



Otter Survey Report

Land at A28 Sturry Link Road

July 2023

Otter Survey Report

Land at A28 Sturry Link Road

21/07/2023

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Non-technical Summary

Phlorum Ltd was commissioned by Project Centre, on behalf of Kent County Council, to undertake an otter (*Lutra lutra*) survey to assess the presence/likely absence and distribution of this species within land associated with the A28 Sturry Link Road planning application (Planning ref: CA/21/01854).

The Client, Kent County Council, have planning permission to construct the north-south alignment of Sturry Link Road between 2024 and 2026 from the A28 Sturry Road south of the Great Stour River close to Southern Water's Canterbury Wastewater Treatment Works in the southwest up to the roundabout within the Land at Sturry site, north of the Canterbury to Ramsgate railway line.

The otter survey follows on from a Preliminary Ecological Appraisal (Phlorum, 2023) which identified highly suitable habitat for this species within and adjacent to the Site Area.

The main findings of the survey are as follows:

-  It was concluded that otters were likely absent from the surveyed stretch of the Great Stour River and adjacent habitats. No definitive evidence of otter activity was identified, and no otters were captured by the camera traps despite six weeks of monitoring with good coverage of the surveyed area;
-  Potential field signs, including one possible spraint and possible slides, were most likely indicative of other mammal species, including beaver (*Castor fiber*);
-  This stretch of the Great Stour River is highly suitable for otters, and evidence of otters including a resting place / holt was identified within and adjacent to the Site Area during surveys undertaken in 2017. There is therefore a reasonable chance that otters could use habitats within and adjacent to the Site Area again in the interim before development commences;
-  Based on these conclusions, it is recommended that an otter mitigation licence (A45) will not be required for the development. It is recommended that a precautionary approach to construction works, and operation is followed for habitats to the south of the Canterbury to Ramsgate railway line;
-  Should otter presence be subsequently confirmed within or adjacent to the Site Area in the interim before works commence, it may be necessary to obtain an otter mitigation licence (A45) for the development; and
-  Further information regarding the precautionary approach is provided in Section 4 of this report.

1. Introduction

Background

- 1.1 Phlorum Ltd was commissioned by Project Centre, on behalf of Kent County Council, to undertake an otter (*Lutra lutra*) survey to assess the presence/likely absence and distribution of this species within land associated with the A28 Sturry Link Road planning application (Planning ref: CA/21/01854).
- 1.2 The Client, Kent County Council, have planning permission to construct the north-south alignment of Sturry Link Road between 2024 and 2026 from the A28 Sturry Road south of the Great Stour River close to Southern Water's Canterbury Wastewater Treatment Works in the southwest up to the roundabout within the Land at Sturry site, north of the Canterbury to Ramsgate railway line.
- 1.3 The otter survey follows on from a Preliminary Ecological Appraisal (Phlorum, 2023) which identified highly suitable habitat for this species within and adjacent to the Site Area. It was recommended that a targeted otter survey be undertaken, at any time of year. Due to the requirement for a series of two survey visits for the water vole (*Arvicola amphibius*) survey, the same methodology was followed for the otter survey. The first survey visit was carried out concurrently with the Preliminary Ecological Appraisal, in September 2022. The second survey was carried out in April 2023.
- 1.4 The survey covered a stretch of the Great Stour River, between Vauxhall Road and White Mill Bridge on the A28 Sturry Road, and the land adjacent to the Great Stour River where access allowed. The surveyed areas were either within or directly connected to the Site Area, therefore any otters using these areas could be affected by the development.
- 1.5 This report provides an assessment of the status of otters within the Site Area and adjacent areas, providing information on their presence/likely absence and distribution. Potential impacts of the development are identified and measures to mitigate the effects of the development on otters are discussed in outline.

