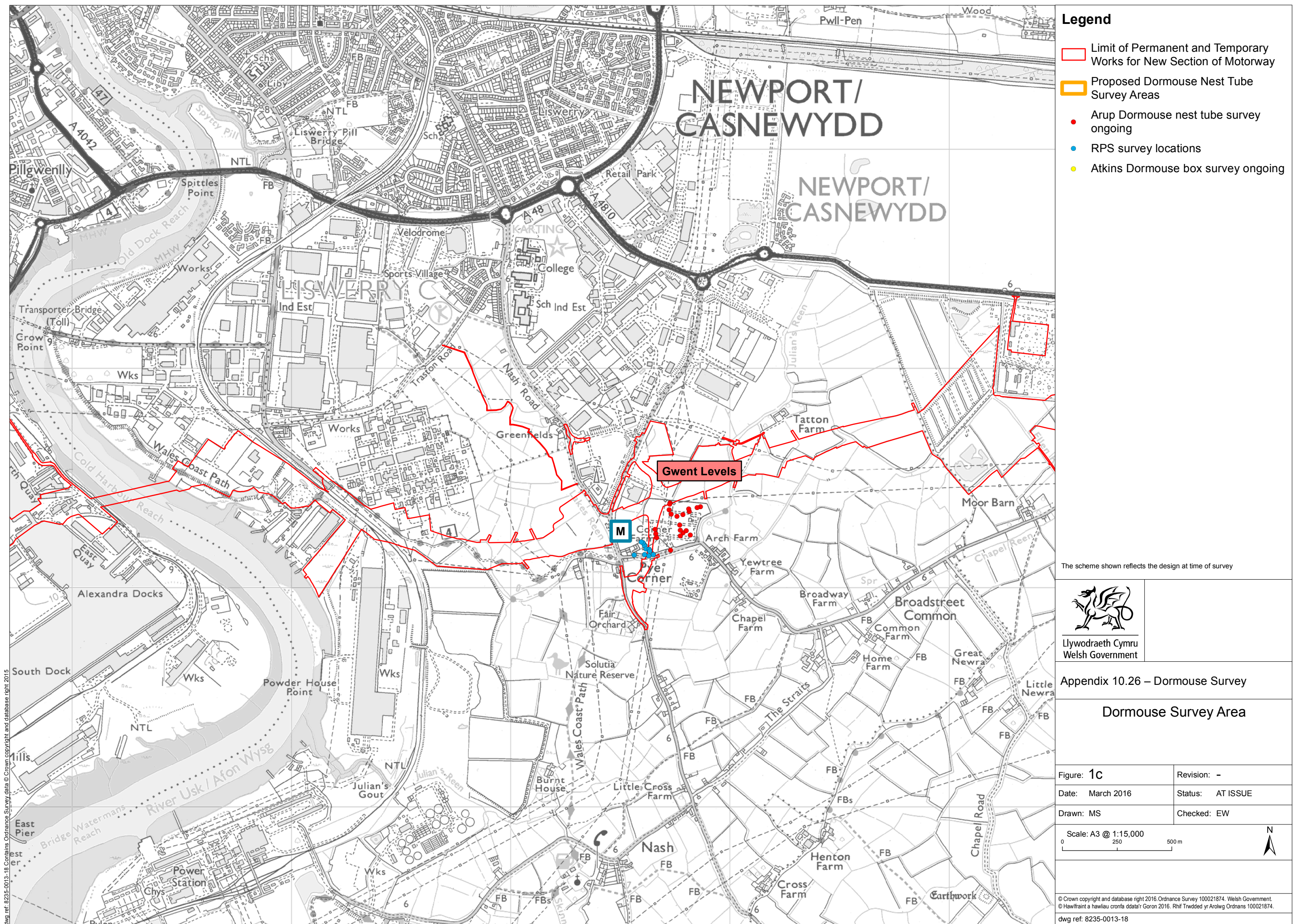


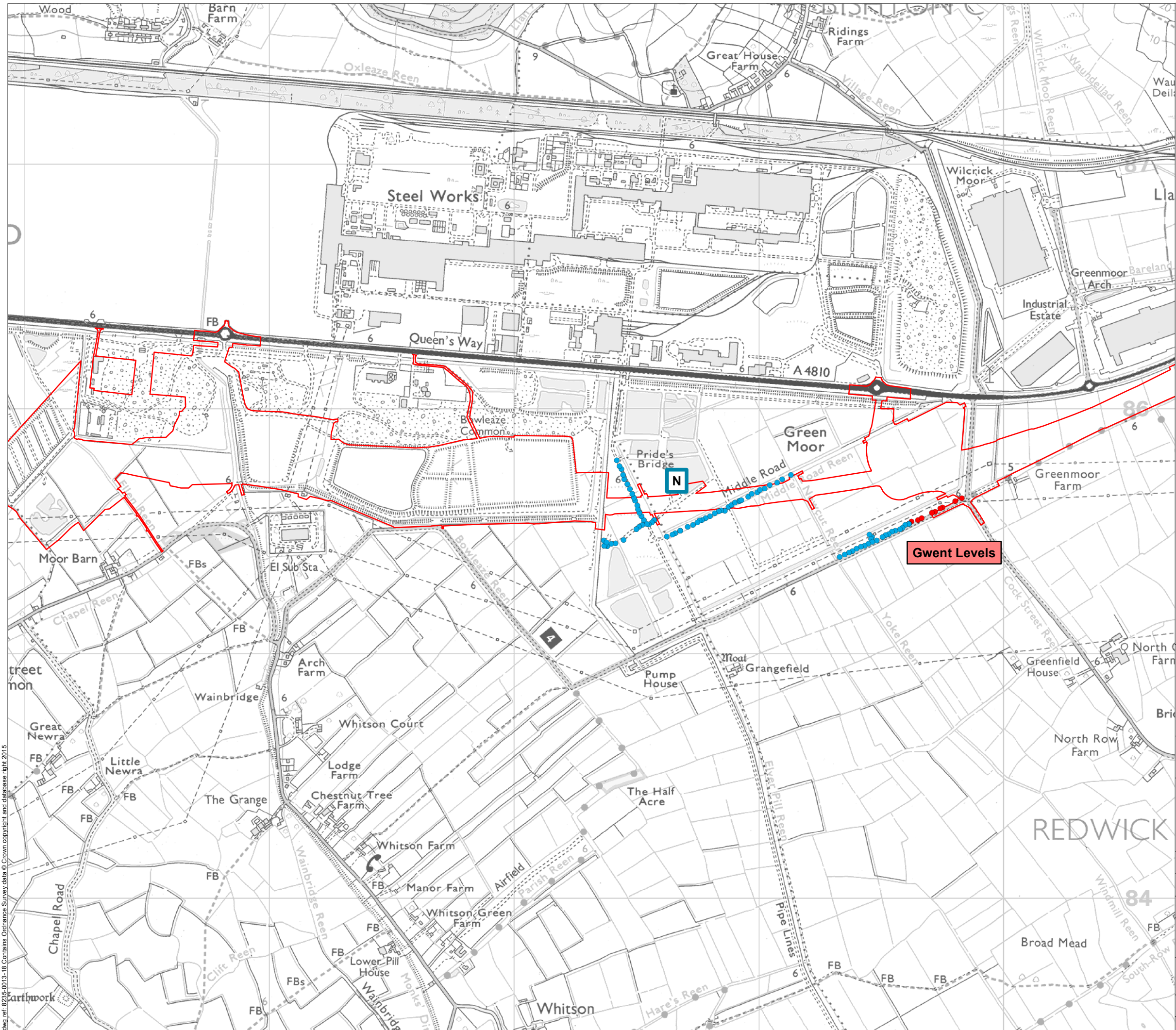
Appendix 10.26 – Dormouse Survey

Dormouse Survey Area

Figure: 1b	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: MS	Checked: EW







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 - Proposed Dormouse Nest Tube Survey Areas
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 - RPS survey locations
 - Atkins Dormouse box survey ongoing

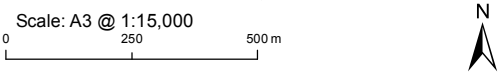
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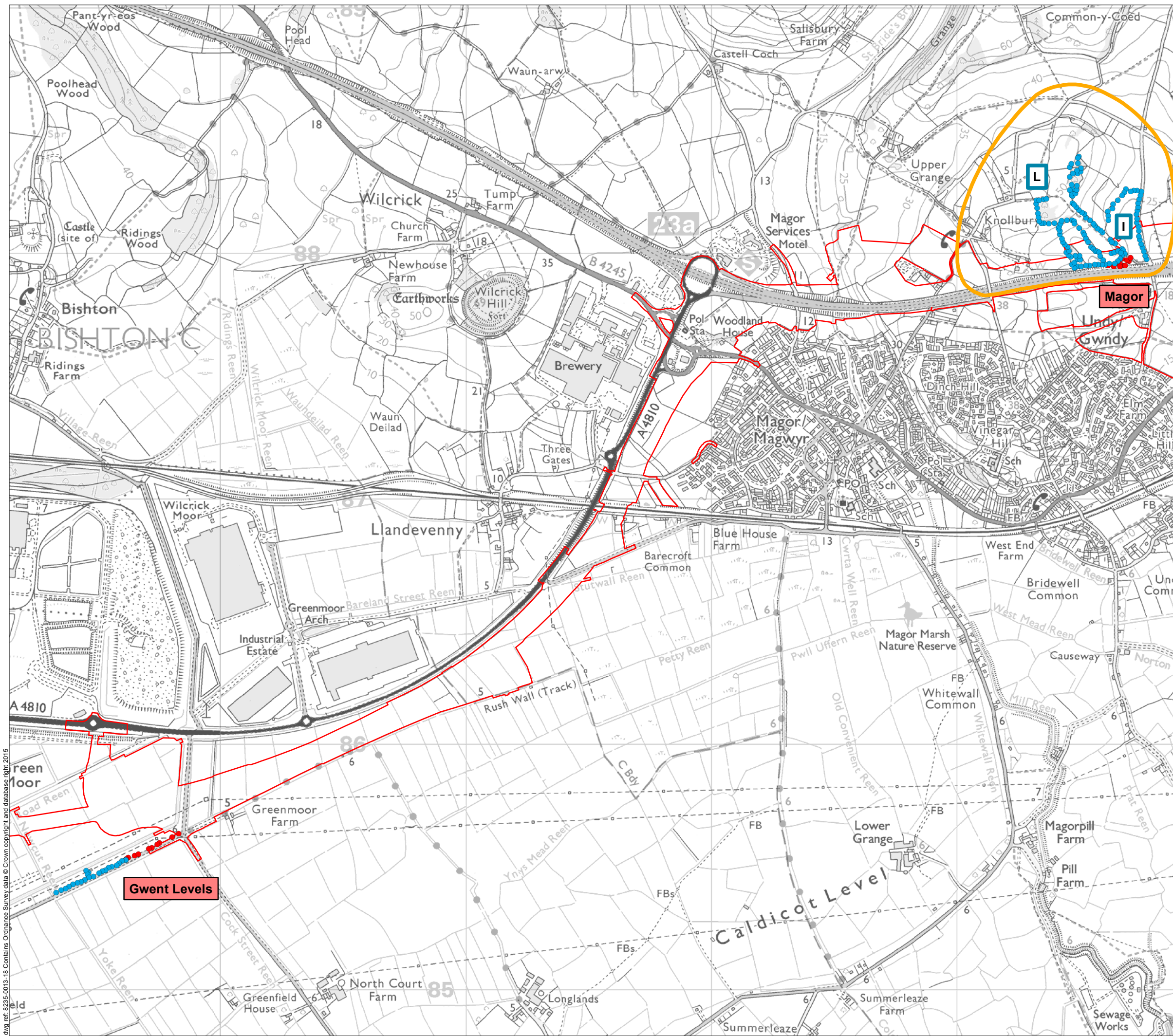


Appendix 10.26 – Dormouse Survey

Dormouse Survey Area


Figure: 1d	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: MS	Checked: EW





- Legend**
- Limit of Permanent and Temporary Works for New Section of Motorway
 - Proposed Dormouse Nest Tube Survey Areas
 - Arup Dormouse nest tube survey ongoing
 - RPS survey locations
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The scheme shown reflects the design at time of survey


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Appendix 10.26 – Dormouse Survey

