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CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN: BIODIVERSITY

Client

Newett Homes

Project

**Penistone Road,
Fenay Bridge**

Date

November 2024

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Rev	Issue Status	Prepared/Date	Approved/Date
-	Issue	DHS / 29.10.24	GP / 01.11.24
A	Issue	DHS / 05.11.24	AJB / 06.11.24

1.0 INTRODUCTION

1.1 The following Construction Environmental Management Plan (CEMP) has been prepared by FPCR Environment and Design Ltd. (FPCR) on behalf of Newett Homes to discharge Condition 14 of a planning consent (Kirklees Council planning ref: 2022/93154) which states:

“Prior to development commencing, (including demolition, ground works, vegetation clearance) a Construction Environmental Management Plan: Biodiversity (CEMP: Biodiversity) shall be submitted to, and approved in writing by, the Local Planning Authority. The CEMP: Biodiversity shall include the following:

- a. Risk assessment of potentially damaging construction activities.*
- b. Identification of “biodiversity protection zones”.*
- c. Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).*
- d. The location and timing of sensitive works to avoid harm to biodiversity features.*
- e. The times during construction when specialist ecologists need to be present on site to oversee works.*
- f. Responsible persons and lines of communication.*
- g. The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.*
- h. Use of protective fences, exclusion barriers and warning signs.*

The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority.

REASON: To ensure avoidance of impacts to protected and priority species in order to prevent significant ecological harm in accordance with Policy LP30 of the Kirklees Local Plan. This is a pre-commencement condition to ensure appropriate measures are designed and agreed prior to any potentially damaging operations associated to the construction phase.”

Site Location

1.2 The Site is located on land to the west and east of Penistone Road, Fenay Bridge (central OS grid reference SE 18604 14821), hereafter referred to as the 'Site'.

1.3 The Site is located west of the village of Fenay Bridge, Kirklees, bound by residential development to the north, south and east, and arable land to the west. In the wider area the landscape is largely agricultural.

Site Context

1.4 Habitat surveys were undertaken by Ecus in 2018 and 2020, with FPCR carrying out an update UKHab and preliminary protected species survey at the Site in June 2022, including an updated desk study. During the 2022 survey, habitats recorded onsite within the main development area east of Penistone Road comprised: other neutral grassland, ruderal/ephemeral, lines of trees and individual trees. To the west of Penistone Road, other neutral grassland, broadleaved woodland, scrub, arable fields and watercourses (including Fenay Beck) were recorded within

the redline boundary. The Site was subject to a further detailed otter survey to inform the planning application.

- 1.5 Since the habitat surveys were carried out, it is understood that the entirety of the main Site area (i.e. land east of Penistone Road) has been cleared under previous planning permission 2020/62/90725, including all works to do date, which did not require a biodiversity CEMP.
- 1.6 This CEMP: Biodiversity should be read alongside the overarching CEMP (Newett Homes, Oct 2024, Rev D).

Proposals

- 1.7 Proposals include a residential development to the east of Penistone Road, involving the construction of 68 dwellings with associated access, parking, amenity space, landscaping and infrastructure works. Land to the west of Penistone Road will be used for a surface water attenuation tank, drainage connections to Fenay Beck and biodiversity offsetting.
- 1.8 Details are shown on drawing reference Z078 - 004-B, provided at Appendix A of the CEMP (Newett Homes, Oct 2024, Rev D).

Objectives of the CEMP: Biodiversity

- 1.9 The objective of this CEMP: Biodiversity is to minimise any potential risks to the species and habitats that are, or are likely to be, present within, or adjacent to, the site.
- 1.10 This document lists the relevant legislation associated with the species considered likely to be present on site and those for which best practice measures are recommended.
- 1.11 The CEMP: Biodiversity will be reviewed jointly by the Principal Contractor and ECoW every six months until completion of all construction and landscaping works to ensure that it remains suitable to ensure the environmental commitments are being met. Any significant changes to the CEMP: Biodiversity will be submitted to the Local Authority for review prior to the relevant construction activity commencing.

