



LAND AT CROESNEWYDD ROAD, WREXHAM

REASONABLE AVOIDANCE MEASURES AND BIOSECURITY RISK ASSESSMENT

PREPARED BY:

ECOLOGIST

PETER KNEEN

DATE

24/03/2017

APPROVED BY

ECOLOGIST

TIM YARDLEY

DATE

24/03/2017

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1.0 Introduction

1.1 Background

Enfys Ecology Ltd have been commissioned by Williams Homes (Bala) Ltd, to produce Reasonable Avoidance Measures (RAMs) for otters to be followed during the development at Croesnewydd Road, Wrexham. The production of the RAMs was required by the Head of Environment and Planning committee report of the 4th July 2016. The RAMs will minimise the risk of harming or disturbing otters if present during proposed development works, which will include the erection of residential 16 apartments. The site layout can be seen in figure 1.1.

The Head of Environment and Planning committee report, 4th July 2016, states that there are no objections to the proposed development on ecological grounds. However, it also states that there should be a requirement for a method statement outlining reasonable avoidance measures to avoid harming or disturbing otters if present.



FIGURE 1.1. SITE LAYOUT

1.2 Previous Survey Work

An ecological survey was undertaken on the 11th November 2015 by Clwydian Ecology of land located at Croesnewydd Road, Wrexham, North Wales. The brief was to carry out a walkover survey and assess the ecological value of the site. During this site visit an otter was observed using the long vegetation to the north east of the site. The survey conducted by Clwydian Ecology concluded that the water course to the north east of the site has been used by otters in the past as a route to travel up and downstream.



FIGURE 1.2. AERIAL VIEW OF THE PROPOSED DEVELOPMENT SITE

Image © Google, 2017

1.3 Site Description

The site is located to the east of Croesnewydd Road (Figure 1.2) and comprises a field immediately bordered by grassland. There is an attenuation pond (Figure 1.3), directly to the north of the site, which is surrounded by high fencing. There are two streams, one to the north east and the other to the south east of the site. During the site visit; heras fencing had been erected around the site to stop public access (Figure 1.4). The fencing was predominantly situated at least 30m from the watercourses. This was with the exception of the southernmost point of the site, which was around 10 metres from the smaller of the two streams (Figure 1.5).



FIGURE 1.3. ATTENUATION POND

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FIGURE 1.4. PROXIMITY OF THE SITE BOUNDARY WITH WATERCOURSE AT CLOSEST POINT

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FIGURE 1.5. CONFLUENCE OF THE TWO STREAMS TO THE EAST OF THE SITE

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2.0 Legislation

Otters (*Lutra lutra*) are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), and receives full protection under Section 9. This species is also listed as a European Protected Species on Schedule 2 of the Conservation (Natural Habitats, etc.) Regulations 1994 which gives it full protection under Regulation 39. Protection was extended by the Countryside and Rights of Way Act 2000 (the CROW Act). Under the above legislation it is an offence to:

- Kill, injure or take an individual of such a species;
- Intentionally or recklessly damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- Intentionally or recklessly disturb such a species whilst using any place of shelter or protection.

3.0 Field Observations in 2017

Peter Kneen (Enfys Ecology) conducted a site walkover on Friday 17th March to assess the potential for impacts of the development on otters. Peter has undertaken otter and water vole surveys on a number of sites within the UK and is capable of identifying evidence of otters. During the site visit, the long vegetation surrounding the site boundary was thoroughly searched for signs of otter resting up. The water courses to the north east and to the east were also inspected thoroughly from the bank and, where safe to do so, the stream bed. Otter field signs such as spraints, tracks, feeding remains, holts, couches, paths and

slides within the river itself, the river banks and the immediate surrounding areas were to be recorded.

No otters were observed using the area surrounding the site, where the otter was identified in the past. There was no evidence present of any otters or other large mammals using the site or the watercourses.

The evidence collected during the site visit does not confirm that otters no longer use the site as a passage way to travel up and down stream, however it is evident from the observations that otters have not used the site for resting up or feeding recently.

4.0 Reasonable Avoidance Measures (RAMS)

The length of river surveyed provided limited suitability for otters with limited suitable habitat available for a holt. As the territory for otters is so large, it is likely that otters move through the area, which is confirmed by the findings of the previous survey (2015), however unless a natal holt is present, where the otters would bring up young for the first three months, it is unlikely that they spend large periods of time here, when they are present, it is likely to be in low numbers.

