

Appendix 1.2 - Hailsham East

Sites

052_1310 Former Southern Water Sewage Works
135_1310 Land South of A271
197_1310 Land East of Battle Road
215_1310 Poplar Cottage Farm
308_1310 Amberstone Grange
379_1310 Part of Marshfoot Farm
454_1310 Land South of Howard Close
467_1310 Land at Station Road
523_1310 Land at and to Rear of Lynton
524_1310 Land at Harebeating Nursery
724_1310 Land North of Old Swan Lane
746_1310 Land South of Mill Road
781_1310 Former Eastbourne Waterworks
804_1310 Land at Mill Road
883_1310 Land at Harebeating Farm
885_1310 Hailsham Ambulance Station
897_1310 Land at Peppers adjacent to Amberstone Grange

052/1310 Former Southern Water Sewage Works, Station Road, Old Swan Lane

Ecological Assessment

Site overview

The site is situated immediately to the southeast of Hailsham in an area with a mixture of semi-industrial usages, housing, young woodland and pasture, being connected to the surrounding countryside through a network of hedgerows.

The site supports a variety of land uses, due to its association with a STW, including areas of hardstanding and bare ground, rough semi-improved grassland, scattered scrub, amenity grassland and small areas of woodland. There is an overall lack of management on the site except for areas in the south west of the site accessed by a hardstanding track.

The local soils are seasonally wet, slightly acid but base rich loams and clays.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 1km

Sites of local importance and protected and/or notable species: 1km

Ponds and waterbodies: 250m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels Ramsar	290	SE	Pevensy Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensy Levels Special Area of Conservation (SAC)	290	SE	Pevensy Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels SSSI	290	SE	Pevensy Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1% of the total British population of wintering lapwings.

052/1310 Former Southern Water Sewage Works, Station Road, Old Swan Lane

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Coastal and floodplain grazing marsh	20m	SE	Priority Habitat found on site and within 1km of the site.
Deciduous woodland	200m	NW	Two stands of deciduous woodland lie within 1km of the site

Ecological baseline: protected species

A number of protected species have been recorded from within the search radius; refer to **Figure 4.5** protected species mapping for more details of locations.

Records covered a broad range of species, including some of the following:

- Plants (Roesel's bush-cricket, lesser quaking-grass, broad leaved-spurge)
- Reptiles (slow worm, grass snake)
- Birds (raven, swift)
- Invertebrates (girdled mining bee, Roesel's bush-cricket, garden tiger, green-brindled crescent)
- Mammals (brown-long eared bat, common pipistrelle, soprano pipistrelle)
- Fish (brook lamprey, European eel)

Ecological baseline: non-native species

The following non-native species have previously been recorded from within the search radius:

- Plants; three-cornered garlic, cherry laurel, Japanese rose, Himalayan cotoneaster, giant knotweed
- Invertebrates; harlequin ladybird, horse chestnut miner

Setting and green infrastructure

The site lies in a rural landscape on the edge of Hailsham and has a coherent green infrastructure network comprised of hedgerows and belts of scrubby woodland, and also a watercourse which flows from urban Hailsham southeast to the Pevensy Levels. These effectively link the site with the wider countryside despite a variety of local landuses including housing, a sewage treatment plant and various light industrial premises.

The site boundaries are rather poorly defined to the north with no clear demarcation between this site and site 724/1310; to the south, west and east, however, the boundaries are demarcated by a mixture of hedgerow and fencing

There are an estimated 2 ponds within the search area. Settling lagoons at the nearby Sewage Treatment Works are not included in this total.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The grassed areas of part of the former treatment works are regularly managed by mowing. The remainder of the on-site vegetation appears to be unmanaged, although horses may occasionally be grazed on parts of the site.

052/1310 Former Southern Water Sewage Works, Station Road, Old Swan Lane

Habitat Description

Figure 052/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A1.1.1 Broadleaved semi-natural woodland

A small area of this habitat type was present in the south-west corner of the site adjacent to the former sewage works entrance track. The woodland was mature, natural in origin, and included elm *Ulmus agg.*, sycamore *Acer pseudoplatanus*, horse chestnut *Aesculus hippocastanum*, and Ash *Fraxinus excelsior*. The ground flora was dominated by ivy *Hedera helix* and bramble *Rubus fruticosus* agg. with false brome *Brachypodium sylvaticum*, wood avens *Geum urbanum*, cleavers *Galium aparine*, nettle *Urtica dioica* and pendulous sedge *Carex pendula*.

A2.2 Scattered scrub

Small areas of scattered scrub mixed with tall ruderal were present throughout the site but were most closely associated with the external and internal boundaries. The dominant species was bramble *Rubus fruticosus* agg. but the scrub also included blackthorn *Prunus spinosa*, hawthorn *Crateagus monogyna*, and elder *Sambucus nigra*.

B2.2 Semi-improved neutral grassland

The majority of the site was of this habitat type. On the whole the grasslands were unmanaged, and in rank condition, however at the time of survey a single horse was tethered in the eastern field. The sward was dominated by common bent *Agrostis capillaris*, Yorkshire-fog *Holcus lanatus*, meadow barley *Hordeum secalinum* and white clover *Trifolium repens*. Other grasses present in significant quantity included timothy *Phleum pratense* false oat-grass *Arrhenatherum elatius*, rough meadow-grass *Poa trivialis*, perennial rye-grass *Lolium perenne* and crested dog's-tail *Cynosurus cristatus*. Both fields contained significant quantities of Fleabane *Pulicaria dysenterica*, clustered dock *Rumex conglomeratus*, greater bird's-foot Trefoil *Lotus pedunculatus*, hoary ragwort *Senecio erucifolius* and creeping thistle *Cirsium arvense*. Other herbs present to varying degrees included common knapweed *Centaurea nigra*, red clover *Trifolium pratense*, common agrimony *Agrimonia eupatoria*, and meadow vetchling *Lathyrus pratensis*.

C3.1 Tall ruderal

Areas of mixed tall ruderal and scattered scrub were present throughout the site but were most closely associated with external and internal boundaries. Representative species included creeping thistle *Cirsium arvense*, hogweed *Heracleum sphondylium*, and nettle *Urtica dioica*. Areas generally too small for mapping as a specific habitat type.

J1.2 Amenity grassland

A small area of amenity grassland was associated with the former sewage treatment works in the west of the site. This area was the only part of the site to show signs of management, being closely mown. The grass sward consisted of cock's-foot *Dactylis glomerata*, Yorkshire-fog *Holcus lanatus*, perennial rye-grass *Lolium perenne*, rough meadow-grass *Poa trivialis*, and false oat-grass *Arrhenatherum elatius*. There was a typical range of closely mown grassland herbs including daisy *Bellis perennis*, creeping cinquefoil *Potentilla reptans*, dandelion *Taraxacum* agg., white clover *Trifolium repens*, yarrow *Achillea millefolium*, and greater plantain *Plantago major*.

J2.1.1 Native species-rich hedge, intact

The eastern boundary is marked by a hedgerow which although largely intact, also contains a number of gaps, and is degenerating through lack of management into scrub habitat. The species recorded were sycamore *Acer pseudoplatanus*, ash *Fraxinus excelsior*, bramble *Rubus fruticosus* agg. elder *Sambucus nigra*, blackthorn

052/1310 Former Southern Water Sewage Works, Station Road, Old Swan Lane

Prunus spinosa, wild plum *Prunus domestica*, ivy *Hedera helix*, dog rose *Rosa canina*, hawthorn *Crataegus monogyna*, and cherry plum *Prunus cerasifera*.

J2.4 Fence

The western and part of the southern boundary are demarcated by fencing. The only fence on site which was still intact was that surrounding the area off amenity grassland.

J4 Hardstanding and bare ground

A concrete access track led into the former water treatment site to further hardstanding areas.

Protected species

The site is considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	The site features species rich grassland habitats. If these habitats are likely to be impacted by development proposals then habitat surveys would be advisable.
<i>Rare and scarce plants</i>	The presence of uncommon plant species in the grassland areas cannot be ruled out.
<i>Rare and scarce invertebrates</i>	The site is considered unlikely to support rare or scarce invertebrates.
<i>Amphibians including great crested newts</i>	Some site habitats (hedgerow, scrub, woodland) are suitable for this group and there are a number of ponds in the local area, including on site. The presence of amphibians, including great crested newt cannot be ruled out.
<i>Reptiles</i>	The following habitats are suitable for this species group (hedgerow, woodland, scrub, grassland) and presence on site is likely.
<i>Breeding/Wintering birds</i>	The hedgerow and woodland habitats are likely to support nesting birds. Nesting birds may also use the site buildings where access to structures is possible. The proximity to high quality bird nesting and foraging habitats including a large tract of woodland and pasture means that the presence of less common species cannot be ruled out. The site is not considered likely to support significant populations of wintering birds
<i>Dormouse</i>	The scrub, hedgerow and woodland habitats have potential to support dormouse.

052/1310 Former Southern Water Sewage Works, Station Road, Old Swan Lane

<i>Aquatic mammals including water vole and otter</i>	There are no habitats on site suitable for these species.
<i>Terrestrial mammals including badger</i>	No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use cannot be ruled out.
<i>Bats (roosting potential)</i>	None of the site trees are of sufficient size, or age, or have structural features which are suitable for bats. However, detailed bat inspections have not been undertaken and presence cannot be ruled out.
<i>Bats (foraging and commuting)</i>	The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	European	Unknown		
<i>Sites of national importance</i>	High	National	Unknown		
<i>Sites of local importance</i>	Lower	District	Neutral	Probable	
<i>Habitats</i>	Lower	District	Minor Adverse	Possible	
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	Unknown	Unknown			
<i>Invertebrates</i>	N/A	N/A			
<i>Amphibians including great crested newts</i>	Unknown	Unknown			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			
<i>Aquatic mammals including water voles and otters</i>	N/A	N/A			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

052/1310 Former Southern Water Sewage Works, Station Road, Old Swan Lane

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	✓
Hedgerow survey	May to October	✓
Rare plant survey	April to September (depending upon species)	✓
Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	✓
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	X
Dormouse survey	April to November	✓
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	X
Otter survey	Year round (Spring is optimal)	X
Bat inspection survey (trees)	Year round (Winter is optimal)	✓
Bat inspection survey (buildings)	Year round	X
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features including scrub and woodland at the periphery of the site should be protected in the built scheme.
- All mature trees should be retained in-situ.
- Retention of areas of scrub and trees, and linear features such as hedgerows wherever possible throughout the site.

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to

052/1310 Former Southern Water Sewage Works, Station Road, Old Swan Lane

active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.

- Herras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped. Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures should regular monitoring record a decline in habitat quality or quantity.

Potential enhancements

A number of enhancement measures could be employed in order to increase the value of the site to wildlife, including the following:

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Creation of a new wildlife pond in a secluded corner of the site.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- Enhancements to the retained woodland habitat, including thinning out non-native deciduous tree species, and replacement planting with native species.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (woodland and hedgerow).
- Supplementary planting in gaps in tree and hedgelines will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of proposed SUDs features using native wetland plants, and trees, shrubs etc.
- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brush) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

052/1310 Former Southern Water Sewage Works, Station Road, Old Swan Lane

Summary

Likelihood of ecological interest: protected habitats and or species

High	Medium	Low	Negligible

Locations of features indicative only

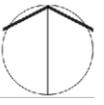


L16416 Hailsham Area Action Plan
 Hailsham East
 052/1310 Former Southern Water Sewerage
 Works, Station Road, Old Swan Lane

Phase 1 Habitat Survey

Figure 052/1310/ E01
 1:750@A3

September 2016



135/1310 Land South of A271 and north of Harebeating Lane

Ecological Assessment

Site overview

The site is situated immediately to the east of Hailsham and lies in a mainly rural area, surrounded by extensive pasture, the latter habitat including a number of horse paddocks.

The site comprises mainly pasture, with hedging to the external and internal boundaries, and two small areas of woodland to the north and south.

A sewage treatment plant lies to the northeast.

The local soils are seasonally wet, slightly acid but base rich loams and clays.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 2km

Sites of local importance and protected and/or notable species: 2km

Ponds and waterbodies: 500m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels Ramsar	290	SE	Pevensy Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensy Levels Special Area of Conservation (SAC)	290	SE	Pevensy Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels SSSI	290	SE	Pevensy Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1% of the total British population of wintering lapwings.

135/1310 Land South of A271 and north of Harebeating Lane

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
CW97 Jarvis's, Nobody's Wood & Park Wood Complex LWS	1200m	NE	These sites form a large area of mostly ancient and/or semi-natural woodland containing ancient earthworks and have had a long history of varying use and management. The woodlands are mainly oak with a history of coppiced hornbeam, sweet chestnut and hazel, with some areas of ash and alder in calcareous and wetter soils, respectively. The wooded stream valley supports a diversity of bryophytes and ferns.
CW14 Hellingly Cemetery LWS	2km	NW	Species-rich grassland with a high ratio of herbs to grasses. Species recorded include bird's-foot trefoil, black medick and autumn hawkbit with localised yellow oat-grass, fairy flax, dwarf thistle and spring-sedge.
Notable Road Verge: Amberstone Roundabout	600m	N	Early purple and green winged orchids
Coastal and floodplain grazing marsh	300m	E	Priority Habitat within 1km of the site.
Deciduous woodland	Adjacent	E	Priority Habitat lies adjacent to the site
Good quality semi-improved grassland	400m	E	Priority Habitat lies within 1 km of the site
Traditional orchard	1km	S	Priority Habitat lies within 1 km of the site

Ecological baseline: protected species

A number of protected species have been recorded from within the search radius; refer to **Figure 4.5** protected species mapping for more details of locations.

- Records covered a broad range of species, including some of the following:
- Plants (three-lobed crowfoot, welsh poppy, lesser quaking grass, box, hairlike pondweed, greater yellow-cress)
- Fungus (powdery piggyback, redleg toughshank, bloodred webcap)
- Amphibians and reptiles (slow worm, common lizard, grass snake, great crested newt)
- Birds (hobby, lapwing, raven, barn owl, Cetti's warbler, peregrine, swift)
- Invertebrates (variable damselfly, girdled mining bee, lunar thorn, orange footman, maple pug, Roesel's bush-cricket)
- Mammals (water vole, dormouse, hedgehog, Brandts bat, whiskered bat, brown-long eared bat, common pipistrelle, soprano pipistrelle, serotine, Daubenton's bat, Natterer's bat, noctule, Bechstein's bat)
- Fish (brook lamprey, European eel, bullhead, brown trout)
- Mollusc (Shining ram's-horn, little whirlpool ram's-horn snail, large mouthed valve-snail)

Ecological baseline: non-native species

The following non-native species have previously been recorded from within the search radius:

135/1310 Land South of A271 and north of Harebeating Lane

- Plants; Indian balsam, floating pennywort, winter heliotrope, three-cornered garlic, cherry laurel, Japanese rose, Himalayan cotoneaster, rhododendron, giant knotweed, parrot's feather.
- Invertebrates; harlequin ladybird, horse chestnut miner.

Setting and green infrastructure

The site lies in a rural landscape with a coherent green infrastructure network, albeit fairly intensively managed to the south due to the presence of numerous horse paddocks. There are few woodlands local to the site. The extensive marshland landscape of Pevensey Levels lies to the east.

The site features a network of managed hedges.

There are an estimated 7 ponds within the search area. One of these is on-site.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The grassed areas of the site are close-grazed pasture. The hedgerows are frequently cut.

Habitat Description

Figure 135/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A1.1.1 Broadleaved semi-natural woodland

The site features two areas of woodland.

The northern woodland is a semi-mature stand of oak *Quercus robur* and hornbeam *Carpinus betulus* woodland, which supports a range of other species including hawthorn *Crataegus monogyna*, and a number of wild service trees *Sorbus torminalis*. The woodland is quite dense and so understorey vegetation is limited, but includes wood melick *Melica uniflora* and false-brome *Brachypodium sylvaticum*. Other species include bramble *Rubus fruticosus* agg., honeysuckle *Lonicera periclymenum*, enchanter's nightshade *Circaea lutetiana*, and wood dock *Rumex sanguineus*.

The southern woodland is more scrubby in nature and supports oak *Quercus robur*, crack willow *Salix x fragilis*, goat willow *Salix caprea*, and silver birch *Betula pendula* with a small amount of hornbeam *Carpinus betulus*. The understorey vegetation is dense, and restricts access to the woodland, though species observable from its periphery include hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, bramble *Rubus fruticosus* agg., great willowherb *Epilobium hirsutum*, stone parsley *Sison amonum*, nettle *Urtica dioica*, bindweed *Calystegia sepium*, spear thistle *Cirsium vulgare*, garlic mustard *Alliaria petiolata*, and prickly oxtongue *Helminthotheca echinodes* on the margins.

Both areas of woodland appear to be of natural origin.

A2.1 Dense/continuous scrub

There are two small areas of scrub on the site; one on a site boundary, which is associated with off-site ruderal vegetation, and one associated with the site of a building, on the southern boundary. Species present in these areas include scrubby oak *Quercus robur*, elm *Ulmus minor*, elder *Sambucus nigra*, blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna* and bramble *Rubus fruticosus* agg., over an understorey of great willowherb *Epilobium hirsutum*, nettle *Urtica dioica*, bindweed *Calystegia sepium*, spear thistle *Cirsium vulgare*, garlic mustard *Alliaria petiolata*, broad-leaved dock *Rumex obtusifolius* and prickly oxtongue *Helminthotheca echinodes*.

135/1310 Land South of A271 and north of Harebeating Lane

A3.1 Scattered broadleaved trees

A number of scattered trees are present throughout the site, some being field trees and some associated with the pond. The trees are mature or semi-mature specimens. Species present primarily consist of oak *Quercus robur* and ash *Fraxinus excelsior*.

B4 Improved grassland

The majority of the site is composed of grass fields, all of which fall under this community type. The dominant species in all fields is perennial ryegrass *Lolium perenne*. Other grasses typically occur along field margins, but are otherwise sparsely scattered through the sward; these include Yorkshire fog *Holcus lanatus*, meadow barley *Hordeum secalinum*, common bent *Agrostis capillaris*, creeping bent *Agrostis stolonifera*, and timothy *Phleum pratense*.

Associated forbs most frequently include white clover *Trifolium repens*, which has a patchy dominance. Other species include red clover *Trifolium pratense*, daisy *Bellis perennis* and creeping buttercup *Ranunculus repens*, with, in damper or more disturbed areas, especially along field margins, creeping cinquefoil *Potentilla reptans*, broad-leaved dock *Rumex obtusifolius*, curled dock *Rumex crispus*, creeping thistle *Cirsium arvense*, soft rush *Juncus effusus*, bristly ox-tongue *Helminthotheca echioides*, common fleabane *Pulicaria dysenterica*, cut-leaved cranesbill *Geranium dissectum* and agrimony *Agrimonia eupatoria*. These last two species occur rarely and only at field margins.

At field entry points, there is a tendency for change in the assemblage of species present (though at a scale too small for the purposes of survey mapping), which favours species with a more ephemeral character on areas of ground. Here additional species include red goosefoot *Chenopodium rubrum*, redshank *Persicaria maculosa*, fat hen *Chenopodium album*, sharp-leaved fluellin *Kickxia elatine* and scentless mayweed *Tripleurospermum inodorum*.

C1.1 Bracken - continuous

Amongst areas of continuous bracken *Pteridium aquilinum*, species composition is similar to the understory of that found in J2.3.1.

C3.1 Tall ruderal

This community type only occurs along field margins, and predominantly adjacent to hedgerows. Species include bramble *Rubus fruticosus* agg., broad-leaved dock *Rumex obtusifolius*, bindweed *Calystegia sepium*, stone parsley *Sison amonum*, nettle *Urtica dioica* and creeping thistle *Cirsium arvense*.

G1 Standing water

A small pond is present in the centre of the site. As the pond is very shaded, there are no aquatic species present. Tree species associated with the banksides include field maple *Acer campestre*, oak *Quercus robur*, ash *Fraxinus excelsior* and white willow *Salix alba*. The ground flora comprises ivy *Hedera helix*, prickly sowthistle *Sonchus asper*, bramble *Rubus fruticosus* agg., and nettle *Urtica dioica*.

G2 Running water

A stream runs along part of the northern boundary, alongside the woodland and hedgerow. Associated species include ivy *Hedera helix*, bramble *Rubus fruticosus* agg., male fern *Dryopteris filix-mas*, soft shield fern *Polystichum setiferum*, harts tongue *Asplenium scolopendrium*, and wood melick *Melica uniflora*.

J2.1.1 Native species-rich hedge, intact

Most of the hedges on the site fall into this category. These hedgerows are dominated by blackthorn *Prunus spinosa* with associated species including hawthorn *Crataegus monogyna*, hazel *Corylus avellana*, hornbeam *Carpinus betulus*, goat willow *Salix caprea* and ash *Fraxinus excelsior*, and also climbers and scramblers such as bramble *Rubus fruticosus* agg., ivy *Hedera helix*, and honeysuckle *Lonicera periclymenum*.

The ground flora associated with the closely managed hedge sections is species poor, or absent; that associated with the less frequently managed hedges included false oat grass *Arrhenatherum elatius*, meadow barley *Hordeum secalinum*, perennial ryegrass *Lolium perenne* and timothy *Phleum pratense*, together with cow parsley *Anthriscus sylvestris*, stone parsley *Sison amonum*, ivy *Hedera helix*, hogweed *Heracleum spondylium*,

135/1310 Land South of A271 and north of Harebeating Lane

spear thistle *Cirsium vulgare*, prickly sowthistle *Sonchus asper*, soft rush *Juncus effusus*, meadow vetchling *Lathyrus pratensis*, agrimony *Agrimonia eupatoria*, and teasel *Dipsacus fullonum*.

J2.3.1 Native species-rich hedge with trees

Two sections of this hedge type are kept closely trimmed; the remainder have been allowed to grow to form broad, tall boundary features.

The hedgerows are dominated by black horn *Prunus spinosa* with associated species including hawthorn *Crataegus monogyna*, holly *Ilex aquifolium*, goat willow *Salix caprea* and elder *Sambucus nigra*. Tree species present include primarily ash *Fraxinus excelsior*, but also field maple *Acer campestre*, crack willow *Salix x fragilis*, and elm *Ulmus* sp., with associated climbers and scramblers such as bramble *Rubus fruticosus* agg., ivy *Hedera helix*, and dog rose *Rosa canina* agg.

The ground flora associated with the closely managed hedge sections was species poor, or absent; that associated with the less frequently managed hedges included false oat grass *Arrhenatherum elatius*, timothy, cocks foot, ivy, hogweed *Heracleum spondylium*, great willowherb *Epilobium hirsutum*, spear thistle *Cirsium vulgare*, prickly sowthistle *Sonchus asper*, silverweed *Potentilla anserina*, nettle *Urtica dioica*, cleavers *Galium aparine*, hoary ragwort *Senecio erucifolius*, creeping thistle *Cirsium arvense*, soft rush *Juncus effusus*, hard rush *Juncus inflexus*, wood dock *Rumex sanguineus*, and perforate St. John's wort *Hypericum perforatum*.

J2.4 Fence

Sections of stock-proof fencing are present on various of the internal and external boundaries.

J4 Hardstanding and bare ground

A track which follows the eastern boundary comprises concrete with packed earth where it runs through the centre of the site.

Target Notes

1	Young (recently planted) hedge
---	--------------------------------

Protected species

The site is considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	The site features species rich hedgerow and woodland habitats (refer to Phase 1 map). The stream corridor supports a wide variety of ferns. If these habitats are likely to be impacted by development proposals then habitat surveys would be advisable.
<i>Rare and scarce plants</i>	The presence of uncommon plant species in the woodland in particular cannot be ruled out.
<i>Rare and scarce invertebrates</i>	The site is considered unlikely to support rare or scarce invertebrates.

