

High Speed Rail (Crewe – Manchester)

Background information and data

Ecology and biodiversity

BID EC-008-00001

Ecological baseline data - reptiles

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Department
for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

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1 Introduction

- 1.1.1 This report presents a summary of the baseline data relating to reptiles.
- 1.1.2 Baseline data have been collected for the Proposed Scheme in relation to the following community areas (CA):
- Hough to Walley's Green (MA01);
 - Wimboldsley to Lostock Gralam (MA02);
 - Pickmere to Agden and Hulseheath (MA03);
 - Broomedge to Glazebrook (MA04);
 - Risley to Bamfurlong (MA05);
 - Hulseheath to Manchester Airport (MA06);
 - Davenport Green to Ardwick (MA07); and
 - Manchester Piccadilly Station (MA08).
- 1.1.3 This report should be read in conjunction with Map Series EC-07 in the Background Information and Data, Ecology Map Book. As no reptile surveys were carried out within MA08, there is no corresponding mapsheet within the EC-07 Map Series.
- 1.1.4 The Environmental Statement¹ should be referred to for details of the ecology impact assessment.

¹ High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement*. Available online at: <https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement>.

2 Reptiles

2.1 Methodology

- 2.1.1 Details of the standard methodology utilised for surveys of common reptiles² are provided in Technical Note – Ecology and biodiversity – Ecological Field Survey Methods and Standards (FSMS) included in the Environment Impact Assessment Scope and Methodology Report (SMR)³.
- 2.1.2 Desktop reptile records have been obtained for areas within 5km of the land required for the construction of the Proposed Scheme from the following sources:
- Greater Manchester Local Records Centre (GMLRC)⁴;
 - Staffordshire Ecological Record⁵; and
 - rECOrd⁶, Local Biological Records Centre for the Cheshire region.
- 2.1.3 Consultation was undertaken with Manchester Biodiversity Partnership, Cheshire Wildlife Trust and Lancashire Wildlife Trust. During this consultation Manchester Biodiversity Partnership and Cheshire Wildlife Trust reported that reptiles are considered largely absent from areas outside of the mosses and meres. This was based on their local knowledge of reptile distribution in MA01 to MA08 and was supported by Lancashire Wildlife Trust. In line with the FSMS, survey effort for reptiles was reduced by only including sites especially suitable for reptiles, i.e. with a higher proportion of positive habitat variables as listed in the FSMS or where sites with less suitable habitat were adjacent to historic records or positive survey results.

2.2 Deviations, constraints and limitations

- 2.2.1 At sites where the risk of theft, potential disturbance of refugia or injury to public or livestock was considered to be high, for example on publicly accessible sites or those with livestock, only roofing felt was used rather than a 50:50 split of metal and roofing felt, as roofing felt is less likely to cause injury to public or livestock.
- 2.2.2 Further deviations to the standard methodology were as follows:

² The two rare reptile species occurring in the UK do not occur in the area through which HS2 Phase 2b passes.

³ High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement, Environmental Impact Assessment Scope and Methodology Report*, Volume 5, Appendix CT-001-00001. Available online at: <https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement>.

⁴ Greater Manchester Local Records Centre. Available online at: <https://www.gmwildlife.org.uk/>.

⁵ Staffordshire Ecological Record, *The Ecological Database for Staffordshire*. Available online at: http://www.staffs-ecology.org.uk/html2015/index.php?title=Main_Page.

⁶ rECOrd, *Local Biological Records Centre serving Cheshire*. Available online at: <http://www.record-lrc.co.uk/>.

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- an extension to the survey period to include October 2018 was implemented. October surveys were undertaken during suitable weather conditions and ahead of the onset of hibernation. This deviation enabled surveys to be carried out during suitable weather conditions in October 2018;
- the FSMS states that seven survey visits with no reptiles recorded are required to assume absence of reptiles. In MA01 to MA08, consultees (Manchester Biodiversity Partnership, Cheshire Wildlife Trust and Lancashire Wildlife Trust, see Section 2.1) have confirmed that reptiles are considered to be largely absent from the study area apart from in the mosses and meres. This has been confirmed by the results of completed surveys (reptile presence confirmed in less than 5% of the sites subject to full surveys outside of the mosses and meres). Therefore, where it has not been possible to complete seven visits due to access restrictions but at least four visits have been completed and, providing no positive survey results or desk study records exist in the vicinity of the site, reptiles have been assumed to be absent; and
- some surveys were affected by temperatures being too high, or by refugia having been disturbed. In these cases, repeat surveys were carried out and more than seven survey visits were carried out on some sites.

Survey limitations and assumptions

2.2.3 Scoping of suitable reptile sites involved site visits only where access was available. At a small number of sites, access was revoked and a complete set of baseline data could not be collected. These are described in this report as ‘partially complete’. Of these, where the majority of visits (four or more) were undertaken and no reptiles were recorded in adjacent sites, reptiles are assumed absent. Where fewer than four visits have been undertaken, a precautionary approach has been applied and reptiles assumed present on the basis of suitable habitat and proximity to known records.

2.2.4 Despite the presence of suitable reptile habitat, reptile surveys were not undertaken at several sites due to lack of access during the survey season. These sites are presented in Table 1 and on accompanying Ecology Map Series EC-07.

Table 1: Summary of locations where requirement for reptile survey was identified but no access was available for survey

| Ecology survey code | Location | Centroid OS grid reference | Description of proposed survey location | CA | Approximate distance from the land required for the construction of the Proposed Scheme (m) and orientation |
|----------------------------|--|----------------------------|--|------|---|
| CH452896-U204181_L5334_RE2 | Wimboldsley Grange, Nantwich Road, Wimboldsley, Middlewich | SJ67996332 | Dairy farm with improved grassland, broadleaved woodland, hedgerows, | MA02 | Within |

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| Ecology survey code | Location | Centroid OS grid reference | Description of proposed survey location | CA | Approximate distance from the land required for the construction of the Proposed Scheme (m) and orientation |
|----------------------|--|----------------------------|--|------|---|
| | | | ponds and scattered scrub. | | |
| CH449513_L5886_RE2 | Land at Dairy House Farm, Stanthorne, Middlewich | SJ68766506 | Agricultural land - pastoral field sown with Italian rye grass. | MA02 | Within |
| CH642507_L20954_RE1 | Land south of Glaziers Lane, Culcheth, Warrington | SJ64859440 | Small parcel of agricultural land with scattered trees. | MA05 | 85m south |
| MAN128527_L21075_RE1 | The Bungalow, Sandy Lane, Lowton, Warrington | SJ62929828 | Rural property with garden and several fields used for grazing sheep and hay making. | MA05 | Within |
| MAN128527_L21133_RE1 | Cheetham Fold Farm, Sandy Lane, Lowton, Warrington | SJ63079830 | Rural property with garden and several fields used for grazing sheep and hay making. | MA05 | 1m east |
| GM48980_L5488_RE1 | Land north of Lightshaw Lane, Warrington | SJ61379966 | Improved/semi-improved grassland with ditches ponds and scrub. | MA05 | Within |

2.3 Baseline

Desk study results

- 2.3.1 Desk study records identified all four common species, adder (*Vipera berus*), common lizard (*Zootoca vivipara*), grass snake (*Natrix helvetica*) and slow worm (*Anguis fragilis*), as present within the study area.

Hough to Walley's Green (MA01)

- 2.3.2 No reptile desk study records were identified within the land required for the construction of the Proposed Scheme within MA01. Seven grass snake records were identified within 5km of the land required for the construction of the Proposed Scheme. No records for other reptile

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species were identified. The grass snake records were in Betley (1), Wybunbury (4), Coppenhall (1), and Maw Green (1). The closest of these to the land required for the construction of the Proposed Scheme, was in Coppenhall, approximately 620m to the south-east.

Wimboldsley to Lostock Gralam (MA02)

- 2.3.3 No reptile desk study records were identified within the land required for the construction of the Proposed Scheme within MA02. Thirteen grass snake records were identified within 5km of the land required for the construction of the Proposed Scheme, the majority of which were from the sewage works in Winsford, approximately 1.8km west. No records for other reptile species were identified within 5km of the land required for the construction of the Proposed Scheme.

Pickmere to Agden and Hulseheath (MA03)

- 2.3.4 One reptile record was identified within the land required for the construction of the Proposed Scheme within MA03, a common lizard, most likely in the margin of the M56 close to Agden House. One additional record was identified 2.6km west of the land required for the construction of the Proposed Scheme adjacent to the M56 in Primrose Hill.

Broomedge to Glazebrook (MA04)

- 2.3.5 Two common lizard and one grass snake records were identified within the land required for the construction of the Proposed Scheme within MA04. These were adjacent to the south-east boundary of Holcroft Moss adjacent to MA05. Sixteen additional records for grass snake (1), common lizard (12), and slow worm (3) were recorded within 5km of the land required for the construction of the Proposed Scheme in MA04. The closest of these was a record of common lizard 990m from the land required for the construction of the Proposed Scheme. In addition, 36 records of common lizard were recorded on Holcroft Moss, located adjacent to the northern boundary of MA04 in MA05. These are included in MA05 below.