As the river corridor and retention pond are not due to be affected by the development, the connectivity and habitat will remain both during in and after the works take place and the impact on otters, if any will be low. If any couches are present, which were not identified these will remain undisturbed.

With this in mind reasonable avoidance measures should be used to ensure that no otters are adversely affected during the construction works.

4.1 *Mitigation and Recommendations*

The majority of the proposed development will be located at least 30m away from the watercourses, and so there will be limited disturbance and no loss or changes made to the river corridor, river banks or the immediate surroundings. As this is the case no mitigation, beyond reasonable avoidance measures, are required.

As it is thought that otters only pass through the area for foraging, a licence from NRW will not be required, however a precautionary approach should be taken by following the Reasonable Avoidance Measures detailed below.

4.2 *Method Statement for Otter*

As the development will not involve works near the water course, it is considered highly unlikely to result in the disturbance and/or loss of otter habitat. However, a precautionary

approach must be adopted to minimise potential impacts to the species if present.

Prior to works commencing

- A toolbox talk will be given to all site workers by a suitably experienced ecologist. This talk will highlight the potential presence of otters in the area, the mitigation methods described below, and highlight the signs that may indicate the presence of this species on site.

Buffer Zone

- A buffer zone between the proposed development area and river channel should be retained to at least 10m in width in order to screen construction works and reduce any impact on otter if present.
- Prior to works commencing Otter fencing should be erected along the edge of the site adjacent to the existing heras fencing to prevent otters entering the area of work. The buffer zone, between the site fencing and the watercourse shall be off limits to site workers at all times, except for the purpose of undertaking specific, pre agreed works. The Otter fencing should be a welded steel mesh sunk 200-400mm in to the ground (depending on ground conditions). It should have a 45 degree bend in the top to prevent otters jumping over and it should protrude approximately 1m above the ground.

Addendum: Heras fencing is already present onsite (as of a site visit on the 21st March 2017). Otter fencing should be added as soon as possible. Otter fencing is available from a number of sources. Ecological Land Management is a local company who can provide the fencing and installation service on site. <http://www.elm.uk.net/>

- Any works that may affect the buffer zone /river corridor should be carried out under ecological supervision, due to the potential presence of otters. Any work required in this area must therefore be discussed with the project ecologist well in advance.

Site Access and Compound

- Any development near to water has an associated risk of pollutants that could negatively impact water quality and aquatic habitat and species. It is critical that all works should prevent any pollution to the water course. This includes any leaching of material into the water from chemical pollutants traditionally thought of as pollution to sediment laden runoff water
- Suitable and appropriate measures or precautions should be taken to avoid any issues relating to fuel spillage. This could involve the use of spill kits (absorbent materials) on site.

- Storage of plant or machinery should be restricted as much as practical to hardstanding areas of the site, once created, prior to this plant or machinery should be stored off site as far as is practicable.
- Any chemical and/or fuels on site must be stored within a locked, sealed and bunded container, ideally at the furthest extremity away from the river corridor.
- Refuelling of machinery/vehicles should occur in one location at the furthest extremity away from the river corridor, and a drip tray should always be used.
- All excavations should be covered at night or a suitable method of escape should be provided, for example a secured scaffold board to enable trapped otters to climb out of the footings/holes.

Lighting

- Light spill should be avoided around the river corridor and buffer zone at all times during the construction works. Any security lighting should be on a timer to prevent over lighting, and be faced downwards to prevent light spill onto nearby habitats.

At All Times

- If at any point in the works an otter or evidence thereof is found all works in the vicinity of the site and watercourse must immediately cease, and an ecologist be called. The ecologist will review the situation and advise on further action.

5.0 Biosecurity Risk Assessment for Land at Croesnewydd Road, Wrexham

Introduction

During the consultation phase of the planning permission for the building of the proposed development requires that a bio-security risk assessment be undertaken to minimise the risk of importing to the site invasive or non-native species.

This document tabulates those species that have been identified as having the potential to be imported during the construction phase of the project. The likely pathways and Operational mitigation have also been identified.

This document will be appended to the contractors Construction Method Statement for use on site.

Currently there are no known invasive species on site.

