

AtkinsRéalis



HAVANT THICKET RESERVOIR PROJECT

New Pipeline Scheme

**Hazel Dormouse
Survey Report**

Portsmouth Water Ltd.

December 2024

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Contents

1.	Introduction.....	5
1.1	Terms of Reference	5
1.2	Hazel dormouse legislation	5
1.3	The Scheme	5
1.4	The Site	6
1.5	Scope of the Assessment	7
2.	Methodology	8
2.1	Desk study	8
2.2	Habitat suitability assessment.....	8
2.3	Presence/ likely absence survey.....	8
2.4	Limitations	10
3.	Results.....	11
3.1	Desk study	11
3.2	Habitat suitability assessment.....	12
3.3	Presence/ likely absence survey.....	12
4.	Recommendations	13
4.1	Recommendations	13
4.2	Report validity	13
Appendix A.	Site location	15
Appendix B.	Legislation.....	17
Appendix C.	Hazel dormouse nest tube locations.....	18
Appendix D.	Havant Thicket Reservoir Monitoring Survey Results	20
Appendix E.	Hazel dormouse nest tube survey results	22

Tables

Table 1-1 - Surface work locations along the Scheme (numbered from south to north).....	6
Table 2-1 - Index of probability scores	9
Table B-1 - Summary of relevant hazel dormouse legislation	17
Table E-1 - Survey Area (nest tubes deployed in March 2024)	22

Figures

Figure A-1 - Site location	15
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Figure C-1 - Hazel dormouse nest tube locations	18
Figure D-1 – Havant Thicket Reservoir Monitoring Survey Results	20



1. Introduction

1.1 Terms of Reference

AtkinsRéalis UK Limited was commissioned by Ward and Burke on behalf of Portsmouth Water to undertake hazel dormouse presence / likely absence surveys in connection with the installation of a pipeline between the Bedhampton Springs at the Bedhampton Pumping Station and the Havant Thicket Reservoir (hereafter referred to as the Scheme). The Scheme is located near Havant, Portsmouth, as shown on Figure A-1 in Appendix A (hereafter referred to as the Site).

An Environmental Statement (ES)¹ was produced for the Scheme in May 2024 which should be read in conjunction with this report. The ES was submitted to support a planning application for the new dual pipeline scheme (Application ref: APP/24/00405).

This report summarises the details of the hazel dormouse surveys undertaken, including the methods used, results of the surveys, and provides recommendations in relation to hazel dormouse and the Scheme.

1.2 Hazel dormouse legislation

Hazel dormice are fully protected as European Protected Species (EPS) under the Conservation of Habitats and Species Regulations 2017 (as amended). They are also protected under the Wildlife and Countryside Act 1981 (as amended). A summary of the legislation in relation to hazel dormice is provided in Table B-1 in Appendix B.

1.3 The Scheme

The objective of the Havant Thicket Reservoir Scheme is to provide a new resource to supply drinking water in the water-stressed South East of England, while maximising the community and environmental benefits of a new raw water reservoir.

The reservoir, when constructed, will be filled with surplus water drawn from the Bedhampton Springs at the Bedhampton pumping station. This will be when flows are at their highest in winter via a new pipeline and will provide water supplies to Portsmouth Water customers in the summer months as required. The Scheme will also enable additional water to be supplied to Southern Water. Southern Water has a forecast deficit in water resources in the Hampshire area, created by the reduction in abstraction from the internationally designated River Itchen and the nationally designated River Test, as agreed with the Environment Agency (EA).

As well as augmenting water supplies and increasing the resilience of water resource management in the South East, the reservoir would provide a new recreational resource adjacent to one of the more deprived areas in south east Hampshire, in a location which the community can access on foot, by bike, or through existing bus routes. It also offers further opportunities to improve the wider footpath, cycleway and bridleway networks in the area. More than 29,500 people live within reasonable walking distance of the Site (1.5 km) and 120,000 people live within reasonable cycling distance (4.5 km).

The Scheme would provide a new wetland habitat and associated area for nature conservation. The proximity of the reservoir to the internationally important Langstone and Chichester Harbour means that it may be used as a safe

¹ AtkinsRéalis, (2024). Havant Thicket Reservoir Project – Environmental Statement. HTR-ATK-XX-XX-RP-Z-0001. Portsmouth Water

retreat for qualifying bird species when there is disturbance in the Harbour Special Protection Area (SPA) and Ramsar site. The construction of the reservoir will result in substantial reductions in nutrient loads to the harbour.

The proposed pipelines would transfer water from Bedhampton Springs to fill the reservoir in the winter and draw water off for treatment and supply when needed in the summer. It would also be used for emergency drawdown should the reservoir levels need to be reduced in emergency conditions, in accordance with the EA safety guidance.

