



Cambridge South East
Transport Strategy (CSET)
Phase 2
Hedgehog Survey Report

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Contents

1	Summary	6
2	Introduction	7
2.1	Background	7
2.2	Project Description and Purpose of the Scheme.....	7
2.3	Legislation and Policy.....	7
2.4	Personnel and Quality Assurance	8
3	Methods	10
3.1	Survey and Report Objectives	10
3.2	Desk-based Study	10
3.3	Field Survey	10
3.4	Survey Limitations and Assumptions	19
4	Results	20
4.1	Desk Study.....	20
4.2	Field Survey	20
5	References	27
	Figures	28
	Figure 1 – Scheme and Survey Area	28
	Appendices	29
	Appendix A – Tunnels Location Maps.....	29
	Appendix B – Trail Camera Data Results	30
	Appendix C – Hedgehog Tunnel.....	35

Tables

Table 1: Summary of Tunnel Location Sites	11
Table 2: Summary of Trail Camera Locations.....	18
Table 4: Site 1	20
Table 5: Site 2	21
Table 6: Site 3	21
Table 7: Site 4	22
Table 8: Site 5	22
Table 9: Site 6	22
Table 10: Site 7	23
Table 11: Site 8	23
Table 12: Site 9	24
Table 13: Site 10	24
Table 14: Site 11	25

Table 15: Site 12	25
Table 16: Site 13	26
Table 17: Trail Camera 1 (C01)	30
Table 18: Trail Camera 2 (C02)	30
Table 19: Trail Camera 3 (C03)	33
Table 20: Trail Camera 4 (C04)	33
Table 21: Trail Camera 5 (C05)	33
Table 22: Trail Camera 6 (C06)	33
Table 23: Trail Camera 7 (C07)	34
Table 24: Trail Camera 8 (C08)	34

1 Summary

Capita Real Estate & Infrastructure's Ecologists was commissioned by the Greater Cambridgeshire Partnership to undertake hedgehog activity surveys across the route of Phase 2 of the Cambridge South East Transport (CSET) Scheme. The surveys have been carried out to provide baseline ecological information for the CSET Project to inform the design and environmental assessment of the proposals.

Surveys were carried out between 11 November and 1 December 2020, focussing on the proposed areas of land to be affected by the CSET Phase 2 scheme.

The results are summarised as follows:

- No hedgehog prints or droppings were identified during the hedgehog tunnel survey.
- No images of hedgehogs were recorded during the period of trail camera deployment.

This report describes the methods and results of the hedgehog survey.

2 Introduction

2.1 Background

2.1.1. Capita Real Estate & Infrastructure's Ecologists were commissioned by the Greater Cambridgeshire Partnership in March 2020 to undertake hedgehog surveys. These surveys were undertaken in relation to the development of Phase 2 of the Cambridge South East Transport (CSET) Project, (the 'Scheme'). The Scheme and the survey area are depicted in Figure 1.

2.1.1 The aim of the report is to summarise the results of the baseline surveys conducted in November 2020 to inform the design and Environmental Statement for the Scheme.

2.2 Project Description and Purpose of the Scheme

2.2.1 The Cambridge South East Transport (CSET) Project aims to create a vital link to ease congestion, offer sustainable travel choices, connect communities and support growth in the in South East of Cambridge. CSET will form part of the Cambridgeshire Autonomous Metro, providing high quality, frequent and affordable public transport.

2.2.2 CSET Phase 2 comprises a segregated public transport route from the A11 (near Brabham) to the Cambridge Biomedical Campus (CBC). This will include new walking, cycling and equestrian links.

2.3 Legislation and Policy

2.3.1. Hedgehogs receive only limited legal protection under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended): They cannot be killed or trapped by certain methods.

2.3.2. Hedgehogs are also classified as vulnerable to extinction under the IUCN Red List for British Mammals.

Planning Policy

2.3.3. National Planning Policy is set out by the National Planning Policy Framework (NPPF February 2019) combined with the guidance document Planning for Biodiversity and Geological Conservation: A Guide to Good Practice" (ODPM 2005).

2.3.4. Biodiversity net gains are referenced strongly in terms of developing local planning policy and decision-making for development applications. The environmental test

of sustainable development requires planning policy and planning decisions to help to 'improve biodiversity' (paragraph 8c).

2.3.5. References to biodiversity net gain elsewhere in the new NPPF (such as paragraph 175d) support the delivery of biodiversity net gain through sustainable development. Net gain for biodiversity is far more prominent than in the previous NPPF and considers a holistic landscape approach to protect, and enhance biodiversity promoting conservation, restoration and enhancement of Priority Habitats (also listed as Habitats of Principal Importance) identified under the NERC Act 2006), ecological networks and the protection and recovery of Priority Species (also listed as Species of Principal Importance) identified under the NERC Act 2006). The NPPF includes requirements for planning authorities to identifying and pursuing opportunities for securing measurable net gains for biodiversity (paragraph 174b).

2.3.6. Protected sites and species are a material consideration in determining planning applications and therefore all information relating to protected sites and species must be submitted with planning submissions for determination of the whole application. The NPPF (paragraph 175) which promotes Local Planning Authorities to assess if significant harm would occur to biodiversity and decide accordingly.

Biodiversity Policy

2.3.7. Section 41 of the NERC Act requires the Secretary of State to draw up a list of Habitats and Species of Principal Importance which should be used to guide decision-makers (which include local authorities) in implementing their duty under Section 40.

2.3.8. Hedgehogs are listed as Species of Principal Importance and are highlighted as requiring conservation action in line with UK.

2.4 Personnel and Quality Assurance

2.4.1. All ecologists employed by Capita adopt best practice working methods in undertaking surveys including the Chartered Institute of Ecology and Environmental Management's (CIEEM) code of professional and all fieldwork is carried out in accordance with current best practice guidelines and under the supervision of senior staff and appropriately licensed ecologists where necessary.

2.4.2. The hedgehog surveys were led by Principal Ecologist, James Johnston and assisted by Assistant Ecologists, Mark Johnson and Thomas Severn.

James is an Associate member of CIEEM and has over seven years' experience working in ecology and conservation. James has worked on a wide range of projects including large infrastructure developments and demolitions. He has conducted numerous Extended Phase I Habitat surveys and is competent in assessing a site's baseline ecological value.

Mark Johnson has three years' experience working within ecological consultancy. He has previous experience using footprint tracking tunnels as part of the People's Trust for Endangered Species' (PTES) voluntary National Hedgehog Survey. He also has previously completed a camera trapping training course for mammal monitoring, with The Mammal Society.

Thomas Severn has two years' experience working within ecological consultancy. He has worked on a wide range of projects and has conducted surveys on species including badger, reptile, breeding birds and bats.

3 Methods

3.1 Survey and Report Objectives

3.1.1. The surveys and report were carried out to fulfil the following objectives.

1. To identify whether hedgehogs are present along the proposed route
2. To provide an assessment of the likely importance of the site for hedgehog and their conservation.

3.2 Desk-based Study

3.2.1. A biological record report was obtained by Mott MacDonald. This report was reviewed, and the results have been included within this report.