135/1310 Land South of A271 and north of Harebeating Lane

<i>Amphibians including great crested newts</i>	Some site habitats are suitable for this group and there are a number of ponds in the local area, including on site. The presence of amphibians, including great crested newt cannot be ruled out.
<i>Reptiles</i>	The following habitats are suitable for this species group (hedgerow, woodland, scrub) and presence on site is likely.
<i>Breeding/Wintering birds</i>	The hedgerow and woodland habitats are likely to support nesting birds. Nesting birds may also use the site buildings where access to structures is possible. The proximity to high quality bird nesting and foraging habitats means that the presence of less common species cannot be ruled out. The site is not considered likely to support significant populations of wintering birds
<i>Dormouse</i>	The woodland and hedgerow habitats have potential to support dormouse.
<i>Aquatic mammals including water vole and otter</i>	The stream corridor is likely to be too shaded for water vole to be present but the presence of otter cannot be ruled out.
<i>Terrestrial mammals including badger</i>	No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use cannot be ruled out.
<i>Bats (roosting potential)</i>	Some of the site trees are of sufficient size, or age, or have structural features which are suitable for bats. Detailed bat inspections have not been undertaken and presence cannot be ruled out.
<i>Bats (foraging and commuting)</i>	The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	European	Unknown		
<i>Sites of national importance</i>	High	National	Unknown		
<i>Sites of local importance</i>	Medium	County	Minor Adverse	Possible	
<i>Habitats</i>	Lower	District	Moderate Adverse	Probable	
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	Unknown	Unknown			

135/1310 Land South of A271 and north of Harebeating Lane

<i>Invertebrates</i>	N/A	N/A			
<i>Amphibians including great crested newts</i>	Unknown	Unknown			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			
<i>Aquatic mammals including water voles and otters</i>	Unknown	Unknown			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	✓
Hedgerow survey	May to October	✓
Rare plant survey	April to September (depending upon species)	✓
Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	✓
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	X
Dormouse survey	April to November	✓
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	X
Otter survey	Year round (Spring is optimal)	✓
Bat inspection survey (trees)	Year round (Winter is optimal)	✓
Bat inspection survey (buildings)	Year round	X
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features including scrub and woodland at the periphery of the site should be protected in the built scheme.
- All mature trees should be retained in-situ.
- The pond should be retained.
- The watercourse should be retained and protected.
- Retention of areas of scrub and trees, and linear features such as hedgerows wherever possible throughout the site.

135/1310 Land South of A271 and north of Harebeating Lane

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Herras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped. Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures should regular monitoring record a decline in habitat quality or quantity.

Potential enhancements

A number of enhancement measures could be employed in order to increase the value of the site to wildlife, including the following:

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Retention and enhancement of the pond on site through de-silting and removal of overhanging woody vegetation.
- Retain and enhance the watercourse through selective removal of overhanging vegetation.
- Creation of a new wildlife pond in a secluded corner of the site.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- Enhancements to the retained woodland habitat, including thinning out any non-native deciduous tree species, and replacement planting with native species.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (hedgerow and woodland).

135/1310 Land South of A271 and north of Harebeating Lane

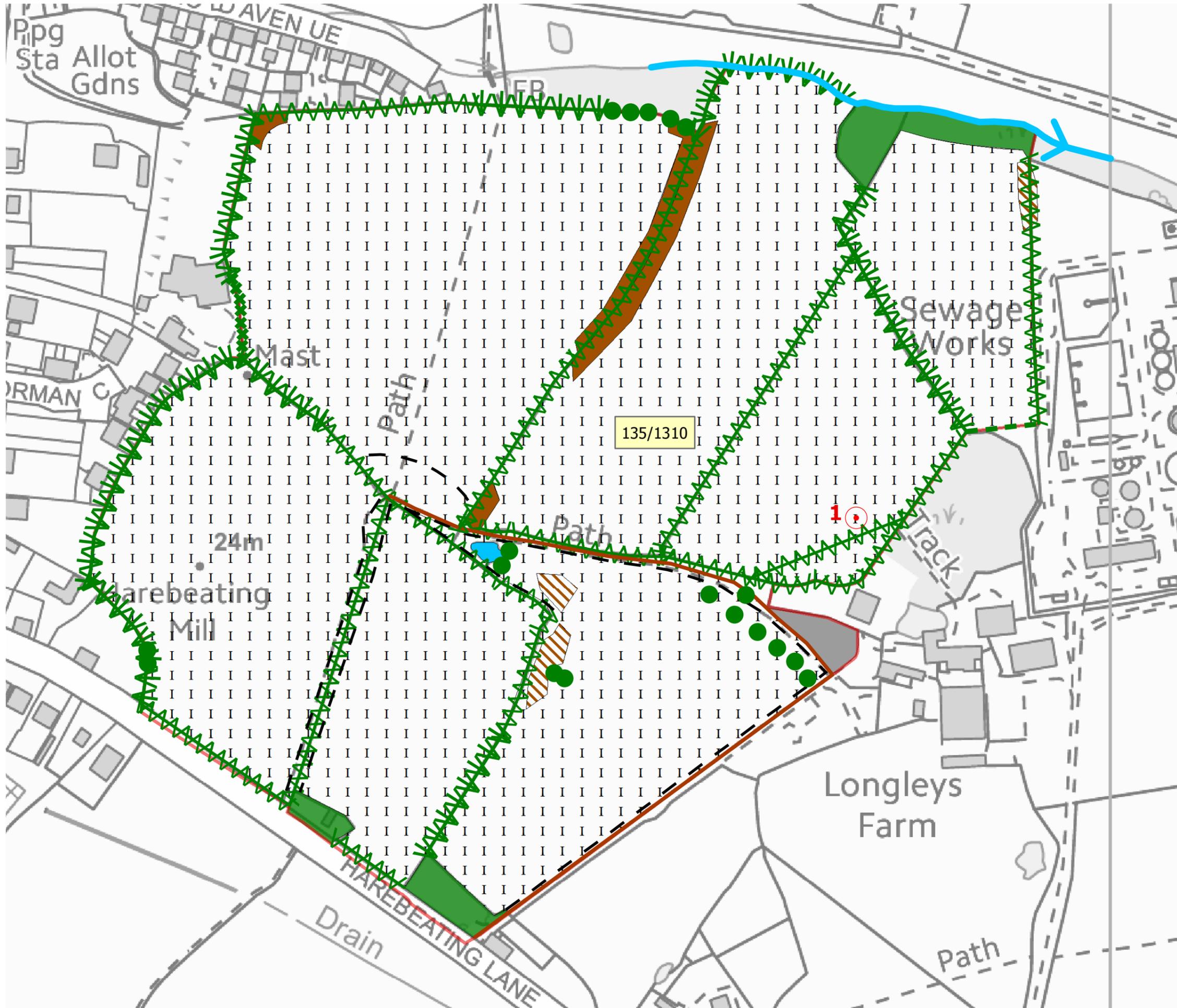
- Supplementary planting in gaps in tree and hedgelines will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of proposed SUDs features using native wetland plants, and trees, shrubs etc.
- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brash) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

Summary

Likelihood of ecological interest: protected habitats and or species

High	Medium	Low	Negligible

Locations of features indicative only



L16416 Hailsham Area Action Plan
Hailsham East
135/1310 Land South of A271

Phase 1 Habitat Survey

Figure 135/1310/E01
1:2000@A3

September 2016



197/1310 Land East of Battle Road, to the rear of the Council Offices, south of Harebeating Lane

Ecological Assessment

Site overview

The site is situated immediately to the east of Hailsham and lies in a rural area, surrounded by extensive pasture, the latter habitat including a number of horse paddocks.

The site comprises mainly horse paddocks, with internal boundaries being formed from fencing and hedging and a small area of marshland. A minor drain runs through the northern part of the site.

The local soils are seasonally wet, slightly acid but base rich loams and clays.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 2km

Sites of local importance and protected and/or notable species: 2km

Ponds and waterbodies: 500m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels Ramsar	290	SE	Pevensey Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensey Levels Special Area of Conservation (SAC)	290	SE	Pevensey Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels SSSI	290	SE	Pevensey Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1% of the total British population of wintering lapwings.

197/1310 Land East of Battle Road, to the rear of the Council Offices, south of Harebeating Lane

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
CW97 Jarvis's, Nobody's Wood & Park Wood Complex LWS	1200m	NE	These sites form a large area of mostly ancient and/or semi-natural woodland containing ancient earthworks and have had a long history of varying use and management. The woodlands are mainly oak with a history of coppiced hornbeam, sweet chestnut and hazel, with some areas of ash and alder in calcareous and wetter soils, respectively. The wooded stream valley supports a diversity of bryophytes and ferns.
CW14 Hellingly Cemetery LWS	2km	NW	Species-rich grassland with a high ratio of herbs to grasses. Species recorded include bird's-foot trefoil, black medick and autumn hawkbit with localised yellow oat-grass, fairy flax, dwarf thistle and spring-sedge.
Notable Road Verge: Amberstone Roundabout	600m	N	Early purple and green winged orchids
Coastal and floodplain grazing marsh	300m	E	Priority Habitat within 1km of the site.
Deciduous woodland	Adjacent	E	Priority Habitat lies adjacent to the site
Good quality semi-improved grassland	400m	E	Priority Habitat lies within 1 km of the site
Traditional orchard	1km	S	Priority Habitat lies within 1 km of the site

Ecological baseline: protected species

A number of protected species have been recorded from within the search radius; refer to **Figure 4.5** protected species mapping for more details of locations.

- Records covered a broad range of species, including some of the following:
- Plants (three-lobed crowfoot, welsh poppy, lesser quaking grass, box, hairlike pondweed, greater yellow-cress)
- Amphibians and reptiles (slow worm, common lizard, grass snake, great crested newt, common toad)
- Birds (hobby, lapwing, raven, barn owl, Cetti's warbler, swift, little egret)
- Invertebrates (variable damselfly, girdled mining bee, lunar thorn, orange footman, maple pug, Roesel's bush-cricket)
- Mammals (water vole, dormouse, hedgehog, Brandts bat, whiskered bat, brown-long eared bat, common pipistrelle, soprano pipistrelle, serotine, Daubenton's bat, Natterer's bat, noctule, Bechstein's bat)
- Fish (Brook lamprey, European eel, bullhead, brown trout)
- Mollusc (Shining ram's-horn, little whirlpool ram's-horn snail, large mouthed valve-snail)

197/1310 Land East of Battle Road, to the rear of the Council Offices, south of Harebeating Lane

Ecological baseline: non-native species

The following non-native species have previously been recorded from within the search radius:

- Plants; Indian balsam, floating pennywort, winter heliotrope, three-cornered garlic, cherry laurel, Japanese rose, Himalayan cotoneaster, rhododendron, giant knotweed, parrot's feather.
- Invertebrates; harlequin ladybird, horse chestnut miner.

Setting and green infrastructure

The site lies in a rural landscape with a coherent green infrastructure network, albeit fairly intensively managed due to the presence of numerous horse paddocks. There are few woodlands local to the site. The extensive marshland landscape of Pevensy Levels lies to the east.

The site features a well-developed network of managed hedges, with further internal boundaries being demarcated by hedgerows. A minor drain is present in the north of the site.

There are an estimated 12 ponds within the search area. One of these is on-site.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The grassed areas of the site mainly comprised a close-grazed sward, with horses being the only grazing animals present.

The hedgerows are mostly regularly maintained.

Habitat Description

Figure 197/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A2.1 Dense/continuous scrub

There is some hawthorn *Crataegus monogyna* present as continuous patches of scrub.

A3.1 Scattered broadleaved trees

A number of scattered trees are present as field trees. These are mature or semi-mature. Species present include oak *Quercus robur*, ash *Fraxinus excelsior* and poplar *Populus* spp.

B2.2 Semi-improved neutral grassland

Some of the grassland areas fall within this community type. The sward is typically dominated by Yorkshire fog *Holcus lanatus* and meadow barley *Hordeum secalinum* with perennial ryegrass *Lolium perenne*.

Other species occurring in smaller quantity include timothy *Phleum pratense*, creeping bent *Agrostis stolonifera*, crested dogs tail *Cynosurus cristatus*, sweet vernal grass *Anthoxanthum odoratum*, common bent *Agrostis capillaris*, and cock's foot *Dactylis glomerata*.

Associated forbs include wild carrot *Daucus carota*, daisy *Bellis perennis*, scented mayweed *Matricaria chamomilla*, nettle *Urtica dioica*, autumn hawkbit *Scorzoneroides autumnalis*, meadow buttercup *Ranunculus acris*, black medick *Medicago lupulina*, common mouse ear *Cerastium fontanum*, red clover *Trifolium pratense*, self-heal *Prunella vulgaris*, common sorrel *Rumex acetosa*, curled dock *Rumex crispus* and meadow vetchling *Lathyrus pratensis*.

Common bird's foot trefoil *Lotus corniculatus* is abundant.

197/1310 Land East of Battle Road, to the rear of the Council Offices, south of Harebeating Lane

B4 Improved grassland

Much of the sward is improved grassland and is closely grazed by horses to a short sward. Grazing pressure differs in intensity between fields. The sward is dominated by Yorkshire fog *Holcus lanatus* and/or perennial ryegrass *Lolium perenne*.

Other species occurring in smaller quantity include timothy *Phleum pratense*, creeping bent *Agrostis stolonifera*, common bent *Agrostis capillaris*, and cock's foot *Dactylis glomerata*.

Associated forbs include spear thistle *Cirsium vulgare*, autumn hawkbit *Scorzoneroides autumnalis*, meadow buttercup *Ranunculus acris*, white clover *Trifolium repens*, creeping buttercup *Ranunculus repens*, creeping cinquefoil *Potentilla reptans*, creeping thistle *Cirsium arvense*, scented mayweed *Matricaria chamomilla* (very infrequently), broad-leaved dock *Rumex obtusifolius* and greater plantain *Plantago major*.

C3.1 Tall ruderal

Ruderal vegetation is dominated by nettles *Urtica dioica*. Other species include bramble *Rubus fruticosus* agg., bristly ox-tongue *Helminthotheca echioides*, creeping thistle *Cirsium arvense*, common fleabane *Pulicaria dysenterica*, teasel *Dipsacus fullonum*, bindweed *Calystegia* sp. Stone parsley *Sison amonum* occurs in less nutrient rich stands of this habitat type.

G1 Standing water

Species associated with the pond include overhanging oak *Quercus robur*, grey sallow *Salix cinerea*, hawthorn *Crataegus monogyna* and bramble *Rubus fruticosus* agg. There is little aquatic or marginal vegetation, although wetland species such as hemlock water dropwort *Oenanthe crocata* are present beneath the canopy.

G2 Running water

Species associated with the stream corridor include hemlock water dropwort *Oenanthe crocata*, marsh woundwort *Stachys palustris*, water figwort *Scrophularia auriculata*, male fern *Dryopteris filix-mas* and hart's tongue *Asplenium scolopendrium*. No aquatic species were noted. Grassy banks are present which are comprised of similar grass species to those described in the improved grassland section.

J1.3 Ephemeral/short perennial

Small areas of ephemeral vegetation are present, for example on trampled ground in gateways and support species such as fat hen *Chenopodium album*, dandelion *Taraxacum* agg., red goosefoot *Chenopodium rubrum* and broad-leaved plantain *Plantago major*.

J2.1.1 Native species-rich hedge, intact

The majority of hedges on the site are intact species-rich native hedges.

These hedgerows are dominated by hawthorn *Crataegus monogyna* with associated species including blackthorn *Prunus spinosa*, hazel *Corylus avellana*, oak *Quercus robur*, elm *Ulmus* spp., holly *Ilex aquifolium*, field maple *Acer campestre*, wild privet *Ligustrum vulgare* and elder *Sambucus nigra* and also climbers and scramblers such as bramble *Rubus fruticosus* agg., dog rose *Rosa canina*, bindweed *Calystegia sepium* and ivy *Hedera helix*.

The ground flora associated with the closely managed hedge sections was species poor and similar in composition to adjacent areas of grassland; that associated with the less frequently managed hedges included ivy *Hedera helix*, prickly sowthistle *Sonchus asper*, silverweed *Potentilla anserina*, nettle *Urtica dioica* and field bindweed *Convolvulus arvensis*.

J2.2.2 Species-poor defunct hedge

Species-poor hedge is present within the site and is comprised of bushes and short hedge sections comprising holly *Ilex aquifolium*, hawthorn *Crataegus monogyna* and dog rose *Rosa canina*. The ground flora is dominated by nettle *Urtica dioica*.

197/1310 Land East of Battle Road, to the rear of the Council Offices, south of Harebeating Lane

J2.3.1 Native species-rich hedge with trees

Most of the hedges on the site fall into this category. The species composition is as J2.1.1. with standard trees of mainly oak *Quercus robur* and ash *Fraxinus excelsior*.

J2.4 Fence

The horse paddocks are typically subdivided by temporary fencing.

J2.6 Dry ditch

Species associated with dry ditches include that of the vegetation of the adjacent field, often with the addition of soft rush *Juncus effusus*, creeping thistle *Cirsium arvense*, hemlock water dropwort *Oenanthe crocata*, common fleabane *Pulicaria dysenterica* and nettle *Urtica dioica*.

Target Notes

1	Semi-improved grassland along track
2	Silage storage area with some ephemeral vegetation

Protected species

The site is considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	The site features species rich hedgerow and grassland habitats If these habitats are likely to be impacted by development proposals then habitat surveys would be advisable.
<i>Rare and scarce plants</i>	The presence of uncommon plant species cannot be ruled out.
<i>Rare and scarce invertebrates</i>	The site is considered unlikely to support rare or scarce invertebrates.
<i>Amphibians including great crested newts</i>	Some site habitats (hedgerow, grassland, scrub) are suitable for this group and there are a number of ponds in the local area including on site. The presence of amphibians, including great crested newt cannot be ruled out.
<i>Reptiles</i>	The following habitats are suitable for this species group (hedgerow, watercourses) and presence on site is possible.
<i>Breeding/Wintering birds</i>	The hedgerow habitats are likely to support nesting birds. Nesting birds may also use the site building where access to structures is possible.

197/1310 Land East of Battle Road, to the rear of the Council Offices, south of Harebeating Lane

	<p>The presence of less common species is unlikely.</p> <p>The site is not considered likely to support significant populations of wintering birds</p>
<i>Dormouse</i>	The hedgerow habitats have some potential to support dormouse.
<i>Aquatic mammals including water vole and otter</i>	There are no habitats on site suitable for otter, although the presence of water vole along sections of watercourse cannot be ruled out.
<i>Terrestrial mammals including badger</i>	No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use cannot be ruled out.
<i>Bats (roosting potential)</i>	<p>None of the site trees are of sufficient size, or age, or have structural features which are suitable for bats. However, detailed bat inspections have not been undertaken and presence cannot be ruled out.</p> <p>There are no site buildings suitable for use by bats.</p>
<i>Bats (foraging and commuting)</i>	The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	<i>Sites of European importance</i>	Very High	Unknown		
<i>Sites of national importance</i>	<i>Sites of national importance</i>	High	Unknown		
<i>Sites of local importance</i>	Medium	County	Minor Adverse	Possible	
<i>Habitats</i>	Lower	Parish	Unknown		
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	N/A	N/A			
<i>Invertebrates</i>	N/A	N/A			
<i>Amphibians including great crested newts</i>	Unknown	Unknown			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			

197/1310 Land East of Battle Road, to the rear of the Council Offices, south of Harebeating Lane

<i>Aquatic mammals including water voles and otters</i>	Unknown	Unknown			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	✓
Hedgerow survey	May to October	✓
Rare plant survey	April to September (depending upon species)	X
Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	✓
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	X
Dormouse survey	April to November	✓
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	✓
Otter survey	Year round (Spring is optimal)	X
Bat inspection survey (trees)	Year round (Winter is optimal)	✓
Bat inspection survey (buildings)	Year round	X
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features should be protected in the built scheme.
- All mature trees should be retained in-situ.
- The pond should be retained.
- Retention of linear features such as the vegetated stream corridor and hedgerows wherever possible throughout the site.

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

197/1310 Land East of Battle Road, to the rear of the Council Offices, south of Harebeating Lane

- Ensure a minimum 10m working offset from retained habitats
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Herras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped.
- Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures should regular monitoring record a decline in habitat quality or quantity.

Potential enhancements

A number of enhancement measures could be employed in order to increase the value of the site to wildlife, including the following:

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Retention and enhancement of the watercourse through selective removal of overhanging woody vegetation and sensitive reprofiling.
- Retention and enhancement of the pond on site through de-silting and removal of overhanging woody vegetation.
- Creation of a new wildlife pond in a secluded corner of the site.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (woodland, scrub, hedgerow etc.).
- Supplementary planting in gaps in tree and hedgelines will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of any proposed SUDs features using native wetland plants, and trees, shrubs etc.

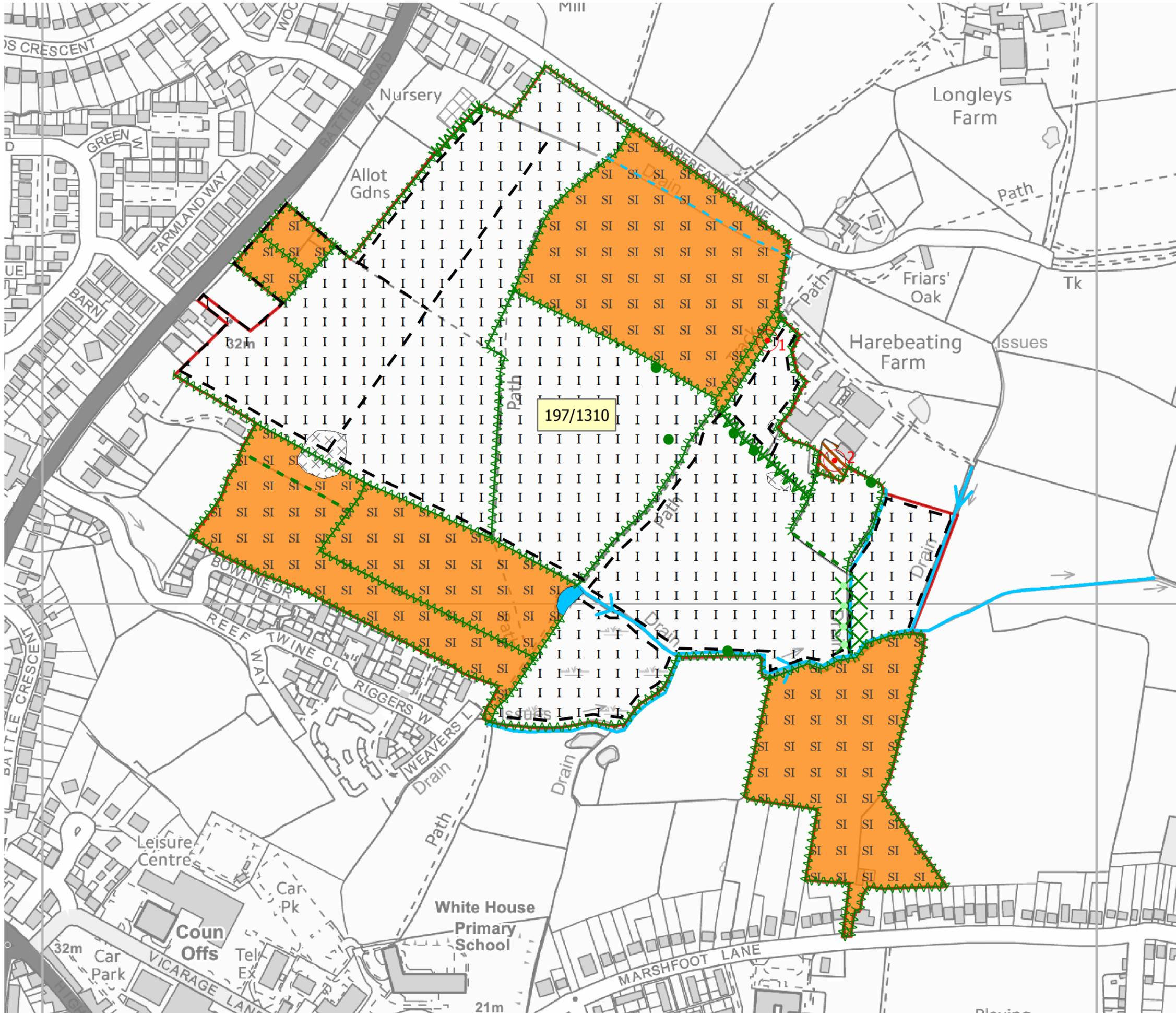
197/1310 Land East of Battle Road, to the rear of the Council Offices, south of Harebeating Lane

- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brash) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

Summary

Likelihood of ecological interest: protected habitats and or species

High	Medium	Low	Negligible



Locations of features indicative only

L16416 Hailsham Area Action Plan
 Hailsham East
 197/1310 Land East of Battle Road,
 to the rear of the Council Offices, south
 of Harebeating Lane

Phase 1 Habitat Survey

Figure 197/1310/E01
 1:3500@A3



September 2016



215/1310 Poplar Cottage Farm, Amberstone

Ecological Assessment

Site overview

The site is situated to the northeast of Hailsham and lies on the edge of open countryside, surrounded by arable land and pasture, the latter habitat including a number of horse paddocks.