The Scheme is allocated in the adopted Havant Borough Council (HBC) and East Hampshire District Council (EHDC) Local Plans. Further information and details can be found in the Planning Statement², which accompanies the planning applications.

1.4 The Site

The proposed pipeline extends from the Bedhampton pumping station, northwards through the Leigh Park housing estate in Havant under roads and open spaces. It runs north/ north-east adjacent to Hermitage Stream and Riders Lane Stream before heading north-west through Staunton Country Park to the proposed control house within the Havant Thicket Reservoir site.

The Scheme comprises seven underground-only work locations (the drilled sections) and eight ‘surface’ work locations, collectively referred to as ‘the Site’ in this report. The location of each ‘surface’ work location is detailed in Table 1-1 below. The work location ID will be used to reference the specific surface works locations, where required, throughout the report. In addition, there are two other ‘surface’ work locations; Section 9 between Shaft 8 and the Havant Thicket Reservoir Site, and Section 10 which is within the Havant Thicket Reservoir Site. Figure A-1 in Appendix A shows all of the Scheme work locations.

Table 1-1 - Surface work locations along the Scheme (numbered from south to north)

Surface work location ID	Central Ordnance Survey National Grid Reference (OSNGR)
Shaft 1	SU 70557 06332
Shaft 2	SU 70700 06893
Shaft 3	SU 70863 07175
Shaft 4	SU 71123 07331
Emergency Discharge Chamber	SU 71009 07562
Shaft 5	SU 71183 07793
Shaft 6	SU 71291 08166
Shaft 7	SU 71611 08293
Shaft 8	SU 71832 08741

The habitats present throughout the Site (surface works locations only) comprise woodland, other neutral grassland, modified grassland, dense scrub and tree lines intersected by rivers and streams (Hermitage or Riders Lane Stream). At the northern end of the Scheme, before entering the Havant Thicket Reservoir site, the Scheme intersects Staunton

² AtkinsRéalis, (2024). Havant Thicket Reservoir Project Revised Pipeline Scheme – Planning Statement. Portsmouth Water.



Country Park. The park includes various nature conservation designations within its boundary, although none of these designations are for hazel dormice.

1.5 Scope of the Assessment

This report presents ecological information relevant to hazel dormice, obtained during the following:

- A desk study undertaken intermittently between January 2023 (protected species data acquired from Hampshire Biodiversity Information Centre (HBIC)) and August 2024 (updated review of Multi-Agency Geographic Information for the Countryside (MAGIC) website);
- A habitat suitability assessment for protected species, including hazel dormouse, within and adjacent to the Site undertaken between January and March 2023; and
- Hazel dormouse presence / likely absence surveys undertaken between March and October 2024.



2. Methodology

2.1 Desk study

The geographical area for obtaining ecological data through desk studies is based on the potential Ecological Zone of Influence (EZoI) of the Scheme and has been determined using professional judgement.

Baseline data has been gathered from a range of sources through data requests, and using online resources as outlined below.

Hazel dormouse survey and monitoring data from the Havant Thicket Reservoir Scheme was reviewed^{3, 4, 5}.

The MAGIC website was reviewed to identify:

- Relevant statutory designated nature conservation sites within 1 km of the Scheme with hazel dormice as a qualifying species; and
- Granted EPS mitigation licences within 2 km of the Scheme.

HBIC was contacted to identify:

- Non-statutory designated nature conservation sites within 1 km of the Scheme with hazel dormice as a qualifying feature; and
- Recent⁶ records of hazel dormouse within 1 km of the Scheme.

2.2 Habitat suitability assessment

Habitat suitability assessments for protected species were conducted between January and March 2023 at surface work locations. The habitat suitability assessment is based on information adapted from descriptions of habitat suitability in The Dormouse Conservation Handbook⁷. Field surveys divided habitats into four habitat suitability categories: optimal, sub-optimal, poor and negligible.

2.3 Presence/ likely absence survey

Hazel dormouse presence/ likely absence surveys were carried out using nest tubes between March and October 2024 in suitable habitat within and adjacent to Shaft 7 and Shaft 8 (hereafter referred to as 'the Survey Area'). Surveys were not undertaken at Shaft 1 – 6, including the Emergency Discharge Chamber, and Section 10 as the habitats were not considered to be suitable for hazel dormice and have poor connectivity due to fragmentation from the urban area, whilst Section 10 is an active construction site within the Havant Thicket Reservoir Site. Section 9 and the Shaft 8 north of Middle Park Way were excluded from the presence/ absence surveys as recent surveys have confirmed the presence of hazel dormouse in habitats directly connected to Section 9 and the Shaft 8 north of Middle Park Way.

