

Otter Working Method Statement

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Assessor:	P Hague
Prepared by:	Kier
Address:	Kier Site Compound Toddbrook Reservoir, Reservoir Road, Whaley Bridge, High Peak, SK23 7BL

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Distribution

Organisation	Contact
Kier – Project Manager	Karen Woods
Kier – Snr Project Manager	Jim Rice
CRT - Framework Ecologist	Stephen Leigh
CRT - Principal Project Manager	Tom Greenwood

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1 Introduction

Background

- 1.1. The following report has been prepared by Kier on behalf of Canal & River Trust and provides details of an Otter *Lutra lutra* working method statement (OMS) associated with the proposed Reservoir Restoration Works at Toddbrook Reservoir (Derbyshire). The need for an OMS was included in the Outline CEMP submitted with the planning application.
- 1.2. The requirement to consider the potential impacts of proposed works on otters was identified by otter surveys, undertaken by JCA, ecological consultants and Kier respectively between September 2019 and March 2022. The surveys identified the presence of otters along the river corridor (the River Goyt and Todd brook) within the scheme boundaries, although these are only used for foraging and as a commuting route. The need for an OMS was included in the Outline CEMP submitted with the planning application

Site Location

- 1.3. The scheme is to construct a new spillway at Toddbrook Reservoir, after the 2019 incident which caused damage to the auxiliary spillway A map of the area scheme is provided in Appendix A.
- 1.4. The reservoir is sited within the Peak District in Derbyshire. It is predominantly semi-rural including: semi-improved grassland, deciduous and conifer woodlands, and broad-leaved semi-natural woodlands.
- 1.5. The surrounding area is a mixture of Parkland, children's play area and the River Goyt (The play area is to be closed during the construction phase), the dam wall and associated grassland, residential dwellings, the reservoir and brook and a wooded valley with high moorland habitat.

Details of the proposed works

- 1.6. The scheme comprises the construction of a replacement spillway and associated dam infrastructure, replacement sailing club facilities including new access, replacement play equipment and park landscaping.
- 1.7. Enabling works will include topsoil and sub soil removal, haul roads and (see Appendix C).
- 1.8. The main works will include:
 - A new spillway comprising a weir and tumble bay structure located at the northern end of the dam.
 - A stilling basin structure at the end of the spillway chute to remove energy from the water flow before it is discharged into a channel which will join the River Goyt at its existing location.
 - Landscaping to integrate the spillway channel into the surrounding area and park, and a replacement play area.

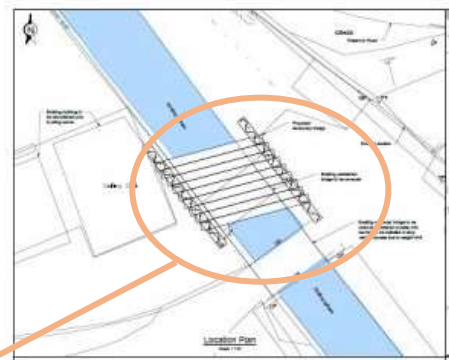
- Relocation of the sailing club facilities to allow for the construction of the new spillway, including buildings, slipway, and new access off Reservoir Road.
- Decommissioning of the existing primary and auxiliary spillway structures, with the auxiliary spillway to be grassed.
- Connection of the existing by-wash channel into the new spillway tumble bay structure.
- In-filling of the redundant downstream section of the by-wash channel, with an underground pipe laid to Brookfield Pond.
- Works to the dam: a) to increase the height of the existing core, b) stabilise parts of the dam, c) and provide drainage to areas on the downstream side of the dam.
- Diversion of the canal feeder pipework to facilitate construction of spillway

1.9. The site will be first prepared by stripping the topsoil from the areas noted for welfare, access, and haul roads, set down areas and will be stored separately within the compound. If practicable the bed material and a selection of vegetation is stored, for replacement after the works has been done.

