

A47 Wansford to Sutton Dualling

Scheme Number: TR010039

Volume 6

6.3 Environmental Statement Appendices

Appendix 8.14 – Otter and Water Vole Survey Report

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Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Applications: Prescribed Forms and
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ENVIRONMENTAL STATEMENT APPENDICES
Appendix 8.14 - Otter and Water Vole Survey Report

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1. Introduction

- 1.1.1. In February 2020, Sweco UK were commissioned by Highways England to undertake an otter (*Lutra lutra*) and water vole (*Arvicola amphibious*) survey at Wansford in line with the Road Investment Strategy announced in 2014 (Highways England 2014). This is to inform the Environmental Statement (ES) Chapter 8 (Biodiversity) (**TR010039/APP/6.1**) at PCF Stage 3 for the A47 Wansford to Sutton Dualling (the Proposed Scheme).
- 1.1.2. Previous otter and water vole surveys at the site were undertaken 2017 and 2018. During both 2017 and 2018 surveys, otter field signs and potential otter holts were found. No water vole field signs were found during 2017 surveys, and no definitive water vole field signs were recorded during 2018 surveys.
- 1.1.3. This detailed baseline report is an update to previous surveys and provides a summary of the water vole and otter surveys undertaken at the site by Sweco, between 15th and 18th September 2020. It outlines recommendations for mitigation and further survey work where necessary.

1.2. Works description

- 1.2.1. The Proposed Scheme is designed to provide a new 2.6km dual carriageway which largely follows the existing A47 at the Wansford end, crossing to the north and running parallel to the existing A47 after Sutton Heath Road. There would also be a dedicated free-flow link road from the A1 southbound to the A47 eastbound to alleviate congestion at the Wansford junctions.
- 1.2.2. The Proposed Scheme is located at Wansford and extends eastwards to Sutton and forms a section of Single carriageway that is part of the main arterial highway route connecting to Peterborough and Norwich to the east.

2. Ecological background

2.1. Previous studies

Preliminary ecological appraisal (PEA)

- 2.1.1. As detailed in the 2018 EIA Scoping Report (Highways England, 2018b) the following records were previously identified; 16 records of otter within 2km of the search radius dated between 1966 and 2012 and 9 records of water vole within 2km of the search radius dated between 1970 and 2001.
- 2.1.2. At PCF Stage 1 a Preliminary Ecological Appraisal (PEA) was undertaken (Amey, 2017) which identified suitable habitat for otter and water vole on the River Nene and waterbodies adjacent to the southern and northern boundaries of the current A47 carriageway.

PCF Stage 2 phase 2 surveys

- 2.1.3. In April 2017, at PCF Stage 2, an otter and water vole survey of all suitable habitat within 250m of the route options was undertaken (Amey, 2017) with reference to good practice guidelines in Dean *et. al.* (2016) and Chanin (2003).
- 2.1.4. The surveys undertaken in April 2017 identified no signs of water vole and it was therefore considered unlikely that water vole was present in the Proposed Scheme boundary.
- 2.1.5. Otter field signs identified during the survey include footprints, spraints, feeding remains and 11 potential holt locations (Amey, 2017). The 2017 surveys confirmed an active otter population and potential holt locations however no otter holts were confirmed (Amey, 2017).

PCF Stage 3 phase 2 surveys 2017

- 2.1.6. Further otter and water vole surveys were undertaken at PCF Stage 3 between June and October 2017. Otter surveys focused on watercourses with previous otter field signs that would be directly impacted by the chosen route option, including the watercourse west of the dismantled railway. In addition, the habitat was reassessed for suitability for water vole (Amey, 2017a).
- 2.1.7. No water vole field signs were identified in the surveys undertaken at PCF Stage 3.
- 2.1.8. The results of the otter survey suggested infrequent use of the watercourse to the west of the dismantled railway and several potential otter holts including a mature willow *Salix* sp. overhanging the channel (Amey, 2017a). A camera-trap

survey was also undertaken for otter however no definite images of otter were captured (Amey, 2017a).

