



High Speed Two Phase 2a (West Midlands - Crewe)

Background Information and Data

Ecology and biodiversity

Ecological baseline data - reptiles (BID-EC-008-000)



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Department for Transport

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A report prepared for High Speed Two (HS2) Limited:

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1 Introduction

1.1.1 This report presents a summary of the ecological baseline data relating to reptiles.

1.1.2 Ecological baseline data has been collected for the assessment of High Speed Rail (West Midlands - Crewe). The Proposed Scheme will pass through the following community areas (CA):

- CA1: Fradley to Colton;
- CA2: Colwich to Yarlet;
- CA3: Stone and Swynnerton;
- CA4: Whitmore Heath to Madeley; and
- CA5: South Cheshire.

1.1.3 This report should be read in conjunction with Map Series EC-07 in the Background Information and Data, Ecology Map Books.

1.1.4 The following baseline ecology reports can also be referred to:

- Ecological baseline data - phase 1 habitat survey (Background Information and Data: BID-EC-002-000);
- Ecological baseline data - protected and or notable flora (Background Information and Data: BID-EC-003-000);
- Ecological baseline data - national vegetation classification and ancient woodland (Background Information and Data: BID-EC-004-000);
- Ecological baseline data - hedgerows (Background Information and Data: BID-EC-005-000);
- Ecological baseline data - river habitat, river corridor, and ditch surveys, (Background Information and Data: BID-EC-006-000);
- Ecological baseline data - amphibian and pond surveys (Background Information and Data: BID-EC-007-000);
- Ecological baseline data - breeding and wintering birds (Background Information and Data: BID-EC-009-000);
- Ecological baseline data - otter and water vole (Background Information and Data: BID-EC-010-000);
- Ecological baseline data - hazel dormouse (Background Information and Data: BID-EC-011-000);
- Ecological baseline data – bats (Background Information and Data: BID-EC-12-000);
- Ecological baseline data - white clawed crayfish and other invertebrate (Background Information and Data: BID-EC-013-000); and

- Ecological baseline data - fish (Background Information and Data: BID-EC-014-000).

1.1.5 Note that baseline data for badger is not made publically available due to the historic persecution of this species.

1.1.6 The ecological assessment is detailed in The High Speed Rail (West Midlands - Crewe) Environmental Statement (ES)¹.

- Volume 2, Community area reports;
- Volume 3, Route-wide effects;
- Volume 4, Off-route effects; and
- Volume 5, Appendices.

¹ HS2 Ltd (2017), *High Speed Rail (West Midlands – Crewe) Environmental Statement (ES)*, www.gov.uk/hs2

2 Reptiles

2.1 Methodology

2.1.1 Details of the standard methodology utilised for terrestrial surveys are provided in Technical Note HS2 Ecological Surveys: Field Survey Methods and Standards (FSMS) included in the Scope and Methodology Report (SMR) Addendum (see ES Volume 5: Appendix CT-001-002).

2.1.2 Desk data has been obtained from the following sources in relation to provision of reptile records within 5km of the land required for the construction of the Proposed Scheme:

- Staffordshire Ecological Record²; and
- rECOrd³, Local Biological Records Centre for the Cheshire region.

2.2 Deviations, constraints and limitations

2.2.1 At all sites where the risk of theft and/or potential disturbance of refugia was considered to be high, only roofing felt was used rather than a 50:50 split of metal and roofing felt.

2.2.2 Further deviations to the standard methodology were as follows:

- an extension to the survey period to include October 2016 during suitable environmental conditions, and ahead of the onset of hibernation. This deviation enabled surveys to be carried out in suitable weather conditions in October 2016; and
- additional survey visits to sites where the level of disturbance of refugia required this.

2.3 Survey limitations and assumptions

2.3.1 Scoping of suitable reptile sites involved site visits only where access was available. At a small number of sites weather prevented a complete set of baseline data being collected. These are described in this report as partially complete and reptiles are assumed as present.

2.3.2 Despite the presence of suitable reptile habitat, reptile surveys were not able to be undertaken at several sites due to lack of access, within the survey season. These sites are presented in Table 1 and on map series EC-07 (Ecology Map Book).

