


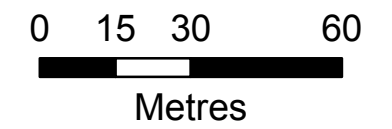


Legend

-  Main badger sett
-  Annex badger sett
-  Slow worm records



Confidential Figure



Scale @ A3 - 1:1,500



ECO.03

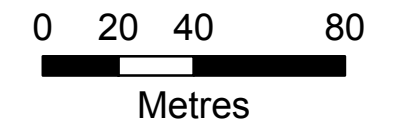
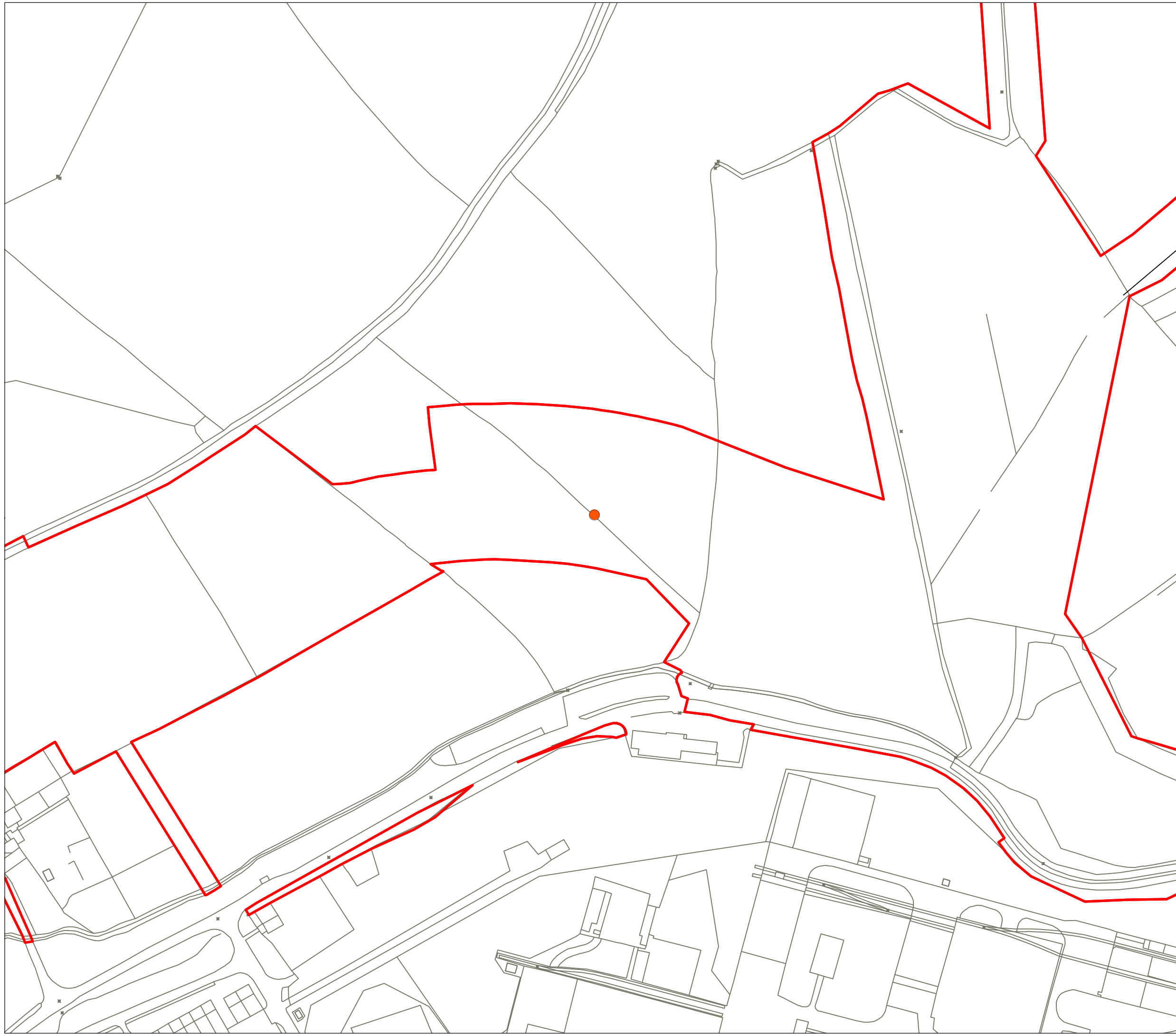
May 2017