Risley to Bamfurlong (MA05)

- 2.3.6 One common lizard record was identified within the land required for the construction of the Proposed Scheme within MA05, located at Holcroft Moss. In total, 187 records were identified within 5km of the land required for the construction of the Proposed Scheme in MA05. These were for adder (98), grass snake (16), common lizard (64) and slow worm (9). Thirty-six of these records were for common lizard from within Holcroft Moss, adjacent to the land required for the construction of the Proposed Scheme.

Hulseheath to Manchester Airport (MA06)

- 2.3.7 No reptile desk study records were identified within the land required for the construction of the Proposed Scheme within MA06. One common lizard record was identified 3.7km

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south-east and one slow worm 3.9km north of the land required for the construction of the Proposed Scheme.

Davenport Green to Ardwick (MA07)

- 2.3.8 No reptile desk study records were identified within the land required for the construction of the Proposed Scheme within MA07. Seventeen reptile records were identified within 5km of the land required for the construction of the Proposed Scheme including 14 slow worm and three grass snake. The closest record to the land required for the construction of the Proposed Scheme was a grass snake located approximately 670m west.

Manchester Piccadilly Station (MA08)

- 2.3.9 No reptile desk study records were identified within the land required for the construction of the Proposed Scheme or within 5km of it in MA08.

Field study results

- 2.3.10 Details of the locations where reptile surveys were conducted, and associated survey results, are provided in Table 2 and accompanying Ecology Map Series EC-07. Sites subject to a walkover survey and subsequently scoped out are also listed.
- 2.3.11 A review of aerial photography suggested that many areas appeared suitable for supporting reptiles; however, when ground-truthed during the field surveys, the quality, connectivity and suitability of habitats for reptile species was generally poor across MA01 to MA08. This judgement was based on an observed lack of field margins/headland, intense grazing pressure and/or few areas of permanently undisturbed habitat. The connectivity through the landscape for grass snake is provided by the various waterways, roadside verges and existing rail corridors that cross the landscape.
- 2.3.12 One hundred and ninety one sites were subject to reptile habitat assessment. A total of 55 sites were identified for refugia survey and surveys were completed at 30 of these sites. Surveys were partially completed at 25 sites where access became unavailable or surveys were abandoned due to repeated theft or disturbance of refugia. One site was identified for refugia survey but access was refused. Surveys were undertaken between 1 September 2017 and 26 September 2019.
- 2.3.13 Of the 55 sites identified for refugia survey, reptiles were recorded and confirmed as present at two. A low population of slow worm was recorded in MA01 and a low population of common lizard was recorded in MA05. Reptiles were considered likely to be absent from 51 of the surveyed sites and reptile presence was assumed at two sites where surveys were partially complete with fewer than four visits as it is considered that absence cannot be assumed without at least four survey visits. In addition, reptiles were assumed to be present at one site where there was anecdotal evidence of reptiles but no access to the site was available.

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Table 2: Summary of reptile survey work undertaken in MA01 to MA08

| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|------------------------------------|--|-------------------|----------------|----------------------|----------------------|-----------------------------|---|------|---|
| CH246162_L1 5903_RE1_020 817 | 13 Broughton Road, Crewe CW1 4NW | SJ70265744 | Refugia survey | 7 September 2017 | 26 October 2018 | 8 | Presence/absence survey conducted - reptiles assumed absent. | MA01 | Within |
| CH437357_L1 6111_RE1_310 717 | Land on the west and east sides of Broughton Road, Coppenhall, Crewe | SJ70265757 | Refugia survey | 1 September 2017 | 25 September 2018 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA01 | Within |
| CH121035_L1 5830_RE1_010 817 | Land to the west of Broughton Road, Coppenhall | SJ70155771 | Refugia survey | 20 September 2017 | 9 October 2018 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA01 | Within |
| CH324349_L1 5891_RE1_210 917 | Land on the west side of Mablins Lane, Crewe | SJ69655776 | Walkover only | 21 September 2017 | 21 September 2017 | 1 | Habitat assessment only - scoped out. | MA01 | 311m west |
| CH589878_L1 6026_RE1_010 817 | Land lying to the west of Broughton Road, Crewe | SJ70235794 | Refugia survey | 6 September 2017 | 10 October 2018 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA01 | Within |

⁷ Peak adult count of each species is listed.

⁸ Classification criteria in line with guidance from: Herpetofauna Groups of Britain and Ireland (1998), *Evaluating local mitigation/translocation programmes: Maintaining Best Practice and Lawful Standards*, HGBI advisory notes for Amphibian and Reptile Groups (ARGs), HGBI, c/o Froglife, Halesworth, unpublished.