The majority of the site, comprising 3 small fields, is currently unmanaged semi-improved neutral grassland surrounded by species-rich hedgerows with mature trees. The lack of management has allowed scrub to colonise by advancing from the hedgerows and spontaneous seedlings in the grassland.

The smallest field in the north-east of the site contains a small area of non-ruderal vegetation and a square brick walled enclosure, now overtaken by scrub.

A natural watercourse forms part of the north-eastern boundary.

The local soils are seasonally wet, slightly acid but base rich loams and clays.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 1km

Sites of local importance and protected and/or notable species: 1km

Ponds and waterbodies: 250m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels Ramsar	550m	SE	Pevensy Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensy Levels Special Area of Conservation (SAC)	550m	SE	Pevensy Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels SSSI	290	SE	Pevensy Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and

215/1310 Poplar Cottage Farm, Amberstone

			invertebrates, in addition to over 1% of the total British population of wintering lapwings.
--	--	--	--

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
CW97 Jarvis's, Nobody's Wood & Park Wood Complex LWS	700m	N	These sites form a large area of mostly ancient and/or semi-natural woodland containing ancient earthworks and have had a long history of varying use and management. The woodlands are mainly oak with a history of coppiced hornbeam, sweet chestnut and hazel, with some areas of ash and alder in calcareous and wetter soils, respectively. The wooded stream valley supports a diversity of bryophytes and ferns.
Notable Road Verge: Amberstone Roundabout	200m	N	Early purple and green winged orchids
Ancient woodland	800m	N	Priority Habitat lies within 1 km of the site
Coastal and floodplain grazing marsh	100m	N	Priority Habitat lies within 1km of the site.
Deciduous woodland	800m	N	Priority Habitat lies adjacent to the site
Good quality semi-improved grassland	500m	E	Priority Habitat lies within 1 km of the site
Traditional orchard	300m	S	Priority Habitat lies within 1 km of the site

Ecological baseline: protected species

A number of protected species have been recorded from within the search radius; refer to **Figure 4.5** protected species mapping for more details of locations.

- Records covered a broad range of species, including some of the following:
- Amphibians and reptiles (slow worm, common lizard, grass snake, great crested newt, common toad)
- Birds (lapwing, Cetti's warbler, swift, tree sparrow)
- Invertebrates (wall, white admiral)
- Mammals (water vole, dormouse, whiskered bat, brown-long eared bat, common pipistrelle, Bechstein's bat)
- Mollusc (large mouthed valve-snail)

Ecological baseline: non-native species

The following non-native species have previously been recorded from within the search radius:

- Plants; cherry laurel, rhododendron.

Setting and green infrastructure

The site, although on the edge of Hailsham, lies in a strongly rural landscape with a coherent green infrastructure network. The adjacent landuse is a mixture of housing and pasture, dissected by hedgerows and tree-lined watercourses. The surrounding landuse in the wider area is a mixture of woodland and pasture, including Park Wood, with further arable land to the north; and to the south and west, housing, a sewage treatment plant and various light industrial premises.

Minor watercourses to the south and immediately to the northeast of the site flow down to the Pevensy Levels.

215/1310 Poplar Cottage Farm, Amberstone

There are no ponds within the search area with the exception of one minor site pond which is entirely overgrown.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The site was entirely unmanaged with the exception of a garden boundary hedge.

Habitat Description

Figure 215/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A2.1 Dense/continuous scrub

Areas of this vegetation type were present close to site boundaries. The scrub featured dense bramble *Rubus fruticosus* and blackthorn *Prunus spinosa* thickets spreading from the hedgerows.

A2.2 Scattered scrub

Both the larger fields on site contained scattered scrub species through large areas of the grassland habitat. The most frequent species were dog rose *Rosa canina* and young oak saplings *Quercus robur*.

B2.2 Semi-improved neutral grassland

The majority of the site consisted of this habitat type, albeit in an entirely unmanaged and rank condition. The sward was typically dominated by common bent *Agrostis capillaris* and Yorkshire-fog *Holcus lanatus*. Other significant contributions were made by tufted hair-grass *Deschampsia cespitosa*, cock's-foot *Dactylis glomerata*, red fescue *Festuca rubra*, timothy *Phleum pratensis* and sweet vernal-grass *Anthoxanthum odoratum*, all of which were either frequent or occasional. Hairy sedge *Carex hirta* was noted as frequent in the north-east part of the site. Rushes *Juncus* sp. were only found in the small north-eastern field.

Among the non-graminoid grassland herbs creeping cinquefoil *Potentilla reptans*, common sorrel *Rumex acetosa*, meadow vetchling *Lathyrus pratensis*, greater bird's-foot trefoil *Lotus pedunculatus* and lesser stitchwort *Stellaria graminea* were all important, being at least frequent. There were also large areas containing a significant quantity of creeping thistle *Cirsium arvense*.

The western of the two large fields generally contained the most diversity and abundance of herbs, especially abundant were meadow vetchling *Lathyrus pratensis* and creeping cinquefoil *Potentilla reptans*. Large clumps of tufted hair-grass *Deschampsia cespitosa* were a feature of this area only. The eastern field contained more creeping thistle *Cirsium arvense* and hoary ragwort *Senecio erucifolius*. Both fields contained frequent specimens of dog rose *Rosa canina* and oak saplings *Quercus robur*. The small field in the north-east was more heterogeneous in character but the grassland portion was species-poor.

C3.2 Tall non-ruderal

Part of the small north-east field was considered to fall within this habitat type. The area was dominated by great willowherb *Epilobium hirsutum* and fleabane *Pulicaria dysenterica* with some ragwort *Senecio jacobeeae*, water figwort *Scropularia auriculata* and Soft Rush *Juncus effusus*.

G1 Standing water

A small pond has become entirely overgrown by scrub and trees.

215/1310 Poplar Cottage Farm, Amberstone

G2 Running water

A minor watercourse, the Magham Sewer, runs northwest to southeast along the northeastern site boundary. The watercourse lies in a deep natural channel lined by trees and scattered scrub including oak *Quercus robur*, alder *Alnus glutinosa* and willows *Salix* sp., and is consequently heavily shaded. No aquatic or emergent species were found except for water figwort *Scrophularia auriculata*.

A number of shade tolerant or woodland species were recorded on the banks including wood false-brome *Brachypodium sylvaticum*, dog's mercury *Mercurialis perennis*, pendulous sedge *Carex pendula*, enchanter's-nightshade *Circaea lutetiana* and male fern *Dryopteris felix-mas*.

J2.1.1 Native species-rich hedge, intact

The western boundary fell into this habitat type. It was dominated by hawthorn *Crateagus monogyna* with other species present as J2.3.1. This hedge lacked mature trees unlike others on the site see below.

J2.3.1 Native species-rich hedge with trees

The majority of boundaries on site were of this type and exhibited no signs of recent management. The most abundant shrub species were hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa*. Also frequent components were elder *Sambucus nigra*, holly *Ilex aquifolium*, ivy *Hedera helix*, bramble *Rubus fruticosus* agg., dog rose *Rosa canina*, sycamore *Acer pseudoplatanus* and field maple *Acer campestre*. Also present were elm *Ulmus* agg. and hazel *Coryllus avellana*.

The majority of the trees were oak *Quercus robur* with some ash *Fraxinus excelsior*.

The ground flora was generally species poor consisting of grasses from the adjacent semi-improved grassland and/or bramble *Rubus fruticosus* and nettle *Urtica dioica* however the boundary running through the centre of the site had bluebell *Hyacinthoides non-scripta*. Also present were bracken *Pteridium aquilinum*, wood dock *Rumex sanguineus* and lords and ladies *Arum maculatum*.

J3.6 Buildings

There is a derelict building on site which has become entirely overgrown by scrub and lacks a roof.

Protected species

The site is considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	The site features species rich hedgerow and grassland habitats. If these habitats are likely to be impacted by development proposals then habitat surveys would be advisable.
<i>Rare and scarce plants</i>	There are on-site records for rare plants (arable margins, woodland). The presence of uncommon plant species in habitats on site cannot be ruled out.
<i>Rare and scarce invertebrates</i>	The site is considered unlikely to support rare or scarce invertebrates.
<i>Amphibians including great crested newts</i>	Some site habitats (scrub, grassland, non-ruderal, hedgerow) are suitable for this group and although the pond on site is

215/1310 Poplar Cottage Farm, Amberstone

	unsuitable for amphibians, a new pond on the adjacent landholding may potentially support them in future years.
<i>Reptiles</i>	The following habitats are suitable for this species group (hedgerow, grassland, scrub, non-ruderal) and presence on site is likely.
<i>Breeding/Wintering birds</i>	The hedgerow and scrub habitats are likely to support nesting birds. The proximity to high quality bird nesting and foraging habitats including a large tract of pasture means that the presence of less common species cannot be ruled out. The site is not considered likely to support significant populations of wintering birds.
<i>Dormouse</i>	The hedgerow habitats have potential to support dormouse.
<i>Aquatic mammals including water vole and otter</i>	There minor watercourse has some potential for water vole; the presence of otter is unlikely but cannot be ruled out.
<i>Terrestrial mammals including badger</i>	No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use cannot be ruled out.
<i>Bats (roosting potential)</i>	None of the site trees are of sufficient size, or age, or have structural features which are suitable for bats. However, detailed bat inspections have not been undertaken and presence cannot be ruled out. The building on site is unsuited to use by roosting bats.
<i>Bats (foraging and commuting)</i>	The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	European	Unknown		
<i>Sites of national importance</i>	High	National	Unknown		
<i>Sites of local importance</i>	Medium	County	Minor Adverse	Probable	
<i>Habitats</i>	Lower	Parish	Unknown		
<i>Veteran trees</i>	N/A	N/A			

215/1310 Poplar Cottage Farm, Amberstone

<i>Plants</i>	Unknown	Unknown			
<i>Invertebrates</i>	N/A	N/A			
<i>Amphibians including great crested newts</i>	Unknown	Unknown			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			
<i>Aquatic mammals including water voles and otters</i>	Unknown	Unknown			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Figure 215/1310/E03 Ecological Opportunities and Constraints Plan summarises potential or known ecological constraints at the site.

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	✓
Hedgerow survey	May to October	✓
Rare plant survey	April to September (depending upon species)	✓
Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	✓
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	X
Dormouse survey	April to November	✓
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	✓
Otter survey	Year round (Spring is optimal)	✓
Bat inspection survey (trees)	Year round (Winter is optimal)	✓
Bat inspection survey (buildings)	Year round	X
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features should be protected in the built scheme.
- All mature trees should be retained in-situ.
- The pond should be retained.

215/1310 Poplar Cottage Farm, Amberstone

- Retention of areas of scrub and trees, and linear features such as the watercourse, and hedgerows wherever possible throughout the site.

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Herras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped. Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures should regular monitoring record a decline in habitat quality or quantity.

Potential enhancements

A number of enhancement measures could be employed in order to increase the value of the site to wildlife, including the following:

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Retention and enhancement of the pond on site through de-silting and removal of overhanging woody vegetation.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (woodland, scrub etc).

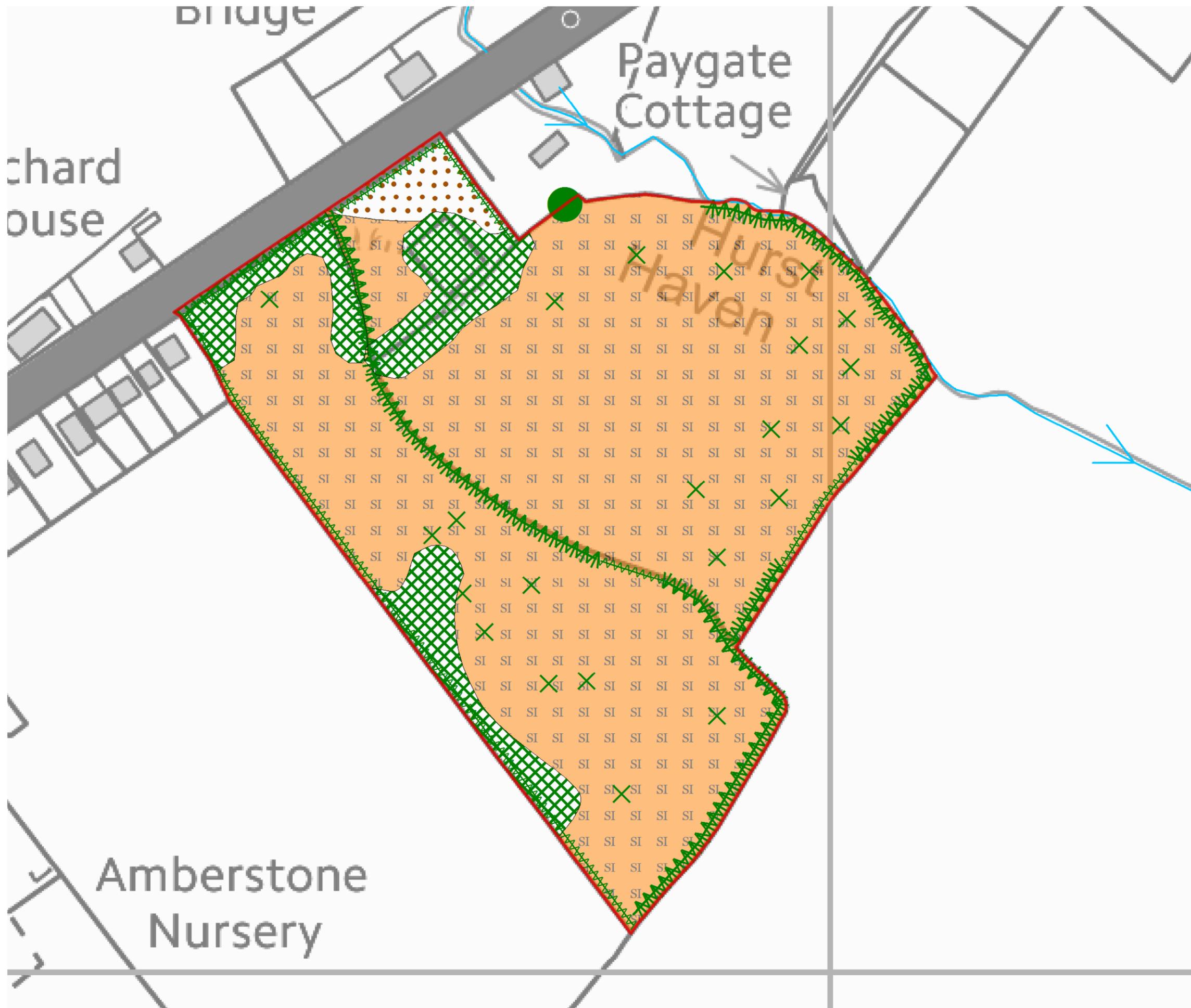
215/1310 Poplar Cottage Farm, Amberstone

- Supplementary planting in gaps in tree and hedgelines will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of any proposed SUDs features using native wetland plants, and trees, shrubs etc.
- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brash) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

Summary

Likelihood of ecological interest: protected habitats and or species

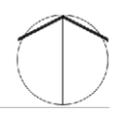
High	Medium	Low	Negligible



L16416 Hailsham Area Action Plan
 Hailsham East
 215/1310 Poplar Cottage farm, Amberstone

Phase 1 Habitat Survey

Figure 215/1310/E01
 1:1250@A3



September 2016



308/1310 Amberstone Grange, Amberstone

Ecological Assessment

Site overview

The site is situated to the northeast of Hailsham and lies on the edge of open countryside, surrounded by arable land and pasture, the latter habitat including a number of horse paddocks.

During ground survey the majority of site was found to consist of semi-improved neutral grassland managed for hay-cutting. The southeast corner contained a greater proportion of Rushes. This habitat, however, had recently been reduced in area by the construction of a water-body resulting in a new area of standing water and significant areas of bare ground, colonised by ephemeral species. Species-rich hedges formed the northern and eastern boundaries and were regularly cut. A natural watercourse heavily shaded by trees and scrub formed the southern boundary. Small areas of tall ruderal vegetation, a dry ditch, and hardstanding were present in the east.

The local soils are slightly acid loams and clays with impeded drainage.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 1km

Sites of local importance and protected and/or notable species: 1km

Ponds and waterbodies: 250m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels Ramsar	325m	S	Pevensy Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensy Levels Special Area of Conservation (SAC)	325m	S	Pevensy Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Pevensy Levels SSSI	325m	S	Pevensy Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1% of the total British population of wintering lapwings.
---------------------	------	---	---

308/1310 Amberstone Grange, Amberstone

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
CW97 Jarvis's, Nobody's Wood & Park Wood Complex LWS	425m	N	These sites form a large area of mostly ancient and/or semi-natural woodland containing ancient earthworks and have had a long history of varying use and management. The woodlands are mainly oak with a history of coppiced hornbeam, sweet chestnut and hazel, with some areas of ash and alder in calcareous and wetter soils, respectively. The wooded stream valley supports a diversity of bryophytes and ferns.
Amberstone Roundabout Notable Road Verge	50m	NW	Supports early purple orchid, green winged orchid, oxeye daisy and other meadow flowers.
Coastal and floodplain grazing marsh Priority Habitat	On site		Priority Habitat found on site and within 1km of the site.
Ancient Woodland	950m	NW	Two parcels of ancient woodland named Hellingly Hospital 2 and Hellingly Hospital 3 lie within 1km of the site.

Ecological baseline: protected species

Records covered a broad range of species, including some of the following:

- Plants (hairlike pondweed, greater yellow-cress)
- Amphibians and reptiles (great crested newt, slow worm, common lizard)
- Birds (lapwing, Cetti's warbler, lesser spotted woodpecker, tree sparrow)
- Invertebrates (white admiral and wall butterflies; large-mouthed valve snail)
- Mammals (hedgehog, water vole, dormouse, whiskered bat, Bechstein's bat, Natterer's bat, brown-long eared bat, common pipistrelle, soprano pipistrelle)
- Fish (European eel)

Refer to **Figure 4.5** protected species mapping for more details of locations.

Ecological baseline: non-native species

The following non-native species have previously been recorded from within the search radius:

- Plants; winter heliotrope, cherry laurel, hybrid bluebell, Canadian waterweed, Nuttall's waterweed, floating pennywort

Setting and green infrastructure

The site, which is close to the edge of Hailsham, lies in a strongly rural landscape with a coherent green infrastructure network. The adjacent landuse is a mixture of housing, a farm and pasture, dissected by hedgerows and tree-lined watercourses. The surrounding landuse in the wider area is a mixture of woodland

308/1310 Amberstone Grange, Amberstone

and pasture, including Park Wood, with arable land to the northwest; and to the northeast, the village of Magham Down.

A minor watercourse on the southwestern boundary flows down to the Pevensy Levels.

There are several ponds within the search area: one minor pond on an adjacent landholding which is entirely overgrown, 2 ponds at Amberstone Grange Farm and several further waterbodies in Magham Down. A new artificial pond has recently been created on the site itself.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The grassed areas of the site are regularly grazed improved turf. The associated boundary hedgerows are kept closely cut.

Habitat Description

Figure 308/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A2.2 Scattered scrub

Broadleaved trees and scattered scrub were present lining the watercourse which ran along the southwest boundary. The scrub component included hawthorn *Crateagus monogyna*, hazel *Corylus avellana*, willows *Salix* spp. and ivy *Hedera helix*.

A3.1 Scattered broadleaved trees

Broadleaved trees and scattered scrub were present lining the watercourse which ran along the southwest boundary. The trees included mature oak *Quercus robur*, ash *Fraxinus excelsior* and sycamore *Acer pseudoplatanus*.

B2.2 Semi-improved neutral grassland

The majority of the site fell into this habitat type. The central part of the field had been recently cut and bailed for hay, however the margins remained uncut, allowing the plant species to be more easily identified.

The sward was typically dominated by Yorkshire-fog *Holcus lanatus* with abundant sweet vernal-grass *Anthoxanthum odoratum*. Other frequently occurring grass species were common bent *Agrostis capillaris*, crested dog'-tail *Cynosurus cristatus*, meadow barley *Hordeum secalinum*, rough meadow -grass *Poa trivialis*, perennial rye-grass *Lolium perenne* and marsh fox-tail *Alopecurus geniculatus*.

Among the non-graminoid herbs greater bird's-foot trefoil *Lotus pedunculatus* and red clover *Trifolium pratense* were the most abundant. Also present were creeping thistle *Cirsium arvense*, lesser stitchwort *Stellaria graminea*, ground ivy *Hedera helix*, lesser trefoil *Trifolium dubium*, marsh cudweed *Gnathaliium uliginosum*, and common vetch *Vicia sativa*.

B5 Marshy grassland

A relatively small area of the field in its southeast corner was allocated to this habitat type being dominated by soft rush *Juncus effusus* and compact rush *Juncus conglomeratus*.

C3.1 Tall ruderal

A small patch of this habitat type was present on a mound of soil close to the eastern boundary of the site. It was dominated by nettle *Urtica dioica* with fat-hen *Chenopodium album*, red goosefoot *Chenopodium rubrum*,

308/1310 Amberstone Grange, Amberstone

black nightshade *Solanum nigrum* and docks *Rumex spp.*. A single large plant of the alien species apple-of-Peru *Nicandra physalodes* was also present.

G1 Standing water

An artificial water body had been recently constructed in the south of the site. The edges of the water had been naturally colonised by marginal species including jointed rush *Juncus articulatus*, compact rush *Juncus conglomeratus*, and reedmace *Typha latifolia*.

G2 Running water

A minor watercourse, the Magham Sewer ran northwest to southeast along the southwestern site boundary. The watercourse was lined by trees and scattered scrub, and was consequently shaded in these areas, with little aquatic vegetation. However, a number of woodland/ shade tolerant species were recorded on the banks including: pendulous sedge *Carex pendula*, hedge woundwort *Stachys sylvatica*, wood dock *Rumex sanguineas*, Wood false-brome *Brachypodium silvaticum*, wood avens *Geum urbanum*, enchanter's nightshade *Circaea lutetiana*, and giant fescue *Schedonorus giganteus*.

J1.3 Ephemeral/short perennial

The recent construction of the water body had evidently involved considerable ground movement and disturbance which had resulted in a large area of bare ground surrounding it. The area had become colonised by a variety of species able to take advantage of disturbed ground. These included: pale persicaria *Persicaria lapathifolia*, scentless mayweed *Tripleurospermum inodorum*, black medick *Medicago lupulina*, Black bindweed *Fallopia convolvulus*, thyme-leaved speedwell *Veronica serpyllifolium*, many-seeded goosefoot *Chenopodium polyspermum*, and scarlet pimpernel *Anagallis arvensis*.

J2.1.1 Native species-rich hedge, intact

The northern and western boundaries featured hedgerows of this type, managed by regular cutting. The dominant species was hawthorn *Crateagus monogyna*. Other frequent shrub and woody species included Ivy *Hedera helix*, bramble *Rubus fruticosus* agg., dog rose *Rosa canina* and blackthorn *Prunus spinosa*. Less frequent components included holly *Ilex aquifolium*, hazel *Corylus avellana* and wild plum *Prunus domestica*. The ground flora was species poor and included: hogweed *Heracleum sphondylium*, nettle *Urtica dioica* and great willowherb *Epilobium hirsutum*. Bracken *Pteridium aquilinum* was present in several sections.

J2.4 Fence

Fencing is present along many of the boundaries and also forms some internal boundaries. The watercourse is similarly separated from the paddocks by fencing.

J2.6 Dry ditch

A dry ditch was present beside the hedge. There was no standing or flowing water however species of damper conditions were present including: hemlock water-dropwort *Oenanthe crocata*, gypsywort *Lycopus europaeus*, soft rush *Juncus effusus*, and water figwort *Scrophularia auriculata*.

J4 Hardstanding and bare ground

An area of hardstanding was present beside the eastern boundary.