PCF Stage 3 phase 2 surveys 2018

- 2.1.9. Further surveys were undertaken in 2018 of all suitable habitat within 500m of the Proposed Scheme boundary (the 'survey area') which encompassed two watercourses (the River Nene, Wittering Brook) (Highways England, 2018c) and follows the best practice guidelines in Dean *et al.*, (2015) and Strachan *et al.*, (2011).
- 2.1.10. In addition to traditional survey methods, a camera-trap was placed on Wittering Brook south of the A47 for a period of eight days as a supplementary survey methodology for otters.
- 2.1.11. No definitive water vole field signs were recorded within the survey area. Two potential holes were recorded however, due to the lack of other water vole field signs it was concluded these were most likely attributable to brown rat *Rattus norvegicus* (Highways England, 2018c).
- 2.1.12. The survey identified otter field signs on Wittering Brook and the River Nene including spraint, footprints, potential couches and potential holts. A feature which is considered an otter holt was recorded, with spraint and footprints at the water's edge, on the River Nene south of the A47 (Highways England, 2018c).
- 2.1.13. The camera-trap placed on Wittering Brook did not capture any images of otter. It was considered that the low sensitivity of the camera may have caused it to fail to capture swimming otters, that the otters may be walking overland between the culvert and the A47 or that there were simply no otters passing during the time of camera-trap survey (Highways England, 2018c).
- 2.1.14. The surveys undertaken in 2018 concluded that otters use both Wittering Brook and the River Nene and that whilst water voles were not found in the surveys, checks prior to construction should be undertaken for this species (Highways England, 2018c).

Incidental records

- 2.1.15. Whilst undertaking a site visit for a wintering bird survey, surveyors noted potential water vole footprints on the north bank of the River Nene, east of the A1 bridge at approximately TL 07659 99395, on a patch of exposed mud.

2.2. Legislation

Habitats Directive

- 2.2.1. The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, or the 'Habitats Directive', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.
- 2.2.2. In England, the Habitats Directive is transposed into national law via the Conservation of Habitats and Species Regulations 2017. These regulations came into force on 30 November 2017. The Regulations make it an offence to deliberately capture, kill, disturb, damage or destroy a breeding/resting place of or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5.

Otters

- 2.2.3. Otters are given special protection within England by their inclusion on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).
- 2.2.4. As a result, it is an offence to:
- deliberately capture, injure or kill an otter
 - possess or advertise, sell or exchange an otter (dead or alive) or any part of an otter
- 2.2.5. Deliberately disturb an otter in such a way as to be likely significant to affect:
- the ability of any significant group of otters to survive, breed or nurture their young
 - the local distribution or abundance of otters
 - damage or destroy a breeding site or resting place of any otter (this does not necessarily need to be intentional or deliberate)
 - intentionally damage, destroy or obstruct access to any place that an otter uses for shelter or protection
 - intentionally or recklessly disturb an otter while it is occupying a structure or place that it uses for shelter or protection
- 2.2.6. With specific reference to the offence of disturbance, Regulation 43(1) of the Conservation of Habitats and Species Regulations 2017 states that a person commits an offence if the disturbance of animals includes in particular any disturbance which is likely to impair their ability:

- to survive, to breed or reproduce, or to rear or nurture their young, or
- in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- to affect significantly the local distribution or abundance of the species to which they belong

2.2.7. Otters are also afforded more general protection within the Natural Environment and Rural Communities Act (NERC) 2006. This imposes a duty on all public bodies, including local authorities and statutory bodies, in exercising their functions, “to have due regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity” [Section 41]. It notes that “conserving biodiversity includes restoring or enhancing a population or habitat” [Section 41]. Consequently, attention should be given to dealing with the modification or development of an area if aspects of it are deemed important to otters.

2.2.8. Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, when carrying out their normal (e.g. planning) functions. The otter is listed under Section 41 of the NERC Act 2006.

2.2.9. Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level) and are usually drawn up by a consortium of local Government organisations and conservation charities. The otter is listed as a Local Priority Species ((LPS) formerly listed in Local Species Action Plans) by the Cambridgeshire and Peterborough Biodiversity Group (2020).

Water voles

2.2.10. Water voles are protected under schedule 5 of the Wildlife and Countryside Act 1981 (as amended). While previously only their burrows were protected from disturbance or damage, since 6th April 2008 they have been given further protection which makes it illegal to:

- intentionally or recklessly kill, injure or take water voles
- possess or control live or dead water voles or derivatives thereof
- intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection
- intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose

2.2.11. The water vole is also listed as a species of Principal Importance in England under schedule 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Water vole is listed as an LPS by the Cambridgeshire and Peterborough Biodiversity Group (2020).

