

1. SCOPE

This plan is designed to comply with relevant legislation and committed mitigation measures and S.37 Consent Conditions 16 and 17.

2. ISSUE RECORD

This is a Reference document. The current version of Controlled and Reference documents are held on ProjectWise.

It is your responsibility to ensure you work to the current version.

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5. REFERENCE AND RELATED DOCUMENTS

- AECOM – XX Route Overhead Line Diversion Preliminary Ecological Replacement (October 2022)
- AECOM – XX Route Overhead Line Diversion EIA Screening Assessment (October 2022)
- BT003651-1-EP-SPTM-0001 Wester Moffat XX Route OHL Construction Environmental Management Plan

6. INTRODUCTION

Badger (*Meles meles*) is protected under The Protection of Badgers Act 1992. Under this Act it is illegal to intentionally or recklessly damage a badger sett or cause a dog to enter a sett, to obstruct access to a sett and to disturb a badger while occupying a sett, or for any person to kill, injure or take a badger. It is also an offence to cruelly ill-treat a badger, to dig for or to snare a badger.

This legislation means that badgers are fully protected in Scotland, and that any planned activity, which may affect them, requires prior consultation with the appropriate statutory nature conservation organisation (SNH). Licences may be granted for certain purposes that would otherwise be illegal from SNH.

Under Section 10 (1) of The Protection of Badgers Act 1992, licences may be granted to interfere with a badger sett within an area specified in the licence by any means so specified.

A licence under The Protection of Badgers Act 1992 is required from SNH in specific areas to enable construction of the Beaully to Denny Project that would otherwise contravene the law. This licence must remain valid at all times during the construction period.

7. PROTECTION PLAN

In advance of construction at any location where there is the potential for badgers to be present, it is **essential** that:

- Pre-construction survey for badger is completed on a rolling programme (maximum of 12 months prior to start of proposed works in a particular area, including Site Investigation) to ensure availability of up-to-date information on sett locations.
- Pre-construction badger surveys to include minimum of 30 m beyond LODs for construction areas and access tracks increasing to 100 m in areas of potential high noise and vibration (piling, blasting etc.).
- The preconstruction surveys will identify whether the setts are active, inactive or defunct.

Active setts are defined by a number of characteristics such as:

- tunnels having smoothly brushed sides (lack of cobwebs etc);
- obviously used paths to the entrance (characterised by a lack of vegetation);
- a lack of vegetation/leaves in the entrance;
- footprints; and
- sometimes snuffle holes, latrines and tree scratchings in the immediate vicinity.

Inactive setts are characterised by tunnels looking disused (e.g. cobwebs) and vegetation/leaves in the entrance and no other evidence of badger.

Defunct setts are characterised by a loss of the structural integrity of the tunnel entrance (such as when they have been trampled by cattle) and/or roots growing through the tunnel, and no other evidence of badger, (i.e. the hole could not be used for shelter by a badger in its current state).

- The findings of pre-construction badger surveys to be made available to SNH and relevant Councils as required.
- A review is undertaken to check whether Project Works are likely to affect badgers. If necessary works will be modified (e.g. micro-site access tracks, tower/compound locations) to ensure all ground works are a minimum of 30 m from any sett, or a minimum of 100 m for high noise or vibration (e.g. percussive / vibration piling, blasting).
- Method Statements for all works within badger buffers will be produced and communicated to site staff. This SPP is designed to provide the Contractor and Ecological Clerk of Works with an approved methodology for carrying out certain badger mitigation activities. Method Statements for specific activities (outlined below) will also require approval from SNH prior to the works being carried out.
- Method Statements will provide all specific mitigation necessary to ensure the minimisation of impacts on the badger resource. Working methods and mitigation will be as agreed with SNH through this SPP and issued Method Statements and amended as necessary, in the light of the findings of the surveys and legal and best practice requirements.
- An exceptional circumstance procedure will be implemented should mitigation options (as detailed below) not prove satisfactory in a particular case. In such a scenario mitigation will be determined on a case specific basis under extensive consultation with the statutory authorities. No Project Works would be undertaken until such a time that a satisfactory outcome can be successfully achieved.
- Relevant plans and documentation will be updated with new and amended information as it is produced, with changes communicated to appropriate staff as required.
- The Ecological Clerk of Works will attend site on a regular basis throughout the construction period to ensure all environmental mitigation relevant to badger is delivered, and ensure compliance with SNH badger licence.