1.10. A flume pipe bridge will be installed to the upper site (A) to allow access from Reservoir Road across the by wash into site. Box culvert bridge will be installed to the middle site (B) located within the by wash to access site and lower site (C) memorial park feeder & mine drainage excavation.

A – Upper site – N.T.S.

B – Middle site – N.T.S.



Plan – N.T.S.

C – Lower site – N.T.S.

- 1.11. For construction of the new structure, piling will be required and excavations. Area noted on plan with red line which will incorporate suitable access / egress when tasks and operations stop.



Plan – N.T.S.

- 1.12. Temporary and small-scale works (fence installation) as well as more intrusive works (tree removal) have already taken place, the later under the supervision of a competent ecologist using hand machinery for 3 days.
- 1.13. Where practicable, the scheme has been designed to avoid sensitive features.
- 1.14. The works can be accessed from either side of the site and all works will be visible to the public throughout the construction period.
- 1.15. The project will be managed with daily/weekly checks by competent site staff the Kier Environmental Advisor/Ecologist or Environmental representative.

Report objectives

- 1.16. This method Statement provides a current baseline for otter activity across the site, with measures to ensure that potential impacts to otters are addressed and safe working methods are adopted during construction works.

2 Local Status of Otter

Summary Otter habitat Requirements

- 2.1. Otters are adapted to a semi-aquatic lifestyle and exploits a wide range of habitats from small ditches, moorland streams, lakes and ponds to large rivers, estuaries, and coasts. Otters are strongly territorial and generally live alone for most of the time.
- 2.2. They can encompass as much as 35 km of riverine habitat called 'home range' in which they will feed, rest, and reproduce. They require 1.0kg to 1.5kg of food per day, preferring fish, eel, and amphibians. However, they are opportunistic predators and will occasionally take crayfish, water vole, bats, and waterfowl.
- 2.3. Although they are primarily nocturnal, otters can come out during daytime, they usually rest in a holt, which may be in a tree root system, a hole in a bank or under a pile of rocks but may be in a drain or cave. They will also rest above ground in vegetation, creating flattened areas sometimes called couches.
- 2.4. In England, breeding can occur throughout the year and one to four cubs are usually born. Breeding areas are often site's that otters return year after year. Man-made features such as pipes and buildings may also provide shelter for otters.
- 2.5. Presence of otters will depend the suitability of the habitat in providing both food and shelter.

Baseline

- 2.6. An ecological survey was commissioned by Canal & River Trust to undertake a series of protected species surveys including otter along the footprint of the scheme and in summary extract from the report.
'No signs of otter e.g., spraints, footprints or holts, were recorded during the survey. No suitable habitat for holt construction was identified along the bankside. In addition, the left bank of the river is frequently disturbed by members of the public and dog walkers. Sections of the right bank outside the Site but within the survey area were reinforced. The channel of Todd Brook is dominated by concrete and the banks are reinforced; consequently, no suitable habitat for holt construction was identified'.
- 2.7. Further walkover site visits were conducted by the Kier environmental team between September 2019 and March 2022. No obvious signs of otter were identified during these walkover visits.
- 2.8. As part of the ecological appraisal process for the scheme, a follow-up walkover survey was undertaken by Kier Environment team in March 2022, to identify any potential constraints to the proposed works relating to the presence of otters along any suitable linear water courses including the Todd Brook.
- 2.9. The site showed no evidence of otter.
- 2.10. On review of the works documentation and subsequent information from both Canal & River Trust and Kier, the risk to otters is deemed as very low/negligible providing the working methods within this document are followed.