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|------------------------------------|--|-------------------|----------------|-------------------|-----------------|-----------------------------|--|------|---|
| CH81069_L15 765_RE1_2509 17 | Land on the east side of Broughton Road, Crewe | SJ70375803 | Refugia survey | 13 September 2018 | 18 October 2018 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA01 | 16m west |
| CH88142_L16 182_RE1_2509 17 | Land on the south-east side of Parkers Road and the south-west side of Broughton Road, Crewe | SJ70195802 | Refugia survey | 25 September 2018 | 26 October 2018 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA01 | Within |
| CH45715_L16 198_RE1_0211 17 | Moss Farm, Broughton Road, Crewe | SJ70495806 | Refugia survey | 13 September 2018 | 18 October 2018 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA01 | Within |
| CH519167_L1 6018_RE1_160 118 | 25 Kents Lane, Crewe CW1 4PX | SJ70225836 | Walkover only | 16 January 2018 | 16 January 2018 | 1 | Habitat assessment only - scoped out. | MA01 | 59m east |
| CH615623_L6 328_RE1_1601 18 | Land north of Parkers road | SJ70205848 | Walkover only | 16 January 2018 | 16 January 2018 | 1 | Habitat assessment only - scoped out. | MA01 | 41m east |
| CH135902_L1 6033_RE1_010 218 | Land lying to the north-west of Warmingham Road, Monks Coppenhall | SJ70375844 | Walkover only | 1 February 2018 | 1 February 2018 | 1 | Habitat assessment only - scoped out. | MA01 | 141m east |
| CH230277_L5 895_RE1_1310 17 | Land on the south side of Grass Road, Leighton | SJ69685862 | Refugia survey | 13 September 2018 | 24 October 2018 | 6 | Reptiles assumed absent as majority of survey visits completed and | MA01 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|--|---|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| | | | | | | | based on local expert knowledge. | | |
| CH439836_L1 5955_RE1_280 917 | Land to the north-west side of Warmingham Road, Crewe | SJ70415864 | Refugia survey | 18 September 2018 | 25 July 2019 | 8 | Presence/absence survey conducted - reptiles assumed absent. | MA01 | 110m east |
| CH252879- CH616525_L5 046_RE1_3107 17 | Land at Minshull Vernon, Crewe, White House, Moss Lane, Minshull Vernon | SJ69495877 | Refugia survey | 12 June 2018 | 18 October 2018 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA01 | Within |
| CH380329_L1 6125_RE1_260 917 | Farm Cottage, Warmingham Road, Warmingham, Crewe, land on the west side of Warmingham Road, Warmingham, Crewe | SJ70545880 | Walkover only | 26 September 2017 | 26 September 2017 | 1 | Habitat assessment only - scoped out. | MA01 | Within |
| CH179051_L4 887_RE1_2609 17 | Land on the south side of Moss Lane, Minshull Vernon | SJ69215888 | Walkover only | 26 September 2017 | 26 September 2017 | 1 | Habitat assessment only - scoped out. | MA01 | 59m west |
| CH588855_L4 733_RE1_2807 17 | Spring Farm, Moss Lane, Minshull Vernon, Crewe, CW1 4RJ | SJ69675893 | Refugia survey | 7 September 2017 | 26 October 2018 | 8 | Presence/absence survey conducted - reptiles assumed absent. | MA01 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|------------------------------------|--|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| CH453005_L1 6137_RE1_260 917 | Moss Cottage, Moss Lane, Warmingham, Crewe CW1 4PW | SJ70295893 | Walkover only | 26 September 2017 | 26 September 2017 | 1 | Habitat assessment only - scoped out. | MA01 | Within |
| CH645921_L1 6295_RE1_250 917 | Land on the east side of Middlewich Road, Bradfield Green, Crewe | SJ68675911 | Walkover only | 25 September 2017 | 25 September 2017 | 1 | Habitat assessment only - scoped out. | MA01 | 89m west |
| CH496892_L1 6230_RE1_260 917 | Moss Lane Farm, Moss Lane, Warmingham, Crewe, CW1 4PW | SJ70495914 | Walkover only | 26 September 2017 | 26 September 2017 | 1 | Habitat assessment only - scoped out. | MA01 | Within |
| CH597265_L5 956_RE1_0208 17 | Moss Farm, Moss Lane, Warmingham, Crewe, CW1 4PW | SJ69905909 | Refugia survey | 7 September 2017 | 2 October 2018 | 10 | Presence/absence survey conducted - reptiles assumed absent. | MA01 | Within |
| CH645921_L1 6295_RE1_260 917 | Land on the east side of Middlewich Road, Bradfield Green, Crewe | SJ69175917 | Walkover only | 26 September 2017 | 26 September 2017 | 1 | Habitat assessment only - scoped out. | MA01 | 89m west |
| CH616525_L5 490_RE1_1210 17 | Land at Moss Lane, Minshull Vernon, Crewe CW1 4RL and land west of railway line, Crewe | SJ69375935 | Refugia survey | 7 September 2017 | 20 June 2018 | 7 | Presence/absence survey conducted. One slow worm peak count (low population). | MA01 | Within |
| CH483025_L1 6140_RE1_260 917 | Land lying to the west of Drury Lane, Warmingham, Crewe | SJ70095975 | Walkover only | 26 September 2017 | 26 September 2017 | 1 | Habitat assessment only - scoped out. | MA01 | 255m east |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|--------------------------------------|--|-------------------|----------------|-------------------|-----------------|-----------------------------|---|------|---|
| CH445194-CH606449_L5 379_RE1_1608 18 | Land at Parkfields Farm, Minshull Vernon, Middlewich, CW1 4RD | SJ69306074 | Walkover only | 3 June 2018 | 3 June 2018 | 1 | Habitat assessment only - scoped out. | MA01 | Within |
| CH596735-CH616525_L3 653_RE1_2308 18 | Agricultural land (The Cabin, Moat House Farm) | SJ68576066 | Walkover only | 23 August 2018 | 23 August 2018 | 1 | Habitat assessment only - scoped out. | MA01 | Within |
| CH286640-CH616525_L5 339_RE1_0108 17 | Land at Minshull Vernon, Crewe | SJ69236133 | Walkover only | 1 August 2017 | 1 August 2017 | 1 | Habitat assessment only - scoped out. | MA01 | Within |
| CH372436_L1 5997_RE1_241 017 | Newfield Hall, Middlewich Road, Minshull Vernon, Middlewich CW10 0LR | SJ68366170 | Walkover only | 24 October 2017 | 24 October 2017 | 1 | Habitat assessment only - scoped out. | MA01 | 13m south |
| CH438116-CH616525_L5 409_RE1_0108 17 | Land at Park Hall Farm, Minshull Vernon, Crewe | SJ69176187 | Refugia survey | 13 September 2017 | 24 October 2018 | 10 | Presence/absence survey conducted - reptiles assumed absent. | MA01 | Within |
| CH556853_L5 044_RE1_1210 17 | Road at Nantwich Road, Middlewich, Wimboldsley Hall, Wimboldsley, Middlewich, CW10 0LW | SJ68566204 | Walkover only | 12 October 2017 | 12 October 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|------------------------------------|---|-------------------|----------------|---------------------|----------------------|-----------------------------|---|------|---|
| CH643381_L5 856_RE1_0610 17 | The Verdin Arms, Wimboldsley, Middlewich, CW10 0LW | SJ68326213 | Refugia survey | 20 June 2018 | 9 October 2018 | 5 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA02 | Within |
| CH628338_L1 5879_RE1_030 817 | Land to the south-east of Middlewich Road, Minshull Vernon, Crewe, Railway | SJ68666206 | Refugia survey | 1 September 2017 | 20 September 2017 | 4 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA02 | Within |
| CH453851_L5 487_RE1_1210 17 | Land at the back of Rose Cottages, Nantwich Road, Wimboldsley, Middlewich, CW10 0LW, Land lying south-east of Nantwich Road, Crewe and land on the south-west side of Middlewich Road, Minshull Vernon, Crewe | SJ69016232 | Walkover only | 12 October 2017 | 12 October 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH556853_L5 320_N/A_1210 17 | Wimboldsley Hall Farm, Wimboldsley, Middlewich, CW10 0LW | SJ68906259 | Walkover only | 12 October 2017 | 12 October 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|-----------------------------------|---|-------------------|----------------|---------------------|---------------------|-----------------------------|--|------|---|
| CH452896_L5 334_RE1_0509 17 | Wimboldsley Grange, Nantwich Road, Wimboldsley, Middlewich, CW10 0LN | SJ67996332 | Walkover only | 5 September 2017 | 5 September 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH483359_L5 340_RE1_0509 17 | Land to the south of Clive Back Lane, Clive Green, Winsford | SJ67836386 | Walkover only | 5 September 2017 | 5 September 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH487718_L5 394_RE1_2807 17 | Agricultural land lying to the west of Nantwich Road, Stanthorne, Middlewich, Land lying to the west of Nantwich Road, Stanthorne, Middlewich | SJ68476407 | Refugia survey | 1 September 2017 | 9 October 2018 | 9 | Presence/absence survey conducted - reptiles assumed absent. | MA02 | Within |
| CH588305_L4 849_RE1_2002 18 | Part of Shropshire Union Canal lying to the west of Nantwich Road, Wimboldsley, Middlewich | SJ67746423 | Walkover only | 20 February 2018 | 20 February 2018 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH613208_L5 189_RE1_1310 17 | Land on the south side of Clive Green Lane, Stanthorne, Middlewich and Land on the west side of Leahead Cottages, Nantwich Road, Stanthorne, Middlewich CW10 0LJ | SJ68536458 | Refugia survey | 13 October 2017 | 30 October 2018 | 4 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA02 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|------------------------------------|--|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| CH342164_L1 6142_RE1_250 917 | Land on east side of Nantwich Road, Stanthorne | SJ68946490 | Walkover only | 25 September 2017 | 25 September 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH613208_L5 333_RE1_1310 17 | 5 to 8 Stanthorne Park Mews, Clive Green Lane, Stanthorne, Middlewich, CW10 0NZ, Stanthorne Parks, Clive Green Lane, Stanthorne, Middlewich, CW10 0NA and Stanthorne Park Mews, Clive Green Lane, Stanthorne, Middlewich, CW10 0NZ | SJ68186468 | Refugia survey | 13 June 2018 | 09 October 2018 | 5 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA02 | Within |
| CH449513_L5 886_RE1_0308 17 | Land at Dairy House Farm, Stanthorne, Middlewich | SJ68766506 | Walkover only | 3 August 2017 | 3 August 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH203954_L5 382_RE1_1210 17 | 4 Seaton Street, Winsford CW7 3NW, Yew Tree Farm, Coal Pit Lane, Stanthorne, Middlewich, CW10 9JS | SJ68376585 | Walkover only | 12 October 2017 | 12 October 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH5202_L538 1_RE1_070817 | Stanthorne Villa, Birch Lane, Stanthorne, Middlewich, CW10 9JR | SJ68516627 | Walkover only | 7 August 2017 | 7 August 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|--|--|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| CH249792_L1 5810_RE1_270 917 | Birch Lane Cottage, Birch Lane, Stanthorne | SJ68886660 | Refugia survey | 12 September 2018 | 26 October 2018 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA02 | Within |
| CH612701_L5 081_RE1_2803 18 | Land at Middlewich Road, Stanthorne, Middlewich | SJ69276654 | Walkover only | 28 March 2018 | 28 March 2018 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH612701_L5 140_RE1_3101 18 | Land at Middlewich Road, Stanthorne, Middlewich, Road Birch Lane, Stanthorne | SJ69006655 | Walkover only | 31 October 2018 | 31 October 2018 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH234515_L1 5799_RE1_270 917 | Petanna, Birch Lane, Stanthorne, Middlewich CW10 9JR, Stanthorne House, Middlewich Road, Stanthorne, Middlewich CW10 9JB | SJ68856669 | Walkover only | 27 September 2017 | 27 September 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH446766- CH614893_L5 405_RE1_0802 18 | Land at Bostock Road, Bostock, Middlewich and land at Winsford (referred to below as the mines and minerals) CW10 9JF | SJ68406765 | Walkover only | 8 February 2018 | 8 February 2018 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH446766- CH61489_L54 74_RE1_29031 8 | Woodland (Oak Wood, Middlewich) (Bostock Road, A533) CW10 9JF | SJ68076778 | Walkover only | 29 March 2018 | 29 March 2018 | 1 | Habitat assessment only - scoped out. | MA02 | 331m east |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|---|---|-------------------|----------------|-------------------|------------------|-----------------------------|---|------|---|
| CH446766-CH614832_L5 429_RE1_3110 17 | Land at Bostock Road, Bostock, Middlewich and land at Winsford (referred to below as the mines and minerals), CW10 9JN | SJ67926850 | Refugia survey | 25 September 2017 | 24 October 2018 | 9 | Presence/absence survey conducted - reptiles assumed absent. | MA02 | Within |
| CH446766_L4 782_RE1_1801 18 | Land at Winsford, Land on the east side of Trent and Mersey Canal, Byley, Middlewich | SJ68556875 | Walkover only | 18 January 2018 | 18 January 2018 | 1 | Habitat assessment only - scoped out. | MA02 | 75m east |
| CH446766-CH515800-CH534892_L5 061_RE1_0609 17 | Dairy Farm, Whatcroft Hall Lane, Whatcroft, Northwich, CW9 7SQ, land at Winsford (referred to below as the mines and minerals) | SJ68236888 | Walkover only | 6 September 2017 | 6 September 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH446766-CH515800-CH534892_L5 497_RE1_2308 17 | Dairy Farm, Whatcroft Hall Lane, Whatcroft, Northwich, CW9 7SQ, land at Winsford (referred to below as the mines and minerals) and Land at Winsford (referred to below as the mines and minerals) CW9 7SQ | SJ68536931 | Walkover only | 23 August 2017 | 23 August 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|---|--|-------------------|---------------|-------------------|-----------------|-----------------------------|---|------|---|