National Planning Policy Framework (NPPF) (2019)

2.2.12. The NPPF (2019) outlines government planning policies and how they should be applied within local authorities. The framework places an emphasis on sustainable development, encouraging the re-use of land that has previously been developed over using land that has a higher environmental value and by minimising impacts on biodiversity. The NPPF states that developments should aim to conserve or enhance biodiversity and encourages opportunities to incorporate biodiversity in and around developments using the principles of the mitigation hierarchy. Paragraphs 170, 174 and 175 of the NPPF give policy support to the provision of measurable net gains in biodiversity. Paragraph 174 specifies that plans should identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including locally designated sites; and promote the conservation, restoration and enhancement of priority habitats and ecological networks and the protection and recovery of priority species.

National Policy Statement for National Networks (2014)

2.2.13. The National Policy Statement for National Networks (2014) states “*development should avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives. The applicant may also wish to make use of biodiversity offsetting in devising compensation proposals to counteract any impacts on biodiversity which cannot be avoided or mitigated. Where significant harm cannot be avoided or mitigated, as a last resort, appropriate compensation measures should be sought.*”

2.3. Aims and objectives

2.3.1. These surveys are intended as an update to otter and water vole surveys undertaken at PCF Stages 2 and 3 (Amey, 2017 and 2017a Highways England, 2018c) outlined in Section 2.1, in accordance with the Chartered Institute of Ecology and Environmental Management’s ((CIEEMs) CIEEM, 2019) guidelines on the lifespan of ecological data.

2.3.2. The aims of the 2020 survey work and this report are to:

- to determine the presence or likely absence of otters and water voles on site

- to provide preliminary advice on mitigation strategies against any adverse effects on the local otter and water vole population which may arise as a result of the Proposed Scheme
- to inform any Natural England mitigation licences that may be required

2.3.3. To enable this, the following scope of works was programmed:

- Desktop study - a review of historical records of otter and water vole in the surrounding area, including the results of previous ecological surveys in the area
- Field surveys - a survey of suitable watercourses within 500m of the Proposed Scheme boundary that could potentially be affected
- Ecological report - detailing the survey results, implications for the Proposed Scheme and instructions for further ecological work.

3. Methodology

3.1. Field survey

3.1.1. Otter and water vole surveys can be undertaken simultaneously. All field surveys referred to methodologies outlined in Chanin (2003) and Strachan *et al.* (2011). Both sides of each watercourse were surveyed where accessible. Evidence of otter, water vole and other riparian mammal activity, such as invasive American mink (*Neovison vison*), was searched for during the course of the surveys.

Otters

3.1.2. Otter field signs surveyed for included spraints, tracks, feeding remains, slides, holts (underground dens and breeding sites) and couches (above ground sites where otters rest during the day). A survey extent of 250m upstream and downstream of the A47 junction to check for otter shelters that may be impacted by the works and constrain the Proposed Scheme was carried out rather than a wider search for all otter activity. This was the methodology used in previous surveys, so was repeated for comparison.

3.1.3. There are a number of different shelters or resting places used by otters. Below is a brief description of the terminology used in this report.

Holts

3.1.4. Otter holts are places or structures used by otters for shelter on a 'permanent' basis. Holts are covered structures, usually a hole or burrow along the river bank amongst riparian vegetation and the root system of river side trees, or behind boulders set in to the bank. Usually a holt will also have other associated otter field signs such as footprints or an accumulation of spraint. Holts may also be connected to lying-up areas and have more than one entrance as with badger setts.

Lying-up areas/couches

3.1.5. Lying-up areas or couches are 'temporary' areas used by otters for resting, grooming or feeding whilst on the move. Lying-up areas usually do not form a full covered structure, rather they are partially hidden bankside shelves amongst riparian vegetation, or 'nest-like' structures amongst reeds and grasses. As with holts, lying-up areas usually have other field signs to demonstrate use by otters.

Natal dens

3.1.6. Natal dens are holts which are used by otters to give birth and rear their young. Natal dens usually have inconspicuous entrances and have little or no evidence

of otter activity around the entrance. Natal dens can be located some distance from the watercourse, sometimes being set back in woodland amongst log piles, tree roots, rubble or even amongst reed beds.