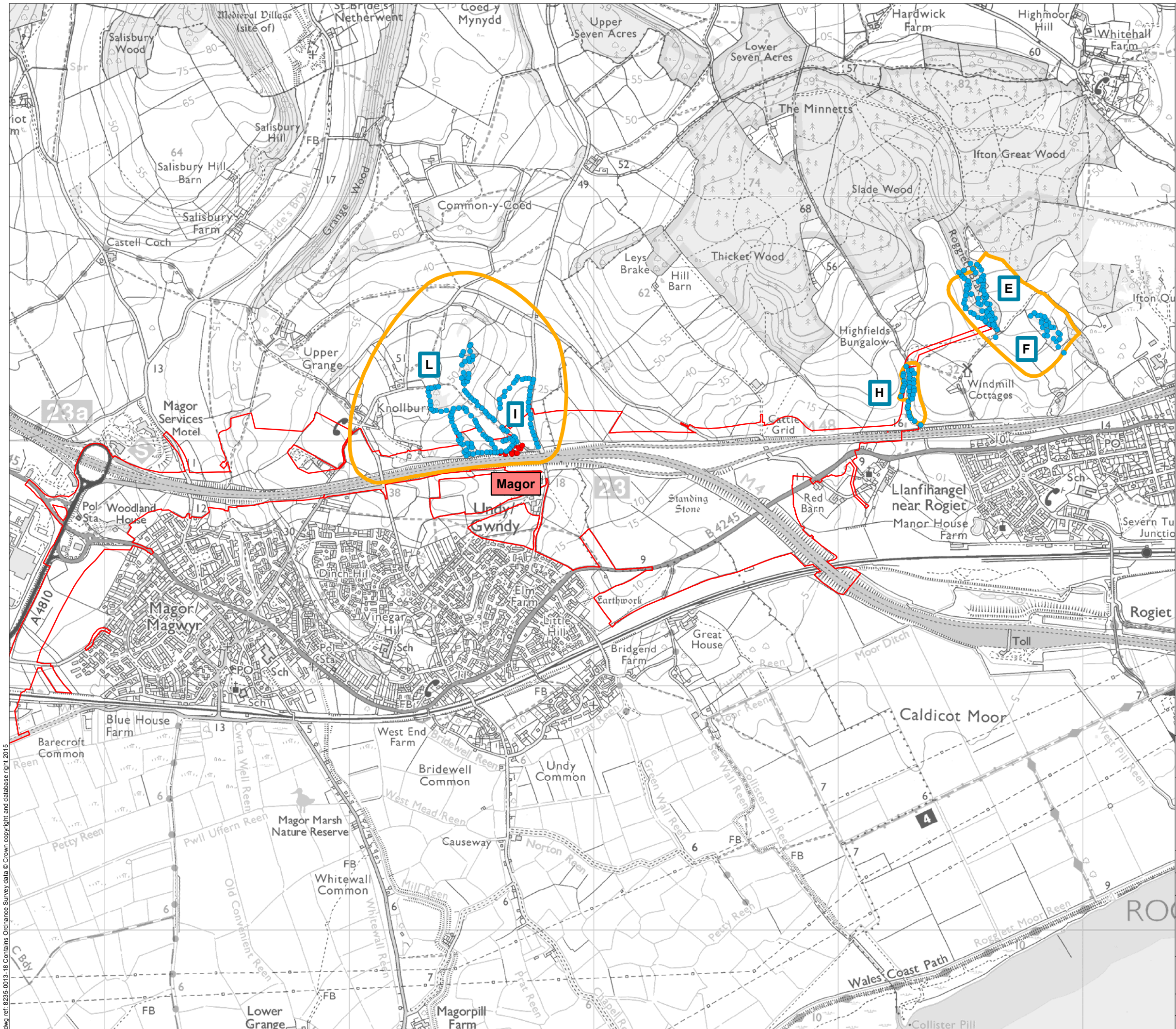
Dormouse Survey Area

Figure: 1e	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: MS	Checked: EW

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- Legend**
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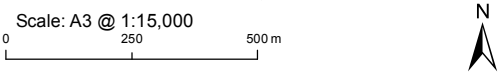
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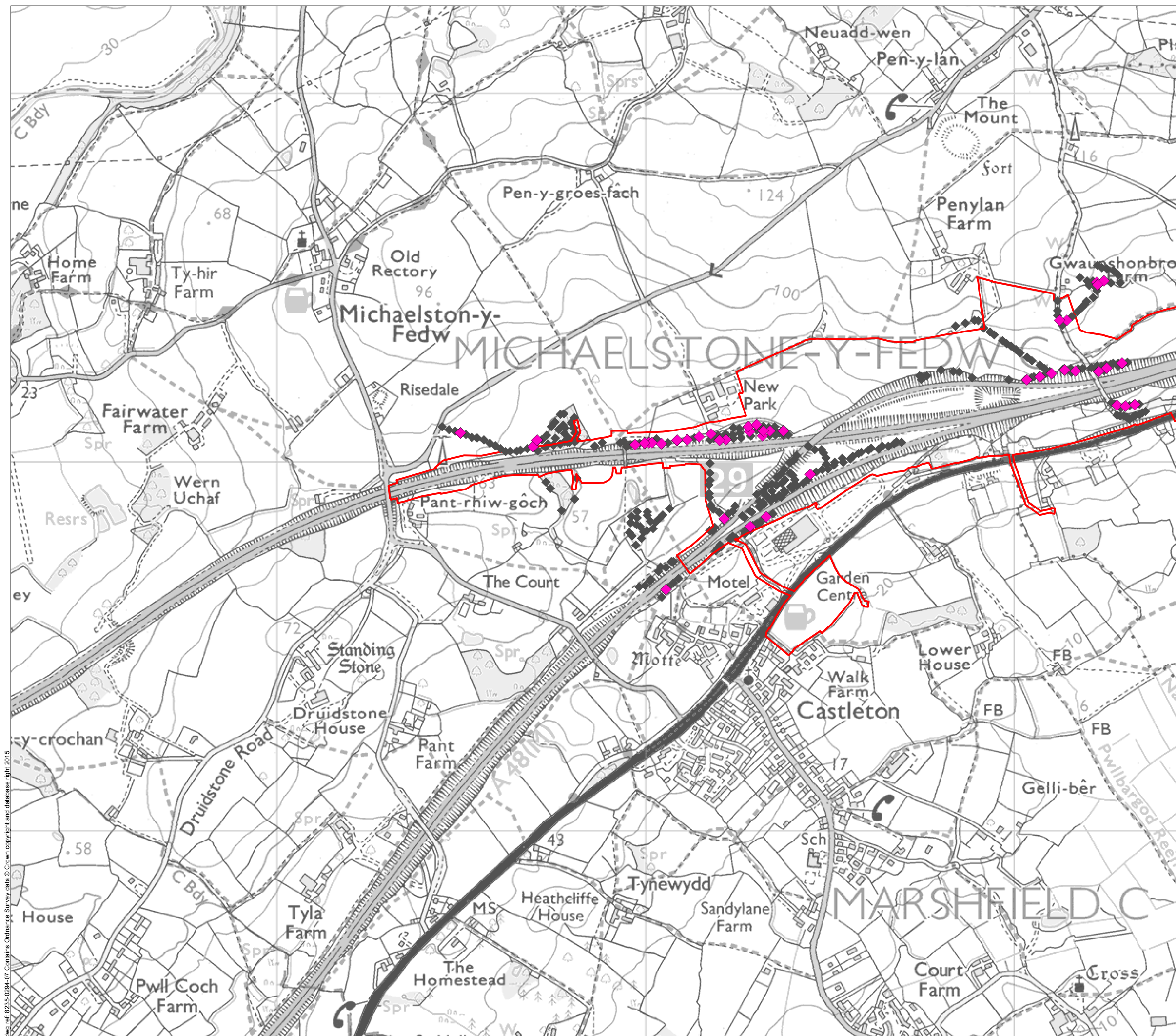


Appendix 10.26 – Dormouse Survey

Dormouse Survey Area


Figure: 1f	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: MS	Checked: EW





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Legend

-  Limit of Permanent and Temporary Works for New Section of Motorway
- ◆ Survey Location
- ◆ Dormouse Presence
- ◆ Possible Dormouse Presence

The scheme shown reflects the design at time of survey



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Appendix 10.26 – Dormouse Survey

Dormouse Survey Results

Figure: 2a

Revision: -

Date: March 2016

Status:	AT ISSUE
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Drawn: CR

Checked: LW

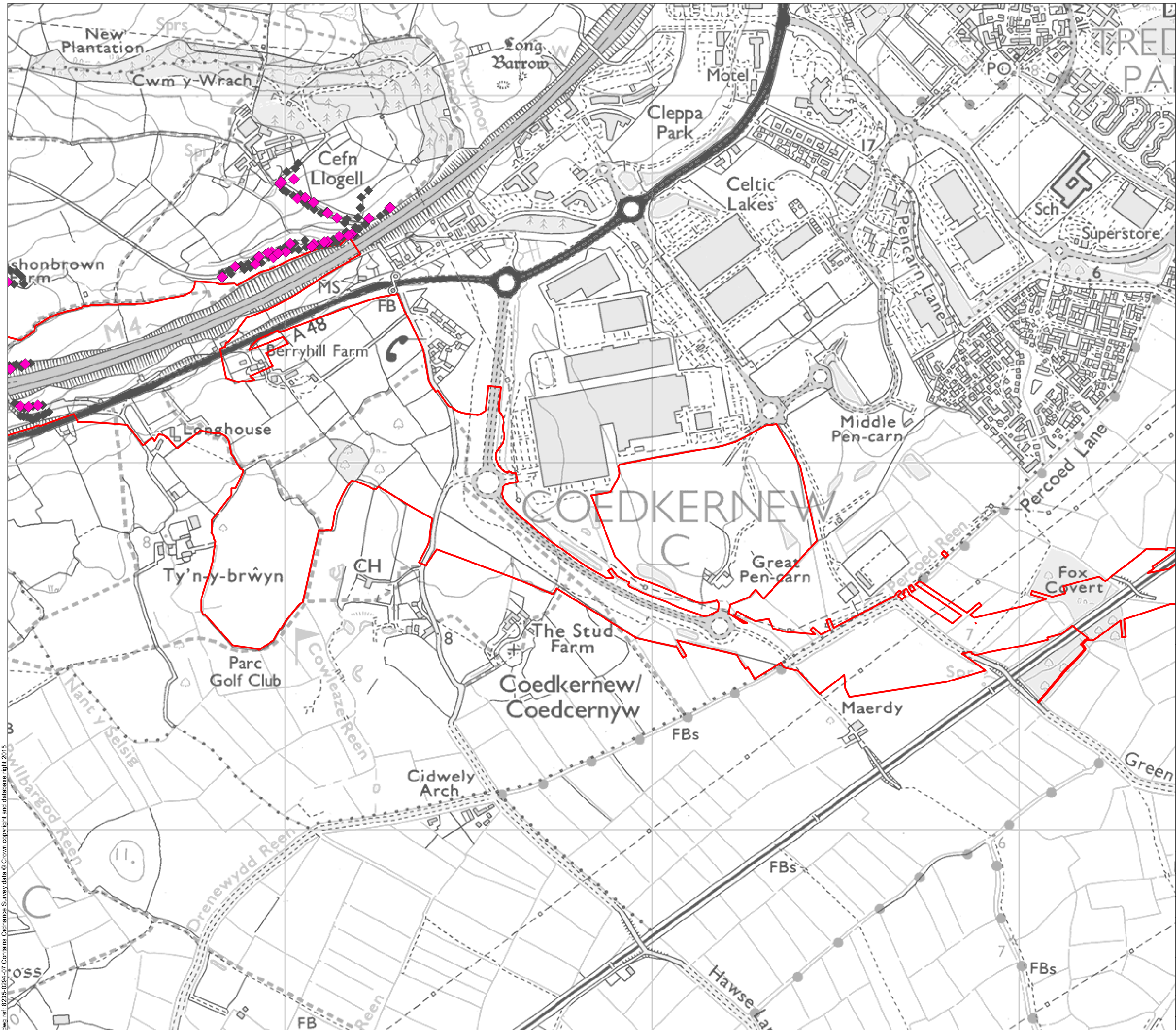
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dwg ref: 8235-0294-07



- Legend**
- Limit of Permanent and Temporary Works for New Section of Motorway
 - Survey Location
 - Dormouse Presence
 - Possible Dormouse Presence

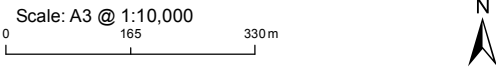
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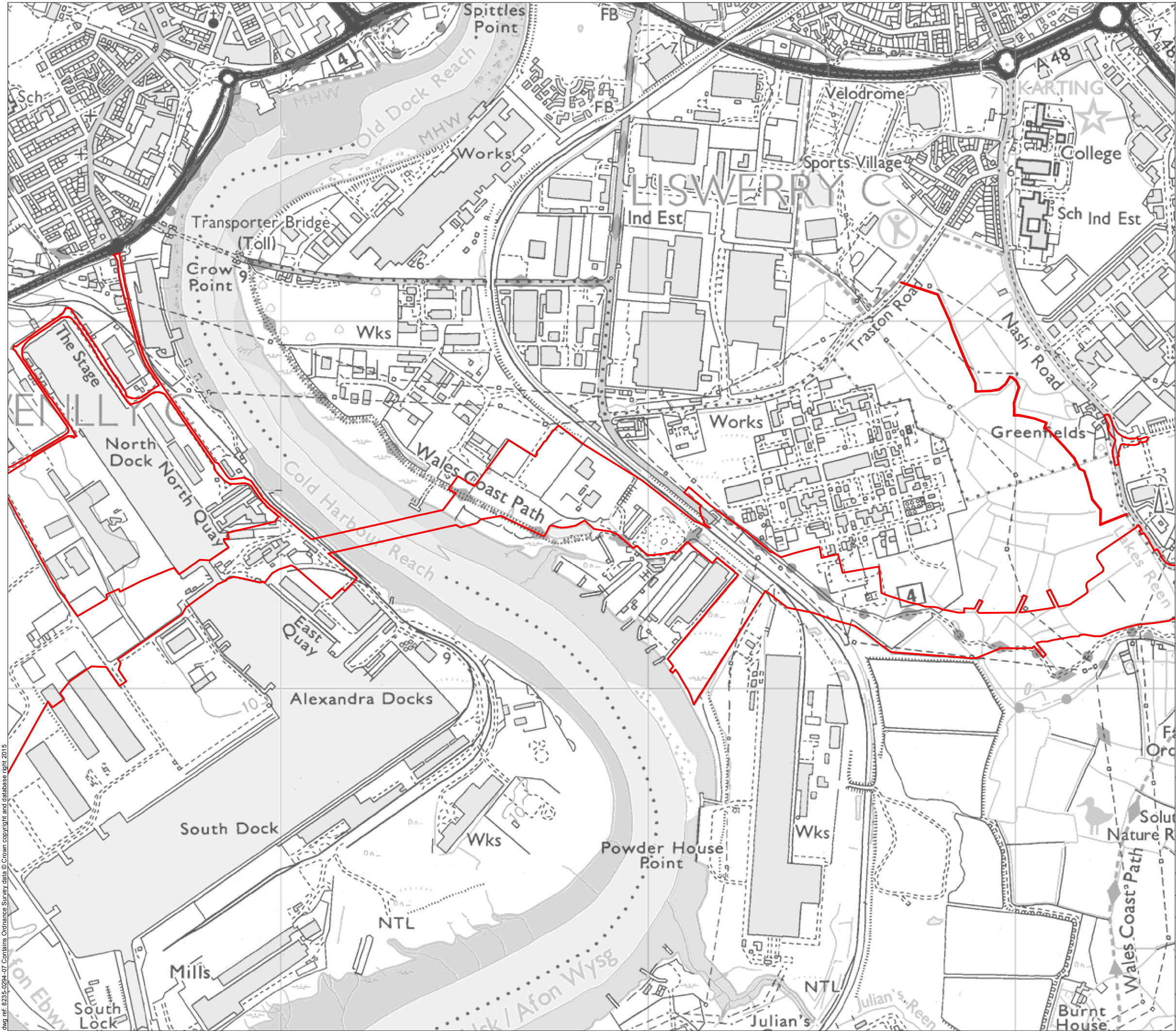