| CH446766-CH534892_L5 171_RE1_0612 17 | Dairy Farm, Whatcroft Hall Lane, Whatcroft, Northwich, CW9 7SQ and land at Winsford (referred to below as the mines and minerals) CW10 9LB | SJ68476966 | Walkover only | 6 December 2017 | 6 December 2017 | 1 | Habitat assessment only - scoped out. | MA02 | 18m west |
| CH446766_L4 974_RE1_0705 18 | Land at Winsford, CW9 7SQ, The Secret Garden and adjoining Paddock at Whatcroft Hall, Whatcroft CW9 7SQ | SJ68126812 | Walkover only | 7 May 2018 | 7 May 2018 | 1 | Habitat assessment only - scoped out. | MA02 | 59m west |
| CH446766-CH515800-CH534892_L4 054_RE1_0708 18 | Dairy Farm, Whatcroft Hall Lane, Whatcroft, Northwich CW9 7SQ and land at Winsford | SJ68517002 | Walkover only | 7 August 2018 | 7 August 2018 | 1 | Habitat assessment only - scoped out. | MA02 | 12m east |
| CH446766-CH515800-CH534892_L5 021_RE1_0108 17 | Dairy Farm, Whatcroft Hall Lane, Whatcroft, Northwich, CW9 7SQ, land at Winsford (referred to below as the mines and minerals) and land at Winsford (referred to below as the mines and minerals), CW9 7SQ | SJ68407008 | Walkover only | 1 August 2017 | 1 August 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|---|--|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| CH446766-CH515800-CH534892_L5101_RE1_010817 | Dairy Farm, Whatcroft Hall Lane, Whatcroft, Northwich, CW9 7SQ | SJ68187017 | Walkover only | 1 August 2017 | 1 August 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH635992_L17879_RE1_101217 | Land lying to the east of Yew Tree Farm, Davenham Road, Whatcroft, Northwich CW9 7RZ | SJ67977130 | Walkover only | 10 December 2017 | 10 December 2017 | 1 | Habitat assessment only - scoped out. | MA02 | 297m west |
| CH552565_L6101_RE1_140218 | Agricultural land and hedgerows (Davenham Road) | SJ68217153 | Walkover only | 14 February 2018 | 14 February 2018 | 1 | Habitat assessment only - scoped out. | MA02 | 28m west |
| CH575521_L17914_RE1_031017 | Park Farm Marina, Davenham Road, Billinge Green, Northwich | SJ68137162 | Walkover only | 3 October 2017 | 3 October 2017 | 1 | Habitat assessment only - scoped out. | MA02 | 15m west |
| CH333308_L6083_RE1_160118 | 4 Pear Tree Farm Cottage, Davenham Road, Billinge Green, Northwich and parking space CW9 7RY and Gadbrook Farm, Davenham Road, Rudheath, Northwich | SJ68637154 | Walkover only | 16 January 2018 | 16 January 2018 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH505004_L6247_RE1_260917 | Agricultural land, Lach Dennis | SJ68927186 | Refugia survey | 8 May 2018 | 27 September 2018 | 6 | Reptiles assumed absent as majority of survey visits | MA02 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|--------------------------------------|--|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| | | | | | | | completed and based on local expert knowledge. | | |
| CH402012-CH505004_L5 153_RE1_3101 18 | Land on the east and west side of King Street, Rudheath, Northwich | SJ68677205 | Walkover only | 31 January 2018 | 31 January 2018 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH403450_L5 271_RE1_0102 18 | Distribution Centre, WM Morrison Supermarkets plc, King Street, Rudheath, Northwich, CW9 7WA and land on the south-west side of King Street, Rudheath, Northwich | SJ68327213 | Walkover only | 1 February 2018 | 1 February 2018 | 1 | Habitat assessment only - scoped out. | MA02 | 90m west |
| CH505004_L5 424_RE1_2609 17 | Land on the east and west sides of King Street, Rudheath, Northwich | SJ69357202 | Refugia survey | 30 May 2018 | 27 September 2018 | 5 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA02 | Within |
| CH345680_L1 7930_RE1_041 017 | Land on the east side of Griffiths Road, Lostock, Northwich | SJ68737326 | Refugia survey | 1 June 2018 | 29 August 2018 | 3 | Reptiles assumed present as surveys not completed. | MA02 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|--|---|-------------------|---------------|-------------------|-------------------|-----------------------------|---|------|---|
| CH345680_L1 7917_RE1_041 017 | Land on the east side of Griffiths Road, Lostock, Northwich | SJ68417332 | Walkover only | 4 October 2017 | 4 October 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH398472- CH508081_L4 618_RE1_2201 18 | Land and Buildings on the south-west side of Birches Lane, Lostock Green, Northwich | SJ69467352 | Walkover only | 22 January 2018 | 22 January 2018 | 1 | Habitat assessment only - scoped out. | MA02 | 14m east |
| CH345680_L1 7925_RE1_041 017 | Land on the east side of Griffiths Road, Lostock, Northwich | SJ68707367 | Walkover only | 4 October 2017 | 4 October 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH502714_L1 7926_RE1_240 118 | Land on the east side of Griffiths Road, Lostock Gram, Northwich | SJ68847388 | Walkover only | 24 January 2018 | 24 January 2018 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH259484_L1 7878_RE1_051 017 | Land lying to the west of Station road, Lostock Gram, Northwich | SJ69037458 | Walkover only | 5 October 2017 | 5 October 2017 | 1 | Habitat assessment only - scoped out. | MA02 | 22m north-east |
| CH315313_L5 910_RE1_1012 17 | Land on the east and west sides of Moss Lane, Lostock Gram | SJ70387462 | Walkover only | 10 December 2017 | 10 December 2017 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH449387_L6 086_RE1_2103 18 | Industrial land and road surrounding Cheshire Business Park | SJ69717517 | Walkover only | 21 March 2018 | 21 March 2018 | 1 | Habitat assessment only - scoped out. | MA02 | Within |
| CH187305_L5 965_RE1_2109 17 | Millwood, Cranage Villas, Chester Road, Plumley, Knutsford, WA16 0UB and | SJ70437553 | Walkover only | 21 September 2017 | 21 September 2017 | 1 | Habitat assessment only - scoped out. | MA02 | 38m east |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ^a | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|-----------------------------------|---|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| | land on the north-east side of Ascol Drive and on the south-east side of Chester Road, Plumley, Knutsford | | | | | | | | |
| CH134605_L5 935_RE1_2009 17 | Land on the north-west side of Manchester Road, Lostock Gralam, Plumley | SJ70067565 | Refugia survey | 25 April 2018 | 30 May 2018 | 3 | Reptiles assumed present as surveys not completed. | MA02 | Within |
| CH344686_L5 011_RE1_0110 17 | Home Farm, Linnards Lane, Wincham, Northwich | SJ70057592 | Refugia survey | 9 May 2018 | 27 September 2018 | 5 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA02 | Within |
| CH499496_L5 787_RE1_2009 17 | Land on the north-west side of Chester Road, Plumley, Knutsford and land on the south side of Linnards Lane, Wincham, River | SJ70237596 | Refugia survey | 8 May 2018 | 27 September 2018 | 6 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA02 | Within |
| CH570938_L5 150_RE1_1409 17 | Frog Lane Farm, Pickmere, Beech House, Hall Lane, Pickmere | SJ69487813 | Walkover only | 14 September 2017 | 14 September 2017 | 1 | Habitat assessment only - scoped out. | MA03 | 417m south |
| CH570938_L5 321_RE1_1409 17 | Frog Lane Farm, Pickmere, Beech House, Hall Lane, Pickmere | SJ69647860 | Walkover only | 14 September 2017 | 14 September 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|-----------------------------------|--|-------------------|---------------|-------------------|-------------------|-----------------------------|---|------|---|
| CH623030_L6 330_RE1_2103 18 | Agricultural land to the north of Budworth Road | SJ70107924 | Walkover only | 21 March 2018 | 21 March 2018 | 1 | Habitat assessment only - scoped out. | MA03 | Within |
| CH131342_L5 174_RE1_0908 17 | Land adjoining Hollowood Farm and land known as Tabley Wood, Old Hall Lane, Tabley Superior, Land lying to the north-west of Old Hall Lane, Over Tabley, Knutsford | SJ71377997 | Walkover only | 9 August 2017 | 9 August 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |
| CH258462_L5 350_RE1_1309 17 | Hollowood Farm, Over Tabley, Knutsford and land adjoining Hollowood Farm and Tabley Wood lying to the north-west of Old Hall Lane, Tabley Superior | SJ71078012 | Walkover only | 13 September 2017 | 13 September 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |
| CH275897_L5 249_RE1_1309 17 | Land to the south-west side of Hollowood Farm, Tabley, Knutsford | SJ70408019 | Walkover only | 13 September 2017 | 13 September 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |
| CH131342_L5 118_RE1_0509 17 | Land adjoining Hollowood Farm and Tabley Wood to the north-west of Old Hall Lane, Tabley Superior | SJ70748022 | Walkover only | 5 September 2017 | 5 September 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|---|--|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| CH434587_L5 232_RE1_1309 17 | Hollowood Farm, Over Tabley, Knutsford, Land adjoining Hollowood Farm and Tabley Wood to the north-west of Old Hall Lane, Tabley Superior | SJ70708043 | Walkover only | 13 September 2017 | 13 September 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |
| CH400937_L4 774_RE1_1210 17 | Goodiers Green Farm, Winterbottom Lane, Mere, Cheshire WA16 0QG | SJ71208206 | Refugia survey | 9 May 2018 | 27 September 2018 | 6 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA03 | 1m west |
| CH575612- CH612686_L2 1091_RE1_300 817 | Agricultural land and Pylon and land at Bowden View Farm, Bowden View Lane, Mere, Knutsford, WA16 0QD | SJ71718318 | Walkover only | 30 August 2017 | 30 August 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |
| U200964_L62 56_RE1_30081 7 | Agricultural land lying north-west of Hulseheath Lane, Knutsford, Land adjoining Bowden View Farm, Bowden View Lane, Mere, Knutsford, WA16 0QD | SJ71948364 | Walkover only | 30 August 2017 | 30 August 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|------------------------------------|--|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| U200940_L54 70_RE1_23081 7 | Land lying south of Peacock Lane, Knutsford | SJ71728404 | Refugia survey | 9 May 2018 | 27 September 2018 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA03 | Within |
| CH448367_L4 985_RE1_1608 17 | Moss House Farm, Thowler Lane, Millington, Altrincham WA14 3RJ | SJ71928443 | Walkover only | 16 August 2017 | 16 August 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |
| U201013_L60 96_RE1_22081 7 | Agricultural land lying east of Moss Lane, Lymm | SJ71408461 | Walkover only | 22 August 2017 | 22 August 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |
| CH289151_L5 779_RE1_1008 17 | Boothbank Cottage, Booth Bank Lane, Macclesfield, WA14 3RG, land on the north west side of Booth Bank Cottage, Booth Bank Lane, Agden and land on the north-west side of Boothbank Lane, Agden | SJ72168493 | Walkover only | 10 August 2017 | 10 August 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |
| CH410526_L2 1122_RE1_220 817 | Land on the north-west side of Booth Bank Cottage, Booth Bank Lane, Agden and land on the north-west side of Boothbank Lane, Agden | SJ72048489 | Walkover only | 22 August 2017 | 22 August 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|---|--|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| CH308879_L2 1048_RE1_150 817 | Land lying north and south of Agden Lane, Agden and High Legh | SJ71548498 | Refugia survey | 10 May 2018 | 28 September 2018 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA03 | Within |
| CH409597_L6 036_RE1_1008 17 | Land on the north side of Agden Lane, High Legh, WA16 6NY | SJ71628508 | Walkover only | 10 August 2017 | 10 August 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |
| CH367059_L2 1102_RE1_021 117 | Nags Head, Chester Road, Macclesfield WA14 3RX and public road (Chester road) and hedgerow | SJ74048539 | Walkover only | 2 November 2017 | 2 November 2017 | 1 | Habitat assessment only - scoped out. | MA03 | 38m north |
| CH410526_L2 1123_RE1_220 817 | Booth Bank Lane, Agden, High Legh, Cheshire East, WA14 3RH | SJ71968491 | Walkover only | 22 August 2017 | 22 August 2017 | 1 | Habitat assessment only - scoped out. | MA03 | Within |
| CH410639_L5 880_RE1_2903 18 | Land on the north and south sides of Spring Lane, Lymm | SJ71298748 | Walkover only | 29 March 2018 | 29 March 2018 | 1 | Habitat assessment only - scoped out. | MA04 | Within |
| CH250245- CH94931_L53 80_RE1_17011 8 | Heatley Farm, Wet Gate Lane, Lymm WA13 9SL and Little Heatley Farm, Heatley, Lymm | SJ71298746 | Walkover only | 17 January 2018 | 17 January 2018 | 1 | Habitat assessment only - scoped out. | MA04 | Within |
| CH580019_L5 967_RE1_2103 18 | Wet Gate Lane Farm, Wet Gate Lane, Lymm, WA13 9SJ | SJ71508769 | Walkover only | 21 March 2018 | 21 March 2018 | 1 | Habitat assessment only - scoped out. | MA04 | 4m south |