2.0 ROLES AND RESPONSIBILITIES

Ecological Clerk of Works

- 2.1 Prior to the commencement of works, an ecological clerk of works (ECoW) will be appointed by the contractor to oversee the delivery of the mitigation (and biodiversity enhancement) measures on site. The Site project manager will be the main point of contact for the ECoW, and any actions required to be completed following a site audit by the ECoW will be overseen/ instructed by the Site project manager.
- 2.2 In summary, the ECoW will be responsible for the following:
- ensuring all of the appropriate ecological mitigation measures are implemented and recorded/ reported, as necessary;
 - ensuring all necessary reporting to the LPA is completed and submitted in a timely fashion;
 - providing information to the Site project manager to inform programming;

- recording all site inspections and audits;
- communicating action points to the site project manager and site staff directly where there is a need for urgent action to prevent environmental harm;
- monitoring the ecological and environmental performance of any sub-contractors and provide correction or direction as necessary; and
- feeding back lessons learnt to the project team to inform any future phases of works.

2.3 Once determined, the name and contact of the ECoW will be kept in the site office at all times.

3.0 ECOLOGICAL FEATURES, RISK ASSESSMENT AND RELEVANT LEGISLATION

3.1 Newett Homes published their CEMP in October 2024 (REV D). Below shows the programme of works listed within the CEMP:

- Archaeological investigation works to commence October 2023
- Site mobilisation works to commence July 2024, including site clearance, the erection of boundary fencing and tree protection fencing, and temporary compound set up;

Phase 1

- Cut & Fill - complete July 2024
- Roads & Sewers - complete October 2024
- Dwelling buildouts: Plots 1 to 16 - February to August 2025
- Surfacing - complete November 2025

Phase 2

- Cut & Fill - complete September 2024
- Roads & Sewers - complete January 2025
- Dwelling buildouts: Plots 17 to 32 & 45 to 56 - July 2025 to February 2026
- Surfacing - complete June 2026

Phase 3

- Cut & Fill - complete November 2024
- Roads & Sewers - complete March 2025
- Dwelling buildouts: Plots 33 to 44 & 57 to 65 - January to July 2026
- Surfacing - complete September 2026

3.2 FPCR were commissioned to write this Biodiversity CEMP in October 2024, and given the programme of works above. Table 1 below describes the potential biodiversity impacts that are still relevant.

Table 1 – Assessment of Risk to Habitats & Species

Habitat	Relevant Legislation / Policy	Assessment of Risk
Trees & Woodlands (offsite and onsite)	<p>Policy LP33 of the Local Plan states that development must <i>“Proposals will need to comply with relevant national standards regarding the protection of trees in relation to design, demolition and construction.”</i></p> <p>There are two potential lowland mixed deciduous Priority Habitat (under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006) located adjacent to the Site.</p> <p>A line of trees (LOT1) and several individual trees (T5-T8) along the northern edge of the development boundary east of Penistone Road are retained.</p>	<p>There is a risk of:</p> <ul style="list-style-type: none"> • Root compaction, • Damage to roots through pollution or incorrect storage of materials.
Watercourses (Fenay Beck & ditches)	<p>There are no watercourses present in the eastern Site boundary however west of Penistone Road are two ditches and Fenay Beck. Rivers, riverine corridors and associated habitats are listed as Priority Habitats of the Kirklees Biodiversity Action Plan.</p> <p>Additionally, Fenay Beck is located within the Kirklees Wildlife Habitat Network.</p> <p>Policy LP30 of the Local Plan states that development must <i>“safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network”</i>.</p>	<p>There is a risk of:</p> <ul style="list-style-type: none"> • Pollution from dust, and run off during construction activities, including accidental spillages, • Damage and disturbance to the surrounding retained watercourse habitats during construction.

Habitat	Relevant Legislation / Policy	Assessment of Risk
<p>Bats: There may be some disturbance on foraging and commuting bats due to construction phase lighting on adjacent vegetation.</p> <p>Three trees (T5-T7) onsite with the boundary east of Penistone Road were found to have low bat roosting potential. These are not expected to be lost to development but still may be impacted by adjacent construction works, such as by lighting.</p>	<p>Bats and their roosts are listed on the Conservation of Habitats and Species Regulations 2017 (as amended) making it illegal to deliberately disturb any such animal or damage / destroy a breeding site or roosting place of any such animal.</p> <p>Bats are also afforded full legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is illegal to recklessly or intentionally kill, injure or take a species of bat or recklessly or intentionally damage or obstruct access to or destroy any place of shelter or protection or disturb any animal whilst they are occupying such a place of shelter or protection.</p> <p>Some bat species are considered to be Species of Principal Importance (SPI).</p>	<p>There is a risk of:</p> <p>Disturbance of roosting, foraging and commuting bats, if present.</p>
<p>Otter: No evidence of otter were found in the onsite and offsite areas of waterbodies in 2022 although records within the catchment mean they are likely to be using the Beck for commuting.</p> <p>An update survey is recommended prior to installation of the headwall.</p>	<p>Otters are listed are listed on the Conservation of Habitats and Species Regulations 2017 (as amended) making it illegal to deliberately kill, disturb or capture them and damage /destroy their breeding sites and resting places – even if otters are not present.</p> <p>Otter are also afforded protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to intentionally or recklessly disturb otters while they occupy a structure or place used for shelter or protection or obstruct access to a place of shelter or protection.</p> <p>Otters are also considered to be a SPI.</p>	<p>There is a risk of:</p> <ul style="list-style-type: none"> • Disturbance of otter, if present. • Damage or destroying otter breeding sites and resting places. • Killing and injury of otter due to improper storage of materials, presence of open excavations and un-capped pipework.