Office: 4594 Drawn by: ESH Checked by: CM

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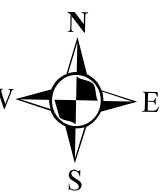
Legend

-  Dormouse record
-  Site boundary



Scale @ A3 - 1:2,000

ECO.04



May 2017

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**Breeding Birds:
Red and Amber
List**

ECO.05

Legend

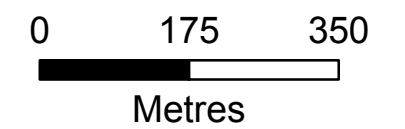
Red list

- ★ Linnet
- ★ Herring gull
- ★ Black headed gull
- ★ Starling

Amber list

- Song thrush
- Skylark
- Meadow pipit
- House sparrow
- House martin
- Swallow
- Long-tailed tit
- Goldcrest
- Whitethroat
- Green woodpecker
- ★ Yellowhammer

— Site boundary



Scale @ A3 - 1:8,836

ECO.05






May 2017

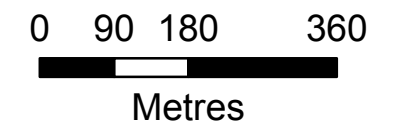
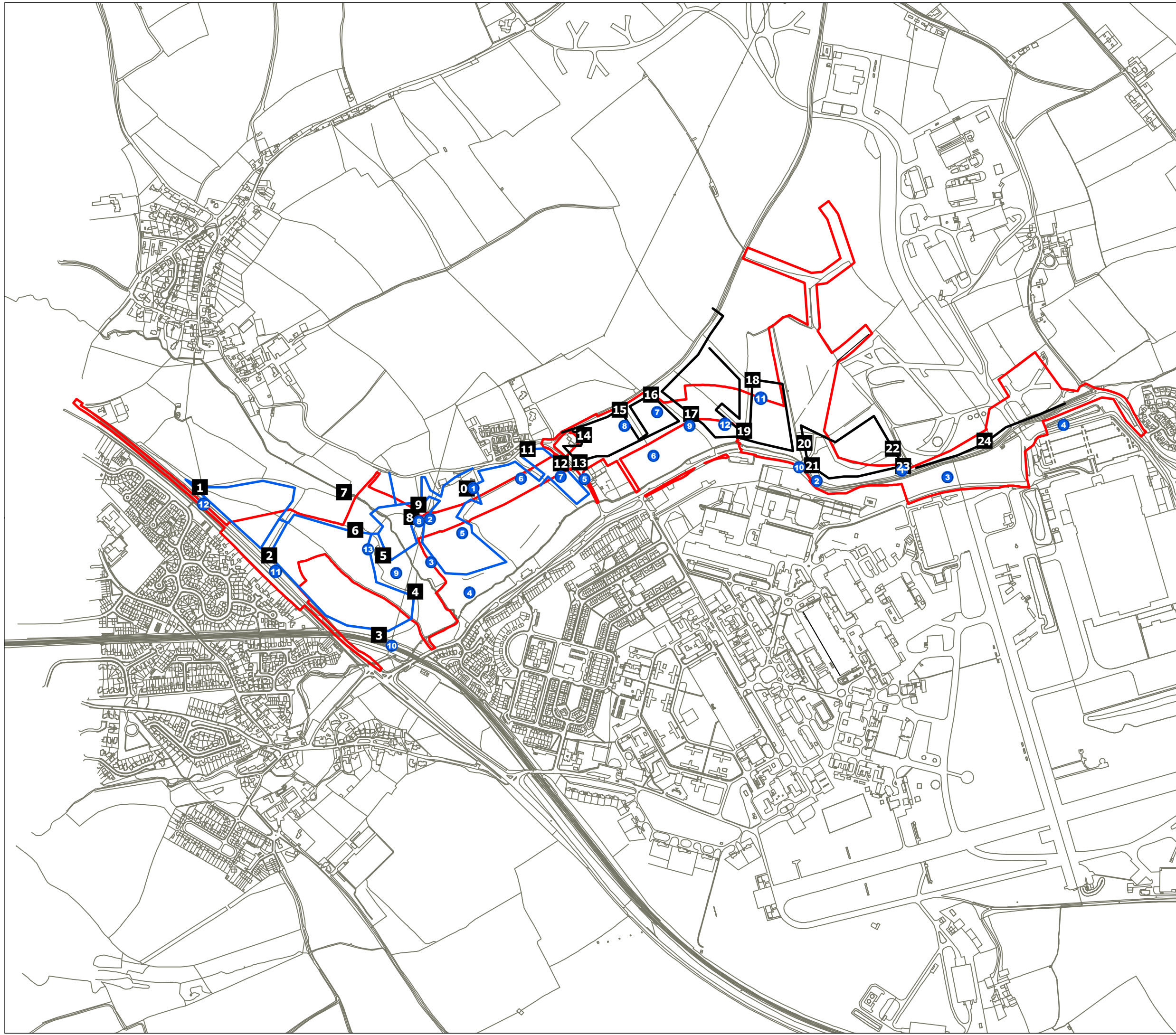
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Legend

