

# Westway, Renfrewshire: Updated Ecological Survey and Assessment

August 2016

A Report to WB Westway LP

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The Manse, 24 High Street,  
Auchterarder, Perthshire,  
PH3 1DF  
T 01764 660067  
post@heritage-environmental.co.uk  
www.heritage-environmental.co.uk

VAT Registration No. : 683 0029 48  
Registered in Scotland.  
Company No. : SC 174098



## 1 INTRODUCTION

- 1.1.1 This report presents the results of an independent study by Heritage Environmental Ltd. (HEL) to provide an Ecological Constraints Survey for the proposed development at Westway, Renfrewshire on behalf of WB Westway LP. The scope of the assessment included the following species/groups:
- Water Vole (*Arvicola amphibius*)
  - Otter (*Lutra lutra*);
  - Badger (*Meles meles*); and
  - Non-native (Invasive) Plants.
- 1.1.2 A previous Ecological Impact Assessment (EclA) was undertaken in relation to the proposed development in 2007 by HEL:
- Proposed Development at Westway, Renfrew. A Report to Halcrow Yolles Ltd from HEL.
- 1.1.3 The otter baseline results were updated in 2011:
- Proposed Development at Westway Renfrewshire: Update Otter Survey and Assessment March 2011. A Report to ADF Architects from HEL.
- 1.1.4 This report provides information to update the above surveys.
- 1.1.5 Impacts on ecological features are considered in relation to the consented Planning Permission in Principle Masterplan for Westway, shown in Drawing No. G941 P-02 revision F produced by ADF Architects.
- 1.1.6 The walkover survey was completed on 18 July 2016 by Gareth Parry ACIEEM and Colin Dunlop MCIEEM.

## 1.2 Proposal

- 1.2.1 By way of background to the proposal, WB Westway LP acquired Westway in 2004. Since that time the owners have worked with Renfrewshire Council to agree a business and distribution led mixed use masterplan to set out the framework for future investment in, and improvement of, Westway.
- 1.2.2 The uses that could be permitted by the Simplified Planning Zone (SPZ) are fundamentally the same as those within the approved masterplan that benefits from Planning Permission in Principle (PPP). Whilst the scope of the SPZ will be determined during the SPZ preparation phase, it is anticipated that the SPZ Scheme would permit the erection / extension of industrial and distribution floorspace, new office space and the refurbishment of existing buildings within the business park in line with the approved masterplan.
- 1.2.3 In addition there will also be an opportunity to deliver additional ‘complementary uses’ including cafes/restaurants, leisure uses and day nurseries. Any floorspace permitted by the SPZ is not in addition to the existing PPP consent.
- 1.2.4 The scale of the industrial and business uses and the range of complementary uses will be identified during the preparation of the SPZ Scheme through consultation with the local community, owner/occupiers in the SPZ area and key agencies.
- 1.2.5 Whilst the PPP masterplan included residential, hotel, multi-storey car park and bridge land uses, these are excluded from the SPZ Scheme itself. They will be promoted at Westway, although through a separate planning process.

## 1.3 Legislative Context

1.3.1 This EclA has been undertaken with specific regard to recommendation and legislative requirements given in the following, where relevant:

- The Conservation (Natural Habitats &c.) Regulations 1994 (as amended in Scotland);
- Nature Conservation (Scotland) Act 2004 (NCSA);
- Wildlife and Countryside Act 1981 (WCA); and
- The Protection of Badgers Act 1992.

1.3.2 Appendix A.1 provides further details of the above legislation.

## 2 SURVEY METHODS

### 2.1 Scope of Study

2.1.1 The scope of the study was defined by HEL in consultation with WB Westway LP as provision of a protected mammal survey. The following receptors and study areas were considered:

- Water vole *Arvicola amphibius*: proposed development (including currently unused lade) and to a minimum of 50 m beyond the application boundary;
- Badger *Meles meles*: proposed development site and to a minimum of 100 m beyond the application boundary;
- Otter *Lutra lutra*: proposed development site (including currently unused lade) and to a minimum of 200 m beyond the application boundary; and
- Non-native (Invasive) plants: proposed application boundary.

