ENVIRONMENTAL CONSULTANTS

# Derogation Licence Application: Otter (*Lutra Lutra*)

## Supporting information

## Post Office Field Amenity Area

***Ennis, Co. Clare***

# 1 Introduction

ID Environmental Consultants have been commissioned by Ennis 2040 to provide Ecological consultancy services for a proposed public realm plan consisting of a raised amenity area and bridge over a parcel of land known as the Post Office field in Ennis Co. Clare.

This project will be submitted for planning before the end of 2024. The following Ecological surveys and reports have been completed.

The current authors have completed an **Appropriate Assessment Screening Report, Appropriate Assessment (AA) (Natura Impact Statement (NIS))** and an **Ecological Impact Assessment Report** for the proposed development.

## 1.1 Explanation as to why the derogation licence sought

An active Otter holt is known to occur within the Post Office Field within 130m of the proposed works at their closest point. Piling works within 150m of a breeding otter holt require a derogation licence from NPWS (Smal, C., 2008)[1]. A derogation license is sought on a precautionary basis as possible impacts due to disturbances that exist during construction.

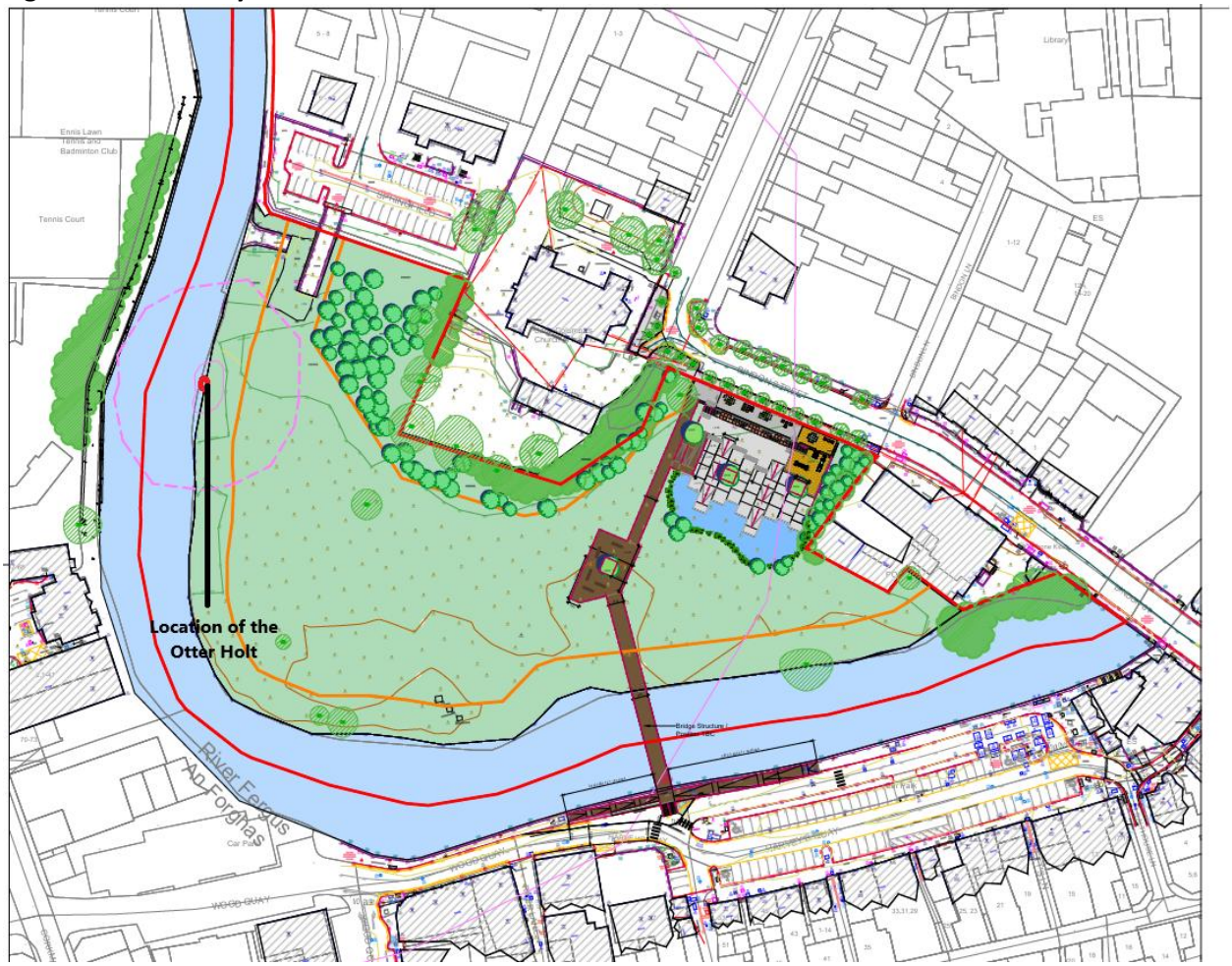
## 1.2 Site of Works

The subject site is located within the Post Office field In the town Centre of Ennis, Co. Clare. Post Office Field is a 1.7-hectare area of seasonally flooded grassland, trees, and scrub located in a meander of the Fergus River. The River Fergus is part of the Lower River Shannon SAC and has downstream connectivity to the River Shannon and River Fergus Estuaries SPA. The majority of the River Fergus banks downstream and upstream of the site are vertical concrete walls aimed at limiting the potential flood risk to the adjacent urban areas during flood conditions. However, The Post Office field along the north bank has a semi-natural profile with a low earth bank of <1m in height. The existing habitats present in the Post Office Field are composed primarily of wet grasslands similar to Collow grasslands. Collow grasslands are a type of floodplain grassland that occurs on the calcareous soils of river floodplains. Their tall, dense vegetation characterises them. Other habitats on-site include Scrub, reed fringe and a mature Treeline dominated by Sycamore (*Acer pseudoplatanus*) and Lime Tree (*Tilia Cordata*).

The works, as proposed, consist of a bridge connecting Harveys Quay to Bank Place via a raised boardwalk over an area of flood plain known as the Post Office Field. The scheme layout is shown in Figure 1 below.

[1] **National Roads Authority (NRA).** (2008). *Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes*. Dublin: National Roads Authority. Author Dr. Chris Smal