Site Area Description

- 1.6 The Site Area for the proposed A28 Sturry Link Road scheme comprised three separate areas of land. These areas of land will be the responsibility of the A28 Sturry Link Road Scheme developers. See the areas highlighted in red in Figure 1 in Appendix A for the location of the three separate areas of land. The majority of the Site Area lies between the A28 Sturry Road, where the Site Area runs adjacent to Sturry Road Community Park, and the Canterbury to Ramsgate railway line. Part of a field to the north of the Canterbury to Ramsgate railway line covering the location of the proposed rail bridge is included. The Site Area also includes a section of the field to the west, providing a link road to Broad Oak Road, and a short section of Broad Oak Road and Shalloak Road immediately north of the Canterbury to Ramsgate railway line. A small area of road to the east of the main Site Area, comprising the A291 Herne Bay Road/Sturry Hill and A28 Island Road junction, also resides within the Site Area.
- 1.7 The Site Area comprised buildings, hardstanding, amenity grassland, agricultural land, improved grassland, semi-improved neutral grassland, marshy grassland, ruderal vegetation, continuous scrub, broad-leaved semi-natural woodland, water bodies, reedbed, individual trees, and hedgerow and trees.
- 1.8 The National Grid Reference for the centre of the Site Area is TR 16942 60093. The Site Area extends over approximately 7.7 hectares (ha).
- 1.9 Phlorum have considered a larger 'Survey Area' in other ecological reports, including the Preliminary Ecological Appraisal. The Survey Area covered 14.7ha and included land associated with the Greenfield Shooting Grounds and the rest of the land within the Land at Sturry Application Site (Planning ref: CA/20/02826). However, for the purposes of the otter survey, only the Great Stour River and adjacent terrestrial habitats were included. It was considered that the other parts of the Site Area and Survey Area had negligible potential to support otter.
- 1.10 The Great Stour River flows through Kent past Ashford to Canterbury and Sandwich. Within the survey area, the banks of the Great Stour River were heavily vegetated with tall, dense ruderal vegetation places including species such as Himalayan balsam (*Impatiens glandulifera*), common nettle (*Urtica dioica*), hogweed (*Heracleum sphondylium*), bindweed (*Convolvulus arvensis*), common reed (*Phragmites australis*), bittersweet (*Solanum dulcamara*) and brambles (*Rubus fruticosus* agg.), hawthorn (*Crataegus monogyna*) and willow (*Salix* sp.).

2. Methodology

Data Search

- 2.1 Records for otters within a 2km radius of the Survey Area were obtained from Kent and Medway Biological Records Centre (KMBRC, 2022) as part of the Preliminary Ecological Appraisal (Phlorum, 2023).

Personnel


- 2.2 The first survey was led by Emily Phillips (BSc (Hons), QCIEEM), an ecological consultant with over three years' survey experience. The survey was assisted by Mika Valentini (BSc (Hons)), an ecological consultant with over two years' survey experience.
- 2.3 The second survey, camera trap surveys and boat survey were led by Natalie Arscott (BSc (Hons), MRes, QCIEEM), an ecological consultant with over four years' professional survey experience. The second survey and camera trap surveys were assisted by Livia Dry (BSc (Hons), MSc), an ecological consultant with over two years' survey experience. The boat survey was assisted by Marian Cameron (BSc (Hons), MSc, MIEMA, CENV, PEIA) and Amy Fitzmaurice of Kent Wildlife Trust.
- 2.4 The survey results and assessment were reviewed by the project director Richard Schofield (BSc (Hons), MSc, CSJK, MCIEEM, MIEMA, CEnv), with over 20 years of experience in managing projects.


Otter Surveys

- 2.5 The first survey visit to determine the presence/likely absence of otter was carried out on the 13th September 2022. The weather conditions during the survey were dry and overcast.
- 2.6 The second survey visit to determine the presence/likely absence of otter was carried out on the 25th April 2023. The weather conditions during the survey were dry and sunny.
- 2.7 Photographs from the otter surveys are provided in Appendix D.
- 2.8 The survey methodology followed best practice guidelines as detailed in '*Monitoring the Otter Lutra lutra*' (Chanin, 2003). During the surveys, a detailed search for otter field signs was undertaken, paying particular attention to important riverine features such as bridges, tunnels, stream islands and reed beds.


2.9 The first survey, in September 2022, was carried out entirely from land. During the second survey, in April 2023, waders were used to walk along the Great Stour River. This allowed the riverbanks to be surveyed concurrently from both the water and adjacent land, where water levels allowed. Two ecologists were present for both surveys.


2.10 Numerous terms have been used to describe signs of otter activity and features used by otters. For the avoidance of doubt, definitions of the terms used for the purpose of this survey are provided below:


 **Sightings.** Otters are nocturnal animals and, as such, are rarely seen during daytime surveys. Males can be up to 1.2 metres long and weigh up to 10 kilos (about the size of a small dog). Males are usually slightly larger than females, which tend to be no more than 1m long. Otters have a brown coat, with a large cream coloured patch on the chin and underbelly, and a broad muzzle. Otters are often confused with American mink (*Neovison vison*). Minks are smaller (up to 0.5 m long), with a plain darker coat and a pointed muzzle;


 **Spraints.** Spraints (otter faeces) are territorial markers usually left in prominent positions on the riverbank or on a rock mid-river. These are found in varying degrees of freshness from fresh when they are almost transparent and liquid, to old when they are grey, solid and dry through to disintegrated when they are a loose collection of prey remains;