-  Listening stops
-  Static locations
-  Western transect
-  Eastern transect
-  Site boundary

Note: Listening stops positioned slightly to the south of their actual positions to avoid overlap with the static positions on the plan



Scale @ A3 - 1:9,153

Road boundary & transect routes



March 2017





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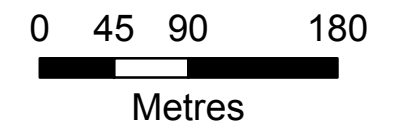
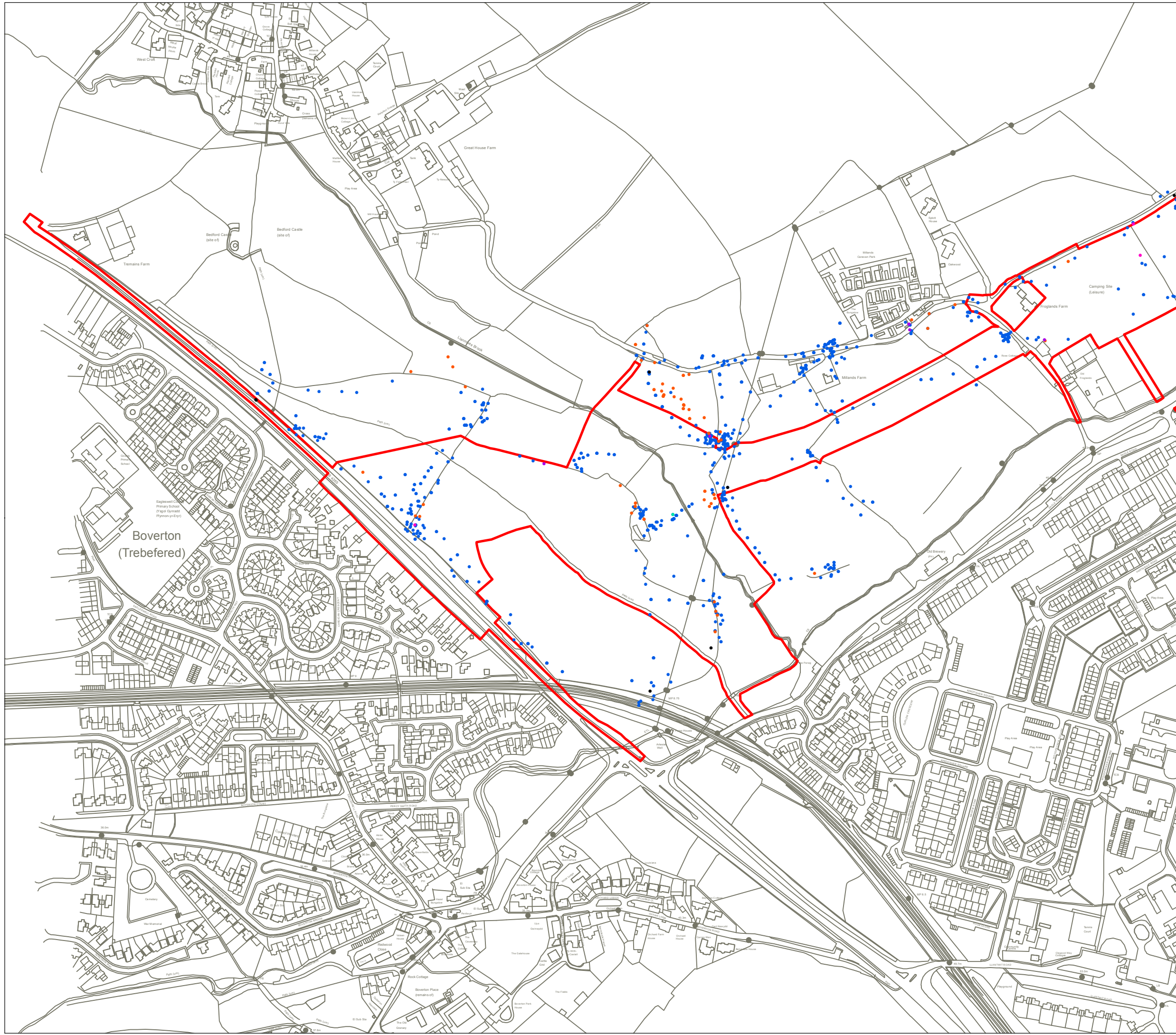
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**Summary Bat
Transect Data
West**