**Figure 1: Scheme layout and the location of the otter holt identified**




# 2 Supporting Evidence

### 2.1.1 Baseline Evidence

Otters were recorded first during wintering bird surveys in January 2024 when a family group consisting of an adult and two cubs were noted within the Fergus along the western edge of the Post Office field. Follow-up surveys in March and May 2024 identified an active Otter holt along the site's western boundary. The holt consists of two entrances approximately 1 meter from the water's edge within dogwood scrub. Camera trapping began on the 14th of July, 2024, and has continued to the present day. The usage of this holt has been minimal and sporadic over the survey period. From the period 14th July 2024 to 1st September 2024, otters were only recorded on 5 days. From September 1st to the present, no additional sightings have been recorded; however, fresh scat near the holt suggests that they have been active in the area over this period. The evidence suggests that this holt is not a main refugia and may only be used irregularly or on a seasonal basis.

### 2.1.2 Potential Impacts

Potential construction phase impacts include:

- Deterioration of water quality within the River Fergus arising from surface water run-off and pollution during site preparation and construction.
- Disturbance to Otters during construction works, in particular piling works

### 2.1.3 Operational Phase Impacts

Increased human presence in an area with currently low anthropogenic disturbance within the urban area of Ennis. Based on the scientific literature review below and the presence of Otters already on the site in the urban centre of Ennis, it is not expected that the Proposed Development will result in disturbance during the operational phase:

Under the proposed scheme, pedestrian access to the PO Field site will not be permitted. As such, no disturbance impacts are expected for Otters above the baseline condition at the site. The Otter Holt is located adjacent to a busy pedestrian footpath within the urban area of Ennis. The evidence suggests that these otters are accustomed to a degree of anthropogenic disturbance. This would concur with the literature on otters and anthropogenic disturbance: The NPWS Threat Response Plan for Otter.[2] acknowledges that "Little evidence has come to light in recent studies to suggest that disturbance by recreation is a significant pressure." It also identifies that otters are known to travel significant distances from streams and lakes in search of new territory and feeding areas. Channin P (2003)[3] Provides a literary review with regard to anthropogenic disturbance and refers to several reports which have found that disturbance is not detrimental to Otters (Jefferies (1987), (Durbin 1993), (Green & Green 1997). The report also describes successful breeding in towns, under ferry terminals and under the jetties of one of Europe's largest oil and gas terminals at Sullom Voe in North Scotland. Irish Wildlife Manual No 23 (National Otter Survey of Ireland 2004/2005)[4] found no significant relationship between disturbance and otter occurrence. In addition, no significant difference in otter presence was found between sites with and without recreational activity. It also states, "The lowest percentage occurrence was found at the sites with the lowest recorded disturbance" Irish Wildlife Manual No 76 (National Otter Survey of Ireland 2010/2012) notes that the occurrence of Otter was unaffected by perceived levels of disturbance at the survey sites. It also notes that little published evidence demonstrates any consistent relationship between Otter occurrence and human disturbance (Mason & Macdonald, 1986; Delibes et al., 1991; Bailey & Rochford, 2006).