Appendix 10.26 – Dormouse Survey

Dormouse Survey Results

Figure: 2b	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: CR	Checked: LW





Legend

- Limit of Permanent and Temporary Works for New Section of Motorway
- Survey Location
- Dormouse Presence
- Possible Dormouse Presence

The scheme shown reflects the design at time of survey



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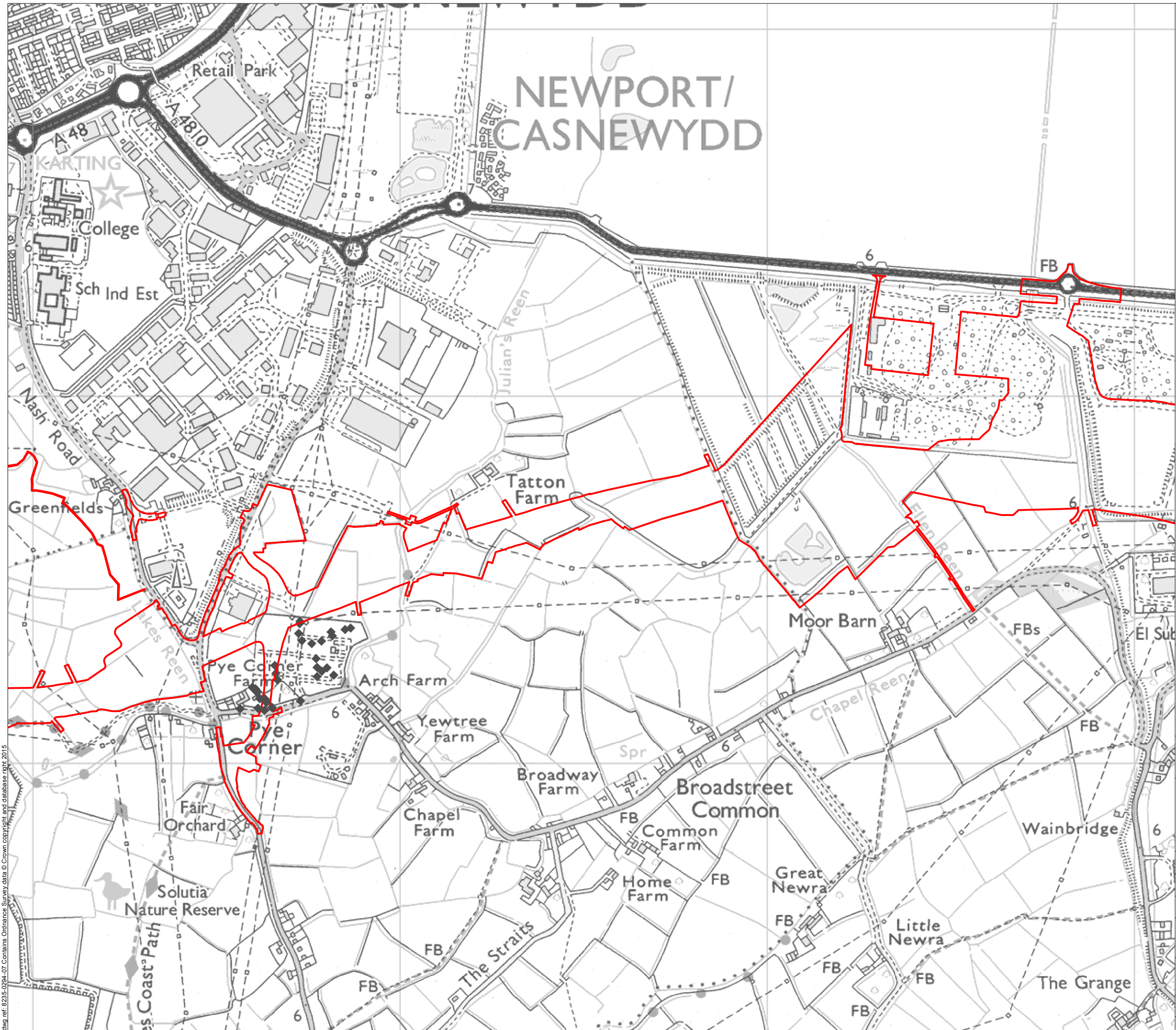
Appendix 10.26 – Dormouse Survey

Dormouse Survey Results

Figure: 2d	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: CR	Checked: LW

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- Legend**
- Limit of Permanent and Temporary Works for New Section of Motorway
 - Survey Location
 - Dormouse Presence
 - Possible Dormouse Presence

The scheme shown reflects the design at time of survey



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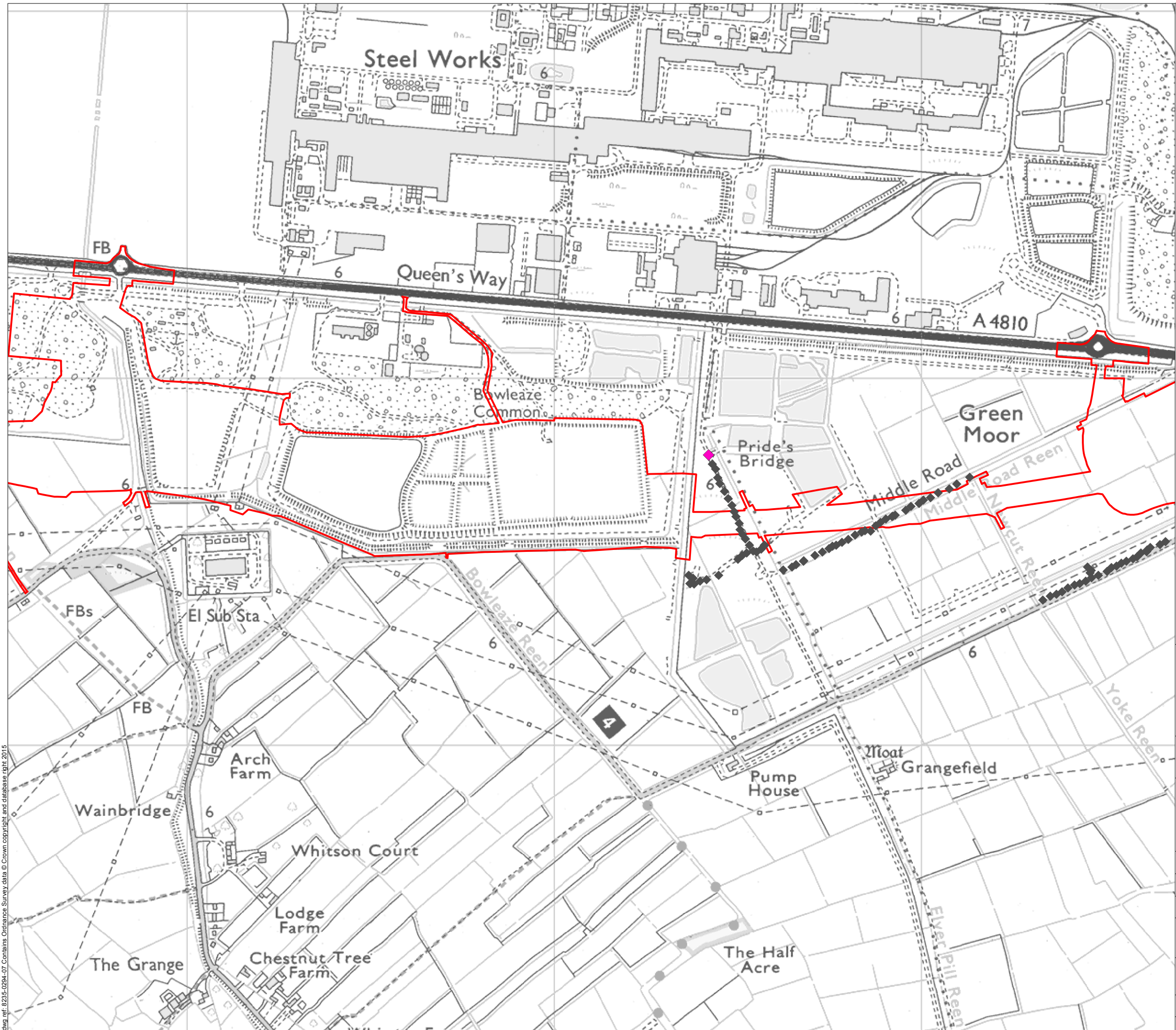
Appendix 10.26 – Dormouse Survey

Dormouse Survey Results

Figure: 2e	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: CR	Checked: LW

Scale: A3 @ 1:10,000
0 165 330m

N
↑



Legend

Limit of Permanent and Temporary Works for New Section of Motorway

Survey Location

Dormouse Presence

Possible Dormouse Presence

The scheme shown reflects the design at time of survey



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Appendix 10.26 – Dormouse Survey

Dormouse Survey Results

Figure: 2f	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: CR	Checked: LW

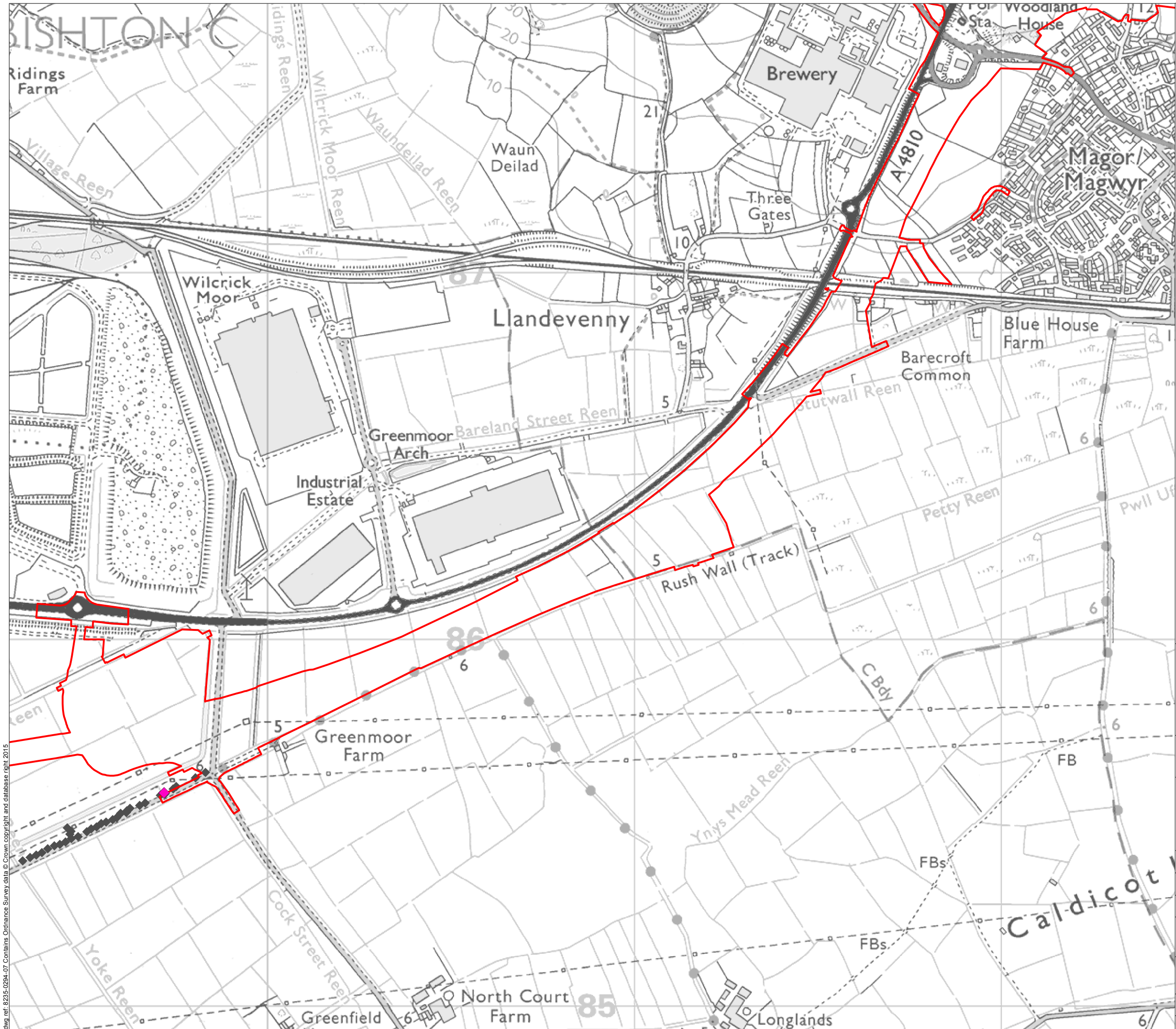
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165

330 m

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- Legend**
- Limit of Permanent and Temporary Works for New Section of Motorway
 - Survey Location
 - Dormouse Presence
 - Possible Dormouse Presence