Habitat	Relevant Legislation / Policy	Assessment of Risk
Badger: none recorded on Site but given their transient nature there is a potential for them to move into the area.	Badgers and their setts are protected under the Protection of Badgers Act (1992) making it an offence to wilfully kill, injure or take a badger (or attempt to do so), cruelly ill-treat a badger, dig for a badger and intentionally or recklessly damage or destroy a badger sett, or obstruct access to it, cause a dog to enter a sett and disturb a badger when it is occupying a sett.	There is a risk of: Killing and injury of badger due to improper storage of materials, presence of open excavations and un-capped pipework.
Nesting birds: Potential presence of nesting birds - suitable habitat includes onsite trees, the neutral grassland, arable fields, scrub, woodland and Fenay Beck banks.	Under the Wildlife and Countryside Act 1981 (amended) it is an offence to kill, injure or take a bird, take damage or destroy a nest in use or being built, take or destroy an egg, possession or control of wild bird or any part or object derived from, or egg or part of one.	There is a risk of: Killing and injury of birds (including ground nesting birds) and damage to nests.
Invasive species: Himalayan balsam, cherry laurel	Himalayan balsam, cherry laurel and signal crayfish are all listed on Schedule 9 of the Wildlife and Countryside Act (as amended) which imparts a legal obligation for no action to take place which might result in the species being caused to grow or spread in the wild.	There is a risk of spreading invasive species as a result of construction operations.

3.3 Proposals will not result in impacts to Local Wildlife Sites (LWS) i.e. Almondbury Common, Lepton Great Wood, and Carr Wood, which all lie over 500m from the Site.

4.0 PRECAUTIONARY ECOLOGICAL WORKING MEHTOD STATEMENT

Biodiversity Protection Zones

- 4.1 Biodiversity Protection Zones are areas of retained land which contain habitats that may be at risk from damage, or habitats which have been identified to be of importance to faunal species which may be harmed or disturbed by construction activities.
- 4.2 Protective Heras fencing should be used during to protect retained trees and boundary woodland including the roots of trees and protect the ground flora at their base. The fences will restrict access to such areas by construction workers/equipment, to ensure no physical damage occurs and to minimise the risk of accidental pollution events. Tree protection measures are outlined in the Arboriculture Report submitted with the application (ECUS, 2023).
- 4.3 No works or storage of materials will take place within the above protection zones during construction, unless agreed by the project ecologist following a review of anticipated works. Furthermore, no additional soil stripping, excavations or any vegetation clearance is to take place (unless agreed with the project ecologist); no site workers or vehicles are permitted, and no machinery or materials are to be stored within the protection zones.
- 4.4 Measures taken will also in turn benefit other species by protecting suitable habitats within the Biodiversity Protection Zones ensuring a consistent foraging and commuting resource.

Habitats

- 4.5 No temporary storage of materials, construction of haul routes, or site machinery will be situated within or adjacent to the retained trees.
- 4.6 Dust emissions from construction will be controlled following measures outlined in the CEMP (Newett Homes, Oct 2024, REV D) to prevent impacts from dust deposition on retained habitats and the Kirklees Wildlife Habitat Network.
- 4.7 Measures to protect root protection areas (RPAs) of retained trees should be followed, as outlined in Section 4.2 above, the Arboriculture Report (ECUS, 2023) and any updated arboricultural reports required under condition 15.
- 4.8 It is the responsibility of the Principal Contractor to ensure that fencing is maintained and remains in the correct location. The Principal Contractor must also monitor the fencing and buffer zones to ensure that there have been no vehicle incursions and no materials are being stored within them. Weekly checks of the fencing demarcating the RPAs will be made by the Principal Contractor and this will ensure:
- the integrity and correct positioning of protective fencing; and
 - that repairs are made to the fencing, as necessary.

