

# A358 Taunton to Southfields Dualling Badger Technical Report 2020

PCF Stage 2

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## Executive summary

The proposed A358 Taunton to Southfield dualling scheme (hereafter referred to as ‘the scheme’) would provide a dual carriageway along the length of the A358 between Taunton and Ilminster in Somerset, connecting the A303 at Ilminster to the M5 motorway to the north. The scheme would include grade separated interchanges and, with the purpose of providing a high quality free flow journey for those using the route, the removal of at-grade junctions and direct accesses.

Field surveys to identify badger *Meles meles* signs were undertaken by Mott MacDonald Sweco Joint Venture in 2017, 2018, 2019 and 2020. The field surveys identified a total of 72 badger setts within 250m of the online section (section 1) of the scheme and 500m of the offline section (section 2). The field surveys included all scheme options until 2019 when the survey area was reduced to include only the footprint of the Pink Modified Option. Of these setts, 14 have been classified as main setts within the footprint of the scheme and 11 of these were subject to bait marking surveys. Badger bait marking surveys were undertaken in 2020 to establish the territories of each badger clan for 11 of the main setts and to provide information on whether the new road will cause fragmentation to these territories.

At the time of writing, the project is still within the design phase. Therefore, the full extent of potential impacts of the scheme on the badger populations is yet to be confirmed. An impact assessment, and mitigation and compensation measures to alleviate any potential impacts will be detailed within the Ecology and Nature Conservation chapter of the project Environmental Statement, when published.

# 1. Introduction

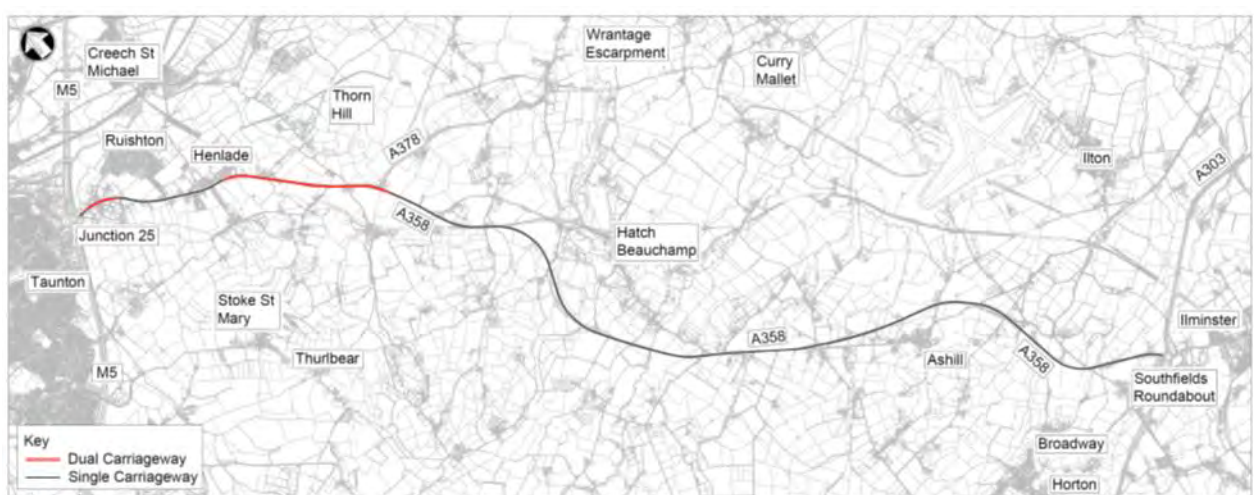
## 1.1. Background

1.1.1. The A303 / A358 corridor is a vital connection between the south-west of England, London and the south-east of England. Due to the population density, employment opportunities, urban concentrations and tourist attraction of the Southwest, the A303 / A30 / A358 corridor experiences a wide range of traffic flows which lead directly to severe and regular instances of congestion and delay.

1.1.2. The A303 / A30 is part of the strategic road network (SRN) and together with the A358 forms a key strategic link between the South West Peninsular (SWP) and the rest of the south, south-east and London. Although it is dualled over much of its length there are several unimproved single carriageway sections between the M3 motorway at Basingstoke and the M5 at Taunton and Exeter which cause congestion, especially during summer weekends.

1.1.3. The A358 between Taunton and Southfields Roundabout is predominantly single carriageway with a short (1.1 miles) dual carriageway section in the vicinity of Thornfalcon and a 3 lane (2+1) section (0.3 miles) immediately to the south of that. It has many side roads and private accesses directly onto it. The national speed limit applies between Southfields and Henlade where it reduces to 30mph; the speed limit increases to 40mph north of Henlade on the approach to the M5 Junction 25. A plan showing the existing route between Taunton and Southfields is provided in Figure 1:1.

Figure 1:1 : A358 Taunton to Southfields existing road layout

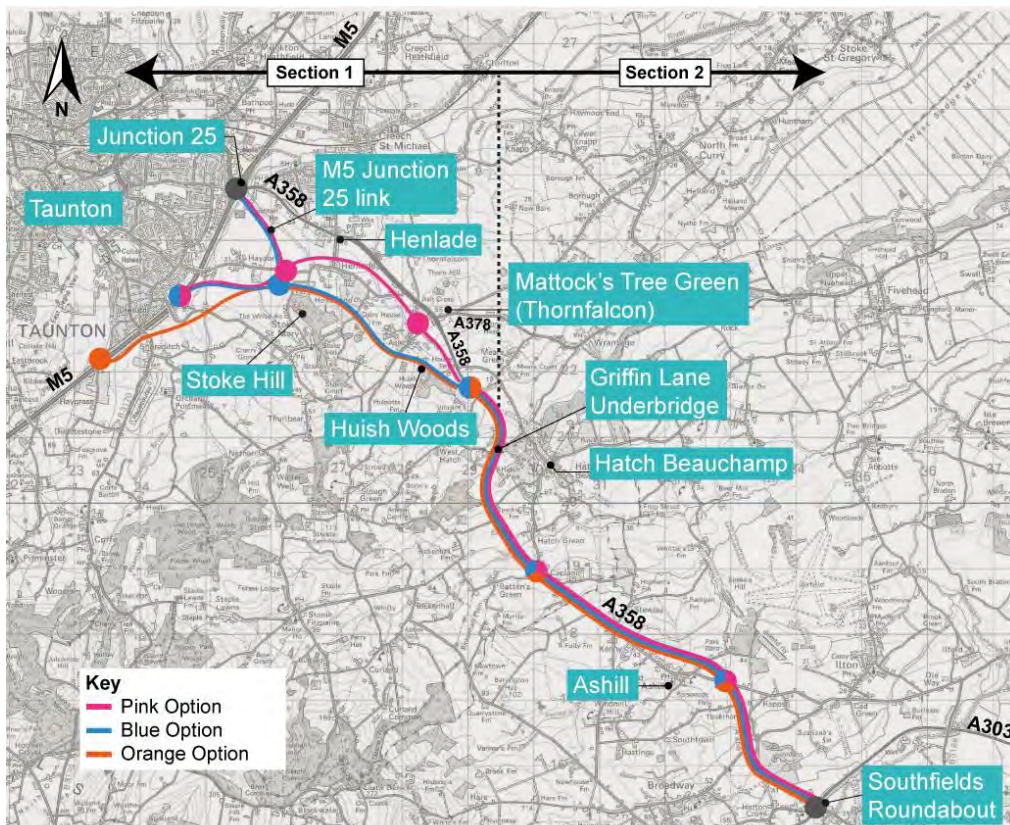


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1.1.4. Three potential route options were chosen, the Orange, Pink and Blue. At the public consultation in 2017 only the Orange option was presented. A further consultation was held in 2018 in which all three options were presented. The three route options presented at the 2018 consultation are described below and shown in Figure 1:2.

- The **Pink option** commences at a new junction on the M5 approximately 1.2 miles (2 kilometres) south of junction 25. South-facing slip roads from the M5 would combine to become the new dual carriageway, which runs eastwards and north of Stoke Hill. Here a limited-movement junction is proposed with east-facing slip road connections to the new road which would allow traffic to travel between the new A358 and junction 25 via a new 0.9 mile (1.5 kilometre) dual carriageway link past the planned Nexus 25 site. The proposed route would then follow the existing A358 to Southfields Roundabout enabling the existing road to be upgraded from a single to a dual carriageway. The total length of the Pink option is 9 miles (14.6 kilometres), plus the 0.9 miles (1.5 kilometres) spur leading to M5 junction 25.
- The **Blue option** commences at the M5 approximately 1.2 miles (2 kilometres) south of junction 25 and runs eastwards on a more southerly alignment. At Stoke Hill a junction is proposed similar to that with the Pink option which would allow traffic to travel between the road and junction 25 via a new 1.2 miles (2 kilometres) dual carriageway link past the planned Nexus 25 site. The road would then continue in a south-easterly direction to West Hatch Lane, where an all-movement, grade-separated junction is proposed to allow access to Hatch Beauchamp, Henlade and surrounding communities, and the A378. This option is identical to the Pink option from this point onwards to Southfields Roundabout. The total length of the Blue option is 8.7 miles (14.1 kilometres), plus the 1.2 miles (2 kilometres) spur leading to M5 junction 25.
- The **Orange option** commences at the M5 approximately 2.1 miles (3.5 kilometres) south of junction 25 at a proposed new 2-bridge roundabout which would form a new all-movements junction between the new A358 and the motorway. The proposed road initially takes a north-easterly course towards Henlade before arcing around the north of Stoke Hill. In contrast to the Blue option, there is no link to junction 25 from this location, and therefore no junction at Stoke Hill. This option is identical to the Blue option from this point onwards. The total length of the Orange option is 9.5 miles (15.3 kilometres).

Figure 1:2 : Route options presented at the public consultations



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## 1.2. Scheme proposal

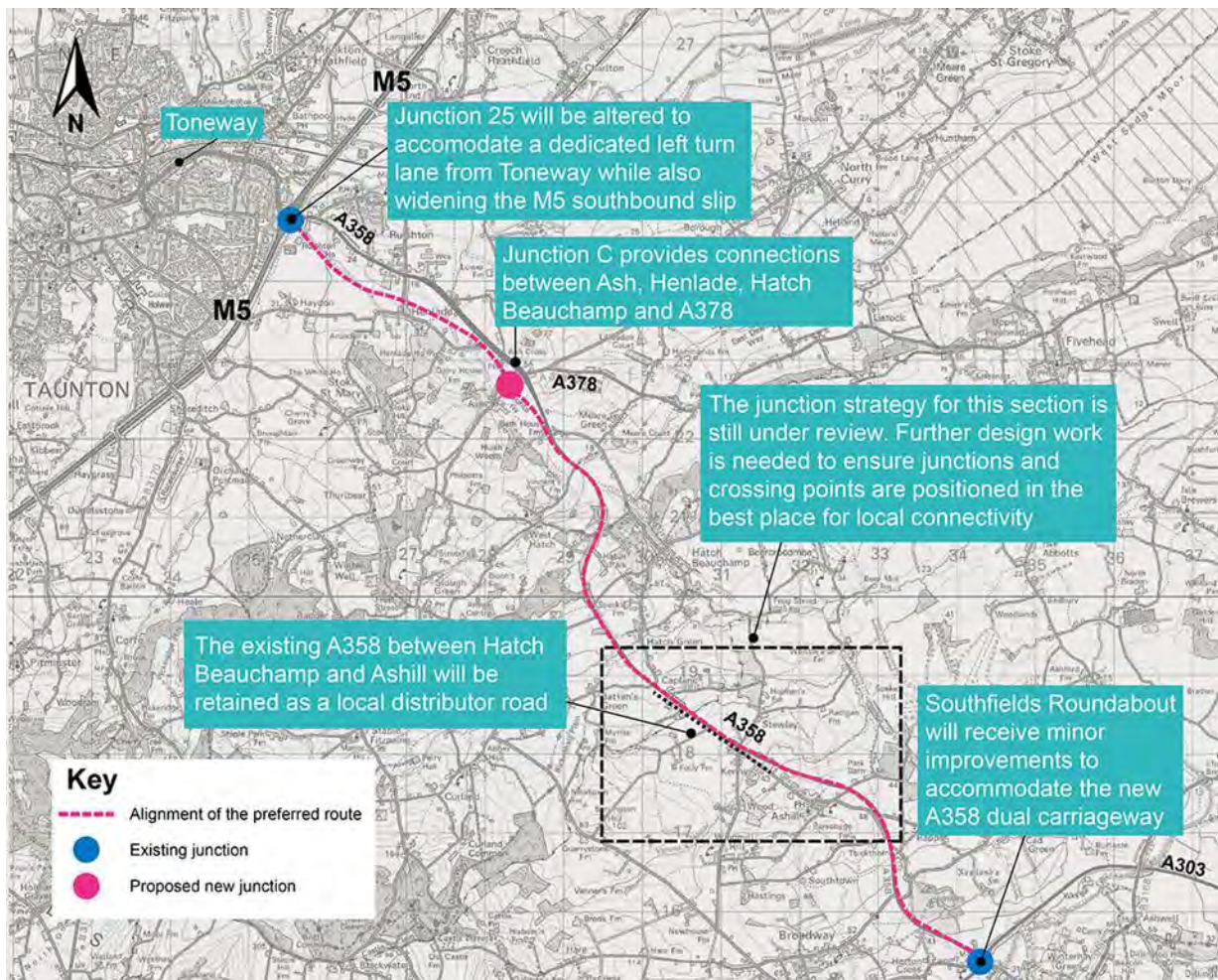
1.2.1. The Pink option is the most expensive option, but as the best performing of the three and the option attracting strong support from the 2018 consultation, it was trialed for modification to reduce the scheme cost. This revised option is referenced as the Pink Modified Option.

1.2.2. The Preferred Route Announcement (PRA) on the 13 June 2019 identified the Pink Modified Option as the preferred route option.

1.2.3. The Pink Modified Option would comprise online widening between West Hatch Lane and Southfields Roundabout. This option would involve the re-use of a large amount of the existing A358 corridor, and between West Hatch Lane and Henlade the route would pass close to the A378 junction at Mattocks Tree Green. This would enable direct interchange between the proposed road and the A378. The scheme retains the bypass at Henlade, connects with the A378, and connects directly to junction 25 on the M5. A plan showing the Pink Modified Option is shown in Figure 1:3 below.

1.2.4. The proposed scheme would provide a dual carriageway along the length of the A358 between Taunton and Ilminster in Somerset, connecting the A303 at Ilminster to the M5 motorway to the north. The scheme would include grade separated interchanges and, with the purpose of providing a high quality free flow journey for those using the route, the removal of at-grade junctions and direct accesses.

Figure 1:3 : Pink Modified option



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## 1.3. Purpose of the report

1.3.1. This Badger Technical Report has been prepared during Stage 2 of the Highways England's Project Control Framework (PCF). This Technical Report provides an overview of the badger *Meles meles* surveys results undertaken between 2017 and 2020 within 500m of the Pink Modified Option.



## 1.4. Scope of report

1.4.1. The objective of this report is to present the methodology, constraints and results of the badger surveys undertaken for the scheme. The report considers only the results relevant to the Pink Modified Option. Results of badger surveys undertaken that are not within 500m are included in the results map for completeness.