2.1.2 The above study areas have been defined in recognition of current guidelines and are considered to be appropriate in assessing any potential effects on ecology arising from the proposed development.

### 2.2 Limiting Factors

2.2.1 Access was not available to the western side of the river (due to land holding constraints), although from the east bank it appeared suitable for use by otter. As the construction of a bridge across the White Cart Water forms part of the proposals and therefore will affect the west bank, further survey is required to provide a comprehensive appraisal of otter.

### 2.3 Field Methods

#### Protected Mammals

2.3.1 A walkover survey of the study site was undertaken by experienced mammal surveyors to identify potential ecological constraints associated with protected mammal species (refer Appendix A.x) that may occur within the geographical area. Surveys were undertaken within the relevant study areas noted below:

- Water vole *Arvicola amphibius*: proposed development to a minimum of 50 m beyond works;
- Badger *Meles meles*: proposed development site to a minimum of 100 m beyond works; and
- Otter *Lutra lutra*: proposed development site to a minimum of 200 m beyond works.

2.3.2 A systematic search for otter, water vole and badger was undertaken based on standardised survey methods in: Ward *et al.* (1994) for otter; Dean, Strachan *et al.* (2016) for water vole; and Harris *et al.* (1989) for badger. As well as sightings of protected mammal species, evidence of the presence/recent presence of species including prints, paths, droppings, places of shelter (including holes, setts, holts and dens) and feeding remains were surveyed for and mapped where encountered.

### **Non-native (Invasive) Plants**

2.3.3 A systematic search will be completed for non-native (invasive) plants within the study site, including Japanese knotweed *Fallopia japonica*, giant hogweed *Heracleum mantegazzianum* and Himalayan balsam *Impatiens glandulifera*. Any stands of the above species were target noted and their location recorded using GPS where encountered.

### **3 RESULTS**

#### **3.1 Desk Study**

- 3.1.1 NBN Gateway has no contemporary records of water vole or badger within 5 km of the site.
- 3.1.2 Desk study information indicates that Ordnance Survey (OS) 10 km Grid Square NS46 (in which the study area is located) was not surveyed as part of the 2003-4 national otter survey (Strachan 2007). However, they were recorded as present in the adjacent Grid Squares NS47, NS56 and NS45 in the 2003-4 national survey.
- 3.1.3 The NBN Gateway has recent records (within the last 10 years) for otter within OS 10 km Grid Square NS46. The closest record to the proposed development site is approximately 3 km to the west of the proposed development site.

#### **3.2 Protected Mammal Species**

- 3.2.1 Appendix A.2 provides target notes for the protected mammal survey. The following provides an account of the survey findings for all species surveyed:

##### **Water Vole**

- 3.2.2 Water vole were not confirmed during the survey. Habitat suitability is generally limited by excessive shading from riparian trees.
- 3.2.3 Given water vole are not present within the study area, no effects are predicted and they are scoped out of this assessment.

##### **Badger**

- 3.2.4 No evidence of Badger was recorded within the study area, and therefore this species does not represent a project constraint.
- 3.2.5 Numerous mammal holes were recorded. However, none had signs of use by badger; the majority were identified as being used by either red fox *Vulpes vulpes* or rabbit *Orytolagus cuniculus*. The remainder were defunct/unoccupied.
- 3.2.6 Given badger are not present within the study area, no effects are predicted and they are scoped out of this assessment.

##### **Otter**

- 3.2.7 Field signs of otter (holts, resting up sites and spraints) were recorded within the study area. During the 2011 survey 4 places of shelter for otter were identified (refer to Target Notes 7, 8, 9 and 22 Appendix A.2). During the current survey Target Note 9 was not identified and is likely to have been destroyed by the river.
- 3.2.8 Places of shelter (Target Notes 8 and 22 (refer Appendix A.2) had no field signs to suggest recent/current use (spraint or anal jelly). These sites, however, maybe used seasonally or on a temporary basis.
- 3.2.9 Place of shelter Target Note 7 (refer Appendix A.2) was identified during the previous survey (2011) as a potential holt site. Two holes were again present; however, the lower hole (approximately 1.5 m above mean high water level) had collapsed. The second hole approximately 4-5 m up the bank was still clear. Old evidence of use was identifiable during the 2016 survey (old spraint on rocks next to the river). The site is still considered to be a potential holt site.
- 3.2.10 An additional place of shelter was identified during the survey (refer to Target Note 35 Appendix A.2). The site was identified under a leaning aspen *Populus tremula* approximately 5 m from the river bank with a clear couch embedded into the ground. A

sprainting site was recorded in close proximity, near to the river bank (refer to Target Note 34 Appendix A.2).