3.3 Field Survey

Presence/Absence Surveys

- 3.3.1 The People's Trust for Endangered Species methodology "Guidance for detecting hedgehogs using footprint tracking tunnels" (PTES. 2015) was used for the surveys.
- 3.3.2 The survey involved the use of footprint tunnels, that consist of ink, paper and bait to record animal track and prints.
- 3.3.3 Tunnels were placed evenly distributed across the site, a minimum of 100m apart, at linear features that were suitable for hedgehog as illustrated in Appendix C.
- 3.3.4 Surveys were carried out in November 2020. This is in accordance with the PTES guidance which recommend these surveys are undertaken between April to November.
- 3.3.5 The tunnels were baited and left out on for a minimum of five consecutive days.
- 3.3.6 The paper was then collected for footprint analysis.
- 3.3.7 Due to the size of the survey area, it was split into two using the River Granta as a natural barrier to reduce the risk of animals moving between the two areas of survey.

Location of Tunnels

3.3.8 Table 1 summarises the locations the tunnels were left out for survey which are also shown on plans in Appendix A.

Table 1: Summary of Tunnel Location Sites

Tunnel Reference	Location	Grid Reference	Habitat type
S01-T01	Granhams Road, Great Shelford, CB22 5JY	TL 46499 53425	Hedgerow adjacent to road
S01-T02	Granhams Road, Great Shelford, CB22 5JY	TL 46547 53476	Hedgerow
S01-T03	Granhams Road, Great Shelford, CB22 5JY	TL 46466 53550	Hedgerow
S01-T04	Granhams Road, Great Shelford, CB22 5JY	TL 46382 53625	Hedgerow
S01-T05	Granhams Road, Great Shelford, CB22 5JY	TL 46306 53692	Hedgerow
S01-T06	Addenbrookes-Great Shelford Cycleway, Great Shelford, CB22 5EF	TL 46217 53769	Hedgerow
S01-T07	Nine Wells, Addenbrookes-Great Shelford Cycleway, Great Shelford, CB2 0AX	TL 46104 53871	Hedgerow
S01-T08	Addenbrookes-Great Shelford Cycleway, Great Shelford, CB22 5EF	TL 46005 53958	Hedgerow
S01-T09	Nine Wells, Addenbrookes-Great Shelford Cycleway, Great Shelford, CB2 0AX	TL 46036 54015	Hedgerow
S01-T10	Nine Wells, Addenbrookes-Great Shelford Cycleway, Great Shelford, CB2 0AX	TL 46091 54073	Hedgerow
S02-T11	Granhams Road, Great Shelford, CB22 5JY	TL 46515 53420	Hedgerow adjacent to road

Tunnel Reference	Location	Grid Reference	Habitat type
S02-T12	Granhams Road, Great Shelford, CB22 5JY	TL 46552 53321	Field margin
S02-T13	Granhams Road, Great Shelford, CB22 5JY	TL 46654 53246	Field margin
S02-T14	Coppice Avenue, Great Shelford, CB22 5AQ	TL 46752 53163	Field margin
S02-T15	Coppice Avenue, Great Shelford, CB22 5AQ	TL 46882 53180	Field margin
S02-T16	Coppice Avenue, Great Shelford, CB22 5AQ	TL 46853 53149	Woodland edge / field margin
S02-T17	Coppice Avenue, Great Shelford, CB22 5AQ	TL 46900 53086	Field margin near gardens
S02-T18	Coppice Avenue, Great Shelford, CB22 5AQ	TL 46974 53015	Field margin near garden
S02-T19	Hinton Way, Great Shelford, CB22 5AD	TL 47035 52949	Field margin near gardens
S02-T20	Hinton Way, Great Shelford, CB22 5AD	TL 47099 52883	Hedgerow / field margin
S03-T21	Hinton Way, Stapleford, CB22 5AD	TL 47322 52993	Field margin near gardens
S03-T22	Hinton Way, Stapleford, CB22 5AD	TL 47313 52932	Field margin near gardens
S03-T23	Hinton Way, Stapleford, CB22 5AD	TL 47340 52885	Field margin near gardens
S03-T24	Hinton Way, Stapleford, CB22 5AD	TL 47387 52834	Field margin near gardens

Tunnel Reference	Location	Grid Reference	Habitat type
S03-T25	Hinton Way, Stapleford, CB22 5AD	TL 47360 52770	Hedgerow
S04-T26	Haverhill Road, Stapleford, CB22 5BX	TL 48133 52605	Hedgerow
S04-T27	Middlefield Cottage, Haverhill Road, Stapleford, CB22 5BX	TL 48049 52676	Hedgerow near gardens
S04-T28	The House on the Hill, Haverhill Road, Stapleford, CB22 5BX	TL 47957 52738	Hedgerow near gardens
S04-T29	Haverhill Road, Stapleford, CB22 5BX	TL 48095 52510	Hedgerow
S04-T30	Haverhill Road, Stapleford, CB22 5BX	TL 48031 52436	Hedgerow
S05-T31	Chalk Hill, Stapleford, CB22 5DQ	TL 47658 52242	Track edge
S05-T32	Chalk Hill, Stapleford, CB22 5DQ	TL 47685 52270	Field margin near gardens
S05-T33	Chalk Hill, Stapleford, CB22 5DQ	TL 47698 52212	Field margin near gardens
S05-T34	Gog Magog Way, Stapleford, CB22 5DQ	TL 47747 52177	Field margin near gardens
S05-T35	Haverhill Road, Stapleford, CB22 5BX	TL 47797 52152	Hedgerow
S06-T36	Haverhill Road, Stapleford, CB22 5BX	TL 47934 52308	Field margin
S06-T37	Haverhill Road, Stapleford, CB22 5BX	TL 47824 52070	Hedgerow near gardens
S06-T38	Haverhill Road, Stapleford, CB22 5BX	TL 47891 52032	Hedgerow near gardens
S06-T39	Haverhill Road, Stapleford, CB22 5BX	TL 47965 51992	Hedgerow

Tunnel Reference	Location	Grid Reference	Habitat type
S06-T40	Haverhill Road, Stapleford, CB22 5BX	TL 48036 51954	Hedgerow
S07-T41	Fox Hill, Stapleford, CB22 5FX	TL 48028 51328	Field margin / scrub
S07-T42	Fox Hill, Stapleford, CB22 5FX	TL 48097 51343	Field margin / ditch
S07-T43	Fox Hill, Stapleford, CB22 5FX	TL 48164 51351	Field margin / ditch
S07-T44	Fox Hill, Stapleford, CB22 5FX	TL 48235 51357	Field margin / ditch
S07-T45	Fox Hill, Stapleford, CB22 5FX	TL 48279 51362	Field margin / ditch
S08-T46	Deal Farm, Sawston	TL 48269 50927	Track edge / field margin
S08-T47	Deal Farm, Sawston	TL 48301 50992	Woodland edge / field margin
S08-T48	Deal Farm, Sawston	TL 48225 51007	Woodland edge/ field margin
S08-T49	Deal Farm, Sawston	TL 48245 51037	Woodland edge / field margin
S08-T50	Deal Farm, Sawston	TL 48386 50971	Woodland edge / field margin
S08-T51	Deal Farm, Sawston	TL 48351 50945	Woodland edge / field margin
S08-T52	Deal Farm, Sawston	TL 48428 50904	Woodland edge / field margin
S08-T53	Deal Farm, Sawston	TL 48503 50884	Woodland edge / field margin
S08-T54	Deal Farm, Sawston	TL 48463 50932	Woodland edge / field margin