³ ECOSA Ltd., (2022). 2022 European Protected Species Ecological Monitoring and Ecological Supervision Report. Havant Thicket Reservoir.

⁴ ECOSA Ltd., (2023). 2022 European Protected Species Ecological Monitoring and Ecological Supervision Report. Havant Thicket Reservoir.

⁵ Atkins, (2020). Environmental Statement – Ecology Chapter. Havant Thicket Reservoir.

⁶ Within the past 10 years.

⁷ Bright, P.W., Morris, P.A. & Mitchell-Jones, A.J. (2006). The Dormouse Conservation Handbook (2nd Edition). English Nature, Peterborough.

The surveys were undertaken in accordance with good practice guidance⁸ and the Chartered Institute of Ecology and Environmental Management (CIEEM) competencies for undertaking hazel dormouse surveys⁹. They were undertaken by two ecologists, one of whom held a Natural England hazel dormouse survey licence.

A total of 100 artificial nest tubes were placed in suitable habitat (i.e. woodland, hedgerow and scrub) as shown in Figure C-1 in Appendix C. Nest tubes were deployed on 26th March 2024 and collected on 15th October 2024 after the last check for hazel dormouse presence.

Where possible nest tubes were spaced between 15 m and 20 m apart. Where access was restricted due to overgrown vegetation, tubes were placed closer together. Nest tubes were fastened below horizontal tree/scrub branches (including within bramble).

Nest tubes were checked monthly from April 2024 up to and including October 2024.

Using 50 tubes as a standard for surveying, a combined Index of Probability score can be calculated to demonstrate the robustness of the hazel dormouse survey. The Index of Probability score is based on the likelihood of a tube being occupied in any specific month and is highest in May, August and September when nest tubes are most frequently occupied. The combined score is calculated by adding together the Index of Probability score for each full month the survey tubes are present and is increased or decreased depending on the number of nest tubes deployed⁸. Table 2-1 below shows the index of probability for score for the survey area.

A combined Index of Probability score of 20 or above must be achieved to be able to conclude likely absence of hazel dormice in any particular survey area. A combined score of 22 has been achieved indicating a robust survey has taken place.

Table 2-1 - Index of probability scores

Month (index of probability)	Survey Area
March (0)	0 – Nest tubes deployed
April (1)	1
May (4)	4
June (2)	2
July (2)	2
August (5)	5
September (7)	7
October (2)	1 – Nest tubes collected on 15 th October so only half the score is awarded
November (2)	0
TOTAL SCORE	22

⁸ Bright, P.W., Morris, P.A. & Mitchell-Jones, A.J. (2006). *The Dormouse Conservation Handbook* (2nd Edition). English Nature, Peterborough.

⁹ CIEEM (2013). *Competencies for Species Survey: Hazel Dormouse*.



2.4 Limitations

HBIC do not hold exhaustive records of all the species that occur within a given area. Therefore, the absence (or limited numbers) of records for hazel dormice does not demonstrate that the species is absent from any particular area. This limitation has been addressed by carrying out targeted presence/likely absence surveys for hazel dormice.

The following nest tubes were not surveyed during each survey visit:

- **June:** 8, 9, 10, and 34 (total 4 tubes);
- **July:** 6, 8, 9, 10, 20, 23, 29, 34, 36, 54, 83, 85, 86, 87, 88, 90, 91, 92, 97, and 99 (total 20 tubes);
- **August:** 8, 10, 34, 84, 85, 86, 87, 88, 89, 91, 92, 93, 97, 98, and 99 (total 15 tubes);
- **September:** 8, 10, 23, 30, 34, 35, 37, 40, 57, 84, 85, 86, 87, 88, 89, 91, 92, 97, 98, and 99 (total 20 tubes); and
- **October:** 8, 23, 34, 35, 57, 84, 85, 86, 87, 88, 89, 91, 92, 93, 97, 98, and 99 (total 17 tubes).

Table E-1 in Appendix D gives further details on the nest tubes which were not surveyed each month and when replacement tubes were installed. The nest tubes had either fallen onto the ground, were lost in dense vegetation, or thought to have been removed by members of the public. However, which nest tubes were thought to be lost in vegetation, fallen on the ground, or removed, was not recorded by the surveyors. It was clear that some nest tubes had been removed by members of the public as the wire attaching the nest tubes to the branch was still present and some nest tubes were found nearby on the ground and deliberately damaged. Therefore, these were not replaced due to the risk of disturbance to any hazel dormice which may have used the nest tubes. Some other nest tubes were not replaced as the surveyors did not have enough spare replacement nest tubes or it was thought the nest tube may be found on the next visit.