- 3.2.11 It is considered that otter use the section of river within the study area for shelter, foraging and/or travelling. The 1.2 km stretch of river within the study area is likely to comprise a small portion of a home range for otter (Harris and Yalden [2008] noted range size of 39 km – 48 km for males Scotland and; 16 - 22 km for females).
- 3.2.12 Five otter places of shelter have been identified within/on the edge of the application boundary: 4 temporary places of shelter (Target Notes 7,8, 22 and 35(refer Appendix A.2) and one potential holt site. Proposed works have the potential to disturb these sites, depending upon their proximity, nature and/or duration. Further information on the exact location, timing and nature of proposed works is required prior to the completion of an assessment for disturbance to otter places of shelter and to determine any licensing requirements.

### **3.3 Non-native (Invasive) Plants**

- 3.3.1 Japanese knotweed, giant hogweed and Himalayan balsam were identified within the study area. A large stand of Japanese knot weed was identified at BNG: NS 49411 67243 extending to approximately 24 m x 24 m. In addition, smaller stands of Himalayan balsam (refer to Target Notes 30 and 31 Appendix A.2) and giant hogweed (refer to Target Notes 23 and 32 Appendix A.2) were noted.
- 3.3.2 An eradication programme should be undertaken to prevent the spread of these plant species throughout the site and into the surrounding area. The work should be carried out according to recognised and agreed methodologies such as:
- mechanical excavation and removal (either onsite chemical treatment or burial);
  - licenced landfill burial; and / or
  - in situ chemical treatment (through folia spraying and / or stem injection).
- 3.3.3 All work should be carried out by suitably qualified personnel and all areas should be monitored once treated to ensure the eradication strategy has been effective.

## **4 REQUIREMENTS FOR FURTHER SURVEY**

### **4.1 Introduction**

- 4.1.1 Prior to assessment of impacts for otter, further survey of the west bank of the river is required. Similarly, further survey for otter would be necessary in order to develop appropriate mitigation programmes, if required..

### **4.2 Otter Survey**

- 4.2.1 Access to the west bank of White Cart Water could not be gained for the otter survey during the 2007 or 2011 surveys. It is considered that to provide an appropriate level of assessment the west bank of the river should be surveyed for otter prior to any bridge construction works. The survey area should include the location of the proposed bridge construction and an appropriate buffer distance up and downstream of the bridge location (to be defined in consultation with SNH). It is recommended that this survey is undertaken as soon as access arrangements can be made and prior to any works relating to the bridge commencing.

## 5 REFERENCES

**Harris, S and Yalden, D.W., eds. 2008.** Mammals of the British Isles: Handbook, 4th Edition. The Mammal Society, Southampton. Ch. 5.

**Kruuk, H. 2006.** Otters ecology, behaviour and conservation. Oxford University Press, Oxford.

**Otters and Development. 2008.** Scottish Wildlife Series.

**Dean, M., Strachan, R., Gow, D. and Andrews, R. 2016.** The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series). The Mammal Society, London.