## 1.5. Study area

1.5.1. Guidance on ecological assessments recommends that all ecological features that occur within a zone of influence (Zoi) for a proposed scheme are investigated (CIEEM, 2018)<sup>1</sup>. The potential Zoi includes:

- Areas directly within the land take for the proposed scheme and access that could cause loss of badger setts or severance of territories
- Areas that would be temporarily affected during construction that could cause loss or disturbance to occupied setts
- Areas where there is a risk of noise disturbance during construction and/or operation

1.5.2. The Zoi for badgers is 500m in accordance with guidelines provided in the Design Manual for Road and Bridges (DMRB) for the construction of new roads<sup>2</sup>. This was reduced to 250m where the Pink Modified Option stays online as a proportionate approach agreed with Natural England.

1.5.3. Sett 114 and sett 84 are main setts just outside of the 250m buffer from the online section of the Pink Modified Option. The survey area was extended here for the bait marking surveys as a high level of activity was noted at the sett during the initial surveys.

## 1.6. Legislation

1.6.1. Badgers are common and widespread throughout the British Isles and are protected under the Protection of Badgers Act (1992)<sup>3</sup>. It is an offence to wilfully kill, injure or take (capture) or to cruelly ill-treat a badger. It is also an offence to intentionally or recklessly damage, destroy or obstruct access to a badger sett or to disturb a badger when it is occupying a **sett**.

1.6.2. There are two elements to the offence of causing disturbance to a badger occupying a sett; there must be an action capable of disturbing a badger, and the badger

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<sup>1</sup> Chartered Institute of Ecology and Environmental Management (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal

<sup>2</sup> Standards for Highways (2020) Design Manual for Roads and Bridges, Biodiversity Design LD 118

<sup>3</sup> Protection of Badgers Act (1992) c.51, ([Protection of Badgers Act 1992 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/1992/51))

must be occupying the sett at the time of disturbance. Disturbance can be described as to agitate, destroy, unsettle or to interfere with the settled course of operations. The tolerance of badgers to activities is likely to differ according to the conditions they are habituated to. Judgement must be exercised regarding scale and scope of operations as to whether actions could cause disturbance. Elements of construction activity, including earth works and vegetation clearance, within 30m of a sett where operations such as crop harvesting is undertaken routinely is unlikely to cause disturbance.

1.6.3. A sett can be defined as a place or structure where signs indicate current use by badger. Often, it is formed of a network of tunnels and chambers, but can include other structures. It is not illegal to carry out disturbing activities, or to damage, obstruct or destroy a sett if it is not occupied by a badger and does not show signs of current use (e.g. footprints, badger hair, bedding). Once such signs disappear and there are no badgers occupying the sett, then it may not be in current use and, therefore not protected. Unless a sett can be proved to have collapsed or fallen into disrepair through natural causes it should be assumed that it is in current use. If a sett shows signs of current use, a Natural England badger development licence would be required if there is the potential for an offence to occur. Interference / licensed sett disturbance must be avoided between December and June (inclusive), when badgers are breeding.

## **1.7. Status of badgers at the national level**

1.7.1. Badgers are one of only a handful of large native mammals in the UK. They are not a species of conservation concern, as they are widespread across the country. However, they are protected by national law, and are important for biodiversity in the UK.

1.7.2. It is estimated that the UK has 25% of the global population of badger<sup>4</sup> and it is important that the species is given due consideration during development to ensure that they have sufficient foraging opportunities and routes for dispersal, so that effective genetic variation may still occur.

## **1.8. Status of badgers at the county level**

1.8.1. Somerset is one of five counties where Department for Environment, Food and Rural Affairs (Defra) have authorised badger culls to take place, in an attempt to control the spread of tuberculosis in cattle. It is, therefore unclear what the population size of badgers is within the county. The population size is likely to be heavily influenced by the time of year and the specific areas that culling takes place.

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<sup>4</sup> The Wildlife Trust (<http://www.wildlifetrusts.org/badger>)

## 1.9. Badger ecology

1.9.1. Badgers are generally found in both suburban landscapes and in the countryside. Although their main food is earthworms, badgers are omnivores and at times of year when earthworms are scarce, they supplement their diet with various other foods such as fruit, berries, nuts, arable and cover crops, invertebrates and small mammals.

1.9.2. Badgers live in social groups called 'clans', with an average of six animals in each clan (though these numbers vary and can be considerably greater). A clan lives within a home range which varies greatly in size depending on the number of other clans within the local area and the quality of the foraging habitat held within the home range. Home ranges in good rural habitat can be less than 30 hectares, whilst home ranges in areas of poor foraging habitat can be as large as 300 hectares. Within these home ranges, the clan holds a territory which they actively defend against other clans. In good quality habitat this territory averages at approximately 50 hectares<sup>5</sup>.

1.9.3. Within the territory, badgers inhabit 'setts', which are complex, underground structures with a series of passages and chambers. Badgers are nocturnal and spend their days resting up within these setts. A clan can have a number of setts, with the 'main' sett used all year round. Other sett classifications are listed in section 2.4.

1.9.4. Badgers are both a philopatric and dynamic species. Their activity, sett creation, sett status, distribution and social group compositions can be changeable, with bursts of new sett creation activity in response to change. However, badgers are also known to exhibit loyalty to setts and habitual behaviour. They tend to use the same routes regularly, creating pathways and breaking down fencing in order to access preferred foraging areas.

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<sup>5</sup>Kruuk, T. & Parish, T., 1982. Factors affecting population density, group size and territory size of the European badger, *Meles meles*. *Journal of Zoology* 196: 31-39. Zoological Society of London.

## 2. Methodology

### 2.1. Survey guidance

2.1.1. The following survey guidance has been considered in the methodology design. Any deviation from standard industry practice is noted in Section 2.5: Constraints.

- Badgers: surveys and mitigation for development projects (Natural England, 2015)<sup>6</sup>
- Scottish Natural Heritage's (SNH) Best Practice Badger Survey Guidance Note (SNH, 2003)<sup>7</sup>
- Competencies for species surveys: Badger (Chartered Institute of Ecology and Environmental Management (CIEEM), 2013)<sup>8</sup>
- Classification of badger setts *Meles meles* in the UK: A review of guidance for surveyors (CIEEM, 2013)<sup>9</sup>
- Surveying badgers (Harris et al., 1989)<sup>10</sup>

### 2.2. Desk study

2.2.1. A detailed biological records search was requested from Somerset Environmental Records Centre (SERC) in 2017 up to a distance of 2 kilometres from the scheme to identify records of badger within the zone of influence (Zol) and wider surrounds. The records search was undertaken for all scheme options under consideration at the time, including the Pink Modified option. The results for badgers can be found within appendix A.

### 2.3. Habitat assessment

2.3.1. Prior to undertaking badger surveys, a Phase 1 habitat survey was undertaken in 2016. The Phase 1 habitat survey was undertaken from public rights of way (PRoW). The Zol was found to offer a variety of habitats for badger including woodland, hedgerows and scrub, providing suitable cover for sett construction and high value areas to forage. The Phase 1 survey identified signs of badger in the form of latrines, snuffle pits and setts. Two badger setts within the Zol for the Pink Modified option were identified during the Phase 1 surveys, sett 114 and an outlier sett with a grid reference ST27424 23107.

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<sup>6</sup> Natural England (2015), Badgers: surveys and mitigation for development project

<sup>7</sup> Scottish Natural Heritage (2003), Best Practice Badger Survey Guidance Note

<sup>8</sup> CIEEM (2013), Competencies for Species Survey: Badger

<sup>9</sup> CIEEM (2013), Classification of badger setts *Meles meles* in the UK: Review and Guidance for Surveyors

<sup>10</sup> Harris, S., Creswell, P., and Jefferies, D.J., 1989. Surveying badgers. Mammal Society, London.

## 2.4. Field signs surveys

2.4.1. Mott MacDonald Sweco JV undertook badger field signs surveys between February 2017 and February 2020 to identify badger setts and other signs of habitat use. Incidental badger signs were also recorded throughout the 2017, 2018, 2019 and 2020 survey seasons. The Zol was the scheme footprint plus 500m from Section 1 of the scheme where the route goes offline and the scheme footprint plus 250m for Section 2 where the route stays online. In 2017 and part of 2019 walkover surveys were undertaken for all route options until the Preferred Route Announcement (PRA) in June 2019. After the PRA, the walkover surveys were only undertaken for the Pink Modified Option survey area.

2.4.2. All connected and accessible land within the survey area was thoroughly searched for badger field signs. A systematic survey was carried out to search for field signs, across suitable habitats where access was agreed or via PRoW, as identified by the field signs surveys. The field signs survey obtained records of the following evidence of badgers, as per the guidance in Harris et al., 1989<sup>11</sup>:

- Setts (a network of underground tunnels and chambers with entrances / holes)
- Latrines (uncovered dung pits, often used to mark territory boundaries)
- Badger paths and runs (well-worn paths in undergrowth or earth)
- Mammal paths with the possibility of being used by badgers
- Foraging signs such as snuffle holes (holes in the ground where badgers have dug up roots or worms)
- Hairs (distinctive guard hairs with an ovoid cross section)
- Bedding material (dry vegetation visible at sett entrances that has been pulled out of underground chambers)
- Footprints
- Evidence of rabbit and fox activity

2.4.3. Where entrance holes deemed to be excavated by badgers were found, setts were classified based on the following guidance of Roper, 1992<sup>12</sup>:

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<sup>11</sup> Harris, S., Creswell, P., and Jefferies, D.J., 1989. Surveying badgers. Mammal Society, London.

<sup>12</sup> Roper, T. J., 1992. The Structure and Function of Badger Setts. Journal of Zoology. Volume 221 Issue 4

- Main: A large number of holes in close proximity, often with large spoil heaps outside. Well-trodden paths to and from the sett, and between entrance holes are present.
- Annexe: Consists of several holes usually within 150m of a main sett. At least one obvious, well-trodden path will connect these entrances to a main sett. They are not necessarily in use all the time, even if the connected main sett is very active.
- Subsidiary: These will often only have a few holes, typically over 50m from a main sett. An obvious connected path to other setts is usually absent, subsidiary setts are not always in continuous use.
- Outlier: Usually with only one or two holes, outliers have no connecting path to other setts and are only used sporadically. When not in use by badger they are often taken over by foxes or rabbits but are still recognisable as badger setts by the shape of the tunnel; at least 250-300mm wide at the base with a roof of roughly 200mm high.

2.4.4. In addition to sett classification, a current activity level was also described for each sett. This was noted as follows<sup>13</sup>:

- Well used: Obvious spoil heap outside entrances, recently excavated, well-worn paths present between entrances and leading out into surroundings, generally clear of vegetation and appear to be frequently inhabited. Smaller setts may not have obvious fresh spoil heaps, but this does not mean they are not well-used.
- Partially used: Possible spoil heaps outside some entrances, but spoil has not been added to recently. Entrances not in constant use but may have been for a time in the previous season or earlier in the season. Generally clear of vegetation, small amount of leaf litter / debris may have collected at entrance. Paths leading to entrance, but less well-worn. Cobwebs often present over the entrances, indicating not recently used. Entrances can be easily used by recolonised badgers with only minimal clearance and/or digging out.
- Disused: Entrances which haven't been in use for at least one season. A large amount of debris / leaf litter collected at entrances and vegetation grown up around it. No obvious paths leading to and from entrances and any spoil heaps have dispersed / weathered and become re-vegetated. Disused entrances may also have collapsed tunnels or entrances, which would require significant digging out to become useable again.

2.4.5. Whilst classification of setts and entrance activity categories may appear clear, this can often be more difficult in the field. Depending on badger density, habitat and food availability, all types of sett are not necessarily present in a particular area. Many social groups will not have an annexe sett, and areas of poor habitat may not have a main sett

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<sup>13</sup> Harris *et al.*, Surveying badgers, p. 12

as described above. Factors such as these were taken in a wider context before making a final decision on sett classification, as it is important to have an overall view of all setts in the landscape.

## 2.5. Bait marking surveys

2.5.1. Following the identification of badger habitats and field signs, more detailed survey work was considered necessary to confirm activity within the survey area. Bait marking surveys were therefore undertaken, the objectives of which were to:

- establish the extents and boundaries of badger territories within the Zol
- determine whether badger clans from the wider surrounds enter the Zol
- identify whether territorial boundaries of different clans overlap, and to consider the potential for conflict between clans in the event of territory displacement of a clan

2.5.2. The bait marking methodology included a range of survey techniques to identify and define badger activity across the Zol, and to characterise the status of potential setts found within the footprint of the scheme.

2.5.3. The bait marking survey methodology is based on the characteristic behaviour of badgers to mark their territories with aggregations of latrines, and to regularly maintain the territorial boundary with fresh dung. Bait marking involves the use of harmless, coloured pellets that are consumed by badgers and are evident in faecal deposits left in the latrines<sup>14</sup>.

2.5.4. Of the 14 active main setts identified within the Zol during the field signs surveys, 11 were included in the bait marking surveys which took place in February and March 2020. Three of the main setts within the Zol were not included in the bait marking surveys, as detailed in section 2.6 of this report. Although setts 84 and 114 are located just outside the Zol these have been included in the bait marking surveys as the likely territories for these clans extend into the Zol. The bait marking surveys undertaken for this assessment used six different coloured pellets. These setts include:

- sett 128 (red pellets)
- sett 32 (yellow pellets)
- sett 129 (white pellets)

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<sup>14</sup> Delahay RJ, Brown JA, Mallinson PJ, Spyvee PD, Handoll D, Rogers LM and Cheeseman C L (2000) The use of marked bait in studies of the territorial organisation of the European badger (*Meles meles*). Mammal Review 30: 73-87.

- sett 38 (blue pellets)
- sett 55 (orange pellets)
- sett 68 (green pellets)
- sett 83 (red pellets)
- sett 85 (yellow pellets)
- sett 84 (blue pellets)
- sett 114 (white pellets)
- sett 100 (green pellets)

2.5.5. Setts with duplicated colours were far enough apart to avoid misidentifying latrines.

2.5.6. The bait was laid each weekday, where access allowed, and a walkover survey was undertaken of the full 500m radius around each sett, where access was granted. The bait was laid in the afternoon, or as late in the day as possible, to reduce the likelihood of it being washed away by rain or other animals consuming it. Walkover surveys were undertaken from the first day of bait marking to allow latrines to be identified. Baiting and latrine inspections were then undertaken on a daily basis (Monday to Friday) for a minimum of three weeks for each sett, where access allowed. Due to access restrictions, walkovers were only undertaken on Tuesdays, Wednesdays and Fridays for setts 83 and 85. The survey duration was increased to four weeks for these setts to account for this.

2.5.7. The food used for the bait consisted of peanuts mixed with golden syrup and the coloured pellets. The bait stations were established outside the active entrances of each main sett and underneath any available heavy stones close to these setts to prevent other animals from consuming the bait.

## 2.6. Constraints

2.6.1. Three main setts (62, 138 and 140) within the ZoI were not included in the bait marking surveys. Access was refused for sett 62. This is not considered a limitation as it is north of the current A358 and 470m north of where the Pink Modified Option goes offline to the south. Sett 140 was not included in the bait marking survey as it is north of the A358 where it widens into a dual carriageway and subsequent junction of the M5, which is likely to constitute a barrier to movement of these clans towards the Pink Modified Option. In addition, Sett 128 is considered to lie between Sett 140 and the Pink Modified Option, where the A358 becomes permeable to badgers. Sett 138 was not subject to bait marking survey due to its location north of the A358. Although sett 138 lies east of Black Brook,



which passes under the A358, the land south of the A358 accessible from that underpass is now under construction and was therefore considered unlikely to provide suitable habitat for badgers. Setts 138 is 445m north and sett 140 is 470m north of the Pink Modified Option.