From June to October between four and 20 nest tubes were not surveyed. Although this is between 4% and 20% of the overall number of nest tubes, this is not considered to be a significant limitation. This is because 50 nest tubes would have been a sufficient survey effort for the Site as a whole in line with survey guidelines and over 50 were checked on each visit⁷.



3. Results

3.1 Desk study

Ecological Survey and Assessment (ECOSA Ltd.) and a Hampshire County Council (HCC) ranger recorded hazel dormice and field signs confirming the presence of hazel dormice within the Havant Thicket Reservoir site⁵, which is located within 1 km of the Scheme (presence/ likely absence surveys undertaken between 2005 and 2009; hazel dormouse recorded by ranger in 2011). The results of these surveys were used to inform the EPS mitigation licence for the Havant Thicket Reservoir scheme (2020-50257-EPS-AD2-2), issued by Natural England in September 2022:

- Licence reference 2020-50257-EPS-AD2-2 (27/09/2022 – 30/11/2035): This licence allows the capture of 25 hazel dormice, transportation of 25 hazel dormice, disturbance of hazel dormice, destruction of a resting place for hazel dormice and destruction of a breeding site for hazel dormice.

ECOSA Ltd. recorded hazel dormice and field signs confirming the presence of hazel dormice within the Havant Thicket Reservoir site during monitoring surveys undertaken between May to October 2022³ and May to November 2023⁴, as shown on Figure D-1 in Appendix D.

A review of MAGIC identified no relevant statutory designated nature conservation sites within 1 km of the Scheme with hazel dormice as a qualifying species.

A review of MAGIC identified four granted EPS mitigation licences for hazel dormice within 2 km of the Scheme:

- 2016-21182-EPS-MIT (11/03/2016 – 01/01/2019): Damage of a breeding site for hazel dormice, damage of a resting place for hazel dormice and destruction of a resting place for hazel dormice. Licensed site located approximately 1.50 km west of the Scheme (adjacent to the location licensed under 2014-456-EPS-MIT).
- 2014-3156-EPS-MIT (18/09/2014 – 31/12/2019): Impact on a breeding site for hazel dormice and destruction of a resting place of hazel dormice. Licensed site located approximately 1.20 km west of the Scheme.
- 2014-456-EPS-MIT (08/05/2014 – 31/10/2020): Damage of a breeding site for hazel dormice, damage of a resting place for hazel dormice, destruction of a breeding site for hazel dormice and destruction of a resting place for hazel dormice. Licensed site located approximately 1.50 km west of the Scheme (adjacent to the location licensed under 2016-21182-EPS-MIT).
- 2019-39163-EPS-MIT (19/03/2019 – 30/11/2024): Impact on a breeding site for hazel dormice, destruction of a breeding site for hazel dormice and destruction of a resting site for hazel dormice. Licensed site located approximately 1.80 km west of the Scheme. Note, the licensed location is beyond the A3(M), which acts as a barrier to dispersal between the Scheme and the licenced location.

HBIC identified no non-statutory designated nature conservation sites within 1 km of the Scheme with hazel dormice as a qualifying feature.

HBIC returned two records of hazel dormice within 1 km of the Scheme (data requested 10th January 2023):

- Record at OSNGR SU 706 095 (2019): Two hazel dormice located approximately 0.95 km northwest of the Scheme.
- Record at OSNGR SU706096 (2019): Hazel dormice located approximately 0.99 km northwest of the Scheme (species confirmed as present, number of individuals not provided with record).

The suitable habitat north of Middle Park Way road, which comprises the northern part of Shaft 8 and Section 9, is connected to suitable habitat where evidence of hazel dormice was recorded during surveys in 2022 and 2023 for



the Havant Thicket Reservoir Scheme. Therefore, hazel dormice are assumed to be present in all suitable habitat within the Site north of Middle Park Way.

3.2 Habitat suitability assessment

The habitat suitability assessment recorded habitat of optimal and sub-optimal suitability to support hazel dormouse within the Site at Shaft 7, Shaft 8 and Section 9. All other work locations within the Site were of poor or negligible suitability to support hazel dormice as they lacked connectivity to offsite habitats suitable for hazel dormice due to their very urban location. Middle Park Way is a road within Shaft 8 which may act as a minor barrier to dispersal for hazel dormice north and south of Middle Park Way.

3.3 Presence/ likely absence survey

During the hazel dormouse presence / likely absence surveys undertaken in the Survey Area in 2024, no evidence of hazel dormouse was recorded. Hazel dormice are considered likely absent from the Survey Area, i.e., between Shaft 7 and Shaft 8 south of Middle Park Way.