## APPENDICES

### A.1 Policy and Guidance

#### ***The Conservation (Natural Habitats & c) Regulations 1994 (The Habitats Regulations)***

- A.1.1 Otter are European Protected Species (EPS) protected under Annex II and IV of EC Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive). The Habitats Directive is transposed in Scottish law by the Conservation (Natural Habitats &c.) Regulations 1994, as amended by The Conservation (Natural Habitats &c.) Amendment (Scottish) Regulations 2007. Otter are listed on Schedule 2 of the Conservation Regulations 1994. The Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2007 enhanced this protection. As EPS, it is an offence to deliberately or recklessly kill, injure or take (capture) otters, deliberately or recklessly disturb or harass otters, and damage, destroy or obstruct access to a breeding site or resting place of any otter.
- A.1.2 This legislation means that otters are fully protected in Scotland, and that any planned activity, which may affect them, requires prior consultation with the appropriate statutory nature conservation organisation (Scottish Natural Heritage [SNH]). Licences may be granted for certain purposes that would otherwise be illegal; such licences for development work must be applied for from the SNH. Under Regulation 44 (2e) of the Conservation (Natural Habitats, &c.) Regulations 1994, licences may be granted for preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment. A licence will not be granted unless, under Regulation 44 (3), the appropriate licensing authority is satisfied there is no satisfactory alternative and that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

#### ***Wildlife and Countryside Act 1981 / The Nature Conservation (Scotland) Act 2004 / The Wildlife and Natural Environment (Scotland) Act 2011***

- A.1.3 The Wildlife and Natural Environment (Scotland) Act 2011 amends the Wildlife and Countryside Act 1981 (WCA) with regard to those plants listed on Schedule 9. The 2011 Act enables any of the Scottish Ministers, SNH, the SEPA or the Forestry Commissions (each of which is a 'relevant body') to make a species control order for premises when the relevant body is satisfied of the presence on the premises of an invasive plant at a place outwith its natural range. In addition, it provides for the contents of species control orders. It enables a relevant body to specify what must be done, by whom and by when, in order to control or eradicate an invasive species.
- A.1.4 Enhanced statutory protection is afforded to those species protected under Schedule 5 of the Wildlife and Countryside Act (WCA). Species listed under Schedule 5 include water vole. This makes it an offence to kill, injure or take any such species or to intentionally damage, destroy or obstruct access to any place used for shelter or breeding. Disturbance to Schedule 5 species in their place of shelter also constitutes an

offence of the Act. The Act furthermore prohibits certain methods of killing, injuring, or taking of wild animals.

A.1.5 Part 3 and Schedule 6 (Part 5) of the Nature Conservation (Scotland) Act 2004 (NCSA) amends the Wildlife and Countryside Act 1981. Species protection now includes reckless acts. In addition, as well as those carrying out unlawful acts, anyone permitting unlawful acts is guilty of an offence.

A.1.6 Water vole varies from other Schedule 5 listed mammals in that in Scotland it is afforded enhanced statutory protection under Schedule 5 – in respect of section 9 (4) only. This makes it an offence to disturb or damage any water vole resting place or habitat, but the animals themselves are not protected. This legislation means that water vole habitat is comprehensively protected in Britain, and that any planned activity which might affect this species requires prior consultation with the appropriate statutory conservation organisation (SNH).

### ***The Protection of Badgers Act 1992***

A.1.7 The legislation makes it an offence to:

- Willfully kill, injure, take, possess or cruelly ill treat a badger or to attempt to do so;
- To interfere with a sett by damaging or destroying it;
- To obstruct access to, or any entrance of a badger sett; and
- To disturb a badger when it is occupying a sett.

A.1.8 The Nature Conservation (Scotland) Act 2004 updates the Protection of Badgers Act 1992, raising the allowance for imprisonment from a term not exceeding six months to a term not exceeding 3 years for a serious offence. Where an offence is committed under this act by a corporate body, the individual (as well as the corporate body, Scottish partnership or unincorporated association) is guilty of the offence and is liable to be proceeded against and punished accordingly.

A.1.9 The Protection of Badgers Act 1992 allows licensing, for the purposes of development, of activities that would otherwise be prohibited. This allows developments, as defined in the Town and Countryside Planning (Scotland) Act 1997, to interfere with a Badger sett within an area specified in the licence by any means so specified. Licences must be applied for from SNH.

## A.2 Survey Results

A.2.1 Survey target notes are presented in the table below. In order to relate these to previous survey, these are as presented in the 2011 report and updated where necessary.