[2] NPWS (2009) Threat Response Plan: Otter (2009-2011). National Parks & Wildlife Service, Department of the Environment, Heritage & Local Government, Dublin.
[3] Chanin (2003) Ecology of the European Otter Lutra lutra Conserving Natura 2000 Rivers Ecology Series No. 10
[4] Bailey, M. and Rochford J. (2006) Otter Survey of Ireland 2004/2005. Irish Wildlife Manuals, No. 23. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland.

### 2.1.4 Summary of potential impacts to the overall conservation of this species

Without the advent of mitigation, there is the potential for a temporary adverse impact on otters in terms of water quality impacts and potential reductions in prey abundance locally.

There is the potential for temporary adverse impact due to disturbance during works. It is understood that this holt is not in regular use by this family group, who may avoid the area when works are underway. No disturbance impacts are predicted if no otters are present in the holt during works.

# 3 Mitigation Measures

Mitigation is prescribed in accordance with the EPA draft guidance on EIAR (EPA, 2017), which requires mitigation by avoidance as a first approach. Where this is not feasible, measures to prevent impacts from giving rise to adverse effects should be adopted.

### 3.1.1 Construction phase - Construction Environmental Management Plan (CEMP)

A CEMP has been developed for the Proposed Development (Ennis 2040, 2024). This CEMP has been developed in conjunction with and cognisant of the findings and recommendations of the NIS (IDEC, 2024) and other ecological documents, including the project EcIA (IDEC, 2024). The CEMP outlines the approach that will be adopted for environmental management throughout the project works at the site, with the primary aim of reducing and avoiding any adverse effects from construction on the environment, both within the Fergus and associated local habitats.

### 3.1.2 CEMP Objectives

The objectives of the CEMP are, therefore, to:

- Act as a continuous link and reference document for environmental issues between the design, construction, testing and commissioning stages of the Project;
- Demonstrate how construction activities and supporting design shall properly integrate the requirements of environmental legislation, planning consent conditions, policy, good practice, and those of the environmental regulatory authorities and third parties;
- Record environmental risks and identify how they will be managed during the construction period;
- Record the objectives, commitments and mitigation measures to be implemented together with the programme of works and date of achievement;
- Identify key staff structures and responsibilities associated with the delivery of the Project and environmental control and communication and training requirements as necessary;
- Describe the Contractor's proposals for ensuring that the requirements of the environmental design are achieved, or are in the process of being achieved, during the Contract Period;

- Act as a vehicle for transferring key environmental information at handover to the body responsible for the operational management of the Proposed Development site. This shall include details of the asset, short and long-term management requirements, and any monitoring or other environmental commitments (where required) and
- Provide a review, monitoring and audit mechanism to determine the effectiveness of and compliance with environmental control measures and how any necessary corrective action shall take place (where required).

## 3.2 Protection of Water Quality

The potential impacts on the River Fergus, which may, in turn, lead to indirect effects on otter habitat and foraging potential, have been evaluated and addressed for the construction and operational phases of the Proposed Development.

At a minimum, all pollution control measures will be designed, installed, and maintained in accordance with CIRIA guidance for 'Environmental Good Practice on Site'(C741), 'Guidelines on Protection of Fisheries During Construction Works In and Adjacent to Waters' (IFI 2016), 'Control of water pollution from linear construction projects. Technical guidance' (C648), and under the supervision of an Environmental Clerk of Works (EnCoW) who shall be appointed by the Contractor.

The work area shall be clearly marked on site. No work will be permitted to take place outside of these areas. Access and storage of equipment and materials are also clearly delineated and provided off-site where possible.

Works will occur within a functioning floodplain of the River Fergus. Work will be scheduled for dry conditions to reduce the runoff risk. In the event of adverse weather events, work will be halted. Construction works will not be undertaken before, during or immediately after significant rainfall events.

The principal likely pollution sources are contaminated site runoff, including silty water arising from the exposed ground created by the movement of machinery and works associated with piling and the bridge abutment, in addition to accidental leaks/spills of oil/fuels from machinery or storage areas and runoff from areas where concrete pours are taking place. Mitigation measures to avoid/prevent contaminated runoff and pollution from the site are prescribed below.