3 Legislative and Conservation Context

- 3.1. Before any of the works take place, measures must be taken to ensure that the legislation concerning otters is not breached because of works. Otters are afforded full protection under the Conservation of Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).
- 3.2. Under Regulation 41 of the Conservation of Habitats and Species Regulations 2017 (as amended) it is illegal to:
- Deliberately capture, injure, or kill any wild animal of a European Protected Species (EPS),
 - Deliberately disturb wild animals of an EPS (affecting ability to survive, breed or rear young) – disturbance of animals includes any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young,
 - Deliberately disturb wild animals of an EPS (impairing ability to migrate or hibernate) – disturbance of animals includes any disturbance which is likely to impair their ability in the case of hibernating or migratory species to hibernate or migrate,
 - Deliberately disturb wild animals of an EPS (affecting local distribution and abundance) – disturbance of animals includes any disturbance which is likely to significantly affect the local distribution or abundance of the species to which they belong,
 - Deliberately disturb wild animals of an EPS (whilst occupying a structure or place used for shelter or protection) – intentionally or recklessly disturb any wild animal while it is occupying a structure or place which it uses for shelter or protection,
 - Damage or destroy a breeding site or resting place of a wild animal an EPS.
- 3.3. Under the Wildlife and Countryside Act 1981 (as amended) it is illegal to
- Recklessly or intentionally kill, injures, or take any wild animals included in Schedule 5.
 - Recklessly or intentionally damage or destroy, or obstruct access to any structure or place which any wild animal included in Schedule 5 uses for shelter or protection,
 - Recklessly or intentionally disturb any such animal while it is occupying a structure or place which it uses for shelter or protection.
- 3.4. If Otters are using terrestrial or aquatic habitats on site and impacts upon the species cannot be avoided, a European Protected Species Licence from Natural England will be required to allow the works to derogate from the Legislation. On this occasion, a licence is not deemed as necessary for Toddbrook.

4 RAMS Evaluation

- 4.1. The RAMs evaluation is based upon Natural England guidance and the ecologist's knowledge of the species and its requirements. In this instance it is considered that the proposals are not licensable as potential impacts can be effectively removed by the implementation of RAMs.
- 4.2. The advice provide by Natural England is as follows:

'Use avoidance, mitigation and compensation to deal with potential impacts you've identified that might affect otters.'

To avoid harming or disturbing protected species proposals could: reduce the size of the development or alter its layout to retain the site's important habitat features; plan for construction work to be carried out at specific times to avoid sensitive times... If it's not possible to completely avoid harm, disruption should be as minimal as possible.

- 4.3. The advice continues:

'Usually, you should be able to avoid harming the otters or damaging or blocking access to their habitats. Apply for a mitigation licence if you can't avoid this.'

5 Method Statement

Measures to prevent disturbance to foraging and commuting otter will be implemented through this Otter Working Method statement (OMS) covering the construction period.

- 5.1. The Otter risk appraisal has concluded that the works are unlikely to result in an offence under the wildlife legislation protecting Otters. The evidence suggests that otters do use the watercourse infrequently and therefore works can proceed in the area without a licence from Natural England; but a precautionary method of works should be adopted.
- 5.2. Residual risks associated with the proposed works with respect to otters are low/negligible and restricted to the disturbance of otters as part of the works (noise, lighting, use of heavy machinery) which could potentially utilise the site in very small numbers essentially as a foraging or commuting corridor. While this is considered as possible, a Precautionary Method of Works is outlined below to address any residual risk of accidental harm to individual otters.
- 5.3. The timing of works has been designed to limit any further impacts to otters in accordance with the guidance as otters should not be present within the waterbody during daytime.

Pre-Commencement

- 5.4. The proposed timings for the operations are to be made clear to the qualified ecologist or the ECoW is to be contacted giving 48hrs notice prior to the commencement of operations to ensure that all site operatives receive a “toolbox” talk and are supplied with a copy of the site’s specific method statement. The Kier ecologist/Environmental representative will also be able to make the appropriate arrangements for pre-works survey 24hrs of works commencing.
- 5.5. Prior to works commencing the site will be walked by an ecologist/ECoW and the contractor to determine any constraints to the works and agree suitable access to the site beside the adjacent Todd Brook. The ecologist may need to enter the brook, this will only be done so if the water is deemed as safe, i.e., not in flood.
- 5.6. Upon completion of the walkover the construction team will identify suitable equipment to be used to complete the job within the constraints identified by the ecologist. This will include timings, access, methods etc. Many of which will be further detailed below.
- 5.7. **Covid-19** All sites will operate under Kier SHEMS-GUI-GR-109 Site Operating Procedures - Protecting your workforce

Working Methods

- 5.8. Immediately prior to the start of works all construction/site staff to be involved with the works will be briefed on issues relating to otters prior to works through a toolbox talk by a qualified ecologist/ECoW (see appendix D). Information on otter is also included in the main site induction.
- 5.9. All initial works must be supervised by a qualified ecologist/ECoW and undertaken sensitively.