Target Note	Grid Co-ordinates NS	Description
1	49335 67140	Three large mammal holes at top of bank adjacent to boundary fence. The holes are possibly connected to a section of the bank 3 m to the west, which has now collapsed. No evidence of protected species. <b>Survey 2016:</b> Still present: same target note.
2	49285 67003	Two former rabbit holes (no signs of recent occupation) at top of the bank adjacent to fence. A spoil heap is present 3 m to the east, but no hole is associated with the spoil. No evidence of protected species. <b>Survey 2016:</b> Still present: same target note.
3	49277 67003	Large mammal hole with recently created spoil heap. A large entrance is present, but due to loosely consolidated materials it narrows further down the hole. There is no evidence of protected species. <b>Survey 2016:</b> Entrance visible but the tunnel has completely collapsed.
4	49184 66919	A metal pipe measuring c. 300 mm diameter buried near foot of bank. It appears to be well used by fox, but there was no evidence of protected species. <b>Survey 2016:</b> Still present: same target note.
5	49081 66825	A root plate of a felled tree that has been used by fox for lying up. <b>Survey 2016:</b> Feature has been cleared for new dock
6	49014 66799	Large mammal hole on open embankment. No signs of protected species. <b>Survey 2016:</b> Feature has been cleared for new dock
7	48966 66832	Otter place of shelter, assessed to be a potential holt site. Well worn main entrance below a goat willow, c. 1.5 m above the mean high water level, with a fresh spraint in the entrance. The tunnel of the main entrance kinks upwards toward a smaller hole c. 4 - 5 m up the bank. The smaller hole has a downward facing tunnel, which may be connected to the main entrance. The second hole is by a stane dyke and is well worn. Fresh and old otter spraints and anal jelly are present on the top of the stane dyke, immediately beside the second hole. <b>Survey 2016:</b> The main entrance has collapsed and there are less features suggesting use. Old spraint was found outside on a rock.
8	48970 66827	An otter temporary place of shelter in root plate of an ash tree, just above the mean high water level. It is likely that this place of shelter will be under water after heavy rain. <b>Survey 2016:</b> Still present: same target note.
9	48728 66594	Otter temporary place of shelter halfway up the bank, c. 3 m above mean high water level. The place of shelter is formed from a triangular shaped piece of former industrial

Target Note	Grid Co-ordinates NS	Description
		metal that is c. 1 m wide at base and 0.5 m high. The cavity opens and extends back for 1 m. A spraint was identified on a rock within. <b>Survey 2016:</b> Target note not identified during this survey. Possibly been destroyed by the river.
10	49411 67243	Small stand of Japanese knotweed, c. 50 m <sup>2</sup> on bank out with development site <b>Survey 2016:</b> The stand has got bigger and is now approximately 30 m x 40 m.
11	49348 67149	Series of 6 holes at top of bank immediately adjacent to boundary fence. All holes appear to be active with signs of fox (guard hairs and faeces). The tunnels extend into the site. Strong paths lead along top of bank and into site through holes in fence. <b>Survey 2016:</b> 4 holes are still visible with clear paths between the four. No signs of protected species.
12	49305 67066	Mammal holes (c. 30 cm diameter) at top of bank, but only extending c. 50 cm. No evidence of protected species. <b>Survey 2016:</b> The feature has completely collapsed.
13	49292 67024	Large cavity (c. 2 m x 1 m x 1 m) formed through the collapse of a man-hole. No evidence of protected species. <b>Survey 2016:</b> Site still visible with feeding remains and fox scent.
14	49268 66994	Spoil heap with 2 collapsed holes at top of bank adjacent to boundary fence. No evidence of protected species. <b>Survey 2016:</b> Target note not identified during this survey.
15	49261 66984	Tunnel (c. 30 cm across) at top of slope adjacent to boundary fence. The tunnel extends out of view, but with a very strong smell of fox. <b>Survey 2016:</b> Still present: same target note.
16	49219 66949	Tunnel halfway down the bank beneath an old rootplate, which has collapsed c. 0.75 m into bank and therefore not currently used by mammals. Tunnel is c. 30 – 45 cm across with a spoil heap. A strong smell of fox is present and a number of fox guard hairs were collected from the tunnel. <b>Survey 2016:</b> Still present: same target note.
17	49185 66921	Tunnel (halfway down bank) below sheet of corrugated asbestos, with large spoil heap. No evidence of protected species. <b>Survey 2016:</b> Still present: same target note.
18	49168 66907	Tunnel (halfway down bank) with large spoil heap. A further hole is present c. 3m away but no evidence of protected species. <b>Survey 2016:</b> Still present: same target note.
19	49071 66816	Fox den beneath large slab of concrete on boundary fence line. <b>Survey 2016:</b> Feature has been cleared for new dock
20	48932 66829	Series of 4 holes on bank adjacent to site boundary fence with strong signs of recent use by fox. <b>Survey 2016:</b> Still present: same target note.
21	48947	Two mammal holes on top of bank, both naturally