2.6.2. Complete access was not granted for all areas within the 500m buffer of every main sett during the bait marking surveys. None of the inaccessible areas overlapped with the scheme footprint and, therefore this is not considered to have affected the reliability of the results. On average, 90% of access was granted for these surveys. The following approximate percentage of access was achieved for each sett:

- Sett 128 had 95% access granted
- Sett 32 had 70% access granted
- Sett 129 had 95% access granted
- Sett 38 had 95% access granted
- Sett 55 had 80% access granted
- Sett 68 had 80% access granted
- Sett 83 had 95% access granted
- Sett 85 had 100% access granted
- Sett 84 had 95% access granted
- Sett 114 had 100% access granted
- Sett 100 had 100% access granted

2.6.3. Due to access restrictions, bait could only be placed at setts 85 and 83 in the mornings. This could have increased the likelihood of bait being eaten by other animals or washed away in the rain. This is not considered to have undermined the results as a similar number of latrines with pellets from setts 83 and 85 were identified as the setts where bait was placed in the afternoon. Walkovers to search for latrines at setts 83 and 85 could only be undertaken on Tuesdays, Wednesdays and Fridays. However, bait marking surveys were continued for an additional week for these setts, to account for these access restrictions.

2.6.4. Access restrictions prevented access to some areas between sett 32 and the Pink Modified Option. This is not considered a significant constraint as latrines with yellow pellets were recorded to the south of the Pink Modified Option, confirming this clan is travelling within the area of the proposed route.

2.6.5. Setts 68 had a lack of access to the west of approximately 20% of the 500m buffer. This is not considered a significant constraint as this land is not located between the main sett and the proposed route and is north of the current A358.

2.6.6. At the time of undertaking the bait marking surveys the weather was stormy with high rainfall and flooding. Setts 128, 32, 114 and 100 were affected by flooding which prevented access to parts of survey area for these setts. This occurred in weeks 1 and 2 for setts 128 and 32 and in week 4 for setts 100 and 114. This is not considered a significant constraint as it only affected small areas within each survey buffer and a full walkover undertaken, where access allowed, on other weeks.

2.6.7. During the daily latrine inspections it was not possible to cover the full 500m buffer each day; however, the full 500m buffer around each main sett was walked at least once per week. This is not considered to be a limitation as the results show a high quantity of latrines with pellets identified for each sett.

2.6.8. There is the potential that additional badger setts are present in the areas surveyed in 2017 as badgers may have moved into these areas. This could lead to additional impacts and requirements for licencing and mitigation. The risk for this has been minimised as the main setts and their 500m buffers were revisited in the bait marking surveys carried out in 2020.

## 3. Results

### 3.1. Desk study

3.1.1. The desk study identified records of badger within the zone of influence (Zol) for all scheme options under consideration at the time, including the scheme footprint. Table 3:1 below summarises the results within 30m of the footprint for the Pink modified route. A map presenting the desk study results can be found within appendix A.

Table 3:1 : Summary of desk study results within 30m of the Pink Modified Option

Field sign	Date	Location
One count of dead badger	21/01/2012	329300 121600
One count of dead badger	07/06/1998	330100 118900

3.1.2. Initial field scoping surveys identified habitats within the Zol as having the potential to support badger and requiring further surveys for this species. Sites scoped in for further survey predominantly included areas of grassland, woodland, parkland and scrub.

### 3.2. Field signs survey

3.2.1. Field signs surveys were undertaken from 2017 to 2020 The results of these surveys are presented in summary Table 3:2 below and in appendix B.

3.2.2. Eleven main setts have been confirmed within the Zol. Four of these are located where the scheme goes offline, in the area south of Henlade. Two of these are north of both the current A358 and the Pink Modified Option. Two main setts are within the scheme footprint itself, where the route stays online. Three main setts are located towards the southern end of the scheme where the route stays online.

3.2.3. Seventy-two setts have been identified within the Zol for the Pink Modified Route between 2017 and 2020. This includes 14 setts classified as partially used or well used main setts. All setts are listed in Table 3:1.

Table 3:2 : Summary of badger setts found within the Zol for the Pink Modified option

Sett Reference number	Land parcel	Survey date	Classification	No. of holes	Activity level
20	ST294785	21/11/2017	SUBSIDIARY	UNKNOWN	WELL USED
21	ST294785	21/11/2017	OUTLIER	1	UNKNOWN
25	ST255757	20/11/2017	SUBSIDIARY	1	WELL USED
26	ST169875	22/11/2017	SUBSIDIARY	6	DISUSED
31	U0161; ST30 4681	16/10/2019	OUTLIER	1	PARTIALLY USED
32	ST129315	23/11/2017	MAIN	7	WELL USED

Sett Reference number	Land parcel	Survey date	Classification	No. of holes	Activity level
38	ST121151	23/11/2017	MAIN	6	WELL USED
44	ST121151	23/11/2017	SUBSIDIARY	2	WELL USED
46	ST204055	22/11/2017	OUTLIER	1	PARTIALLY USED
51	ST18349	22/10/2019	OUTLIER	1	PARTIALLY USED
52	U0156	16/10/2019	OUTLIER	1	WELL USED
54	ST277430	13/11/2017	OUTLIER	1	DISUSED
55	U00025	22/10/2019	MAIN	7	WELL USED
56	ST277430	13/11/2017	OUTLIER	1	DISUSED
57	ST277430	13/11/2017	OUTLIER	1	DISUSED
58	ST293627;S T293 688	07/11/2017	OUTLIER	1	DISUSED
59	ST293627;S T293 688	07/11/2017	OUTLIER	1	WELL USED
60	ST293627;S T293 688	07/11/2017	OUTLIER	1	WELL USED
61	U00027	11/09/2019	OUTLIER	2	WELL USED
62	ST208124	23/10/2019	MAIN	19	WELL USED
64	ST218934	09/10/2019	OUTLIER	1	WELL USED
65	ST208124	23/10/2019	SUBSIDIARY	5	WELL USED
66	ST218934	09/10/2019	OUTLIER	1	WELL USED
67	ST218934	09/10/2019	ANNEXE	8	WELL USED
68	ST218934	09/10/2019	MAIN	23	WELL USED
69	ST218934	09/10/2019	OUTLIER	3	WELL USED
70	ST218934	09/10/2019	ANNEXE	5	WELL USED
71	ST218934	09/10/2019	OUTLIER	1	WELL USED
72	ST123986	29/11/2017	SUBSIDIARY	3	PARTIALLY USED
73	ST123986	29/11/2017	SUBSIDIARY	1	DISUSED
74	ST123986	29/11/2017	SUBSIDIARY	1	UNKNOWN
75	ST151582	27/11/2017	OUTLIER	1	DISUSED
78	ST307461	08/10/2019	OUTLIER	1	WELL USED
79	ST324729	29/11/2017	OUTLIER	4	DISUSED
80	ST307461	08/10/2019	OUTLIER	1	WELL USED
82	ST307461	08/10/2019	OUTLIER	1	WELL USED
83	ST307461	08/10/2019	MAIN	24	WELL USED
84	ST324729	29/11/2017	MAIN	4	WELL USED
85	ST307461	08/10/2019	MAIN	13	WELL USED
86	ST324729	29/11/2017	ANNEXE	2	WELL USED
88	ST324729	29/11/2017	OUTLIER	2	WELL USED
89	ST307461	08/10/2019	OUTLIER	1	WELL USED
91	ST44668	29/11/2019	OUTLIER	1	DISUSED

Sett Reference number	Land parcel	Survey date	Classification	No. of holes	Activity level
92	ST44668:ST 3243 25	10/10/2019	OUTLIER	3	PARTIALLY USED
99	WS64773	15/10/2019	OUTLIER	1	PARTIALLY USED
100	WS64773	15/10/2019	MAIN	6	ACTIVE
103	WS44374	13/12/2017	OUTLIER	2	PARTIALLY USED
111	WS44373	10/10/2019	OUTLIER	1	PARTIALLY USED
112	WS44373	10/10/2019	OUTLIER	1	PARTIALLY USED
113	WS44373	10/10/2019	OUTLIER	1	WELL USED
114	WS59858	14/12/2017	MAIN	24	WELL USED
115	WS75255	09/05/2019	OUTLIER	1	WELL USED
117	WS78660	24/10/2019	SUBSIDIARY	6	WELL USED
120	WS78618	24/10/2019	OUTLIER	2	WELL USED
122	WS78597	30/10/2017	OUTLIER	1	DISUSED
124	WS78712	01/11/2017	ANNEXE	4	DISUSED
126	U00086	03/07/2019	SUBSIDIARY	3	PARTIALLY USED
127	U00087	03/07/2019	MAIN	20	WELL USED
128	ST261173;S T113 780	28/06/2019	MAIN	10	WELL USED
129	ST50594	17/07/2019	MAIN	4	WELL USED
130	ST50594	17/07/2019	ANNEXE	1	WELL USED
131	ST50594	17/07/2019	OUTLIER	1	DISUSED
132	ST50594	17/07/2019	OUTLIER	2	PARTIALLY USED
133	U00022	10/06/2019	OUTLIER	1	PARTIALLY USED
134	U00022	10/06/2019	OUTLIER	1	DISUSED
135	ST292929	09/05/2019	OUTLIER	1	WELL USED
136	ST60420	22/10/2019	OUTLIER	1	PARTIALLY USED
137	ST60420	22/10/2019	SUBSIDIARY	4	DISUSED
138	ST256209/ ST10 2361	14/01/2020	MAIN	11	WELL USED
139	ST256209/ ST10 2361	14/01/2020	OUTLIER	1	PARTIALLY USED
140	ST177445	14/01/2020	MAIN	17	WELL USED
142	ST291741	14/01/2020	OUTLIER	1	PARTIALLY USED

3.2.4. Table 3:3 below summarises setts within 30m of the Pink Modified option and are therefore likely to be impacted by the scheme.

Table 3:3 : Summary of badger setts within 30m of the Pink Modified option

Sett reference number	Land parcel	Classification
139	ST317599	OUTLIER

Sett reference number	Land parcel	Classification
73	ST123986	SUBSIDIARY
74	ST123986	SUBSIDIARY
75	ST45806	OUTLIER
83	ST307461	MAIN
85	ST307461	MAIN
91	ST324325	OUTLIER
103	WS49918	OUTLIER
146	WS64216	OUTLIER

3.2.5. Evidence of badger activity has been recorded across the survey area, in particular the areas north and south of Ashill, the north-west where the Pink Modified Option goes offline south of Henlade and to a lesser extent in the north-east. Badger setts, latrines, badger hairs, badger paths, badger footprints and evidence of badger foraging have all been recorded to date. Results of these surveys are displayed in appendix B.

### 3.3. Bait marking surveys

3.3.1. Eleven main setts were subject to bait marking surveys in February and March 2020 to identify the territories of each of these clans. The bait marking surveys confirmed the territories of the badger clans in the Zol. Fresh latrines were found for each sett throughout the survey period.

3.3.2. The survey results are summarised in appendix C and D; detailing the weather conditions and survey results each day for the 11 main setts.

3.3.3. **Sett 128 (red pellets)** is north of the scheme adjacent to the current A358 and north of the Pink Modified Option. The bait marking surveys for this sett identified latrines to the south, south-east and south-west of the main sett. The results show the badgers crossing the route of the Pink Modified Option and overlapping in territory with sett 32. Five latrines with red pellets were identified in total. None of these were to the north of the current A358. Three of these had both red and yellow (sett 32) pellets in the same latrines.

3.3.4. **Sett 32 (yellow pellets)** is south of the current A358 and north of the Pink Modified Option. This sett showed a high level of activity in agricultural fields surrounding the main sett and in all directions except north beyond the current A358. Yellow pelleted latrines were recorded in the location of the Pink Modified Option, between Stoke Road and the fields to the east and south of the main sett. A mammal path with a badger footprint was recorded within a hedgerow at the location where the proposed route will cross Stoke Road. This mammal path is closer to sett 38 (blue pellets) than sett 32. However, the bait marking results show latrines with yellow pellets in fields adjacent to this

badger path in both west and east directions. There are no latrines with blue pellets in close proximity to this path.

3.3.5. **Sett 129 (white pellets)** is north of both the current A358 and the Pink Modified Option. This sett had few entrances but was classified as a main sett due to its high activity level. Only two dung pits with white pellets were recorded throughout the bait marking surveys. These are located to the north and east of the main sett. Access was not granted for bait marking surveys to an area of farmland to the east of sett 129. A mammal path was identified here next to a dung pits with white pellets; suggesting the badgers could be travelling within the no-access area. Access was granted to this area for a walkover survey in 2019 which identified a main sett (62) within these land parcels. Sett 62 is approximately 375m to the east of sett 129 but was not bait marked. There is no evidence that Sett 129 is crossing the current A358 to the south as no white pelleted latrines were found close to the road. A number of latrines without pellets were found within 500m of both sett 129 and sett 55 directly adjacent to the A358 on both sides.

3.3.6. **Sett 38 (blue pellets)** is south of both the current A358 and the Pink Modified Option. Four latrines with blue pellets were recorded in total for sett 38. These were to the south, south-west and north-west of the main sett. There were no recorded latrines in close proximity to the proposed route. A number of latrines with orange pellets (sett 55) were recorded within the 500m buffer around this sett. Blue and yellow pellets (sett 32) were found within the same latrine to the northwest of sett 38.

3.3.7. **Sett 55 (orange pellets)** is south-west of both the current A358 and Pink Modified Option. It is just north of the proposed junctions around Ashe Farm. This sett showed a very high level of activity with orange pelleted latrines found covering a large area. The clan appears to be using the area to the north of the proposed route location and crossing the current A358 as a single latrine with orange pellets was identified to the north of the A358. Latrines with orange pellets were recorded at a distance from the main sett, the furthest being approximately 1.9 kilometres to the west. Latrines with orange pellets in the same location where blue pellets were identified, demonstrates territory overlap with sett 38. There were a number of latrines with orange pellets recorded south of the main sett approximately 130m to the west of the proposed new junctions adjacent to Ashe Farm. A dung pit with no pellets and badger footprints were recorded at the location of the proposed junction. A dead badger was recorded on the A358 during the bait marking surveys in the location where the current road aligns with the proposed new junction, indicating where this clan could be crossing the road, and is within 500m of sett 55 and sett 68.

3.3.8. **Sett 68 (green pellets)** is north-east of both the current A358 and the Pink Modified Option. Since the initial walkover surveys, sett 68 showed a reduced level of activity at the main sett and some of the holes were recorded as potentially having been filled in. The sett was subject to bait marking and pelleted latrines were found to the north-east and east of the main sett. Approximately 20% of land within the 500m buffer to the

west of the main sett had refused access for the bait marking surveys in 2020. Access to this area was obtained for the initial walkovers and a main sett (62) was identified. The 500m buffer of sett 62 overlaps with that of sett 68 and badger footprints were recorded at approximately equal distances from these main setts. Sett 62 was not bait marked due to access restrictions. The locations of pelleted latrines for sett 68 are in the opposite direction of the scheme and do not show the badgers crossing the current A358. However, there are a number of latrines with no pellets in the direction of the current A358 approximately 250m to the west of the main sett.

3.3.9. **Sett 83 (red pellets)** is adjacent to the current A358 to the east and within the scheme footprint. The 500m buffer for sett 83 overlaps with that of sett 85 up to 250m from each sett. However, the main sett locations are separated by the current A358. Latrines with pellets were found to the north, east and south of the main sett. A latrine with red pellets was found to the west of the main sett on the other side of the current A358 suggesting the badger clan could be crossing the road. Sett 83 identified a total of 12 latrines and dung pits with red pellets; one of which is within 10m of a latrine with yellow pellets (sett 85). Another consists of a latrine with both red and yellow pellets within 250m from both setts and appears to be from the same badger. Another dead badger was recorded during the bait marking surveys on the A358. This was located approximately 320m from sett 83. Just north of this, badger footprints were recorded next to a gate with a push-under adjacent to the A358 on the west side of the road. This is closest to sett 85 but also approximately 250m from sett 83.