Other types of deposit occasionally found are **tar spots** and **anal jelly**. Tar spots are blotches of black tar found in spraints but with no fish bones present. Anal jelly is a clear, translucent gel which can vary in colour from pale brown to greenish or amber colour and does not contain bone fragments;

 **Footprints.** Otter footprints are found in soft substrate (e.g. mud or silt) usually at bends in the river and have five toes, which arch around the front of a large pad. Mink prints also have five toes but are smaller and star shaped with long claws that often show. Dog and fox tracks have four toes only;

 **Slides.** These are well-worn access points where an otter slides into the water;

 **Feeding remains.** Otters feed mainly on slower moving fish and eels. They also eat amphibians, crayfish and other invertebrates, small mammals and birds. Otters often leave rests of fish or amphibians on riverbanks; however, it is difficult to confirm whether these have been discarded by otter or other animals unless spraints have been found in the vicinity;

 **Holts.** Holts are structures used by male otters or non-breeding females on a permanent basis. They can be tunnels under the roots of trees (predominantly ash or sycamore), rocky banks, caves, badger setts, rabbit burrows or a group of large stones with gaps underneath. A holt will usually have sprainting sites around it;

- 
Natal dens. Natal dens are used by breeding females to give birth to cubs. They are similar to holts, but generally located further away from the river to protect the cubs against flooding and attacks from other adult otters. Females and cubs in natal dens are particularly sensitive to disturbance. Field signs for recognising a natal den can include:
 - A heavily used path or paths from the water into dense cover or an enclosed structure bedding within the structure which may consist of grass, ferns or reeds (bedding may also be present in other types of resting places);
 - A latrine containing a large number of spraints at the den or within 2 m of it (this is not always the case – sometimes the female will excrete in the water to ensure that there are no signs of occupation near the natal den);
 - A cub play area which may be a well-worn area around a tree or on a bank; and
 - Different sized otter prints; and
- 
Couches (or shelters). These structures are of a temporary nature and can be used by a resting otter for several hours in-between feeding bouts or whilst an individual is traveling over long distances. A variety of features can be used by an otter as a resting site, for example: root plates of fallen trees, cavities underneath tree roots, dense bramble or gorse scrub, reeds or osier beds, islands, large rocks, rhododendron bushes, bracken, hedges, and piles of debris. **Shelter** generally refers to a covered structure whereas a **couch** is uncovered.

- 2.11 The otter survey forms (Appendix B) will record the above field signs. These include sightings, spraints (dried fragments (Df), dried and intact (Di), and not fully dried (Nd)); footprints, slides, feeding remains, holts, natal dens and couches to determine otter usage of the river.

Camera Traps Surveys

- 2.12 Two 3-week periods of camera trap monitoring were conducted in Spring (between March and May) 2023 along the Great Stour River.
- 2.13 Six wildlife cameras (Crenova RD1000) were installed at strategic locations along the Great Stour River, between Vauxhall Road and White Mill Bridge on the A28 Sturry Road. Some of the camera locations were moved for the second period of monitoring in accordance with the initial camera findings and findings from survey visit on the 25th April 2023. Camera locations are shown in the Survey Map in Appendix A.

- 2.14 The camera locations were selected to survey for water vole, otter, and beaver (*Castor fiber*), therefore not all locations were optimal for specifically detecting otter. For both monitoring periods, a camera was positioned to monitor the historic otter resting place/potential holt, with the specific aim of identifying whether it was still in active use by otters.
- 2.15 The wildlife cameras were set to record 30 seconds of video footage following being triggered by motion in the focal area.
- 2.16 For the first period of camera trap monitoring, the cameras were installed on the 2nd March 2023 and removed on the 23rd March 2023.
- 2.17 For the second period of camera trap monitoring, the cameras were installed on the 25th April 2023 and removed on the 16th May 2023.

Boat Survey

- 2.18 An additional survey was carried out on the 8th June 2023, during which the riverbanks of the Great Stour River were viewed from a canoe. The purpose of this survey was to identify beaver burrows, and therefore the bank was not closely inspected for field signs of otter. However, the survey provided an additional opportunity to assess the riverbanks for potential otter holts.
- 2.19 The water level of the Great Stour River was lower during the boat survey than it had been during the previous otter surveys, therefore a greater area of riverbank was visible to visually assess.

Constraints

Data Search Constraints

- 2.20 It is important to note that, even where data is held, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest. Instead the area may be simply under-recorded.