### 3.2.1 Water Quality and Level Monitoring Plan

A Water Quality Monitoring Plan will be implemented from project inception and followed for the duration of the proposed works. The system aims to identify any possible water quality impacts, and remedial actions can be taken immediately, including halting works. The plan outlines a comprehensive monitoring program to assess the potential effects of construction activities on water quality, specifically turbidity and pH, in the River Fergus during construction. Given the nature of the proposed development, pH and Turbidity are the key water quality indicators during the construction phase. Turbidity is the measure of water clarity and can be affected by suspended solids introduced during construction. pH, a measure of acidity or alkalinity, can also be

influenced by construction activities, particularly cement use.

### Monitoring Parameters

1. **Turbidity:** Measured in nephelometric turbidity units (NTU).
2. **pH:** Measured on a scale of 0-14, with 7 being neutral.

### Monitoring Locations

1. **Upstream Reference Point:** A location upstream of the project site, unaffected by construction activities, to serve as a control point. An upstream monitoring point 25m upstream from the abutment is proposed.
2. **Downstream Impact Point:** A location downstream of the project site within 25m of the abutment is proposed.
3. **Construction Site Discharge Points:** A point directly adjacent to the works at the abutment should also be sampled.

### Monitoring Frequency

- **Pre-Construction:** Sampling before the beginning of each working day
- **Construction:** Once daily during works
- **Post-Construction:** One daily post-works at the end of the working day
- It is also advisable to increase the sampling regime during times on intensive works including concrete pours.

### Monitoring Methods and Control Limits

- **Turbidity:** Use a calibrated turbidity meter or a Hach 2100P portable turbidity meter.
    - If turbidity (NTU) units move 30% above the baseline measurement during works
- **pH:** Use a calibrated pH meter or a Hach Pocket Pro+ pH meter.
    - If pH levels in the Fergus change, measuring +/-0.5pH units above the baseline measurement during works

If significant changes are measured, works should be immediately halted, and concrete works should be stopped, the entry point identified, and appropriate measures implemented to prevent further escape to the environment. NPWS and IFI will be notified immediately of any concrete spills into the Fergus as excessive silts enter the Fergus during works.

### Data Collection and Analysis

- **Record Keeping:** Maintain detailed records of monitoring data, including date, time, location, and measured values.
- **Data Analysis:** Analyse collected data to identify trends, deviations from baseline values, and potential correlations with construction activities.
- **Reporting:** Prepare regular reports summarising monitoring results and any observed impacts.

## 3.2.2 General Site Environmental Management During Construction

- All site personnel will be briefed by the Ecological Clerk of Works prior to the commencement of the project
- Signage that clearly states that works are occurring adjacent to an ecologically sensitive area should be erected.
- While it is not expected that large amounts of excavated material will be produced, no stockpiling of any excavated material should occur on site. All excavated material should be placed immediately with a skip or lorry bed.
- No equipment or materials storage will occur at the PO Field site during works.
- Portaloos and/or containerised toilets and welfare units used to provide facilities for site personnel. All will be located off-site within the designated welfare area. A licenced waste disposal contractor will remove all associated waste from the site.
- The site will be kept clean and tidy during the construction phase of this development.

### 3.2.3 Silt Management

#### 3.2.3.1 Site Clearance and Site Preparation

- Initial site clearance, including the removal of the wall along the bank place, will occur under ecological supervision and only occur once EcOW has confirmed via a site survey that no constraints to clearance are found.
- Removal of vegetation on site to enable works will take place outside the bird nesting season. Ideally, this will occur either early in September or late in February to avail of the most suitable ground conditions. Cut vegetation will be removed from the site immediately after cutting;
- Clearance of the site should be carried with hand tools only to avoid disturbance and reduce both the noise and visual impact of clearance
- To avoid disturbance to the ground, tarram should first be placed on the ground in the areas designated for machinery movement. This should then be covered with either clean stone from a suitable local source or with removable bog mats. All machinery movements on the site should be restricted to these areas.
- Silt fencing will be installed around the designated works area and will meet the following specifications.
    - The silt fences will have the following design features: – the geotextile fabric must be entrenched at least 100mm into the ground with the ends upturned inward towards the works; – the fence posts will have a maximum spacing of 2m to prevent sag on the fence; and – the geotextile fabric will be anchored to the fence posts as opposed to wrapped.
    - Daily inspection of silt fences will be carried out by the site management to assess the effectiveness of the measures, to carry out maintenance, and to determine if there has been any damage/breach to the control measures. The silt fences will also be inspected immediately following heavy rainfall or strong winds (equating to a yellow weather warning). Where repair is necessary, this will be carried out immediately and may require the replacement of any damaged/degraded material.