Tunnel Reference	Location	Grid Reference	Habitat type
S08-T55	Deal Farm, Woodland Road, Sawston, CB22 3DT	TL 48658 50816	Field margin / ditch
S08-T56	Deal Farm, Sawston	TL 48638 51042	Field margin / scrub
S08-T57	Deal Farm, Sawston	TL 48576 51117	Field margin / ditch
S08-T58	Deal Farm, Sawston	TL 48525 51190	Field margin / scrub
S08-T59	Deal Farm, Sawston	TL 48659 51080	Hedgerow
S08-T60	Deal Farm, Sawston	TL 48681 50914	Field margin / ditch
S09-T61	Sawston-Babraham Cycleway, Sawston, CB22 3JH	TL 49709 49993	Hedgerow
S09-T62	Sawston-Babraham Cycleway, Sawston, CB22 3JH	TL 49774 49987	Hedgerow
S09-T63	Sawston-Babraham Cycleway, Sawston, CB22 3JH	TL 49852 49960	Hedgerow
S09-T64	Sawston-Babraham Cycleway, Sawston, CB22 3JH	TL 49808 50044	Hedgerow
S09-T65	Sawston-Babraham Cycleway, Sawston, CB22 3JH	TL 49941 49980	Hedgerow
S10-T66	High Street, Babraham, CB22 3AS	TL 50713 49502	Hedgerow
S10-T67	High Street, Babraham, CB22 3AS	TL 50653 49443	Woodland edge / field margin
S10-T68	High Street, Babraham, CB22 3AS	TL 50568 49506	Woodland edge / field margin
S10-T69	Sawston-Babraham Cycleway, Sawston, CB22 3JH	TL 50476 49566	Woodland edge / field margin

Tunnel Reference	Location	Grid Reference	Habitat type
S10-T70	Sawston-Babraham Cycleway, Sawston, CB22 3JH	TL 50415 49615	Hedgerow
S11-T71	A11, Bourn Bridge, Little Abington, CB21 6AP	TL 51851 49842	Woodland edge / field margin
S11-T72	A11, Bourn Bridge, Little Abington, CB21 6AP	TL 51886 49797	Hedgerow
S11-T73	A11, Bourn Bridge, Little Abington, CB21 6AP	TL 51964 49770	Hedgerow
S11-T74	A11, Bourn Bridge, Little Abington, CB21 6AP	TL 51939 49684	Hedgerow
S11-T75	A505, Fourwentways, Babraham, CB21 6AW	TL 51888 49568	Hedgerow
S12-T76	Newmarket Road, Four Went Ways, Little Abington, CB21 6AN	TL 52043 49504	Woodland edge / field margin
S12-T77	A11, Bourn Bridge, Little Abington, CB21 6AR	TL 52000 49532	Woodland edge / field margin
S12-T78	A11, Bourn Bridge, Little Abington, CB21 6AR	TL 51992 49599	Woodland edge / field margin
S12-T79	A11, Bourn Bridge, Little Abington, CB21 6AR	TL 52013 49671	Woodland edge / field margin
S12-T80	A11, Bourn Bridge, Little Abington, CB21 6AR	TL 52025 49729	Woodland edge / field margin
S12-T81	A11, Bourn Bridge, Little Abington, CB21 6AR	TL 52116 49902	Hedgerow
S12-T82	A11, Bourn Bridge, Little Abington, CB21 6AR	TL 52143 49957	Hedgerow

Tunnel Reference	Location	Grid Reference	Habitat type
S12-T83	A11, Bourn Bridge, Little Abington, CB1 6AR	TL 52169 50004	Hedgerow
S12-T84	Bourn Bridge, Little Abington, CB21 6AR	TL 52208 50000	Hedgerow
S12-T85	A11, Bourn Bridge, Little Abington, CB21 6AR	TL 52194 49942	Hedgerow
S13-T86	A1307, Bourn Bridge, Little Abington, CB21 6AR	TL 52318 50126	Field margin
S13-T87	Bourn Bridge, Little Abington, CB21 6AR	TL 52292 50093	Field margin
S13-T88	Bourn Bridge, Little Abington, CB21 6AR	TL 52301 50037	Field margin
S13-T89	Bourn Bridge, Little Abington, CB21 6AR	TL 52322 49968	Field margin
S13-T90	A11, Bourn Bridge, Little Abington, CB21 6AR	TL 52366 49918	Field margin

3.3.9 The tunnels for location sites 1-7 (S01-07) were first set up on the 9 November 2020. GPS locations were taken to aid with re-locating the tunnels. The tunnels were baited with hedgehog food mix.

3.3.10 Daily checks of the tunnels were implemented over five days. On each of the checking days, sheets of paper were removed from each tunnel and replaced. Bait was replaced each day and old bait removed. Data recorded each day included the presence of prints and droppings, evidence of tunnel disturbance and whether bait was taken or remained in place.

3.3.11 On 16 November 2020, sites 1-7 tunnels were retrieved and sites 8-13 (S08-13) set up. These tunnels were then collected in on 23 November 2020.

Trail Camera Survey

3.3.12 Trail cameras were also deployed during this period, then collected on 1 December 2020.

Table 2: Summary of Trail Camera Locations

Camera Reference	Location	Grid Reference	Habitat type
TC-1	Granhams Road, Great Shelford, CB22 5JY	TL 46493 53420	Hedgerow/ gate
TC-2	Coppice Avenue, Great Shelford, CB22 5AQ	TL 46849 53144	Woodland edge/ field margin
TC-3	Middlefield Cottage, Haverhill Road, Stapleford, CB22 5BX	TL 48105 52632	Hedgerow
TC-4	Haverhill Road, Stapleford, CB22 5BX	TL 47800 52155	Field Margin/ hedgerow
TC-5	Haverhill Road, Stapleford, CB22 5BX	TL 47931 52010	Hedgerow
TC-6	Fox Hill, Stapleford, CB22 5FX	TL 48132 51348	Field margin/ ditch
TC-7	Deal Farm, Sawston	TL 48686 50914	Field margin/ ditch
TC-8	A11, Bourn Bridge, Little Abington, CB21 6AP	TL 51843 49826	Woodland edge/ field margin

3.4 Survey Limitations and Assumptions

The commissioning of this survey came later in the 2020 survey programme so it was not possible to schedule this earlier in the survey season.

4 Results

4.1 Desk Study

Biological Records for hedgehog

- 4.1.1 A data search requested by Mott MacDonald produced 28 results for hedgehogs within 2km of the Scheme. Two records were returned from within the survey area along Babraham High Street.
- 4.1.2 The majority of the records are of dead hedgehogs along the surrounding roads. Records were returned from Great Shelford, Sawston and Babraham.

4.2 Field Survey

Footprint Tunnel Surveys

- 4.2.1 Animal prints were recorded in all tunnel locations.
- 4.2.2 None of the sheets collected from the surveys showed presence of hedgehog prints.
- 4.2.3 Cat *Felis catus*, fox *Vulpes vulpes* and small mammal tracks, such as mice and rat *Rattus sp*, were present.
- 4.2.4 The motion sensitive cameras did not capture evidence of hedgehog, however badger *Meles meles*, fox and muntjac deer *Muntiacus reevesi* footage was obtained.