The scheme shown reflects the design at time of survey



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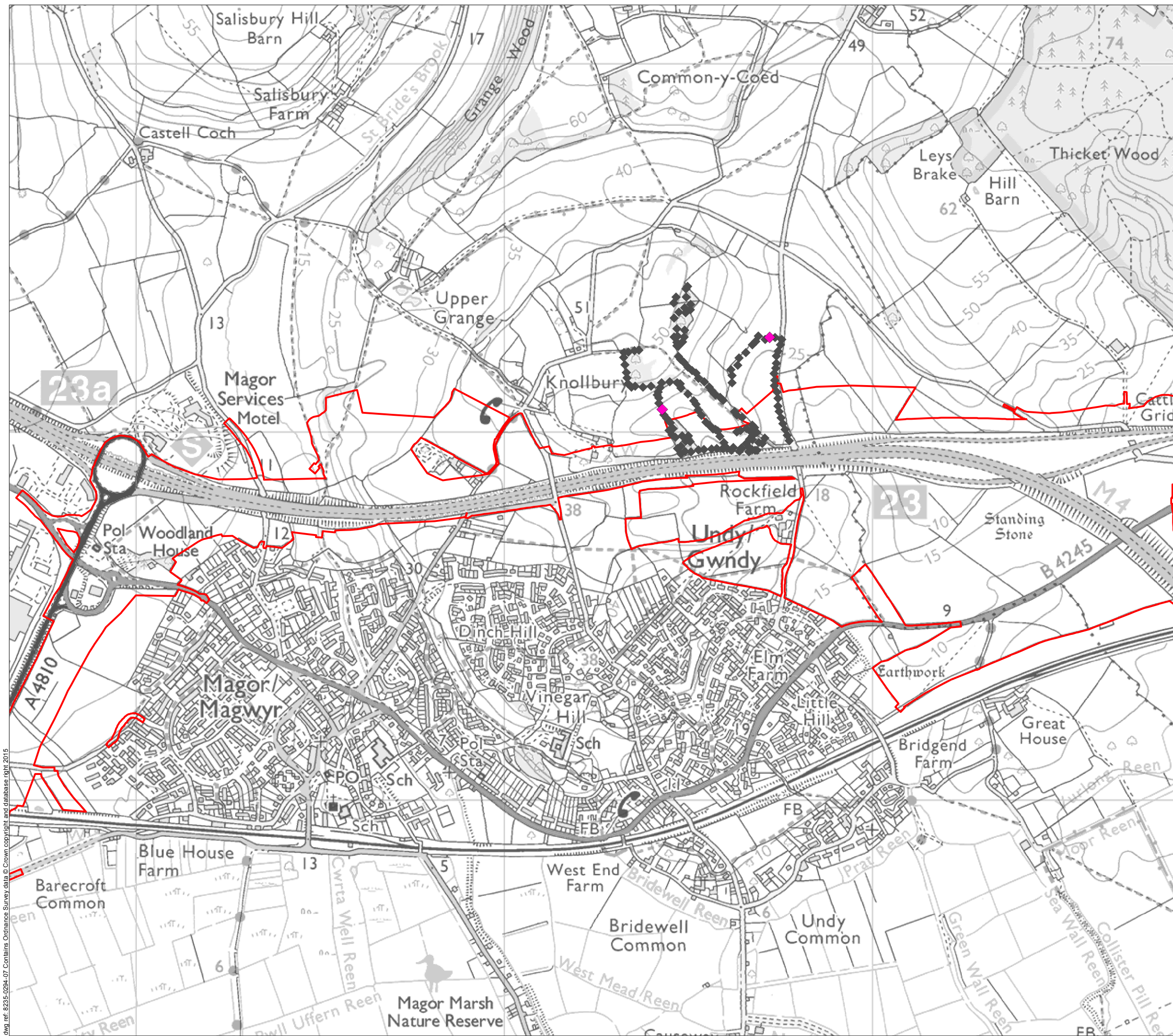
Appendix 10.26 – Dormouse Survey

Dormouse Survey Results

Figure: 2g	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: CR	Checked: LW


Scale: A3 @ 1:10,000
0 165 330 m

N
↑



- Legend**
- Limit of Permanent and Temporary Works for New Section of Motorway
 - Survey Location
 - Dormouse Presence
 - Possible Dormouse Presence

The scheme shown reflects the design at time of survey


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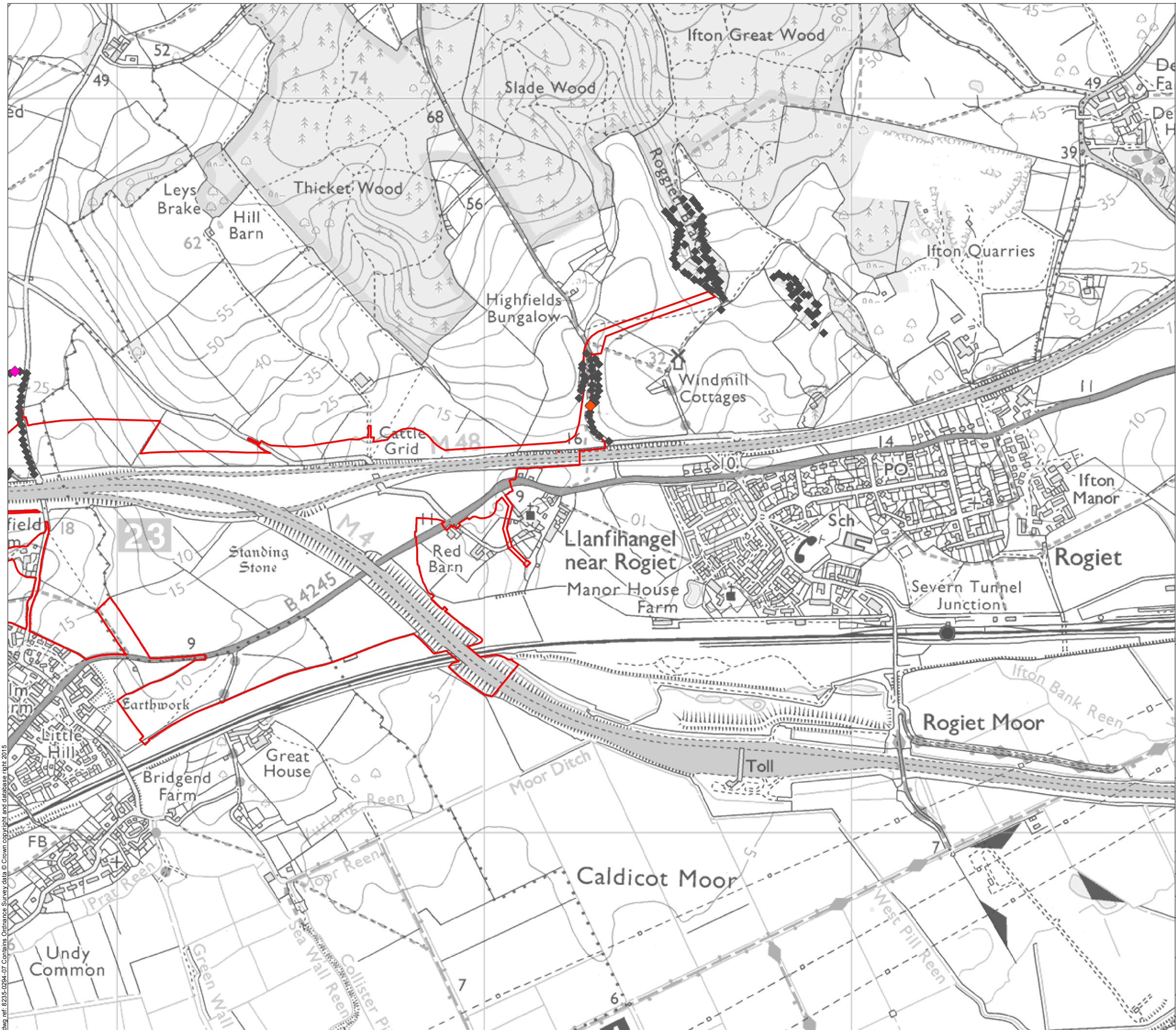
Appendix 10.26 – Dormouse Survey

Dormouse Survey Results

Figure: 2h	Revision: -
Date: March 2016	Status: AT ISSUE
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Legend


Limit of Permanent and Temporary Works for New Section of Motorway

Survey Location

Dormouse Presence

Possible Dormouse Presence

The scheme shown reflects the design at time of survey



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Appendix 10.26 – Dormouse Survey

Dormouse Survey Results

Figure: 2i

Revision: -

Date: March 2016

Status: AT ISSUE

Drawn: CR

Checked: LW

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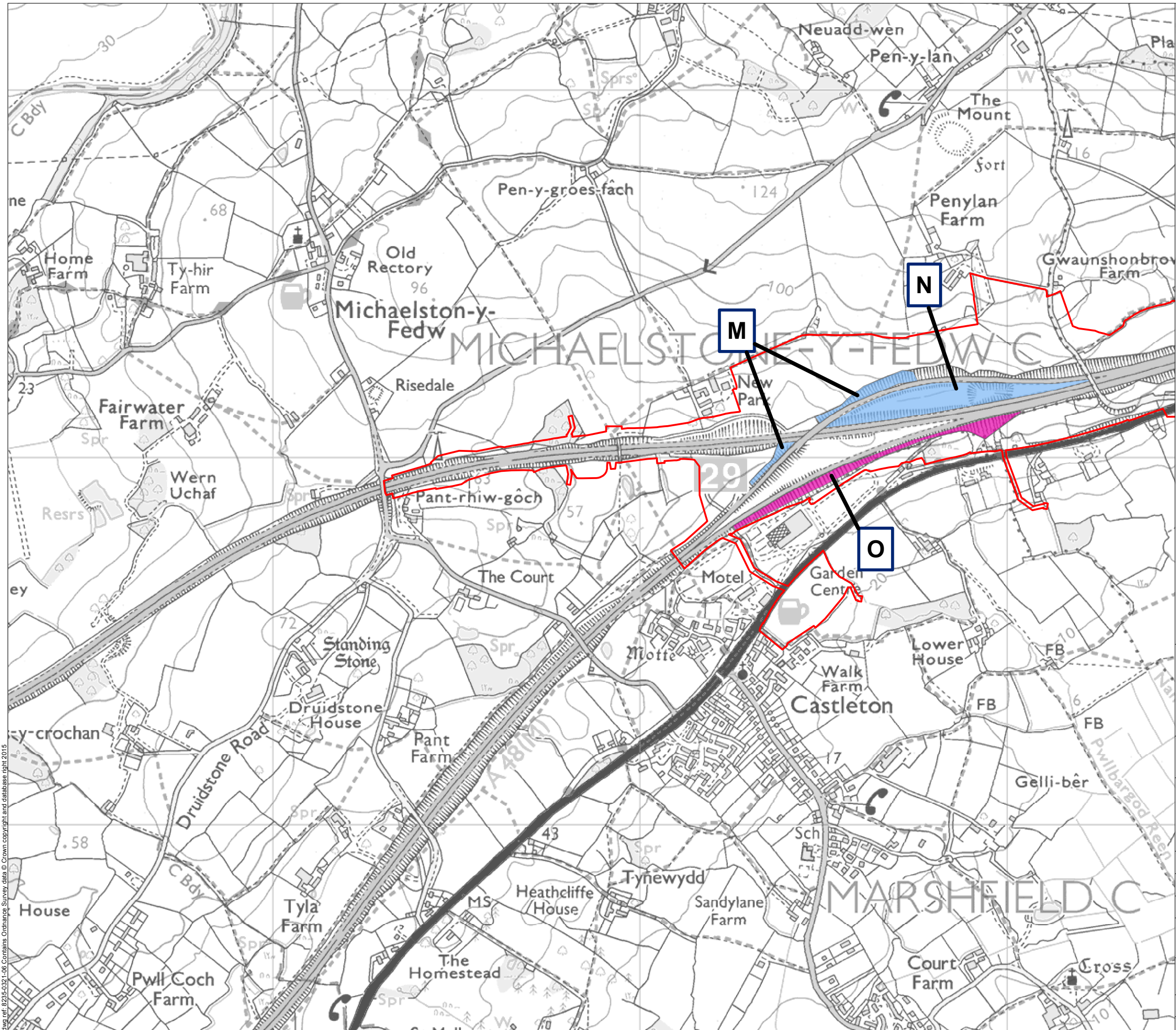
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330m

N

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Legend


Limit of Permanent and Temporary Works for New Section of Motorway

Hazlenut Survey Results

Dormouse presence absent

Dormouse presence confirmed

The scheme shown reflects the design at time of survey



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Appendix 10.26 – Dormouse Survey

Hazlenut Search Areas and Results

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Date: March 2016	Status: AT ISSUE
Drawn: CR	Checked: LW

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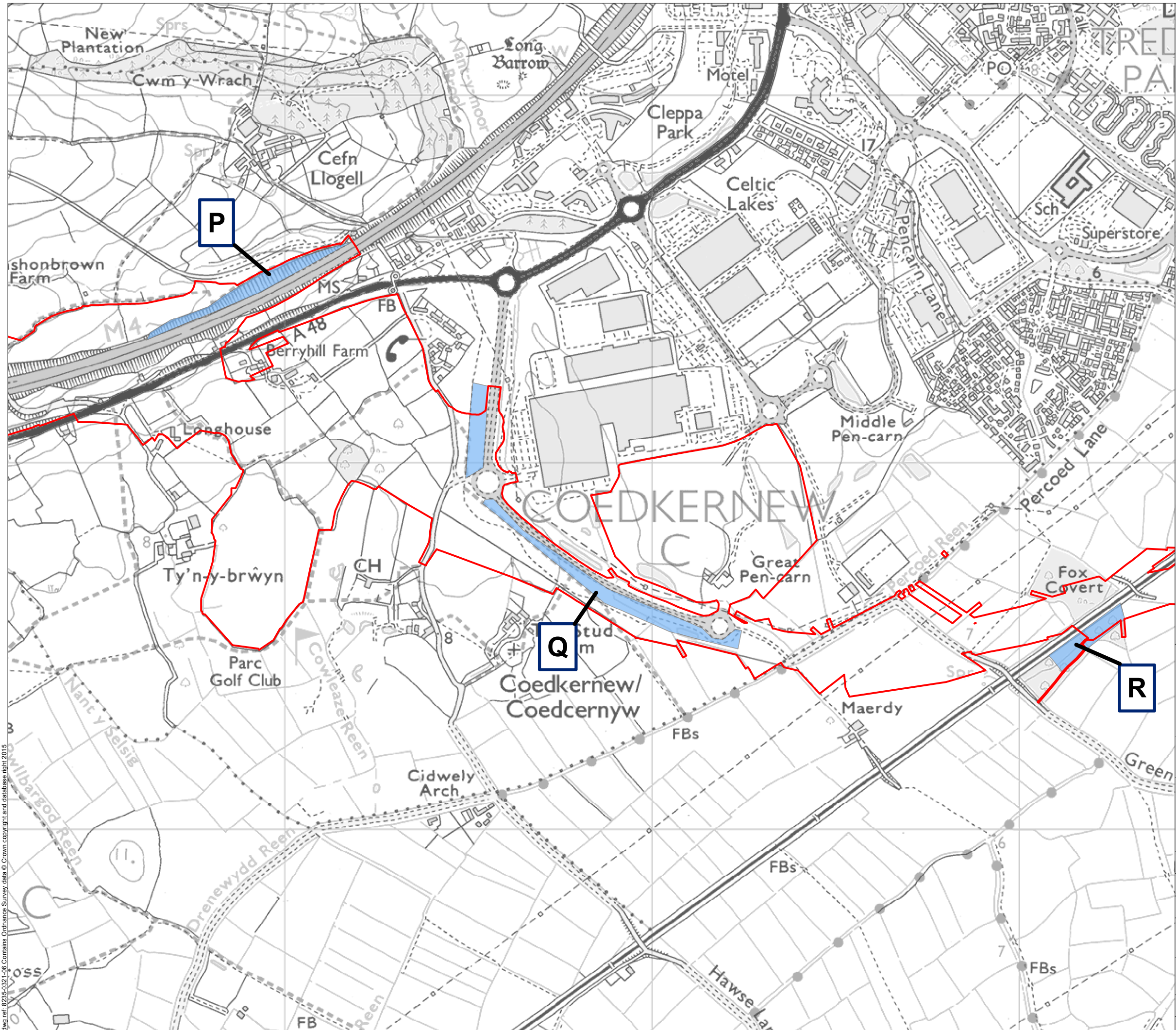
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Legend