3.3.10. **Sett 85 (yellow pellets)** is west of the current A358 and is within the scheme footprint. Latrines with yellow pellets were identified in the woodland to the south of the main sett on the east of the A358. Three were found to the north of the main sett close to latrines with red pellets (sett 83) and within the same dung pit as red pellets. A latrine with yellow pellets was discovered approximately 700m to the north-west of the main sett. In total ten latrines with yellow pellets were identified, three of which were on the opposite side of the current A358. Griffin lane passes underneath the A358 and connects the woodland habitat either side of the main road. Badger footprints were identified underneath the A358 bridge at Griffin Lane on both the north and south sides; suggesting the badger clan are crossing the road via the underpass. The dead badger recorded in proximity to sett 83 was approximately 150m from sett 85. The push-under and footprints could be associated with either clan. An additional main sett was identified during the bait marking surveys 480m from sett 85 to the west of the A358. This was not added to the list of setts identified in the field surveys as it is outside the Zol, but its territory may overlap with both setts 83 and 85.

3.3.11. **Sett 84 (blue pellets)** is south-west of the scheme. Seven latrines with blue pellets were identified for this sett. These were found in every direction of the main sett and showed the badger clan to be travelling within the majority of the 500m radius from the main sett. A latrine with blue pellets was identified to the north-east of the main sett on the opposite side of the current A358. There is an underpass situated between this latrine



and the main sett. As badger footprints were identified within the underpass, it is considered likely that the sett 84 clan are utilising this to cross the road.

3.3.12. **Sett 100 (green pellets)** is at the southern end of the scheme to the north of the A358. A total of eight latrines with green pellets were identified for sett 114, primarily to the north and north-west of the main sett. One of these latrines was recorded to the south of the A358. There is an underpass north-west of the main sett with signs that it is being used by badgers, including mammal paths, badger footprints and latrines with green pellets in the fields either side of the underpass.

3.3.13. **Sett 114 (white pellets)** is just over 250m south of the current A358. Bait marking surveys identified 17 latrines in all directions from the main sett. No latrines with red pellets were identified on the north side of the current A358. Another dead badger was recorded during the 2020 bait marking surveys on the A358 within 500m of sett 100. The majority of pelleted latrines were found away from the proposed new road, to the south-west of the main sett. However, three latrines with red pellets were identified to the east of the main sett, in the location of the proposed junction south of Ashill.

## 4. Conclusion

4.1.1. Field surveys undertaken between 2017 and 2020 identified 14 active main badger setts within the scheme footprint. Bait marking surveys were undertaken for 11 of the main setts in 2020. Latrines with mixed pellets from different main setts were identified for setts 128 and 32, 32 and 38, and 83 and 85 displaying the territory boundaries. In total 11 distinct clans have been identified within the zone of influence (Zol).

4.1.2. Sett 129 did not show a high level of activity as only two latrines with white pellets were identified. Access was denied for the bait marking surveys for sett 62. This main sett is within the 500m buffer for both setts 69 and 129 and field signs were identified in 2020 showing badgers were travelling within the no-access area. Sett 62 could be an additional clan within the Zol.

4.1.3. There is evidence that badgers are crossing the current A358 via underpasses beneath the main road and also crossing the road itself, resulting in instances of mortality. Four setts in total were found to be crossing the A358.

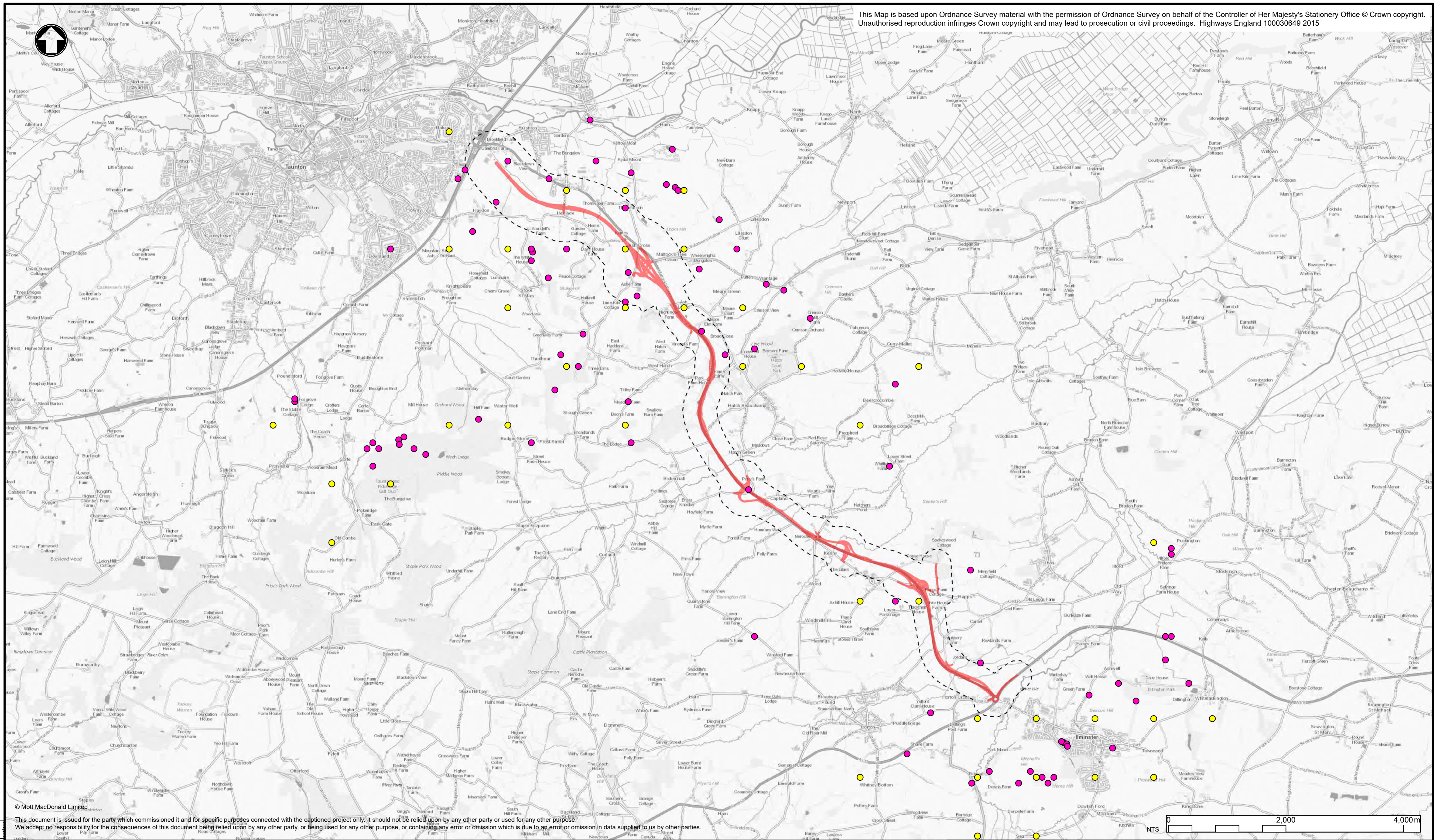
4.1.4. Full details of the potential impacts to badgers and ecological mitigation measures will be included within the ecology and nature conservation chapter of the Environmental Statement for the project. Mitigation measures relevant to badgers should include any effects identified from:

- Sett destruction
- Disturbance from noise and vibration
- Habitat loss and fragmentation
- Construction and operational activities

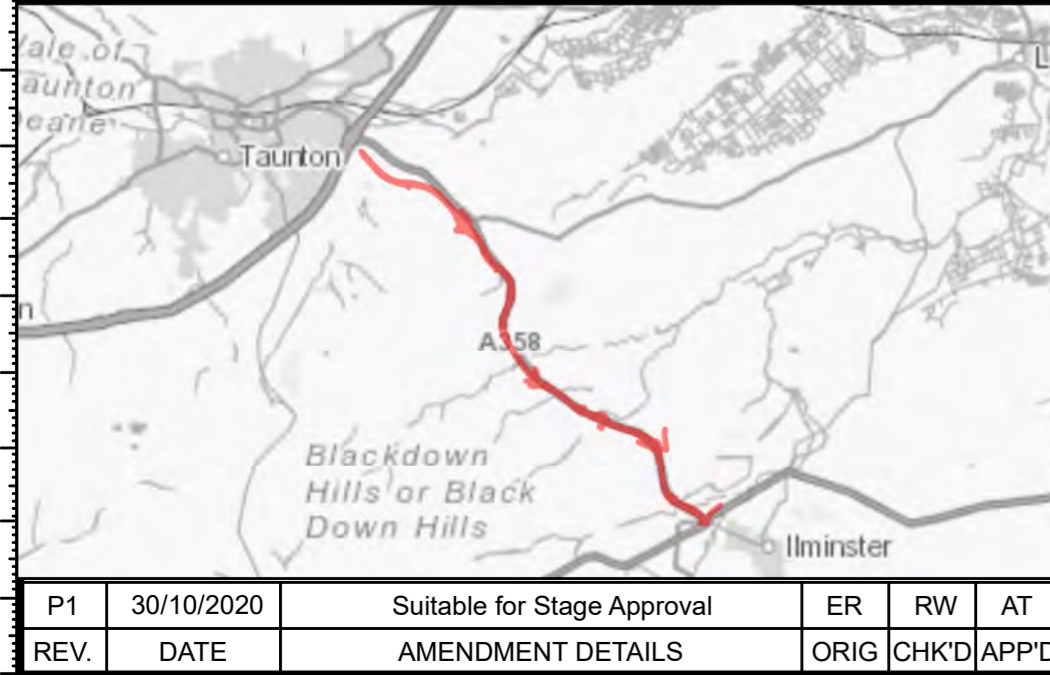
A licence from Natural England would be required for any sett closures. Positive measures should be considered that may offer benefits to badgers, including habitat creation. This would improve habitat connectivity and habitat enhancement whilst maintaining existing safe crossing points.

# Appendices

# Appendix A Desk study results



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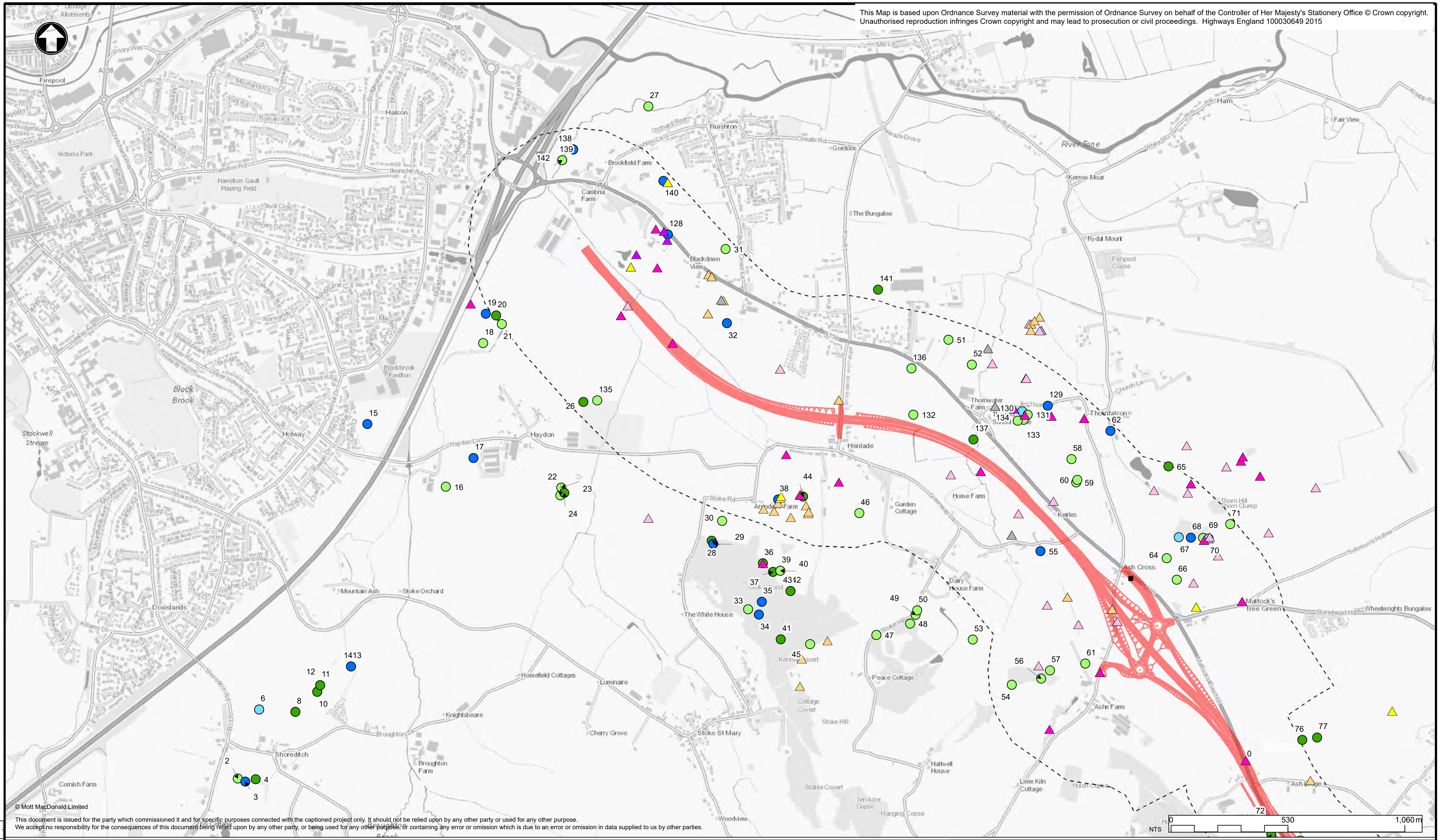


Notes		Key to symbols		References drawings	
Pink Modified Scheme, Mott MacDonald (2018) Badger Record Data, Somerset Environmental Records (2020) Service Layer Credits: Contains OS data © Crown Copyright and database right 2020		<ul style="list-style-type: none"> <li><span style="color: red;">—</span> Pink modified scheme option</li> <li><span style="border-bottom: 1px dashed black; width: 20px; display: inline-block;"></span> 250m online and 500m offline buffer</li> <li><span style="color: yellow;">●</span> Badger sets SERC data</li> <li><span style="color: pink;">●</span> Badger record SERC data</li> </ul>			

Drawing Status		Suitable for Stage Approval		S4		Project Title		A358 Taunton to Southfields			
		Stoneham Place Stoneham Lane Southampton SO50 9NW Tel: +44 (0)23 8062 8800 Fax: +44 (0)23 8062 8801 www.motmac.com		Drawing Title		Badger SERC Record Data					
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Client				Original Size	A1	Date	30/10/2020	Date	30/10/2020	Date	30/10/2020
Drawing Number HE551508 - MMSJV - EBD - 000		Originator - DR - LB - 0061		Volume - DR - LB - 0061		Project Ref. No. 370774		Revision P1			