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|-------------------------------------|---|-------------------|----------------|-------------------|------------------|-----------------------------|---|------|---|
| GM451813-MAN44064_L5970_RE1_280318 | Agricultural land lying south of Paddock Lane, Warbuton | SJ70878835 | Walkover only | 28 March 2018 | 28 March 2018 | 1 | Habitat assessment only - scoped out. | MA04 | Within |
| GM779015_L5903_RE1_280318 | Land and buildings on the west side of Bent Lane, Warburton, Lymm and Land at The Bent Farm | SJ70888894 | Walkover only | 28 March 2018 | 28 March 2018 | 1 | Habitat assessment only - scoped out. | MA04 | Within |
| GM932657_L6334_RE1_011118 | Land north of Paddock Lane (A6144) | SJ70338925 | Walkover only | 1 November 2018 | 1 November 2018 | 1 | Habitat assessment only - scoped out. | MA04 | Within |
| GM932762-MAN140976_L5473_RE1_290318 | Land to the west of Warburton Lane, Lymm | SJ70728942 | Walkover only | 29 March 2018 | 29 March 2018 | 1 | Habitat assessment only - scoped out. | MA04 | Within |
| GM711551-GM932762_L4700_RE1_050118 | Land at Warburton Estate, Warburton, Lymm | SJ70838952 | Walkover only | 5 January 2018 | 5 January 2018 | 1 | Habitat assessment only - scoped out. | MA04 | Within |
| GM320678_L5863_RE1_150318 | Millbank Hall Farm, Lock Lane, Partington, Manchester, M31 4BS | SJ70978952 | Walkover only | 15 March 2018 | 15 March 2018 | 1 | Habitat assessment only - scoped out. | MA04 | Within |
| CH241489_L5932_RE1_270318 | Land on the south-east side of Manchester Road, Hollins Green | SJ70199091 | Refugia survey | 21 June 2018 | 5 September 2018 | 5 | Reptiles assumed absent as majority of survey visits | MA04 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|---|--|-------------------|---------------|-------------------|-----------------|-----------------------------|--|------|---|
| | | | | | | | completed and based on local expert knowledge. | | |
| CH174016_L2 6080_RE1_100 118 | Land lying to the west of Bank Street, Glazebrook | SJ70009112 | Walkover only | 10 January 2018 | 10 January 2018 | 1 | Habitat assessment only - scoped out. | MA04 | Within |
| CH313259_L2 1032_RE1_070 318 | Land to the east of Dam Head Lane, Glazebrook | SJ69359211 | Walkover only | 7 March 2018 | 7 March 2018 | 1 | Habitat assessment only - scoped out. | MA04 | Within |
| CH569904_L2 1184_RE1_140 118 | Hollingreave Farm, Dam Lane, Rixton, Warrington, WA3 6LE | SJ69119226 | Walkover only | 14 January 2018 | 14 January 2018 | 1 | Habitat assessment only - scoped out. | MA04 | Within |
| CH661922_L2 1451_RE1_110 418 | Agricultural land lying north of Dam Head Lane, Glazebrook | SJ68849234 | Walkover only | 11 April 2018 | 11 April 2018 | 1 | Habitat assessment only - scoped out. | MA04 | Within |
| CH395409- CH401121_L5 934_RE1_1004 18 | Church Farm, land on the west side of Glazebrook Lane, Glazebrook, and land to the west of Glazebrook Lane, Glazebrook | SJ69189253 | Walkover only | 10 April 2018 | 10 April 2018 | 1 | No access for presence/absence survey. Reptiles assumed present. | MA04 | Within |
| CH198525- CH558854_L2 1219_RE1_200 318 | Beechfield Farm, Moss Lane, Rixton, Warrington, WA3 6AD | SJ68699285 | Walkover only | 20 March 2018 | 20 March 2018 | 1 | Habitat assessment only - scoped out. | MA04 | Within |