Limit of Permanent and Temporary Works for New Section of Motorway

Hazlenut Survey Results

Dormouse presence absent

Dormouse presence confirmed

The scheme shown reflects the design at time of survey



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Appendix 10.26 – Dormouse Survey

Hazlenut Search Areas and Results

Figure: 3b

Revision: -

Date: March 2016

Status: AT ISSUE

Drawn: CR

Checked: LW

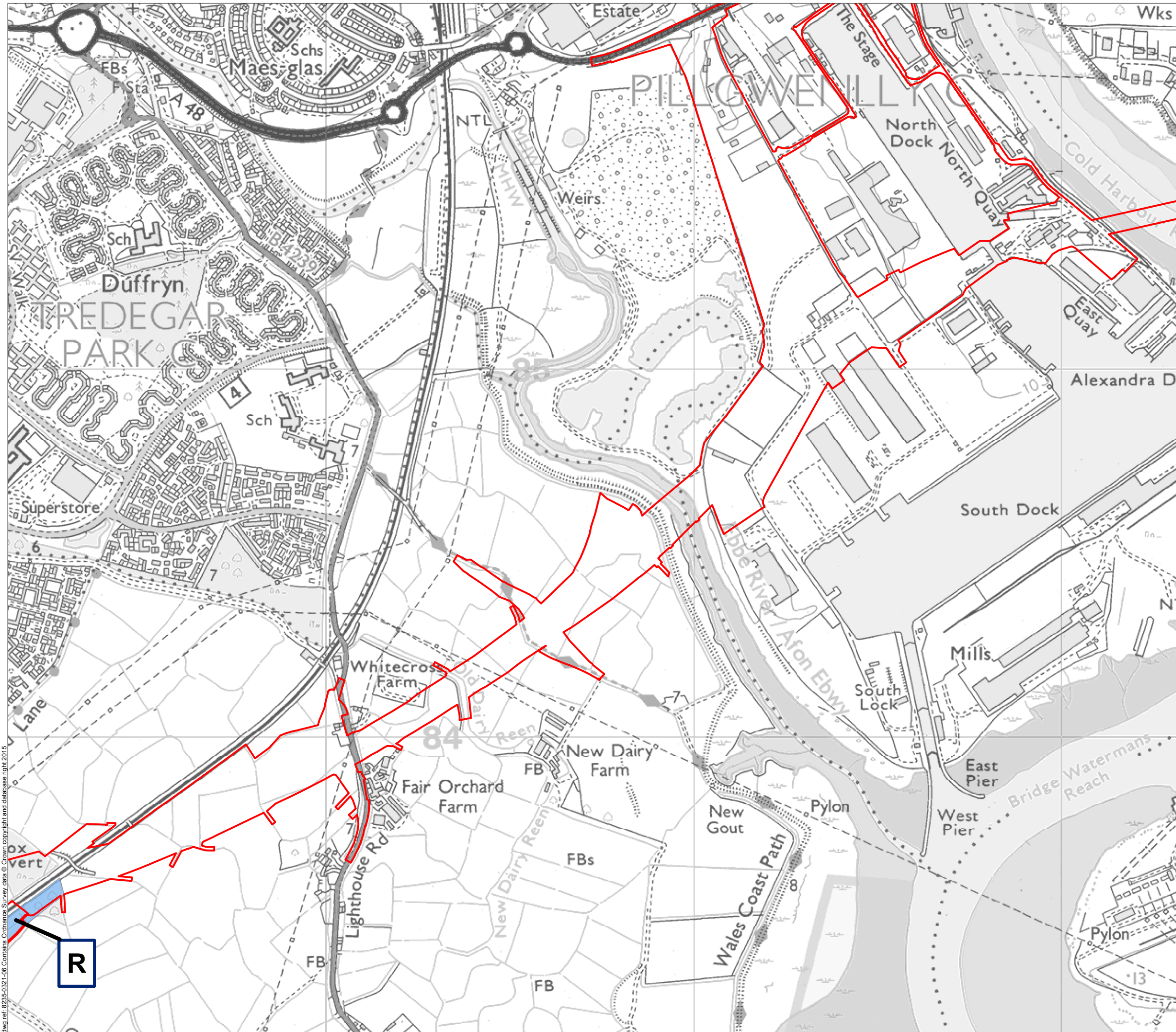
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dwg ref: 8235-0321-06



Legend


Limit of Permanent and Temporary Works for New Section of Motorway

Hazlenut Survey Results

Dormouse presence absent

Dormouse presence confirmed

The scheme shown reflects the design at time of survey



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Appendix 10.26 – Dormouse Survey

Hazlenut Search Areas and Results

Figure: 3C	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: CR	Checked: LW

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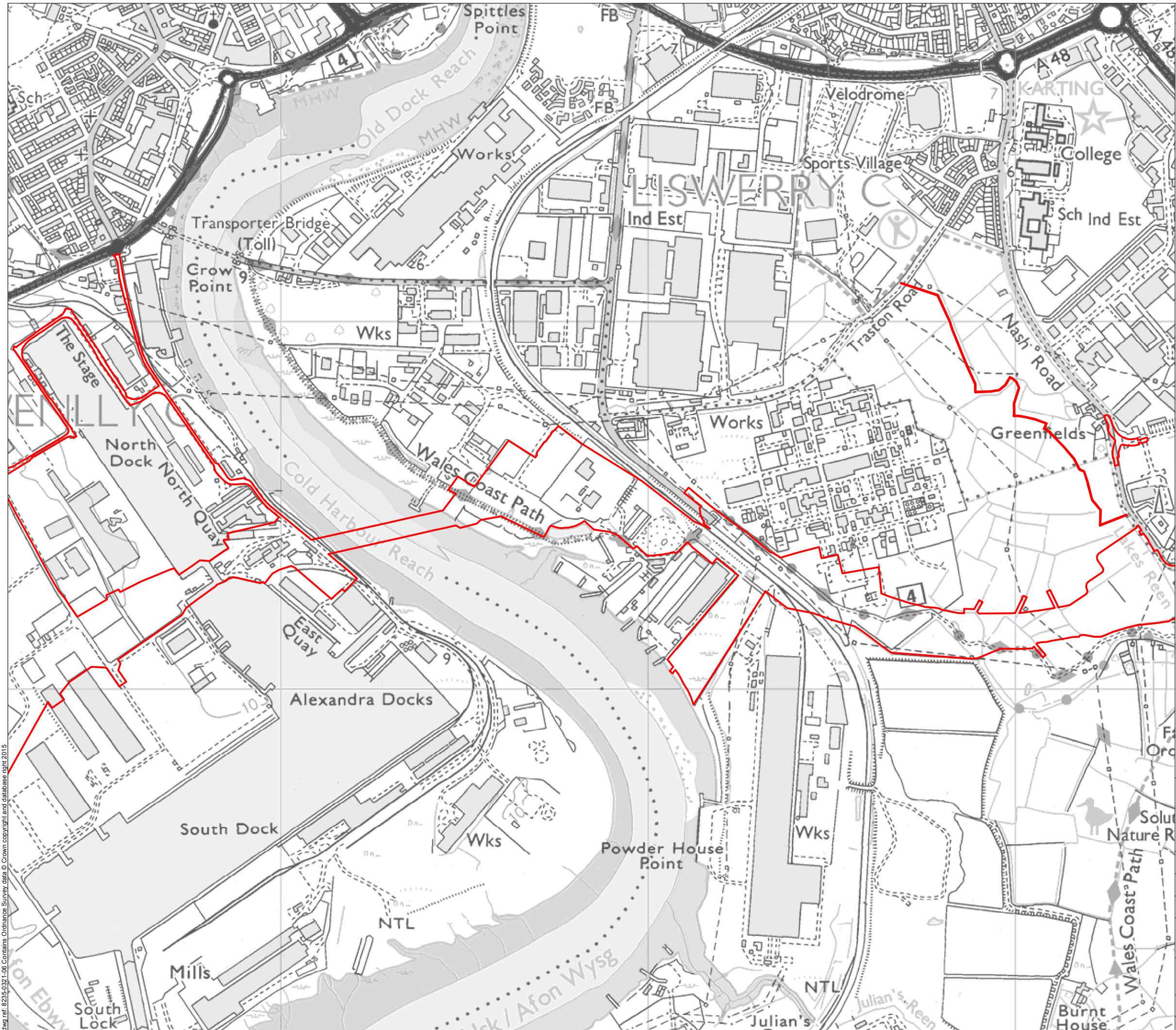
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500m

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dwg ref: 8235-0321-06



Legend

Limit of Permanent and Temporary Works for New Section of Motorway

Hazlenut Survey Results

Dormouse presence absent

Dormouse presence confirmed

The scheme shown reflects the design at time of survey

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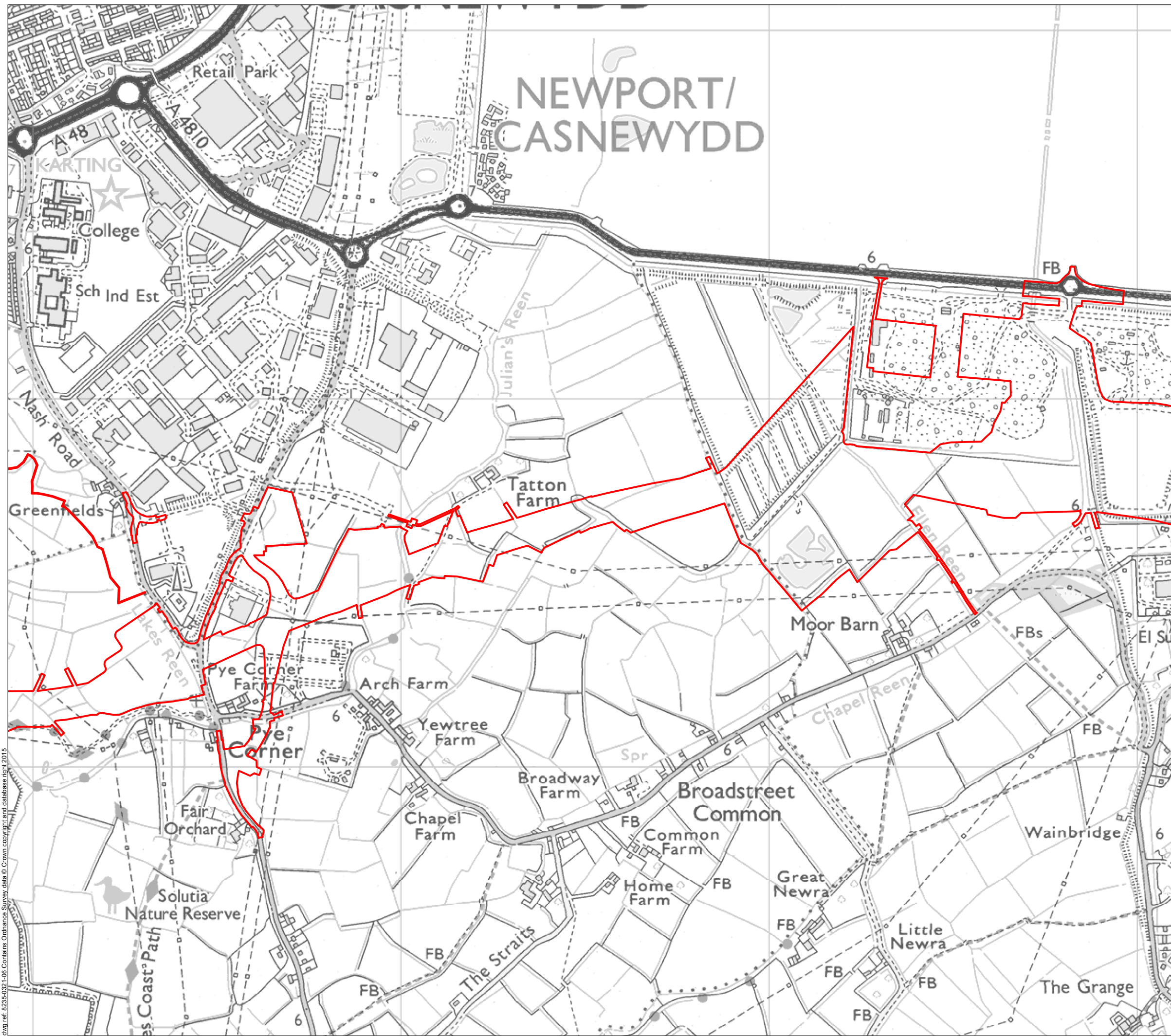
Appendix 10.26 – Dormouse Survey

Hazlenut Search Areas and Results

Figure: 3d	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: CR	Checked: LW

Scale: A3 @ 1:10,000
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dwg ref: 8235-0321-06