- 5.10. All machine use and access must be restricted to the least possible movements and solely to the locations identified as 'safe' by the qualified ecologist.
- 5.11. Works should be restricted to daylight hours only, if not best practices should be followed (BS 5228-1:2009).
- 5.12. No works within 10m of the river will be undertaken after dusk.
- 5.13. The use of high intensity lighting which would illuminate the brook will be avoided both during the works period and following on from the completion of the project, to ensure that suitable habitat for otter is maintained adjacent to the site. Lighting hoods, creation of dark corridors will be considered as mitigation measures. Minimise use of lighting to lowest practical levels to enable safe working
- Ensure lighting is directional and low spill (use of shields) and directed inwards to work areas rather than outward facing towards the River Goyt, connecting habitats or residents. The use of sensors and automatic control systems for lighting to minimise the periods when it is on.
- 5.14. All excavations of material of the brook must be undertaken in a manner that always reduces the risk of damage to adjacent structures and vegetation.
- 5.15. Otters are naturally inquisitive. Open excavations will be kept to a minimum across the whole site and covered overnight or fitted with a means of escape to prevent otters or other animals becoming trapped by means of ramped access / egress. This will be inspected every morning to ensure no animals, such as otter or badger have fallen in. Pipes stored on site should also be inspected.
- 5.16. Flood Risk, Toddbrook is a feeder reservoir for Peak Forest Canal in Whaley Bridge in Derbyshire. Flood warnings and River levels will be monitored for high water levels. All open excavations to be closed in advanced of high river levels and no piling to occur during high river levels.
- 5.17. If otters or their features are identified within or immediately to the works area, works will cease, and the environmental teams both construction and client should be contacted at the earliest opportunity.
- 5.18. No site operative will be permitted to disturb a feature potentially identified as resulting from an otter (holt, couch, slide, spraint site etc.) until investigated by a suitable qualified ecologist.
- 5.19. Be aware that otter may lie-up in stacked pipes or beneath pallets. These features should be inspected daily before the start of works.
- 5.20. No Fuel, oil or any other potentially harmful or polluting fluids / chemicals to be stored within 10m of the Brook or other water courses.
- 5.21. Best practice working methods will be always implemented - ISO 14001

If at any time otters are found during the works, the works will stop, and further advice sought with the Kier Environmental Team with escalation to the Canal and River Trust Environmental / Ecology representative.

Appendix A :

Site Location Plan – N.T.S. (Red line boundary indicates site area).



Legend
 Proposed Site

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PI	2018/21	18	19A	19B
Scale	5000	25	10000	75000



ARUP

Address House, 1000 Street
 20 East River, Leeds LS15 7EE
 UK
 Tel: +44 (0)113 242 4000
 www.arup.com

Client
 Canal & River Trust

Project
 Restoring Toddbrook Reservoir

Figure 1.1: Proposed Scheme Boundary

Scale
 1:5,000

Drawn By	Issue	Issue
277887	277887	277887
1.1		P1

Appendix B:

Area most favorable to Otters and proposed water channels, plan identifies by-wash, river Goyt and ground water/drainage. - Plan N.T.S



