



Friern Barnet Former Sewage Works

Badger Survey Report

May 2009

Document control sheet **BPP 04 F8**

Client: London Borough of Barnet
 Project: Friern Site Assessment Job No: B0878400
 Document Title: Friern Barnet Former Sewage Works
 Badger Report

	Originator	Checked by	Reviewed by	Approved by
ORIGINAL	NAME Diana Clark	NAME Richard Law	NAME Richard Law	NAME Peter Allan
DATE 18 May 2009	SIGNATURE 	SIGNATURE 	SIGNATURE 	SIGNATURE 
Document Status				

REVISION	NAME	NAME	NAME	NAME
DATE	SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE
Document Status				

REVISION	NAME	NAME	NAME	NAME
DATE	SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE
Document Status				

REVISION	NAME	NAME	NAME	NAME
DATE	SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE
Document Status				

Jacobs Engineering U.K. Limited

This document has been prepared by a division, subsidiary or affiliate of *Jacobs Engineering U.K. Limited* ("Jacobs") in its professional capacity as consultants in accordance with the terms and conditions of Jacobs' contract with the commissioning party (the "Client"). Regard should be had to those terms and conditions when considering and/or placing any reliance on this document. No part of this document may be copied or reproduced by any means without prior written permission from Jacobs. If you have received this document in error, please destroy all copies in your possession or control and notify Jacobs.

Any advice, opinions, or recommendations within this document (a) should be read and relied upon only in the context of the document as a whole; (b) do not, in any way, purport to include any manner of legal advice or opinion; (c) are based upon the information made available to Jacobs at the date of this document and on current UK standards, codes, technology and construction practices as at the date of this document. It should be noted and it is expressly stated that no independent verification of any of the documents or information supplied to Jacobs has been made. No liability is accepted by Jacobs for any use of this document, other than for the purposes for which it was originally prepared and provided. Following final delivery of this document to the Client, Jacobs will have no further obligations or duty to advise the Client on any matters, including development affecting the information or advice provided in this document.

This document has been prepared for the exclusive use of the Client and unless otherwise agreed in writing by Jacobs, no other party may use, make use of or rely on the contents of this document. Should the Client wish to release this document to a third party, Jacobs may, at its discretion, agree to such release provided that (a) Jacobs' written agreement is obtained prior to such release; and (b) by release of the document to the third party, that third party does not acquire any rights, contractual or otherwise, whatsoever against Jacobs and Jacobs, accordingly, assume no duties, liabilities or obligations to that third party; and (c) Jacobs accepts no responsibility for any loss or damage incurred by the Client or for any conflict of Jacobs' interests arising out of the Client's release of this document to the third party.

Contents

1	Introduction	1-1
2	Methodology	2-1
3	Results	3-1
4	Discussion and recommendations	4-1
5	References	5-1

Background

Jacobs UK Ltd carried out an Extended Phase I Habitat survey of the former Friern Barnet Sewage Works on 18th January 2008 and identified the presence of holes dug in the south-western corner of the site (Jacobs, 2008). The report noted that these may have originally been dug by badgers, although no other signs of this species were noted anywhere on the site and a strong smell of fox was noted in one of the holes.

The report noted that no records of badgers were found during the desk study search, however “a group of entrances... which may have formed either a badger sett or a fox den” were noted in a previous ecological survey, carried out and reported on by WS Atkins in 1998 (WS Atkins, 1998). It is unclear if this matches the location of the holes found during the Extended Phase I Habitat survey in 2008 due to the absence of maps in the 1998 report.

Legislation and survey requirements

Badgers are protected under the Protection of Badgers Act 1992, making it an offence to wilfully kill, injure or take, or attempt to kill, injure or take a badger. It is also an offence to damage, destroy, or obstruct access to the entrance to a badger sett. The Act defines the term “badger sett” as “*any structure or place which displays signs indicating current use by a badger*”. The term “current use” is generally taken as use within the previous twelve months. Disturbance to or exclusion of badgers from the sett is not legally permitted except under license from a statutory authority, which in this country is Natural England.

The Extended Phase I Habitat report recommended that the site be checked for badger activity prior to site clearance if a reasonable period of time elapses, i.e. more than a year from the date of this survey. In particular the holes observed during the Extended Phase I Habitat survey should be checked. Further discussions with the client and the possibility of works taking place in 2009 resulted in a badger survey being commissioned.

General

The following paragraphs outline the methodology used to carry out the badger survey, which has been done in accordance with current best practise and based on the most up-to-date guidance available.