The nest tube survey results in the Survey Area are fully detailed in Table E-1 in Appendix D.



4. Recommendations

4.1 Recommendations

The hazel dormouse presence/ likely absence surveys have confirmed the likely absence of hazel dormice from the Survey Area around Shaft 7 and Shaft 8. Therefore, works within the Survey Area, i.e., Shaft 7 and Shaft 8 south of Middle Park Way, do not require a Natural England EPS hazel dormouse licence. However, due to evidence of hazel dormouse north of Middle Park Way road, it is recommended that the works at Shaft 7 and Shaft 8 are carried out taking a precautionary approach to site clearance, using a written Method Statement/ Precautionary Method of Working.

The suitable habitat north of Middle Park Way road, which comprises the northern part of Shaft 8 and Section 9, is connected to suitable habitat where evidence of hazel dormice was recorded during surveys in 2022 and 2023 for the Havant Thicket Reservoir Scheme. Therefore, hazel dormice are assumed to be present in all suitable habitat within the Site north of Middle Park Way and a Natural England EPS hazel dormouse mitigation licence will be required for works in this location.

Most of the impacted habitat areas will be reinstated once works are complete in the area. The licence application method statement will fully detail the mitigation and compensation measures,

4.2 Report validity

In the event of scope or programme changes or if works do not commence within 24 months of the date of this report, then updates to the surveys may be required to ensure the validity of the data, as per Chartered Institute of Ecology and Environmental Management guidance¹⁰. A walkover survey must be undertaken within three months of any EPS licence application or modification for hazel dormouse to ensure habitat conditions have not changed since the last dormouse survey as per Natural England guidance for licence applications¹¹.

¹⁰ CIEEM (2019) *Advice Note on the Lifespan of Ecological Reports and Surveys*.

¹¹ Natural England. *Hazel Dormice – Method Statement template to support a licence application* [a35-2_method_statement.doc \(live.com\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/635222/a35-2_method_statement.doc)



APPENDICES

Appendix A. Site location

Figure A-1 - Site location



Appendix B. Legislation

Table B-1 - Summary of relevant hazel dormouse legislation

Species	Legislation	Relevant offences	Licensing procedures and guidance
Hazel dormice <i>European protected species</i>	Conservation of Habitats and Species Regulations 2017 (as amended) Reg 43.	Deliberately ¹² capture, injure or kill a hazel dormouse; deliberate disturbance ¹³ of a hazel dormouse; or damage or destroy a breeding site or resting place used by a hazel dormouse.	An NE licence in respect of development is required. Guidance documents: <i>NE Standing Advice for protected species 2022</i> <i>European Protected Species: Mitigation Licensing - How to get a licence</i> (NE 2013) <i>Dormouse Conservation Handbook</i> (English Nature 2006)
	Wildlife and Countryside Act 1981 (as amended) Schedule 5, Section 9.	Intentionally kill, injure or take a hazel dormouse; intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection or disturb ¹⁴ a hazel dormouse in such a place.	Licence issued for survey and conservation by NE.
	Natural Environment & Rural Communities Act 2006 Section 40 (as amended)	Not applicable	Section 40 of the NERC Act 2006 (as amended) sets out the duty for public authorities to conserve biodiversity in England. Habitats and species of principal importance for the conservation of biodiversity are identified by the Secretary of State for England, in consultation with Natural England, are referred to in Section 41 of the NERC Act (as amended) for England. The list of habitats and species can be found on the NE website under 'Habitats and species of principal importance in England'. The list is used as a guide for decision makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act 2006 (as amended) to have regard to the conservation of biodiversity in England when carrying out their normal functions. N.B. The UK Biodiversity Action Plan (BAP) was used to draw up the list of Species and Habitats of Principal Importance and was succeeded by the UK Post-2010 Biodiversity Framework in 2012. However, the UK BAP list of priority habitats and species continue to be regarded as conservation priorities in the UK Post-2010 Biodiversity Framework (JNCC & Defra, July 2012).

¹² Deliberate capture or killing is taken to include “accepting the possibility” of such capture or killing.