Target Notes

1	New pond with associated bare ground and ephemeral vegetation
2	Area of grass near pond not mown for hay as in other parts of site
3	Unmanaged grassland with <i>Juncus</i> patches

308/1310 Amberstone Grange, Amberstone

Protected species

The site is known to support, or considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	The site features species rich hedgerow and grassland habitats. If these habitats are likely to be impacted by development proposals then habitat surveys would be advisable.
<i>Rare and scarce plants</i>	There are few records for rare plants within 1km of the site. The presence of uncommon plant species in the species rich grassland areas cannot be ruled out.
<i>Rare and scarce invertebrates</i>	Only a small number of invertebrate records were returned with the data search. The site is considered unlikely to support rare or scarce invertebrates.
<i>Amphibians including great crested newts</i>	A relatively large number of great crested newt records exist within 1km of the site. Some site habitats (scrub, grassland, marsh, ruderal, hedgerow) are suitable for this group and there are a number of ponds in the local area, including on site. The presence of amphibians, including great crested newt cannot be ruled out.
<i>Reptiles</i>	Common lizard and slow worm records were returned with the data search. The following habitats are suitable for this species group (hedgerow, marsh, woodland, grassland) and presence on site is likely.
<i>Breeding/Wintering birds</i>	The hedgerow and woodland habitats are likely to support nesting birds. Nesting birds may also use the site buildings where access to structures is possible. The proximity to high quality bird nesting and foraging habitats including a large tract of pasture means that the presence of less common species cannot be ruled out. The site is not considered likely to support significant populations of wintering birds
<i>Dormouse</i>	There are records for dormouse within 1km of the site. The woodland and hedgerow habitats have potential to support dormouse.

308/1310 Amberstone Grange, Amberstone

<i>Aquatic mammals including water vole and otter</i>	There minor watercourse has some potential for water vole; the presence of otter is unlikely but cannot be ruled out.
<i>Terrestrial mammals including badger</i>	No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use cannot be ruled out.
<i>Bats (roosting potential)</i>	None of the site trees are of sufficient size, or age, or have structural features which are suitable for bats. However, detailed bat inspections have not been undertaken and presence cannot be ruled out.
<i>Bats (foraging and commuting)</i>	The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	European	Unknown		
<i>Sites of national importance</i>	High	National	Unknown		
<i>Sites of local importance</i>	Medium	County	Unknown		
<i>Habitats</i>	Lower	Parish	Moderate Adverse	Probable	
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	Unknown	Unknown			
<i>Invertebrates</i>	Unknown	Unknown			
<i>Amphibians including great crested newts</i>	Unknown	Unknown			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			
<i>Aquatic mammals including water voles and otters</i>	N/A	N/A			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

308/1310 Amberstone Grange, Amberstone

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	✓
Hedgerow survey	May to October	✓
Rare plant survey	April to September (depending upon species)	✓
Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	✓
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	X
Dormouse survey	April to November	✓
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	✓
Otter survey	Year round (Spring is optimal)	✓
Bat inspection survey (trees)	Year round (Winter is optimal)	✓
Bat inspection survey (buildings)	Year round	X
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features including scrub and woodland at the periphery of the site should be protected in the built scheme.
- All mature trees should be retained in-situ.
- The pond should be retained.
- Retention of areas of scrub and trees, and linear features such as hedgerows wherever possible throughout the site.

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Heras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.

308/1310 Amberstone Grange, Amberstone

- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped. Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures and regular monitoring to record a decline in habitat quality or quantity.

Potential enhancements

A number of enhancement measures could be employed to increase the value of the site to wildlife, including the following:

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Retention and enhancement of the pond on site.
- Creation of a new wildlife pond in a secluded corner of the site.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- Enhancements to the retained woodland habitat, including thinning out non-native deciduous tree species, and replacement planting with native species.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (woodland, hedgerow etc).
- Supplementary planting in gaps in tree and hedgelines will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of any proposed SUDs features using native wetland plants, and trees, shrubs etc.
- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brush) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

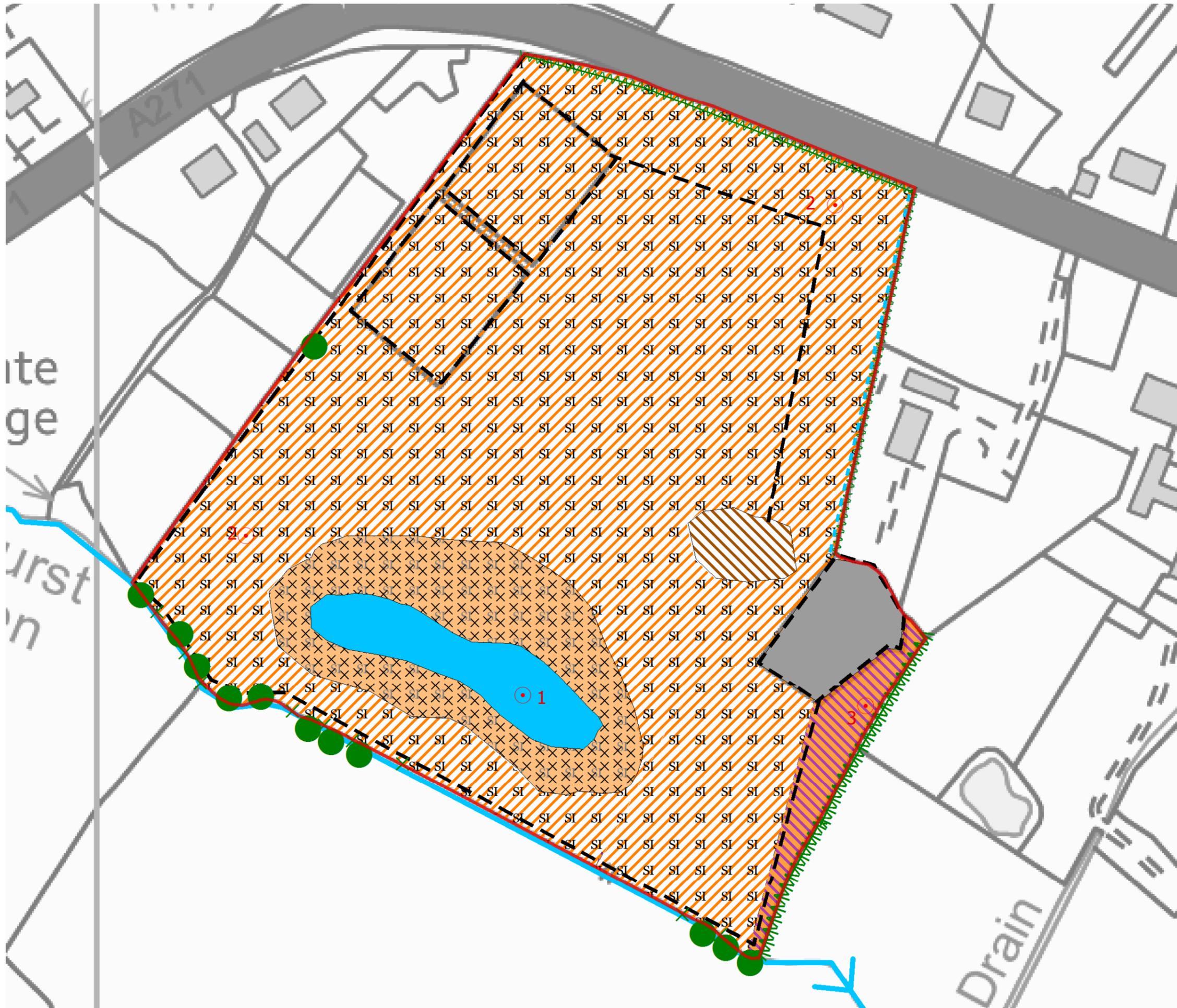
308/1310 Amberstone Grange, Amberstone

Summary

Likelihood of ecological interest: protected habitats and or species

High	Medium	Low	Negligible

Locations of features indicative only

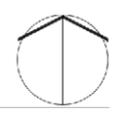


L16416 Hailsham Area Action Plan
Hailsham East
308/1310 Amberstone Grange, Amberstone

Phase 1 Habitat Survey

Figure 308/1310/E01
1:1250@A3

September 2016



379/1310 Part of Marshfoot Farm and part of Old Marshfoot Farm

Ecological Assessment

Site overview

The site is situated to the east of Hailsham and lies in a largely rural area, with pasture, including grazing marsh, to the east and north, and the urban edge of Hailsham to the west.

The main land use on site is pasture with some fields being mown for hay, the fields being dissected by a network of hedgerows

The local soils are seasonally wet, slightly acid but base rich loams and clays.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 2km

Sites of local importance and protected and/or notable species: 2km

Ponds and waterbodies: 500m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels Ramsar	Adjacent	E	Pevensey Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensey Levels Special Area of Conservation (SAC)	Adjacent	E	Pevensey Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels SSSI	Adjacent	E	Pevensey Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1% of the total British population of wintering lapwings.

379/1310 Part of Marshfoot Farm and part of Old Marshfoot Farm

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Amberstone Roundabout Notable Road Verge	1.8km	N	Supports early purple orchid, green winged orchid, oxeye daisy and other meadow flowers.
Coastal and floodplain grazing marsh Priority Habitat	On site		This habitat type is found on site and extensively within the surrounding landscape, including Pevensey Levels.
Deciduous woodland Priority Habitat	500m	SW	A number of deciduous woodlands lie within 2km of the site, with the nearest being 500m to the south west.
Traditional orchard Priority Habitat	500m	W	A number of traditional orchards lie within 2km of the site, with the nearest being 500m to the west.

Ecological baseline: protected species

Records covered a broad range of species, including some of the following:

- Plants (three-lobed crowfoot, tubular water-dropwort, Welsh poppy, lesser quaking-grass, hairlike pondweed, sharp-leaved pondweed, rootless duckweed, golden dock, corn parsley, frogbit, bladderwort, greater yellow-cress)
- Algae (clustered stonewort)
- Amphibians and reptiles (great crested newt, slow worm, common lizard, grass snake)
- Birds (gadwall, swift, bittern, Cetti's warbler, little ringed plover, raven, lesser spotted woodpecker, little egret, peregrine, hobby, red kite, yellow wagtail, tree sparrow, redshank, barn owl, lapwing)
- Invertebrates (wall and small heath butterflies; many moth species, including cinnabar, mottled rustic, lackey and buff ermine; wasp spider; a number of beetle species; variable damselfly; girdled mining bee; Roesel's bush-cricket; the fly *Volucella inanis*; the shining ram's-horn, little whirlpool ram's-horn snail, the pea mussel *Pisidium pseudosphaerium* and large-mouthed valve snail;)
- Mammals (hedgehog, water vole, dormouse, whiskered bat, Bechstein's bat, Natterer's bat, noctule bat, brown-long eared bat, common pipistrelle, soprano pipistrelle)
- Fish (European eel)

Refer to **Figure M04** protected species mapping for more details of locations

Ecological baseline: non-native species

The following non-native species have previously been recorded from within the search radius:

- Plants; floating pennywort, cherry laurel, Himalayan cotoneaster, Japanese rose, three-cornered garlic, New Zealand pigmyweed, giant knotweed, parrot's feather
- Invertebrates; harlequin ladybird, horse chestnut leaf-miner
- Mammals: American mink

Setting and green infrastructure

The site lies in a strongly rural landscape, albeit on the edge of urban Hailsham, on slightly higher ground amidst the grazing marshes of the Pevensey Levels. Green infrastructure components within the local

379/1310 Part of Marshfoot Farm and part of Old Marshfoot Farm

landscape therefore include both hedgerows, which are a feature of the higher ground to the west, and marsh ditches and other minor watercourses to the east. There is no woodland in the local area.

There are an estimated 5 ponds within the search area.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The majority of the land is occupied by grassland, which is mown for hay or grazed. Internal and boundary hedgerows are kept closely cut.

Habitat Description

Figure 379/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

B2.2 Semi-improved neutral grassland

The central-western field adjacent to the urban edge of Hailsham was considered to contain a greater number of species and was therefore allocated to the semi-improved grassland category. A limited range of grasses were found although perennial rye-grass *Lolium perenne* remained dominant. The following herbs were also frequent in this field: meadow vetchling *Lathyrus pratensis*, tufted vetch *Vicia cracca*, common sorrel *Rumex acetosa*, and common bird's-foot trefoil *Lotus corniculatus*.

B4 Improved grassland

Improved grassland was the main habitat present on the site. The sward was species poor, being dominated by perennial rye-grass *Lolium perenne*. Associated herbs were few, but included red clover *Trifolium pratense*, white clover *Trifolium repens*, and meadow buttercup *Ranunculus acris*.

G1 Standing water

The east of the site merges with the Pevensey Levels and the site boundary is a water-filled ditch for part of its length. This and other watercourses on the site supported a moderately interesting aquatic flora. A number of marginal species were recorded including common reed *Phragmites australis*, reed sweet-grass *Glyceria maxima*, water-plantain *Alisma plantago-aquatica*, and branched bur-reed *Sparganium erectum*. Several fully aquatic rooted species were found including curled pondweed *Potamogeton crispus* and water-starwort *Callitriche* sp. The water surface was covered in a dense layer of duckweeds including: fat duckweed *Lemna gibba*, common duckweed *Lemna minor*, and greater duckweed *Spirodela polyrhiza*. Frogbit *Hydrocharis morsus-ranae* was also present.

J1.2 Amenity grassland

Small areas of amenity grassland are associated with the farm buildings. The sward was dominated by perennial rye-grass *Lolium perenne*. A range of herbs typical of closely mown grasslands were present including daisy *Bellis perennis*, greater plantain *Plantago major*, and dandelion *Taraxacum* agg.

J2.1.1 Native species-rich hedge, intact

The majority of boundaries on the site could be allocated to this category. The hedges were all well maintained, stock proof consistent with the areas use as pasture and supported by fences. The dominant species was hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa*. Also present, although less abundant, were honeysuckle *Lonicera periclymenum*, elm *Ulmus* agg., dog rose *Rosa canina*, and field maple *Acer campestre*.

J2.3.1 Native species-rich hedge with trees

379/1310 Part of Marshfoot Farm and part of Old Marshfoot Farm

The hedges in the northeast and southwest bordering urban Hailsham of the site could be allocated to this category. The species composition was as for Native species rich hedge, intact although there were mature specimens of both oak *Quercus robur* and ash *Fraxinus excelsior*.

J2.4 Fence

Most of the hedged boundaries were supported by wire fences.

J3.6 Buildings

There were a number of buildings associated with the farmstead on the site. The majority were of recent construction. Rooves were generally flat or slightly pitched and of asbestos or corrugated iron construction.

J4 Hardstanding and bare ground

Extensive areas of concrete and other hard surfaces were present in association with the farm buildings.

Protected species

The site is known to support, or considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	The site features species rich hedgerow and ditch systems. If these habitats are likely to be impacted by development proposals then habitat surveys would be advisable.
<i>Rare and scarce plants</i>	A wide variety of rare plants, including aquatic weeds, were returned with the data search. The presence of uncommon plant species within the ditch network is likely. Some species of local interest were noted during the Phase 1 survey.
<i>Rare and scarce invertebrates</i>	A large variety of invertebrate species, including aquatic molluscs, have been recorded within 2km of the site. The site (ditch system) is considered likely to support rare or scarce invertebrates.
<i>Amphibians including great crested newts</i>	A large number of great crested newt records exist within 2km of the site. Some site habitats (grassland, hedgerow) are suitable for this group and there are a number of ponds in the local area. The presence of amphibians, including great crested newt cannot be ruled out.
<i>Reptiles</i>	The data search returned records for slow worm, common lizard and grass snake within 2km of the site. The following habitats are suitable for this species group (hedgerow, grassland) and presence on site is likely.

379/1310 Part of Marshfoot Farm and part of Old Marshfoot Farm

<i>Breeding/Wintering birds</i>	<p>The hedgerow habitats are likely to support nesting birds. Nesting birds may also use the site buildings where access to structures is possible.</p> <p>The proximity to high quality bird nesting and foraging habitats including a large tract of and pasture means that the presence of less common species cannot be ruled out.</p> <p>The site is may be used by populations of wintering birds.</p>
<i>Dormouse</i>	<p>There are records of dormouse within 2km of the site.</p> <p>The hedgerow habitats have potential to support dormouse.</p>
<i>Aquatic mammals including water vole and otter</i>	<p>Water vole has been recorded within 2km of the site.</p> <p>There are habitats on site which appear suitable for these species.</p>
<i>Terrestrial mammals including badger</i>	<p>No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use cannot be ruled out.</p>
<i>Bats (roosting potential)</i>	<p>None of the site trees are of sufficient size, or age, or have structural features which are suitable for bats. However, detailed bat inspections have not been undertaken and presence cannot be ruled out.</p> <p>The buildings on site have some potential to support roosting bats, although the single-skin structures are unlikely to be used by a significant population of roosting bats as tend not to offer sufficient insulation. The local landscape features a number of habitats which are highly suited to bat foraging use.</p>
<i>Bats (foraging and commuting)</i>	<p>The site is likely to offer bat foraging opportunity.</p>

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	European	Major Adverse	Possible	Major Adverse
<i>Sites of national importance</i>	High	National	Moderate Adverse	Possible	Moderate Adverse
<i>Sites of local importance</i>	Medium	County	Moderate Adverse	Probable	Moderate Adverse
<i>Habitats</i>	Lower	District	Moderate Adverse	Probable	Minor Adverse
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	Unknown	Unknown			
<i>Invertebrates</i>	Unknown	Unknown			

379/1310 Part of Marshfoot Farm and part of Old Marshfoot Farm

<i>Amphibians including great crested newts</i>	Unknown	Unknown			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			
<i>Aquatic mammals including water voles and otters</i>	Unknown	Unknown			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	✓
Hedgerow survey	May to October	✓
Rare plant survey	April to September (depending upon species)	✓
Invertebrate survey	April to September (depending upon species)	✓
Great crested newt survey	March to June	✓
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	✓
Dormouse survey	April to November	✓
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	✓
Otter survey	Year round (Spring is optimal)	✓
Bat inspection survey (trees)	Year round (Winter is optimal)	✓
Bat inspection survey (buildings)	Year round	✓
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features including scrub and woodland at the periphery of the site should be protected in the built scheme.
- All mature trees should be retained in-situ.
- The ditch system should be retained.
- Retention of areas of scrub and trees, and linear features such as hedgerows wherever possible throughout the site.

379/1310 Part of Marshfoot Farm and part of Old Marshfoot Farm

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Heras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped.
- Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures and regular monitoring to record a decline in habitat quality or quantity.

Potential enhancements

A number of potential enhancements could be employed at this site in order to improve habitats for wildlife, including:

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Creation of new ditch sections if possible.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (hedgerow, wetland habitats).
- Supplementary planting in gaps in tree and hedgelines will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of any proposed SUDs features using native wetland plants, and trees, shrubs etc.

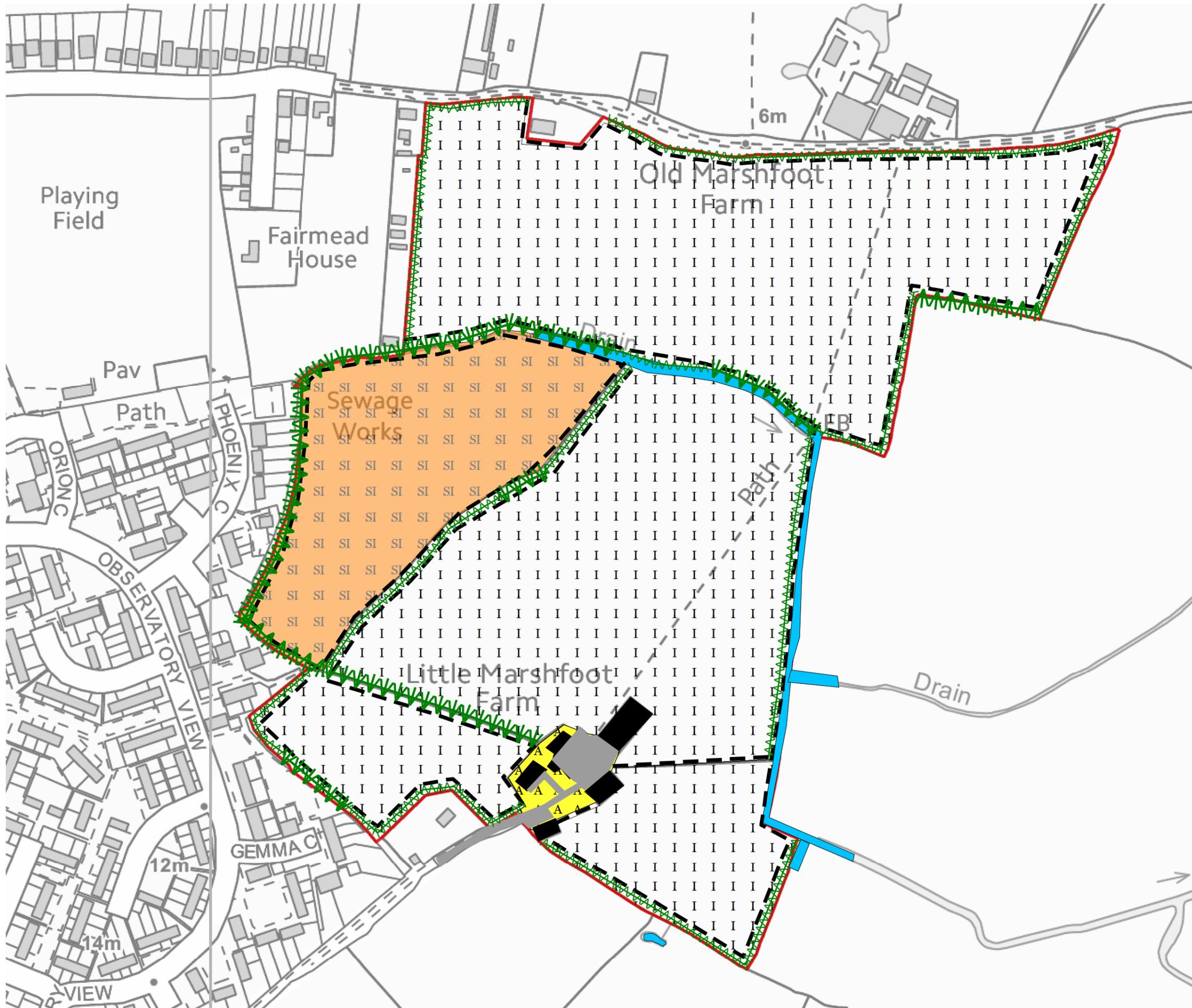
379/1310 Part of Marshfoot Farm and part of Old Marshfoot Farm

- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brash) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

Summary

Likelihood of ecological interest: protected habitats and or species

High	Medium	Low	Negligible



L16416 Hailsham Area Action Plan
 Hailsham East
 379/1310 Part of Marshfoot Farm and part of
 Old Marshfoot Farm

Phase 1 Habitat Survey

Figure 379/1310/E01
 1:2500@A3

September 2016



454/1310 Land south of Howard Close

Ecological Assessment

Site overview

The site is situated immediately to the south east of Hailsham in an area with a mixture of semi-industrial usages, housing, young woodland and pasture, being connected to the surrounding countryside through a network of hedgerows.

The site supported young deciduous woodland, especially towards the south, east and west boundaries. The north and centre of the site was mainly dense scrub with scattered trees but and some small open areas of semi-improved neutral grassland.

The local soils are seasonally wet, slightly acid but base rich loams and clays.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 1km

Sites of local importance and protected and/or notable species: 500m

Ponds and waterbodies: 250m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels Ramsar	550m	SE	Pevensy Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensy Levels Special Area of Conservation (SAC)	550m	SE	Pevensy Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Pevensy Levels Site of Special Scientific Interest (SSSI)	550m	SE	Pevensy Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1% of the total British population of wintering lapwings.
---	------	----	---

454/1310 Land south of Howard Close

Sites of local importance

Coastal and floodplain grazing marsh	100m	N	Priority Habitat lies within 1km of the site.
Deciduous woodland	Site	-	Site partly comprises Priority Habitat young deciduous woodland

Ecological baseline: protected species

Relatively few records of protected species were returned within the search radius; refer to **Figure 4.5** protected species mapping for more details of locations.

The majority of records were of slow worm. Other species recorded include grass snake, common pipistrelle, soprano pipistrelle, red kite, bullhead and lesser quaking-grass. Moth species recorded include green-brindled crescent, mottled rustic, rustic and red-green carpet.

Ecological baseline: non-native species

The only record of non-native species within the search radius was of harlequin ladybird.

Setting and green infrastructure

The site lies in a rural landscape on the edge of Hailsham and has a coherent green infrastructure network comprised of hedgerows and belts of scrubby woodland, and also a watercourse which flows from urban Hailsham southeast to the Pevensey Levels. These effectively link the site with the wider countryside despite a variety of local landuses including housing, a sewage treatment plant and various light industrial premises.

There no ponds within the search area.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The site is unmanaged.