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|---|--|-------------------|----------------|-------------------|-------------------|-----------------------------|--|------|---|
| CH198535-CH414713-U201189_L21396_RE1_200619 | Agricultural land and part of woodland lying south of M62, Birchwood, Warrington | SJ68519256 | Refugia survey | 20 June 2019 | 26 September 2019 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA05 | Within |
| CH329686_L21217_RE1_070618 | Hanging Birch Farm, Holcroft Lane, Culcheth, Warrington WA3 5AN, land south of the M62, and land south of M62 at Holcroft Moss, Culcheth | SJ67959306 | Refugia survey | 21 June 2018 | 19 September 2019 | 8 | Presence/absence survey conducted. 12 common lizard peak count (low population). | MA05 | Within |
| CH319763_L5068_RE1_071118 | Land to the east of Birchwood Way, Croft, Warrington, WA3 6BY | SJ68479327 | Walkover only | 7 November 2018 | 7 November 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| CH510589_L4979_RE1_310518 | Land at New Hall Farm, New Hall Lane, Culcheth, WA3 5EE | SJ67059363 | Refugia survey | 27 June 2018 | 10 October 2018 | 8 | Presence/absence survey conducted - reptiles assumed absent. | MA05 | 3m east |
| CH103951_L5080_RE1_310518 | Moss Side Farm, Silver Lane, Croft, Warrington | SJ66069397 | Refugia survey | 22 June 2018 | 10 October 2018 | 8 | Presence/absence survey conducted - reptiles assumed absent. | MA05 | Within |
| CH510589_L5485_RE1_310518 | Land at New Hall Farm, New Hall Lane, Culcheth, WA3 5EE | SJ66769401 | Refugia survey | 22 June 2018 | 10 October 2018 | 8 | Presence/absence survey conducted - reptiles assumed absent. | MA05 | Within |