Survey Constraints

- 2.21 Ecological surveys are limited by factors that affect presence of plants and animals such as seasonality. Whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the environment.
- 2.22 Accessibility along the Great Stour River for the first otter survey was largely limited due to tall, dense ruderal vegetation along the riverbank edges which prevented the surveyors from being able to get into the riverbank to easily survey the bank sides.
- 2.23 The use of waders during the second otter survey improved access to the riverbank edges, however the water level was too high for wading in places.

- 2.24 It is possible that signs of otter activity may have been obscured and under-recorded in areas of dense bankside vegetation.
- 2.25 Field signs may have been removed by recent rainfall or high water levels during the second otter survey. This was unlikely to be a constraint during the first otter survey, due to a prolonged period of dry weather preceding the survey.

3. Results

Data Search

- 3.1 The data search returned ten recent (post-2007) records of European otter within 2km of the Survey Area.

Previous Reports









- 3.2 Amey Consulting carried out otter surveys between January and April 2017 and found several field signs indicating the presence of otters on the Great Stour River, within and in close proximity to the Site Area.
- 3.3 Confirmed otter spraints were identified in three locations. One of these was at tip of the fork of the Great Stour River, within the Site Area, and the other two were approximately 170m downstream, on the southern arm of the Great Stour River. The grid reference locations are TR 16865 59991, TR 17034 59957, and TR 17022 59933.
- 3.4 An otter slide was identified in the same location as one of the spraints on the southern arm of the Great Stour River (grid reference TR 17022 59933).
- 3.5 An otter resting place / holt was identified under a mature bankside willow with a thick covering of honeysuckle, in the same location as the slide and one of the spraints (grid reference TR 17022 59933). This is on the boundary of the Site Area.
- 3.6 Amey Consulting (2017) concluded that otters were present and active within and adjacent to the Site Area, and that the stretch of river was likely part of an established otter territory. It was considered that *"the proposed link road has potential to cause significant disturbance to otter habitat during the construction stage and will require further otter monitoring to inform the need for a European Protected Species (EPS) mitigation licence to be obtained ahead of the works"*.
- 3.7 According to Amey Consulting (2017), discussions with a third party who was monitoring the river at that time found that the resting place / holt was being used by a single male otter.
- 3.8 Scat belonging to American mink was also recorded during the surveys.


First Otter Survey (September 2022)

- 3.9 The first otter survey was carried out from the land adjacent to the Great Stour River only. Dense vegetation along the banks of the Great Stour River restricted access for close inspection in places. It is therefore possible that field signs were obscured within the vegetation.
- 3.10 During this survey, no definitive evidence of otter presence was identified.

- 3.11 A single potential otter spraint was found in the bankside vegetation, along the southern arm of the Great Stour River, opposite Maytree Canterbury Nurseries (grid reference TR 17190 59968). The faeces were dried and partially degraded, therefore it could not be confirmed whether they belonged to otter or another mammal species, such as fox (*Vulpes vulpes*).
- 3.12 Paths of flattened vegetation leading into the water were identified in three locations. One of these was adjacent to the potential spraint (grid reference TR 17197 59968) and the other two were within the Site Area close to the fork of the Great Stour River (grid references TR 16957 60020 and TR 16956 60010). These were characteristic of otter slides, however could not be definitively identified as having been created by otters. The potential slides may also have been created by beavers, which have been confirmed to be present and create similar looking 'haul outs'.
- 3.13 No other field signs indicative of otter were seen.
- 3.14 The area surveyed is illustrated in the Survey Map in Appendix A. The survey record form is shown in Appendix B. Photographs highlighting features of particular ecological interest to otter are provided in Appendix D.

Second Otter Survey (April 2023)

- 3.15 The second otter survey was carried out from both the land adjacent to the Great Stour River and from within the Great Stour River using waders. Surveying from the water allowed for a close inspection of the riverbanks of the Great Stour River, however the vegetation here was dense and therefore it is possible that field signs may have been obscured within the vegetation.
- 3.16 During this survey, no definitive evidence of otter presence was identified.
- 3.17 Several potential slides into the river were seen. However, most of these were more characteristic of a beaver haul out point than an otter slide, due to the significant indent into the bank that had been created, typical of a beaver haul out due to their heavier weight. The potential slides / haul out points were mostly located near the fork of the Great Stour River, and along the southern arm. The grid references for the potential slides / haul out points seen are:
 -  TR 16828 59998;
 -  TR 16844 60000;
 -  TR 16938 60018;
 -  TR 16900 60000;
 -  TR 16946 60009;
 -  TR 16895 59980;
 -  TR 16937 59969;
 -  TR 17018 59933; and

 TR 17297 59970.