Invasive Species

- 4.9 Himalayan balsam is listed on Schedule 9 of the Wildlife and Countryside Act (as amended) which imparts a legal obligation for no action to take place which might result in the species being caused to grow in the wild. This species was noted along the ditches in the boundary west of Penistone Road and in Fenay Beck. Any works near the ditches or the Beck should follow good site hygiene protocols, to prevent spread. These include:

- Marking out contaminated areas;
- Ensuring that vehicles with caterpillar tracks do not work within contaminated areas;
- Treating contaminated soils carefully;
- Limit use of tracked machinery at infested sites; and
- Cleaning machinery or equipment that could be contaminated

Fauna

4.10 Measures for the protection of fauna that are appropriate during construction are provided below.

General Good Practice Measures

- 4.11 The following precautionary measures will be adopted to avoid any potential for harm to protected and notable species:
- where possible, material will be stored within a fenced compound within an area of cleared vegetation rather than near to retained habitats;
 - materials should be raised from the ground by storing on pallets to prevent fauna from sheltering within them;
 - all excavations left overnight should be left with one sloping end to allow any animals that may fall in to escape; and
 - all excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling.

Noise

4.12 Construction activities will adhere to good practice in terms of noise regulations such that the level of noise and vibrations generated by machinery and actions is minimised, wherever possible. Specific measures are outlined in the CEMP (Newett Homes, Oct 2024, REV D).

Lighting

4.13 Direct external lighting shall be avoided / diverted from all retained and adjacent habitats and flood lighting would be low or high-pressure sodium instead of mercury or metal halide lamps. All lighting would be directional to avoid light spillage onto sensitive habitats.

Nesting Birds

- 4.14 There should be no remaining habitat on Site within the active work area east of Penistone Road suitable for nesting birds. If any regrowth occurs prior to the proposed construction of dwellings, the following measures should be followed:
- 4.15 The removal of woody vegetation, including newly established grasslands, or sections of hedgerow, trees or areas of scrub should be undertaken outside of the bird nesting season, i.e. avoiding clearance from March to August, inclusive. Where this is not possible, the site will be checked by the ECoW or a suitably qualified ecologist to confirm the absence of nesting birds prior to vegetation removal.
- 4.16 Where nesting birds are present, an exclusion zone should be set around the nest (as determined by the supervising ecologist and suitable for the species nesting), cordoned off with

high visibility tape or mesh fencing within which no works can occur until the birds have fully fledged.

Bats

- 4.17 All construction activities will be undertaken during daylight (CEMP - Newett Homes, Oct 2024, REV D) which will avoid adverse impacts to bats and other nocturnal species. If construction activities occur after dusk, then lighting will be kept to a minimum with directional lighting used to minimize light spill onto areas of retained or newly created trees/shrubs/hedgerow. See 'lighting' section, above. Trees with roosting potential will be retained.

Otter

- 4.18 An update otter survey will be undertaken prior to works commencing. If evidence of otter is found including any places of rest or shelter such as holts, couches and natal holts then appropriate mitigation will need to be applied and a licence will potentially need to be sought prior to works starting.
- 4.19 In the continued absence of otter, the following precautionary measures will be adopted during construction works to minimise the risk of accidental harm to otter:
- site operatives will be made aware of the potential presence of otters and the need for a duty of care when working in close proximity to Fenay Beck;
 - pipes over 250mm in diameter will be capped overnight to prevent otters entering;
 - where deep excavations are left open over-night (such as during construction of the attenuation tank), shallow, sloping batters and/or covers will be used to prevent animals becoming trapped in the working area; and
 - As otters are generally crepuscular working operations within the 20m of Fenay Beck will be limited to daylight hours and will be under ecologist supervision.

Badger

- 4.20 The following precautionary measures will be adopted during construction works to minimise the risk of accidental harm to badgers:
- during construction any pipes greater than 150mm in diameter will be capped if they are left open overnight, thereby preventing badgers (or other fauna) from becoming trapped;
 - any pits or trenches will be similarly covered overnight, or left with a suitable means of escape, e.g. wooden plank; and
 - any soil piles must be covered over or compacted down to minimise the risk of badgers digging in to create setts.
- 4.21 If an active badger sett is identified then works will have to take the relevant legislation into consideration, with appropriate mitigation to protect the area of badger interest. This may entail the use of buffer zones, badger fencing or undertaking works under the appropriate Natural England badger Licence to ensure this species is not directly impacted by the proposals. Works under a badger Licence that directly affect a sett or disturb badger occupying a sett may only be undertaken between July and November, inclusive.