Site 1

Table 3: Site 1

Survey Number	Date of Survey	Weather Conditions	Results
01	10/11/2020	12°C, Passing clouds	Mice prints and droppings
02	11/11/2020	11°C, Scattered clouds	Mice and fox prints
03	12/11/2020	10°C, Passing clouds	Mice prints and droppings
04	13/11/2020	12°C, Scattered clouds	Mice prints

Survey Number	Date of Survey	Weather Conditions	Results
05	16/11/2020	10°C, Passing clouds	Mice and rat prints

Site 2

Table 4: Site 2

Survey Number	Date of Survey	Weather Conditions	Results
01	10/11/2020	13°C, Passing clouds	Mice prints and droppings
02	11/11/2020	12°C, Scattered clouds	Mice prints and droppings
03	12/11/2020	11°C, Passing clouds	Mice prints and droppings
04	13/11/2020	12°C, Scattered clouds	Mice and fox prints
05	16/11/2020	10°C, Passing clouds	Mice prints and droppings

Site 3

Table 5: Site 3

Survey Number	Date of Survey	Weather Conditions	Results
01	10/11/2020	14°C, Passing clouds	Mice prints and droppings
02	11/11/2020	12°C, Passing clouds	Mice prints and droppings
03	12/11/2020	12°C, Passing clouds	Mice prints and droppings
04	13/11/2020	11°C, Scattered clouds	Mice prints and droppings
05	16/11/2020	10°C, Passing clouds	Mice prints and droppings

Site 4

Table 6: Site 4

Survey Number	Date of Survey	Weather Conditions	Results
01	10/11/2020	14°C, Scattered clouds	Mice prints and droppings
02	11/11/2020	13°C, Passing clouds	Mice prints and droppings
03	12/11/2020	12°C, Passing clouds	Mice prints and droppings
04	13/11/2020	12°C, Passing clouds	Mice prints and droppings
05	16/11/2020	10°C, Passing clouds	Mice prints and droppings

Site 5

Table 7: Site 5

Survey Number	Date of Survey	Weather Conditions	Results
01	10/11/2020	13°C, Scattered clouds	Mice, bird and cat prints
02	11/11/2020	13°C, Passing clouds	Mice and cat prints
03	12/11/2020	12°C, Passing clouds	Mice prints and droppings
04	13/11/2020	12°C, Passing clouds	Mice and bird prints
05	16/11/2020	10°C, Passing clouds	Mice and fox prints

Site 6

Table 8: Site 6

Survey Number	Date of Survey	Weather Conditions	Results
01	10/11/2020	14°C, Scattered clouds	Mice prints and droppings

Survey Number	Date of Survey	Weather Conditions	Results
02	11/11/2020	13°C, Passing clouds	Mice prints and droppings
03	12/11/2020	12°C, Passing clouds	Mice prints and droppings
04	13/11/2020	12°C, Passing clouds	Mice prints and droppings
05	16/11/2020	10°C, Passing clouds	Mice prints and droppings

Site 7

Table 9: Site 7

Survey Number	Date of Survey	Weather Conditions	Results
01	10/11/2020	14°C, Scattered clouds	Mice prints and droppings
02	11/11/2020	13°C, Passing clouds	Mice prints and droppings
03	12/11/2020	12°C, Passing clouds	Mice prints and droppings
04	13/11/2020	12°C, Passing clouds	Mice prints and droppings
05	16/11/2020	11°C, Passing clouds	Mice prints and droppings

Site 8

Table 10: Site 8

Survey Number	Date of Survey	Weather Conditions	Results
01	17/11/2020	14°C, Partly sunny	Mice prints and droppings
02	18/11/2020	12°C, Sunny	Mice prints and droppings

Survey Number	Date of Survey	Weather Conditions	Results
03	19/11/2020	9°C, Partly sunny	Mice prints and droppings
04	20/11/2020	4°C, Partly sunny	Mice prints and droppings
05	23/11/2020	5°C, Sunny	Mice prints and droppings

Site 9

Table 11: Site 9

Survey Number	Date of Survey	Weather Conditions	Results
01	17/11/2020	14°C, Partly sunny	Mice prints and droppings
02	18/11/2020	13°C, Sunny	Mice prints and droppings
03	19/11/2020	9°C, Partly sunny	Mice prints and droppings
04	20/11/2020	5°C, Overcast	Mice prints and droppings
05	23/11/2020	8°C, Sunny	Mice prints and droppings

Site 10

Table 12: Site 10

Survey Number	Date of Survey	Weather Conditions	Results
01	17/11/2020	14°C, Partly sunny	Mice prints and droppings
02	18/11/2020	13°C, Sunny	Mice and vole prints
03	19/11/2020	8°C, Light rain. Mostly cloudy	Mice prints and droppings

Survey Number	Date of Survey	Weather Conditions	Results
04	20/11/2020	6°C, Light rain. Mostly cloudy	Mice and vole prints
05	23/11/2020	8°C, Sunny	Mice prints and droppings

Site 11

Table 13: Site 11

Survey Number	Date of Survey	Weather Conditions	Results
01	17/11/2020	14°C, Scattered clouds	Mice prints and droppings
02	18/11/2020	14°C, Scattered clouds	Mice prints and droppings
03	19/11/2020	8°C, Light rain. Mostly cloudy	Mice prints and droppings
04	20/11/2020	7°C, Overcast	Mice prints and droppings
05	23/11/2020	9°C, Sunny	Mice prints and droppings

Site 12

Table 14: Site 12

Survey Number	Date of Survey	Weather Conditions	Results
01	17/11/2020	14°C, Scattered clouds	Mice prints and droppings
02	18/11/2020	14°C, Scattered clouds	Mice prints and droppings
03	19/11/2020	9°C, Broken clouds	Mice prints and droppings
04	20/11/2020	7°C, Overcast	Mice prints and droppings

Survey Number	Date of Survey	Weather Conditions	Results
05	23/11/2020	9°C, Sunny	Mice prints and droppings

Site 13

Table 15: Site 13

Survey Number	Date of Survey	Weather Conditions	Results
01	17/11/2020	14°C, Partly sunny	Mice prints and droppings
02	18/11/2020	14°C, Scattered clouds	Mice prints and droppings
03	19/11/2020	9°C, Broken clouds	Mice prints and droppings
04	20/11/2020	7°C, Overcast	Mice prints – tunnel chewed
05	23/11/2020	9°C, Sunny	Mice prints and droppings

Incidental sightings

- 4.4.2 No hedgehogs have been recorded during other surveys which have been undertaken during 2020.