Habitat Description

Figure 454/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A1.1.1 Broadleaved semi-natural woodland

The site included an area of semi-mature woodland dominated by ash *Fraxinus excelsior* and oak *Quercus robur* with some sycamore *Acer pseudoplatanus* and cherry plum *Prunus cerasifera*. The understorey was dominated by bramble *Rubus fruticosus* agg. with some blackthorn *Prunus spinosa*, dog rose *Rosa canina*, ivy *Hedera helix* and hazel *Corylus avellana*. The ground flora was poor but included nettle *Urtica dioica*, wood dock *Rumex sanguineas*, wood avens *Geum urbanum*, false brome *Brachypodium sylvaticum*, lord's-and-ladies *Arum maculatum*, and pendulous sedge *Carex pendula*. The woodland was evidently of natural origin and appeared to have developed over the past 20-25 years however there were some older trees, especially near the site boundaries and watercourse.

454/1310 Land south of Howard Close

A2.1 Dense/continuous scrub

The central part of the site featured dense bramble *Rubus fruticosus* agg. dominated scrub with scattered broadleaved trees see below. No other species made a significant contribution to the scrub although hawthorn *Crataegus monogyna*, Japanese honeysuckle *Lonicera japonica* and Henry's honeysuckle *Lonicera henryi* were present in this habitat. The latter two are escapes from adjacent gardens.

A3.1 Scattered broadleaved trees

A number of scattered trees were present throughout the non-woodland i.e. scrub and grassland parts of the site. These were immature or semi-mature specimens of oak *Quercus robur*, ash *Fraxinus excelsior* and cherry plum *Prunus cerasifera*. Mature oaks are present along the stream corridor.

B2.2 Semi-improved neutral grassland

Small areas of this habitat were found between the blocks of dense bramble *Rubus fruticosus* scrub and between the scrub and woodland. The sward was probably maintained by rabbit grazing and was dominated by Yorkshire-fog *Holcus lanatus* and common bent *Agrostis capillaris*. Other graminoid species present included perennial rye-grass *Lolium perenne*, cock's-foot *Dactylis glomerata*, hairy sedge *Carex hirta*, and timothy *Phleum pratense*. Also present were common knapweed *Centaurea nigra*, creeping cinquefoil *Potentilla reptans*, bird's-foot Trefoil *Lotus corniculatus*, yarrow *Achillea millefolium*, meadow buttercup *Ranunculus acris*, and burnet-saxifrage *Pimpinella saxifraga*.

G2 Running water

A minor watercourse in a natural channel flows along the southern boundary of the site. Bankside species included bluebell *Hyacinthoides non-scripta* and dog's-mercury *Mercurialis perennis*.

Protected species

The site is considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	The site features species rich grassland. If these habitats are likely to be impacted by development proposals then habitat surveys would be advisable.
<i>Rare and scarce plants</i>	There was one record for lesser quaking-grass returned with the data search and burnet-saxifrage was also found during the Phase 1 survey. The presence of uncommon plant species cannot be ruled out.
<i>Rare and scarce invertebrates</i>	The site is considered unlikely to support rare or scarce invertebrates.
<i>Amphibians including great crested newts</i>	Some site habitats are suitable for this group (woodland and grassland) but there are no ponds in the local area. The presence of amphibians, including great crested newt cannot be ruled out but is unlikely.

454/1310 Land south of Howard Close

<i>Reptiles</i>	The following habitats are suitable for this species group (woodland, grassland) and presence on site is likely.
<i>Breeding/Wintering birds</i>	The woodland habitats are likely to support nesting birds. The proximity to high quality bird nesting and foraging habitats including woodland and pasture means that the presence of less common species cannot be ruled out. The site is not considered likely to support significant populations of wintering birds.
<i>Dormouse</i>	There are no records of dormouse within the search radius. However, the woodland and hedgerow habitats have potential to support dormouse.
<i>Aquatic mammals including water vole and otter</i>	The minor watercourse has some potential to support these species.
<i>Terrestrial mammals including badger</i>	No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use cannot be ruled out.
<i>Bats (roosting potential)</i>	None of the site trees are of sufficient size, or age, or have structural features which are suitable for bats. However, detailed bat inspections have not been undertaken and presence cannot be ruled out. The buildings on site are unlikely to be used by a significant population of roosting bats as single-skin structures tend not to offer sufficient insulation. However, the local landscape features a number of habitats which are highly suited to bat foraging use and detailed bat inspections have not been undertaken and so the existence of an on-site roost cannot be ruled out.
<i>Bats (foraging and commuting)</i>	The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principle has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	European	Unknown		
<i>Sites of national importance</i>	High	National	Unknown		
<i>Sites of local importance</i>	Lower	District	Moderate Adverse	Probable	

454/1310 Land south of Howard Close

<i>Habitats</i>	Lower	District	Moderate Adverse	Probable	
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	Unknown	Unknown			
<i>Invertebrates</i>	N/A	N/A			
<i>Amphibians including great crested newts</i>	N/A	N/A			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			
<i>Aquatic mammals including water voles and otters</i>	Unknown	Unknown			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	✓
Hedgerow survey	May to October	X
Rare plant survey	April to September (depending upon species)	✓
Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	X
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	X
Dormouse survey	April to November	✓
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	✓
Otter survey	Year round (Spring is optimal)	✓
Bat inspection survey (trees)	Year round (Winter is optimal)	✓
Bat inspection survey (buildings)	Year round	X
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features including scrub and woodland at the periphery of the site should be protected in the built scheme.
- All mature trees should be retained in-situ.

454/1310 Land south of Howard Close

- Retention of areas of denser woodland, scrub and trees and grassland, and linear features such as the watercourse wherever possible throughout the site.

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Heras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped.
- Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures and regular monitoring to record a decline in habitat quality or quantity.

Potential enhancements

A number of enhancement measures could be employed in order to increase the value of the site to wildlife, including the following:

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Creation of a new wildlife pond in a secluded corner of the site.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- Enhancements to the retained woodland habitat, including thinning out non-native deciduous tree species, and replacement planting with native species.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (woodland etc).

454/1310 Land south of Howard Close

- Supplementary planting in gaps in tree and hedgelines will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of any proposed SUDs features using native wetland plants, and trees, shrubs etc.
- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brash) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.

Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

Summary

Likelihood of ecological interest: protected habitats and or species

High	Medium	Low	Negligible

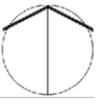
Locations of features indicative only



L16416 Hailsham Area Action Plan
 Hailsham East
 454/1310 Land south of Howard Close

Phase 1 Habitat Survey

Figure 454/1310/E01
 1:1000@A3



September 2016



467/1310 Land at Station Road

Ecological Assessment

Site overview

The site is situated immediately to the south east of Hailsham in an area with a mixture of semi-industrial usages, housing, young woodland and pasture, being connected to the surrounding countryside through a network of hedgerows.

The site vegetation is heterogeneous in structure supporting young deciduous woodland and areas of scrub of different ages and species composition as well as open 'glades' with a range of non-woody species.

The local soils are seasonally wet, slightly acid but base rich loams and clays.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 1km

Sites of local importance and protected and/or notable species: 500m

Ponds and waterbodies: 250m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels Ramsar	550m	SE	Pevensy Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensy Levels Special Area of Conservation (SAC)	550m	SE	Pevensy Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Pevensy Levels Site of Special Scientific Interest (SSSI)	550m	SE	Pevensy Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1% of the total British population of wintering lapwings.
---	------	----	---

Sites of local importance

Deciduous Woodland	Site	-	Site includes Priority Habitat within boundary
--------------------	------	---	--

467/1310 Land at Station Road

Ecological baseline: protected species

Relatively few records of protected species were returned within the search radius; refer to **Figure 4.5** protected species mapping for more details of locations.

The majority of records were of slow worm. Other species recorded include grass snake, soprano pipistrelle, red kite, bullhead and lesser quaking-grass. Moth species recorded include green-brindled crescent, mottled rustic, rustic and red-green carpet.

Ecological baseline: non-native species

The only record of non-native species within the search radius was of harlequin ladybird.

Setting and green infrastructure

The site lies in a rural landscape on the edge of Hailsham and has a coherent green infrastructure network comprised of hedgerows and belts of scrubby woodland, and also a watercourse which flows from urban Hailsham southeast to the Pevensy Levels. These effectively link the site with the wider countryside despite a variety of local landuses including housing, a sewage treatment plant and various light industrial premises.

There are no ponds within the search area.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The site is unmanaged.

Habitat Description

Figure 467/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A1.1.1 Broadleaved semi-natural woodland

The site included an area of semi-mature woodland of natural origin which appeared to have developed over the past 20-25 years. It supported a range of species including elm *Ulmus* sp. ash *Fraxinus excelsior*, hawthorn *Crataegus monogyna*, oak *Quercus robur*, sycamore *Acer pseudoplatanus*, cherry plum *Prunus cerasifera* and downy birch *Betula pubescens* as canopy species. The woodland had an understorey containing abundant blackthorn *Prunus spinosa* and a ground flora dominated by Ivy *Hedera helix* and Bramble *Rubus fruticosus*. Other components of the ground flora included perennial dog's-mercury *Mercurialis perennis*, wood dock *Rumex sanguineus*, wood avens *Geum urbanum*, wood false-brome *Brachypodium sylvaticum* and lords and ladies *Arum maculatum*. Several different fern species were noted including male fern *Dryopteris felix-mas*, hart's-tongue *Asplenium scolopendrium* and soft shield-fern *Polystichum setiferum*. The oldest part of the woodland is the section nearest the road which supported mature elm, probably originally part of a boundary feature. The trees on the remainder of the site were all semi-mature except for an occasional older ash or oak. Generally, tree cover was sparser in the northern half of the site and this area may be better classified as dense scrub with scattered broadleaved trees.

A2.1 Dense/continuous scrub

In the northern half of the site the conditions were noticeably more open with the tree cover being less dense. There was however a predominance of dense bramble *Rubus fruticosus* agg. scrub across the area. Associated species included goat willow *Salix caprea*, stone parsley *Sison amomum*, creeping bent *Agrostis stolonifera*, great willowherb *Epilobium hirsutum*, and nettle *Urtica dioica*.

467/1310 Land at Station Road

A3.1 Scattered broadleaved trees

The tree cover was less dense in the northern half of the site with a scrub layer of bramble *Rubus fruticosus* agg. This area may be best described as scrub A2.1 with scattered broadleaved trees. The trees were a mixture of oak *Quercus robur*, ash *Fraxinus excelsior* and willows *Salix* sp.

Protected species

The site is considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	The site features young woodland and scrub habitats. A habitat survey would be advisable.
<i>Rare and scarce plants</i>	There is one record for lesser quaking-grass within 500m of the site. The presence of uncommon woodland plant species cannot be ruled out.
<i>Rare and scarce invertebrates</i>	There are records for a small number of moth species within the search radius, however the site is considered unlikely to support rare or scarce invertebrates.
<i>Amphibians including great crested newts</i>	No records of amphibians were returned with the data search. Site habitats are suitable for this group however there are few ponds in the immediate local area and the presence of amphibians, including great crested newt is unlikely.
<i>Reptiles</i>	There are records of slow worm and grass snake within 500m of the site. The following habitats are suitable for this species group (scrub, woodland) and presence on site is likely.
<i>Breeding/Wintering birds</i>	The scrub and woodland habitats are likely to support nesting birds. Nesting birds may also use the site buildings where access to structures is possible. The proximity to high quality bird nesting and foraging habitats including a large tract of scrub and pasture means that the presence of less common species cannot be ruled out. The site is not considered likely to support significant populations of wintering birds
<i>Dormouse</i>	There are no records for dormouse within the search radius. However, the woodland and hedgerow habitats have potential to support dormouse.
<i>Aquatic mammals including water vole and otter</i>	There are no habitats on site suitable for these species, although if works are likely to impact the watercourse on the northern boundary, survey may be advisable.

467/1310 Land at Station Road

<i>Terrestrial mammals including badger</i>	No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use cannot be ruled out.
<i>Bats (roosting potential)</i>	None of the site trees are of sufficient size, or age, or have structural features which are suitable for bats. However, detailed bat inspections have not been undertaken and presence cannot be ruled out.
<i>Bats (foraging and commuting)</i>	The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	International	Unknown		
<i>Sites of national importance</i>	High	National	Unknown		
<i>Sites of local importance</i>	Lower	District	Moderate Adverse	Probable	
<i>Habitats</i>	Lower	Parish	Moderate Adverse	Probable	
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	Unknown	Unknown			
<i>Invertebrates</i>	N/A	N/A			
<i>Amphibians including great crested newts</i>	N/A	N/A			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			
<i>Aquatic mammals including water voles and otters</i>	Unknown	Unknown			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

467/1310 Land at Station Road

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	✓
Hedgerow survey	May to October	X
Rare plant survey	April to September (depending upon species)	✓
Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	X
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	X
Dormouse survey	April to November	✓
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	✓
Otter survey	Year round (Spring is optimal)	✓
Bat inspection survey (trees)	Year round (Winter is optimal)	✓
Bat inspection survey (buildings)	Year round	X
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features including scrub and woodland at the periphery of the site should be protected in the built scheme.
- All mature trees should be retained in-situ.
- Retention of areas of scrub and trees wherever possible throughout the site.

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.

467/1310 Land at Station Road

- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Heras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped.
- Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures and regular monitoring to record a decline in habitat quality or quantity.

Potential enhancements

A number of enhancement measures could be employed in order to increase the value of the site to wildlife, including the following:

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Creation of a new wildlife pond in a secluded corner of the site.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- Enhancements to the retained woodland habitat, including thinning out non-native deciduous tree species, and replacement planting with native species.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (woodland, hedgerow etc).
- Supplementary planting in gaps in tree and hedgelines will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of any proposed SUDs features using native wetland plants, and trees, shrubs etc.
- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brush) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

467/1310 Land at Station Road

Summary

Likelihood of ecological interest: protected habitats and or species

High	Medium	Low	Negligible

Locations of features indicative only



L16416 Hailsham Area Action Plan
Hailsham East
467/1310 Land at Station Road

Phase 1 Habitat Survey

Figure 467/1310/E01
1:1000@A3

September 2016



523/1310 Land at and to the rear of Lynton, Battle Road

Ecological Assessment

Site overview

The site is situated to the northeast of Hailsham and lies on the edge of open countryside, surrounded by arable land and pasture, the latter habitat including a number of horse paddocks.

The majority of the site is currently semi-improved grassland, although the boundary includes a dwelling, 'Lynton' and associated garden and access track.

The local soils are seasonally wet, slightly acid but base rich loams and clays.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 1km

Sites of local importance and protected and/or notable species: 1km

Ponds and waterbodies: 250m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels Ramsar	290	SE	Pevensey Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensey Levels Special Area of Conservation (SAC)	290	SE	Pevensey Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels SSSI	290	SE	Pevensey Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1%

523/1310 Land at and to the rear of Lynton, Battle Road

			of the total British population of wintering lapwings.
--	--	--	--

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
CW97 Jarvis's, Nobody's Wood & Park Wood Complex LWS	1200m	NE	These sites form a large area of mostly ancient and/or semi-natural woodland containing ancient earthworks and have had a long history of varying use and management. The woodlands are mainly oak with a history of coppiced hornbeam, sweet chestnut and hazel, with some areas of ash and alder in calcareous and wetter soils, respectively. The wooded stream valley supports a diversity of bryophytes and ferns.
Notable Road Verge: Amberstone Roundabout	600m	N	Early purple and green winged orchids
Ancient Woodland	900m	N	Three ancient woodlands lie within 1km of the site
Deciduous woodland	900m	N	Priority Habitat found within 1km of the site.
Coastal and floodplain grazing marsh	300m	NE	Priority Habitat found within 1km of the site.
Traditional orchard	250m	S	Priority Habitat lies within 1 km of the site

Ecological baseline: protected species

A number of protected species have been recorded from within the search radius; refer to **Figure 4.5** protected species mapping for more details of locations.

Records covered a broad range of species, including some of the following:

- Plants (Welsh poppy, box)
- Reptiles and amphibians (slow worm, grass snake, common lizard, great crested newt, adder)
- Birds (swift, Cetti's warbler, tree sparrow, lapwing)
- Invertebrates (white admiral)
- Mammals (brown-long eared bat, common pipistrelle, soprano pipistrelle, whiskered bat, Bechstein's bat, dormouse, water vole)
- Fish (brook lamprey, European eel)
- Mollusc (large-mouthed valve snail)

Ecological baseline: non-native species

The following non-native species have previously been recorded from within the search radius:

- Plants; cherry laurel, rhododendron.

523/1310 Land at and to the rear of Lynton, Battle Road

Setting and green infrastructure

The site, although on the edge of Hailsham, lies in a strongly rural landscape with a coherent green infrastructure network. The adjacent landuse is a mixture of housing and pasture, dissected by hedgerows and tree-lined watercourses. The surrounding landuse in the wider area is a mixture of woodland and pasture, including Park Wood, with arable land to the north and to the south and west, housing, a sewage treatment plant and various light industrial premises.

Minor watercourses to the south and northeast of the site flow down to the Pevensey Levels.

There are no ponds within the search area with the exception of one minor pond on an adjacent landholding to the southwest, which is entirely overgrown.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The majority of the site is intensively managed improved grassland, with a minor proportion being gardens. Hedges to the southwest and south are regularly managed; that to the east is less often cut but remains intact.

Habitat Description

Figure 523/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A2.1 Dense/continuous scrub

An area of continuous scrub over ruderal vegetation is present along the western boundary. Species present include bramble *Rubus fruticosus* agg., with nettle *Urtica dioica*, hogweed *Heracleum spondylium*, yarrow, *Achillea millefolium*, creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare* and ragwort *Senecio jacobaea*.

B2.2 Semi-improved neutral grassland

The grassland is dominated by Yorkshire fog *Holcus lanatus* and perennial rye grass *Lolium perenne*, with smaller amounts of other grass species; creeping bent *Agrostis stolonifera*, common bent *Agrostis capillaris* and cock's-foot *Dactylis glomerata*. Associated forbs include creeping thistle *Cirsium arvense*, bristly ox-tongue *Helminthotheca echiodes*, red clover *Trifolium pratense*, white clover *Trifolium repens*, creeping cinquefoil *Potentilla reptans*, curly dock *Rumex crispus*, ragwort *Senecio jacobaea*, common bird's foot trefoil *Lotus corniculatus*, meadow buttercup *Ranunculus acris*, creeping buttercup *Ranunculus repens*, field bindweed *Convolvulus arvensis* and common fleabane *Pulicaria dysenterica*.

C3.1 Tall ruderal

Tall ruderal vegetation was prominent on the northern boundaries, being associated with the edge of the settlement. Species present in this community include dense stinging nettles *Urtica dioica*, bramble *Rubus fruticosus* agg, bristly ox-tongue *Helminthotheca echiodes*, bindweed *Calystegia* sp., black medick *Medicago lupulina*, common fleabane *Pulicaria dysenterica*, greater willowherb *Epilobium hirsutum* and spear thistle *Cirsium vulgare*.

J1.2 Amenity grassland

Small areas of amenity grassland are present in the gardens of 'Lynton'. The sward is dominated by perennial rye grass *Lolium perenne*. Associated grasses could be identified due to the close-mowing regime. Other species present included dandelion *Taraxacum* agg., greater plantain *Plantago major*, creeping cinquefoil *Potentilla reptans*, white clover *Trifolium repens*, self-heal *Prunella vulgaris* and creeping buttercup *Ranunculus repens*.

523/1310 Land at and to the rear of Lynton, Battle Road

J1.4 Introduced shrub

Most plants within the garden are non-native and could not be identified. Species noted include buddleia *Buddleia davidii*, fuchsia *Fuchsia* sp. and pendulous sedge *Carex pendula*.

J2.1.1 Native species-rich hedge, intact

A number of hedges on the site are intact species-rich native hedges.

These hedgerows are dominated by hawthorn *Crataegus monogyna* with associated species including blackthorn *Prunus spinosa*, sycamore *Acer pseudoplatanus*, elder *Sambucus nigra* and also climbers and scramblers such as bramble, ivy *Hedera helix*, dog rose *Rosa canina*, and bindweed *Calystegia* sp.

The ground flora associated with the closely managed hedge sections was similar to that of adjacent habitats; that associated with the less frequently managed hedges included false-brome *Brachypodium sylvaticum*, ivy *Hedera helix*, nettle *Urtica dioica*, spear thistle *Cirsium vulgare*, creeping thistle *Cirsium arvense*, false oat grass *Arrhenatherum elatius*, bristly ox-tongue *Helminthotheca echioides*, dandelion *Taraxacum* agg., hairy willowherb *Epilobium hirsutum*, broad-leaved dock *Rumex obtusifolius*, hogweed *Heracleum spondylium*, and burdock *Arctium minus*.

J2.3.1 Native species-rich hedge with trees

The hedgerow composition is similar to that of J2.1.1 with the dominant tree species being oak *Quercus robur*. Other associated species include field maple *Acer campestre* and plum *Prunus* sp. Ground flora includes wood dock *Rumex sanguineus*, and cuckoo pint *Arum maculatum*.

J2.4 Fence

Fencing demarcates the boundaries of most of the gardens abutting the northern edge of the site.

J3.6 Buildings

Buildings on site include a dwelling, Lynton, which appears to date from the early part of the 20th century and features hanging tiles. There are a number of associated outbuildings.

J4 Hardstanding and bare ground

Concrete and other hard surfaces are present in association with the house and access.

Protected species

The site is considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	The site features species rich hedgerow and grassland. If these habitats are likely to be impacted by development proposals then habitat surveys would be advisable.
<i>Rare and scarce plants</i>	The site is considered unlikely to support rare or scarce plants.

523/1310 Land at and to the rear of Lynton, Battle Road

<i>Rare and scarce invertebrates</i>	The site is considered unlikely to support rare or scarce invertebrates.
<i>Amphibians including great crested newts</i>	Some site habitats (hedgerow, woodland, grassland) are suitable for this group and there are ponds in the local area. The presence of amphibians, including great crested newt cannot be ruled out.
<i>Reptiles</i>	The following habitats are suitable for this species group (hedgerow, woodland, grassland) and presence on site is likely.
<i>Breeding/Wintering birds</i>	The hedgerow habitats are likely to support nesting birds. Nesting birds may also use the site buildings where access to structures is possible. The site is not considered likely to support significant populations of wintering birds
<i>Dormouse</i>	The hedgerow habitats have potential to support dormouse.
<i>Aquatic mammals including water vole and otter</i>	There are no habitats on site suitable for these species.
<i>Terrestrial mammals including badger</i>	No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use cannot be ruled out.
<i>Bats (roosting potential)</i>	None of the site trees are of sufficient size, or age, or have structural features which are suitable for bats. However, detailed bat inspections have not been undertaken and presence cannot be ruled out. The buildings on site have some bat potential. Moreover, the local landscape features a number of habitats which are highly suited to bat foraging use and detailed bat inspections have not been undertaken and so the existence of an on-site roost cannot be ruled out.
<i>Bats (foraging and commuting)</i>	The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	European	Unknown		
<i>Sites of national importance</i>	High	National	Unknown		

523/1310 Land at and to the rear of Lynton, Battle Road

<i>Sites of local importance</i>	Medium	County	Neutral		
<i>Habitats</i>	Lower	Parish	Moderate Adverse	Probable	
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	Unknown	Unknown			
<i>Invertebrates</i>	Unknown	Unknown			
<i>Amphibians including great crested newts</i>	Unknown	Unknown			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			
<i>Aquatic mammals including water voles and otters</i>	N/A	N/A			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	✓
Hedgerow survey	May to October	✓
Rare plant survey	April to September (depending upon species)	X
Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	X
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	X
Dormouse survey	April to November	X
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	X
Otter survey	Year round (Spring is optimal)	X
Bat inspection survey (trees)	Year round (Winter is optimal)	✓
Bat inspection survey (buildings)	Year round	✓
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features should be protected in the built scheme.
- All mature trees should be retained in-situ.
- Retention of trees, and linear features such as hedgerows wherever possible throughout the site.

523/1310 Land at and to the rear of Lynton, Battle Road

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Herras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped.
- Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures should regular monitoring record a decline in habitat quality or quantity.

Potential enhancements

A number of enhancement measures could be employed in order to increase the value of the site to wildlife, including the following:

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Creation of a new wildlife pond in a secluded corner of the site.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (woodland, hedgerow etc).
- Supplementary planting in gaps in tree and hedgelines will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of any proposed SUDs features using native wetland plants, and trees, shrubs etc.