ECO.07

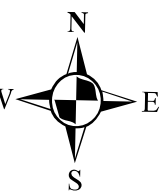
Legend

-  **Common pipistrelle**
-  **Soprano pipistrelle**
-  ***Myotis* sp.**
-  **Noctule**
-  **Serotine**
-  **Nathusius pipistrelle**



Scale @ A3 - 1:4,564

PH1



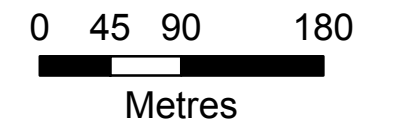
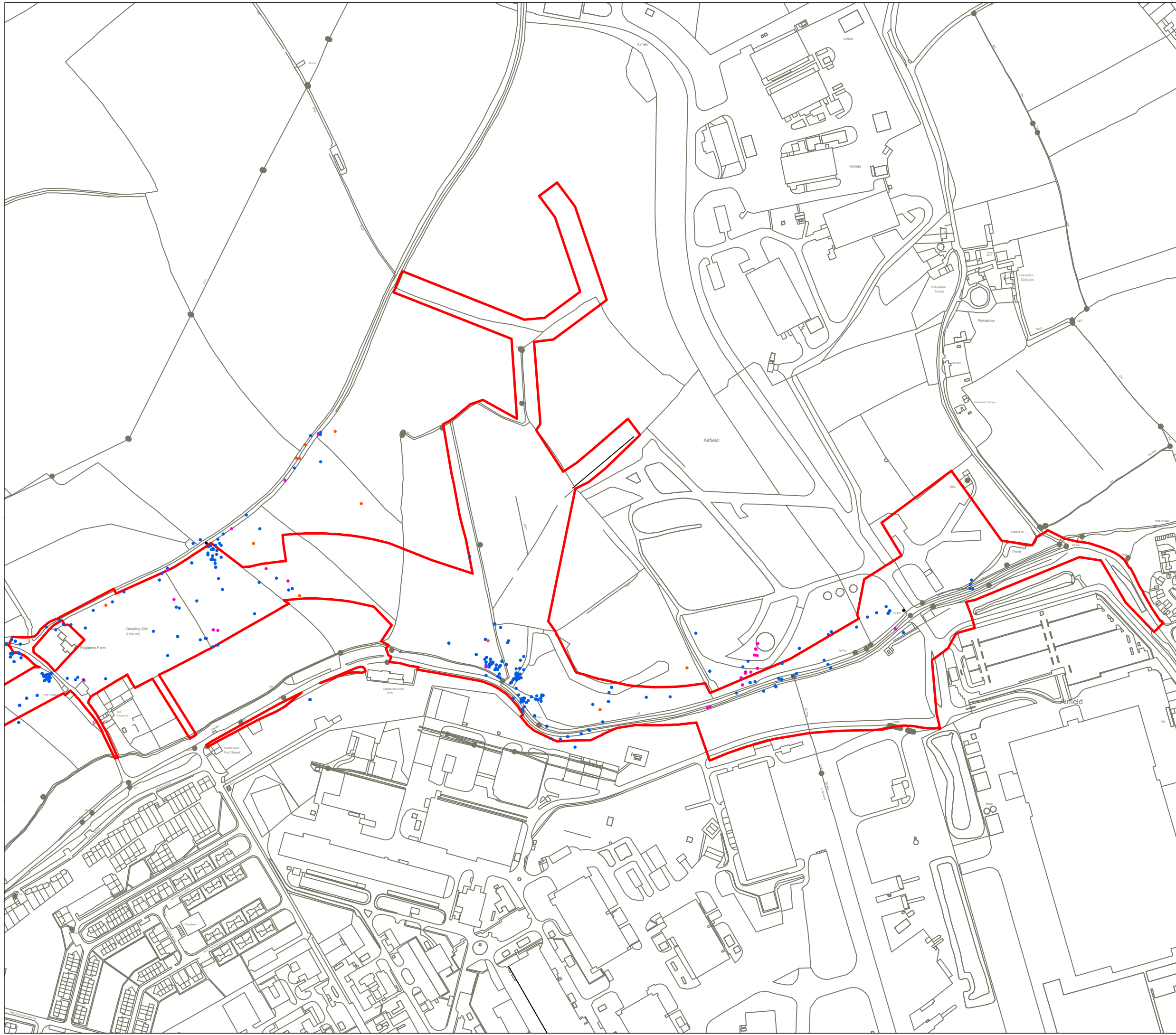
March 2017

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Legend

- Common pipistrelle
- Soprano pipistrelle
- Myotis* sp.
- Noctule
- Serotine
- Nathusius pipistrelle*



Scale @ A3 - 1:4,794

PH1



March 2017

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APPENDIX A- Additional survey data