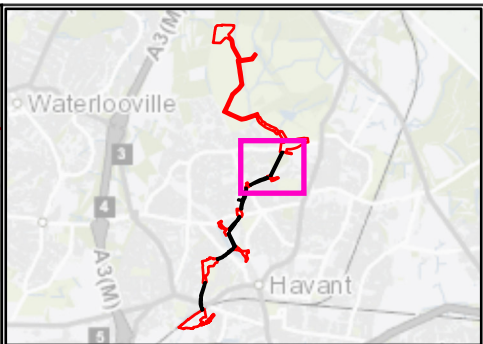
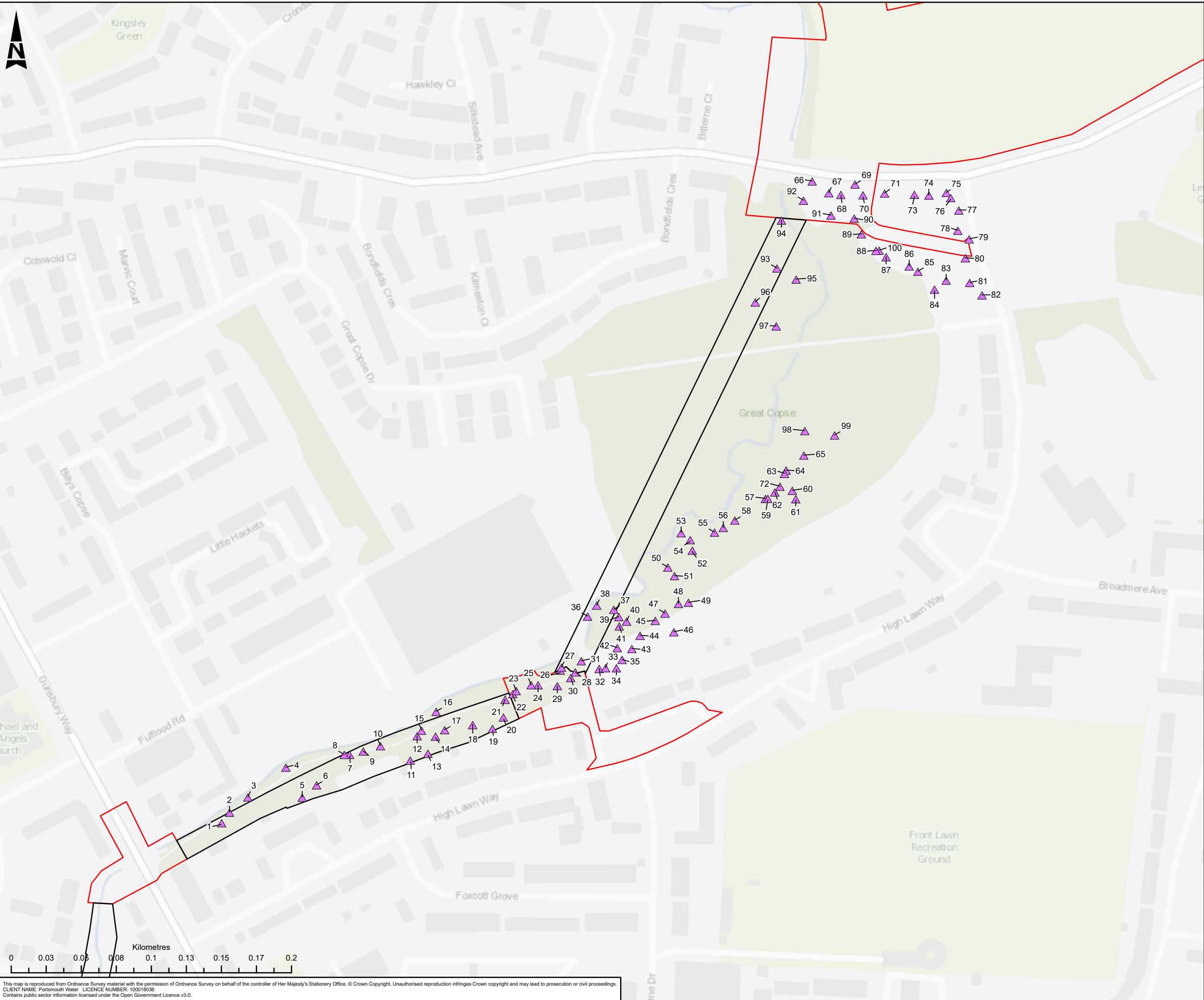
¹³ Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong.

¹⁴ Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong.

Appendix C. Hazel dormouse nest tube locations

Figure C-1 - Hazel dormouse nest tube locations





Pipeline Scheme Red Line Boundary

Surface and Underground Works

Underground Works Only

Hazel Dormouse Survey

Nest Tube Locations

C01	EN	MD	AR	JF	PUBLISHED	21/10/2024
Rev.	Dwn By	Ckd By	Rev By	Auth By	Description	Date



Aztec West
500 Park Avenue
Almondsbury
Bristol
BS32 4RZ

Tel: +44 (0) 1454 6620000
Fax: +44 (0) 1454 663333
www.atkinsrealis.com

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Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455



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Project Title
HAVANT THICKET RESERVOIR