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Ecological baseline data – reptiles

| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|--|--|-------------------|---------------|--------------------|--------------------|-----------------------------|---|------|---|
| CH510589_L4 916_RE1_3105 18 | Land at New Hall Farm, New Hall Lane, Culcheth, WA3 5EE | SJ84169074 | Walkover only | 31 May 2018 | 31 May 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| SJ65949407C H571149_L21 223_RE1_1403 18 | Ratcliffe House Farm, Bent Lane, Culcheth, WA3 5ER | SJ66789455 | Walkover only | 14 March 2018 | 14 March 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| CH140887_L6 110_RE1_0711 18 | 91 Wigshaw Lane, Culcheth, Warrington WA3 4AD | SJ64879483 | Walkover only | 7 November 2018 | 7 November 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| CH96746_L59 38_RE1_05041 8 | Blakeley Farm, Wigshaw Lane, Culcheth, Warrington, WA3 4AG and land lying to the south- west of Leigh Golf Course, Kenyon | SJ64229502 | Walkover only | 05 April 2018 | 05 April 2018 | 1 | Habitat assessment only - scoped out. | MA05 | 10m south |
| CH445123_L2 1168_RE1_180 118 | Land to the south-west of Broseley Avenue, Culcheth, Warrington | SJ64379540 | Walkover only | 18 January 2018 | 18 January 2018 | 1 | Habitat assessment only - scoped out. | MA05 | 10m south |
| CH375511_L2 0988_RE1_071 118 | Wilton Grange, 90 Kenyon Lane, Kenyon WA3 4AX | SJ63159588 | Walkover only | 7 November 2018 | 7 November 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| CH399964_L2 0964_RE1_071 118 | Land to the west of Kenyon Lane, Culcheth | SJ63119591 | Walkover only | 7 November 2018 | 7 November 2018 | 1 | Habitat assessment only - scoped out. | MA05 | 42m west |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|------------------------------------|---|-------------------|---------------|-------------------|-----------------|-----------------------------|---|------|---|
| CH382722_L5 099_RE1_0504 18 | Land on the east side of Kenyon Lane, Kenyon | SJ63379591 | Walkover only | 5 April 2018 | 5 April 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| CH103739_L5 159_RE1_0504 18 | Land and buildings on the west side of Broseley Lane and land on the east and west of Wilton Lane known as Broseley Hall Farm, Culcheth and Glazebury | SJ64049591 | Walkover only | 5 April 2018 | 5 April 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| CH382722_L5 132_RE1_0504 18 | Land on the east side of Kenyon Lane, Kenyon | SJ63509609 | Walkover only | 5 April 2018 | 5 April 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| CH103739_L5 136_RE1_0504 18 | Land lying south of Wilton Lane, Culcheth, Warrington | SJ84019012 | Walkover only | 5 April 2018 | 5 April 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| CH626573_L5 173_RE1_0504 18 | Land lying south of Wilton Lane, Culcheth, Warrington | SJ63869587 | Walkover only | 5 April 2018 | 5 April 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| CH412504_L5 088_RE1_2903 18 | Land on the south side of Wilton Lane, Kenyon | SJ63779639 | Walkover only | 29 March 2018 | 29 March 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| MAN221207_ L5398_RE1_29 0318 | Dickinsons Farm, Kenyon Lane, Lowton, Warrington, WA3 1LG | SJ63159655 | Walkover only | 29 March 2018 | 29 March 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|------------------------------------|---|-------------------|----------------|-------------------|------------------|-----------------------------|---|------|---|
| CH434602_L5 331_RE1_2903 18 | Birchalls Farm, Wilton Lane, Culcheth, Warrington, WA3 4BA | SJ63709678 | Walkover only | 29 March 2018 | 29 March 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| GM754517_L2 1114_RE1_200 218 | Road (Enterprise Way), V B G Ltd, Enterprise Way, Lowton, Warrington, WA3 2AG | SJ64879483 | Walkover only | 20 February 2018 | 20 February 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| MAN133176_ L6238_RE1_10 0418 | Woodland and agricultural land (west of Cheetham Fold Farm, Sandy Lane, Lowton, Warrington) | SJ63079799 | Walkover only | 10 April 2018 | 10 April 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| MAN171798_ L5909_RE1_19 0318 | Land to the east of Garton Drive, Lowton, Warrington | SJ62739796 | Refugia survey | 5 June 2018 | 5 September 2018 | 5 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA05 | Within |
| GM886606_L5 890_RE1_1204 18 | Land and buildings at 2 Garton Common, Slag Lane, Lowton, Warrington, WA3 1BY and Warren Croft Farm, Garton Common, Lowton, Warrington, WA3 1BY | SJ62629820 | Walkover only | 12 April 2018 | 12 April 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|--------------------------------------|---|-------------------|---------------|-------------------|------------------|-----------------------------|---|------|---|
| GM 216299_L601 7_RE1_081118 | Land at the back of 2 Garton Common, Slag Lane, Lowton | SJ62499828 | Walkover only | 8 November 2018 | 8 November 2018 | 1 | Habitat assessment only - scoped out. | MA05 | 42m south-east |
| GM785913_L5 199_RE1_2802 18 | Red House Farm, Sandy Lane, Lowton, Warrington, WA3 1BD | SJ62789835 | Walkover only | 28 February 2018 | 28 February 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| U202318-U202511_L21 333_RE1_1004 18 | Land south of Byrom Lane | SJ62919850 | Walkover only | 10 April 2018 | 10 April 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| GM482769_L4 205_RE1_0811 18 | Land lying to the west of Slag Lane, Lowton, WA3 1BS | SJ62499883 | Walkover only | 8 November 2018 | 8 November 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| GM153253_L5 103_RE1_2903 18 | Pegasus Arabians, Lower Rothwells Farm, Lowton Road, Golborne | SJ61539904 | Walkover only | 29 March 2018 | 29 March 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| GM344974-GM425997_L6 245_RE1_2803 18 | Land on the west side of Wigan Road, Golborne, Warrington | SJ60649936 | Walkover only | 28 March 2018 | 28 March 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| GM105934_L5 201_RE1_1903 18 | Land to the north of Ashton Road, Golborne | SJ60499930 | Walkover only | 19 March 2018 | 19 March 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|---|---|-------------------|---------------|-------------------|------------------|-----------------------------|---|------|---|
| GM587528_L5 868_RE1_2803 18 | Critchley House, Lightshaw Lane, Lowton, Warrington WA3 1BS | SJ61969931 | Walkover only | 28 March 2018 | 28 March 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| GM103220_L5 368_RE1_0404 18 | Land on the south-west side of Lightshaw Lane, Golborne, Wigan Road Farm, Wigan Road, Golborne, Warrington, WA3 3UF and Windy Bank Farm, Wigan Road, Golborne | SJ61309947 | Walkover only | 4 April 2018 | 4 April 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| GM484980- MAN211851_ L5488_RE1_04 0418 | Agricultural land (east of Hillcroft, Lightshaw Lane, Golborne, Warrington WA3 3UH), Hillcroft, Lightshaw Lane, Golborne, Warrington WA3 3UH, land north of Lightshaw Lane, Warrington, land on the north side of Lightshaw Hall, Lightshaw Lane, Golborne, Warrington WA3 3UJ and Lightshaw Hall Farm, Lightshaw Lane, Golborne, Warrington WA3 3UJ | SJ61379966 | Walkover only | 4 April 2018 | 4 April 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|-----------------------------------|---|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| GM425997_L5 285_RE1_2803 18 | Balmers Farm, Wigan Road, Golborne, Warrington WA3 3UQ and Public road, verges and public footpaths (03, 25 and 27), (Wigan Road and Aye Bridge Road) | SJ60589977 | Walkover only | 28 March 2018 | 28 March 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| GM425997_L5 141_RE1_2803 18 | Balmers Farm, Wigan Road, Golborne, Warrington WA3 3UQ | SJ60640003 | Refugia survey | 19 June 2018 | 27 September 2018 | 8 | Presence/absence survey conducted - reptiles assumed absent. | MA05 | Within |
| GM425997_L4 982_RE1_2703 18 | Balmers Farm, Wigan Road, Golborne, Warrington WA3 3UQ | SD60640003 | Walkover only | 27 March 2018 | 27 March 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| GM425997_L4 980_RE1_2703 18 | Balmers Farm, Wigan Road, Golborne, Warrington WA3 3UQ | SD60910006 | Walkover only | 27 March 2018 | 27 March 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| U202766_L21 306_RE1_0811 18 | Agricultural land east of Aye Bridge Road | SD60880015 | Walkover only | 8 November 2018 | 8 November 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| U201103_L21 304_RE1_0611 18 | Agricultural Land boarded by public road (Warrington Road, A573) to the east, and Hey Brook to the west. | SD60880015 | Walkover only | 6 November 2018 | 6 November 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|------------------------------------|---|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| U201102_L21303_RE1_061118 | Hey Brook and land on the West side of Public Road (Warrington Road, A573) | SD60720043 | Walkover only | 6 November 2018 | 6 November 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| GM425997-GM917074_L6100_RE1_310118 | Agricultural land, woodland and buildings at Aye Bridge Farm lying west of Aye Bridge Road, Abram | SD60540039 | Walkover only | 31 January 2018 | 31 January 2018 | 1 | Habitat assessment only - scoped out. | MA05 | Within |
| GM682479-L21128_RE1_270318 | Land lying the south-west of Warrington Road, Abram | SD60510154 | Walkover only | 27 March 2018 | 27 March 2018 | 1 | Habitat assessment only - scoped out. | MA05 | 180m east |
| CH510589_L5095_RE1_310518 | Croft, Culcheth, Warrington | SJ66759423 | Refugia survey | 31 May 2018 | 10 October 2018 | 8 | Presence/absence survey conducted, reptiles assumed absent. | MA05 | Within |
| CH542392_L5231_RE1_040817 | Land on the north and south sides of Castle Mill Lane, Ashley, Altrincham WA15 0QZ | SJ79558357 | Walkover only | 4 August 2017 | 4 August 2017 | 1 | Habitat assessment only - scoped out. | MA06 | Within |
| CH480792_L5149_RE1_070917 | Chapel House Farm, Castle Mill Lane, Ashley, Altrincham, WA15 0QZ | SJ79318373 | Refugia survey | 10 May 2018 | 28 September 2018 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA06 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|------------------------------------|---|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| CH421325_L5 907_RE1_0709 17 | Land on the north-west side of Mill Road, Altrincham | SJ79738380 | Walkover only | 7 September 2017 | 7 September 2017 | 1 | Habitat assessment only - scoped out. | MA06 | Within |
| GM771626_L5 867_RE1_0709 17 | Castle Mill Farm, Mill Lane, Ashley, Altrincham WA15 0RD | SJ79868395 | Walkover only | 7 September 2017 | 7 September 2017 | 1 | Habitat assessment only - scoped out. | MA06 | Within |
| CH237195_L4 3289_RE1_040 817 | Land on the south-east side of Back Lane, Ashley | SJ78968397 | Walkover only | 4 August 2017 | 4 August 2017 | 1 | Habitat assessment only - scoped out. | MA06 | Within |
| CH542392_L5 218_RE1_0408 17 | Land on the north and south sides of Castle Mill Lane, Ashley, Altrincham, WA15 0QZ | SJ79558396 | Refugia survey | 10 May 2018 | 28 September 2018 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA06 | Within |
| CH333422_L5 796_RE1_0709 17 | Land on the north side of Little Thorns Green Farm, Back Lane, Ashley WA15 0QX, land on the north, south and west side of Castle Mill Lane, Ashley, Altrincham, Lane End Cottages, Castle Mill Lane, Ashley, Altrincham, WA15 0QT. Tanyard Farm, Castle Mill Lane, Ashley, Altrincham, WA15 0QT and Little Thorn Greens | SJ78938403 | Refugia survey | 11 May 2018 | 28 September 2018 | 6 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA06 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|--|---|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| | Farm, Back Lane, Ashley, Altrincham WA15 0QX | | | | | | | | |
| CH121954_L4 667_RE1_1303 18 | Land to the west side of Millington Hall Lane, Millington | SJ72748407 | Walkover only | 13 March 2018 | 13 March 2018 | 1 | Habitat assessment only - scoped out. | MA06 | 19m south-east |
| GM865079_L5 823_RE1_0609 17 | Land adjoining Yew Tree Barn, Sunbank Lane, Ringway, Altrincham, WA15 0PY | SJ79908430 | Refugia survey | 10 May 2018 | 28 September 2018 | 6 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA06 | Within |
| GM354762_L6 041_RE1_0609 17 | Lingerfields, Sunbank Lane, Ringway | SJ79988437 | Refugia survey | 10 May 2018 | 28 September 2018 | 6 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA06 | Within |
| CH438356_L5 053_RE1_2308 17 | Land on the south side of Boothbank Lane | SJ72408440 | Walkover only | 23 August 2017 | 23 August 2017 | 1 | Habitat assessment only - scoped out. | MA06 | Within |
| GM347593- GM579478_L6 042_RE1_0609 17 | Bollinbrook Sunbank Lane, Ringway, WA15 0PY and Bollinbrook, Sunbank Lane, Ringway, Altrincham WA15 0PY | SJ80018444 | Walkover only | 6 September 2019 | 6 September 2019 | 1 | Habitat assessment only - scoped out. | MA06 | 1m east |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|------------------------------------|--|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| CH200252_L2 1096_RE1_230 817 | Hilltop, Thowler Lane, Millington, Ivy House Farm, Thowler Lane, Millington, Altrincham WA14 3RJ | SJ72078449 | Walkover only | 23 August 2017 | 23 August 2017 | 1 | Habitat assessment only - scoped out. | MA06 | Within |
| GM742096_L5 884_RE1_0609 17 | Hale Bank Farm, Sunbank Lane, Ringway, WA15 0QA | SJ79808454 | Refugia survey | 11 May 2018 | 28 September 2018 | 5 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA06 | Within |
| CH91775_L43 404_RE1_0509 17 | 16 Haslemere Avenue, Hale Barns, Altrincham WA15 0AU and 18 Haslemere Avenue, Hale Barns | SJ79338463 | Refugia survey | 11 May 2018 | 28 September 2018 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA06 | 65m east |
| GM353579_L4 740_RE1_0111 17 | Land lying to the west of Sunbank Lane, Ringway | SJ79458463 | Walkover only | 1 November 2017 | 1 November 2017 | 1 | Habitat assessment only - scoped out. | MA06 | Within |
| GM353579_L4 754_RE1_0111 17 | Land to the west of Sunbank Lane, Ringway | SJ79558465 | Walkover only | 1 November 2017 | 1 November 2017 | 1 | Habitat assessment only - scoped out. | MA06 | Within |
| GM17960_L43 438_RE1_0603 18 | Land on the east side of Chapel Lane and land on the south side of Sunbank Lane, Hale | SJ79798476 | Walkover only | 6 March 2018 | 6 March 2018 | 1 | Habitat assessment only - scoped out. | MA06 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|-------------------------------------|--|-------------------|----------------|-------------------|----------------------|-----------------------------|---|------|---|
| CH448367_L5 212_RE1_1910 17 | Moss House Farm, Thowler Lane, Millington, Altrincham, WA14 3RJ | SJ72348483 | Refugia survey | 9 May 2018 | 27 September 2018 | 6 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA06 | Within |
| GM385440_L4 992_RE1_0111 17 | Land to the south of Hale Road, Hale Barns, Altrincham and land on the north and south sides of the M56 lying to the north of Sunbank Lane, Hale | SJ79988488 | Walkover only | 1 November 2017 | 1 November 2017 | 1 | Habitat assessment only - scoped out. | MA06 | Within |
| MAN212521_ L43441_RE1_0 30817 | Land to the south of Hale Road, Hale Barns, Altrincham | SJ80078505 | Refugia survey | 11 May 2018 | 28 September 2018 | 6 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA06 | Within |
| CH325341_L5 032_RE1_0908 17 | Land on the north-east side of Millington Lane, Millington | SJ73058512 | Refugia survey | 9 May 2018 | 27 September 2018 | 6 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA06 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|-----------------------------------|--|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| CH325341_L5 191_RE1_0908 17 | Land on the north-east side of Millington Lane, Millington | SJ72858513 | Refugia survey | 9 May 2018 | 27 September 2018 | 6 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA06 | 82m north |
| GM629089_L5 813_RE1_0308 17 | Land to the north-west of Hasty Lane, Hale Barns | SJ80158551 | Refugia survey | 11 May 2018 | 28 September 2018 | 5 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA06 | Within |
| GM916185_L5 844_RE1_0609 17 | Hale Barns Cricket Club, Brooks Drive, Hale Barns, Altrincham, WA15 8TW | SJ80068558 | Refugia survey | 6 September 2017 | 28 September 2018 | 5 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA06 | Within |
| GM112487_L5 841_RE1_0709 17 | Flaxhigh Covert lying to the south-east of Brooks Drive, Hale Barns | SJ80138569 | Walkover only | 7 September 2017 | 7 September 2017 | 1 | Habitat assessment only - scoped out. | MA06 | Within |
| GM908609_L5 017_RE1_0508 17 | Davenport Cottage, Davenport Green Hall, Shay Lane, Hale Barns, Altrincham, WA15 8UD and Davenport Green | SJ80268637 | Walkover only | 5 August 2017 | 5 August 2017 | 1 | Habitat assessment only - scoped out. | MA06 | 7m north-west |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|--|--|-------------------|----------------|-------------------|-------------------|-----------------------------|---|------|---|
| | Hall, Shay Lane, Hale Barns, Altrincham WA15 8UD | | | | | | | | |
| GM53625-GM686564-LA6860-MAN143601-MAN157151-U201607_L8831_RE1_260619 | Didsbury Golf Club, Ford Lane, Northenden, Manchester, M22 4NQ | SJ84019012 | Refugia survey | 26 June 2019 | 17 September 2019 | 6 | Reptiles assumed absent as majority of survey visits completed and based on local expert knowledge. | MA07 | 15m south |
| GM53625-GM686564-LA6860-MAN143601-MAN157151-U200750-U201607_L8860_RE1_250619 | Land on the south-east side of Palatine Road | SJ83499073 | Refugia survey | 26 June 2019 | 25 September 2019 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA07 | Within |
| GM686564_L5033_RE1_250619 | Land on the north side of Ford Lane, Didsbury | SJ84169074 | Refugia survey | 25 June 2019 | 25 September 2019 | 7 | Presence/absence survey conducted - reptiles assumed absent. | MA07 | Within |