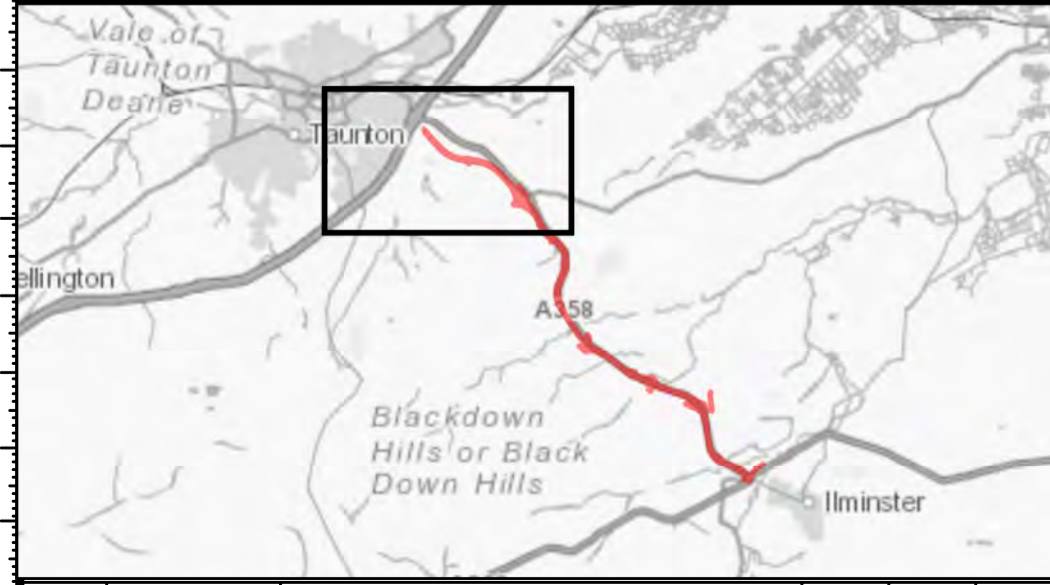
P1	30/10/2020	Suitable for Stage Approval	ER	RW	AT
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

## **Appendix B Badger sett and field signs locations**



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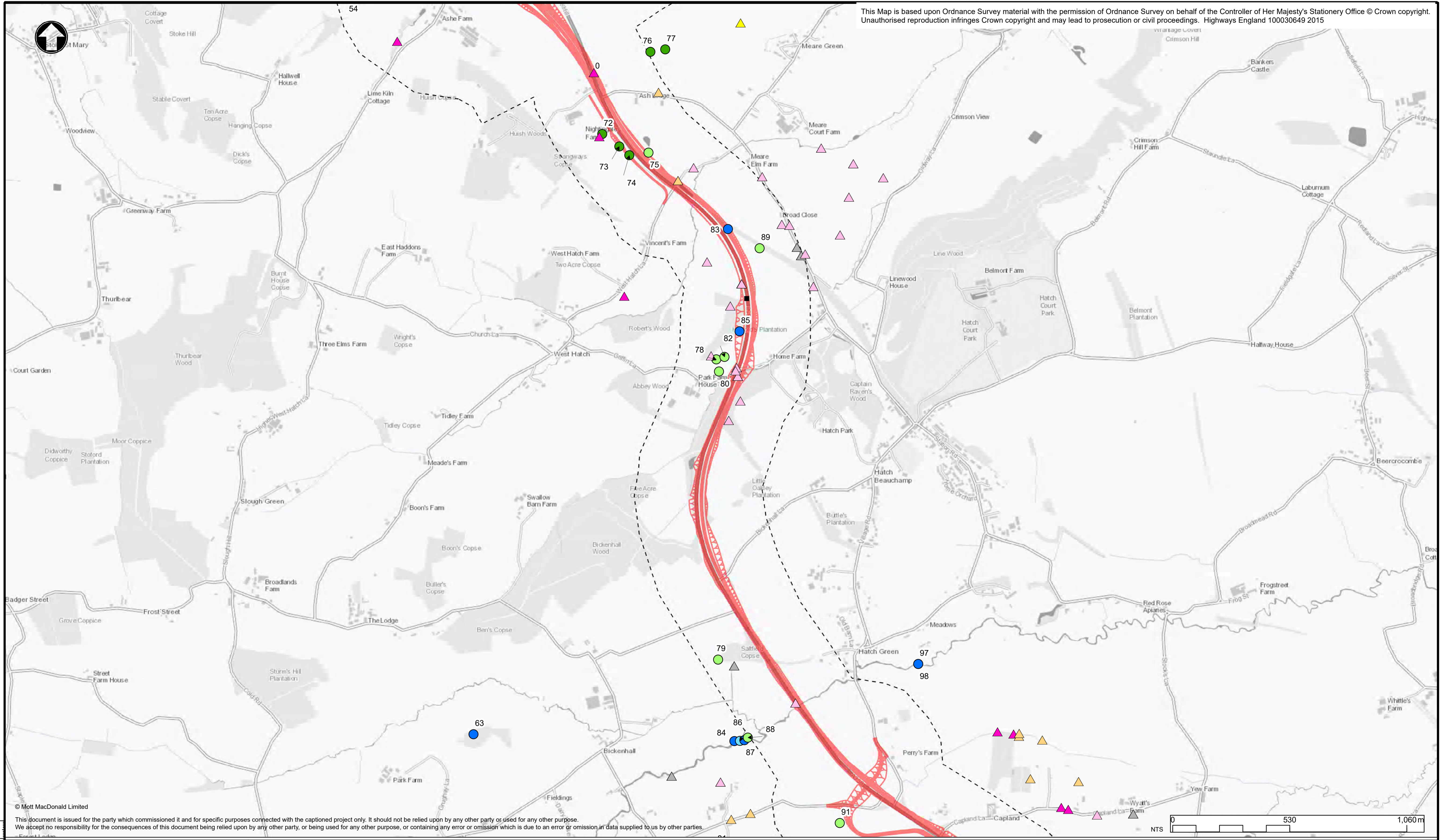


**Notes**  
 Pink Modified Scheme, Mott MacDonald (2018)  
 Badger sett locations, Mott MacDonald (2018)  
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Key to symbols	Feature
Pink modified scheme option	Badger footprint
250m online and 500m offline buffer	Badger hair
<b>Badger classification</b>	
Main	Mammal path
Annexe	Possible badger path
Subsidiary	Push through
Outlier	Badger push under

Drawing Status		Suitable for Stage Approval		S4		Project Title	
Mott MacDonald Sweco		Stoneham Place Stoneham Lane Southampton SO50 9NW		Tel: +44 (0)23 8062 8800 Fax: +44 (0)23 8062 8801 www.mottmac.com		A358 Taunton to Southfields	
Client		highways england		Drawing Title		Badger setts and field signs locations Page 1 of 4	
Scale	NTS	Designed	RW	Drawn	ER	Checked	SW
Original Size	A1	Date	04/03/2021	Date	04/03/2021	Date	04/03/2021
Project Ref. No.	HE551508 - MMSJV - EBD -			370774		Revision	
Location	000	Type	- DR - LB -	Number	0174	P2	

P2	04/03/2021	Suitable for Stage Approval	ER	RW	AT
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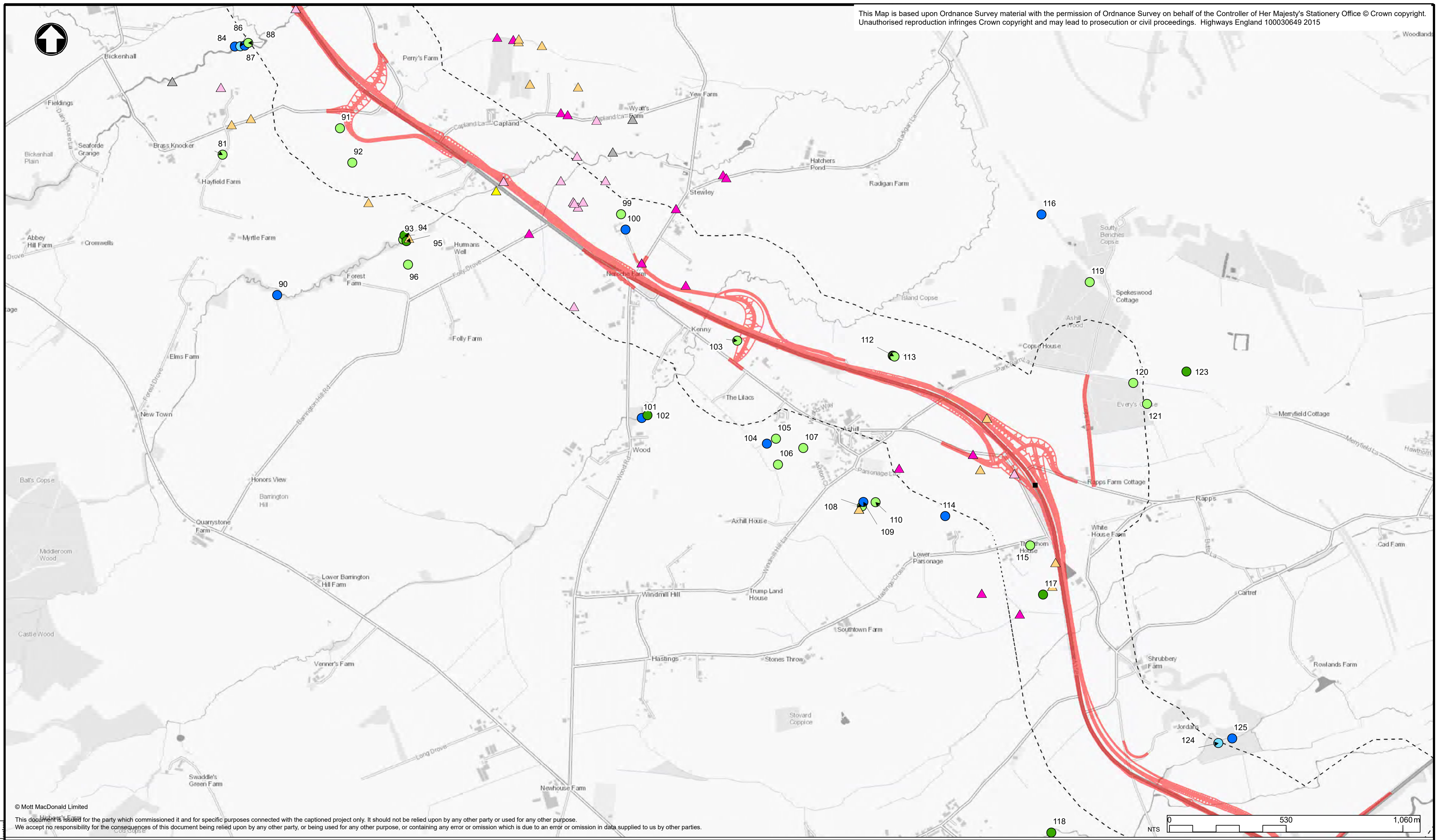


Notes		Key to symbols		Feature	
Pink Modified Scheme, Mott MacDonald (2018) Badger sett locations, Mott MacDonald (2018)		— Pink modified scheme option		▲ Badger footprint	
Service Layer Credits: Contains OS data © Crown Copyright and database right 2020		- - - 250m online and 500m offline buffer		▲ Badger hair	
		<b>Badger classification</b>		▲ Mammal path	
		● Main		▲ Possible badger path	
		● Annexe		▲ Badger push under	
		● Subsidiary			
		● Outlier			

Drawing Status		Suitable for Stage Approval		S4		Project Title		A358 Taunton to Southfields	
Client		Mott MacDonald Sweco		Stoneham Place Stoneham Lane Southampton SO50 9NW Tel: +44 (0)23 8062 8800 Fax: +44 (0)23 8062 8801 www.mottmac.com		Drawing Title		Badger setts and field signs locations Page 2 of 4	
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Drawing Number		HE551508 - MMSJV		Volume		- EBD -		Approved	
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				Number				Revision	
								P2	

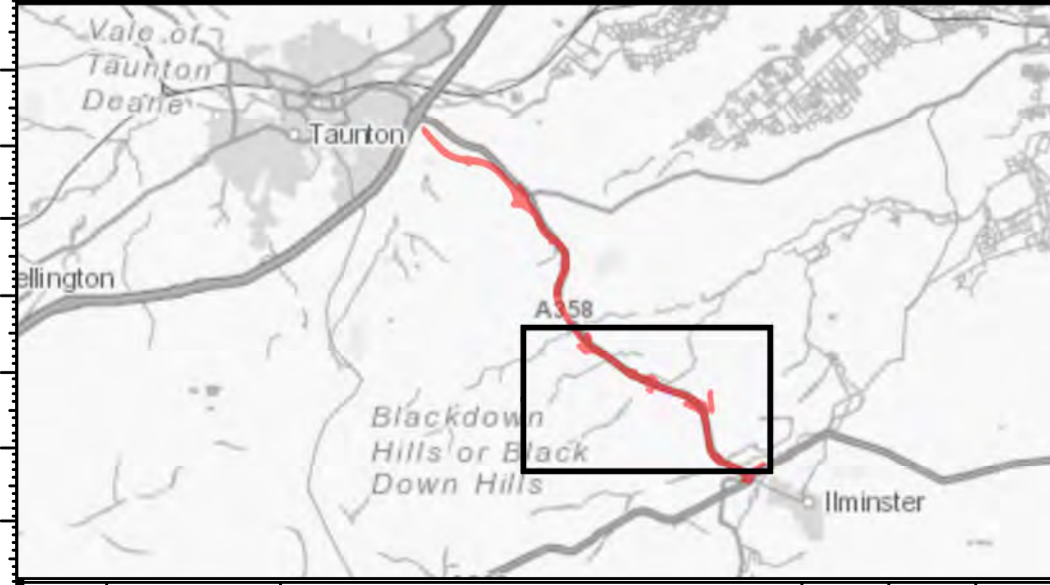
P2	04/03/2021	Suitable for Stage Approval	ER	RW	AT
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D





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**Notes**  
 Pink Modified Scheme, Mott MacDonald (2018)  
 Badger sett locations, Mott MacDonald (2018)  
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Key to symbols		Feature	
	Pink modified scheme option		Badger footprint
	250m online and 500m offline buffer		Badger hair
<b>Badger classification</b>			Mammal path
	Main		Possible badger path
	Annexe		Badger push under
	Subsidiary		
	Outlier		

References drawings

Drawing Status: Suitable for Stage Approval

**Mott MacDonald Sweco**  
 Stoneham Place  
 Stoneham Lane  
 Southampton  
 SO50 9NW  
 Tel: +44 (0)23 8062 8800  
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 www.mottmac.com