- Accumulated silt will be removed regularly from the base of silt fences and will be removed off-site. Silt will not be permitted to build up such that it exceeds 10cm in height.
- Silt fences must remain in place until the disturbed areas within the sites have been reinstated and revegetated.

- A pea gravel bags filled with locally sourced stone will be used to build a bund around the proposed abutment closest to the River Fergus. This will then be lined with silt fencing on the inner side of the bund. This bund should be approximately 200mm in height, horseshoe-shaped surrounding the abutment, and remain in place for the duration of the construction of the abutment.

#### 3.2.3.2 During Construction

**Piling works**

- The sequencing of piling works should aim to minimise the time spent on site and work from the most sensible location, closest to the river, backwards towards the least sensible area, the terrace.
- Dewatering of the piling casing may be required to allow concrete pouring to occur.
  - Water shall be pumped from the excavation and should be discharged into a silt buster before out falling via a silt sock at the northern extent of the site at the maximum distance from the Fergus. Given the scale of the works, the outfall from the silt buster is expected to be negligible.
  - A silt sock should be permanently in place on the end of the outfall pipe. This should be inspected and emptied regularly if silt accumulation is affecting flow.
  - If works occur during conditions where the soil is at or close to saturation, the pipe outfall should be inspected hourly and moved if surface water accumulation is observed. If it is observed that water is pooling on the surface of the ground. Pumping and works associated with the trench should be halted until ground conditions are suitable to allow pumping and outflow onto grasslands to return.
  - Works will be inspected by the Site manager and project Ecologist before any heavy rainfall event or prolonged rainfall of two or more days.

### 3.2.4 Concrete Control Procedure

Concrete will be used for abutment foundations and foundations for the proposed amenity areas. The amenity area will also be made of concrete, but it will be brought to the site as pre-cast slabs. The following control measures will be implemented to prevent pollution from concrete during construction.

- Any concrete used for the works will be brought to the site by a concrete truck. On-site concrete batching and mixing activities will not be permitted on the Post Office field site.
- Any concrete pouring required as part of the construction of the abutment, foundations for the boardwalk or amenity areas will be monitored by the project EcOW as per the Water Quality

Monitoring Plan above

- Batch loads of concrete will be delivered on an as-needed basis to the designated hardstand area at the site's roadside boundary. Concrete will either be pumped to the site of each piling or brought in via a dumper truck.
- Concrete mix trucks, pumps, and equipment must be washed down off-site and not within the surrounding area.
- Any concrete works will be scheduled during dry weather conditions to reduce the risk of runoff.

### 3.2.5 Management of Potentially Polluting Materials

- No bulk chemicals to be stored within the PO Field. Temporary oil and fuel storage tanks may be kept in suitable containers in the material storage area and stored on appropriately bunded spill pallets as required.
- Any fuel and oil stored on-site shall be stored on bunded spill pallets approved under BS EN 1992-3:2006. The bunds will be impermeable and capable of retaining a volume equal to or greater than 1.1 times (>110%) the capacity of the containers stored on them. In the event of a spillage, excess oil or fuel will be collected in the bund.
- Where possible, vehicles will be refuelled, and hydraulic oils or lubricants will be added off-site.
- Spill protection equipment such as oil booms, oil soakage pads, socks, and sand will be available in clearly marked bins/silos and in construction vehicles to be used in the event of an accidental release during refuelling.
- Any spillage of fuels, lubricants or hydraulic oils will be immediately contained, and the contaminated soil removed from the site and disposed of by all relevant waste management legislation.
- Site workers will receive training on managing a spill event in the form of a toolbox talk, which will also highlight the sensitive nature of the River Fergus and the PO Field site.
- All construction equipment will be checked prior to commencing work on site to ensure that it is mechanically sound and to avoid oil, hydraulic fluids, and grease leaks.
- Drip trays will be utilised on-site for all pumps and other stationary equipment, including piling equipment. Spill kits will also be available at these locations for the duration of the contract. Any used spill kits will be disposed of using a hazardous waste disposal contractor and in accordance with all relevant EU and Irish waste management legislation;
- All hazardous substances on-site shall be controlled within an enclosed storage compound off site that locked when not in use to prevent theft and vandalism;
- Spillages will be recorded and advised to the project manager, who will inform local authorities if they deem it significant;

- All liquid deliveries will be supervised by a responsible person to ensure that (1) storage tank levels are checked before delivery to prevent overfilling and (2) the product is delivered to the correct tank.
- Taps, nozzles or valves fitted with a lock system and;
- Procedures and contingency plans will be set up to deal with emergency accidents or spills.