8. MITIGATION MEASURES

The following provides details of mitigation options to cover all situations that may affect badgers during the Project:

8.1 General

- The Ecological Clerk of Works to maintain a watching brief during construction, specifically to check for badger setts.
- Destruction of setts will only be undertaken as a last resort (again method statements detailing mitigation under the licence will be provided).
- Any temporarily exposed pipe system to be capped when contractors are off site to prevent badger from gaining access. Similarly, all exposed trenches and holes must be provided with mammal exit ramps when contractors are off site (i.e. at night time).
- An emergency procedure must be implemented by site workers if signs of badger (e.g. setts, latrines or animals) are encountered. All work within 30 m to cease, and the Ecological Clerk of Works to inspect site and define mitigation (if required).

8.2 Specific Mitigation

- Micro-siting of works to ensure a minimum separation distance of 30 m from any badger sett (or 100 m for high noise / vibration activities). Where this is not possible appropriate mitigation will be required prior to any works taking place in accordance with this SPP and under the SNH Project Badger licence.
- For all setts within 30 m of works (or 100 m for high noise / vibration activities) a buffer area will be marked on the ground using blue rope to prevent work access and all workers will be briefed of its purpose.
- If the proposed works could result in the disturbance of a badger sett a detailed mitigation plan will be required. This must be agreed with SNH (either through compliance with this SPP or through approval of a specific method statement) and only completed under licence. The badger sett will not be destroyed, but protected from disturbance and/or potential damage by the erection of a buffer marked on the ground with blue rope, which is to be maintained until the works are finished. Where appropriate any setts subject to disturbance under licence may be temporarily excluded (as described above) until the works are completed.
- Additional measures to avoid undue disturbance to badgers would be agreed and may include timing restrictions on works (*i.e.* no works to be undertaken during hours of darkness).
- If the proposed works could result in the destruction of a sett, a detailed mitigation strategy and programme will be required. This must be agreed with SNH and only completed under licence. Where an artificial sett is required to be constructed, the type and location will be agreed with SNH. The construction of an artificial sett must be completed at least 6 months prior to start of works. Badgers will then be excluded from the affected sett using an appropriate method (such as exclusion gates) agreed with SNH. In order to protect potential natal sites, exclusions will not be completed during the period December – June (inclusive). The sett must then be destroyed using controlled methods, either by hand or appropriate machinery, under the supervision of the Ecological Clerk of Works.
- Any badger setts subject to works under licence must be monitored during and after the works.

9. LICENSED WORKS

9.1 General Presumptions

Under the Project Licence there is a general presumption against works being carried out which could disturb badgers in their setts or to exclude any sett within the breeding season, unless it can be clearly demonstrated that either it is inactive, (*i.e.* through monitoring such as sticks, sand pads, camera traps) or that there is no alternative solution against Project timescales and requirements. In these exceptional circumstances consultation will be required with SNH.

9.2 Works Requiring SNH Approved Method Statements

The following works require a Method Statement to be approved by SNH:

- Any works within 30 m of (or 100 m for high noise / vibration activities) or to a main sett, or a sett which cannot be discounted as a main sett, at any time of year. This includes felling operations.
- Any works within 30 m (or 100 m for high noise / vibration activities) of an active sett within the breeding season (December to June inclusive).
- Where it is proposed to exclude (even temporarily) such a proportion of setts in a given clan's territory as to cause a significant impact on the clan.
- Any exceptional circumstances not covered in this SPP or Points 1 to 3 above.