5.0 PROTECTION OF WATER RESOURCES

- 5.1 Water pollution is the contamination of water bodies (e.g. lakes, rivers, oceans, and groundwater). Water pollution affects plants and organisms living in these bodies of water; and, in almost all cases the effect is damaging either to individual species and populations, but also to the natural biological communities. Water pollution occurs when pollutants are discharged directly or indirectly into water bodies without adequate treatment to remove harmful compounds.
- 5.2 Sources of water pollution on building sites include diesel and oil; paint, solvents, cleaners and other harmful chemicals; and construction debris and dirt. When land is cleared, it causes soil erosion that leads to silt being run-off and sediment pollution. Silt and soil, which runs into natural waterways turns them turbid, which restricts sunlight filtration and destroys aquatic life.
- 5.3 Surface water run-off also carries other pollutants from the site, such as diesel and oil, toxic chemicals, and building materials like cement. When these substances get into waterways, they poison water life and animals that drink from them. Pollutants on construction sites can also soak into the groundwater, a source of human drinking water. Once contaminated, groundwater is much more difficult to treat than surface water.

Run-off Waters and Silt Pollution

- 5.4 All water pollution is an offence under the Water Resources Act 1991. The Act makes it an offence to cause pollution to controlled waters either deliberately or accidentally. Controlled waters include all watercourses and water contained in underground strata (groundwater).
- 5.5 Although not so obvious, a cause of water pollution as chemicals or farm waste, for example, silt causes six per cent of all water pollution incidents. Any works which create silt therefore pose a serious threat to the water environment.
- 5.6 Silt causes lasting damage to river life by:
- clogging gills, so fish suffocate and die;
 - destroying spawning sites;
 - injuring fish by its abrasive action;
 - destroying insect habitats on the riverbed, starving fish of their food source;
 - stunting aquatic plant growth, limiting oxygen supplies, shelter and a food source; and
 - building up to cause flooding.
- 5.7 Also, oil and chemicals are often present in silt, especially from roads, land reclamation, and construction sites. This causes even more dangerous pollution. Preventing silt pollution in the first place is the best solution – and can be done by careful planning and taking suitable precautions.
- 5.8 The construction industry is a major cause of silt pollution. There are many reasons such as rainfall running off disturbed or stripped ground, for example.
- 5.9 Virtually all development, construction and maintenance works are likely sources of silt pollution. These include:

- land reclamation;
- any pipelines construction and repairs;
- dewatering or pumping out excavation;
- demolition; Concreting;
- culvert cleaning;
- sand blasting; and
- road cutting.

Measures to Prevent Water Pollution

5.10 The Principal Contractor will ensure good construction site practice to help control and prevent pollution. The following measures will be taken to mitigate the risks:

- the Principal Contractor will prevent erosion and run-off, minimize land disturbance and leave maximum vegetation cover;
- cover piles of building materials like cement, sand and other powders; regularly inspect for spillages, and locate them so they will not be washed into waterways or drainage areas;
- use non-toxic paints, solvents and other hazardous materials wherever possible;
- segregate, tightly cover and monitor toxic substances to prevent spills and possible site contamination;
- cover up and protect all drains on site;
- collect any wastewater generated from site activities in settlement tanks, screen, discharge the clean water, and dispose of remaining sludge according to environmental regulations.

5.11 Concrete is highly alkaline and corrosive and can have a serious impact on watercourses. It is essential to take particular care with all works involving concrete and cement. Suitable provision will be made for the washing out of concrete mixing plant or ready-mix concrete lorries so that washings do not flow into any drain or watercourse, or seep underground.

5.12 In the event of a spillage on site, the material will be contained (using an absorbent material such as sand or soil or commercially available booms). All spillages will be reported to the Site Manager who will inform the Environment Agency in the event of a significant occurrence.

Fuels and Oil

5.13 Storage and handling of fuel and oil may result in spillages due to operator error or mechanical damage to containers. This may result in soil and surface water contamination, and possibly subsequent groundwater contamination. The Principal Contractor will clean up any spillages, to prevent environmental damage. To this end spill kits, with absorbent material and padded bunds will be present on site.

5.14 Loss of oil to surface waters is highly visible and likely to attract the immediate attention of the Local Authorities and/or members of the public even if the quantities involved are minute. As

little as one gallon of oil can cover an area of water of approximately 100 sq. meters. Oil pollution is currently the single major environmental issue most targeted by the Environment Agency.