Drawing Title
Figure C-1: HAZEL DORMOUSE NEST TUBE LOCATIONS

Portsmouth Water Drawing Number	Rev
	C01

Appendix D. Havant Thicket Reservoir Monitoring Survey Results

Figure D-1 – Havant Thicket Reservoir Monitoring Survey Results



Appendix E. Hazel dormouse nest tube survey results

Table E-1 - Survey Area (nest tubes deployed in March 2024)

Tube number	April 2024	23 rd May 2024	25 th June 2024	17 th July 2024	21 st August 2024	25 th September 2024	15 th October 2024
1	Empty	Empty	Empty	Empty	Empty	Empty	Empty
2	Empty	Empty	Empty	Empty	Empty	Empty	Empty
3	Empty	Empty	Empty	Empty	Empty	Empty	Empty
4	Empty	Empty	Empty	Empty	Empty	Empty	Empty
5	Empty	Empty	Empty	Empty	Empty	Empty	Empty
6	Empty	Empty	Empty	Could not find, replaced	Empty	Mouse sp. nest	Mouse sp. nest
7	Empty	Empty	Empty	Empty	Empty	Empty	Empty
8	Empty	Empty	Could not find	Could not find	Could not find	Could not find	Could not find
9	Empty	Empty	Could not find	Could not find, replaced	Empty	Empty	Empty
10	Empty	Empty	Could not find	Could not find	Could not find, replaced	Empty	Empty
11	Empty	Empty	Empty	Empty	Empty	Empty	Empty
12	Empty	Empty	Empty	Empty	Empty	Empty	Empty
13	Empty	Empty	Empty	Empty	Empty	Empty	Empty
14	Empty	Empty	Empty	Empty	Empty	Empty	Empty
15	Empty	Empty	Empty	Empty	Empty	Empty	Empty
16	Empty	Empty	Empty	Empty	Empty	Empty	Empty

Tube number	April 2024	23 rd May 2024	25 th June 2024	17 th July 2024	21 st August 2024	25 th September 2024	15 th October 2024
17	Empty	Empty	Empty	Empty	Empty	Empty	Empty
18	Empty	Empty	Empty	Empty	Empty	Empty	Empty
19	Empty	Empty	Empty	Empty	Empty	Empty	Empty
20	Empty	Empty	Empty	Could not find	Empty	Empty	Empty
21	Empty	Empty	Empty	Empty	Empty	Empty	Empty
22	Empty	Empty	Empty	Empty	Empty	Empty	Empty
23	Empty	Empty	Empty	Could not find	Empty	Nest tube removed by member of public, replaced	Nest tube on ground
24	Empty	Empty	Empty	Empty	Empty	Empty	Empty
25	Empty	Empty	Empty	Empty	Empty	Empty	Empty
26	Empty	Empty	Empty	Empty	Empty	Empty	Empty
27	Empty	Empty	Empty	Empty	Empty	Empty	Empty
28	Empty	Empty	Empty	Empty	Empty	Empty	Empty
29	Empty	Empty	Empty	Could not find	Empty	Empty	Empty
30	Empty	Empty	Empty	Empty	Empty	Could not find	Empty
31	Empty	Empty	Empty	Empty	Empty	Empty	Empty
32	Empty	Empty	Empty	Empty	Empty	Empty	Empty
33	Empty	Empty	Empty	Empty	Empty	Empty	Empty
34	Empty	Empty	Could not find	Could not find	Could not find	Could not find	Could not find
35	Empty	Empty	Empty	Empty	Empty	Could not find	Could not find

Tube number	April 2024	23 rd May 2024	25 th June 2024	17 th July 2024	21 st August 2024	25 th September 2024	15 th October 2024
36	Empty	Empty	Empty	Could not find	Empty	Empty	Empty
37	Empty	Empty	Empty	Empty	Empty	Could not find	Empty
38	Empty	Empty	Empty	Empty	Empty	Empty	Empty
39	Empty	Empty	Empty	Empty	Empty	Empty	Empty
40	Empty	Empty	Empty	Empty	Empty	Could not find	Empty
41	Empty	Empty	Empty	Empty	Empty	Empty	Empty
42	Empty	Empty	Empty	Empty	Empty	Empty	Empty
43	Empty	Empty	Empty	Empty	Empty	Empty	Empty
44	Empty	Empty	Empty	Empty	Empty	Empty	Empty
45	Empty	Empty	Empty	Empty	Empty	Empty	Empty
46	Empty	Empty	Empty	Empty	Empty	Empty	Empty
47	Empty	Empty	Empty	Empty	Empty	Empty	Empty
48	Empty	Empty	Empty	Empty	Empty	Empty	Empty
49	Empty	Empty	Empty	Empty	Empty	Empty	Empty
50	Empty	Empty	Empty	Empty	Empty	Empty	Empty
51	Empty	Empty	Empty	Empty	Empty	Empty	Empty
52	Empty	Empty	Empty	Empty	Empty	Empty	Empty
53	Empty	Empty	Empty	Empty	Empty	Empty	Empty
54	Empty	Empty	Empty	Could not find	Empty	Empty	Empty
55	Empty	Empty	Empty	Empty	Empty	Empty	Empty
56	Empty	Empty	Empty	Empty	Empty	Empty	Empty