Table A1: Full invertebrate survey species list

Scientific name	Common name	Status
<i>Abax parallelepipedus</i>	Common shoulderblade	-
<i>Abraxas grossulariata</i>	Magpie moth	-
<i>Acanthosoma haemorrhoidale</i>	Hawthorn shield bug	-
<i>Aglais io</i>	Peacock butterfly	-
<i>Aglais urticae</i>	Small tortioseshell	-
<i>Agriphila tristella</i>	Common grass-vaneer moth	-
<i>Agrotis exclamationis</i>	Heart and dart moth	-
<i>Anania hortulata</i>	Small magpie moth	-
<i>Anchomenus dorsalis</i>	A ground beetle	-
<i>Andrena (Melandrena) nitida</i>	Grey-patched mining bee	-
<i>Andrena chrysoceles</i>	Hawthorn mining bee	-
<i>Andrena ovatula</i>	Small gorse mining bee	-
<i>Andrena subopaca</i>	Impunctate mini-miner	-
<i>Anthocharis cardamines</i>	Orange-tip butterfly	-
<i>Apamea monoglypha</i>	Dark arches moth	-
<i>Apis mellifera</i>	Honeybee	-
<i>Araneus diadematus</i>	Garden cross spider	-
<i>Armadillium vulgare</i>	Common pill woodlouse	-
<i>Bolyphantes luteolus</i>	A money spider	-
<i>Bombus hortorum</i>	Garden bumblebee	-
<i>Bombus lapidarius</i>	Red-tailed bumblebee	-
<i>Bombus lapidarius</i>	Early bumblebee	-
<i>Bombus lucorum</i> agg.	White-tailed bumblebee	-
<i>Bombus pascuorum</i>	Common carder bumblebee	-
<i>Bombus pratorum</i>	Early bumblebee	-
<i>Bombus terrestris</i>	Buff-tailed bumblebee	-
<i>Bombus vestalis</i>	Vestal cuckoo bee	-
<i>Calopteryx splendens</i>	Banded demoiselle	RedList GB post 2001 LC
<i>Cepaea hortensis</i>	White-lipped banded snail	-
<i>Charanyca trigrammica</i>	Treble lines moth	-
<i>Chorthippus brunneus</i>	Field grasshopper	-
<i>Chorthippus parallelus</i>	Meadow grasshopper	-
<i>Chrysopa carnea</i>	Common green lacewing	-
<i>Chrysotus gramineus</i>	A dolichopid fly	-
<i>Cicadella viridis</i>	Green leafhopper	-
<i>Coccinella 7-punctata</i>	7-spot ladybird	-
<i>Coenagrion puella</i>	Azure blue damselfly	RedList GB post 2001 LC
<i>Coreus marginatus</i>	Dock bug	-
<i>Cornu aspersum</i>	Garden snail	-
<i>Crocallis elinguaris</i>	Scalloped oak moth	-
<i>Diarsia mendica</i>	Ingrailed Clay moth	-
<i>Diarsia rubi</i>	Small square-dot moth	Env Act (research only)
<i>Diplolepis rosae</i>	A gall wasp	-
<i>Enallagma cyathigerum</i>	Common blue damselfly	RedList GB post 2001 LC
<i>Episyrphus balteatus</i>	Marmalade hoverfly	-
<i>Eristalis arbustorum</i>	A hoverfly	-
<i>Eristalis interruptus</i>	A hoverfly	-
<i>Eristalis pertinax</i>	A hoverfly	-
<i>Eristalis tenax</i>	A hoverfly	-



