

To: Matt Richardson

From: William Dent

Company: Miller Homes Limited

SLR Consulting Limited

cc: Andrea Wilcockson

Date: 13 November 2025

Project No. 404.064550.00001

RE: Land Parcels Adjacent to Worsell Drive, Copthorne – Water Vole and Otter Surveys

Introduction

In 2025, SLR Consulting Limited (SLR) was commissioned by Miller Homes Limited to undertake a targeted surveys for otter *Lutra lutra* and water vole *Arvicola amphibius* of Copthorne Brook, to support the planning application for residential development on two land parcels adjacent to Worsell Drive, Copthorne (Ordnance Survey (OS) National Grid Reference: (NGR) TQ 30620 39196).

The construction and/or operation of a proposed development at two land parcels which are adjacent to Worsell Drive, Copthorne (Ordnance Survey (OS) National Grid Reference (NGR) TQ 30620 39196) would necessitate amongst other activities the construction of an outfall structure no wider than 2m into the Copthorne Brook.

Risks were identified from the Site itself in terms of potential disturbance of otter should they be present along two watercourses in proximity to the Site. As well as direct impact to one of these watercourses, the Copthorne Brook, from the outfall construction which may negatively impact otter, water vole, and the watercourse itself. As such, otter and water vole surveys, which were undertaken in August 2025, were necessary to inform an assessment of the potential impacts on important ecological receptors.

Site Context and Description

The proposed development is part of a wider multi-phased development which includes numerous residential plots. As such, the wider Copthorne site itself has been subject to wide ranging and long running ecological surveys and assessments to inform impact assessment, site designs, and mitigation requirements. Such ecological surveys have not identified evidence of breeding or resting places for water vole or otter.

The proposed development is separated into two parcels: the 'Northern Parcel' at OS NGR TQ 30736 39391, and the 'Southern Parcel' at OS NGR TQ 30611 39256, both are approximately 300m and 410m east of the M23 and are approximately 50m and 178m west of Copthorne village.

The Southern Parcel comprises two grassland fields and a site compound, with the Northern Parcel comprising hard standing and grassland.

One watercourse, Copthorne Brook, is situated within the 30-metre buffer area approximately 11 metres away from the Southern Parcel. It occupies the land between the two parcels comprising the proposed development. A second watercourse runs northwards c50m west from the Southern Parcel and joins the Copthorne Brook.

The wider landscape is a mosaic of agricultural fields bordered by hedgerows, areas of woodland, and developed areas. The village of Copthorne is located less than a 1km to the east of the development, and the town of Crawley less than a 1km to the south-west. The M23 lies 300m west of the development and the A264 (Copthorne Way) 450m south of the development.

Methodology

The surveys were undertaken on 29th August 2025 by SLR Project Ecologist William Dent BSc, MSc, Qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and has over 2 years' experience as a professional ecologist. William has undertaken several surveys for water vole and otter.

The report has been subject to review and approval in accordance with SLR company procedures by Dr Andrea Wilcockson, BSc, MSc, PHD, CEnv, MCIEEM (Full member of the Chartered Institute of Ecology and Environmental Management), a Technical Director with SLR's Ecology & Biodiversity team who has over twenty-one years' experience in ecological consultancy.

Otter Survey

The Survey Area comprised a total of 680m of watercourse and suitable areas of habitat adjacent within 50m of the banks. This included the area of Copthorne Brook within the Site and 100m up and downstream, and 100m of the watercourse to the west of the Southern Parcel.

The survey involved assessing the suitability of the watercourse and habitats within the Survey Area in line with survey guidance¹ and a targeted search for evidence of otter presence. Habitat characteristics assessed included:

- water depth, quality, and likely frequency and height of water level changes, relative to bank height;
- presence of potential couch, lay-up points, or holt locations (such as overhanging tree roots);
- presence of spraint and spraint-marking locations (prominent features such as large rocks protruding from the watercourse, bridges, and logs);
- presence of prey items within the watercourse or within proximity to; and
- presence of public pressure/disturbance.

The targeted search included searching for otter signs such as:

- incidental otter sightings;
- spraints;
- slides;
- pawprints and tracks;
- feeding remains; and
- otter remains.

Water Vole Survey

Survey Area comprised 100m upstream and downstream of the reach of Copthorne Brook that fell within the Site, as well as land extending 10m from the bank tops of the watercourse.

The search involved identifying burrows, feeding stations, latrines, and potential paths at the water's edge, as described in the Water Vole Conservation Handbook² which would then

¹Chanin P (2003). *Monitoring the Otter Lutra lutra. Conserving Natura 2000 Rivers Monitoring Series No. 10*, English Nature, Peterborough.

² Strachan R, et al., (2011) Water Vole Conservation Handbook 3rd Edition. Wildlife Conservation Research Unit, Abingdon.



indicate a presence of water vole within the Brook. This involved walking the margins of the water bodies. On the day of the survey the rainfall was too intense to safely enter the stream and survey from within the water column.

Certain aspects of the habitat suitability assessment for water vole were also assessed for including the level of shading from overhanging trees and shrubs, bank profile and structure of the watercourse, water flow and evidence of fluctuation of water-levels, and the presence of anthropogenic impacts.