- 3.18 In addition, there were several mammal pathways through the vegetation within the land at the tip of the fork of the river. These however may not have been created by otters.
- 3.19 No other field signs indicative of otter, such as spraints, were seen.
- 3.20 The area surveyed is illustrated in the Survey Map in Appendix A. The survey record form is shown in Appendix B. Photographs highlighting features of particular ecological interest to otter are provided in Appendix D.

Camera Trap Surveys (March – May 2023)




- 3.21 A total of six weeks of camera trap monitoring, split into two monitoring periods, was carried out in Spring (between March and May) 2023. For both monitoring periods, a camera was situated to record the location of the historic otter resting place / holt that was identified during the 2017 otter surveys.
- 3.22 No otters were recorded by the camera traps during the six weeks of monitoring.
- 3.23 Beavers and foxes, which may leave some similar field signs to otters, were recorded multiple times within the surveyed area.

Boat Survey (June 2023)

- 3.24 The banks of the Great Stour River were surveyed from a canoe in June 2023. No potential holts, or other field signs indicative of otter, were seen.
- 3.25 As the purpose of this boat survey was to inspect the riverbanks for beaver burrows, a focused search for field signs of otter was not carried out. However, the lack of evidence of otters seen supports the findings from the previous otter surveys and camera trap surveys that otter may be absent.

4. Discussion and Recommendations

Discussion

- 4.1 The Client, Kent County Council, have planning permission to construct the north-south alignment of Sturry Link Road between 2024 and 2026 from the A28 Sturry Road south of the Great Stour River close to Southern Water's Canterbury Wastewater Treatment Works in the southwest up to the roundabout within the Land at Sturry site, north of the Canterbury to Ramsgate railway line.
- 4.2 The otter survey comprised two walkover surveys, two 3-week periods of camera trap monitoring, and a basic survey of the banks of the Great Stour River from a boat. The surveyed area included a stretch of the Great Stour River, between Vauxhall Road and White Mill Bridge on the A28 Sturry Road, and the land adjacent to the Great Stour River where access allowed. The surveyed areas were either within or directly connected to the Site Area, therefore any otters using these areas could be affected by the development.
- 4.3 Previous otter surveys carried out by Amey Consulting in 2017 identified evidence of otter within and adjacent to the Site Area, including an active resting place / holt on the boundary of the Site Area. According to Amey Consulting (2017), discussions with a third party who was monitoring the Great Stour River at that time found that the resting place was being used by a single male otter.
- 4.4 It is considered that, at the time of the recent surveys, otters were **likely absent** from this stretch of the Great Stour River and adjacent terrestrial habitats. No definitive evidence of otter activity was identified during the survey visits, and no otters were captured by the camera traps despite six weeks of monitoring with good coverage of the river and riverside habitats. The potential otter spraint and otter slides that were noted were most likely indicative of other mammal species, including beaver.
- 4.5 Based on the current survey results, it is unlikely that the development would result in:
 -  capturing, killing, disturbing, or injuring otters;
 -  damaging or destroying their breeding or resting places; or
 -  obstructing access to their resting or sheltering places.
- 4.6 Therefore, it is recommended that an otter mitigation licence (A45) will not be required for the development.
- 4.7 However, due to their confirmed presence within the Site Area in 2017 and the highly suitable nature of the onsite and adjacent habitats, it is recommended that a precautionary approach to works is followed to safeguard any otters that may use the Site Area.

- 4.8 Should otter presence be subsequently confirmed within or adjacent to the Site Area in the interim before works commence, it may be necessary to obtain an otter mitigation licence (A45) for the development.
- 4.9 Further information regarding the precautionary approach is provided in the Recommendations section below.

Recommendations

Precautionary Approach

- 4.10 It is recommended that a precautionary approach is adopted for all construction works, and during operation, to the south of the Canterbury to Ramsgate railway line, to safeguard otters that may use habitats within this area.
- 4.11 Prior to the commencement of works, a walkover of the stretch of the Great Stour River and adjacent habitats within and adjacent to the Site Area should be undertaken by a suitably qualified ecologist to check for evidence of otter activity. If there is evidence that otters have been using habitats within or adjacent to the Site Area, it may be necessary to obtain an otter mitigation licence (A45) from Natural England prior to works starting.
- 4.12 Prior to the commencement of works, all on-site contractors should be made aware of the potential presence of otters by a toolbox talk by a suitably qualified ecologist.
- 4.13 It has been proposed within the Construction Environmental Management Plan (CEMP) that the historic otter resting place under a willow tree is retained throughout the works. If this is not possible, or if there is potential for damage or disturbance, advice should be directly sought from the Ecological Clerk of Works.
- 4.14 The use of high intensity lighting which would illuminate the Great Stour River should be avoided both during the construction and operation periods, to ensure that suitable habitat for otters is maintained.
- 4.15 It is recommended that no works within 30m of the Great Stour River should be undertaken after dusk.
- 4.16 Otters are naturally inquisitive. Any excavations that are left overnight should either be covered or include a ramp of 45° or less on one face to allow otters and other wildlife to climb out should they fall into the excavation.
- 4.17 Contractors should be aware that otters may lie-up in stacked pipes or beneath pallets. These features should be inspected daily before the start of works.