Scientific name	Common name	Status
<i>Eupeodes corollae</i>	A hoverfly	-
<i>Eupeodes latifasciatus</i>	A hoverfly	-
<i>Eurygaster testudinaria</i>	Tortoise shieldbug	-
<i>Eysarcoris fabricii</i>	Woundwort shieldbug	-
<i>Forficula auricularia</i>	Common earwig	-
<i>Gastrophysa viridula</i>	Green dock beetle	-
<i>Glyphipterix simpliciella</i>	Cocksfoot moth	-
<i>Helophilus pendulus</i>	A hoverfly	-
<i>Hylaeus communis</i>	Common yellow-face bee	-
<i>Inachis io</i>	Peacock butterfly	-
<i>Julus punctatus</i>	Blunt-tailed snake millipede	-
<i>Korscheltellus lupulina</i>	Common swift moth	-
<i>Lasioglossum (Evylaeus) villosulum</i>	Shaggy furrow bee	-
<i>Lasioglossum albipes</i>	Bloomed furrow bee	-
<i>Lasioglossum calceatum</i>	Common furrow bee	-
<i>Lasius niger</i>	Black garden ant	-
<i>Lejogaster metallina</i>	A hoverfly	-
<i>Leptophyes punctatissima</i>	Speckled bush cricket	LI(SEWBReC)
<i>Leptopterna dolabrata</i>	Meadow plant bug	-
<i>Leucozona lucorum</i>	A hoverfly	-
<i>Liocoris tripustulatus</i>	A plant bug	-
<i>Lucillia sericata</i>	Common green bottle	-
<i>Lygocoris pabulinus</i>	Common green capsid	-
<i>Macrolophus rubi</i>	A plant bug	-
<i>Macrothylacia rubi</i>	Fox moth	-
<i>Malacosoma neustria</i>	Lackey moth	Env Act (research only), LBAP
<i>Maniola jurtina</i>	Meadow brown butterfly	-
<i>Melanogaster hirtella</i>	A hoverfly	-
<i>Melanostoma mellinum</i>	A hoverfly	-
<i>Melanostoma scalare</i>	Checkered hoverfly	-
<i>Metellina segmentata</i>	Common orb weaver	-
<i>Misumena vatia</i>	Goldenrod crab spider	-
<i>Myrmica rubra</i>	An ant	-
<i>Myrmica ruginodis</i>	An ant	-
<i>Mythimna impura</i>	Smoky wainscot moth	-
<i>Nebria brevicollis</i>	A ground beetle	-
<i>Neriene peltata</i>	Platform hammock spider	-
<i>Noctua pronuba</i>	Large yellow underwing moth	-
<i>Nomada flava</i>	Flavous nomada bee	-
<i>Ochlodes sylvanus</i>	Large skipper butterfly	-
<i>Ochropleura plecta</i>	Flame shoulder moth	-
<i>Oedemera nobilis</i>	Thick-thighed beetle	-
<i>Omocestus viridulus</i>	Common green grasshopper	-
<i>Oniscus asellus</i>	Common shiny woodlouse	-
<i>Opisthograptis luteolata</i>	Brimstone moth	-
<i>Paederus littoralis</i>	A rove beetle	-
<i>Palomena prasina</i>	Green shieldbug	-
<i>Pararge aegeria</i>	Speckled wood butterfly	-