² Staffordshire Ecological Record, *The Ecological Database for Staffordshire*, http://www.staffs-ecology.org.uk/html2015/index.php?title=Main_Page

³ rECOrd, *Local Biological Records Centre serving Cheshire*, <http://www.record-lrc.co.uk/>

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Table 1: Summary of locations where requirement for reptile survey identified but no access 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
000-RE1-188001	Field north-west of Cranberry	SK1313614001	Small area of rough grass/tall ruderal along western edge of the field, adjacent to the brook.	CA1	Within
000-RE1-188002	Field south-west of Alrewas Hayes	SK1362914662	Areas of rough grassland adjacent to the woodland.	CA1	Within
000-RE1-190001	Field south-west of John's Gorse	SK1100414482	Small area of rough grass/tall ruderal, adjacent to hedgerows.	CA1	Within
000-RE1-192001	Field south-west of King's Bromley Lane	SK1036716780	Areas of unmanaged grassland, with scrub and other debris.	CA1	1m south-west
000-RE1-193001	Field north-west of Trentside Meadows	SK1040917747	Small strip of rough grass/tall ruderal adjacent to the hedgerow.	CA1	Within
000-RE1-193002	Field south-east of Pipe Ridware	SK0961817804	Small strip of rough grass/tall ruderal adjacent to the hedgerow and ditch.	CA1	Within
000-RE1-194002	Field south-west of Pipe Wood Lane	SK0900518640	Small strips of rough grassland with some debris (tyres).	CA1	Within
000-RE1-199001	Field south-east of Newlands Lane	SK0583121467	Small strip of rough grass/tall ruderal adjacent to the hedgerow.	CA1	Within
000-RE1-199003	Field south-west of Sheracop Lane (hedge 3)	SK0551021606	Overgrown grassland around the allotments.	CA1	Within
000-RE1-199004	Field north-west of Heathway	SK0524521101	Rough grassland, tall ruderal and log piles.	CA1	159m north-west
000-RE1-200003	Field north-west of Lount Farm	SK0386821741	Tall ruderal and dense scrub, present along the field margins.	CA1	Within
000-RE1-201001	Field south-east of Lount Farm	SK0346121619	Areas of rough grassland along the field boundary.	CA2	49m south-east
000-RE1-203001	Field north-west of Coley Lane	SK0137222847	Small strip of rough grass/tall ruderal along the field boundary.	CA2	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
000-RE1-205001	Field north-west of Nursery Way	SJ9979123143	Small area of rough grassland around a balancing pond.	CA2	72m south-west
000-RE1-205003	Field north-west of Trent and Mersey Canal	SJ9978723927	Areas of debris and small strips/patches of overgrown grassland.	CA2	Within
000-RE1-205004	Field north-west of Hoomill Lane	SJ9982424233	Unmanaged grassland, with debris onsite.	CA2	5m north-east
000-RE1-205005	Field north-east of River Trent	SJ9948123345	Small strip of rough grass/tall ruderal adjacent to the hedgerow.	CA2	Within
000-RE1-205006	Field south-east of Trent and Mersey Canal	SJ9987523964	Rough grassland on banks of the river corridor.	CA2	Within
000-RE1-207001	Field south-west of Town Field Plantation.	SJ9737524060	Poor semi-improved grassland and tall ruderal habitat within mixed woodland.	CA2	Within
000-RE1-210001	Field south-west of Hopton Pools	SJ9514225583	Habitat mosaic, comprising patches of rough grassland, tall ruderal and scrub.	CA2	13m north-east
000-RE1-211001	Field north-east of Hopton Lane	SJ9419026309	Areas of rough grassland along the field boundary.	CA2	Within
000-RE1-211002	Field south-west of Hopton Lane	SJ9361225844	Patch of rough grassland on embankment.	CA2	Within
000-RE1-212001	Field north-west of Sandon Road	SJ9369327031	Isolated areas of rough grass/tall ruderal.	CA2	Within