9.3 Works Not Requiring SNH Approved Method Statements

The following works may be carried out under this SPP and / or specific Method Statements without the prior approval of SNH:

- Works around (within 20 m) or to (including felling, exclusion and destruction) an inactive sett at any time of year.
- Works around (within 20 m) or to a non-main sett (including disturbance, exclusion and destruction) within the open season (July – November inclusive).
- Felling operations within 20 m of a non-main sett within the open season or inactive sett at any time of year.

10. EXCLUSION / DESTRUCTION OF INACTIVE AND NON-MAIN SETTS

The following methodology will be incorporated into a Site Specific Method Statement and issued prior to work commencing:

10.1 Pre-works assessment

In advance of any ground-breaking or use of construction machinery within 30 m of a sett entrance (or 100 m for blasting operations) an Agent on the Project badger licence will consider in detail the scope of the proposed works, type of sett and topographical location to determine if exclusions can be avoided without placing badgers at risk.

10.2 Exclusion

As agreed with SNH, badger gates and appropriate materials will be used for the exclusion of setts, unless in rare circumstances, in which case SNH will be consulted beforehand. Exclusions must be overseen by a named agent on the Project badger licence.

The specification of the gate and materials would be as described in the Natural England Technical Information Note 25. The badger mesh fence specification is as described in SNH's "Scotland's Wildlife: Badgers and Development (2001)".

The gate would be set to the two-way position for at least 5 days and then set to one-way for 14 days.

10.3 Monitoring Exclusion

To monitor use of the sett the following methods may be used.

- Small pencil-sized sticks placed in the floor of the tunnel just inside the entrance, pointing upright.
- Threads pinned to the gate and gate frame to confirm if the gate has been opened.
- Sand placed at the sett entrance (inside and outside the gate).
- An appropriately positioned camera trap to monitor badger activity at the sett.

The sett will be regularly visited through the exclusion process (e.g. once every three days) to also check on the integrity of the exclusion materials and make good any damage. If it is apparent that badger(s) have breached the exclusion the necessary repairs will be made and exclusion period will be restarted.

11. DESTRUCTION OF THE SETT

- Following successful exclusion the destruction of the sett will be undertaken under the supervision of the Agent / ECoW and carried out using either hand tools or a mini-digger (any digger/excavator will not have jacks which might breach the ground above a tunnel).
- Excavation will start at least 1 m in front of the entrance spoil heap, possibly 4-5 m in front of the entrance, and excavating a trench at least 1 m deep. No more than half a metre depth of soil will be taken at a time. The digger will stop after each excavation to allow the Agent / ECoW to look for any signs of the tunnels and chambers. In the unlikely event that badgers are found during this process all excavation will cease and the badger(s) will be allowed to freely move away from the area. The Agent / ECoW will decide on when the excavation can re-commence.
- The excavation will continue slowly, working forwards into the tunnels and chambers until the Agent / ECoW is satisfied the entire sett has been excavated. Once fully excavated the soil will then be backfilled and compressed to deter animals from excavating further holes.
- Construction works will be programmed to commence as soon after this process as possible to reduce the probability of animals returning to the area

Following closure of a sett within or adjacent to a tower compound the provision of 'badger-proof' fencing will be considered around the compound to prevent future digging within the construction area. The compound access will be secured with a badger resistant gate which will be closed at all times except to provide works access during the day. One-way badger gates will be installed at the corners of the compounds to enable any animals to escape in the event they gain access to the compound. Badger fencing and gates will be installed as per the DMRB specification/Natural England Technical Information Note 25.