Water voles

- 3.1.7. Water vole evidence searched for during the surveys included latrines, feeding evidence, feeding stations, burrows, grazed lawns, footprints and runways through vegetation. The survey area included suitable watercourses within 500m of the Proposed Scheme boundary, where accessible.
- 3.1.8. Relative water vole population density for each 100m of surveyed watercourse was estimated using current guidance from Dean *et al.* (2016) based on the number of latrines recorded. Results were then recorded as “high”, “medium” or “low” relative population density. In watercourses, or stretches of watercourses, where no water vole latrines were identified (where other water vole field signs were recorded to confirm presence), water voles were recorded as present with no relative population density estimated.
- 3.1.9. The results are provided in Annex A (Otter and Water Vole Survey Results Map September 2020).
- 3.1.10. This interpretation acts as an aid for devising water vole mitigation strategies.

3.2. Limitations

- 3.2.1. Otter surveys are not restricted to specific months and seasons as other protected species surveys are. It is recommended that surveys are not undertaken during periods when there is or after heavy rain as field signs will be washed away or obscured by higher water levels.
- 3.2.2. The optimum season for undertaking water vole surveys is April-October and the surveys were carried out within this season.
- 3.2.3. The results of this survey will remain valid until March 2022. Beyond this period, if works have not commenced, it is recommended that a new review of the ecological conditions is undertaken.

4. Results

4.1. Desk study

- 4.1.1. Records were received from Cambridgeshire and Peterborough Environmental Records Centre (CPERC) and Northamptonshire Biodiversity Records Centre (NBRC).
- 4.1.2. In total eight records of water vole were received from CPERC although none were from the last ten years. The most recent record of water vole was 2001 when 4 were trapped at Ailsworth (TL108974) and 18 trapped in Sutton (TL091984 & TL093986).
- 4.1.3. Two records of water vole were received from NBRC however neither were from within the last ten years.
- 4.1.4. Eighteen records of otter were received from CPERC, the most recent from 2017 where a dead otter was seen on the A1 slip road at Water Newton (TL10799710). A single otter was recorded in 2016 at Water Newton (TL1097), a single otter in 2012 at River Nene, Yarwell Mill (TL074973) and another on the River Nene, Water Newton (TL110974) in the same year. All other records were >10 years old and mainly associated to the River Nene.
- 4.1.5. Six records of otter were received from NBRC. The most recent record is the same as the 2017 CPERC entry. All other records were > 10 years old and all are associated to the River Nene watercourse.

4.2. Field Survey

- 4.2.1. The surveys were completed from 15 September 2020 – 18 September 2020.
- 4.2.2. Two watercourses were surveyed: A) River Nene and B) Wittering Brook. The locations of these watercourses surveyed are provided in Annex B.

Habitat

- 4.2.3. Table 4-1 details habitats in each of the watercourses surveyed.

Table 4-1: Summary of the habitats found in the watercourses surveyed.

Watercourse reference	Bank substrate	Water depth (m)	Watercourse description
B1	Stones, Earth Cliffs	< 0.5	A section of Wittering Brook. Bordering land use includes a park/garden to Sacrewell Farm. Bankside vegetation includes trees and tall grass. The width of the river is approximately 1-2m and the bank profile is mostly steep (> 45°) and vertical. The current is considered fast – rapid.

B2	Earth	< 0.5	A section of Wittering Brook. Bordering land use includes a park/garden to Sacrewell Farm. Bankside vegetation includes trees, herbs and reed/sedges. The width of the river is approximately 1-2m and the bank profile is mostly steep (> 45°) and vertical. The current is considered fast.
B3	Earth	< 0.5	A section of Wittering Brook. Bordering land use includes mixed broadleaf woodland and a park/garden to Sacrewell Farm. Bankside vegetation is made up of trees. The width of the river is approximately 1-2m and the bank profile is mostly steep (> 45°). The current is considered fast.
B4	Earth	< 0.5	A section of Wittering Brook. Bordering land is the grassland of Sacrewell Farm. Bankside vegetation is made up of trees and reeds/sedges. The width of the river is approximately 2-5m and the bank profile is mostly steep (> 45°) and vertical. The current is considered fast.
B5	Earth	< 0.5	A section of Wittering Brook. Bordering land is the grassland of Sacrewell Farm. Bankside vegetation is made up of trees and reeds/sedges. This section of Wittering Brook is choked in water cress. The width of the river is approximately 1-2m and the bank profile is mostly steep (> 45°). The current is considered slow.
B6	Earth, Stones	< 0.5	A section of Wittering Brook. Bordering land is mixed broadleaf woodland. Bankside vegetation is made up of trees and nettles are abundant. The width of the river is approximately 1-2m and up to 3-4m in areas and the bank profile is mostly vertical. The current is considered slow.
B7	Earth, Rocks	< 0.5	A section of Wittering Brook. Bordering land is grassland of Sacrewell Farm. Bankside vegetation is made up of reeds/sedges. The width of the river is approximately 2m and the bank profile is steep (> 45°) and vertical with cliff edges. The current is considered slow and fast in different areas.
B8	Earth	0.5 – 1	A section of Wittering Brook. Bordering land is grassland of Sacrewell Farm. Bankside vegetation is made up of reeds/sedges. The width of the river is approximately 1-2m and the bank profile is steep (> 45°) on one side and shallow on the other. The current is considered slow.