000-RE1-213001	Field south-west of Marston Lane	SJ9239427560	Isolated areas of rough grass/tall ruderal.	CA2	Within
000-RE1-216001	Field north-west of New Plantation	SJ9068129458	Small strip of rough grass/tall ruderal adjacent to the hedgerow.	CA2	Within
000-RE1-216002	Field north-west of A34	SJ9076729792	Small strip of rough grass/tall ruderal adjacent to the hedgerow.	CA3	Within
000-RE1-217001	Field north-west of A34	SJ9080030121	Isolated patches of scrub and rough grassland.	CA3	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
000-RE1-218001	Field south-west of Pirehill Lane	SJ8939530523	Small strip of rough grass/tall ruderal adjacent to the hedgerow.	CA3	110m south-west
000-RE1-218002	Field north-east of Pirehill Lane	SJ9002230924	Areas of rough grassland around ponds, field margins and woodland.	CA3	Within
000-RE1-221001	Field north-west of Poolhouse Wood	SJ8828133446	Areas of rough grassland adjacent to the hedgerows and woodland.	CA3	Within
000-RE1-223001	Field north-west of Hall Lane	SJ8632135042	Areas of rough grassland (set-aside).	CA3	38m south-east
000-RE1-223002	Field south-west of A51	SJ8688435692	Areas of rough grassland along the field boundary.	CA3	Within
000-RE1-226001	Field south-west of Top Lane	SJ8513637718	Rough grassland around the woodland edge.	CA3	Within
000-RE1-227002	Field north-west of Clifford's Wood	SJ8361837966	Large rough grassland/tall ruderal margin bordering woodland.	CA3	Within
000-RE1-229001	Field north-west of Swynnerton Old Park	SJ8233539432	Areas of Bracken/scrub/rough grassland.	CA3	132m east
000-RE1-229002	Field north-west of Swynnerton Old Park	SJ8198139167	Bank of rough grassland / scrub.	CA3	Within
000-RE1-230001	Field south-west of Chorlton Brook Cottage	SJ8136539068	Small area of rough grassland.	CA4	25m south-west
000-RE1-232001	Field north-east of Common Lane	SJ7997940635	Semi-improved grassland, compost heaps and stone piles.	CA4	Within
000-RE1-232002	Field south-east of Heath Road	SJ8004040995	Small strip of rough grass/tall ruderal along the field boundary.	CA4	Within
000-RE1-232003	Field south-east of Snape Hall Road	SJ7966041374	Meadow grassland.	CA4	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
000-RE1-232004	Field north-east of Snape Hall Road	SJ7988141599	Rough grassland around the pond edge.	CA4	75m north-east
000-RE1-233002	Field south-west of Whitmore Wood	SJ7875341639	Strip of rough grassland bordering the railway line.	CA4	Within
000-RE1-234001	Field north-east of Manor Road	SJ7829441786	Area of wet marshy grassland.	CA4	Within
000-RE1-234002	Field south-west of Hey Sprink	SJ7800542694	Area of rough grassland and scrub.	CA4	Within
000-RE1-234003	Field north-west of Hey Sprink	SJ7917343191	Small areas of grassland within the woodland.	CA4	Within
000-RE1-235001	Field south-east of Manor Road Verges	SJ7749542810	Isolated areas of rough grassland around ponds, ditches, hedgerows.	CA4	Within
000-RE1-235002	Field south-east of Manor Road Verges	SJ7747543217	Small strip of rough grass/tall ruderal along the field boundary.	CA4	Within
000-RE1-235003	Field north-east of Hey House	SJ7770143405	Small strip of rough grass/tall ruderal along the field boundary and along the brook.	CA4	Within
000-RE1-236002	Field north-west of Red Lane	SJ7667343719	Isolated areas of rough grassland around ponds, ditches, hedgerows.	CA4	Within
000-RE1-236003	Field north-west of Barhill Wood	SJ7653443966	Small area of rough grassland adjacent the woodland.	CA4	Within
000-RE1-237001	Field north-west of A525	SJ7664844235	Long stretches of rough grassland bordering the drive way.	CA4	Within