- 5.15 Soakage materials will be held on all sites where fuel/oils are stored, and staff will be trained in their use. An Emergencies Procedure will be issued when required and it will be prominently displayed in all site accommodation.

Water and Effluent

- 5.16 Water and effluent generated from on-site activities should be treated and disposed of in accordance with the requirements of the Environment Agency. Adequate pollution prevention techniques should be adopted to ensure that any potentially hazardous substances do not come into contact with vulnerable water (e.g. via surface water drainage systems). Recycling water should be encouraged.

6.0 TIMETABLE FOR CONSTRUCTION WORKS

6.1 Table 2 below provides a summary of the protection works to be undertaken during construction.

6.2 A copy of this CEMP: Biodiversity will be held at the site office for reference.

6.3 The Principal Contractor will monitor the ecological issues during the course of construction.

6.4 Throughout construction, all workers should work with due care and attention with respect to the potential presence of fauna and protected species on site. Any observations of protected species must be reported immediately to the Principal Contractor, who will contact the ECoW for further advice.

Table 2: Timetable for Construction

Habitat or Feature	Activity	Mitigation	Recommended timing	Responsibility
General measures	Passive observation	Any observations of protected species must be reported immediately to the Principal Contractor, who will contact the ECoW for further advice.	All year round as appropriate for the duration of construction	All site staff
	Materials storage	Materials and chemicals will be stored centrally within the site and where necessary, protective bunds will be created to contain any spillage events.	All year round as appropriate for the duration of construction	Principal Contractor
	Control of dust particles.	The release of airborne dust particles during construction will be controlled through the use of best practice measures, including, where necessary, the avoidance of work during extended periods of dry weather, damping of dust and wheel washing.	All year round as appropriate for the duration of construction	Principal Contractor
Trees & Woodlands	Protection of trees on and adjacent to Site	Maintaining fencing around onsite retained trees and offsite woodlands. Checks of the fencing demarcating the buffer zones and Root Protection Areas ensuring: <ul style="list-style-type: none"> the integrity and correct positioning of protective fencing; and that repairs are made to the fencing, as necessary. 	Weekly	Principal Contractor

Habitat Feature or	Activity	Mitigation	Recommended timing	Responsibility
Watercourses	Protection of watercourses on and adjacent to Site	Mitigation measures are outlined in section 5.10.	All year round as appropriate, for the duration of construction	Principal Contractor
Bats	Construction site lighting	Avoid lighting / light spill on to Biodiversity Protection Zones including the trees with bat potential. Turn off site lighting when the site is not in use.	All year round as appropriate, for the duration of construction	Principal Contractor
Badger	Construction storage, open excavations and uncapped pipework	Mitigation measures are outlined in section 4.11.	All year round as appropriate, for the duration of construction	Principal Contractor
Otter	Construction storage, open excavations, uncapped pipework and site lighting.	Mitigation measures are outlines in section 4.19.	All year round as appropriate, for the duration of construction of the headwall into Fenay Beck	ECoW and Principal Contractor
Birds	Additional vegetation removal during construction	The removal of woody vegetation to avoid the bird nesting season (March – August, inclusive), where possible. Any clearance of woody vegetation within the nesting season (where necessary) must be preceded by nesting bird check completed by the ECoW or suitably qualified ecologist. If nesting birds are present an exclusion zone to be determined by the ECoW should be set around the nest (suitable for the species nesting) within which no works can occur until the birds have fully fledged.	September to February March to August, inclusive	ECoW and Principal Contractor

Habitat Feature	or Activity	Mitigation	Recommended timing	Responsibility
Invasive species	Movement of vehicles and material during construction	<p>Himalayan balsam was noted in Fenay Beck and the ditches west of Penistone Road. While construction works are to take place in the boundary east of Penistone Road, if any vehicles or personnel enter the western boundary the following measures should be followed.</p> <p>This includes ensuring that all relevant staff are briefed and aware of Himalayan balsam issues and their responsibilities. Everyone working on the site shall be aware of and adhere to good site hygiene such as:</p> <ul style="list-style-type: none"> • Marking out contaminated areas • Ensuring that vehicles with caterpillar tracks do not work within contaminated areas. • Treating contaminated soils carefully • Limit use of tracked machinery at infested sites • Cleaning machinery or equipment that could be contaminated 	All year round, as appropriate, for the duration of construction	All site staff

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