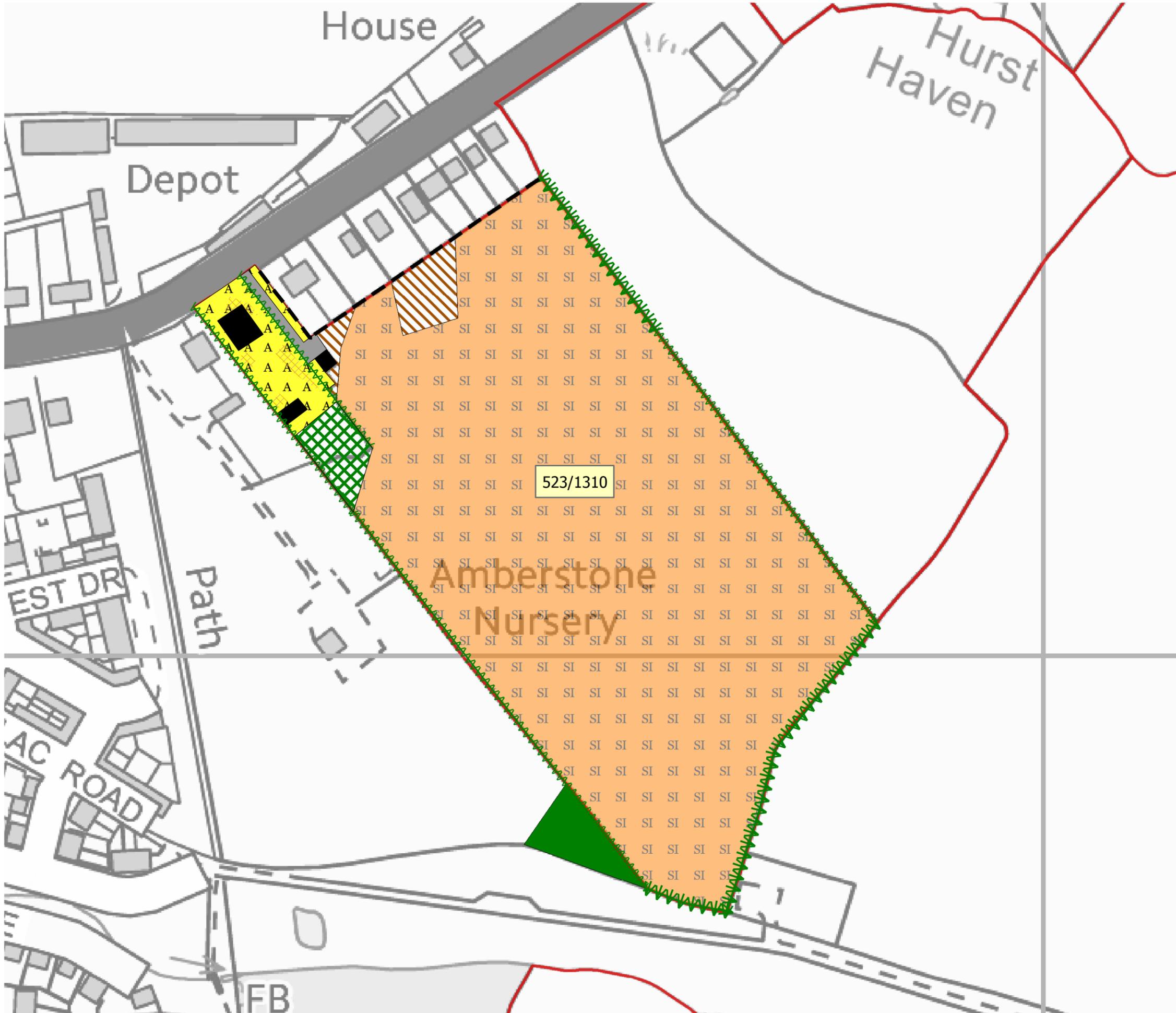
523/1310 Land at and to the rear of Lynton, Battle Road

- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brash) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

Summary

Likelihood of ecological interest: protected habitats and or species

High	Medium	Low	Negligible



Locations of features indicative only

L16416 Hailsham Area Action Plan
 Hailsham East
 523/1310 - Amberstone Nursery

Phase 1 Habitat Survey

Figure 523/1310/E01
 1:1500@A3



September 2016



524/1310 Land at Harebeating Nursery

Ecological Assessment

Site overview

The site is situated immediately to the east of Hailsham and lies on the edge of open countryside featuring extensive pasture, the latter habitat including a number of horse paddocks, beyond which is the open marshland of the Pevensey Levels.

The site comprises a small grass field, with disused glasshouses and buildings associated with the nursery business.

The local soils are seasonally wet, slightly acid but base rich loams and clays.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 1km

Sites of local importance and protected and/or notable species: 500m

Ponds and waterbodies: 250m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels Ramsar	675m	E	Pevensey Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensey Levels Special Area of Conservation (SAC)	675m	E	Pevensey Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels SSSI	675m	E	Pevensey Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1% of the total British population of wintering lapwings.

524/1310 Land at Harebeating Nursery

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Deciduous woodland Priority Habitat	175m	NW	One deciduous woodland lies within 500m of the site, approximately 175m to the north west.
Traditional orchard Priority Habitat	450m	NE	One traditional orchard lies within 500m of the site, approximately 450m to the north east.

Ecological baseline: protected species

Relatively few records of protected species were returned from within the search radius; refer to **Figure 4.5** protected species mapping for more details of locations.

There is a breeding population of great crested newt within 500m of the site, and low numbers of slow worm and common lizard have also been recorded. A number of bat species have been recorded, including common pipistrelle, Bechstein's bat, Whiskered/Brandt's bat and unidentified Myotis and pipistrelle species.

The only other record is for welsh poppy.

Ecological baseline: non-native species

No non-native species records were available for the site. The presence of non-native species cannot however be discounted on this basis.

Setting and green infrastructure

The site lies in a rural landscape with a coherent green infrastructure network, albeit fairly intensively managed due to the presence of numerous horse paddocks. There are few woodlands local to the site. The extensive marshland landscape of Pevensy Levels lies to the east.

The site is bordered by fencing and mature hedging, beyond which, to the southwest, northwest and northeast, is housing. Open paddocks lie to the southeast.

There are no ponds within the search area.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The grassed areas of the site are fairly regularly mown amenity turf. The remainder of the on-site vegetation appears to be unmanaged, although vehicle movements keep parking and access routes open.

Habitat Description

Figure 524/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

524/1310 Land at Harebeating Nursery

A2.2 Scattered scrub

Small areas of scattered scrub are present around derelict glasshouses (T1). Species present include hawthorn *Crataegus monogyna* and dogwood *Cornus* sp. but elder *Sambucus nigra* and bramble *Rubus fruticosus* agg. predominate.

A3.1 Scattered broadleaved trees

Species include sycamore *Acer pseudoplatanus*, field maple *Acer campestre*, yew *Taxus baccata* and silver birch *Betula pendula*.

C1.1 Bracken - continuous

Greenhouses are filled with dense bracken *Pteridium aquilinum* along with bindweed *Calystegia* sp.

C3.1 Tall ruderal

Tall ruderal vegetation was prominent on the site, being associated with the disturbed conditions of the area with glasshouses. Species present in this community include creeping thistle *Cirsium arvense* and dense stinging nettles *Urtica dioica* admixed with scrub and bracken.

C3.2 Tall non-ruderal

Non-ruderal vegetation is present throughout the site. Species present include hoary ragwort *Senecio erucifolius*, stone parsley *Sison amonum*, common fleabane *Pulicaria dysenterica*, greater willowherb *Epilobium hirsutum*, bindweed *Calystegia* sp. and wood dock *Rumex sanguineus*.

J1.2 Amenity grassland

Much of the site comprises this habitat. The sward is dominated by perennial rye-grass *Lolium perenne* and Yorkshire fog *Holcus lanatus*. Other species include daisy *Bellis perennis*, black medick *Medicago lupulina*, ribwort plantain *Plantago lanceolata*, creeping cinquefoil *Potentilla reptans*, creeping buttercup *Ranunculus repens*, field bindweed *Convolvulus arvensis*, self-heal *Prunella vulgaris*, bristly ox-tongue *Helminthotheca echioides*, greater plantain *Plantago major* and red clover *Trifolium pratense*. White clover *Trifolium repens* was particularly abundant.

J1.3 Ephemeral/short perennial

Areas of hardstanding and bare ground near the buildings had some ephemeral species. Those present include ragwort *Senecio* sp., scarlet pimpernel *Anagallis arvensis*, hairy willowherb *Epilobium hirsutum*, hoary willowherb *Epilobium parviflorum*, horsetail *Equisetum arvense*, bristly ox-tongue *Helminthotheca echioides*, redshank *Persicaria maculata*, and squirrel's tail fescue *Vulpia bromoides*. Petty spurge *Euphorbia peplus* and sharp-leaved fluellen *Kickxia elatine* are present in small quantity.

J2.1.1 Native species-rich hedge, intact

A number of hedges on the site are intact species-rich native hedges.

These hedgerows are dominated by blackthorn *Prunus spinosa* with associated species including oak *Quercus robur*, hawthorn *Crataegus monogyna* and wild privet *Ligustrum vulgare* and also climbers and scramblers such as bramble *Rubus fruticosus* agg. dog-rose *Rosa canina* and ivy *Hedera helix*.

The ground flora associated with the closely managed hedge sections typically comprised grasses similar to those of the open areas; that associated with the less frequently managed hedges included false-brome *Brachypodium sylvaticum* and nettle *Urtica dioica*.

J2.3.1 Native species-rich hedge with trees

These hedgerows are dominated by blackthorn *Prunus spinosa* and oak *Quercus robur* with associated species including hawthorn *Crataegus monogyna* and wild privet *Ligustrum vulgare* and also climbers and scramblers such as bramble *Rubus fruticosus* agg. dog-rose *Rosa canina* and ivy *Hedera helix*.

The standard trees are mainly oak *Quercus robur* and ash *Fraxinus excelsior*.

524/1310 Land at Harebeating Nursery

The ground flora is mainly associated with a dry ditch, and included false-brome *Brachypodium sylvaticum*, ivy *Hedera helix*, great willowherb *Epilobium hirsutum*, spear thistle *Cirsium vulgare*, prickly sowthistle *Sonchus asper*, silverweed *Potentilla anserina*, nettle *Urtica dioica*, ground ivy *Glechoma hederacea*, stone parsley *Sison amonum*, water figwort *Scrophularia auriculata* and cuckoo pint *Arum maculatum*.

J2.4 Fence

Fencing is present along various of the site boundaries.

J2.6 Dry ditch

A dry ditch is present along the hedge with trees and so associated ground flora is listed under this category.

J3.6 Buildings

There are a number of shed-type storage buildings on the site. Rooves are generally flat or slightly pitched and of asbestos or corrugated iron. The greenhouses are filled with bracken.

J4 Hardstanding and bare ground

A concrete access track leads to bare ground and hardstanding near to the former glasshouses. There is a large amount of discarded building material which could possibly provide habitat for reptiles.

Target Notes

1	Scattered scrub around derelict buildings
2	Abundant dense bracken
3	Stored wood
4	Building materials; rubble, wood etc., with potential to support reptiles

Protected species

The site is known to support, or considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	The site features species rich hedgerows. If these habitats are likely to be impacted by development proposals then habitat surveys would be advisable.
<i>Rare and scarce plants</i>	There is a single record for welsh poppy occurring within 500m of the site, and the field survey found several uncommon species of bare ground.
<i>Rare and scarce invertebrates</i>	The site is considered unlikely to support rare or scarce invertebrates.

524/1310 Land at Harebeating Nursery

<p><i>Amphibians including great crested newts</i></p>	<p>Counts of up to 18 great crested newts have been recorded in the area as recently as 2014.</p> <p>Some site habitats (hedgerow, grassland, scrub etc.) are suitable for this group and there are a number of ponds in the local area, including on site. The presence of amphibians, including great crested newt cannot be ruled out.</p>
<p><i>Reptiles</i></p>	<p>Records of slow worm and common lizard were returned with the data search.</p> <p>The following habitats are suitable for this species group (hedgerow, grassland, scrub and stored materials) and presence on site is likely.</p>
<p><i>Breeding/Wintering birds</i></p>	<p>The hedgerow habitats are likely to support nesting birds. Nesting birds may also use the site buildings where access to structures is possible.</p> <p>The presence of less common species is unlikely.</p> <p>The site is not considered likely to support significant populations of wintering birds</p>
<p><i>Dormouse</i></p>	<p>No records of dormouse within 500m of the site were returned with the data search.</p> <p>The hedgerow habitats have limited potential to support dormouse due to small extent and proximity to housing.</p>
<p><i>Aquatic mammals including water vole and otter</i></p>	<p>There are no habitats on site suitable for these species.</p>
<p><i>Terrestrial mammals including badger</i></p>	<p>No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use cannot be ruled out.</p>
<p><i>Bats (roosting potential)</i></p>	<p>None of the site trees are of sufficient size, or age, or have structural features which are suitable for bats. However, detailed bat inspections have not been undertaken and presence cannot be ruled out.</p> <p>The buildings on site are unlikely to be used by a significant population of roosting bats as single-skin structures tend not to offer sufficient insulation.</p>
<p><i>Bats (foraging and commuting)</i></p>	<p>The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.</p>

524/1310 Land at Harebeating Nursery

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	European	Neutral		
<i>Sites of national importance</i>	High	National	Neutral		
<i>Sites of local importance</i>	Lower	District	Neutral		
<i>Habitats</i>	Lower	Parish	Moderate Adverse	Probable	
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	Unknown	Unknown			
<i>Invertebrates</i>	N/A	N/A			
<i>Amphibians including great crested newts</i>	Unknown	Unknown			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Lower	Parish	Moderate Adverse	Probable	Neutral
<i>Dormice</i>	N/A	N/A			
<i>Aquatic mammals including water voles and otters</i>	N/A	N/A			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	X
Hedgerow survey	May to October	✓
Rare plant survey	April to September (depending upon species)	✓
Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	✓
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	X
Wintering bird survey	December to February	X
Dormouse survey	April to November	X
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	X
Otter survey	Year round (Spring is optimal)	X
Bat inspection survey (trees)	Year round (Winter is optimal)	✓

524/1310 Land at Harebeating Nursery

Bat inspection survey (buildings)	Year round	X
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features should be protected in the built scheme.
- All mature trees should be retained in-situ.
- Retention of areas of scrub and trees, and linear features such as hedgerows wherever possible throughout the site.

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Heras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped.
- Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures and regular monitoring to record a decline in habitat quality or quantity.

Potential enhancements

A number of potential enhancements could be implemented to improve the site for wildlife, including the following:

524/1310 Land at Harebeating Nursery

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Creation of a new wildlife pond in a secluded corner of the site.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (woodland, hedegrows etc.).
- Supplementary planting in gaps in tree and hedgelines will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of any proposed SUDs features using native wetland plants, and trees, shrubs etc.
- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brash) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

Summary

Likelihood of ecological interest: protected habitats and or species

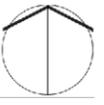
High	Medium	Low	Negligible



L16416 Hailsham Area Action Plan
Hailsham East
524/1310 Land at Harebeating Nursery

Phase 1 Habitat Survey

Figure 524/1310/E01
1:500@A3



September 2016



724/1310 Land north of Old Swan Lane

Ecological Assessment

Site overview

The site is situated immediately to the south east of Hailsham in an area with a mixture of semi-industrial usages, housing, young woodland and pasture, being connected to the surrounding countryside through a network of hedgerows.

The site supports a variety of land uses including rough semi-improved grassland, scrub, hedgerow and small areas of woodland.

The local soils are seasonally wet, slightly acid but base rich loams and clays.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 1km

Sites of local importance and protected and/or notable species: 1km

Ponds and waterbodies: 500m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels Ramsar	20m	E	Pevensy Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensy Levels Special Area of Conservation (SAC)	20m	E	Pevensy Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels SSSI	20m	E	Pevensy Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1% of the total British population of wintering lapwings.

724/1310 Land north of Old Swan Lane

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Coastal and floodplain grazing marsh Priority Habitat	20m	E	This habitat type is found close to the site and extensively within the surrounding landscape, including Pevensy Levels.
Deciduous woodland Priority Habitat	Adjacent	W	A few deciduous woodlands lie within 1km of the site, with the nearest being 500m to the south west.
Traditional orchard Priority Habitat	975m	N	Two traditional orchards lie within 1km of the site, with the nearest being 825m to the north.

Ecological baseline: protected species

Records covered a broad range of species, including some of the following:

- Plants (lesser quaking-grass, broad-leaved spurge)
- Amphibians and reptiles (great crested newt, slow worm, grass snake)
- Birds (raven, swift)
- Invertebrates (small heath and wall butterfly; many moth species, including cinnabar, mottled rustic, lackey and buff ermine; girdled mining bee; red-green carpet; Roesel's bush-cricket; the fly *Volucella inanis*; the shining ram's-horn, the pea mussel *Pisidium pseudosphaerium* and large-mouthed valve snail)
- Mammals (common pipistrelle, soprano pipistrelle, brown long-eared bat)
- Fish (European eel)

Refer to **Figure 4.5** protected species mapping for more details of locations

Ecological baseline: non-native species

The following non-native species have previously been recorded from within the search radius:

- Plants; cherry laurel, Himalayan cotoneaster, Japanese rose, three-cornered garlic, giant knotweed, New Zealand pigmyweed
- Invertebrates; harlequin ladybird, horse chestnut leaf-miner

Setting and green infrastructure

The site lies in a rural landscape on the edge of Hailsham and has a coherent green infrastructure network comprised of hedgerows and belts of scrubby woodland, and also a watercourse which flows from urban Hailsham southeast to the Pevensy Levels. These effectively link the site with the wider countryside despite a variety of local landuses including housing, a sewage treatment plant and various light industrial premises.

The site boundaries are rather poorly defined in places, with no clear demarcation between this site and site 052/1310; to the southeast and west, however, the boundaries are demarcated by a mixture of hedgerow and fencing. The northern boundary follows a small watercourse.

There are an estimated 7 ponds within the search area including one on-site pond (dry at time of survey). Settling lagoons at the nearby Sewage Treatment Works are not included in this total.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

724/1310 Land north of Old Swan Lane

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The site, including boundary features, was, on the whole, unmanaged although there was some evidence of the site having been accessed recently, and the westernmost field is horse-grazed.

Habitat Description

Figure 724/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A1.1.1 Broadleaved semi-natural woodland

Broadleaved semi-natural woodland was not strictly present on the site. The canopies of trees from boundaries and adjacent woodland extended over the site along sections of the northern boundary.

A2.1 Dense/continuous scrub

Due to the largely unmanaged nature of the site significant areas had been colonised by a mixture of scrub and tall ruderal vegetation. This was especially true of the two western fields which lacked any recent horse-grazing. The most important species was bramble *Rubus fruticosus* agg. with other species such as dog rose *Rosa canina*, blackthorn *Prunus spinosa*, and elder *Sambucus nigra* being less abundant.

A2.2 Scattered scrub

Individuals of shrub species, including bramble *Rubus fruticosus* agg., dog rose *Rosa canina*, and hawthorn *Crataegus monogyna*, were scattered over the grasslands.

A3.1 Scattered broadleaved trees

The boundary along Old Swan Lane consisted of a line of planted poplars *Populus x canadensis* which had become colonised by scrub, predominantly blackthorn *Prunus spinosa* but also some young ash *Fraxinus excelsior*.

B2.2 Semi-improved neutral grassland

The grasslands present on the site all fall into this category. Those in the two fields to the west have seen no recent management and have been extensively invaded by scrub and tall ruderal vegetation. The large field to the west was horse grazed and had been colonised by scrub to a lesser extent therefore the grassland area was more extensive.

The dominant grasses more or less throughout the area were Yorkshire fog *Holcus lanatus* and creeping bent *Agrostis stolonifera*. Other grasses present to varying degrees included perennial rye-grass *Lolium perenne*, rough meadow-grass *Poa trivialis*, meadow foxtail *Alopecurus pratensis*, timothy *Phleum pratensis* sweet vernal-grass *Anthoxanthum odoratum*, red fescue *Festuca rubra*, wood small reed *Calamagrostis epigejos*, smooth brome *Bromus racemosus*, and cocks-foot *Dactylis glomerata*. hairy sedge *Carex hirta* was also observed. Among the non-graminoid herbs common fleabane *Pulicaria dysenterica* and white clover *Trifolium repens* were both frequent, ragwort *Senecio jacobea* was occasional and common knapweed *Centaurea nigra*, common agrimony *Agrimonia eupatorium*, common mouse-ear *Cerastium fontanum*, greater birds-foot-trefoil *Lotus pedunculatus* and stone parsley *Sison amonum* were all encountered.

C3.1 Tall ruderal

Tall ruderal vegetation was found colonising the grasslands and intermixed with the scrub. The most common species was nettle *Urtica dioica*. Other frequently encountered species included creeping thistle *Cirsium arvense*, hogweed *Heracleum sphondylium*, great willowherb *Epilobium hirsutum*, and lesser burdock *Arctium minus*.

724/1310 Land north of Old Swan Lane

G1 Standing water

A small pond was present on the north-eastern site boundary. The pond was shaded by mature ash and hawthorn scrub. It was dry at the time of survey.

G2 Running water

A minor watercourse flows along the northern boundary. The watercourse was heavily shaded by overhanging trees and scrub, particularly in the west. The main shading species in the west were willows *Salix* sp. and ash *Fraxinus excelsior*. In the east the watercourse passed through cherry plum *Prunus cerasifera* scrub. The watercourse had flowing water in it but was too densely shaded to support any emergent or aquatic species.

J2.1.1 Native species-rich hedge, intact

The western boundary of the largest field was marked by a hedgerow which although largely intact, also contained a number of gaps, and was degenerating through lack of management into tall scrub habitat. The species recorded were sycamore *Acer pseudoplatanus*, Ash *Fraxinus excelsior*, bramble *Rubus fruticosus* agg., elder *Sambucus nigra*, blackthorn *Prunus spinosa*, wild plum *Prunus domestica*, ivy *Hedera helix*, dog rose *Rosa canina*, hawthorn *Crataegus monogyna*, and cherry plum *Prunus cerasifera*.

Target Notes

1	Series of rectangular depressions, each c8m x 2m; wetter than surrounding grassland and supporting <i>Glyceria</i> sp and <i>Persicaria hydropiper</i> .
---	--

Protected species

The site is known to support, or considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)?
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	The site features species rich hedgerow and grassland habitats. If these habitats are likely to be impacted by development proposals then habitat surveys would be advisable.
<i>Rare and scarce plants</i>	There are nearby records for lesser quaking-grass and broad-leaved spurge. The presence of uncommon plant species in the grassland areas cannot be ruled out.
<i>Rare and scarce invertebrates</i>	Records were returned for a variety of rare/notable invertebrate species. Given the presence of species rich grassland, the site is considered to have some potential to support rare or scarce invertebrates.
<i>Amphibians including great crested newts</i>	A large number of great crested newt records were returned within the search area. Some site habitats are suitable for this group and there are a number of ponds in the local area, including on site. The

724/1310 Land north of Old Swan Lane

	presence of amphibians, including great crested newt cannot be ruled out.
<i>Reptiles</i>	A moderate number of records for slow worm and grass snake were returned with the data search. The following habitats are suitable for this species group (hedgerow, grassland) and presence on site is likely.
<i>Breeding/Wintering birds</i>	The hedgerow and scrub habitats are likely to support nesting birds. Nesting birds may also use the site buildings where access to structures is possible. The proximity to high quality bird nesting and foraging habitats including woodland and pasture means that the presence of less common species cannot be ruled out. The site is not considered likely to support significant populations of wintering birds
<i>Dormouse</i>	There are no records of dormouse within 1km of the site. However, the hedgerow and scrub habitats have potential to support the species.
<i>Aquatic mammals including water vole and otter</i>	There are no habitats on site suitable for these species although their presence in the watercourse on the site boundary cannot be ruled out.
<i>Terrestrial mammals including badger</i>	No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use cannot be ruled out.
<i>Bats (roosting potential)</i>	None of the site trees are of sufficient size, or age, or have structural features which are suitable for bats. However, detailed bat inspections have not been undertaken and presence cannot be ruled out.
<i>Bats (foraging and commuting)</i>	The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	European	Unknown		
<i>Sites of national importance</i>	High	National	Unknown		
<i>Sites of local importance</i>	Lower	District	Unknown		
<i>Habitats</i>	Lower	District	Moderate Adverse	Probable	
<i>Veteran trees</i>	N/A	N/A			

724/1310 Land north of Old Swan Lane

<i>Plants</i>	Unknown	Unknown			
<i>Invertebrates</i>	Unknown	Unknown			
<i>Amphibians including great crested newts</i>	Unknown	Unknown			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			
<i>Aquatic mammals including water voles and otters</i>	Unknown	Unknown			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	✓
Hedgerow survey	May to October	✓
Rare plant survey	April to September (depending upon species)	✓
Invertebrate survey	April to September (depending upon species)	✓
Great crested newt survey	March to June	✓
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	X
Dormouse survey	April to November	✓
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	✓
Otter survey	Year round (Spring is optimal)	✓
Bat inspection survey (trees)	Year round (Winter is optimal)	✓
Bat inspection survey (buildings)	Year round	X
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features including scrub and woodland at the periphery of the site should be protected in the built scheme.
- All mature trees should be retained in-situ.
- The pond should be retained.
- The watercourse should be retained.