Habitat Enhancement/Retention

- 4.18 It is recommended that, as far as possible, the bankside vegetation that borders the Great Stour River is retained and protected from damage during the works.










- 4.19 Habitat enhancement could include the widening of the strip of dense, bankside vegetation that borders the Great Stour River and planting of suitable trees, such as willow, along the riverside, subject to agreement with landowners and in accordance with licence specifications. This would provide greater opportunities for resting places and/or holts for otters.

5. Conclusions

Conclusions

- 5.1 Phlorum Ltd was commissioned by Project Centre, on behalf of Kent County Council, to undertake an otter survey to assess the presence/likely absence and distribution of this species within land associated with the A28 Sturry Link Road planning application (Planning ref: CA/21/01854).
- 5.2 The Client, Kent County Council, have planning permission to construct the north-south alignment of Sturry Link Road between 2024 and 2026 from the A28 Sturry Road south of the Great Stour River close to Southern Water's Canterbury Wastewater Treatment Works in the southwest up to the roundabout within the Land at Sturry site, north of the Canterbury to Ramsgate railway line.
- 5.3 Based on the results of the survey, it is concluded that otters were likely absent from this stretch of the Great Stour River and adjacent terrestrial habitats, at the time of the survey visits. No definitive evidence of otter activity was identified during the survey visits, and no otters were captured by the camera traps despite six weeks of monitoring with good coverage of the river and riverside habitats.
- 5.4 It is however noted that this stretch of the Great Stour River is highly suitable for otters, and evidence of otters including a resting place / holt was identified within and adjacent to the Site Area during surveys undertaken in 2017. There is therefore a reasonable chance that otters could use habitats within and adjacent to the Site Area again in the interim before development commences.
- 5.5 Based on these conclusions, it is recommended that an otter mitigation licence (A45) will not be required for the development. It is however recommended that a precautionary approach to construction works, and operation, is followed for habitats to the south of the Canterbury to Ramsgate railway line.
- 5.6 Should otter presence be subsequently confirmed within or adjacent to the Site Area in the interim before works commence, it may be necessary to obtain an otter mitigation licence (A45) for the development.