Otter

Watercourse A

4.2.4. During the survey in September 2020, one evidence of a potential otter holt, one laying-up area and one potential scratch mark on a tree trunk were recorded.

Watercourse B

4.2.5. During the survey in September 2020 there were five otter spraints and two potential spraints recorded along the banks of Wittering Brook. There were also five evidences of holt potential and two evidences of feeding remains recorded along watercourse B.

Water vole

Watercourse B

4.2.6. During the survey in September 2020, 2 evidences of water vole footprints (Figure 4-1), 12 potential burrows, one latrine (Figure 4-2) and one potential latrine were recorded along Wittering Brook.

Figure 4-1 : Potential water vole footprints identified at Wittering Brook, recorded in September 2020.



Figure 4-2 : Water vole latrine identified at Wittering Brook, recorded in September 2020.



Incidental findings (including invasive plant species)

Watercourse A

4.2.7. Two kingfishers (*Alcedo atthis*) were seen along watercourse A.

Watercourse B

4.2.8. During the survey in September 2020, evidence of small mammals was recorded. These include, 27 small mammal burrows, ten rat droppings, three rat prints, two rat burrows and one other small mammal droppings.

4.2.9. One heron (*Ardea cinerea*), two kingfishers one stoat (*Mustela erminea*) and two fox (*Vulpes vulpes*) prints were recorded while surveying watercourse B.

4.2.10. An area, approximately 5mx5m, of Himalayan Balsam (*Impatiens glandulifera*), was recorded in September 2020 on the southern side of watercourse B (Figure 4-3).

Figure 4-3: Stand of Himalayan Balsam identified at Wittering Brook, recorded in September 2020.



4.2.11. A potential kingfisher nest was recorded along Wittering Brook and a potential [REDACTED] latrine was also noted at the same location.

4.2.12. A bullhead was seen along a stretch of Wittering Brook between the A47 and the River Nene (approximate Grid Reference: TL 08853 99505) (Figure 4-4).

Figure 4-4: Bullhead identified at Wittering Brook, recorded in September 2020.



5. Impact assessment and requirements

5.1. Impact assessment

Habitat

- 5.1.1. Anticipated potential impacts upon habitats include pollution during and post-construction should suitable prevention not be in place.

Otter

- 5.1.2. The survey carried out in September 2020 found signs of otter along both water course A and watercourse B.

Water vole

- 5.1.3. The presence of water vole was identified along watercourse B where a single latrine was recorded during the survey in September 2020, detailed in Table 4-2. An estimate of water vole population size for the 100m of the surveyed section has been calculated and shown in the table below.

Table 4-2: Summary of water vole density in September 2020.

Watercourse Reference	Number of Latrines per 100m	Relative population density
B	1	Low

5.2. Future requirements

Habitat

- 5.2.1. Pollution prevention measures should be employed during construction. Guidance on best practice in relation to pollution prevention and water management is set out in Construction Industry research and Information Association (CIRIA) Guidelines (Soubry (2001)), Murnane *et al.* (2006), Charles and Edwards (2015), and the Environment Agency's approach to groundwater protection (Environment Agency, 2017) and groundwater protection guides (Environment Agency, 2017a), as required under the Water Framework Directive.

Otter

- 5.2.2. No definite otter holts were identified along either watercourse A or B.
- 5.2.3. The River Nene, south of Wittering Brook, still remains open to otters. General mitigation measures should include the implementation of pollution prevention measures (GOV.UK, 2020) during and post-construction.