<i>Philaenus spumarius</i>	Common froghopper	-
<i>Philoscia muscorum</i>	Common striped woodlouse	-



Scientific name	Common name	Status
<i>Pieris brassicae</i>	Large white butterfly	-
<i>Pieris napi</i>	Green-veined white butterfly	-
<i>Pieris rapae</i>	Small white butterfly	-
<i>Platycheirus albimanus</i>	A hoverfly	-
<i>Platycheirus europaeus</i>	A hoverfly	-
<i>Platycheirus rosarum</i>	A hoverfly	-
<i>Platycheirus splendidus</i>	A hoverfly	-
<i>Pollenia rudis</i>	Common cluster fly	-
<i>Polydesmus angustus</i>	Flat-backed millipede	-
<i>Polygonia c-album</i>	Comma butterfly	-
<i>Polyommatus icarus</i>	Common blue butterfly	-
<i>Porcellio scaber</i>	Common rough woodlouse	-
<i>Propylea 14-punctata</i>	14-spot ladybird	-
<i>Protapion fulvipes</i>	White clover seed weevil	-
<i>Psyllobora 22-punctata</i>	22-spot ladybird	-
<i>Pterostichus madidus</i>	Black clock beetle	-
<i>Pterostichus melanarius</i>	A ground beetle	-
<i>Pterostichus niger</i>	A ground beetle	-
<i>Pyrochroa serraticornis</i>	Red-headed cardinal beetle	-
<i>Pyronia tithonus</i>	Gatekeeper butterfly	-
<i>Pyrrhosoma nymphula</i>	Large red damselfly	RedList GB post 2001 LC
<i>Rhagonycha fulva</i>	Common red soldier beetle	RedList GB post 2001 LC
<i>Scaeva pyrastris</i>	A hoverfly	-
<i>Scotopteryx chenopodiata</i>	Shaded broad-bar moth	Env Act (research only), LBAP
<i>Sphaerophoria rueppellii</i>	A hoverfly	-
<i>Spilosoma luteum</i>	Buff ermine moth	Env Act
<i>Stemonyphantes lineatus</i>	A money spider	-
<i>Stenus clavicornis</i>	A rove beetle	-
<i>Subcoccinella 24-punctata</i>	24-spot ladybird	-
<i>Sympetrum striolatum</i>	Common darter	RedList GB post 2001 LC
<i>Syrirta pipiens</i>	A hoverfly	-
<i>Syrphus rectus</i>	A hoverfly	-
<i>Thaumatomyia notata</i>	Yellow swarming fly	-
<i>Thymelicus sylvestris</i>	Small skipper butterfly	-
<i>Trochulus striolatus</i>	Strawberry snail	-
<i>Tyria jacobaeae</i>	Cinnabar moth	Env Act (research only)
<i>Vanessa atalanta</i>	Red admiral butterfly	-
<i>Vespula germanica</i>	German wasp	-
<i>Vespula vulgaris</i>	Common wasp	-
<i>Xestia triangulum</i>	Double square-spot moth	-
<i>Xysticus cristatus</i>	Common crab spider	-
<i>Yponomeuta padell</i>	Orchid ermine moth	-
<i>Zygaena trifolii</i>	5-spot burnet moth	-