12. FELLING OPERATIONS WITHIN 20 M OF INACTIVE AND NON-MAIN SETTS

The following methodology will be incorporated into a Site Specific Method Statement and issued prior to work commencing:

- Tree felling allowed under this SPP is within 20 m of a non-main sett within the open season (July to November inclusive) only, and within 20 m of an inactive sett at any time of year.
- An Agent / ECoW on the Project badger licence will be present before felling to re-check all the vegetation to be removed for any ecological constraints including newly dug badger setts. Details of any ecological constraints, and associated mitigation, not related to badger will be communicated separately to this plan to all site workers.
- All personnel, including contractors and subcontractors, will be briefed by the Agent / ECoW before works commence on the Method Statement to be followed, the presence of the badger setts, their protected status and the conditions of the Licence.
- A 20 m buffer area from the sett entrance will be marked on the ground using blue rope to prevent work access and all workers will be briefed of its purpose.

- All tree felling within the 20 m buffer zone will be undertaken either by a harvester located out with the buffer and reaching in or by hand, both under ECoW supervision. Felling will be carried out in accordance with the SNH Publication “*Badgers and Forestry – Licensing Guidance 2011*”.
- All trees will be felled away from the sett with a ‘soft-felling’ method appropriate to the type of woodland followed in order to avoid impact damage to sett entrances, tunnels and chambers (see below). No forestry plant (e.g. harvester, forwarder) would be operated within the 20 m buffer zone of the sett entrance.
- In mature plantation or semi-natural conifer and broadleaved woodland, where there is a greater risk of damage to tunnels and chambers from the impact of butts and larger branches heavily impacting and/or piercing the ground, sectional felling (*i.e.* controlled lowering of branch and trunk sections to the ground) will be carried out within 20 m of the sett entrance. In addition, brash or other suitable impact protection will be placed on the ground below where the tree sections are being lowered. Where this approach is required it would only be undertaken by a suitably experienced and qualified arborist (*i.e.* with NPTC training CS41 ‘Section Felling’) working under the supervision of the Agent / ECoW.
- Within thicket and pole stage commercial conifer plantations a ‘bench felling’ approach will be followed. Typically, two trees would be felled, more than 20 m from the nearest sett entrance, to provide an elevated ‘bench’ cushioned by the branches of the felled trees, for trees closer to the sett entrance to be felled on top of. This provides ground-protection (*i.e.* preventing larger branches piercing the ground) and a much reduced impact (*i.e.* reduction in vibration and risk of damage to tunnels and chambers within the protection zone). Additional impact protection (e.g. brash mat) would also be placed on the ground below where the butt of the tree would land. Bench felling is a standard felling protocol employed in forestry operations.
- All timber and brash from the felling process would be removed immediately (*i.e.* not left overnight). Timber and brash will be removed from the 20 m buffer zone by the forwarder reaching in, by hand or using cables and winches ensuring that the butt of the felled tree is elevated and not dragged through the buffer zone. There would be no de-stumping within the 20 m buffer zone, all tree stumps would be left in place. No material that could obstruct the sett entrances, obvious badger paths or latrine areas would be left.
- Where shrubs exist within the exclusion zone, these will be left *in situ* in order to maintain some degree of cover around the setts.
- The Agent / ECoW will check the sett entrances every morning and at the end of the day to ensure no damage has occurred.
- Work will be restricted to daylight hours (varying throughout the year) so as to avoid disturbing the natural behaviour of badgers.
- All felled timber and brash will be neatly stacked external to the 20 m buffer zone within a day or two of felling.
- No fires will be allowed within 100 m of the badger setts.

13. FIGURE 1 : BADGERS AND LICENSING FOR CONSTRUCTION WORKS – OPTIMAL MONTHS

| Type | J | F | M | A | M | J | J | A | S | O | N | D |
|---|--|---|---|---|---|---|--|---|---|--------------------------------------|---|---|
| *Within 30-100m of any Non-Breeding Sett | Licences can be issued throughout the year. However, they can take time to issues and some types of mitigation require long run in times and cannot be put in place quickly. | | | | | | | | | | | |
| *Within 30-100m of any Breeding Sett | Licences to disturb cannot be issued | | | | | | Optimal period for works which require a licence such as disturbance, temporary exclusion etc. | | | Licences to disturb cannot be issued | | |

14. FIGURE 2:- BADGER MITIGATIN DECISION TREE