- 5.2.4. No night working should take place and night lighting should be kept to a minimum, with lighting directed away from watercourses to reduce disturbance to otter whilst they are foraging and/or commuting.
- 5.2.5. Trenches and excavations should be covered overnight to prevent harm to any animals. If this is not possible, a means of escape, such as a ramp, should be inserted into the trench/excavation overnight.

Water vole

- 5.2.6. Works should remain a minimum of 5m away from water courses A and B. If this not possible, and works would take place within 5m of the banks, works would require consultation with, and a licence from, Natural England. Mitigation would include displacement or trapping and translocation of water voles.
- 5.2.7. Displacement is a method used to encourage water voles out of the works area by removing all bankside vegetation within the works area. Displacement can be used as a mitigation method where 50m or less of the banks would be impacted and there is suitable adjacent habitat. Displacement requires a licence from Natural England and can be undertaken between 15th February and 15th April inclusive.
- 5.2.8. Translocation means the capture and relocation of water voles from the area to another area of habitat suitable for supporting water voles. This should only be done when there is no reasonable alternative (i.e. displacement of water voles).
- 5.2.9. For translocation to occur, compensatory water vole habitat must be created into which the water voles can be relocated permanently. Once the habitat is of optimum condition for supporting water voles. Trapping and translocation must be completed in the spring where the water voles can become accustomed to the new habitat and when food sources are in abundance. Translocation of water voles should be undertaken, ideally, between 1 March and 15 April, prior to the peak part of the breeding season in accordance with good practice guidelines in Dean *et al.* (2016), as translocation subsequent to 16 April poses a serious risk to juveniles.

Incidental findings

- 5.2.10. Himalayan Balsam is listed on Schedule 9 of the WCA 1981 (as amended) and as such it is an offence to cause the spread of this species in the wild. The location of the Himalayan Balsam (see Section 4.1.9), along Wittering Brook is outside of the Proposed Scheme boundary and it is therefore considered unlikely that works would take place in this area. However, should the Proposed Scheme change, and works be required in the area of the Himalayan Balsam, it is recommended that an Invasive Species Management Plan is produced prior to

works, detailing methods of removal of the Himalayan Balsam and biosecurity measures to employ during works.

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Annex A. Otter and Water Vole Survey Results Map September 2020

LEGEND

- Proposed Scheme Boundary
- Proposed Scheme Design
- Study area
- Otter Survey
- Spraint
- Spraint - Potential
- Feeding Remains
- Feeding Remains - Potential
- Holt - Potential
- Lay up area
- Water Vole
- Footprint
- Latrine
- Potential Water Vole Presence

REFERENCE MAP

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REV	DATE	DESCRIPTION	BY	CHK'D