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| Ecology survey code | Location | OS grid reference | Survey method | Survey start date | Survey end date | No. survey visits completed | Survey result ⁷ (population size class) ⁸ | CA | Approximate distance from the land required for the Proposed Scheme (m) and orientation |
|-----------------------------------|--|-------------------|---------------|-------------------|-----------------|-----------------------------|---|------|---|
| GM605298_L5 002_RE1_3110 18 | Land to the south-west of Gorton Road, Ardwick and land lying to the south- west of Gorton Road, Ardwick, Manchester | SJ86499735 | Walkover only | 31 October 2018 | 31 October 2018 | 1 | Habitat assessment only - scoped out. | MA07 | Within |

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Hough to Walley's Green (MA01)

- 2.3.14 The study area is predominantly to the north of Crewe, with most of the route through Crewe in tunnel. The surrounds of the large town are suburban in character, with agricultural land beyond. After consultation with Manchester Biodiversity Partnership, Cheshire Wildlife Trust and Lancashire Wildlife Trust, the study area is not considered suitable to support a large or widespread population of reptiles.
- 2.3.15 Of the 29 sites subject to reptile habitat assessment in MA01, 15 were scoped out and 14 identified as requiring reptile refugia (presence/absence) survey. Of these 14, reptile refugia surveys were completed at 13 sites and partially completed at one. A small slow worm population was confirmed on one site near Coppenhall Junction, south of Larch Wood and north of Spring Farm. No reptiles were recorded at the other 13 sites subject to presence/absence surveys. Reptiles are assumed absent at the single site subject to partially completed survey, as at least four survey visits were completed and no reptiles were recorded.
- 2.3.16 Field surveys for HS2 Phase 2a identified a population of grass snake, 248m from the land required for the construction of the Phase 2b Proposed Scheme, at Wychwood Park Golf Club. Ongoing surveys of the area covered by HS2 Phase 2a have not been undertaken for HS2 Phase 2b.
- 2.3.17 There is anecdotal evidence of grass snake presence at Moss Bridge Marsh Local Wildlife Site, within the land required for the construction of the Proposed Scheme. Access to survey this site was not made available. Surveys of adjacent sites have not recorded reptiles. For the purpose of the assessment, a low population of grass snake is assumed to be present in this area.

Wimboldsley to Lostock Gralam (MA02)

- 2.3.18 The study area is largely farmland with arable and pasture fields divided by hedgerows. After consultation with Manchester Biodiversity Partnership, Cheshire Wildlife Trust and Lancashire Wildlife Trust, the study area is not considered suitable to support a large or widespread population of reptiles.
- 2.3.19 Of the 50 sites subject to reptile habitat assessment in MA02, 37 were scoped out and 13 identified as requiring refugia (presence/absence) survey. Of these 13 sites, reptile refugia surveys were fully completed at three sites and partially completed at 10. No reptiles were recorded. For the 10 sites subject to partially completed surveys, reptiles are assumed absent at eight of these sites, as at least four survey visits were completed and no reptiles were recorded. Reptiles are assumed to be present at the remaining two sites, as these were subject to three survey visits or fewer and therefore absence cannot be assumed.

Background Information and Data

Ecology and biodiversity

BID EC-008-00001

Ecological baseline data – reptiles

Pickmere to Agden and Hulseheath (MA03)

- 2.3.20 The study area is largely farmland with arable and pasture fields divided by hedgerows. After consultation with Manchester Biodiversity Partnership, Cheshire Wildlife Trust and Lancashire Wildlife Trust, the study area is not considered suitable to support a large or widespread population of reptiles.
- 2.3.21 Of the 20 sites subject to reptile habitat assessment in MA03, 17 were scoped out and three identified as requiring reptile refugia (presence/absence) survey. Of these three sites, reptile refugia surveys were fully completed at two sites and partially completed at one. No reptiles were recorded. For the site subject to partially completed surveys, reptiles are assumed absent, as at least four survey visits were completed and no reptiles were recorded.

Broomedge to Glazebrook (MA04)

- 2.3.22 The study area is largely farmland with arable and pasture fields divided by hedgerows. After consultation with Manchester Biodiversity Partnership, Cheshire Wildlife Trust and Lancashire Wildlife Trust, the study area is not considered suitable to support a large or widespread population of reptiles.
- 2.3.23 Of the 16 sites subject to reptile habitat assessment in MA04, 14 were scoped out, access to one was not available, and one was identified as requiring reptile refugia (presence/absence) survey. Reptile refugia surveys were partially completed at this site. For the site subject to partially completed surveys, reptiles are assumed absent, as at least four survey visits were completed and no reptiles were recorded. Common lizard was assumed to be present at one site where access was not available, at land to the west of Glazebrook Lane. The assumption of presence is based on desk study records from within the site and the species being recorded in an adjacent site in MA05.

Risley to Bamfurlong (MA05)

- 2.3.24 The study area is largely farmland with arable and pasture fields divided by hedgerows. After consultation with Manchester Biodiversity Partnership, Cheshire Wildlife Trust and Lancashire Wildlife Trust, the study area is not considered suitable to support a large or widespread population of reptiles, with the greatest potential for reptiles in areas associated with the mosses and meres.
- 2.3.25 Of the 45 sites subject to reptile habitat assessment in MA05, 37 were scoped out and eight identified as requiring reptile refugia (presence/absence) survey. Of these eight sites, reptile refugia surveys were fully completed at six sites and partially completed at two. One site, Holcroft Moss, was found to support a low population of common lizard. For the two sites subject to partially completed surveys, reptiles are assumed absent, as at least four survey visits were completed and no reptiles were recorded.

Background Information and Data

Ecology and biodiversity

BID EC-008-00001

Ecological baseline data – reptiles

Hulseheath to Manchester Airport (MA06)

- 2.3.26 The study area largely comprises farmland with arable and close-grazed pasture fields divided by hedgerows. Suburban Altrincham is in the north of MA06. After consultation with Manchester Biodiversity Partnership, Cheshire Wildlife Trust and Lancashire Wildlife Trust, the study area is not considered suitable to support a large or widespread population of reptiles.
- 2.3.27 Of the 27 sites subject to reptile habitat assessment in MA06, 14 were scoped out and 13 identified as requiring refugia (presence/absence) survey. Of these 13 sites, reptile refugia surveys were fully completed at three sites and partially completed at 10. No reptiles were recorded. For the 10 sites subject to partially completed surveys, reptiles are assumed absent, as at least four survey visits were completed and no reptiles were recorded.

Davenport Green to Ardwick (MA07)

- 2.3.28 The study area largely comprises the southern suburbs of Manchester. The majority of the Proposed Scheme in this area will be in tunnel below ground. After consultation with Manchester Biodiversity Partnership, Cheshire Wildlife Trust and Lancashire Wildlife Trust, the study area is not considered suitable to support a large or widespread population of reptiles.
- 2.3.29 Of the four sites subject to reptile habitat assessment in MA07, one was scoped out and three identified as requiring refugia (presence/absence) survey. Reptile refugia surveys were partially completed at all three sites. No reptiles were recorded. For the three sites subject to partially completed surveys, reptiles are assumed absent, as at least four survey visits were completed and no reptiles were recorded.

Manchester Piccadilly Station (MA08)

- 2.3.30 The study area entirely comprises the urban centre of Manchester and is considered to be unsuitable for reptiles.
- 2.3.31 No reptile surveys have been undertaken in MA08 and reptiles are assumed to be absent based on the lack of suitable habitat or connectivity.

Background Information and Data

Ecology and biodiversity
BID EC-008-00001
Ecological baseline data – reptiles

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