6. References

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Figures and Appendices

Appendix A

Site Area and Otter Survey Map

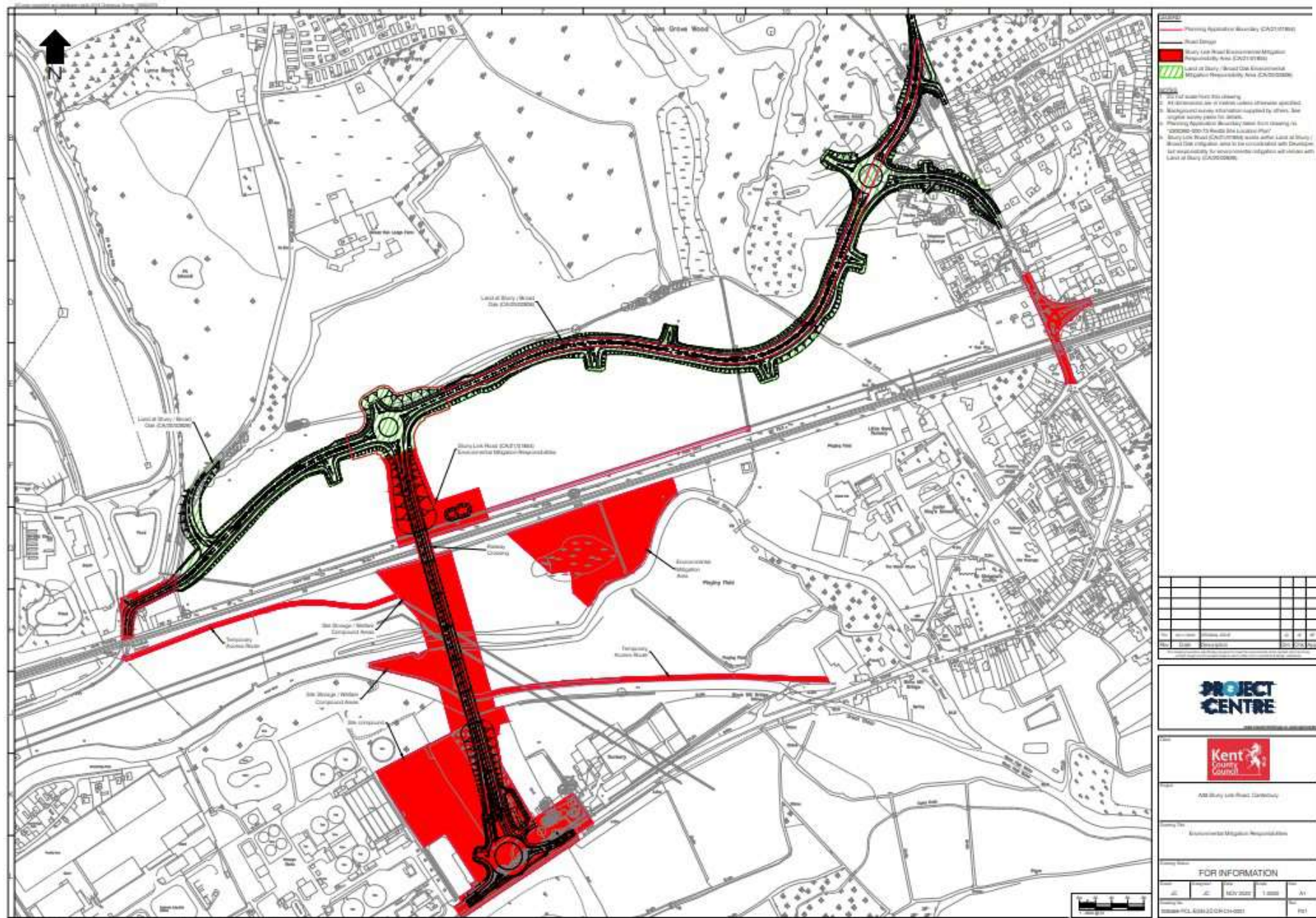


Figure 1: The Site Area

Drawn by: EP
On the: 19/12/2022
Not to Scale
Ref: 11112



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Legend



Surveyed Area



Historic Resting Place

active in 2017 surveys



Potential Otter Spraint

seen during first survey



Potential Otter Slide

seen during both surveys



Camera Trap Location

Figure 2: Land at A28 Sturry Link Road Otter Survey Map

Drawn by: NA
On the: 05/07/2023
Not to Scale
Ref: 11112



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Appendix B

Survey Record Forms

Otter Survey Recording/Monitoring Form.

SITE: Land at A28 Sturry Link Road, Kent		Date: 13/09/2022
RIVER: Great Stour River		
MAP REF: TR 16958 60042		
WEATHER: Warm and overcast	RECENT WEATHER: Warm/dry	
WATER LEVELS: End of summer, high flow	CLIENT: Project Centre	
OTTER RECORDS: Potential otter spraint and slides.	SPRAINTS: DRIED FRAGMENTS (Df) = 2 (possible) DRIED AND INTACT (Di) = 0 NOT FULLY DRIED (Nd) = 0	
COMMENTS: Several sections of the riverbank were inaccessible because of dense, overgrown, tall ruderal vegetation. Large sections of the riverbank were observed by dense vegetation.		
HABITAT DESCRIPTION: The Great Stour is a river corridor that flows past Ashford, Kent, to Canterbury and Sandwich. Within the survey area, the riverbank was heavily vegetated with tall, dense ruderal vegetation places including species such as Himalayan balsam (<i>Impatiens glandulifera</i>), common nettle (<i>Urtica dioica</i>), hogweed (<i>Heracleum sphondylium</i>), bindweed (<i>Convolvulus arvensis</i>), common reed (<i>Phragmites australis</i>), bittersweet (<i>Solanum dulcamara</i>) and brambles (<i>Rubus fruticosus</i> agg.), hawthorn (<i>Crataegus monogyna</i>) and willow (<i>Salix</i> sp.). This made some areas of the river difficult to access, particularly the banks along the river where the Great Stour River forks.		
HABITAT EVALUATION: The section of the river in the eastern region of the site within the Junior King's school grounds would be prone to disturbance due to school activities.		
HUMAN IMPACT: The areas within the Junior King's school ground will be frequently used for school activities.		
OTHER NOTABLE SPECIES: Beavers.		
RECOMMENDATIONS		
(1) A second survey for otter evidence be carried out concurrently with the required second water vole survey in 2023. If a second survey is not carried out then we would recommend that an updated survey should be undertaken if more than 12 months have elapsed since the date of this survey (12 months will have elapsed on 13 th September 2022). (2) We would recommend that camera traps be deployed to improve our understanding of the current level of otter activity at the previously identified resting place and along the stretch of river in general.		
SURVEYOR(S): Emily Phillips and Mika Valentini		