DESIGNER: SWECO

CLIENT: GallifordTry

highways england

PROJECT TITLE: A47 WANSFORD TO SUTTON

PROJECT STAGE: PCF STAGE 3

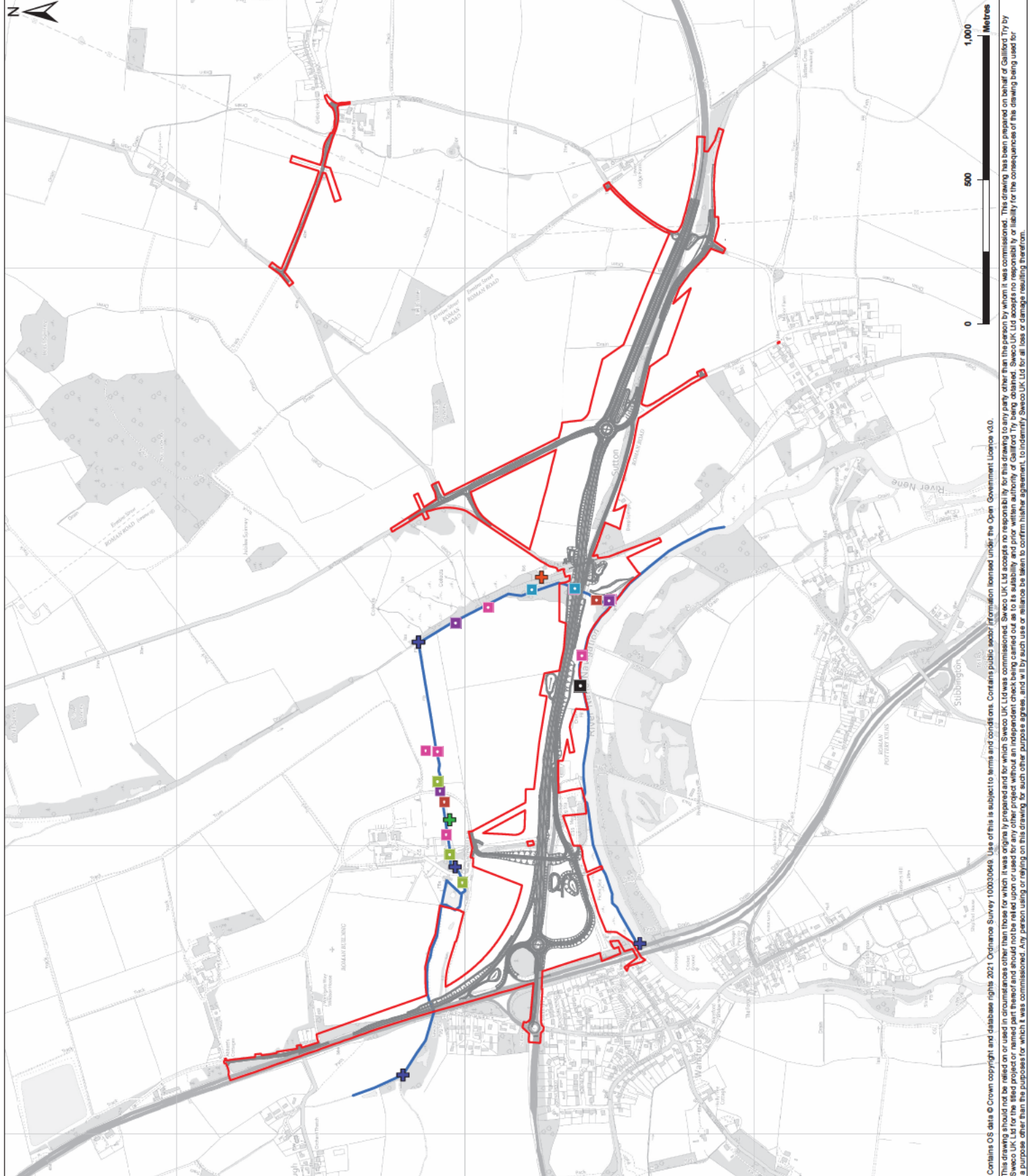
DRAWING TITLE: ANNEX A: OTTER AND WATER VOLE SURVEY RESULTS MAP (SEPTEMBER 2020)