Survey method

Two suitably experienced Jacobs' ecologists carried out the survey on 22nd April 2009. A check for badgers can be carried out at any time of year, however the best time is between October and March when vegetation lacks foliage and field signs are more obvious. Although this survey was carried out at a slightly later date than ideal, vegetation on the site was still low enough to ensure a good level of confidence in the results.

During the survey, the holes previously noted during the Extended Phase I Habitat survey were re-visited and fully investigated. The remaining areas of the site were also surveyed, with particular attention being paid to areas where the vegetation and/or the topography offered suitable sett sites for badgers, for example sloping banks and areas with dense ground cover (hedges, scrub, woodland, etc). Signs of badger activity such as the presence of sett holes, dung pits, latrines, snuffle holes, tracks, hair, prints and scratch marks were noted where appropriate. If holes were discovered these were categorised into sett types using the following criteria, based on Natural England guidance (NE, 2007):

- **Main sett** – Usually appearing well-used, well established and having a large number of holes with big spoil heaps, often with piles of old bedding outside. Main setts tend to have well worn paths between the sett and foraging areas, and between sett holes. They are generally considered to be breeding setts (i.e. where cubs are most likely to be born) and are more often than not in use all year round. A social group of badgers will only have one main sett within their territory.
- **Annexe sett** – Annexe setts are always close to a main sett and are usually connected by one or more obvious well-worn paths. They consist of several holes but are not necessarily in use the whole time, even if the main sett is very active. Should a second litter of cubs be born within the social group, they are likely to be raised within an annexe sett.
- **Subsidiary setts** – Often these have very few holes, are usually at least 50m from a main sett and do not have an obvious path connecting them with another sett. Subsidiary setts are not continuously active.
- **Outlying setts** – Usually comprising one or two holes with very little spoil outside (thus indicating that the tunnel system underground is not extensive), outlying setts have no obvious path connecting them with another sett and are used only sporadically.

An indication of the level of activity at each sett was also made, as follows:

- **Well used** – Well used sett entrances contain no debris or vegetation, are obviously regularly used and often show signs of having been recently excavated.
- **Partially used** – Partially used setts are those with entrances not in regular use and which may have debris (twigs, leaves, moss etc) around the entrance. However, they could potentially be used regularly in the future with minimal clearance necessary.
- **Disused** – Disused setts show signs of not having been in use for a considerable period of time and would not be used again without extensive clearance by a badger.

3**Results**

The few holes observed in the previous survey showed no signs of being currently in use by badgers. Several of the holes appeared to have wide entrances, but further investigations showed that these narrowed very quickly and soil is likely to have collapsed around the entrances due to the nature of the substrate. It is considered likely that these holes are used by foxes and potentially by rabbits as well.

No further signs of badgers using the site, either for sett creation or for foraging, were noted.

Although no signs of badgers using the site were noted during the survey, it is possible that they may use the site for occasional foraging. Badgers may also move onto the site at a later date. It is therefore recommended that the site be re-checked for badger activity if a reasonable period of time elapses, i.e. more than a year from the date of this survey. Any repeat survey would require a site walkover visit, where the fox/rabbit holes are checked for signs of badger activity and the rest of the site looked at for further holes, tracks and latrines etc. A final check for badgers is also recommended immediately prior to works on the site commencing.

Best practice guidance issued by Natural England (NE, 2007) states that “*where interference with a sett showing signs of use cannot be avoided during the development, a license should be sought*”. The guidance also states that “*excavation work and heavy machinery should be kept well away from where it could result in damage to the sett or disturbance to any badger occupying the sett*” and “*disturbance, such as loud noise or vibrations, that might agitate badgers occupying a sett should be avoided or limited to areas well away from the sett*”.

Should active badger setts be discovered, depending on the development proposals and the location/type of works in proximity to the sett, mitigation measures may be required. This could range from simple avoidance of areas occupied by badgers to complete closure of a sett. Any sett closure would need to be carried out under license during late summer, autumn or early winter, by a suitably experienced ecologist.

- | | |
|----------------------------|--|
| Jacobs, 2008 | Extended Phase I Habitat Survey and Desk Study. Jacobs, Reading. |
| Natural England, 2007 | Badgers and Development: A guide to best practise and licensing (interim guidance document, version 09/07). Natural England Wildlife Licensing Unit, Bristol, England. |
| Statutory Instrument, 1992 | Protection of Badgers Act 1992. |
| WS Atkins, 1998 | Outline Ecological Assessment Report: Former Friern Barnet Sewage Treatment Works. |