Species	Potential contamination route	Likelihood of risk	Operational Procedure
Himalayan balsam	Spread of species via construction machinery/ movement of soil. Introduction of seeds via contaminated soil.	Low. Himalayan Balsam is not known to be present on site. Low. There are no requirements to import soil.	Ensure contractors know what Himalayan Balsam looks like. If any plants are identified these should be pulled up and left to dry before the seeds set (July/ August).
Japanese knotweed	Spread of species via construction machinery/ movement of soil. Introduction of seeds via contaminated soil.	Low. Japanese knotweed is not known to be present on site. Low. There are no requirements to import soil.	Ensure contractors know what Japanese knotweed looks like. If it is identified on site, refer to the Environment Agency's Japanese knotweed Code of Practice.

Land at Croesnewydd Road, Wrexham – Reasonable Avoidance Measures (RAMS) for Otter, and Biosecurity Risk Assessment

Species	Potential contamination route	Likelihood of risk	Operational Procedure
Giant Hogweed	Seed being carried from site to site	Medium.	Ensure all boots, tools, tyres, plant and machinery are thoroughly cleaned before coming on site.
INN plants	Planting	Medium	All new planting stock be to grown in an environment free from INN plants.
<i>Chytrid</i>	Transport of spores on boots or field equipment from one water body to another. Working near the attenuation pond with infected plant	Low. No contact by personnel with other amphibian sites. High if machinery has been in contact with water on an infected site, otherwise low	Ensure all workers clean their footwear and equipment between sites. During works near the pond ensure all machinery has been disinfected.
<i>Crassula helmsii</i> – Stonecrop, Australian swamp	Spread of species on footwear or machinery.	Medium. <i>Crassula</i> is known to be present in north Wales but not found on site.	Ensure all workers clean their footwear between sites. Ensure contractors know what it looks like and all machinery is cleaned prior to arriving on site. If it is found on site it must be treated using glyphosphate.
<i>Other non native aquatic plant species</i> <i>Water fern, Parrot's feather, Floating Pennywort, Waterweed, least duckweed</i>	Spread of species on footwear of machinery	Medium	Ensure all workers clean their footwear between sites. Ensure contractors know what it looks like and all machinery is cleaned prior to arriving on site
<i>Phytophthora ramorum</i> – Sudden oak death	Via spores which can be dispersed by wind, rain and watercourses. Pathogen may be transmitted in debris e.g. leaves, needles, bark and soil on machinery. Introduction via new tree planting	Low. if no contact has been made with infected area Low	All equipment (machinery and footwear) thoroughly cleaned before entering site. All boots should be cleaned using the Propellor disinfectant. All stock to come from supplier free of infection.

Land at Croesnewydd Road, Wrexham – Reasonable Avoidance Measures (RAMS) for Otter, and Biosecurity Risk Assessment

Species	Potential contamination route	Likelihood of risk	Operational Procedure
<i>Chalara</i> Ash die back	Via spores but the main threat is introduction via imported nursery stock	Medium	No new ash to be planted as part of the planting scheme.
White nose syndrome	Fungus isolated from a bat in the UK in 2013 and 2014 but no cases in the UK. Contamination is through international bat workers	Low	No requirement as no bats present on site.

Disinfect boots and machinery that would be in contact with amphibians or pond water. Note that when making up bleach or Virkon solutions, pond water can be used so long as it contains little or no organic matter (as this reduces disinfectant effectiveness). Follow this procedure: • Use a brush to scrub off any debris, plant fragments, mud etc. • Rinse with water. Disinfect using one of the following methods:

Soak in a bleach solution (1 measure of household bleach to 9 measures water) for 15 minutes; OR • Virkon (10 mg/ml, as per suppliers instructions) for 1 minute; OR • Fabrics including those worn while doing amphibian fieldwork can be washed on a 40oC cycle (with detergent, ensuring sufficient rinsing). • Nets should be boiled for 10 minutes or if the fabric allows disinfected with spray bleach in a well-ventilated area. • Rinse with clean water and if possible allow to dry for before next use. • Keep field gear (traps, net frames etc.) inside plastic bags during transit and storage to reduce the chance of transmitting Chytridiomycosis. • Ideally all used disinfectant solutions should be poured directly into a sink/drain and flushed with clean water. In the field, pour onto an area of hard-standing, or similar un-vegetated area well away from the pond. Used gloves can be disposed of as domestic rubbish