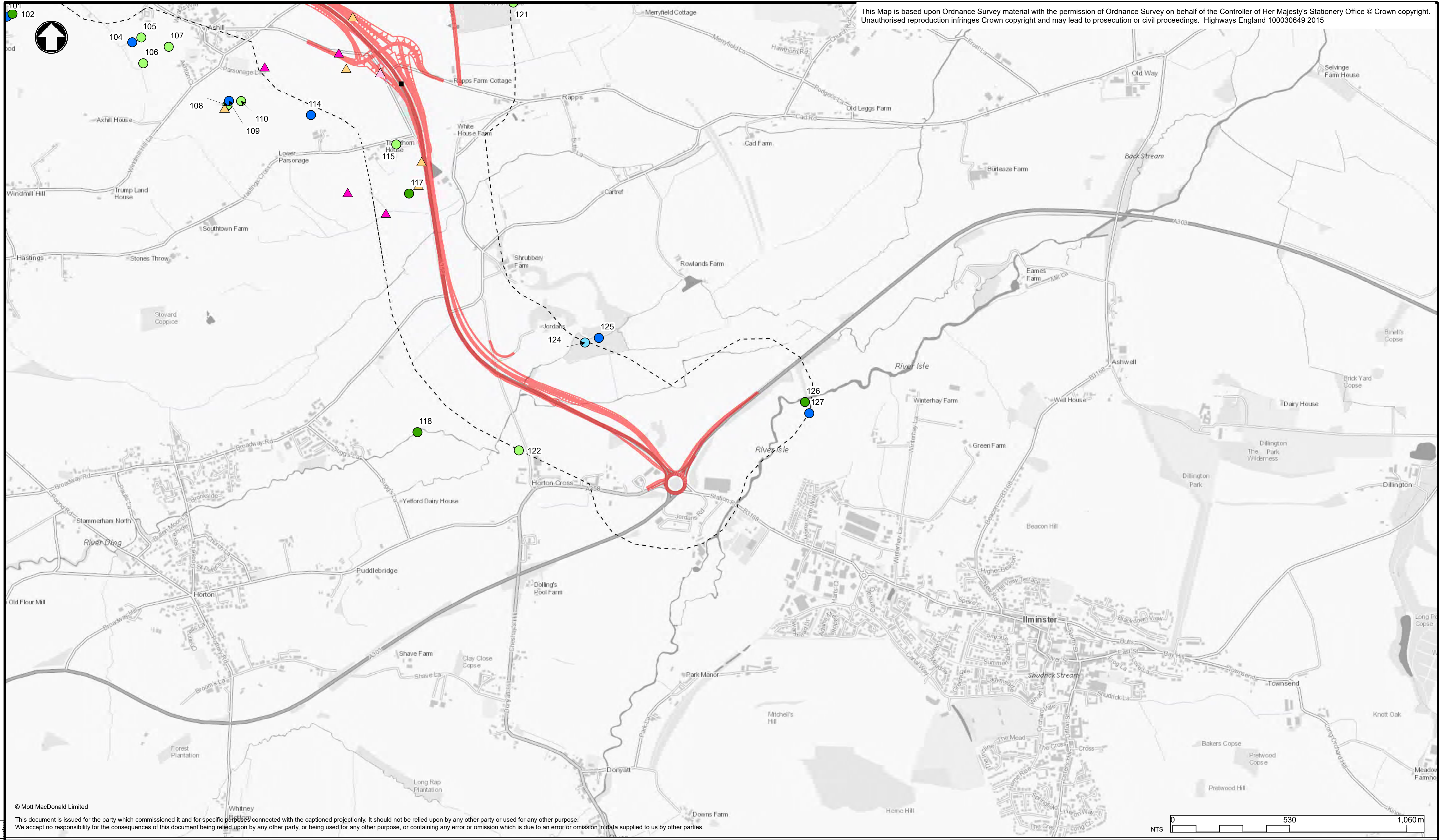


Project Title: A358 Taunton to Southfields

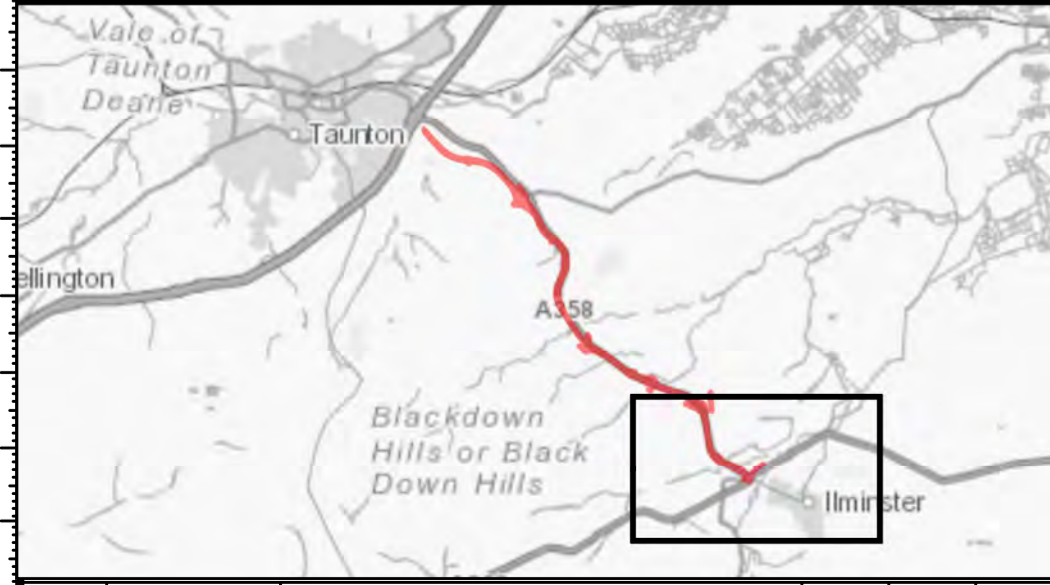
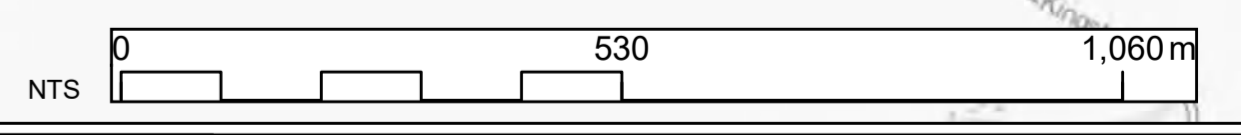
Drawing Title: Badger setts and field signs locations  
 Page 3 of 4

Scale	Designed	Drawn	Checked	Approved
NTS	RW	ER	SW	KA
Original Size	Date	Date	Date	Date
A1	04/03/2021	04/03/2021	04/03/2021	05/03/2021
Drawing Number	Originator	Volume	Project Ref. No.	
HE551508 - MMSJV	- EBD -		370774	
000	- DR - LB -	0176	Revision	
Location		Type	Role	Number
				P2

REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D
P2	04/03/2021	Suitable for Stage Approval	ER	RW	AT



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Notes	Key to symbols	Feature
Pink Modified Scheme, Mott MacDonald (2018) Badger sett locations, Mott MacDonald (2018)	Pink modified scheme option	Badger footprint
Service Layer Credits: Contains OS data © Crown Copyright and database right 2020	250m online and 500m offline buffer	Mammal path
	<b>Badger classification</b>	Possible badger path
	Main	
	Annexe	
	Subsidiary	
	Outlier	

Drawing Status		Suitable for Stage Approval		S4		Project Title		A358 Taunton to Southfields	
Mott MacDonald Sweco		Stonham Place Stonham Lane Southampton SO50 9NW		Tel : +44 (0)23 8062 8800 Fax : +44 (0)23 8062 8801 www.mottmac.com		Drawing Title		Badger setts and field signs locations Page 4 of 4	
Scale	NTS	Designed	RW	Drawn	ER	Checked	SW	Approved	KA
Original Size	A1	Date	04/03/2021	Date	04/03/2021	Date	04/03/2021	Date	05/03/2021
Client	highways england		Drawing Number		HE PIN		Project Ref. No.		370774
000		- DR - LB - 0177		HE551508 - MMSJV - EBD -		Revision		P2	

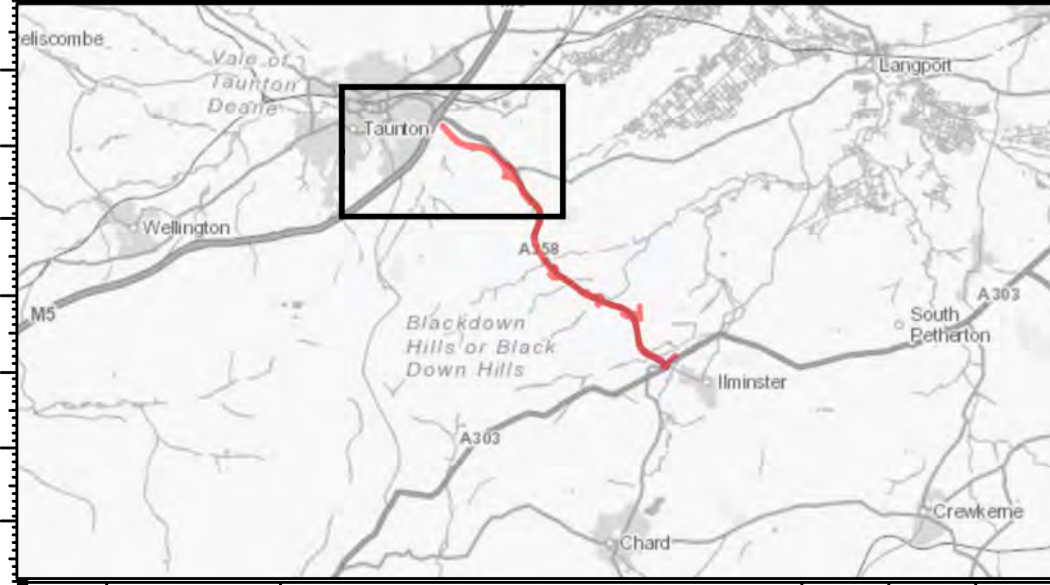
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D
P2	04/03/2021	Suitable for Stage Approval	ER	RW	AT

# Appendix C Badger bait marking territory map



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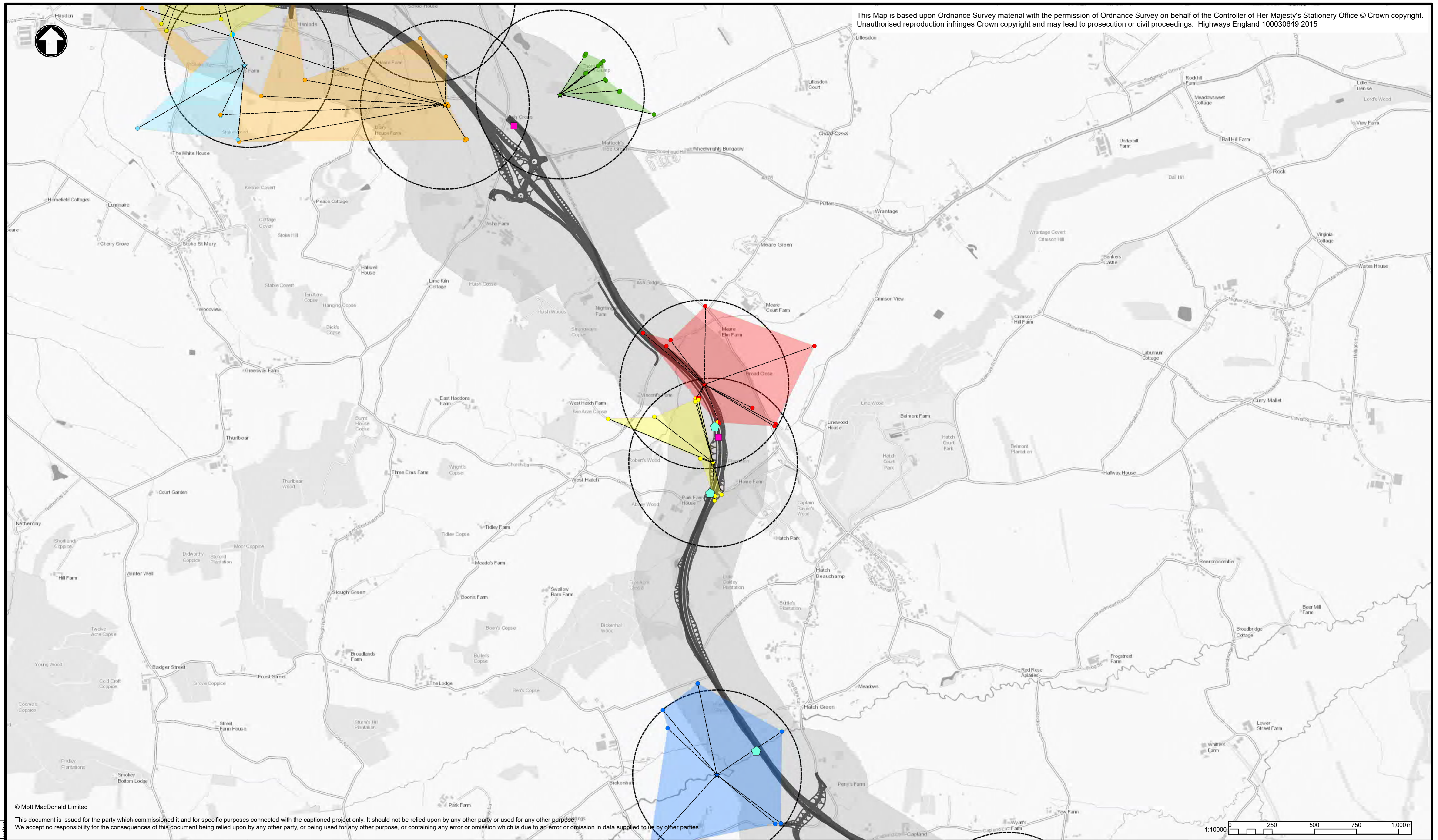


**Notes**  
 Pink Modified Scheme, Mott MacDonald (2018)  
 Badger Data, Mott MacDonald (2018)  
 Service Layer Credits: Contains OS data ©  
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Key to symbols		Main sett		Pellet types present		References drawings	
	—	☆	129		38		32
	—	★	83		38+32		129
	- - -	★	38		83+85		38
	- - -	★	128		128+32		83
	◆	★	32		55+32		85
	■	★	55		129		55
		★	68				68
							128

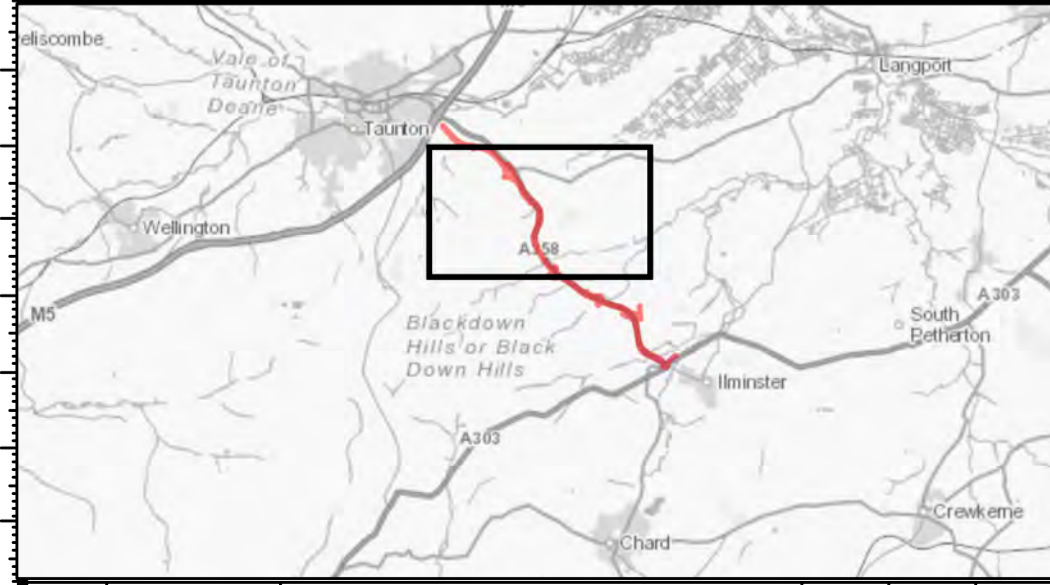
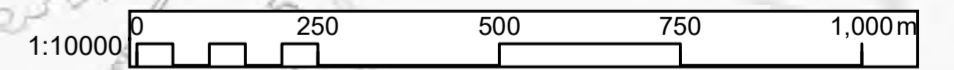
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Client		<b>Mott MacDonald Sweco</b>		Stoneham Place Stoneham Lane Southampton SO50 9NW Tel: +44 (0)23 8062 8800 Fax: +44 (0)23 8062 8801 www.motmac.com		Drawing Title		Badger Bait Marking Results Page 1 of 3	
Scale	1:10000	Designed	RW	Drawn	ER	Checked	SW	Approved	KA
Original Size	A1	Date	05/03/2021	Date	05/03/2021	Date	05/03/2021	Date	05/03/2021
Drawing Number	HE551508 - MMSJV - EBD - 000	Originator	MMSJV	Volume	EBD	Project Ref. No.		370774	
Location	000	Type	DR	Role	LB	Number	0178	Revision	P2