## 3.3 Disturbance – Otters

An active Otter holt is known to occur within the Post Office Field within 130m of the proposed works at their closest point. Piling works within 150m of a breeding otter holt require a derogation licence from NPWS (Smal, C., 2008). Details of the mitigation measures for Otters are aligned with NRA (2005) guidelines.

### 3.3.1 Otters - Pre-construction Surveys

Pre-construction surveys, including camera trapping, will be required up to and including the start of the project to determine if the holt is active and in use at the time works begin from the three months of surveys to date, otter activity has only been identified on an irregular basis, suggesting that the holt is one of at least two used by this family within a local territory.

### 3.3.2 Otter Mitigation During Construction

#### 3.3.2.1 Piling

- For piling operations at the footing within the Post Office field, the use of 'soft start' methods should be employed in order to minimise any potential noise impacts on Otters and other aquatic species. This common technique is generally utilised as a matter of good practice. It ensures that noise emissions start at relatively low levels and are gradually increased over a 20-minute period until full operational power is achieved. If there is a pause in the piling operations for a period of greater than 10 minutes, then the soft-start procedure should be repeated.

#### 3.3.2.2 General

- NPWS will be consulted on the results of the pre-construction surveys. Confirmation will be sought from NPWS prior to any work taking place on-site.
- Construction activity will be confined to daytime hours, thus minimising potential disturbance-related impacts on the species. Alignment and mitigation during construction will ensure no impacts to this holt occur during construction.
- All site personnel will be informed of the location of the holt and of the sensitive nature of the location.
- No works will occur within 130m of the Holt. Including the storage of equipment and site access. The final project layout has been designed to ensure this 130m buffer can be maintained.
- Otters are inquisitive creatures and may enter construction sites in their territory during work. Any open excavation pits or piling holes should be covered and secured at night to avoid possible entrapment.

- Ensure all rubbish and materials will be collected and removed from the site on a regular basis to prevent trapping or injury of any wildlife;
- In the unlikely event of discovering any evidence suggesting otter presence within the footprint of the works, work must stop immediately, and the ECoW should be contacted for advice on how to proceed;
- Otters are most active around dawn and dusk and during the night. Works should be restricted to daylight hours only.
- Toolbox talks on otters should be given to all construction staff on site, and an emergency procedure protocol should be given to contractors in the event of encountering an otter.
- In the unlikely event of an otter being injured, killed, or holt damaged, the ECoW will be contacted immediately. They will visit the site and make written and photographic records. This will record the time, location, personnel involved, and incident details. This information will be supplied to NPWS within 24 hours.

# 4 Conclusion

The evidence provided demonstrates that the proposed actions will not be detrimental to the maintenance of otter populations at a favourable conservation status, as required under Section 54(2) of the European Communities (Birds and Natural Habitats) Regulations with particular regard to the Lower River Shannon SAC to which Otter is a QI species.

The surveys indicate that the otter holt identified on-site is only minimally and sporadically used, suggesting it is not a primary breeding site but rather part of a broader territory. The observed usage pattern is consistent with otters' natural behaviour, which maintains multiple holts across their range.

The construction phase could lead to temporary localised impacts on water quality due to run-off and pollutants. However, comprehensive mitigation measures, including adherence to CIRIA and IFI guidelines, will ensure no significant deterioration of water quality. This reduces the likelihood of indirect effects on otter foraging habitats.

Works will not lead to the destruction of any holt and any habitat around the holting site. During construction, soft-start piling and strict adherence to buffer zones (no works within 130m of the holt) will minimise disturbance. As supported by literature, otters are known to habituate to anthropogenic disturbance, particularly in urban settings (e.g., Green & Green, 1997; Irish Wildlife Manual No. 76).

The combination of baseline evidence, mitigation measures, and the known accumulationto urban disturbance ensures that the proposed actions will not compromise otters' favourable conservation status. Therefore, the requirements under Section 54(2) of the European Communities (Birds and Natural Habitats) Regulations are fully satisfied.