

Artificial Badger Settle (ABS) Design Checklist

This is a design checklist to prompt ecologists involved in ABS design. The checklist is mainly to guide the location and long-term security of the ABS. Once a suitable location has been found, the ABS can be built using a specification (such as the HS2 Artificial Badger Settle Specification). The list is not meant to be exhaustive and there may be other project or location specific factors to consider.

If any of the answers to these questions is 'no', the ecologist should design out the issue as far as possible and if any risk remains this should be identified as a project risk. Note that other specialists need to be involved in the design to help answer questions which do not solely relate to ecology.

Design question	Y/N
Can the project design be amended to avoid loss of existing setts, and thereby avoid the need for an ABS?	
Do you have enough survey information to characterise the badger territory, sett types and impacts of your scheme on both sett building, foraging and commuting habitat?	
If full survey information is not available and mitigation design is based on precautionary assessments, has this been logged as a project risk?	
Is the ABS within the same badger territory as the sett to be closed?	
Is the ABS is located close to an existing badger path?	
If a badger territory boundary is not available, has the ABS been designed at least 50m from the existing main sett or 500m from known main setts used by other badger groups?	
Is the design suitable to compensate for the sett to be lost (i.e., number of chambers and entrances)? Though a historical main sett may have many entrances in varying states of current use, the replacement sett only needs to provide habitat for the badgers currently using it and it is unlikely that a sett of more than 20 chambers would be required in most instances.	
Is the location within flood risk zones, or areas susceptible to groundwater flooding? ¹	

¹ There are various on-line sources available to check flood risk but always ask whether there is more specific project information available such as flood models. [Flood map for planning - GOV.UK \(flood-map-for-planning.service.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/444222/flood-map-for-planning-service.pdf), [Check the long term flood risk for an area in England - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/444222/check-the-long-term-flood-risk-for-an-area-in-england.pdf), [Susceptibility to Groundwater Flooding | British Geological Survey \(BGS\)](https://www.bgs.ac.uk/groundwater/flood-risk/)

Design question	Y/N
Have you monitored the land over different seasons to check local water levels, or asked the existing or previous landowners?	
Is the location free from constraints such as utilities, heritage or archaeological assets, land contamination, interaction with highways or rail land?	
Is the location of the ABS away from public rights of way or other land used by the public/subject to disturbance (e.g. industrial estates and plants which may generate noise and lighting)?	
Does the design make the most of existing topographical contours and landscape features (e.g., embankments and slopes to reduce future flooding issues, existing planting to provide food and cover)?	
Does the design include planting, including species to provide edible plants for badgers and cover from the elements?	
Have you considered whether the design will require any additional consents such as planning permission?	
Is there sufficient land within the developers' ownership or limits of the scheme that can deliver the ABS?	
Does the location and works design include temporary land needed for construction, including access routes, compounds, and laydown areas?	
Does the location and works design include permanent land access for future maintenance and monitoring?	
If the ABS or temporary construction works is on third-party land is an agreement with the landowner in place for continued access for maintenance, management, and monitoring?	
Will the location be safeguarded from later impacts (such as loss, severance, or disturbance) by your scheme or other developments granted permission?	
Does the programme of work fit with the requirements for mitigation? (e.g., is there time for the ABS to be built, and badgers to start using it before existing setts need closing)?	
Does the design reduce the chance of livestock interacting with the ABS?	
Is the design and construction of the ABS sustainable (e.g. can materials be sourced from sustainable sources, to reduce waste and avoid the use of single use plastics?)	

Design question	Y/N
Have you considered whether any other ecological features can be incorporated into the land available to maximise use by wildlife (such as bat boxes, bird boxes, bug houses)?	
Have suitable investigations been undertaken to assess the risk of bovine TB perturbation from the proposed mitigation?	