Tube number	April 2024	23 rd May 2024	25 th June 2024	17 th July 2024	21 st August 2024	25 th September 2024	15 th October 2024
57	Empty	Empty	Empty	Empty	Empty	Could not find	Could not find
58	Empty	Empty	Empty	Empty	Empty	Empty	Empty
59	Empty	Empty	Empty	Empty	Empty	Empty	Empty
60	Empty	Empty	Empty	Empty	Empty	Empty	Empty
61	Empty	Empty	Empty	Empty	Empty	Empty	Empty
62	Empty	Empty	Empty	Empty	Empty	Empty	Empty
63	Empty	Empty	Empty	Empty	Empty	Empty	Empty
64	Empty	Empty	Empty	Empty	Empty	Empty	Empty
65	Empty	Empty	Empty	Empty	Empty	Empty	Empty
66	Empty	Empty	Empty	Empty	Empty	Empty	Empty
67	Empty	Empty	Empty	Empty	Empty	Empty	Empty
68	Empty	Empty	Empty	Empty	Empty	Empty	Empty
69	Empty	Empty	Empty	Empty	Empty	Empty	Empty
70	Empty	Empty	Empty	Empty	Empty	Empty	Empty
71	Empty	Empty	Empty	Empty	Empty	Empty	Empty
72	Empty	Empty	Empty	Empty	Empty	Empty	Empty
73	Empty	Empty	Empty	Empty	Empty	Empty	Empty
74	Empty	Empty	Empty	Empty	Empty	Empty	Empty
75	Empty	Empty	Empty	Empty	Empty	Empty	Empty
76	Empty	Empty	Empty	Empty	Empty	Empty	Empty
77	Empty	Empty	Empty	Empty	Empty	Empty	Empty



Tube number	April 2024	23 rd May 2024	25 th June 2024	17 th July 2024	21 st August 2024	25 th September 2024	15 th October 2024
78	Empty	Empty	Empty	Empty	Empty	Empty	Empty
79	Empty	Empty	Empty	Mouse sp. nest	Empty	Empty	Empty
80	Empty	Empty	Empty	Empty	Empty	Empty	Empty
81	Empty	Empty	Empty	Empty	Empty	Empty	Empty
82	Empty	Empty	Empty	Empty	Empty	Empty	Empty
83	Empty	Empty	Empty	Could not find	Empty	Empty	Empty
84	Empty	Empty	Empty	Empty	Could not find	Could not find	Could not find
85	Empty	Empty	Empty	Could not find	Could not find	Could not find	Could not find
86	Empty	Empty	Empty	Could not find	Could not find	Could not find	Could not find
87	Empty	Empty	Empty	Could not find	Could not find	Could not find	Could not find
88	Empty	Empty	Empty	Could not find	Could not find	Could not find	Could not find
89	Empty	Empty	Empty	Could not find	Could not find	Could not find	Could not find
90	Empty	Empty	Empty	Could not find	Empty	Empty	Empty
91	Empty	Empty	Empty	Could not find	Could not find	Could not find	Could not find
92	Empty	Empty	Empty	Could not find	Could not find	Could not find	Could not find
93	Empty	Empty	Empty	Empty	Empty	Empty	Could not find
94	Empty	Empty	Empty	Empty	Empty	Empty	Empty
95	Empty	Empty	Empty	Empty	Empty	Empty	Empty
96	Empty	Empty	Empty	Empty	Empty	Empty	Empty
97	Empty	Empty	Empty	Could not find, replaced	Could not find	Could not find	Could not find



Tube number	April 2024	23 rd May 2024	25 th June 2024	17 th July 2024	21 st August 2024	25 th September 2024	15 th October 2024
98	Empty	Empty	Empty	Empty	Could not find	Could not find	Could not find
99	Empty	Empty	Empty	Could not find, replaced	Could not find	Could not find	Could not find
100	Empty	Empty	Empty	Empty	Empty	Empty	Empty



AtkinsRéalis



AtkinsRéalis UK Limited
Woodcote Grove
Ashley Road
Epsom
KT18 5BW

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