724/1310 Land north of Old Swan Lane

- Retention of areas of scrub and trees, and linear features such as hedgerows wherever possible throughout the site.

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Heras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped. Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures and regular monitoring to record a decline in habitat quality or quantity.

Potential enhancements

A number of enhancement measures could be employed in order to increase the value of the site to wildlife, including the following:

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Retention and enhancement of the watercourse through selective removal of overhanging woody vegetation and sensitive reprofiling.
- Retention and enhancement of the pond on site through de-silting and removal of overhanging woody vegetation.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (woodland, hedgerow etc.).

724/1310 Land north of Old Swan Lane

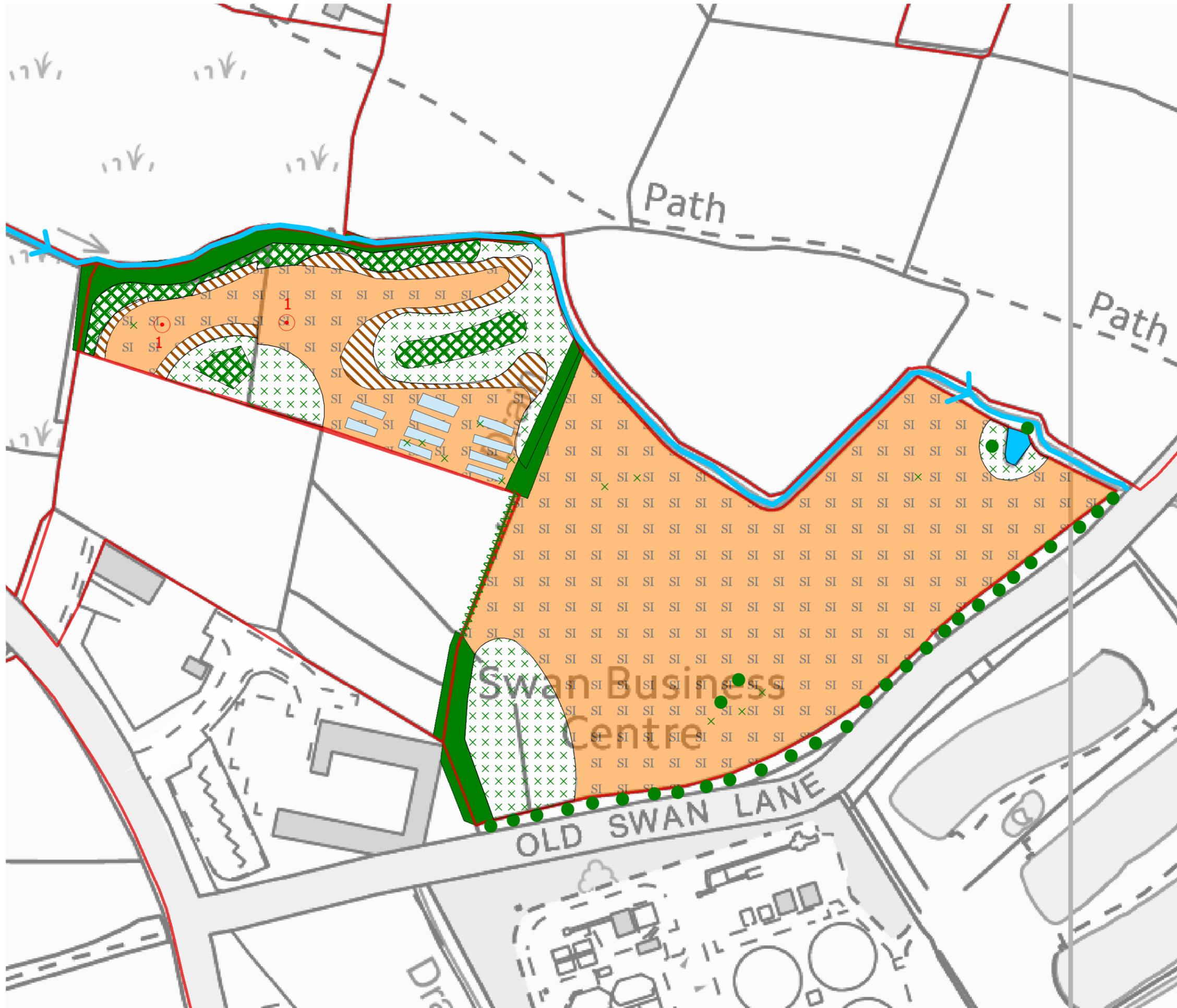
- Supplementary planting in gaps in tree and hedgelines will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of any proposed SUDs features using native wetland plants, and trees, shrubs etc.
- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brash) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

Summary

Likelihood of ecological interest: protected habitats and or species

High	Medium	Low	Negligible

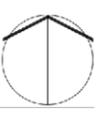
Locations of features indicative only



L16416 Hailsham Area Action Plan
Hailsham West
724/1310 - Land North of Old Swan Lane

Phase 1 Habitat Survey

Figure 724/1310/E01
1:1500@A3



September 2016



746/1310 Land South of Mill Road

Ecological Assessment

Site overview

The site is situated immediately to the south east of Hailsham in an area with a mixture of semi-industrial usages, housing, young woodland and pasture, being connected to the surrounding countryside through a network of hedgerows.

The site features rough semi-improved grassland and associated hedgerows.

The local soils are seasonally wet, slightly acid but base rich loams and clays.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 1km

Sites of local importance and protected and/or notable species: 1km

Ponds and waterbodies: 500m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels Ramsar	Adjacent	E	Pevensey Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensey Levels Special Area of Conservation (SAC)	Adjacent	E	Pevensey Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels SSSI	Adjacent	E	Pevensey Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1% of the total British population of wintering lapwings.

746/1310 Land South of Mill Road

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Coastal and floodplain grazing marsh Priority Habitat	20m	SE	This habitat type is found close to the site and extensively within the surrounding landscape, including Pevensy Levels.
Deciduous woodland Priority Habitat	Adjacent	W	A few deciduous woodlands lie within 1km of the site, with the nearest being 500m to the south west.
Traditional orchard Priority Habitat	825m	N	Two traditional orchards lie within 1km of the site, with the nearest being 825m to the north.

Ecological baseline: protected species

Records covered a broad range of species, including some of the following:

- Plants (three-lobed crowfoot, lesser quaking-grass, broad-leaved spurge)
- Amphibians and reptiles (great crested newt, slow worm, grass snake)
- Birds (raven, swift, lapwing)
- Invertebrates (wall butterfly; many moth species, including cinnabar, mottled rustic, lackey and buff ermine; girdled mining bee; red-green carpet; Roesel's bush-cricket; the fly *Volucella inanis*; the shining ram's-horn, little whirlpool ram's-horn snail, the pea mussel *Pisidium pseudosphaerium* and large-mouthed valve snail)
- Mammals (common pipistrelle, soprano pipistrelle)
- Fish (European eel)

Refer to **Figure 4.5** protected species mapping for more details of locations

Ecological baseline: non-native species

The following non-native species have previously been recorded from within the search radius:

- Plants; cherry laurel, Himalayan cotoneaster, Japanese rose, three-cornered garlic, giant knotweed, parrot's feather
- Invertebrates; harlequin ladybird, horse chestnut leaf-miner

Setting and green infrastructure

The site lies in a rural landscape on the edge of Hailsham and has a coherent green infrastructure network comprised of hedgerows and belts of scrubby woodland, and also a watercourse which flows from urban Hailsham southeast to the Pevensy Levels. These effectively link the site with the wider countryside despite a variety of local landuses including housing, a waste water treatment plant and various light industrial premises.

The site boundaries are typically defined by mature hedges and a minor watercourse; internal boundaries also feature mature hedges. Sections of the northern boundary feature fencing.

There are an estimated 8 ponds within the search area. Settling lagoons at the nearby waste water treatment works are not included in this total.

746/1310 Land South of Mill Road

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The grassed areas of the site are all to varying degrees inter-connected and rough-grazed by horses.

The hedgerows are all unmanaged and are in poor condition with many gaps. The majority have degenerated to lines of trees/ tall shrubs. Some hedges had fences below forming a physical barrier to livestock.

Habitat Description

Figure 746/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A1.1.1 Broadleaved semi-natural woodland

Parts of the southern and western boundary feature broadleaved woodland, however this lies off-site.

A2.2 Scattered scrub

Small areas of scattered scrub are present along the watercourse and also associated with fenced boundaries in the north of the site.

The predominant species along the northern boundaries was bramble *Rubus fruticosus* agg.

The scrub along the watercourse also contained significant quantities of Bramble but was characterised by cherry plum *Prunus cerasifera* and willows *Salix* sp.

A3.1 Scattered broadleaved trees

There were significant numbers of trees along boundaries and hedgerows throughout the site. There was a range of ages from semi-mature to mature. The species were oak *Quercus robur*, ash *Fraxinus excelsior* and elm *Ulmus* sp. Standing dead elm were noted in the hedgerows and were presumed to have died of Dutch Elm Disease in the recent past.

B2.2 Semi-improved neutral grassland

The extensive grassland areas on the site are all considered to fall within this community type. At the time of the survey the fields were being grazed by a herd of horses.

The sward was dominated by a good range of grasses including: meadow barley *Hordeum secalinum*, crested dog's-tail *Cynosurus cristatus*, perennial rye-grass *Lolium perenne*, rough meadow-grass *Poa trivialis*, Yorkshire-fog *Holcus lanatus*, creeping bent *Agrostis stolonifera* and common bent *Agrostis capillaris*. Coarser grasses such as cocks-foot *Dactylis glomerata*, timothy *Phleum pratense* and false-oat *Arrhenatherum elatius*, as well as hairy sedge *Carex hirta*, were present but noted more rarely. Among the non-graminoid herbs self-heal *Prunella vulgaris* was particularly abundant. Also considered at least frequent across the site were red clover *Trifolium pratense*, common bird's-foot trefoil *Lotus corniculatus*, white clover *Trifolium repens* and hoary ragwort *Senecio erucifolius*. meadow vetchling *Lathyrus pratensis* was frequent in the western field only and yarrow *Achillea millefolium* was locally abundant in the south-east field only.

Three species were found only in the eastern quarter of the north-east field: common knapweed *Centaurea nigra*, autumn hawkbit *Scorzoneroideis autumnalis* and burnet saxifrage *Pimpinella saxifraga*.

G2 Running water

A minor watercourse flows along the southern boundary. The watercourse was heavily shaded by overhanging trees and scrub, including cherry plum and willows. The watercourse was at the bottom of a natural channel c3-4m deep. The banks supported ferns including male fern *Dryopteris felix-mas* and hart's-tongue fern

746/1310 Land South of Mill Road

Asplenium scolopendrium. The dense shade had apparently prohibited the growth of any emergent or aquatic species.

J2.1.1 Native species-rich hedge, intact

The hedge along the boundary with Mill Road was relatively intact with few gaps. It was dominated by hawthorn *Crateagus monogyna* and elm *Ulmus* agg.

J2.3.1 Native species-rich hedge with trees

The majority of hedges on site fell into this category. All were neglected with no sign of recent management and contained a high proportion of trees at varying stages of maturity. The most abundant trees/ shrubs were hawthorn *Crateagus monogyna*, blackthorn *Prunus spinosa* and elm *Ulmus* sp. Other species present adding to the diversity were elder *Sambucus nigra*, dog rose *Rosa canina*, cherry plum *Prunus cerasifera* and bramble *Rubus fruticosus* agg. There were a number of standing dead elms in the hedgerows, these having succumbed to Dutch Elm Disease.

The ground flora was typically species poor and dominated by ruderal species including nettle *Urtica dioica* and dock *Rumex* sp. Ground-ivy *Glechoma hederacea* was also frequent- being found in quantity in a number of boundaries. Other species recorded included stone parsley *Sison amomum*, musk mallow *Malva moschatum*, hedge woundwort *Stachys sylvatica*, red campion *Silene dioica*, woody nightshade *Solanum dulcamara* and ivy *Hedera helix*.

J2.4 Fence

There are a number of internal fences, these often being associated with hedgerows.

J4 Hardstanding and bare ground

A small rectangular area of concrete was present in the north of the site. Assumed to be the base of a small agricultural building, since demolished.

Protected species

The site is known to support, or considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	The site features species rich hedgerow and grassland. If these habitats are likely to be impacted by development proposals then habitat surveys would be advisable.
<i>Rare and scarce plants</i>	There are nearby records for rare plants, including three-lobed crowfoot, lesser quaking-grass and broad-leaved spurge. The presence of uncommon plant species in the grassland cannot be ruled out.
<i>Rare and scarce invertebrates</i>	A number of invertebrate records were returned with the data search, with the majority of records being aquatic molluscs. The site is considered unlikely to support rare or scarce invertebrates.

746/1310 Land South of Mill Road

<i>Amphibians including great crested newts</i>	<p>A large number of great crested newt records were returned within 1km of the site.</p> <p>Some site habitats (hedgerow, grassland) are suitable for this group and there are a number of ponds in the local area. The presence of amphibians, including great crested newt cannot be ruled out.</p>
<i>Reptiles</i>	<p>A number of records for slow worm and grass snake were returned with the data search.</p> <p>The following habitats are suitable for this species group (hedgerow, grassland) and presence on site is likely.</p>
<i>Breeding/Wintering birds</i>	<p>The hedgerow and woodland habitats are likely to support nesting birds. Nesting birds may also use the site buildings where access to structures is possible.</p> <p>The proximity to high quality bird nesting and foraging habitats including a tract of woodland and pasture means that the presence of less common species cannot be ruled out.</p> <p>The site is not considered likely to support significant populations of wintering birds</p>
<i>Dormouse</i>	<p>No dormouse records exist within 1km of the site.</p> <p>However, the hedgerow habitats and adjacent woodland have potential to support dormouse.</p>
<i>Aquatic mammals including water vole and otter</i>	Use of the watercourse by these species is possible.
<i>Terrestrial mammals including badger</i>	No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use cannot be ruled out.
<i>Bats (roosting potential)</i>	None of the site trees are of sufficient size, or age, or have structural features which are suitable for bats. However, detailed bat inspections have not been undertaken and presence cannot be ruled out.
<i>Bats (foraging and commuting)</i>	The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	International	Unknown		
<i>Sites of national importance</i>	High	National	Unknown		
<i>Sites of local importance</i>	Medium	County	Unknown		

746/1310 Land South of Mill Road

<i>Habitats</i>	Lower	District	Moderate Adverse	Probable	
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	Unknown	Unknown			
<i>Invertebrates</i>	N/A	N/A			
<i>Amphibians including great crested newts</i>	Unknown	Unknown			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			
<i>Aquatic mammals including water voles and otters</i>	Unknown	Unknown			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	✓
Hedgerow survey	May to October	✓
Rare plant survey	April to September (depending upon species)	✓
Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	✓
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	X
Dormouse survey	April to November	✓
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	✓
Otter survey	Year round (Spring is optimal)	✓
Bat inspection survey (trees)	Year round (Winter is optimal)	✓
Bat inspection survey (buildings)	Year round	X
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features including scrub and woodland at the periphery of the site should be protected in the built scheme.
- All mature trees should be retained in-situ.

746/1310 Land South of Mill Road

- Retention of areas of scrub and trees and the watercourse, and linear features such as hedgerows wherever possible throughout the site.

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Heras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped.
- Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures and regular monitoring to record a decline in habitat quality or quantity.

Potential enhancements

A number of potential enhancements could be employed at this site in order to improve habitats for wildlife, including:

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Retention and enhancement of the watercourse through restoration to a more gentle natural profile and reducing shading vegetation.
- Creation of a new wildlife pond in a secluded corner of the site.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (woodland, hedgerow etc).

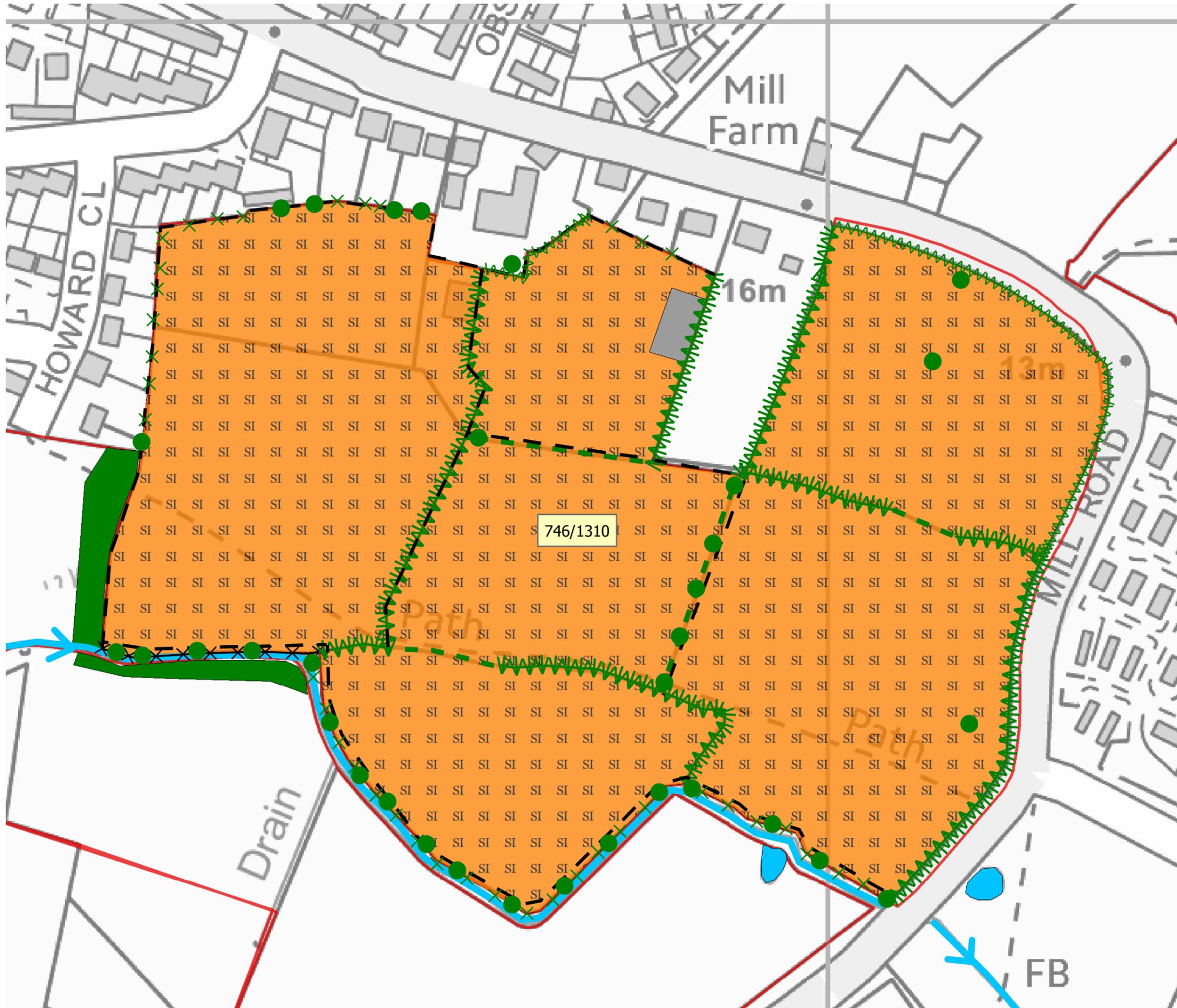
746/1310 Land South of Mill Road

- Supplementary planting in gaps in tree and hedgelines will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of any proposed SUDs features using native wetland plants, and trees, shrubs etc.
- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brash) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

Summary

Likelihood of ecological interest: protected habitats and or species

High	Medium	Low	Negligible



L16416 Hailsham Area Action Plan
 Hailsham East
 746/1310 Land South of Mill Road

Phase 1 Habitat Survey

Figure 746/1310/E01
 1:1500@A3

September 2016



781/1310 Former Eastbourne Waterworks, Amberstone

Ecological Assessment

Site overview

The site is situated a short distance to the northeast of Hailsham and lies in the hamlet of Amberstone, which is set in a largely rural area. The former waterworks is surrounded by isolated dwellings, light industrial uses and open countryside.

The site supports a variety of habitats, including bare ground, hardstanding, a number of buildings and developing scrub.

The local soils are slightly acid loams and clays with impeded drainage.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 1km

Sites of local importance and protected and/or notable species: 500m

Ponds and waterbodies: 250m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels Ramsar	700m	SE	Pevensy Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensy Levels Special Area of Conservation (SAC)	700m	SE	Pevensy Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Pevensy Levels Site of Special Scientific Interest (SSSI)	700m	SE	Pevensy Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1% of the total British population of wintering lapwings.
---	------	----	---

781/1310 Former Eastbourne Waterworks, Amberstone

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
CW97 Jarvis's, Nobody's Wood & Park Wood Complex LWS	450m	N	These sites form a large area of mostly ancient and/or semi-natural woodland containing ancient earthworks and have had a long history of varying use and management. The woodlands are mainly oak with a history of coppiced hornbeam, sweet chestnut and hazel, with some areas of ash and alder in calcareous and wetter soils, respectively. The wooded stream valley supports a diversity of bryophytes and ferns.
Amberstone Roundabout Notable Road Verge	10m	E	Supports early purple orchid, green winged orchid, oxeye daisy and other meadow flowers.
Ancient Woodland	450m	N	One ancient woodland, Park Wood, lies within 500m of the site.
Deciduous woodland Priority Habitat	425m	N	One deciduous woodland, Park Wood, lies within 500m of the site.

Ecological baseline: protected species

A small number of protected species have been recorded from within the search radius; refer to **Figure 4.5** protected species mapping for more details of locations.

Records for all four common species of reptile (common lizard, slow worm, grass snake and adder) were returned, as well as a diversity of bat species (common pipistrelle, soprano pipistrelle, Natterer's bat, Noctule bat, Serotine and Bechstein's bat). Records for water vole, hedgehog, dormouse and grey heron were also returned.

Ecological baseline: non-native species

No non-native species records were available for the site. The presence of non-native species cannot however be discounted on this basis.

Setting and green infrastructure

The site lies in a strongly rural landscape albeit within the junction formed by New Road and the A271 and features a coherent green infrastructure network comprised of hedgerows and tree-lined watercourses. The surrounding land-use in the wider area is a mixture of woodland and pasture, including Park Wood, with some arable land to the north. Closer to the site are several dwellings and light industrial premises.

A minor watercourse on the western site boundary flows down to the Pevensy Levels.

There are no ponds within the search area with the exception of a small waterbody a short way up the Cowbeech Road, across the A271.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

781/1310 Former Eastbourne Waterworks, Amberstone

Management and habitat condition

The site appears largely unmanaged.

Habitat Description

Figure 781/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A2.1 Dense/continuous scrub

Several areas of this habitat type are present, both along site boundaries and throughout the eastern part of the site.

Tree species include ash *Fraxinus excelsior* saplings, young sycamore *Acer pseudoplatanus* and silver birch *Betula pendula*, as well as cherry plum *Prunus cerasifera*, buddleia *Buddleia davidii* elder *Sambucus nigra* wild privet *Ligustrum vulgare*, bramble *Rubus fruticosus* agg. and hawthorn *Crataegus monogyna*.

Ground layer vegetation includes ephemeral and tall non ruderal veegation growing in a mosaic, supporting species such as teasel *Dipsacus fullonum*, hoary willowherb *Epilobium parviflorum*, hairy willowherb *Epilobium hirsutum*, oxeye daisy *Leucanthemum vulgare*, common fleabane *Pulicaria dysenterica*, wall cotoneaster *Cotoneaster horizontalis*, bird's-foot trefoil *Lotus corniculatus*, ragwort *Senecio jacobaea*, large-flowered evening primrose *Oenothera glazioviana*, ground ivy *Glechoma hederacea*, and slender St. John's wort *Hypericum pulchrum*. A number of plants of the hybrid fleabane *Conyza canadensis x floribunda* were also noted.

