

Annex 1

Overview of survey requirements – 2017 - 2019

As part of the development of HS2, we need site-specific information, and would like to ask for your help. The type and number of surveys that we would like to undertake on your property will depend on the property's features.

For all properties falling within the 2017 to 2019 survey programmes one or more site familiarisation and habitat scoping assessments will be undertaken to reinforce any previously made assumptions and environmental mitigation strategies.

For ecology (wildlife) studies, we will undertake surveys of European Protected Species, such as great crested newts, bats, dormice and otters.

In some cases – which we outline below – other specialists may need to visit the site.

1. Possible surveys: ecology

Depending on the findings of the initial ecology surveys, one or more of the following additional surveys may be required on your property:

If your site contains **ponds or lakes**, further surveys may include:

- Amphibians/great crested newts
- Water invertebrates
- Water plants

If your site includes **hedges, woodland, scrubland or grassland**, further surveys may include:

- Bats
- Dormice

If your site contains **flowing water, rivers or ditches**, further surveys may include:

- Crayfish
- Otters
- Fish
- River bank habitat assessment
- Water plants

If your site contains **buildings or man-made structures**, further surveys may include:

- Bats
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In advance of any intrusive survey activities and in particular where vegetation clearance is anticipated a comprehensive site pre-assessment survey will take place, taking account of any relevant seasonal circumstances. This pre-assessment survey is intended to precede any review of environmental issues for the purpose of obtaining consents and approvals.

2. Possible additional surveys: non-intrusive

The following surveys may also be required on your property

Heritage	<ul style="list-style-type: none">• Geophysical investigations (site walkover, hand-held monitoring)• Field walking (site walkover)• Building recording
Water	<ul style="list-style-type: none">• Visual inspections of culverts, drains and watercourses with assessment for surface water flooding• Conditional assessments and botanical surveys of selected watercourses, river catchments and Groundwater Dependent Terrestrial Ecosystem wetland environments
Sound and vibration	<ul style="list-style-type: none">• Day time attended monitoring (site walkover, hand-held monitoring)• Day time unattended monitoring (monitoring station left on site)• Night time attended monitoring (site walkover, hand-held monitoring)
Highway Structures	<ul style="list-style-type: none">• Visual inspection of selected highway and/or supporting structures on primary construction roads, haulage corridors and post-delivery maintenance and access routes.
Utility Services	<ul style="list-style-type: none">• Visual inspection of all above ground installations, pylons, support structures and associated plant rooms, chambers and sub-station enclosures.• Lifting manholes and opening above ground cabinets.• Visual inspection of pipe routes and valve locations• Lifting manhole lids to confirm pipework condition, depths and flows.• Visualisation of new utility diversion and supply corridors.
Agriculture	<ul style="list-style-type: none">• Agricultural land and soil classification validation (ground sampling)

In rarer instances, additional surveys not listed above could be required. If it becomes clear that we need to undertake one of these surveys, we will notify you as soon as possible and discuss with you the best way to carry out the survey.

General agricultural soil sampling using a hand held auger is deemed to be a non-intrusive survey event but where supplementary samples pits and trial trenching is required additional survey payments will be available, negotiated on a case by case basis.