Target Note	Grid Co-ordinates NS	Description
	66816	collapsed with no signs of current use. <b>Survey 2016:</b> Still present: same target note.
22	48940 66822	Large crack willow immediately above tide line. Tree has partially collapsed forming several cavities within main part of tree. Only sign of otter use is a small amount of anal jelly on split limb. Considered to be an otter temporary place of shelter. <b>Survey 2016:</b> Still present: same target note. although there were no signs suggesting current use (spraint or anal jelly).
23	48799 66688	Giant hogweed by river. <b>Survey 2016:</b> No new growth, although old stems were visible.
24	48794 66680	Disused mammal holes (probably fox), with a partially in-filled tunnel and vegetated spoil heap. <b>Survey 2016:</b> Still present: same target note.
25	48780 66663	Bank composed of land-fill building material with many cavities present. Evidence of use by fox, no evidence of protected species. <b>Survey 2016:</b> Still present: same target note.
26	48709 66603	Bank composed of land-fill building material with many cavities present. Evidence of use by fox, no evidence of protected species. <b>Survey 2016:</b> Still present: same target note.
27	48723 66560	Four mammal holes between rubble/spoil immediately within site boundary. Appear to be used by fox, no evidence of protected species. <b>Survey 2016:</b> Still present: same target note.
28	48732 66565	Small stand (5 m <sup>2</sup> ) of Japanese knotweed. <b>Survey 2016:</b> Still visible same target note.
29	49403 67213	<b>Survey 2016:</b> Large mammal hole in the bank. No protected species evidence.
30	49357 67177	<b>Survey 2016:</b> Stand of Himalayan balsam 5 m x 2 m.
31	49337 67142	<b>Survey 2016:</b> Stand of Himalayan balsam 2 m x 10 m.
32	49311 67084	<b>Survey 2016:</b> Two giant hogweed plants.
33	49260 66975	<b>Survey 2016:</b> Three small mammal holes with the tunnel running out of sight. No protected species signs.
34	49246 66982	<b>Survey 2016:</b> Otter spraint on pipe outlet leading into the White Cart Water.
35	49241 66975	<b>Survey 2016:</b> Otter rest up underneath Aspen with a visible couch. Site very close to Target Note 34.
36	49211 66940	<b>Survey 2016:</b> Mammal hole underneath willow. No protected mammal features.
37	49157 66900	<b>Survey 2016:</b> Fox den dug into the bank approximately 8 m from the river. Definite scent of fox.
38	48981 66833	<b>Survey 2016:</b> 4 mammal holes, 2 look active the other two have collapsed. No protected species features.
39	48858	<b>Survey 2016:</b> Collapsed mammal hole. No protected

Target Note	Grid Co-ordinates NS	Description
	66761	mammal features.
40	48795 66679	<b>Survey 2016:</b> Active mammal hole (possibly fox). No protected mammal features.
41	49114 66293	<b>Survey 2016:</b> Japanese knotweed along the fence line to the south of the site.
42	248901 66647	<b>Survey 2016:</b> 4 mammal holes along the fence line to the south. No protected mammal features identified.
43	249997 606381	<b>Survey 2016:</b> 2 mammal holes along the fence line to the south. No protected mammal features identified.
44	249141 666276	<b>Survey 2016:</b> 4 mammal holes along the fence line to the south. No protected mammal features identified.