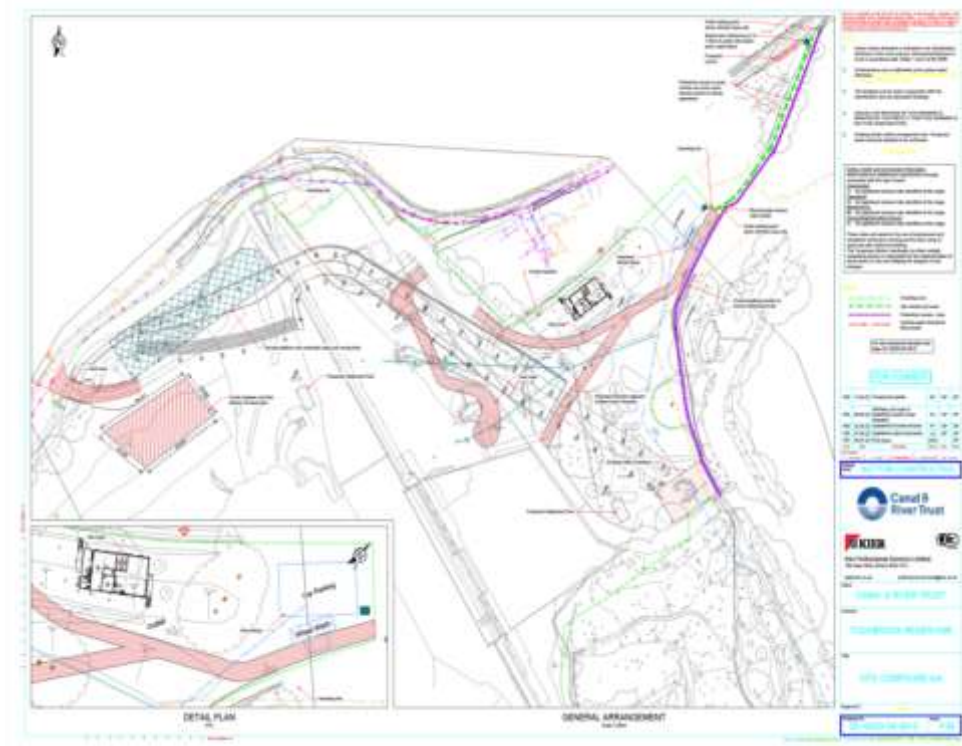
Toddbrook - Surface water run off







- Upper Draw off channel
- Lower Draw off Channel
- Indicative existing surface water run off



Plan identifies access / haul road within site boundary – Plan N.T.S.



Appendix C : Kier - Tool Box Talk

ENVIRONMENT	
	
Environmental System of Work: Identification & Management of Otters SHEMS-SSW-GR-E006	
What are the risks?	Photo Identification
<ul style="list-style-type: none"> • Otters and their habitats are fully protected under UK law • It is illegal to intentionally or recklessly kill, injure, capture or even disturb an Otter • It is also illegal to damage, destroy or obstruct breeding or resting places or places used for shelter or protection (whether occupied or not) • Prosecution could lead to a fine of up to £5000 per offence or in some cases up to six months imprisonment 	
Identification:	
<ul style="list-style-type: none"> • Long slender bodies (approx. 1m) and short legs • Small eyes and ears and thick tail • Dark brown fur and pale underside • They swim with only nose and eyes in view above the surface • 'Spraints' (droppings) – a mass of fish bones and scales held together by a sticky green-black substance, left in prominent places such as heaps of grass and stones and bridges • Can often be confused with Mink, these are smaller (35-45cm) and black 	
Likely Locations:	
<ul style="list-style-type: none"> • Near rivers, canals, lakes, reservoirs and estuaries and at the coast • Floodplains, well vegetated streams, ponds, bogs, marshes, dykes, fens, reedbeds, islands • Both rural and urban areas near watercourses • Woodland and hedgerows near watercourses 	
Immediate Action Required:	
<ul style="list-style-type: none"> • Stop work immediately • Fence off area • Seek expert advice – Environment Team • For trapped and injured animals call the RSPCA (0870 55 55 999) 	
Communications/Notification:	
<ol style="list-style-type: none"> 1. Contact Supervisor 2. Contact local Environmental Manager) 3. Contact SHE Emergency Phone (24hr) 	

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