Legend


Limit of Permanent and Temporary Works for New Section of Motorway

Hazlenut Survey Results

Dormouse presence absent

Dormouse presence confirmed

The scheme shown reflects the design at time of survey


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Welsh Government

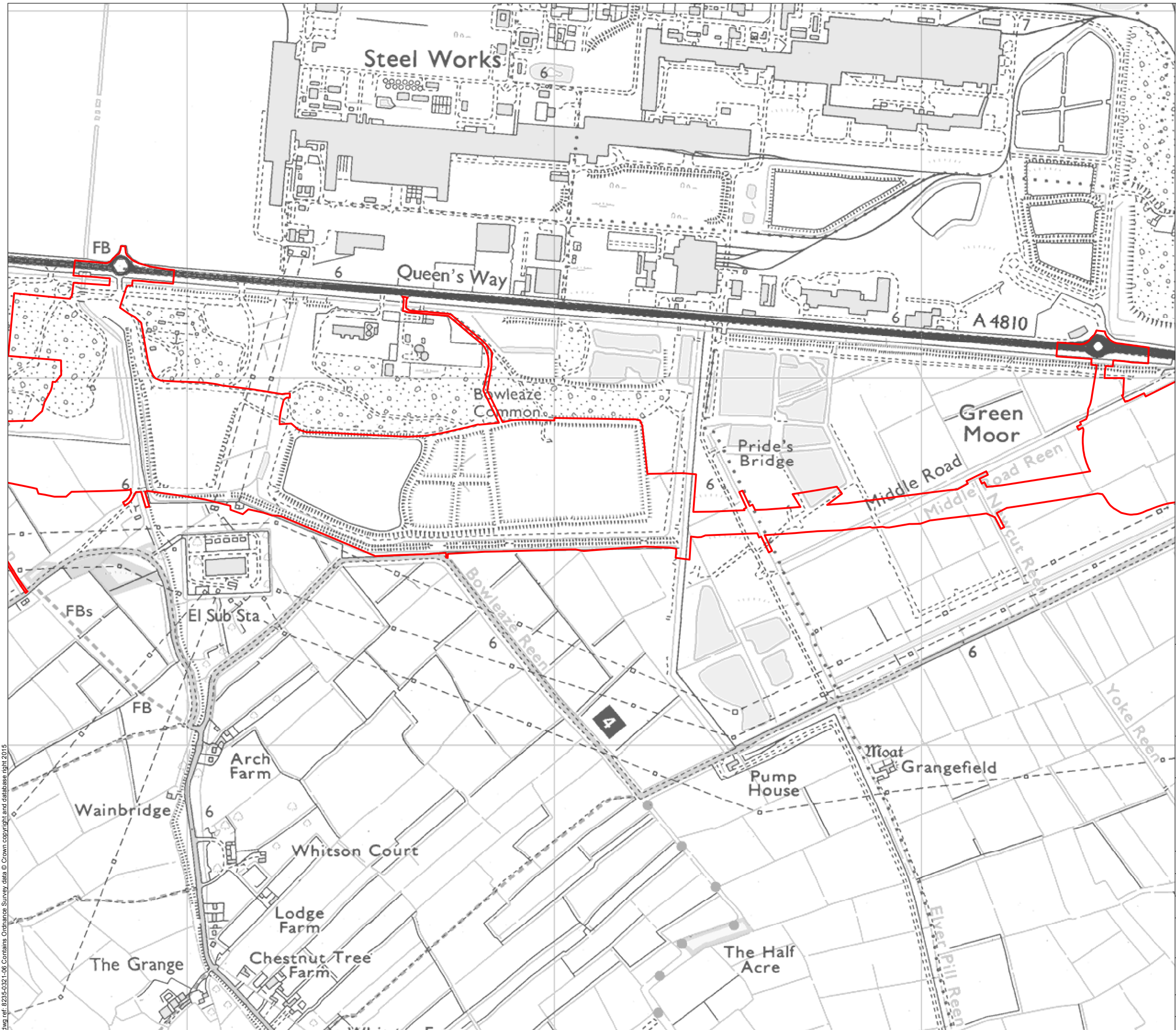
Appendix 10.26 – Dormouse Survey

Hazlenut Search Areas and Results

Figure: 3e	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: CR	Checked: LW

Scale: A3 @ 1:10,000
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Legend


Limit of Permanent and Temporary Works for New Section of Motorway

Hazlenut Survey Results

Dormouse presence absent

Dormouse presence confirmed

The scheme shown reflects the design at time of survey



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Appendix 10.26 – Dormouse Survey

Hazlenut Search Areas and Results

Figure: 3f

Revision: -

Date: March 2016

Status: AT ISSUE

Drawn: CR

Checked: LW

Scale: A3 @ 1:10,000

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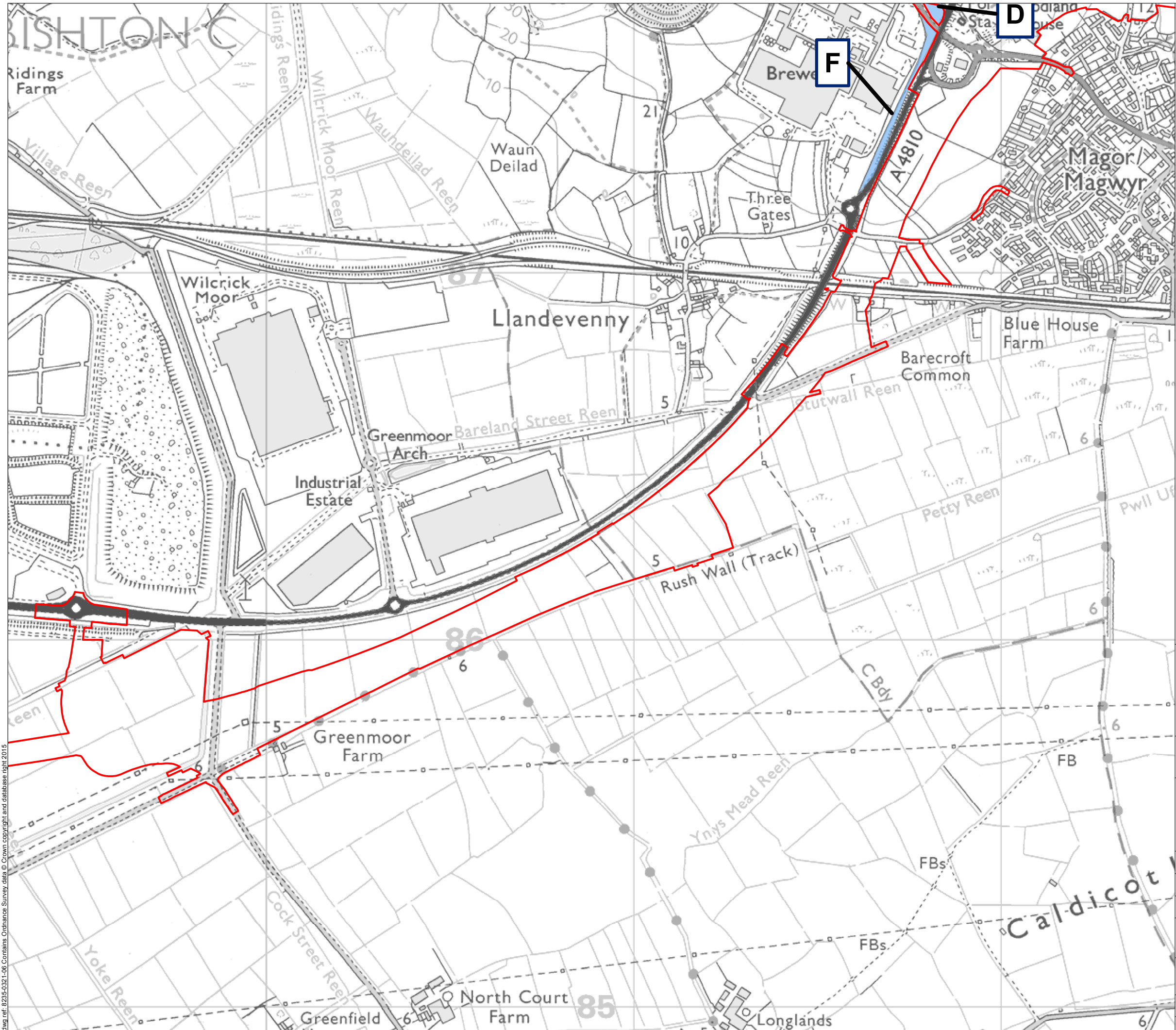
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Legend


Limit of Permanent and Temporary Works for New Section of Motorway

Hazlenut Survey Results

Dormouse presence absent

Dormouse presence confirmed

The scheme shown reflects the design at time of survey


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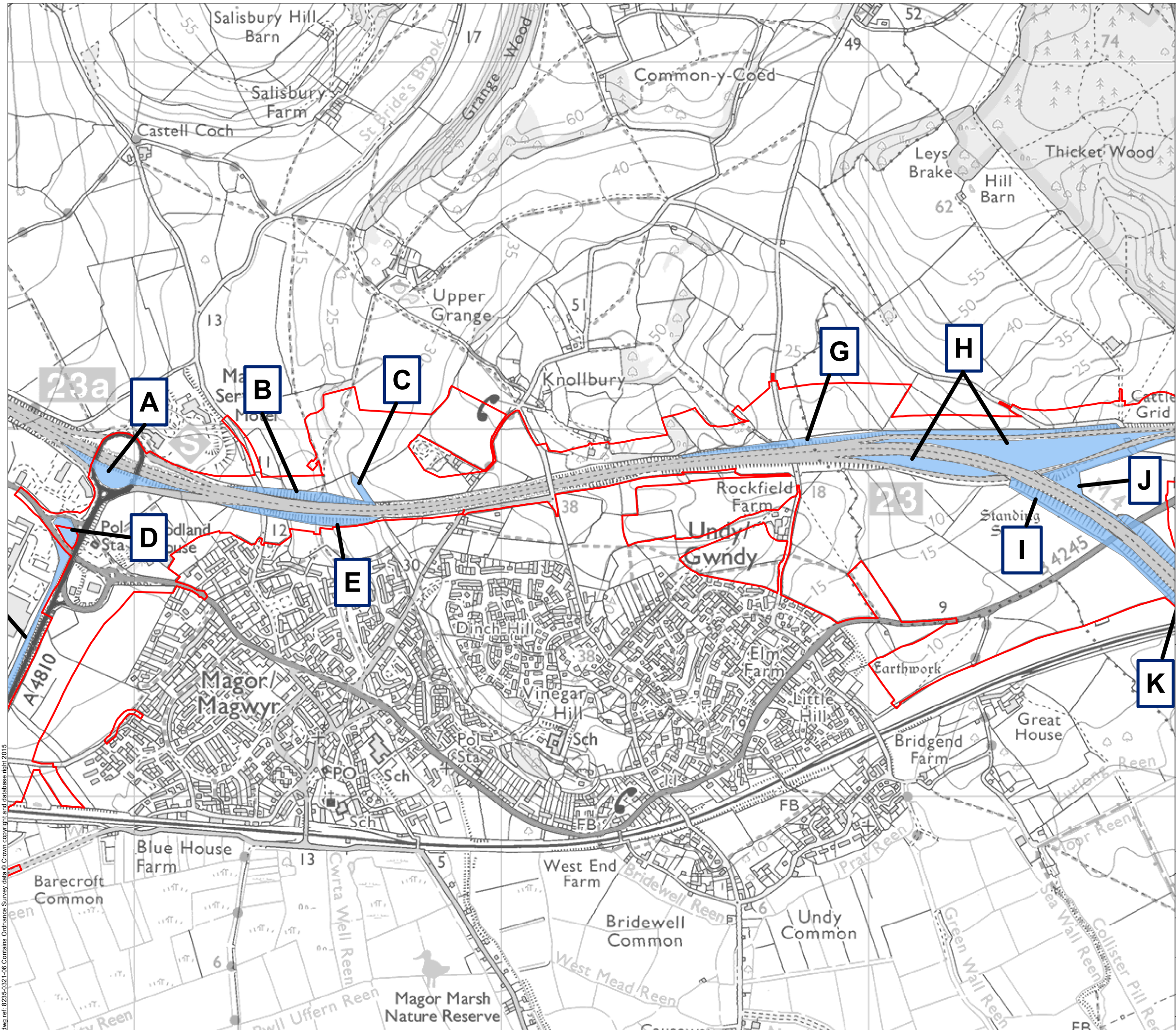
Appendix 10.26 – Dormouse Survey

Hazlenut Search Areas and Results

Figure: 3g	Revision: -
Date: March 2016	Status: AT ISSUE
Drawn: CR	Checked: LW

Scale: A3 @ 1:10,000
0 250 500m

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dwg ref: 8235-0321-06



Legend


Limit of Permanent and Temporary Works for New Section of Motorway

Hazlenut Survey Results

Dormouse presence absent

Dormouse presence confirmed

The scheme shown reflects the design at time of survey



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Appendix 10.26 – Dormouse Survey

Hazlenut Search Areas and Results

Figure: 3h

Revision: -

Date: March 2016

Status: AT ISSUE

Drawn: CR

Checked: LW

Scale: A3 @ 1:10,000

0

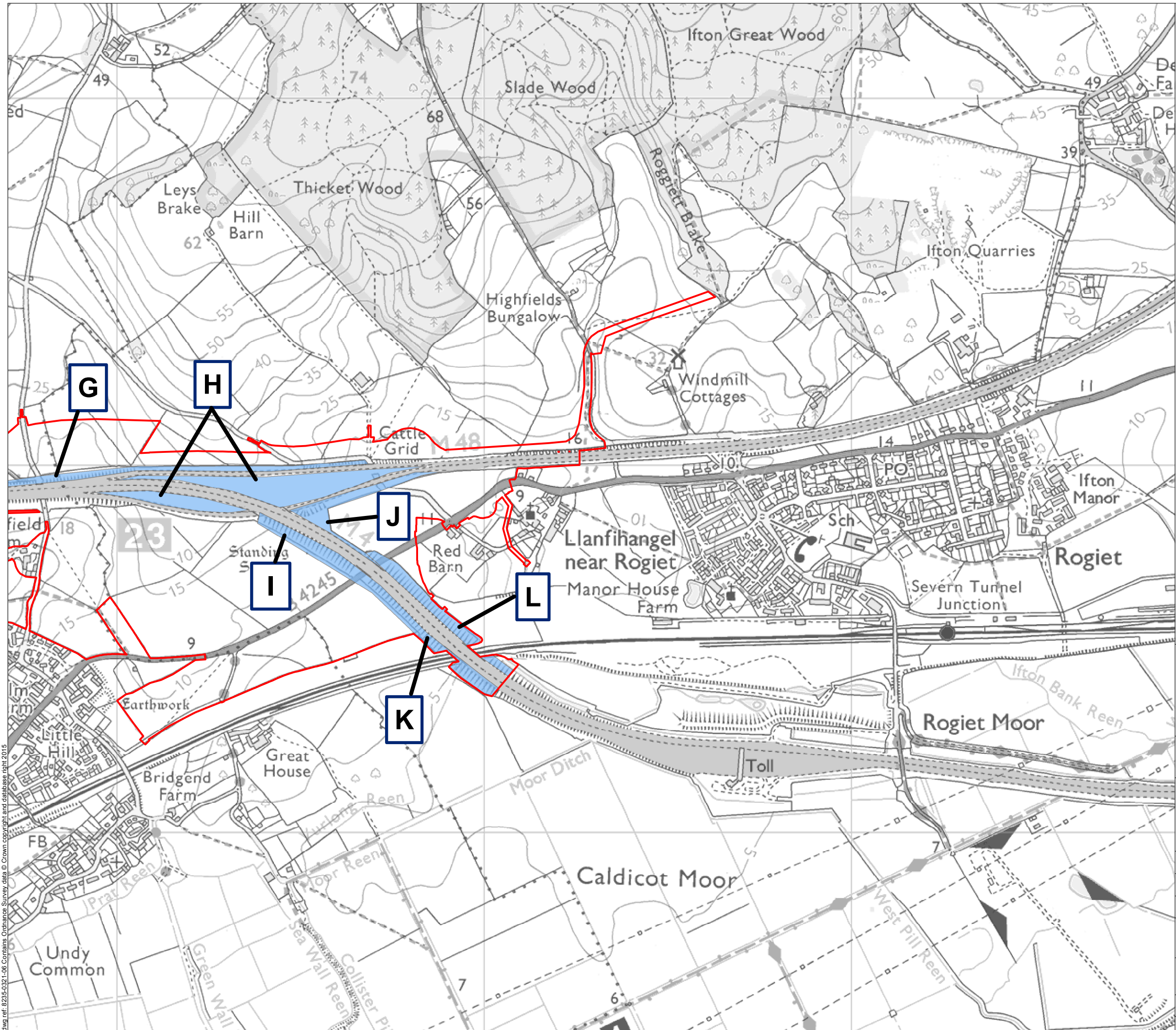
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500m