TR010039/APP/6.2

FOR INFORMATION

SHEET SIZE: A3 SCALE: 1:12,500 STATUS: S2

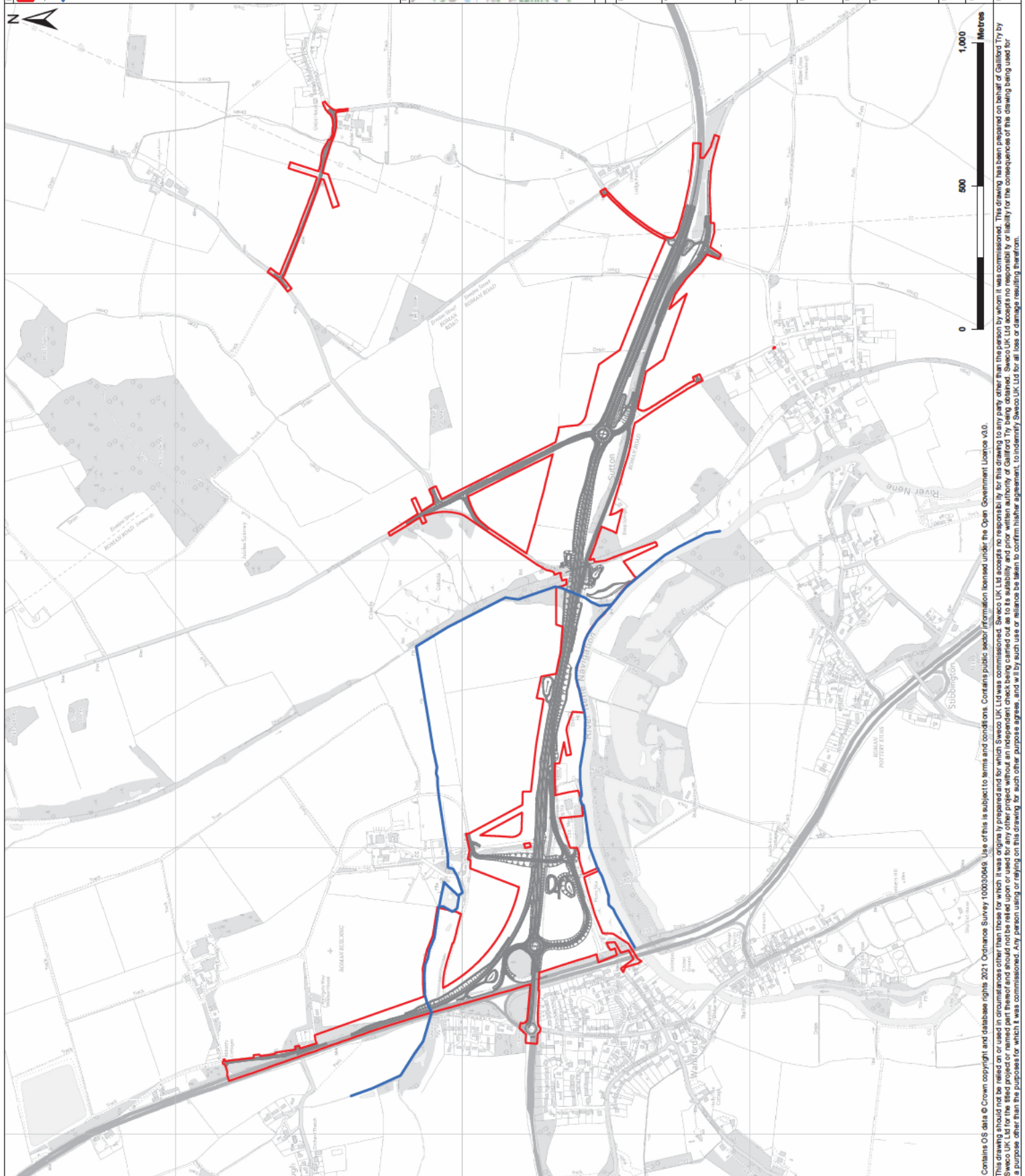
DRAWING NUMBER: HE55 1494-GTY-EGN-000-DR-GI-30100



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Annex B. Locations of the watercourses surveyed



LEGEND Proposed Scheme Boundary Proposed Scheme Design Study area		REFERENCE MAP Contains OS data © Crown Copyright and database right 2021	<table border="1"> <tr> <td>PROJ</td> <td>NO</td> <td>DATE</td> <td>REVISION</td> <td>NO</td> <td>DATE</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	PROJ	NO	DATE	REVISION	NO	DATE							<table border="1"> <tr> <td>DESIGNER</td> <td> </td> </tr> <tr> <td>CONTRACTOR</td> <td>SWECO</td> </tr> <tr> <td>CLIENT</td> <td>GallifordTry</td> </tr> <tr> <td> </td> <td>highways england</td> </tr> <tr> <td>PROJECT TITLE</td> <td>A47 WANSFORD TO SUTTON</td> </tr> <tr> <td>PROJECT STAGE</td> <td>PCF STAGE 3</td> </tr> <tr> <td>DRAWING TITLE</td> <td>ANNEX B: LOCATIONS OF THE WATER-COURSES SURVEYED.</td> </tr> <tr> <td>SHEET NO</td> <td>TR010039/APP/6.2</td> </tr> <tr> <td>FOR INFORMATION</td> <td> </td> </tr> <tr> <td>SHEET SIZE</td> <td>A3</td> </tr> <tr> <td>SCALE</td> <td>1:12,500</td> </tr> <tr> <td>SHEET NO</td> <td>S2</td> </tr> </table>	DESIGNER		CONTRACTOR	SWECO	CLIENT	GallifordTry		highways england	PROJECT TITLE	A47 WANSFORD TO SUTTON	PROJECT STAGE	PCF STAGE 3	DRAWING TITLE	ANNEX B: LOCATIONS OF THE WATER-COURSES SURVEYED.	SHEET NO	TR010039/APP/6.2	FOR INFORMATION		SHEET SIZE	A3	SCALE	1:12,500	SHEET NO	S2
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