000-RE1-237003	Field south-west of Graftons Wood	SJ7606144917	Strip of rough grassland, adjacent to the woodland.	CA4	Within
000-RE1-238001	Field south-west of Wrinehill Wood (east of)	SJ7554544869	Small strip of rough grass/tall ruderal along the field boundary.	CA4	Within
000-RE1-240001	Field north-west of Checkley Lane	SJ7460646770	Patches of rough grassland.	CA5	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
000-RE1-240002	Field north-west of Checkley Lane	SJ7425246433	Small area of wet grassland.	CA5	Within
000-RE1-241001	Field north-east of Den Lane	SJ7400548024	Strip of rough grassland adjacent to the railway corridor.	CA5	Within
000-RE1-241002	Field south-west of Mill Lane	SJ7279547502	Small areas of grassland around the garden edges, piles of grass cuttings present.	CA5	182m south-west
000-RE1-241003	Field south-west of Mill Lane	SJ7274947549	Small areas of rough grassland around the garden edges.	CA5	184m south-west
000-RE1-242001	Field north-east of Den Lane	SJ7356948404	Small strip of rough grass/tall ruderal along the field boundary hedgerows and ponds.	CA5	Within
000-RE1-243001	Field east of Basford Brook and Mere Gutter	SJ7365549062	Small strip of rough grass/tall ruderal along the field boundary.	CA5	Within
000-RE1-243002	Field south-east of Chorlton Lane	SJ7259049728	Small strip of rough grass/tall ruderal along the field boundary.	CA5	Within
000-RE1-243003	Field south-west of Basford Brook and Mere Gutter	SJ7346450093	Areas of rough grassland within a golf course.	CA5	62m north-east
000-RE1-244001	Field south-west of Waybutt Lane	SJ7284050028	Rough grassland on the banks bordering the fields.	CA5	Within
000-RE1-244002	Field south-west of Kendal Way	SJ7304250204	Rough grassland around the edge of the garden.	CA5	188m north-east
000-RE1-244003	Field South-west of Chorlton Lane	SJ7239350062	Rough grassland around the garden edges.	CA5	37m north-west
000-RE1-244004	Field south-east of Cobbs Lane	SJ7184550238	Strips of rough grass/tall ruderal adjacent to the hedgerow.	CA5	184m south-west
000-RE1-244005	Field south-west of Chorlton Lane	SJ7260250562	Rough grassland strip adjacent to the railway corridor.	CA5	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
000-RE1-244006	Field north-west of Chorlton Lane	SJ7218550506	Various areas of marshy grassland.	CA5	Within
000-RE1-245001	Field north-east of Hough Common	SJ7174250772	Dense scrub and rough grassland.	CA5	80m north-west
000-RE1-245002	Field north-east of Hough Common	SJ7172050833	Small isolated strips/patches of rough grassland.	CA5	146m north-west
000-RE1-245004	Field north-east of Hough Common	SJ7168850871	Rough grassland within sapling planting area.	CA5	159m south-east
000-RE1-245005	Field north-west of Chorlton Lane	SJ7229950909	Rough grassland margin on the bank.	CA5	Within
000-RE1-245006	Field south-west of Chorlton Bank Farm	SJ7235051278	Rough grassland, compost heap.	CA5	Within
000-RE1-245007	Field south-east of Casey Lane	SJ7209451800	Small strip of rough grass/tall ruderal along the field boundary.	CA5	Within
000-RE1-246001	Field south-east of Casey Lane	SJ7218651856	Patches of overgrown scrub and tall ruderals.	CA5	Within
000-RE1-246003	Field north-west of Weston Lane	SJ7183852337	Small area of rough grassland adjacent to the railway corridor.	CA5	Within
000-RE1-246004	Field north-east of Weston Lane	SJ7132652379	Rough grassland margin on the bank.	CA5	Within
000-RE1-247001	Field north-east of A500	SJ7272353093	Rough grassland adjacent to the hedgerows and clusters of trees.	CA5	113m north-east
000-RE1-247002	Field south-west of Basford Brook and Mere Gutter	SJ7228553370	Rough grassland adjacent to watercourse.	CA5	50m north-east