5 References

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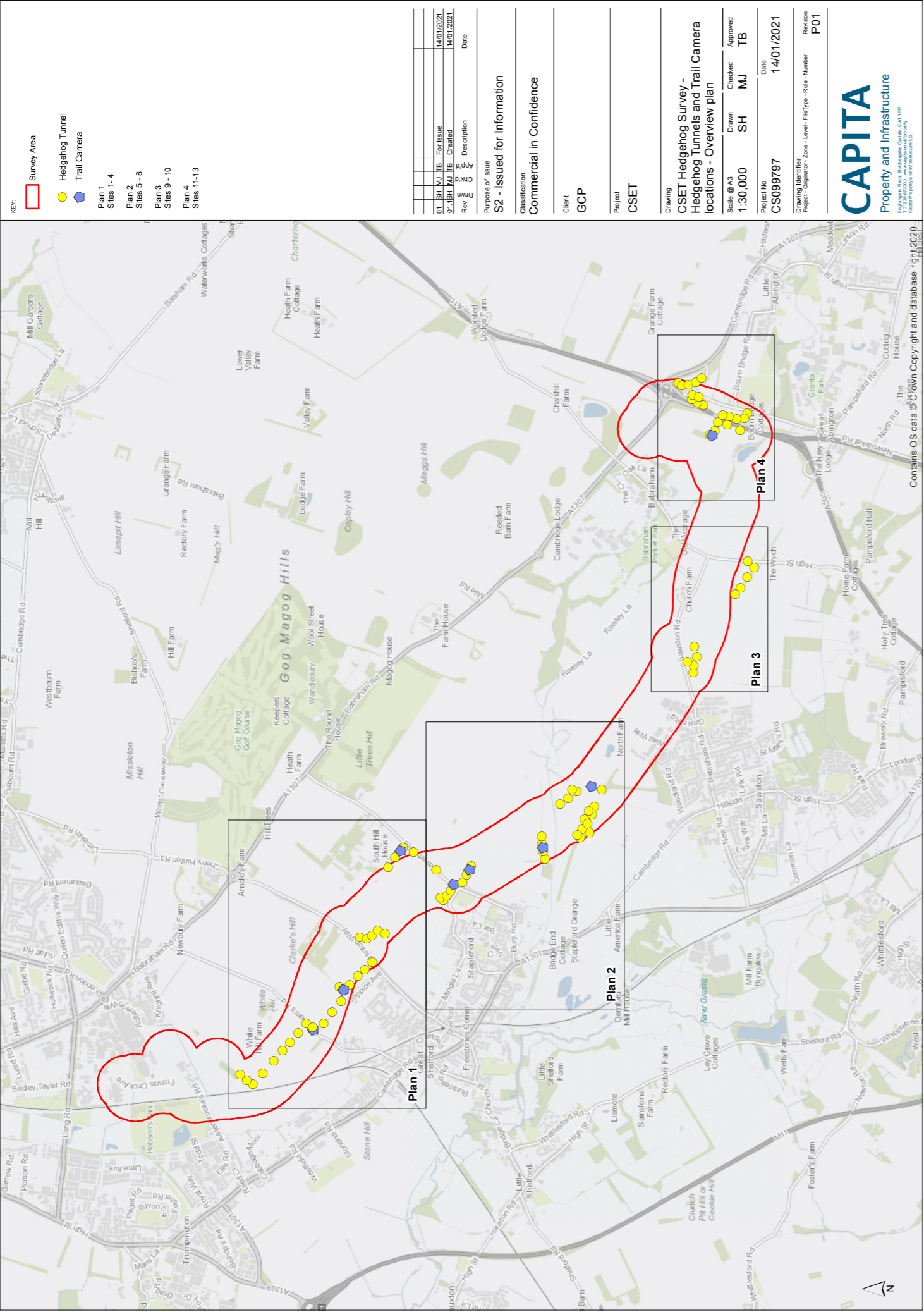
Guidance for detecting hedgehogs using footprint tracking tunnels, Version 1 May 2015 <https://ptes.org/wp-content/uploads/2015/06/Guidance-for-detecting-hedgehogs-using-tracking-tunnels.pdf> [Date accessed: 06/11/2020]

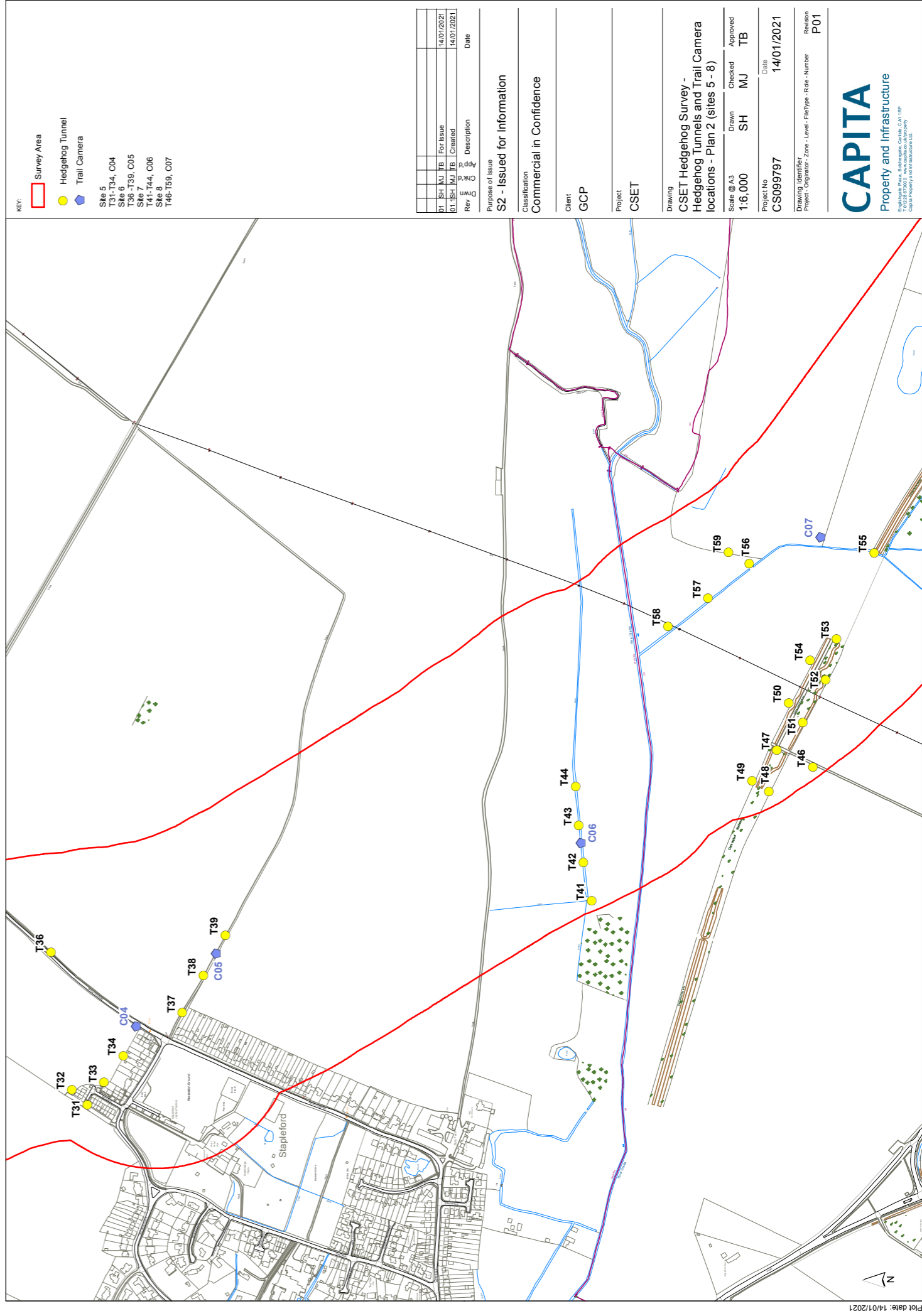
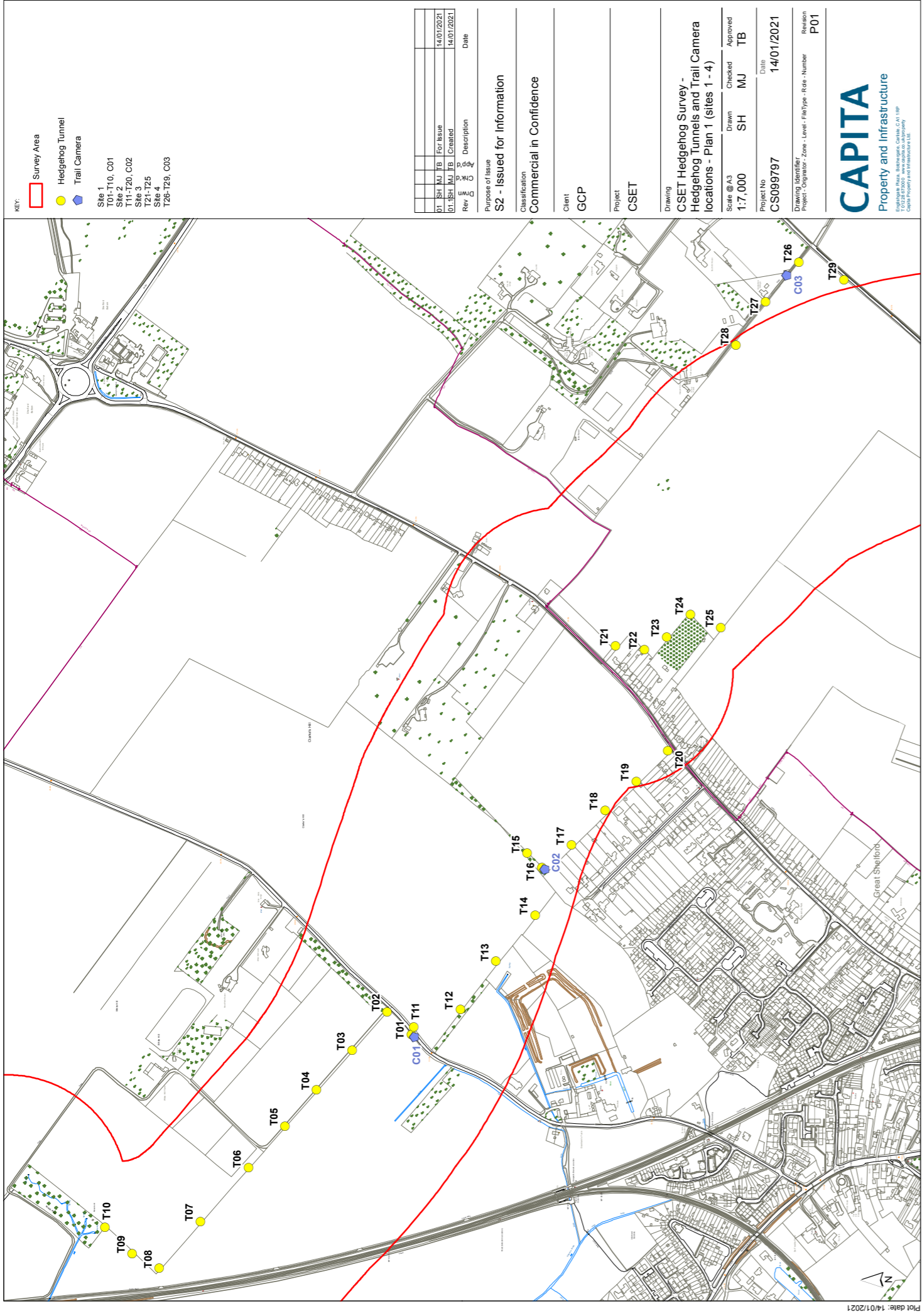
Figures