Key:**Env Act** - Environment (Wales) Act 2016 Section 7.**Red list GB post 2001** - IUCN Red List: Critically Endangered (**CR**), Endangered (**E**), Vulnerable (**VU**), Near Threatened (**NT**), Least Concern (**LC**), Data Deficient (**DD**) and Not Evaluate (**NE**).**LBAP** – Local Biodiversity Action Plan.**LI(SEWBRc)** – Locally Important Species (as identified by local specialists) in SEWBRc area.

**Table A2:** Summary of bat passes per month at each static detector location

Survey month	Survey date	Location	Species	Total number of passes	Notes
May	03/05/2016-07/05/2016	9	Common pipistrelle	201	
		9	Soprano pipistrelle	102	
		9	Serotine	8	
		5	-	No data recorded	Likely equipment failure
		15	Common pipistrelle	338	
		15	Soprano pipistrelle	18	
		15	Serotine	4	
		15	Myotis*	2	
		15	Noctule	1	
		22	Common pipistrelle	896	
		22	Soprano pipistrelle	1	
		22	Serotine	4	
		22	Noctule	4	
May	18/05/2016-22/05/2016	11	Common pipistrelle	1	Potential equipment failure
		2	-	No data recorded	Likely equipment failure
		16	Common pipistrelle	15	
		16	Soprano pipistrelle	1	
		16	Serotine	1	
		16	Noctule	1	
		16	Myotis*	2	
		21	Common pipistrelle	278	
		21	Myotis*	2	
21	Noctules	1			
June	10/06/2016-14/06/2016	13	-	No data recorded	Likely equipment failure
		14	-	No data recorded	Likely equipment failure
		3	Common pipistrelle	45	
		3	Soprano pipistrelle	29	
		3	Myotis*	43	
		3	Serotine	1	
		4	Common pipistrelle	68	
		4	Soprano pipistrelle	2	
		4	Myotis*	4	
July	07/07/2016-11/07/2016	8	-	No data recorded	Likely equipment failure
		7	Common pipistrelle	2088	
		7	Soprano pipistrelle	60	
		7	Myotis*	9	
		7	Serotine	8	
		19	-	No data recorded	Likely equipment failure
		24	-	Static detector stolen	



Survey month	Survey date	Location	Species	Total number of passes	Notes
August	10/08/2016-14/08/2016	12	Common pipistrelle	68	
		12	Soprano pipistrelle	22	
		12	Serotine	1	
		12	Myotis*	1	
		10	Common pipistrelle	40	
		10	Soprano pipistrelle	18	
		10	Serotine	10	
		10	Myotis*	3	
		10	Noctule	1	
		20	Common pipistrelle	43	
		20	Soprano pipistrelle	5	
		23	Common pipistrelle	68	
		23	Soprano pipistrelle	3	
		23	Serotine	3	
		23	Noctule	2	
September	12/09/2016-16/09/2016	1	-	No data recorded	Likely equipment failure
		2	-	No data recorded	Likely equipment failure
		18	-	No data recorded	Likely equipment failure
		17	Common pipistrelle	56	
		17	Soprano pipistrelle	20	
		17	Serotine	3	
		17	Myotis*	5	
17	Noctule	5			