Legislative and Planning Policy Context

Otters are protected under The Conservation of Habitats and Species (Amended) (EU Exit) Regulations 2019 and also fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) making it an offence to: recklessly or deliberately capture, kill, disturb or injure an otter; damage or destroy a breeding site or resting place; obstruct access to a place of rest or shelter; and to possess, sell control or transport live or dead otters, or parts of otters.

Water voles are protected under the Wildlife and Countryside Act 1981 (as amended), making it an offence to intentionally kill, capture or injure a water vole, and/or intentionally or recklessly disturb, obstruct, damage or destroy their burrows.

Otters and water voles are also Species of Principal Importance for the purpose of conserving biodiversity in England. There is a requirement that adverse effects of development on a Species of Principal Importance should be avoided through planning conditions or obligations and that planning permission should be refused where harm to these species, or their habitats, may result, unless the need for, and benefits of, the development clearly outweigh the harm.

Limitations

The survey was conducted during heavy rainfall which may have affected the water table and bank profile. This may have resulted in loss of field sign visibility as burrows may have been below the water table, latrines and feeding stations may have been washed away. As a result, the results of this survey should be analysed in conjunction with the survey performed by SLR in February 2025. Burrows beneath dense vegetation or the water line can be missed, and therefore the results cannot guarantee an absence of a low population of water vole, or future occupation should the watercourse be suitable for neighbouring populations to expand into.

A partial habitat suitability assessment of the watercourse was also undertaken which adds valuable information to inform a reasonable assumption of presence or absence of the species. Nevertheless, this approach is potentially a significant limitation and is discussed further in this report.

The Survey Area for otter extended 50m from the banks where the habitat was suitable. However, for much of the survey area this was decreased to 10m from the bank top due to the area being highly disturbed from the construction of the residential development and therefore considered unsuitable for otter. Furthermore, the areas in question have been subject to numerous surveys over the different phases of the development of the Copthorne project, with no otter holts or couches recorded present within that area or the wider site. Therefore, it is considered that the extent of suitable otter habitat was searched for potential field signs.



Overall, no significant limitations were encountered during the survey for the survey methods used.

Results

Water Vole

The bank of Copthorne Brook comprised of varying bank profiles including vertical with undercut, vertical with toe, gentle (less than 45 degrees), and steep (more than 45 degrees), which are suitable and sub-optimal for water voles to establish burrows. Much of the bank was sparsely vegetated with terrestrial species. No aquatic flora were identified which may have been due to the high water levels caused by the weather. The watercourse is heavily overshadowed by woodland, so a reduction in ground flora variation is likely and therefore reduced the likelihood of food resource availability for water voles.

In addition, the presence of construction and residential development in proximity to the watercourse (including dog walkers through and around the Survey Area) reduced the suitability of the watercourse for the species also.

The watercourse showed signs of a relatively stable water-level, with the watercourse highly unlikely to dry entirely. Furthermore, information from the river levels website for the Burstow stream, of which the Copthorne Brook is a tributary, revealed a water level range recorded usually between 0.75m and 2.65m³.

Ultimately, though, the watercourse offered sub-optimal habitat for the species even with consideration of the potential for higher vegetation variation.

No burrows suitable for water vole were found and no other field signs were recorded. The burrow survey included all areas of banks with no access constraints to the Survey Area, conducted at a time when the water level was potentially high, making it highly possible that suitable water vole burrows were missed. However, considering no water vole burrows were found during previous surveys in 2025, water voles are considered absent from the Survey Area.

Otter

The watercourses were considered sufficiently deep and sheltered from disturbance to offer potential commuting opportunities for otter, with the presence of aquatic fauna including potential prey species a possibility.

Furthermore, scattered trees and overhanging root systems were present along the bank face and bank tops along the watercourse that could potentially offer a place of rest and shelter (holts and couches), but no evidence of occupancy by otter was recorded.

One mammal hole was identified within 10m of the banks which was large enough to house otters but had no indication of a path from the water course to the hole entrance and field signs indicated active use by rabbits.

The presence of nearby construction activities and residential areas to the watercourse greatly limited its potential to be used by otters for undisturbed breeding or resting up.

Potential spraint marking locations such as bridges and exposed root plates were present within the Survey Area, but no spraints were recorded. Despite areas of suitably soft sand and exposed soil adjacent to and along the watercourses, no pawprints, or slides were recorded.

³ The monitoring station was the closest identified at c3km downstream from the Survey Area.



No other signs including incidental sightings, feeding remains, or otter remains were identified during the survey.

Figure 1: Typical example of habitat present for otter at Copthorne Brook



Figure 2: Mammal Hole within 10m of the Copthorne Brook



In summary, no evidence of otter was identified during the survey, but there remained the potential for otter to utilise the watercourse, particularly for commuting and foraging.

Other Notable Species

No signs of other notable species were identified during the survey.



Summary and Conclusions

SLR has undertaken a water vole and otter survey of Copthorne Brook, with no evidence of either species found within the watercourse, bank faces, or bank tops of the watercourse within the Survey Area, but there remained potential for otter within the Survey Area.

It is recommended that a precautionary working method statement for otter is produced to ensure that the works do not disturb otter. This should include a pre-works check of the Survey Area. Also included within the document should be appropriate pollution prevention measures during construction and operation.