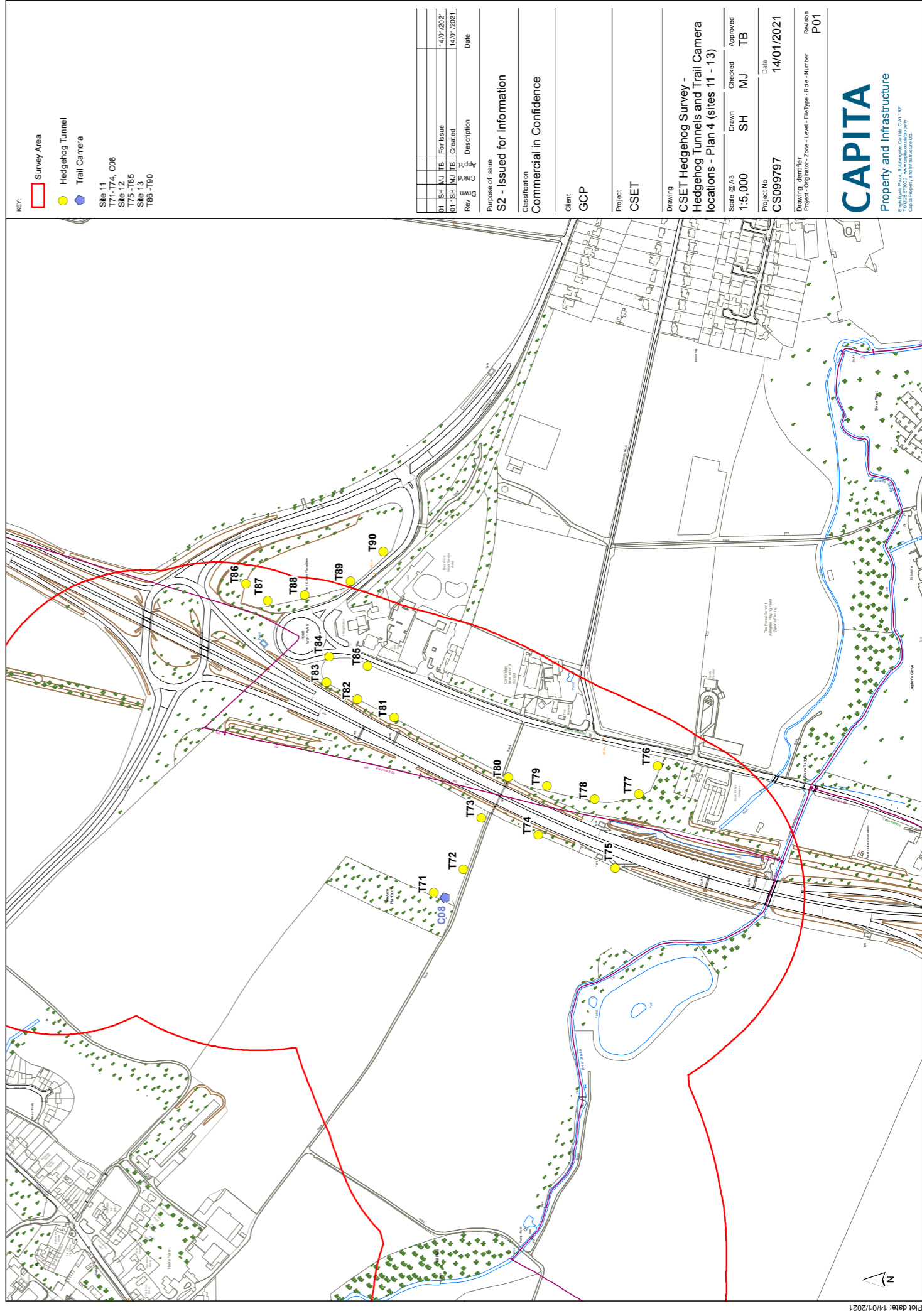
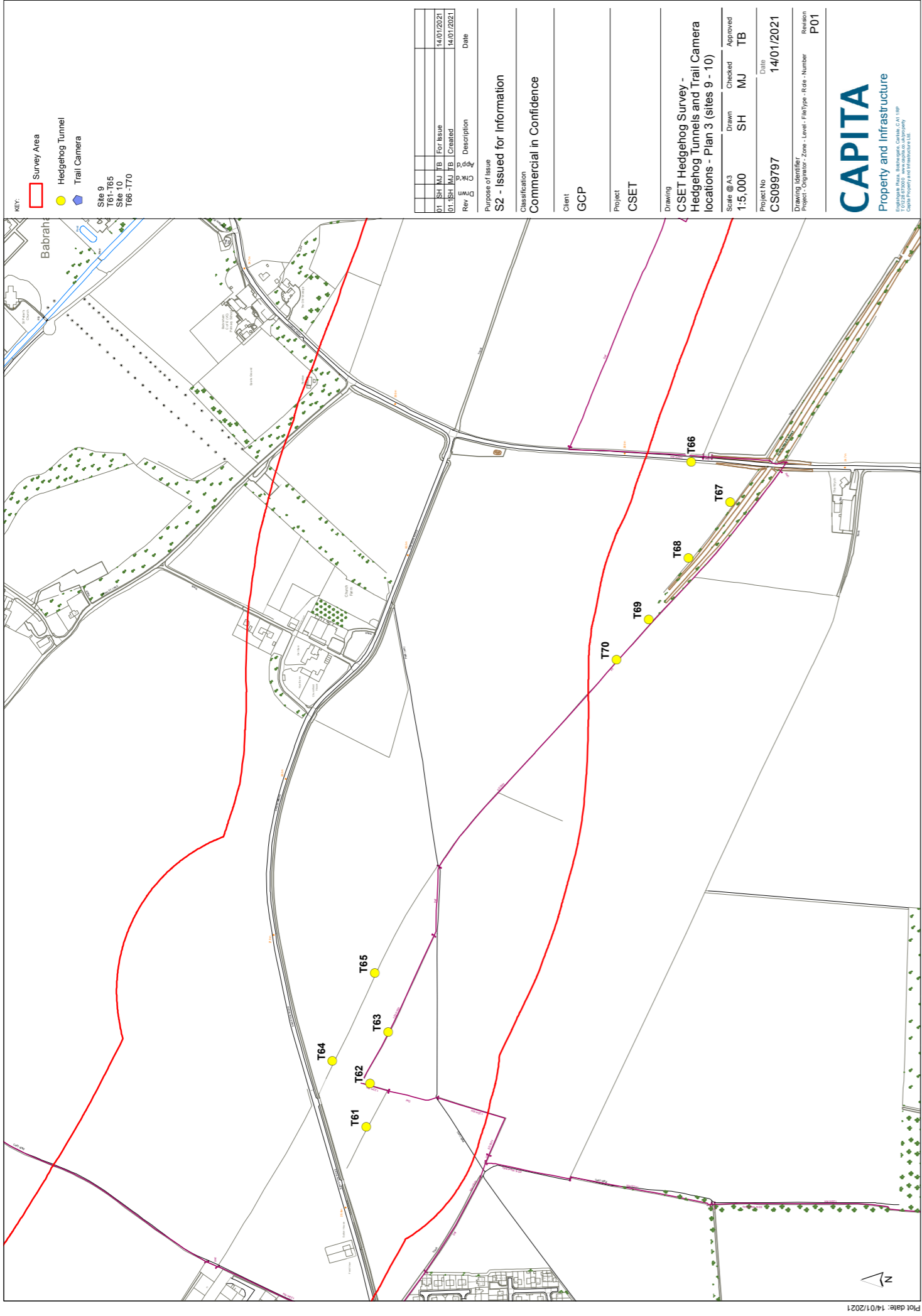
Figure 1 – Scheme and Survey Area