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dwg ref: 8235-0321-06



Legend


Limit of Permanent and Temporary Works for New Section of Motorway

Hazlenut Survey Results

Dormouse presence absent

Dormouse presence confirmed

The scheme shown reflects the design at time of survey



Llywodraeth Cymru
Welsh Government

Appendix 10.26 – Dormouse Survey

Hazlenut Search Areas and Results

Figure: 3i

Revision: -

Date: March 2016

Status: AT ISSUE

Drawn: CR

Checked: LW

Scale: A3 @ 1:10,000

0

250

500m

N

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Annexes

Annex A – Full 2015 Arup Nest Tube Results

Location ref	Location name	Tube Number	Installation date	Survey results							
				Survey visit date	result	Survey visit date	result	Survey visit date	Survey visit date	Survey visit date	Survey visit date
D	A48 Road Verges SW	C29	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		C42	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		C35	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		C24	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		C33	2014	01/06/2015	dormouse present	29/07/2015	empty	16/09/2015	empty	12/11/2015	dormouse present
		C41	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
	A48 Road Verges NW	C36	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D15	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D9	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D14	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D18	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D17	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D16	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D11	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D12	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D13	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
	A48 Road Verges NE	D29	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D25	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D24	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D22	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D27	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D26	2014	01/06/2015	empty	29/07/2015	old dormouse nest	16/09/2015	empty	12/11/2015	empty
	A48 Road Verges SE	D2	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D1	2014	01/06/2015	old dormouse nest	29/07/2015	old dormouse nest	16/09/2015	old dormouse nest	12/11/2015	old dormouse nest
		C37	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		C38	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	old dormouse nest	12/11/2015	empty
		C40	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		C30	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		C31	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		C32	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		C39	2014	01/06/2015	old dormouse nest	29/07/2015	old dormouse nest	16/09/2015	empty	12/11/2015	dormouse present
		C23	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D19	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D21	2014	01/06/2015	dead leaves	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
		D23	2014	01/06/2015	empty	29/07/2015	empty	16/09/2015	empty	12/11/2015	empty
C	verge south of Pen-y-lan Far	C1	2014	01/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		C2	2014	01/06/2015	empty	27/07/2015	old dormouse nest	16/09/2015	empty	11/11/2015	empty
		C3	2014	01/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		C4	2014	01/06/2015	dormouse present	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		C5	2014	01/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		C6	2014	01/06/2015	empty	27/07/2015	empty	16/09/2015	green leaves	11/11/2015	empty
		C7	2014	01/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		C8	2014	01/06/2015	dormouse nest	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		C9	2014	01/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		C10	2014	01/06/2015	dormouse nest	27/07/2015	dormouse nest	16/09/2015	empty	11/11/2015	old dormouse nest
		C11	2014	01/06/2015	dormouse nest	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		C12	2014	01/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		C13	2014	01/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		C14	2014	01/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		C15	2014	01/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		C16	2014	01/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		C101	2014	01/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
E	Pound Hill	E1	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		E2	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		E3	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	dormouse nest	11/11/2015	empty
		E4	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty

Location ref	Location name	Tube Number	Installation date	Survey results							
				Survey visit date	result	Survey visit date	result	Survey visit date	Survey visit date	Survey visit date	Survey visit date
M	Road south of TATA Steelwc	E5	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	dormouse present i	11/11/2015	empty
		E6	2014	04/06/2015	empty	27/07/2015	woodmouse preser	16/09/2015	dormouse nest	11/11/2015	empty
		E7	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		E8	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		E9	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		E10	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		E11	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		E12	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		E13	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		E14	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		E15	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		E16	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		E17	2014	04/06/2015	empty	27/07/2015	empty	16/09/2015	empty	11/11/2015	empty
		A1	2014		no access	13/08/2015	empty	17/09/2015	empty	25/11/2015	empty
		A3	2014		no access	13/08/2015	empty	17/09/2015	empty	25/11/2015	empty
		A17	2014		no access	13/08/2015	empty	17/09/2015	empty	25/11/2015	empty
		A2	2014		no access	13/08/2015	empty	17/09/2015	empty	25/11/2015	empty
		A4	2014		no access	13/08/2015	empty	17/09/2015	empty	25/11/2015	empty
		A10	2014		no access	13/08/2015	dormouse nest	17/09/2015	dormouse nest	25/11/2015	old nest
		A8	2014		no access	13/08/2015	empty	17/09/2015	empty	25/11/2015	empty
		A111	2014		no access	13/08/2015	empty	17/09/2015	empty	25/11/2015	empty
		A5	2014		no access	13/08/2015	empty	17/09/2015	empty	25/11/2015	empty
		A115	2014		no access	13/08/2015	empty	17/09/2015	empty	25/11/2015	woodmouse
I	Verge north of Rockfield Far l	I1	2014	04/06/2015	empty	10/08/2015	empty	08/10/2015	empty	06/11/2015	empty
		I2	2014	04/06/2015	empty	10/08/2015	empty	08/10/2015	empty	06/11/2015	empty
		I3	2014	04/06/2015	empty	10/08/2015	empty	08/10/2015	empty	06/11/2015	empty
		I4	2014	04/06/2015	not found	10/08/2015	not found	08/10/2015	not found	06/11/2015	not found
		I5	2014	04/06/2015	not found	10/08/2015	not found	08/10/2015	not found	06/11/2015	not found
		I6	2014	04/06/2015	not found	10/08/2015	not found	08/10/2015	not found	06/11/2015	not found
		I7	2014	04/06/2015	not found	10/08/2015	not found	08/10/2015	not found	06/11/2015	not found
		I8	2014	04/06/2015	not found	10/08/2015	not found	08/10/2015	not found	06/11/2015	not found
		I9	2014	04/06/2015	not found	10/08/2015	not found	08/10/2015	not found	06/11/2015	not found
		I10	2014	04/06/2015	not found	10/08/2015	not found	08/10/2015	not found	06/11/2015	not found

Annex B - Full 2015 RPS Nest Tube Results

Location ref	Location name		GPS location	Installation date	Survey results						
		Tube Number			Survey visit date	result	Survey visit date	result	Survey visit date	result	
A	Cefn Llogell	1		18/05/2015	30/07/2015	empty	22/09/2015	dormouse and nest	06/11/2015	dormouse nest	
		2		18/05/2015	30/07/2015	empty	22/09/2015	old nest	06/11/2015	dormouse nest	
		3		18/05/2015	30/07/2015	empty	22/09/2015	woven grass	06/11/2015	dormouse nest	
		4		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		5		18/05/2015	30/07/2015	woodmouse nest	22/09/2015	dormouse and nest	06/11/2015	dormouse nest	
		6		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		7		18/05/2015	30/07/2015	empty	22/09/2015	dormouse nest with w	06/11/2015	empty	
		8		18/05/2015	30/07/2015	old dormouse nest	22/09/2015	empty	06/11/2015	dormouse nest	
		9		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	old nest	
		10		18/05/2015	30/07/2015	dormouse nest	22/09/2015	dormouse and nest	06/11/2015	old nest	
		11		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		12		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		13		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		14		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		15		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		16		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		17		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		18		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		19		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		20		18/05/2015	30/07/2015	empty	22/09/2015	damaged	06/11/2015	damaged	
		21		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	dormouse nest	
		22		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		23		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	dormouse nest	
		24		18/05/2015	30/07/2015	empty	22/09/2015	damaged	06/11/2015	damaged	
		25		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	hedge removed	
		26		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	hedge removed	
		27		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	hedge removed	
		28		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	hedge removed	
		29		18/05/2015	30/07/2015	empty	22/09/2015	dormouse nest	06/11/2015	empty	
		30		18/05/2015	30/07/2015	empty	22/09/2015	woodmouse nest	06/11/2015	empty	
		31		18/05/2015	30/07/2015	empty	22/09/2015	likely woodmouse nes	06/11/2015	empty	
		32		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		33		18/05/2015	30/07/2015	empty	22/09/2015	dormouse and nest	06/11/2015	empty	
		34		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		35		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		36		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		37		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		38		18/05/2015	30/07/2015	woodmouse nest	22/09/2015	old nest, nuts	06/11/2015	empty	
		39		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		40		18/05/2015	30/07/2015	woodmouse nest	22/09/2015	dormouse and nest	06/11/2015	dormouse nest	
		41		18/05/2015	30/07/2015	woodmouse nest	22/09/2015	old leaves	06/11/2015	empty	
		42		18/05/2015	30/07/2015	empty	22/09/2015	old nest	06/11/2015	dormouse nest	
		43		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	dormouse nest	
		44		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		45		18/05/2015	30/07/2015	empty	22/09/2015	leaves and berries	06/11/2015	dormouse nest	
		46		18/05/2015	30/07/2015	empty	22/09/2015	damaged	06/11/2015	damaged	
		47		18/05/2015	30/07/2015	empty	22/09/2015	damaged	06/11/2015	damaged	

Location ref	Location name		GPS location	Installation date	Survey results						
		Tube Number			Survey visit date	result	Survey visit date	result	Survey visit date	result	
		48		18/05/2015	30/07/2015	dormouse nest	22/09/2015	empty	06/11/2015	dormouse nest	
		49		18/05/2015	30/07/2015	empty	22/09/2015	dead leaves	06/11/2015	woodmouse nest	
		50		18/05/2015	30/07/2015	woodmouse nest	22/09/2015	damaged	06/11/2015	damaged	
		51		18/05/2015	30/07/2015	empty	22/09/2015	old dormouse nest	06/11/2015	dormouse nest	
		52		18/05/2015	30/07/2015	empty	22/09/2015	woodmouse	06/11/2015	dormouse nest	
		53		18/05/2015	30/07/2015	empty	22/09/2015	old nest	06/11/2015	dormouse nest	
		54		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		55		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		56		18/05/2015	30/07/2015	empty	22/09/2015	2 woodmouse and ne:	06/11/2015	empty	
		57		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	dormouse nest	
		58		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		59		18/05/2015	30/07/2015	empty	22/09/2015	old nest	06/11/2015	woodmouse nest	
		60		18/05/2015	30/07/2015	empty	22/09/2015	old nest	06/11/2015	dormouse nest	
		61		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		62		18/05/2015	30/07/2015	empty	22/09/2015	woodmouse nest	06/11/2015	old nest	
		63		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		64		18/05/2015	30/07/2015	empty	22/09/2015	dormouse nest	06/11/2015	empty	
		65		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		66		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		67		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	dormouse nest	
		68		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	dormouse nest	
		69		18/05/2015	30/07/2015	dormouse nest	22/09/2015	empty	06/11/2015	empty	
		70		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		71		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		72		18/05/2015	30/07/2015	empty	22/09/2015	old nest	06/11/2015	empty	
		73		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	dormouse nest	
		74		18/05/2015	30/07/2015	empty	22/09/2015	some green leaves	06/11/2015	empty	
		75		18/05/2015	30/07/2015	empty	22/09/2015	damaged	06/11/2015	empty	
		76		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		77		18/05/2015	30/07/2015	empty	22/09/2015	old nest	06/11/2015	empty	
		78		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		79		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		80		18/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		81		19/05/2015	30/07/2015	empty	22/09/2015	empty	06/11/2015	empty	
		82		19/05/2015	30/07/2015	old dormouse nest	22/09/2015	empty	06/11/2015	empty	
		83		19/05/2015	30/07/2015	empty	22/09/2015	dormouse nest	06/11/2015	empty	
B	Gwaunshonbrown Farm	84		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		85		19/05/2015	27/07/2015	empty	22/09/2015	dormouse nest	16/11/2015	old nest	
		86		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		87		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		88		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		89		19/05/2015	27/07/2015	empty	22/09/2015	old bracken	16/11/2015	empty	
		90		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		91		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		92		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		93		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	dormouse nest	
		94		19/05/2015	27/07/2015	empty	22/09/2015	dormouse nest	16/11/2015	dormouse nest	
		95		19/05/2015	27/07/2015	empty	22/09/2015	dormouse nest	16/11/2015	dormouse nest	