SITE: Land at A28 Sturry Link Road, Kent		Date: 25/04/2023
RIVER: Great Stour River		
MAP REF: TR 16958 60042		
WEATHER: Dry and sunny	RECENT WEATHER: Wet	
WATER LEVELS: Spring, high flow	CLIENT: Project Centre	
OTTER RECORDS: Potential otter slides.	SPRAINTS: DRIED FRAGMENTS (Df) = 0 DRIED AND INTACT (Di) = 0 NOT FULLY DRIED (Nd) = 0	
COMMENTS: Potential slides are characteristic of beaver haul out points.		
HABITAT DESCRIPTION: The Great Stour is a river corridor that flows past Ashford, Kent, to Canterbury and Sandwich. Within the survey area, the riverbank was heavily vegetated with tall, dense ruderal vegetation places including species such as Himalayan balsam (<i>Impatiens glandulifera</i>), common nettle (<i>Urtica dioica</i>), hogweed (<i>Heracleum sphondylium</i>), bindweed (<i>Convolvulus arvensis</i>), common reed (<i>Phragmites australis</i>), bittersweet (<i>Solanum dulcamara</i>) and brambles (<i>Rubus fruticosus</i> agg.), hawthorn (<i>Crataegus monogyna</i>) and willow (<i>Salix</i> sp.).		
HABITAT EVALUATION: The section of the river in the eastern region of the site within the Junior King's school grounds would be prone to disturbance due to school activities.		
HUMAN IMPACT: The areas within the Junior King's school ground will be frequently used for school activities.		
OTHER NOTABLE SPECIES: Beavers.		
RECOMMENDATIONS		
(1) Otters are likely absent, but this should be confirmed with review of camera trap footage. (2) A walkover survey should be carried out prior to works commencing.		
SURVEYOR(S): Natalie Arscott and Livia Dry		

Appendix C

Legislation

Legislation

This section contains information pertaining to the legislation and planning policy applicable in Britain. This information is not applicable to Northern Ireland, the Republic of Ireland the Isle of Man or the Channel Islands. Information contained in the following appendix is provided for guidance only.






Species

The objective of the EC Habitats Directive¹ is to conserve plants and animals which are considered to be rare across Europe. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2017 (as amended) (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

The Wildlife and Countryside Act 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and also implements the obligations set out for species protection from the Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.



Various amendments have been made since the Wildlife & Countryside Act came into force in 1981. Further details pertaining to alterations of the Act can be found on the following website: www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000) and Nature Conservation (Scotland) Act 2004.

There are a number of other legislative Acts affording protection to species and habitats. These include:

-  Countryside and Rights of Way (CRoW) Act 2000;
-  Deer Act 1991;
-  Natural Environment & Rural Communities (NERC) Act 2006;
-  Protection of Badgers Act 1992; and
-  Wild Mammals (Protection) Act 1996.

Otter

Otters (*Lutra lutra*) are fully protected under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. Regulation 41 prohibits:

-  deliberate killing, injuring or capturing of otters;
-  deliberate disturbance as to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.

¹ Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.

- 🌿 deliberate disturbance as to affect significantly the local distribution or abundance of the species;
- 🌿 damage or destruction of a breeding site or resting place; and
- 🌿 keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part of this species.

Otters also receive protection under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:



- 🌿 intentional or reckless disturbance (at any level);
- 🌿 intentional or reckless obstruction of access to any place of shelter or protection; and
- 🌿 selling, offering or exposing for sale, possession or transporting for purpose of sale.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect breeding or resting places or for activities likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above. The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.

Appendix D

Survey Photographs

Survey Photographs

Photo	Feature	Photograph of Feature
1	Suitable habitat for otter.	 <p>14 Sept 2022 12:18:19 51.297277993010134N 1.1112487349429772E 125° SE 16 Vauxhall Crescent Kent England</p>
2	Potential otter spraint seen during the first survey (September 2022).	 <p>14/9/22 12:44 51°17'50.64982"N 1°6'53.98607"E A28 Mill Road Sturry Kent England #Phlorum Ltd</p>

Flattened vegetation indicating mammal pathway into the river. A potential otter slide. Seen during the first survey (September 2022).

4



Dense, overgrown vegetation obscuring the surveyors' view of the riverbank.

6

Potential otter slide seen during the second survey (April 2023), however the significant indent in the bank is more characteristic of a beaver haul out point.



7

Mammal pathways through the riverside vegetation, seen during the second survey (April 2023).





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