P2	05/03/2021	Suitable for Stage Approval	ER	SW	KA
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D



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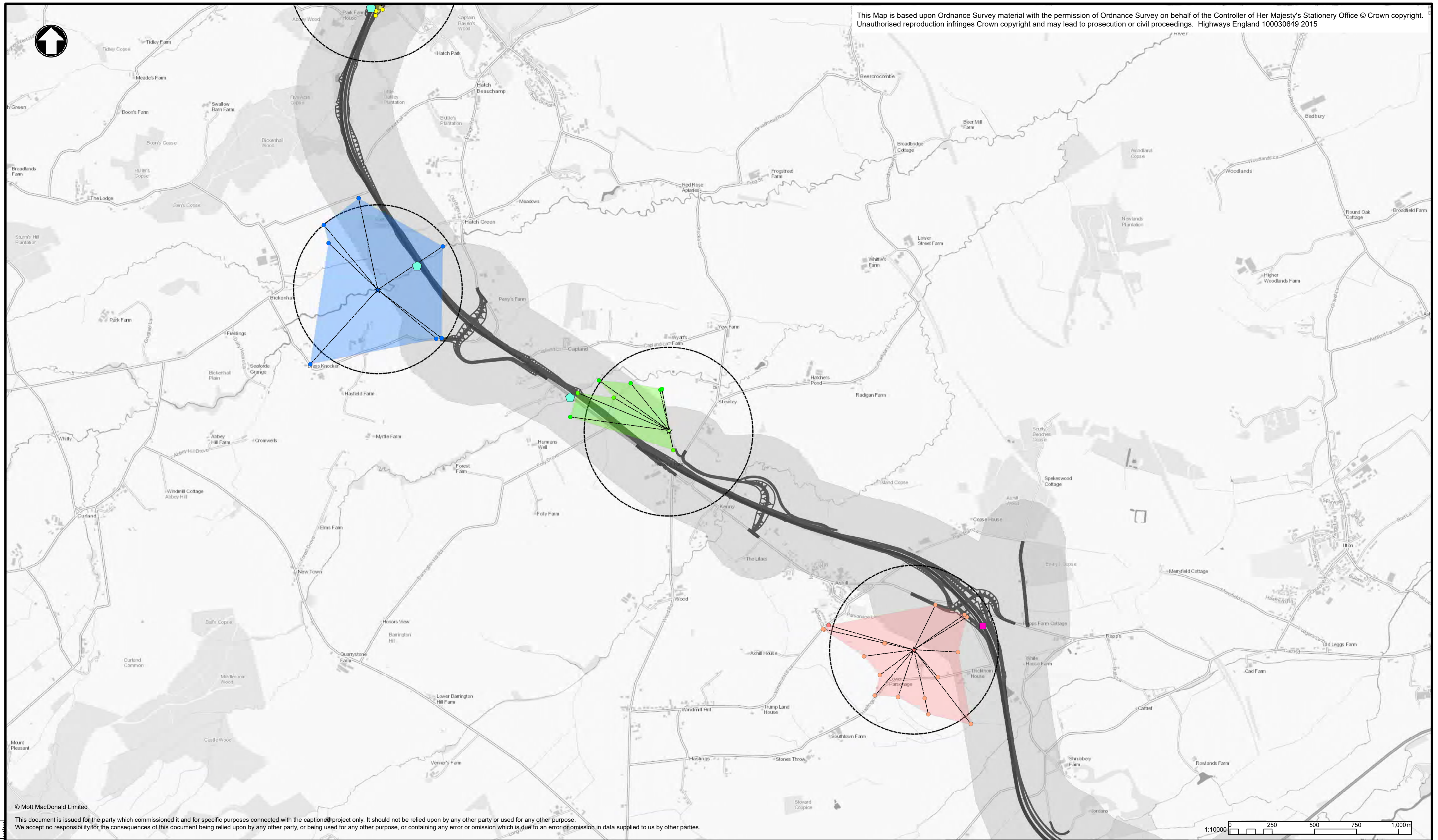


**Notes**  
 Pink Modified Scheme, Mott MacDonald (2018)  
 Badger Data, Mott MacDonald (2018)  
 Service Layer Credits: Contains OS data ©  
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Key to symbols		Main sett		Pellet types present		Clan territory extents	
	Pink modified scheme option		84		38+32		32
	250m online and 500m offline buffer		83		83+85		84
	Bait marking 500m buffer		85		129		38
	Territory distance lines		38		84		83
	Badger crossing locations		55		68		85
	Badger mortality		68				55
							68

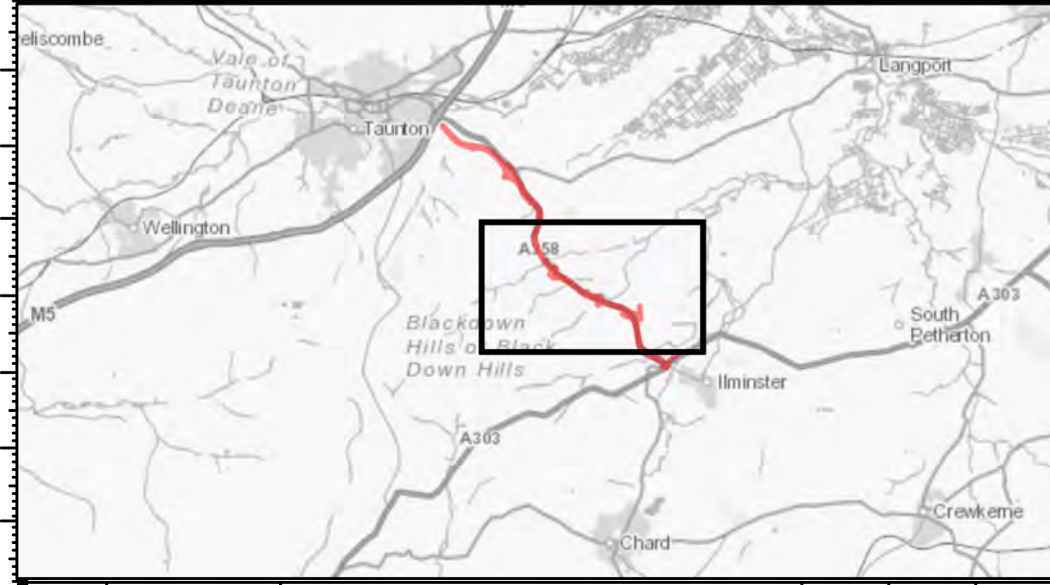
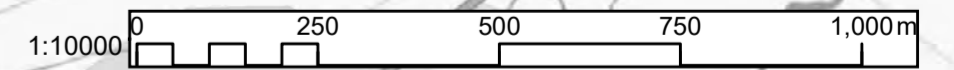
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Client		Mott MacDonald Sweco		Stoneham Place Stoneham Lane Southampton SO50 9NW Tel: +44 (0)23 8062 8800 Fax: +44 (0)23 8062 8801 www.mottmac.com		Drawing Title		Badger Bait Marking Results Page 2 of 3	
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Original Size	A1	Date	05/03/2021	Date	05/03/2021	Date	05/03/2021	Date	05/03/2021
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Location	000	Type	DR	Role	LB	Number	0179	Revision	
								P2	

P2	05/03/2021	Suitable for Stage Approval	ER	SW	KA
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D



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**Notes**  
 Pink Modified Scheme, Mott MacDonald (2018)  
 Badger Data, Mott MacDonald (2018)  
 Service Layer Credits: Contains OS data © Crown Copyright and database right 2020

Key to symbols		Main sett		Pellet types present		References drawings	
	Pink modified scheme option		84		84		85
	250m online and 500m offline buffer		114		100		84
	Bait marking 500m buffer		100				100
	Territory distance lines						
	Badger crossing locations						
	Badger mortality						

Drawing Status		Suitable for Stage Approval		S4		Project Title		A358 Taunton to Southfields	
Client		Mott MacDonald Sweco		Stoneham Place Stoneham Lane Southampton SO50 9NW Tel: +44 (0)23 8062 8800 Fax: +44 (0)23 8062 8801 www.mottmac.com		Drawing Title		Badger Bait Marking Results Page 3 of 3	
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								P2	

P2	05/03/2021	Suitable for Stage Approval	ER	SW	KA
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

## Appendix D Badger bait marking survey results

Table D.1 Sett 128 daily bait marking results (red pellets)

Date	Weather	Findings
11/02/2020	Moderate wind and rain	Three latrines in one field to south-east of main sett, no pellets, just outside 500m buffer.
12/02/2020	Occasional rain and wind, largely calm and dry	No walkover.
13/02/2020	No rain. Preceding evening wet and windy	Large areas inaccessible due to flooding. No new findings.
14/02/2020	Dry, still calm	Fresh latrine with no pellets to the south of main sett.
17/02/2020	Rain, wind, storm over previous weekend	Latrine without pellets found, 2-3 days old. Revisited later in week. No change.
18/02/2020	Rain, cloudy, wind	None
19/02/2020	Rain, cloudy, wind	None
20/02/2020	Rain, cloudy, wind	Push throughs into land parcel with no access.
21/02/2020	Fine, cold and bright	No walkover
24/02/2020	Dry, overcast, sunny spells	None
25/02/2020	Intermittent heavy rain and wind	One new latrine with pellets 750m south of sett. Two latrines with both red and yellow pellets in fields to south, between sett 128 and sett 32.
26/02/2020	Dry, scattered cloud, damp ground	None
27/02/2020	Clear and sunny	No walkover.
28/02/2020	Rain	No walkover.
02/03/2020	Damp and sunny	No walkover.
03/03/2020	Sunny, scattered cloud, Dry	Mixed red and yellow pellets in same latrines .
04/03/2020	Scattered cloud, light wind and occasional rain	None
05/03/2020	Heavy Rain, Overcast and Light Wind	None
06/03/2020	Sunny	No walkover.

Table D.2 Sett 32 daily bait marking results (yellow pellets)

Date	Weather	Findings
11/02/2020	Moderate wind and rain	Three latrines in one field to south-east of main sett, no pellets, between 250 and 500m from main sett.
12/02/2020	Occasional rain and wind, largely calm and dry	No walkover.
13/02/2020	No rain. Preceding evening wet and windy	Two fresh latrines to south-east of main sett, just outside 500m buffer.
14/02/2020	Dry, still calm	New latrine in field to north of main sett.
17/02/2020	Rain, wind, storm over previous weekend	Dung without pellets found near the main sett.
18/02/2020	Rain, cloudy, wind	Dung pit with pellets found to south of 250m buffer. Latrine previously recorded without pellets found with yellow pellets.
19/02/2020	Rain, cloudy, wind	Large latrine without pellets identified to north of main sett. One Latrine found with pellets.
20/02/2020	Rain, cloudy, wind	Large latrine to north of main sett with found on previous day now has pellets in. One further latrine pit found. Latrines without pellets found 500m south of main sett.
21/02/2020	Fine, cold and bright	No walkover.
24/02/2020	Dry, overcast, sunny spells	None
25/02/2020	Intermittent heavy rain and wind	Several new latrines with yellow pellets identified in fields to north east of main sett. Two latrines with both red and yellow pellets to west and south of main sett.
26/02/2020	Dry, scattered cloud, damp ground	None
27/02/2020	Clear and sunny	No walkover.
28/02/2020	Rain	No walkover.
02/03/2020	Damp and sunny	No walkover.
03/03/2020	Sunny, scattered cloud, Dry	One small latrine with yellow pellets identified to the east of main sett.
04/03/2020	Scattered cloud, light wind and occasional rain	None
05/03/2020	Heavy Rain, Overcast and Light Wind	None
06/03/2020	Sunny	No walkover.

Table D.3 Sett 128 daily bait marking results (white pellets)

Date	Weather	Findings
11/02/2020	Moderate wind and rain	No walkover.
12/02/2020	Occasional rain and wind, largely calm and dry	One latrine without pellets identified to south-west of main sett, adjacent to A358.
13/02/2020	No rain. Preceding evening wet and windy	No walkover.
14/02/2020	Dry, still calm	No walkover.
17/02/2020	Rain, wind, storm over previous weekend	No walkover.
18/02/2020	Rain, cloudy, wind	Lots of footprints and paths recorded to the north of main sett.
19/02/2020	Rain, cloudy, wind	Dung pit with white pellets identified.
20/02/2020	Rain, cloudy, wind	None
21/02/2020	Fine, cold and bright	New subsidiary sett to north of main sett identified.
24/02/2020	Dry, overcast, sunny spells	None
25/02/2020	Intermittent heavy rain and wind	One fresh latrine with white pellets 400m north of main sett. One new latrine without pellets discovered 270m north-west of main Sett.



Date	Weather	Findings
26/02/2020	Dry, scattered cloud, damp ground	No walkover.
27/02/2020	Clear and sunny	None
28/02/2020	Rain	No walkover.
02/03/2020	Damp and sunny	No walkover.
03/03/2020	Sunny, scattered cloud, Dry	One dung pit with pellets to the east of main sett recorded. Same location as previously identified.
04/03/2020	Scattered cloud, light wind and occasional rain	None
05/03/2020	Heavy Rain, Overcast and Light Wind	New main sett found to north outside the 500m, and badger skull found too. these are target noted .
06/03/2020	Sunny	No walkover.

Table D.4 Sett 38 daily bait marking results (blue pellets)

Date	Weather	Findings
24/02/2020	Dry, overcast, sunny spells	None
25/02/2020	Intermittent heavy rain and wind	None
26/02/2020	Dry, scattered cloud, damp ground	None
27/02/2020	Clear and sunny	Latrine with orange pellets recorded, as well as three latrines with yellow pellets. Two latrines with no pellets recorded.
28/02/2020	Rain	Two latrines identified in Stoke wood, one with blue pellets.
02/03/2020	Damp and sunny	No walkover
03/03/2020	Sunny, scattered cloud, Dry	Latrines with mixed blue yellow pellets found.
04/03/2020	Scattered cloud, light wind and occasional rain	None
05/03/2020	Heavy Rain, Overcast and Light Wind	New latrine with orange pellets found.
06/03/2020	Sunny	No walkover.
09/03/2020	Scattered Cloud, Infrequent Showers	No walkover.
10/03/2020	Sunny, scattered cloud, occasional showers	No walkover.
11/03/2020	Scattered cloud, light wind and dry	Three new latrines with blue pellets recorded; 500m, 450m and 330m south of the main sett. Two new latrines with orange pellets recorded; 330m and 450m south of sett 38.
12/03/2020	Scattered cloud, sunny spells with short intervals of rain and hail	Latrine identified one pit with blue pellets and two pits without pellets, recorded 730m south-west of sett 38. One fresh latrine with yellow pellets was recorded 510m north-west of sett 38.
13/03/2020	Scattered cloud, sunny with short spells of drizzle	Two new fresh latrines with orange and yellow pellets were discovered 500m north-east of sett 38.