2.4 Baseline

Desk Study Results

- 2.4.1 Desk study records identified all four common species adder (*Vipera berus*), common lizard (*Zootoca vivipara*), grass snake (*Natrix natrix*) and slow worm (*Anguis fragilis*) as present within the study area.
- 2.4.2 The records also identified sand lizard (*Lacerta agilis*) as present in Cannock Chase Site of Special Scientific Interest (SSSI), over 4km from land required for the Proposed Scheme. Sand lizard is not thought to be present within or adjacent to land required for the Proposed Scheme.

Fradley to Colton (CA1)

- 2.4.3 No reptile desk study records were identified within the land required for the construction of the Proposed Scheme. Grass snake, common lizard and slow worm were recorded within 4km of the land required for the construction of the Proposed Scheme. Adders were recorded over 5km from the land required for the construction of the Proposed Scheme.

Colwich to Yarlet (CA2)

- 2.4.4 No reptile desk study records were identified within the land required for the construction of the Proposed Scheme. Common lizard and adder were recorded within 2km of the land required for the construction of the Proposed Scheme. Grass snake and slow worm were recorded within 3km of the land required for the construction of the Proposed Scheme. A sand lizard was recorded just over 4km from the land required for the construction of the Proposed Scheme, within Cannock Chase SSSI.

Stone and Swynnerton (CA3)

- 2.4.5 No reptile desk study records were identified within the land required for the construction of the Proposed Scheme. Grass snake was recorded within 2km of the land required for the construction of the Proposed Scheme. Common lizard was recorded within 4km of the land required for the construction of the Proposed Scheme. There are no desk study records of any other reptile species.

Whitmore Heath and Madeley (CA4)

- 2.4.6 No reptile desk study records were identified within the land required for the construction of the Proposed Scheme. Adder was recorded within 250m of the land required for the construction of the Proposed Scheme. Common lizard and grass snake were recorded within 2km of the land required for the construction of the Proposed Scheme. There are no desk study records of any other reptile species.

South Cheshire (CA5)

- 2.4.7 No reptile desk study records were identified within the land required for the construction of the Proposed Scheme. Grass snake and slow worm were recorded within 200m of the land required for the construction of the Proposed Scheme. There are no desk study records of any other reptile species.

Field Study Results

- 2.4.8 Details of the locations where reptile surveys were conducted and associated survey results are provided in Table 2 and map series EC-07 (Ecology Map Book). Sites subject to a walkover survey and subsequently scoped out are also listed.
- 2.4.9 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 CA1-CA4. This judgement was based on a 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 permeate the landscape. The habitat across CA5 was generally less intensively managed and more diverse, with greater potential to support populations of reptiles.
- 2.4.10 A total of 22 sites were identified for survey and surveys were completed at 11 of these sites. Surveys were partially completed at a further 11 of these sites and access was not available to the remaining sites. Surveys were undertaken between 18 July 2016 and 17 October 2016.
- 2.4.11 Two sites were visited and subject to a walkover survey to assess the habitat suitability for reptiles. After this initial habitat suitability survey these sites were scoped out as the habitat was assessed as being of generally poor quality, unlikely to support reptiles.
- 2.4.12 Of the 22 sites surveyed, reptiles were recorded at two, both within CA5. Only grass snake was recorded. Reptiles were considered likely to be absent from nine of the surveyed sites, and reptile presence was assumed at 11 sites where surveys were partially complete as absence cannot be proved without a full set of surveys.