Location ref	Location name		GPS location	Installation date	Survey results						
		Tube Number			Survey visit date	result	Survey visit date	result	Survey visit date	result	
C	Hedge off Penylan Road	96		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		97		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		98		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		99		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		100		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		101		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		102		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		103		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		104		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		105		19/05/2015	27/07/2015	empty	22/09/2015	tree removed	16/11/2015	tree removed	
		106		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		107		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		108		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		109		19/05/2015	27/07/2015	empty	22/09/2015	tree removed	16/11/2015	tree removed	
		110		19/05/2015	27/07/2015	empty	22/09/2015	empty	16/11/2015	empty	
		111		19/05/2015	27/07/2015	dormouse nest	22/09/2015	dormouse nest	16/11/2015	dormouse nest	
		112		20/05/2015	27/07/2015	empty	09/09/2015	woodmouse nest	16/11/2015	empty	
		113		20/05/2015	27/07/2015	empty	09/09/2015	grass/seeds	16/11/2015	empty	
		114		20/05/2015	27/07/2015	empty	09/09/2015	empty	16/11/2015	empty	
		115		20/05/2015	27/07/2015	empty	09/09/2015	empty	16/11/2015	dormouse nest	
		116		20/05/2015	27/07/2015	empty	09/09/2015	empty	16/11/2015	empty	
		117		20/05/2015	27/07/2015	empty	09/09/2015	empty	16/11/2015	empty	
		118		20/05/2015	27/07/2015	empty	09/09/2015	empty	16/11/2015	empty	
		119		20/05/2015	27/07/2015	woodmouse nest	09/09/2015	woodmouse nest	16/11/2015	empty	
		120		20/05/2015	27/07/2015	empty	09/09/2015	empty	16/11/2015	empty	
		121		20/05/2015	27/07/2015	empty	09/09/2015	empty	16/11/2015	empty	
		122		20/05/2015	27/07/2015	empty	09/09/2015	empty	16/11/2015	empty	
		123		20/05/2015	27/07/2015	empty	09/09/2015	woodmouse nest	16/11/2015	empty	
		124		20/05/2015	27/07/2015	empty	09/09/2015	empty	16/11/2015	empty	
		125		20/05/2015	27/07/2015	woodmouse nest	09/09/2015	empty	16/11/2015	empty	
		126		20/05/2015	27/07/2015	empty	09/09/2015	empty	16/11/2015	empty	
		127		20/05/2015	27/07/2015	empty	09/09/2015	empty	16/11/2015	empty	
		128		20/05/2015	27/07/2015	old dormouse nest	09/09/2015	old nest	16/11/2015	empty	
		129		20/05/2015	27/07/2015	empty	09/09/2015	green hazel leaves	16/11/2015	dormouse nest	
D	by Pwll Diwaelod	130		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	
		131		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	
		132		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	
		133		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	
		134		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	
		135		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	
		136		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	
		137		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	
		138		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	
		139		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	
		140		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	
		141		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	
		142		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	
		143		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty	

Location ref	Location name		GPS location	Installation date	Survey results					
		Tube Number			Survey visit date	result	Survey visit date	result	Survey visit date	result
E	Roggiett Brake Quarry Woo	144		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty
		145		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty
		146		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty
		147		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty
		148		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty
		149		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty
		150		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty
		151		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty
		152		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty
		153		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	horse damage
		154		20/05/2015	05/08/2015	empty	09/09/2015	horse damage	16/11/2015	horse damage
		155		20/05/2015	05/08/2015	empty	09/09/2015	horse damage	16/11/2015	horse damage
		156		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty
		157		20/05/2015	05/08/2015	empty	09/09/2015	empty	16/11/2015	empty
		158		20/05/2015	05/08/2015	empty	09/09/2015	horse damage	16/11/2015	horse damage
		159		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		160		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		161		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		162		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		163		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		164		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		165		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		166		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		167		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		168		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		169		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		170		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		171		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		172		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		173		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		174		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		175		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		176		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		177		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		178		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		179		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		180		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		181		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		182		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		183		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		184		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		185		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		186		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		187		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		188		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		189		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		190		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty
		191		26/05/2015	04/08/2015	empty	14/09/2015	empty	06/11/2015	empty

[illegible]

Location ref	Location name		GPS location	Installation date	Survey results						
		Tube Number			Survey visit date	result	Survey visit date	result	Survey visit date	result	
G	Central area at J28-29	240		26/05/2015	05/08/2015	empty	14/09/2015	empty	23/11/2015	empty	
		241		26/05/2015	05/08/2015	empty	14/09/2015	empty	23/11/2015	empty	
		242		26/05/2015	05/08/2015	empty	14/09/2015	empty	23/11/2015	empty	
		243		26/05/2015	05/08/2015	empty	14/09/2015	empty	23/11/2015	empty	
		244		26/05/2015	05/08/2015	empty	14/09/2015	empty	23/11/2015	empty	
		245		26/05/2015	05/08/2015	empty	14/09/2015	empty	23/11/2015	empty	
		246		26/05/2015	05/08/2015	empty	14/09/2015	empty	23/11/2015	empty	
		247		26/05/2015	05/08/2015	empty	14/09/2015	empty	23/11/2015	empty	
		248		26/05/2015	05/08/2015	empty	14/09/2015	empty	23/11/2015	empty	
		249		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		250		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		251		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		252		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		253		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		254		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		255		02/06/2015	30/07/2015	woodmouse nest	09/09/2015	woodmouse nest	12/11/2015	empty	
		256		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		257		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		258		02/06/2015	30/07/2015	empty	09/09/2015	woodmouse nest	12/11/2015	empty	
		259		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		260		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	woodmouse	
		261		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		262		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		263		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		264		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		265		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		266		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		267		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		268		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	woodmouse	
		269		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	woodmouse	
		270		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		271		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		272		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		273		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		274		02/06/2015	30/07/2015	empty	09/09/2015	dormouse present	12/11/2015	dormouse nest	
		275		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	woodmouse x2	
		276		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		277		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		278		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		279		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		280		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	woodmouse x3	
		281		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		282		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		283		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		284		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		285		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		286		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	
		287		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty	

Location ref	Location name		GPS location	Installation date	Survey results					
		Tube Number			Survey visit date	result	Survey visit date	result	Survey visit date	result
H	Minnetts Lane site	288		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		289		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		290		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		291		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		292		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		293		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		294		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		295		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		296		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		297		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		298		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		299		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		300		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		301		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		302		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		303		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		304		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		305		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		306		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		307		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		308		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		309		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		310		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		311		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		312		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		313		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		314		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		315		02/06/2015	30/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		316		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		317		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		318		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		319		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		320		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		321		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		322		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
323		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	Old Man's beard		
324		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty		
325		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty		
326		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty		
327		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty		
328		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty		
329		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty		
330		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty		
331		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty		
332		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty		
333		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty		
334		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty		
335		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty		

Location ref	Location name		GPS location	Installation date	Survey results					
		Tube Number			Survey visit date	result	Survey visit date	result	Survey visit date	result
I	Knollbury area (East end) near	336		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		337		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		338		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		339		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		340		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		341		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		342		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		343		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		344		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		345		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		346		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		347		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		348		02/06/2015	28/07/2015	empty	14/09/2015	empty	23/11/2015	empty
		349		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		350		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		351		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	likely woodmouse nest
		352		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		353		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		354		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		355		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		356		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		357		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		358		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		359		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		360		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		361		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		362		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		363		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		364		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		365		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		366		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		367		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty
		368		03/06/2015	05/08/2015	empty	24/09/2015	dormouse nest	06/11/2015	old dormouse nest
369		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty		
370		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty		
371		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty		
372		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty		
373		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty		
374		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty		
375		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty		
376		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty		
377		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty		
378		03/06/2015	05/08/2015	empty	24/09/2015	empty	06/11/2015	empty		
J	M4 Road Verge accessed via	379		11/06/2015	29/07/2015	empty	09/09/2015	green leaves	12/11/2015	woodmouse x2
		380		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		381		11/06/2015	29/07/2015	empty	09/09/2015	old dormouse nest	12/11/2015	empty
		382		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		383		11/06/2015	29/07/2015	empty	09/09/2015	green leaves	12/11/2015	dormouse nest

Location ref	Location name		GPS location	Installation date	Survey results					
		Tube Number			Survey visit date	result	Survey visit date	result	Survey visit date	
K	Pound Hill Road Verges	384		11/06/2015	29/07/2015	empty	09/09/2015	dormouse nest with v	12/11/2015	dormouse nest
		385		11/06/2015	29/07/2015	empty	09/09/2015	old dormouse nest	12/11/2015	dormouse nest
		386		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	nut cache (likely woodmouse)
		387		11/06/2015	29/07/2015	empty	09/09/2015	dormouse present	12/11/2015	empty
		388		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		389		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	dormouse nest
		390		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	dormouse nest
		391		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	woodmouse nest
		392		11/06/2015	29/07/2015	se nest and dormouse	09/09/2015	woodmouse nest	12/11/2015	dormouse nest
		393		11/06/2015	29/07/2015	empty	09/09/2015	woven nest	12/11/2015	empty
		394		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		395		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		396		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		397		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		398		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	dormouse and juvenile dormouse
		399		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		400		11/06/2015	29/07/2015	empty	09/09/2015	woodmouse and nest	12/11/2015	empty
		401		11/06/2015	29/07/2015	empty	09/09/2015	dormouse present	12/11/2015	old nest
		402		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		403		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		404		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		405		11/06/2015	29/07/2015	empty	09/09/2015	green leaves	12/11/2015	empty
		406		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		407		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	old nest
		408		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	dormouse nest
		409		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	dormouse nest
		410		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		411		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		412		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	dormouse nest
		413		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	dormouse nest
		414		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		415		11/06/2015	29/07/2015	empty	09/09/2015	dormouse and nest	12/11/2015	dormouse nest
		416		11/06/2015	29/07/2015	empty	09/09/2015	dormice x2 and nest	12/11/2015	empty
		417		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		418		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		419		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		420		11/06/2015	29/07/2015	empty	09/09/2015	old woodmouse nest	12/11/2015	empty
		421		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		422		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		423		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	dormouse nest
		424		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		425		11/06/2015	29/07/2015	empty	09/09/2015	empty	12/11/2015	empty
		426		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	empty
		427		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	empty
		428		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	empty
		429		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	dormouse nest
		430		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	empty
		431		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	empty

Location ref	Location name		GPS location	Installation date	Survey results					
		Tube Number			Survey visit date	result	Survey visit date	result	Survey visit date	
L	Knollbury Woodland and fie	432		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	dormouse nest
		433		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	empty
		434		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	empty
		435		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	empty
		436		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	empty
		437		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	empty
		438		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	dormouse nest
		439		12/06/2015	29/07/2015	empty	09/09/2015	empty	11/11/2015	empty
		440		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		441		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		442		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		443		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		444		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		445		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		446		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		447		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		448		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		449		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		450		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		451		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		452		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		453		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		454		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		455		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		456		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		457		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	damaged
		458		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		459		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		460		24/06/2015	10/08/2015	empty	08/10/2015	woodmouse nest	16/11/2015	woodmouse nest
		461		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		462		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		463		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		464		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		465		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		466		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		467		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		468		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		469		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		470		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		471		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		472		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		473		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		474		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		475		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		476		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		477		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		478		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		479		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty

Location ref	Location name		GPS location	Installation date	Survey results						
		Tube Number			Survey visit date	result	Survey visit date	result	Survey visit date	result	
		480		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged	
		481		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		482		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		483		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		484		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		485		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		486		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	damaged	
		487		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		488		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		489		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		490		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		491		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		492		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		493		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		494		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		495		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		496		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		497		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged	
		498		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		499		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		500		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		501		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		502		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		503		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		504		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	damaged	
		505		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged	
		506		24/06/2015	10/08/2015	empty	08/10/2015	dormouse nest and w	16/11/2015	old dormouse nest	
		507		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged	
		508		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged	
		509		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		510		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged	
		511		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		512		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		513		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged	
		514		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		515		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		516		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged	
		517		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	damaged	
		518		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		519		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		520		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		521		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged	
		522		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		523		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		524		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged	
		525		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged	
		526		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	
		527		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty	

Location ref	Location name		GPS location	Installation date	Survey results					
		Tube Number			Survey visit date	result	Survey visit date	result	Survey visit date	
M	Pye Corner Farm	528		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		529		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		530		24/06/2015	10/08/2015	empty	08/10/2015	damaged	16/11/2015	damaged
		531		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		532		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		533		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		534		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		535		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		536		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		537		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		538		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		539		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		540		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		541		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		542		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		543		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		544		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		545		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		546		24/06/2015	10/08/2015	empty	08/10/2015	empty	16/11/2015	empty
		547		28/07/2015	15/08/2015	empty	06/11/2015	empty		
		548		28/07/2015	15/08/2015	empty	06/11/2015	empty		
		549		28/07/2015	15/08/2015	empty	06/11/2015	empty		
		550		28/07/2015	15/08/2015	empty	06/11/2015	empty		
		551		28/07/2015	15/08/2015	empty	06/11/2015	empty		
		552		28/07/2015	15/08/2015	empty	06/11/2015	empty		
		553		28/07/2015	15/08/2015	empty	06/11/2015	empty		
		554		28/07/2015	15/08/2015	empty	06/11/2015	empty		
		555		28/07/2015	15/08/2015	empty	06/11/2015	empty		
N	TATA road verge	556		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		557		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		558		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		559		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		560		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		561		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		562		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		563		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		564		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		565		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		566		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		567		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		568		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		569		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		570		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		571		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		572		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		573		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		574		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		575		19/08/2015	17/09/2015	empty	25/11/2015	empty		

Location ref	Location name		GPS location	Installation date	Survey results					
		Tube Number			Survey visit date	result	Survey visit date	result	Survey visit date	
Middle reen east		576		19/08/2015	17/09/2015	empty	25/11/2015	woodmouse nest		
		577		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		578		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		579		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		580		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		581		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		582		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		583		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		584		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		585		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		586		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		587		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		588		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		589		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		590		19/08/2015	17/09/2015	empty	25/11/2015	empty		
Middle Reen west		591		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		592		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		593		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		594		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		595		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		596		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		597		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		598		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		599		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		600		19/08/2015	17/09/2015	empty	25/11/2015	empty		
tracks		601		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		602		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		603		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		604		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		605		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		606		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		607		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		608		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		609		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		610		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		611		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		612		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		613		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		614		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		615		19/08/2015	17/09/2015	empty	25/11/2015	empty		
tracks 2		616		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		617		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		618		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		619		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		620		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		621		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		622		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		623		19/08/2015	17/09/2015	empty	25/11/2015	empty		

Location ref	Location name		GPS location	Installation date	Survey results					
		Tube Number			Survey visit date	result	Survey visit date	result	Survey visit date	result
		624		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		625		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		626		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		627		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		628		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		629		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		630		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		631		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		632		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		633		19/08/2015	17/09/2015	empty	25/11/2015	woodmouse x4		
		634		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		635		19/08/2015	17/09/2015	empty	25/11/2015	empty		
		636		19/08/2015	17/09/2015	empty	25/11/2015	dormouse nest		