Table D.5 Sett 55 daily bait marking results (orange pellets)

Date	Weather	Findings
11/02/2020	Moderate wind and rain	Three latrines found on Northern side of A358, along hedgerow next to road.
12/02/2020	Occasional rain and wind, largely calm and dry	One latrine to south-west of set, adjacent to A358.
13/02/2020	No rain. Preceding evening wet and windy	Fresh latrine found south of A358 in scrub next to road.
14/02/2020	Dry, still calm	None
17/02/2020	Rain, wind, storm over previous weekend	No walkover.
18/02/2020	Rain, cloudy, wind	Dung pit no pellets.
19/02/2020	Rain, cloudy, wind	Footprints identified.
20/02/2020	Rain, cloudy, wind	Latrine with orange pellets identified.
21/02/2020	Fine, cold and bright	None
24/02/2020	Dry, overcast, sunny spells	None
25/02/2020	Intermittent heavy rain and wind	Two new fresh latrines without pellets found 100m and 300m east of sett 55. Orange pelleted latrine found 250m south-east of sett 55.
26/02/2020	Dry, scattered cloud, damp ground	None
27/02/2020	Clear and sunny	One new latrine recorded 270 meters south-west of sett 55. One badger latrine with no pellets was discovered 400m south-east of sett 55.
28/02/2020	Rain	No walkover.
02/03/2020	Damp and sunny	No walkover.
03/03/2020	Sunny, scattered cloud, Dry	Latrine with pellets found very close to main sett. Latrines without pellets found south of main sett.
04/03/2020	Scattered cloud, light wind and occasional rain	Pelleted latrine found north of site near the A358. Latrine with pellets found to the north of the main sett, east side of the A358. Dung pit without pellets found to west of main sett.
05/03/2020	Heavy Rain, Overcast and Light Wind	Fox dung with pellets found .
06/03/2020	Sunny	No walkover.

Table D.6 Sett 68 daily bait marking results (green pellets)

Date	Weather	Findings
17/02/2020	Rain, wind, storm over previous weekend	None
18/02/2020	Rain, cloudy, wind	Dung pit with no pellets found.
19/02/2020	Rain, cloudy, wind	Footprints identified.
20/02/2020	Rain, cloudy, wind	None
21/02/2020	Fine, cold and bright	No walkover.
24/02/2020	Dry, overcast, sunny spells	One dung pit without pellets discovered 100m east of sett 68.
25/02/2020	Intermittent heavy rain and wind	No walkover.
26/02/2020	Dry, scattered cloud, damp ground	Five new latrines with green pellets recorded 200-320m north-east of the main sett. Two new latrines with green pellets recorded 350 meters and 600m east and south of the main sett. One latrine found at road edge approximately 540m south of main sett next to lane and a mammal push-through.
27/02/2020	Clear and sunny	None
28/02/2020	Rain	No walkover.
02/03/2020	Damp and sunny	No walkover.

Date	Weather	Findings
03/03/2020	Sunny, scattered cloud, Dry	Green pelleted latrine found north-east of main sett, near a previously identified green pelleted latrine. One latrine without pellets found. Latrine with green pellets within small woodland north of the main sett found.
04/03/2020	Scattered cloud, light wind and occasional rain	Latrine without pellets found to the south-west, within 200m of main sett.
05/03/2020	Heavy Rain, Overcast and Light Wind	Latrine with green pellets found to the east of main sett. Another latrine without pellets found further to the east; likely to be from a neighbouring clan outside of survey area.
06/03/2020	Sunny	No walkover.
09/03/2020	Scattered Cloud, infrequent Showers	One Latrine with no pellets recorded 400m west of sett 68.
10/03/2020	Sunny, scattered cloud, occasional showers	One fresh latrine with no pellets recorded 600 meters south-west, 370m and 700m south-east of the main sett.
11/03/2020	Scattered cloud, light wind and dry	Two latrines with green pellets recorded, situated 280m and 300m north-east of the main sett. Three latrines with no pellets recorded situated at; 280m, 300m and 500m north-east of the main sett. One latrine with no pellets recorded at a 300m east of the main sett. One new latrine with no pellets recorded 570m east of the main sett.
12/03/2020	Scattered cloud, sunny spells with short intervals of rain and hail	No walkover.
13/03/2020	Scattered cloud, sunny with short spells of drizzle	No walkover.

Table D.7 Sett 83 daily bait marking results (red pellets)

Date	Weather	Findings
11/02/2020	Moderate wind and rain	One pit found with fresh dung, no pellets; near hedgerow south of A358.
12/02/2020	Occasional rain and wind, largely calm and dry	None
13/02/2020	No rain. Preceding evening wet and windy	None
14/02/2020	Dry, still calm	None
17/02/2020	Rain, wind, storm over previous weekend	No walkover.
18/02/2020	Rain, cloudy, wind	Dead badger found in middle of A358 between sett 83 and sett 85.
19/02/2020	Rain, cloudy, wind	No walkover.
20/02/2020	Rain, cloudy, wind	Two separate latrines found north-west of main sett, without pellets. Large clump of badger hair found.
21/02/2020	Fine, cold and bright	No walkover.
24/02/2020	Dry, overcast, sunny spells	No access on this day.
25/02/2020	Intermittent heavy rain and wind	Red pellets found in latrine west of the main sett, one the opposite site of the A358. Latrine with red pellets found north-west of the main sett.
26/02/2020	Dry, scattered cloud, damp ground	No walkover.

Date	Weather	Findings
11/02/2020	Moderate wind and rain	One pit found with fresh dung, no pellets; near hedgerow south of A358.
12/02/2020	Occasional rain and wind, largely calm and dry	None
27/02/2020	Clear and sunny	Red and yellow pellets in same dung pit, found south-west of main sett (across A358). New latrine with red pellets found south-east of the main sett. Another new large latrine with red pellets found south-east of the main sett across the A358 on ridge of old railway bank.  A main sett, annex and subsidiary identified on the eastern side of railway bank in woodland, outside of survey area.
28/02/2020	Rain	No walkover.
02/03/2020	Damp and sunny	No Walkover.
03/03/2020	Sunny, scattered cloud, dry	One fresh latrine with red pellets, located 300m north-west of sett 83 on the eastern side of the A358.  One large fresh latrine with four pits and no pellets found. The latrine has been previously recorded.
04/03/2020	Scattered cloud, light wind and occasional rain	Dung pit found with red pellets, located 500m north-west of the main sett.
05/03/2020	Heavy Rain, overcast and light wind	One new latrine with red pellets was recorded 450m north of main sett. Two new latrines with no pellets were recorded 450m north and 580m north-west of main sett.
06/03/2020	Sunny	No walkover.
09/03/2020	Scattered cloud, infrequent showers	None
10/03/2020	sunny, scattered cloud, occasional showers	One fresh latrine in pit with red pellets found 700m north-east of the main sett. One fresh latrine with no pellets discovered 630m south-west of the main sett.
11/03/2020	Scattered cloud, light wind and dry	No walkover.
12/03/2020		One latrine with two pits with both red and yellow pellets recorded 240m south-east of sett 83, near a mammal path under a gate which could be used by badgers to cross the A358. One week old latrine with no pellets recorded 85m south-west of the main sett.
13/03/2020	Scattered cloud, sunny with short spells of drizzle	No walkover.

Table D.8 Sett 85 daily bait marking results (yellow pellets)

Date	Weather	Findings
11/02/2020	Moderate wind and rain	One pit found with fresh dung, near hedgerow south of A358.
12/02/2020	Occasional rain and wind, largely calm and dry	None
13/02/2020	No rain. Preceding evening wet and windy	None
14/02/2020	Dry, still calm	None

Date	Weather	Findings
17/02/2020	Rain, wind, storm over previous weekend	No walkover.
18/02/2020	Rain, cloudy, wind	Footprints found on gate on east side of A358 to gate close to latrines with red pellets (sett 85).
19/02/2020	Rain, cloudy, wind	No walkover.
20/02/2020	Rain, cloudy, wind	None
21/02/2020	Fine, cold and bright	No walkover.
24/02/2020	Dry, overcast, sunny spells	No access on this day.
25/02/2020	Intermittent heavy rain and wind	No walkover.
26/02/2020	Dry, scattered cloud, damp ground	No walkover.
27/02/2020	Clear and sunny	Yellow and red pellets in same latrine, found north of main sett.
28/02/2020	Rain	No walkover.
02/03/2020	Damp and sunny	No Walkover.
03/03/2020	Sunny, scattered cloud, dry	Two small latrines, yellow pellets, located 370m north of main sett on the western side of the A358, this has been recorded previously. New latrine discovered 250m south of the main sett on the eastern side of the A358, no pellets.
04/03/2020	Scattered cloud, light wind and occasional rain	Three new latrines with yellow pellets recorded 250 meters south, 450m and 680 meters north-west of the main sett. Two fresh latrines with yellow pellets and one without pellets latrine recorded 370m north of the main sett.
05/03/2020	Heavy rain, overcast and light wind	None
06/03/2020	Sunny	No walkover.
09/03/2020	Scattered cloud, infrequent showers	None
10/03/2020	Sunny, scattered cloud, occasional showers	Latrine recorded 370m north-east of the main sett, with yellow pellets but not fresh.
11/03/2020	Scattered cloud, light wind and dry	No walkover.
12/03/2020	Sunny, scattered cloud, occasional showers	Three new latrines with yellow pellets recorded at 150-200m south of the main sett. One latrine with red and yellow pellets recorded at a previously known latrine, located 240m north of the main sett and east of the A358 near a mammal path under a gate that could be used by badgers to cross the A358. One latrine with no pellets recorded at a previously known latrine at 390m north-west of the main sett.
13/03/2020	Scattered cloud, light wind and dry	No walkover

Table D.9 Sett 84 daily bait marking results (blue pellets)

Date	Weather	Findings
11/02/2020	Moderate wind and rain	Large latrine adjacent to main sett, no pellets. Four fresh latrines found running along hedgerow in field south-east of the main sett next to road.
12/02/2020	Occasional rain and wind, largely calm and dry	One latrine found without pellets to south-west of main sett, adjacent to A358.
13/02/2020	No rain. Preceding evening wet and windy	None
14/02/2020	Dry, still calm	None
17/02/2020	Rain, wind, storm over previous weekend	No walkover.

Date	Weather	Findings
18/02/2020	Rain, cloudy, wind	badger hair found caught on barbed wire west of main sett adjacent to river. Footprints found both north and south of the A358 underpass.
19/02/2020	Rain, cloudy, wind	No walkover.
20/02/2020	Rain, cloudy, wind	Latrine found without pellets along public footpath between fields north of sett.
21/02/2020	Fine, cold and bright	No walkover.
24/02/2020	Dry, overcast, sunny spells	None
25/02/2020	Intermittent heavy rain and wind	New latrine with blue pellets found north of the river. Another new latrine with blue pellets found south of the river.
26/02/2020	Dry, scattered cloud, damp ground	None
27/02/2020	Clear and sunny	None
28/02/2020	Rain	No walkover.
02/03/2020	Damp and sunny	Two small latrines without pellets, just over 500m from the main sett to the south.
03/03/2020	Sunny, scattered cloud, dry	No walkover.
04/03/2020	Scattered cloud, light wind and occasional rain	One new latrine with two pits and blue pellets, located 550m to south-west of main sett.
05/03/2020	Heavy rain, overcast and light wind	Three new latrines with blue pellets recorded 575m north-west, 450m east (east of the road) and 410m north-east of the main sett. One fresh latrine with no pellets was recorded 450m east of the main sett.
06/03/2020	Sunny	No walkover.

Table D.10 Sett 114 daily bait marking results (red pellets)

Date	Weather	Findings
11/02/2020	Moderate wind and rain	Week one findings include latrines with no pellets and one latrine with red pellets to the north-west of the main sett.
12/02/2020	Occasional rain and wind, largely calm and dry	Week one findings include latrines with no pellets and one latrine with green pellets to the north-west of the main sett.
13/02/2020	No rain. Preceding evening wet and windy	Week one findings include latrines with no pellets and one latrine with green pellets to the north-west of the main sett.
14/02/2020	Dry, still calm	Week one findings include latrines with no pellets and one latrine with green pellets to the north-west of the main sett.
17/02/2020	Rain, wind, storm over previous weekend	No walkover.
18/02/2020	Rain, cloudy, wind	Two badger latrines consisting of two dung pits found to the east of the A358. Two badger paths through fences with hair located 500m south-east of the main sett. One badger path identified through fence located 500m north-east of the main sett. Dead Badger identified on road.
19/02/2020	Rain, cloudy, wind	Two fresh latrines with red pellets discovered 550m north-west of the main sett. Two latrines with red pellets discovered 150m west and 300m south-west of the main sett. One fresh and one old dung pits with no pellets discovered 400m west of the main sett. One week old latrine with no pellets discovered 450m south of the main sett.
20/02/2020	Rain, cloudy, wind	Two badger dung pits identified 200m south and east of the sett with no pellets. Latrine with red pellets recorded. Latrine with four dung pits and no pellets recorded 600m south of the main sett.
21/02/2020	Fine, cold and bright	No walkover.
24/02/2020	Dry, overcast, sunny spells	Latrine previously identified without pellets found with red pellets.
25/02/2020	Intermittent heavy rain and wind	None
26/02/2020	Dry, scattered cloud, damp ground	Latrine with fresh dung but no pellets identified.
27/02/2020	Clear and sunny	None
28/02/2020	Rain	No walkover.
02/03/2020	Damp and sunny	None
03/03/2020	Sunny, scattered cloud, Dry	New latrine without pellets found.
04/03/2020	Scattered cloud, light wind and occasional rain	None
05/03/2020	Heavy rain, overcast and light wind	Three new latrines to the east of the main sett identified. Some areas not accessible due to flooding.
06/03/2020	Sunny	None

Table D.11 Sett 100 daily bait marking results (green pellets)

Date	Weather	Findings
11/02/2020	Moderate wind and rain	Week one findings include latrines with no pellets and one latrine with green pellets to the north-west of the man sett.
12/02/2020	Occasional rain and wind, largely calm and dry	Week one findings include latrines with no pellets and one latrine with green pellets to the north-west of the man sett.
13/02/2020	No rain. Preceding evening wet and windy	Week one findings include latrines with no pellets and one latrine with green pellets to the north-west of the man sett.
14/02/2020	Dry, still calm	Week one findings include latrines with no pellets and one latrine with green pellets to the north-west of the man sett.
11/02/2020	Moderate wind and rain	Week one findings include latrines with no pellets and one latrine with green pellets to the north-west of the man sett.
17/02/2020	Rain, wind, storm over previous weekend	No walkover.
18/02/2020	Rain, cloudy, wind	No walkover.
19/02/2020	Rain, cloudy, wind	No walkover.
20/02/2020	Rain, cloudy, wind	Badger dung not in pit found with no pellets, north-west of the main sett .
21/02/2020	Fine, cold and bright	Four latrines with green pellets discovered east and north-east of the main sett. Three badger latrines with no pellets found north and north-east of the main sett.
24/02/2020	Dry, overcast, sunny spells	None
25/02/2020	Intermittent heavy rain and wind	Latrine previously identified without pellets found with green pellets.
26/02/2020	Dry, scattered cloud, damp ground	Latrine previously identified without pellets found with green pellets.
27/02/2020	Clear and sunny	New latrine found with green pellets on other side of the A358. Footprints at A358 underpass.
28/02/2020	Rain	None
02/03/2020	Damp and sunny	None
03/03/2020	Sunny, scattered cloud, Dry	None
04/03/2020	Scattered cloud, light wind and occasional rain	None
05/03/2020	Heavy Rain, Overcast and Light Wind	None. Some areas not accessible due to flooding.
06/03/2020	Sunny	No walkover