Table 2: Summary of reptile survey work undertaken in CA 1 - CA5

Ecology survey code	Location	OS grid reference	Survey method	Survey start date	Survey end date	No. survey visits completed	Survey result ⁴ (population size class) ⁵	CA	Approximate distance from the land required for the Proposed Scheme (m) and orientation
000-RE1-191001	Field south-east of Shaw Lane	SK1140616170	Refugia survey	14 September 2016	13 October 2016	6	Reptiles assumed present as surveys not completed	CA1	Within
000-RE1-192002	Field south-west of Trentside Meadows	SK1022016982	Refugia survey	15 September 2016	13 October 2016	7	Reptiles assumed present as surveys not completed	CA1	Within
000-RE1-194001	Field south-west of Pipe Wood Lane	SK0921718000	Refugia survey	14 September 2016	13 October 2016	7	Reptiles assumed present as surveys not completed	CA1	45m south-west
000-RE1-199002	Field north-west of Narrow Lane	SK0549321342	Refugia survey	12 September 2016	10 October 2016	6	Reptiles assumed present as surveys not completed	CA1	Within
000-RE1-200001	Field north-west of B5013	SK0448821643	Walkover only	13 September 2016	13 September 2016	1	Habitat assessment only - scoped out	CA1	Within
000-RE1-200002	Field north-west of B5013	SK0433421904	Walkover only	11 October 2016	11 October 2016	1	Habitat assessment only - scoped out	CA1	Within
000-RE1-201002	Field north-east of Jongham's Cottage	SK0412122367	Refugia survey	19 July 2016	9 September 2016	6	Reptiles assumed present as surveys not completed	CA1	Within
000-RE1-202001	Field south-west of Lount Farm	SK0315422651	Refugia survey	24 August 2016	4 October 2016	8	Presence/absence survey conducted – reptiles assumed absent	CA2	Within

⁴ Peak adult count of each species is listed

⁵ Classification criteria in line 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, unPubl

Ecology survey code	Location	OS grid reference	Survey method	Survey start date	Survey end date	No. survey visits completed	Survey result ⁴ (population size class) ⁵	CA	Approximate distance from the land required for the Proposed Scheme (m) and orientation
000-RE1-204001	Field south-east of Tithebarn Covert	SK0092723137	Refugia survey	13 September 2016	17 October 2016	4	Reptiles assumed present as surveys not completed	CA2	Within
000-RE1-207002	Field north-east of Town Field Plantation	SJ9787024227	Refugia survey	1 August 2016	26 September 2016	8	Presence/absence survey conducted – reptiles assumed absent	CA2	Within
000-RE1-222001	Field north-east of Highlow Meadows	SJ8703434566	Refugia survey	12 September 2016	7 October 2016	5	Reptiles assumed present as surveys not completed	CA3	Within
000-RE1-227001	Field north-west of Clifford's Wood	SJ8361337680	Refugia survey	5 September 2016	6 October 2016	4	Reptiles assumed present as surveys not completed	CA3	Within
000-RE1-228001	Field south-east of Swynnerton Old Park	SJ8320338145	Refugia survey	8 September 2016	7 October 2016	4	Reptiles assumed present as surveys not completed	CA3	Within
000-RE1-228002	Field south-west of Hatton Common	SJ8267038193	Refugia survey	9 September 2016	7 October 2016	5	Reptiles assumed present as surveys not completed	CA3	Within
000-RE1-230002	Field south-west of Bent Lane	SJ8097639871	Refugia survey	17 August 2016	11 October 2016	9	Presence/absence survey conducted – reptiles assumed absent	CA4	Within
000-RE1-232005	Field north-west of Snape Hall Road	SJ7962141481	Refugia survey	22 August 2016	14 October 2016	8	Presence/absence survey conducted – reptiles assumed absent	CA4	Within
000-RE1-233001	Whitmore Wood	SJ7920741716	Refugia survey	17 August 2016	12 October 2016	8	Presence/absence survey conducted – reptiles assumed absent	CA4	Within

Ecology survey code	Location	OS grid reference	Survey method	Survey start date	Survey end date	No. survey visits completed	Survey result ⁴ (population size class) ⁵	CA	Approximate distance from the land required for the Proposed Scheme (m) and orientation
000-RE1-236001	Field south-west of Manor Road	SJ7721843953	Refugia survey	14 September 2016	12 October 2016	8	Presence/absence survey conducted – reptiles assumed absent	CA4	8m south-west
000-RE1-237002	Field north-east of Barhill Wood	SJ7634444350	Refugia survey	19 September 2016	7 October 2016	4	Reptiles assumed present as surveys not completed	CA4	Within
000-RE1-245003	Field north-west of Chorlton Lane	SJ7247451050	Refugia survey	2 August 2016	23 September 2016	8	Three grass snake	CA5	Within
000-RE1-245008	Field north-east of Chorlton Lane	SJ7270451013	Refugia survey	7 September 2016	10 October 2016	8	One grass snake	CA5	Within
000-RE1-245009	Field north-east of Back Lane	SJ7170951166	Refugia survey	2 September 2016	7 October 2016	8	Presence/absence survey conducted – reptiles assumed absent	CA5	Within
000-RE1-246002	Field south-east of Basford Brook and Mere Gutter	SJ7250052359	Refugia survey	5 August 2016	22 September 2016	8	Presence/absence survey conducted – reptiles assumed absent	CA5	170m north-east
000-RE1-247003	Field north-west of Basford Brook and Mere Gutter	SJ7121853018	Refugia survey	15 August 2016	26 September 2016	8	Presence/absence survey conducted – reptiles assumed absent	CA5	52m north-west