Appendices

Appendix A – Tunnels Location Maps







Appendix B – Trail Camera Data Results

Table 16: Trail Camera 1 (C01)

Species	Time	Date	Camera Clip Number
Reeve's muntjac	16:55	05-11-2020	VIDO0010
European badger	21:16	05-11-2020	VIDO0011
European badger	21:38	05-11-2020	VIDO0012
European badger	21:02	06-11-2020	VIDO0019
European badger	21:21	06-11-2020	VIDO0020
Red fox	03:40	06-11-2020	VIDO0013
Red fox	00:48	07-11-2020	VIDO0021
Red fox	18:31	09-11-2020	VIDO0035
Red fox	00:39 – 00:41	10-11-2020	VIDO0066 to VIDO0069
Red fox	17:57	10-11-2020	VIDO0092
Red fox	04:12	11-11-2020	VIDO0097
Red fox	03:49	12-11-2020	VIDO0156
European badger	02:36	24-11-2020	VIDO0020
Reeve's muntjac	02:14	27-11-2020	VIDO0068
Red fox	19:37	29-11-2020	VIDO0090

Table 17: Trail Camera 2 (C02)

Species	Time	Date	Camera Clip Number
Reeve's muntjac	02:07 – 02:10	06-11-2020	VIDO0005 – VIDO0008
Reeve's muntjac	07:20	06-11-2020	VIDO0011
Reeve's muntjac	09:26	06-11-2020	VIDO0013
Reeve's muntjac	17:02 – 17:05	06-11-2020	VIDO0016 – VIDO0021
Reeve's muntjac	22:35	06-11-2020	VIDO0022
Reeve's muntjac	00:14	07-11-2020	VIDO0023
Reeve's muntjac	01:41 – 01:42	07-11-2020	VIDO0024 - 0025
Red fox	03:24	08-11-2020	VIDO0033
Reeve's muntjac	08:39	08-11-2020	VIDO0037
Reeve's muntjac	00:14	10-11-2020	VIDO0061
Reeve's muntjac	18:35	10-11-2020	VIDO0093
Reeve's muntjac	18:47 – 18:48	10-11-2020	VIDO0094 - 0095
Red fox	02:35	11-11-2020	VIDO0097
Reeve's muntjac	18:33	11-11-2020	VIDO0102
Reeve's muntjac	18:37	11-11-2020	VIDO0103
Reeve's muntjac	23:15	11-11-2020	VIDO0104
Red fox	23:45	11-11-2020	VIDO0105
Reeve's muntjac	04:48	12-11-2020	VIDO0108

Species	Time	Date	Camera Clip Number
Reeve's muntjac	05:08	12-11-2020	VIDO0109
Reeve's muntjac	07:08	12-11-2020	VIDO0110
Reeve's muntjac	02:38	13-11-2020	VIDO0006
Reeve's muntjac x2	02:49	13-11-2020	VIDO0007
Reeve's muntjac	04:05	13-11-2020	VIDO0008
Reeve's muntjac	23:10	13-11-2020	VIDO0016
European badger	23:27	13-11-2020	VIDO0017-0018
Reeve's muntjac	00:02	14-11-2020	VIDO0020
Reeve's muntjac	16:57	14-11-2020	VIDO0023
Reeve's muntjac	21:12	14-11-2020	VIDO0025
Reeve's muntjac	23:05 - 23:07	14-11-2020	VIDO0027-0028
Reeve's muntjac	00:21	16-11-2020	VIDO0040
Reeve's muntjac	02:43	16-11-2020	VIDO004
Reeve's muntjac	04:29	16-11-2020	VIDO0045
Reeve's muntjac	05:55	16-11-2020	VIDO0046
Reeve's muntjac	07:09-07:10	16-11-2020	VIDO0047-0048
Reeve's muntjac	18:26-18:27	16-11-2020	VIDO0056-0057
Reeve's muntjac	20:19	16-11-2020	VIDO0058
Reeve's muntjac	22:26-22:27	16-11-2020	VIDO0059-0060
Reeve's muntjac	23:05	17-11-2020	VIDO0065
Reeve's muntjac	00:35-00:40	18-11-2020	VIDO0066-0070
Reeve's muntjac	03:15	18-11-2020	VIDO0071
Reeve's muntjac	20:30	18-11-2020	VIDO0078
Reeve's muntjac	21:55	18-11-2020	VIDO0079
Reeve's muntjac (adult + juvenile)	21:13	19-11-2020	VIDO0005
Reeve's muntjac	02:30-02:31	20-11-2020	VIDO0006-0007
European Badger	00:05	21-11-2020	VIDO0021
European Badger	00:51	21-11-2020	VIDO0022
Reeve's muntjac	00:55	21-11-2020	VIDO0023
Reeve's muntjac	02:02	21-11-2020	VIDO0024
Reeve's muntjac	02:27	21-11-2020	VIDO0026
Red fox	02:42	21-11-2020	VIDO0027
Red fox	04:15	21-11-2020	VIDO0031
Reeve's muntjac	06:02	21-11-2020	VIDO0032
Reeve's muntjac	10:26-10:29	21-11-2020	VIDO0035-0038
Reeve's muntjac	16:34-16:35	21-11-2020	VIDO0048-0049
Reeve's muntjac	16:45-16:47	21-11-2020	VIDO0050-0051
Reeve's muntjac	18:36	21-11-2020	VIDO0055
Reeve's muntjac	19:01	21-11-2020	VIDO0056
Reeve's muntjac	20:02	21-11-2020	VIDO0057
Reeve's muntjac	20:20	21-11-2020	VIDO0059
Reeve's muntjac	21:02	21-11-2020	VIDO0061
Reeve's muntjac	23:25	21-11-2020	VIDO0063

Species	Time	Date	Camera Clip Number
Reeve's muntjac	02:07	22-11-2020	VIDO0064
Reeve's muntjac	03:43	22-11-2020	VIDO0065
Reeve's muntjac	05:43	22-11-2020	VIDO0067
Reeve's muntjac	10:47	22-11-2020	VIDO0070
Reeve's muntjac	16:09	22-11-2020	VIDO0071
Reeve's muntjac	16:49	22-11-2020	VIDO0072
Reeve's muntjac (adult male, female + juvenile)	19:44	22-11-2020	VIDO0073
Reeve's muntjac	16:01-16:02	23-11-2020	VIDO0096-0097
Reeve's muntjac	17:28	23-11-2020	VIDO0098
Reeve's muntjac	00:08	24-11-2020	VIDO0101
Reeve's muntjac	01:49	24-11-2020	VIDO0102
Reeve's muntjac	21:24	24-11-2020	VIDO0118
Reeve's muntjac	01:43-01:45	25-11-2020	VIDO0119-0120
Reeve's muntjac	03:13	25-11-2020	VIDO0122
Red fox	15:18	25-11-2020	VIDO0131
European badger	20:31	25-11-2020	VIDO0134
Reeve's muntjac	21:00	25-11-2020	VIDO0135
Reeve's muntjac	14:16	26-11-2020	VIDO0145
Reeve's muntjac	20:50	26-11-2020	VIDO0147
Reeve's muntjac	05:31	27-11-2020	VIDO0149
Red fox	06:08	27-11-2020	VIDO0150
Reeve's muntjac	07:35	27-11-2020	VIDO0151
Red fox	11:04	27-11-2020	VIDO0156
Red fox	12:46	27-11-2020	VIDO0160
Red fox	14:21	27-11-2020	VIDO0162
Reeve's muntjac (adult + juvenile)	17:40	27-11-2020	VIDO0163
Reeve's muntjac	18:04	27-11-2020	VIDO0165
Reeve's muntjac	20:14-20:15	27-11-2020	VIDO0166-0167
Reeve's muntjac	21:43	27-11-2020	VIDO0168
Reeve's muntjac	23:17	27-11-2020	VIDO0169
Reeve's muntjac	05:12	28-11-2020	VIDO0170
European badger	00:45	29-11-2020	VIDO0174
Reeve's muntjac	02:14 – 02:16	29-11-2020	VIDO0175-0177
Reeve's muntjac	03:02	29-11-2020	VIDO0179
Reeve's muntjac (adult + juvenile)	03:32	29-11-2020	VIDO0180
Reeve's muntjac (adult + juvenile)	03:37	29-11-2020	VIDO0181
Reeve's muntjac	05:46	29-11-2020	VIDO0182
Reeve's muntjac	05:53	29-11-2020	VIDO0184

Species	Time	Date	Camera Clip Number
Red fox + Reeve's muntjac	12:45	29-11-2020	VIDO0189
Reeve's muntjac	12:46-12:48	29-11-2020	VIDO0190-0192
Reeve's muntjac	20:40	29-11-2020	VIDO0193
Reeve's muntjac	22:56	29-11-2020	VIDO0196
Red fox	23:20	29-11-2020	VIDO0197
Red fox	03:05	30-11-2020	VIDO0201
Reeve's muntjac	16:28	30-11-2020	VIDO0207
European badger	18:58	30-11-2020	VIDO0208
Reeve's muntjac	00:36	01-12-2020	VIDO0211
Reeve's muntjac	02:01	01-12-2020	VIDO0214
Reeve's muntjac	05:37	01-12-2020	VIDO0216
Reeve's muntjac	06:33	01-12-2020	VIDO0218

Table 18: Trail Camera 3 (C03)

Species	Time	Date	Camera Clip Number
No species recorded	N/A	N/A	N/A

Table 19: Trail Camera 4 (C04)

Species	Time	Date	Camera Clip Number
Reeves's muntjac	00:22	08-11-2020	VIDO0008
Red fox	02:59	10-11-2020	VIDO0021
Red fox	03:06	10-11-2020	VIDO0023

Table 20: Trail Camera 5 (C05)

Species	Time	Date	Camera Clip Number
No species recorded	N/A	N/A	N/A

Table 21: Trail Camera 6 (C06)

Species	Time	Date	Camera Clip Number
European badger	20:43-20:44	22-11-2020	VIDO0113-114
European badger	21:07	27-11-2020	VIDO0117
European badger	19:43	29-11-2020	VIDO0118
European badger	21:25	29-11-2020	VIDO0119
Reeve's muntjac	22:42	29-11-2020	VIDO0120

Species	Time	Date	Camera Clip Number
Reeve's muntjac	18:21	30-11-2020	VIDO0121
European badger	18:47	30-11-2020	VIDO0122

Table 22: Trail Camera 7 (C07)

Species	Time	Date	Camera Clip Number
No species recorded	N/A	N/A	N/A

Table 23: Trail Camera 8 (C08)

Species	Time	Date	Camera Clip Number
Reeve's muntjac	21:19	13-11-2020	VIDO0141
European badger	23:32	13-11-2020	VIDO0146

Appendix C – Hedgehog Tunnel



Hedgehog Tunnel (T11) along hedgerow field boundary (TL 46515 53420)

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