Fradley to Colton (CA1)

- 2.4.13 The study area is largely farmland with arable and pasture fields divided by hedgerows. Overall the majority of the land, being close grazed pasture and arable fields, is not considered suitable to support a large or widespread population of common reptile species although there is potential for several small populations in areas linked by connective hedgerow, railway corridors, streams and woodland habitat.
- 2.4.14 Five sites were identified as requiring population size class surveys. Surveys were partially completed at five sites. Two sites were scoped out and no surveys were undertaken at a total of 11 sites which had potential to support reptiles but there was no access. No reptiles were recorded.

Colwich to Yarlet (CA2)

- 2.4.15 The study area is largely farmland with arable and pasture fields divided by hedgerows. Overall the majority of the land, being close grazed pasture and arable fields, is not considered suitable to support a large or widespread population of common reptile species although there is potential for several small populations in areas linked by connective hedgerow, railway corridors, streams and woodland habitat.
- 2.4.16 Three sites were identified as requiring population size class surveys. Surveys were completed at two sites and partially completed at a further site. No sites were scoped out and no surveys were undertaken at a total of 15 sites which had potential to support reptiles but there was no access. No reptiles were recorded.

Stone and Swynnerton (CA3)

- 2.4.17 The study area is largely farmland with arable and pasture fields divided by hedgerows. Overall the majority of the land, being close grazed pasture and arable fields, is not considered suitable to support a large or widespread population of common reptile species although there is potential for several small populations in areas linked by connective hedgerow, railway corridors, streams and woodland habitat.
- 2.4.18 Four sites were identified as requiring population size class surveys. Surveys were partially completed at four sites. No sites were scoped out and no surveys were undertaken at a total of 11 sites which had potential to support reptiles but there was no access. No reptiles were recorded.

Whitmore Heath and Madeley (CA4)

- 2.4.19 The study area is largely farmland with arable and pasture fields divided by hedgerows. Overall the majority of the land, being close grazed pasture and arable fields, is not considered suitable to support a large or widespread population of common reptile species although there is potential for several small populations in areas linked by connective hedgerow, railway corridors, streams and woodland habitat.
- 2.4.20 Five sites were identified as requiring population size class surveys. Surveys were completed at four sites and one survey was partially completed. No sites were scoped

out and no surveys were undertaken at a total of 17 sites which had potential to support reptiles but there was no access. No reptiles were recorded.

South Cheshire (CA5)

- 2.4.21 The study area is largely farmland with arable and pasture fields divided by hedgerows within the southern section of CA5. Northwards towards Crewe the habitat becomes less uniform, and the rural landscape changes into an urban landscape.
- 2.4.22 Five sites were identified as requiring population size class surveys. Surveys were completed at five sites. No sites were scoped out and no surveys were undertaken at a total of 27 sites which had potential to support reptiles but there was no access.
- 2.4.23 A medium population of grass snake was recorded within a field adjacent to Chorlton Lane, directly west of Wychwood Park. Suitable foraging, basking and hibernation habitat was identified within this area. Anecdotal records suggest that a compost heap in a nearby field has provided suitable egg laying habitat in previous years.
- 2.4.24 A low population of grass snake was recorded adjacent to Wychwood Park Golf Course, east of the West Coast Main Line. Anecdotal accounts from landowners stated that grass snake are sometimes seen within the Wychwood Park mitigation areas and a historic egg laying site had been noted just north of Wychwood Park. It is likely this population is connected to that at Chorlton Lane, directly west of Wychwood Park.


3 References

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