A2.2 Scattered scrub

Small areas of scattered scrub are present on the site. Species present include bramble *Rubus fruticosus* agg., elder *Sambucus nigra*, hawthorn *Crataegus monogyna*, wild privet *Ligustrum vulgare*, and buddleia *Buddleia davidii*. This habitat dominates the northernmost section of the site where there is a large mound of earth and building debris but occurs throughout.

A3.1 Scattered broadleaved trees

A large number of scattered trees are present throughout the site but particularly along the external boundaries. These are typically semi-mature specimens and appear to have been planted, although some may be self-sown. Species present include sycamore *Acer pseudoplatanus*, ash *Fraxinus excelsior*, silver birch *Betula pendula*, and goat willow (*Salix caprea* ssp. *sphacelata*).

B2.2 Semi-improved neutral grassland

The grassland areas are considered to fall within this community type. The sward is typically dominated by Yorkshire fog *Holcus lanatus*, with abundant cock's-foot *Dactylis glomerata*. Associated forbs include perforate St. John's wort *Hypericum perforatum*, imperforate St. John's wort *Hypericum maculatum*, ribwort plantain, *Plantago lanceolata*, slender knapweed *Centaurea debeauxii*, meadow vetchling *Lathyrus pratensis*, germander speedwell *Veronica chamaedrys*, selfheal *Prunella vulgaris*, common bird's-foot trefoil *Lotus corniculatus*, greater bird's-foot trefoil *Lotus pedunculatus*, yarrow *Achillea millefolium*, common mouse ear *Cerastium fontanum*, bugle *Ajuga reptans*, cleavers *Galium aparine*, and silverweed *Potentilla anserina*.

C3.1 Tall ruderal

Tall ruderal vegetation is prominent, particularly to the west of the site. Species present in this community include nettle *Urtica dioica*, bramble *Rubus fruticosus* agg., water figwort *Scrophularia auriculata*, and common fleabane *Pulicaria dysenterica*, with ground ivy *Glechoma hederacea* in the ground layer.

C3.2 Tall non-ruderal

Sections of non-ruderal communities are present predominantly at the western side of the site, but also in the area surrounding the central buildings, where vegetation is mostly mown (presumably for access). At these localities there is patchy bramble *Rubus fruticosus* agg., creeping cinquefoil *Potentilla reptans*, cat's-ear

781/1310 Former Eastbourne Waterworks, Amberstone

Hypochaeris radicata, ribwort plantain, *Plantago lanceolata*, slender knapweed *Centaurea debeauxii*, hemp agrimony *Eupatorium cannabinum*, perforate St. John's wort *Hypericum perforatum*, common fleabane, *Pulicaria dysenterica* and burdock *Arctium minus*.

G2 Running water

A minor watercourse flows along the western boundary. The watercourse is heavily shaded and supports no aquatic vegetation, however the banks have a similar species composition to C3.1.

J1.3 Ephemeral/short perennial

The central hardstanding supports a sparse cover of ephemeral vegetation which extends out over much of the site, where it occurs in a close mosaic with the scrub habitats. Where there are ephemeral communities at adjacent site sections to the hardstanding the cover of this habitat type becomes more diverse. Species include teasel *Dipsacus fullonum*, wild strawberry *Fragaria vesca*, slender St. John's wort *Hypericum pulcrum*, lady's mantle *Alchemilla mollis*, bugle *Ajuga reptans*, lesser hawkbit *Leontodon saxatile*, slender knapweed *Centaurea debeauxii*, water figwort *Scrophularia auriculata*, hybrid fleabane *Conyza canadensis x floribunda*, agrimony *Agrimonia eupatoria*, scarlet pimpernel *Anagallis arvensis*, black medick *Medicago lupulina*, and hemp agrimony *Eupatorium cannabinum*. Remnants of garden planting are also present including *Pyracantha* spp., and tutsan *Hypericum androsaemum*.

J2.4 Fence

Internal and external boundaries feature chain-link fencing.

J3.6 Buildings

There are a number of buildings on the site. These include new and old (Victorian) pumping sheds, water storage tanks and other buildings associated with the waterworks.

J4 Hardstanding and bare ground

Extensive areas of concrete and other hard surfaces are present on the site.

Target Notes

1	Large mound of earth and building debris partially overgrown with <i>Buddleia</i> scrub – creates ideal reptile hibernaculum.
2	Hardstanding supporting developing scrub over ephemeral vegetation.
3	Water storage tank, possibly prone to leaking and lower sections support a variety of ferns including harts-tongue <i>Asplenium scolopendrium</i> , male fen <i>Dryopteris filix-mas</i> and black spleenwort <i>Asplenium adiantum-nigrum</i> .

Protected species

The site is considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	The site features a small area of species rich grassland only.

781/1310 Former Eastbourne Waterworks, Amberstone

<i>Rare and scarce plants</i>	<p>There were no rare plant records returned with the data search.</p> <p>The presence of uncommon plant species in the grassland and ephemeral habitats cannot be ruled out.</p>
<i>Rare and scarce invertebrates</i>	<p>There were no records of rare and/or scarce invertebrates returned with the data search.</p> <p>The site is considered to have some potential to support rare or scarce invertebrates given the range of ephemeral habitats, plant species diversity and varied site microclimate.</p>
<i>Amphibians including great crested newts</i>	<p>No records of amphibians were returned with the data search.</p> <p>Some site habitats (grassland, scrub etc.) are suitable for this group. However, there are few ponds in the local area and the closest lies beyond a busy main road. The presence of amphibians on site is thought unlikely.</p>
<i>Reptiles</i>	<p>Records for four species of reptile were returned.</p> <p>The site's habitats (grassland, scrub and rubble piles) are highly suitable for this species group and presence on site is likely.</p>
<i>Breeding/Wintering birds</i>	<p>The scrub habitats are likely to support nesting birds. Nesting birds may also use the site buildings where access to structures is possible.</p> <p>The proximity to high quality bird nesting and foraging habitats including woodland and pasture and the on-site ephemeral habitats means that the presence of less common species cannot be ruled out.</p> <p>The site is not considered likely to support significant populations of wintering birds.</p>
<i>Dormouse</i>	<p>There is one record of dormouse within 500m of the site.</p> <p>The site habitats do not have potential to support dormouse.</p>
<i>Aquatic mammals including water vole and otter</i>	<p>There are no habitats on site suitable for these species; occasional presence of otter along the watercourse cannot be ruled out but is considered unlikely. The watercourse is too heavily shaded to be used by water vole.</p>
<i>Terrestrial mammals including badger</i>	<p>No badger setts or other signs were noted during the Phase I survey and the site fencing makes presence unlikely.</p>
<i>Bats (roosting potential)</i>	<p>None of the site trees are of sufficient size, or age, or have structural features which are suitable for bats.</p> <p>The buildings on site are unlikely to be used by a significant population of roosting bats as single-skin structures tend not to offer sufficient insulation. However, the local landscape features a number of habitats which are highly suited to bat foraging use and detailed bat inspections have not been</p>

781/1310 Former Eastbourne Waterworks, Amberstone

	undertaken and so the existence of an on-site roost cannot be ruled out.
<i>Bats (foraging and commuting)</i>	The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Higher	European	Neutral		
<i>Sites of national importance</i>	Higher	National	Neutral		
<i>Sites of local importance</i>	Medium	County	Neutral		
<i>Habitats</i>	Lower	District	Moderate Adverse	Probable	Minor Adverse
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	Unknown	Unknown			
<i>Invertebrates</i>	Unknown	Unknown			
<i>Amphibians including great crested newts</i>	N/A	N/A			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	N/A	N/A			
<i>Aquatic mammals including water voles and otters</i>	N/A	N/A			
<i>Terrestrial mammals including badgers</i>	N/A	N/A			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	X
Hedgerow survey	May to October	X
Rare plant survey	April to September (depending upon species)	✓
Invertebrate survey	April to September (depending upon species)	✓
Great crested newt survey	March to June	X
Reptile survey	April to June and September to October	✓

781/1310 Former Eastbourne Waterworks, Amberstone

Breeding bird survey	April to June	✓
Wintering bird survey	December to February	X
Dormouse survey	April to November	X
Badger survey	Year round (Spring/Autumn are optimal)	X
Water vole survey	April to October	X
Otter survey	Year round (Spring is optimal)	X
Bat inspection survey (trees)	Year round (Winter is optimal)	X
Bat inspection survey (buildings)	Year round	✓
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features including the watercourse and scrub and woodland at the periphery of the site should be protected in the built scheme.
- All mature trees should be retained in-situ.
- Retention of areas of grassland, scrub and trees, wherever possible throughout the site.

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Heras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped.
- Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures and regular monitoring to record a decline in habitat quality or quantity.

781/1310 Former Eastbourne Waterworks, Amberstone

Potential enhancements

A number of enhancement measures could be employed in order to increase the value of the site to wildlife, including some of the following:

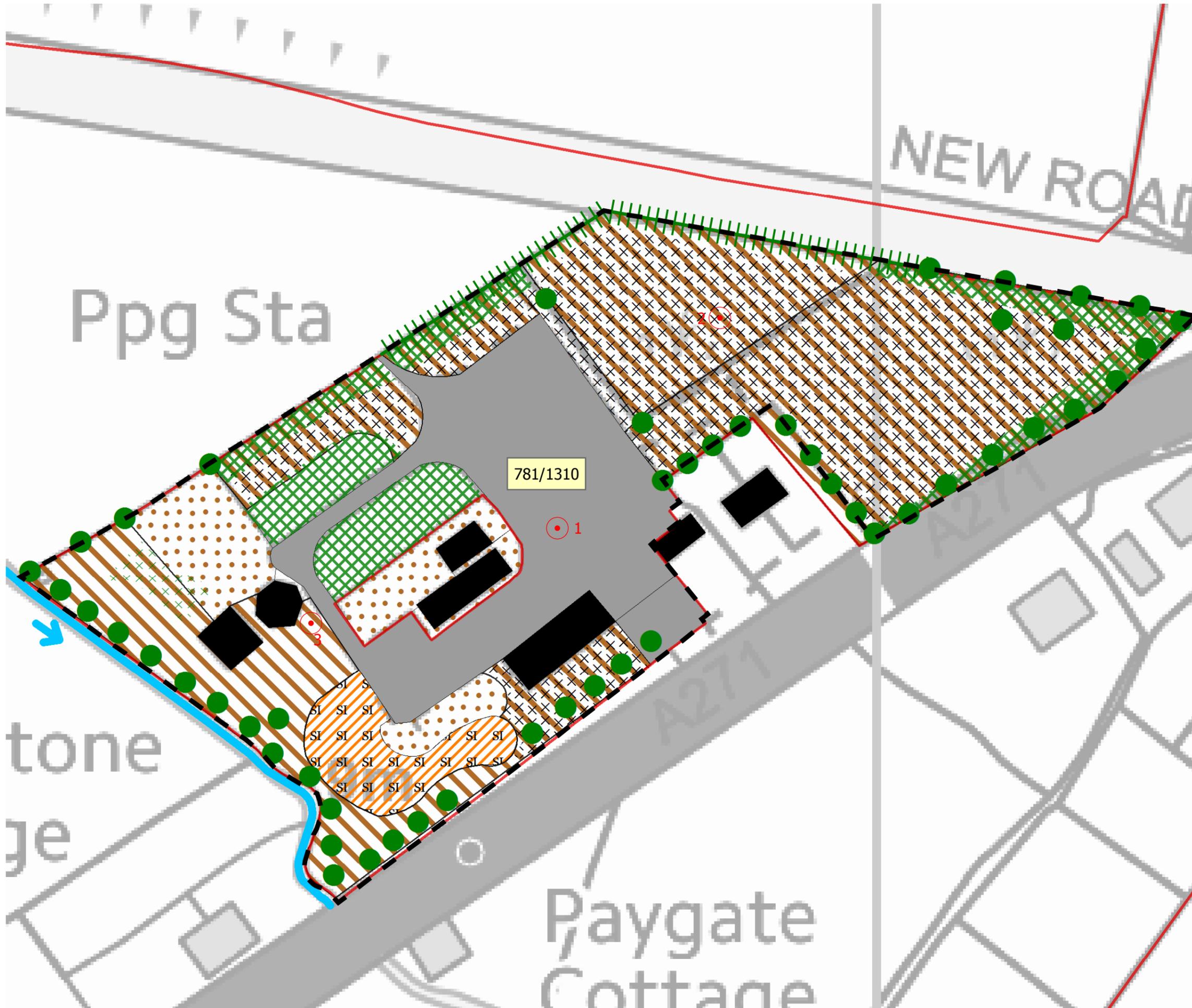
- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Retention and enhancement of the watercourse through de-silting and removal of overhanging woody vegetation.
- Creation of a new wildlife pond in a secluded corner of the site.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (hedgerows etc.).
- Supplementary planting in gaps in boundary vegetation will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of any proposed SUDs features using native wetland plants, and trees, shrubs etc.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brash) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

Summary

Likelihood of ecological interest: protected habitats and or species

High	Medium	Low	Negligible

Locations of features indicative only

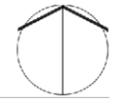


L16416 Hailsham Area Action Plan
Hailsham East
781/1310 Former Eastbourne Waterworks

Phase 1 Habitat Survey

Figure 781/1310/E01
1:800@A3

September 2016



804/1310 Land at Mill Road

Ecological Assessment

Site overview

The site is situated a short distance to the southeast of Hailsham and immediately to the north of Lion House Park (housing). The marshland of Pevensey Levels lies to the east and northeast.

The site features grassland, plantation woodland and hedgerow habitats.

The local soils are seasonally wet, slightly acid but base rich loams and clays.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 1km

Sites of local importance and protected and/or notable species: 1km

Ponds and waterbodies: 500m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels Ramsar	75m	N	Pevensey Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensey Levels Special Area of Conservation (SAC)	75m	N	Pevensey Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels SSSI	75m	N	Pevensey Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1%

804/1310 Land at Mill Road

			of the total British population of wintering lapwings.
--	--	--	--

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Coastal and floodplain grazing marsh Priority Habitat	Adjacent		A large area of this habitat type lies within 1km, including on adjacent land to the north of the site.
Good quality semi-improved grassland Priority Habitat	875m	N	An area of this habitat type lies approximately 875m north of the site.
Deciduous woodland Priority Habitat	375m	SW	Two stands of deciduous woodlands lie within 1km of the site, the nearest of which lies approximately 375m south-west of the site.
Traditional orchard Priority Habitat	875m	NW	A single traditional orchard lies within 1km, approximately 875m north-west of the site.

Ecological baseline: protected species

Records covered a broad range of species, including some of the following:

- Plants (sharp-leaved pondweed, lesser quaking-grass, rootless duckweed)
- Amphibians and reptiles (slow worm, grass snake)
- Birds (lapwing)
- Invertebrates (wall and small heath butterflies; garden tiger moth; large-mouthed valve snail, the shining ram's-horn, little whirlpool ram's-horn snail, *Pisidium pseudosphaerium*)
- Mammals (common pipistrelle, soprano pipistrelle)
- Fish (European eel)

Refer to **Figure 4.5** protected species mapping for more details of locations.

Ecological baseline: non-native species

The following non-native species have previously been recorded from within the search radius:

- Plants; parrot's feather
- Invertebrates; horse-chestnut leaf miner

Setting and green infrastructure

The sites lies in a strongly rural landscape albeit on the edge of a large area of housing at Lion House Park and close to the edge of Hailsham further to the west, and has good habitat linkages to the wider area via a system of hedgerows. The surrounding land-use is almost entirely pastoral, with relatively little woodland. The open expanse of marshland of Pevensy Levels lies to the east and northeast.

There are an estimated 9 ponds within the search area. These include two on-site ponds, but exclude larger waterbodies to the southwest associated with the STW.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

804/1310 Land at Mill Road

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The open areas of the site consist of semi-improved grassland, which is kept mown. The remainder of the vegetation is rough grassland with recent plantation woodland, though which a network of mown paths and glades have been created.

The hedges surrounding and dissecting the site appear not to be in regular management but are in good condition.

Habitat Description

Figure 804/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A1.1.2 Broadleaved plantation woodland

This habitat type covers much of the site. Constituent tree species diversity is high, and includes silver birch *Betula pendula*, beech *Fagus sylvatica*, elm *Ulmus* sp., blackthorn *Prunus spinosa*, hornbeam *Carpinus betulus*, field maple *Acer campestre*, cherry *Prunus avium*, rowan *Sorbus aucuparia*, hazel *Corylus avellana*, sweet chestnut *Castanea sativa*, and oak *Quercus robur*. Most of the oak trees within have mildew. The tree species mix also features infrequent evergreen species, including holly *Ilex aquifolium*, and yew *Taxus baccata*.

The groundlayer is dominated by cock's-foot *Dactylis glomerata* but otherwise is similar to the semi-improved grassland. Forbs present include ragwort *Senecio jacobaea*, dog rose *Rosa canina*, common knapweed *Centaurea nigra* agg. , and hairy willowherb *Epilobium hirsutum*.

A2.1 Dense/continuous scrub

Along central and northern site boundaries and interior field divisions there are sections of dense/continuous scrub. These comprise mainly blackthorn *Prunus spinosa* and juvenile oak *Quercus robur*, with field rose *Rosa arvensis* and dog rose *Rosa canina* agg. over grassland with tufted vetch *Vicia cracca* and ragwort *Senecio jacobaea*.

A3.1 Scattered broadleaved trees

Scattered trees are present around the ponds. Species present primarily include oak *Quercus robur*, and ash *Fraxinus excelsior*.

B2.2 Semi-improved neutral grassland

All grassland areas, including those mown for use as pathways, are considered to fall within this community type. The sward is typically dominated by cock's-foot *Dactylis glomerata*. Other grasses include Yorkshire fog *Holcus lanatus*, timothy *Phleum pratense*, creeping bent *Agrostis stolonifera*, meadow barley *Hordeum secalinum*, sweet vernal grass *Anthoxanthum odoratum*, and common bent *Agrostis capillaris*.

Associated forbs include common bird's-foot trefoil *Lotus corniculatus*, ragwort *Senecio jacobaea*, common sorrel *Rumex acetosa*, selfheal *Prunella vulgaris*, meadow buttercup *Ranunculus acris*, cow parsley *Anthriscus sylvestris*, meadow vetchling *Lathyrus pratensis*, hogweed *Heracleum sphondylium*, red clover *Trifolium pratense* and common mouse-ear *Cerastium fontanum*. Common fleabane *Pulicaria dysenterica* and greater bird's-foot trefoil *Lotus pedunculatus* are present in damper areas.

C1.1 Bracken - continuous

Small stands of bracken *Pteridium aquilinum* occur in places along site boundaries.

C3.2 Tall non-ruderal

804/1310 Land at Mill Road

There is a small fragment of this community type at the southern end of the site. It consists of rosebay willowherb *Chamerion angustifolium*, creeping thistle *Cirsium arvense*, and ragwort *Senecio jacobaea* over grassland.

G1 Standing water

Two small ponds are present on site. The pond at the southeastern corner of the site is too shaded by overhanging hawthorn *Crataegus monogyna*, ash *Fraxinus excelsior* and bramble *Rubus fruticosus* agg., and hedgerow trees to support aquatic flora. However, bankside species include soft rush *Juncus effusus*.

At the northwestern corner duckweed *Lemna* sp. covers the entirety of the pond's surface. Bankside species include ash *Fraxinus excelsior*, and crack willow *Salix x fragilis*.

J2.1.1 Native species-rich hedge, intact

A number of hedges on the site are intact species-rich native hedges.

These hedgerows are dominated by blackthorn *Prunus spinosa*. Associated species include hawthorn *Crataegus monogyna*, hazel *Corylus avellana*, oak *Quercus robur* and elder *Sambucus nigra*, and also climbers and scramblers such as bramble *Rubus fruticosus*, ivy *Hedera helix*, dog rose *Rosa canina* agg., and honeysuckle *Lonicera periclymenum*.

The ground flora associated with the hedge sections includes stone parsley *Sison amonum* and a mix of grasses similar to the composition found in B2.2.

J2.3.1 Native species-rich hedge with trees

Most of the hedges on the site fall into this category. Most have been allowed to grow to form broad, tall boundary features.

The hedgerows are dominated by blackthorn *Prunus spinosa*, with oak *Quercus robur* and hawthorn *Crataegus monogyna*.

Climbers and scramblers include bramble *Rubus fruticosus* agg., ivy *Hedera helix*, dog rose *Rosa canina* agg.

The ground flora associated with the closely managed hedge sections was species poor, or absent; that associated with the less frequently managed hedges included false oat grass *Arrhenatherum elatius*, ivy *Hedera helix*, hogweed *Heracleum spondylium*, lords and ladies *Arum maculatum*, great willowherb *Epilobium hirsutum*, bindweed *Calystegia sepium*, cleavers *Galium aparine*, spear thistle *Cirsium vulgare* and nettle *Urtica dioica*.

J2.4 Fence

There are a number of fence sections within the site, most of which are embedded within hedgerows.

J4 Hardstanding and bare ground

There is a small area of bare ground in the south of the site.

Protected species

The site is known to support, or considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.

804/1310 Land at Mill Road

<i>Notable site habitats</i>	<p>The site features species rich hedgerow habitats.</p> <p>If these habitats are likely to be impacted by development proposals then habitat surveys would be advisable.</p>
<i>Rare and scarce plants</i>	<p>There is one record of sharp-leaved pondweed within 1km of the site.</p> <p>The presence of uncommon plant species is considered unlikely.</p>
<i>Rare and scarce invertebrates</i>	<p>The majority of invertebrate records returned were for aquatic molluscs.</p> <p>The site is considered unlikely to support rare or scarce invertebrates.</p>
<i>Amphibians including great crested newts</i>	<p>No great crested newt records were returned with the data search.</p> <p>The site habitats (grassland, woodland and scrub) are suitable for this group and there are a number of ponds in the local area, including on site. The presence of amphibians, including great crested newt cannot be ruled out.</p>
<i>Reptiles</i>	<p>There are records of grass snake and slow worm within 1km of the site.</p> <p>The following habitats are suitable for this species group (hedgerow, plantation woodland, scrub and grassland) and presence on site is likely.</p>
<i>Breeding/Wintering birds</i>	<p>The hedgerow habitats are likely to support nesting birds. Ground-nesting species may be present in the young plantation.</p> <p>The site is not considered likely to support significant populations of wintering birds</p>
<i>Dormouse</i>	<p>There are no records for dormouse within 1km of the site.</p> <p>However, the hedgerow habitats have potential to support dormouse.</p>
<i>Aquatic mammals including water vole and otter</i>	<p>There are no habitats on site suitable for these species.</p>
<i>Terrestrial mammals including badger</i>	<p>No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use cannot be ruled out.</p>
<i>Bats (roosting potential)</i>	<p>None of the site trees appear of sufficient size, or age, or have structural features which are suitable for bats. However, detailed bat inspections have not been undertaken and presence cannot be ruled out.</p>
<i>Bats (foraging and commuting)</i>	<p>The site is likely to offer bat foraging opportunity and may also be used by bats moving between habitats within the local landscape.</p>

804/1310 Land at Mill Road

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	European	Unknown		
<i>Sites of national importance</i>	High	National	Unknown		
<i>Sites of local importance</i>	Lower	District	Unknown		
<i>Habitats</i>	Lower	Parish	Moderate Adverse	Probable	Minor Adverse
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	N/A	N/A			
<i>Invertebrates</i>	N/A	N/A			
<i>Amphibians including great crested newts</i>	Unknown	Unknown			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			
<i>Aquatic mammals including water voles and otters</i>	N/A	N/A			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	X
Hedgerow survey	May to October	✓
Rare plant survey	April to September (depending upon species)	X
Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	✓
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	X
Dormouse survey	April to November	✓
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	X
Otter survey	Year round (Spring is optimal)	X
Bat inspection survey (trees)	Year round (Winter is optimal)	✓

804/1310 Land at Mill Road

Bat inspection survey (buildings)	Year round	X
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features including scrub and woodland at the periphery of the site should be protected in the built scheme.
- All mature trees should be retained in-situ.
- The ponds should be retained.
- Retention of areas of scrub and older trees, and linear features such as hedgerows wherever possible throughout the site.

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Heras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped.
- Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures and regular monitoring to record a decline in habitat quality or quantity.

Potential enhancements

A number of enhancement measures could be employed in order to increase the value of the site to wildlife, including the following:

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.

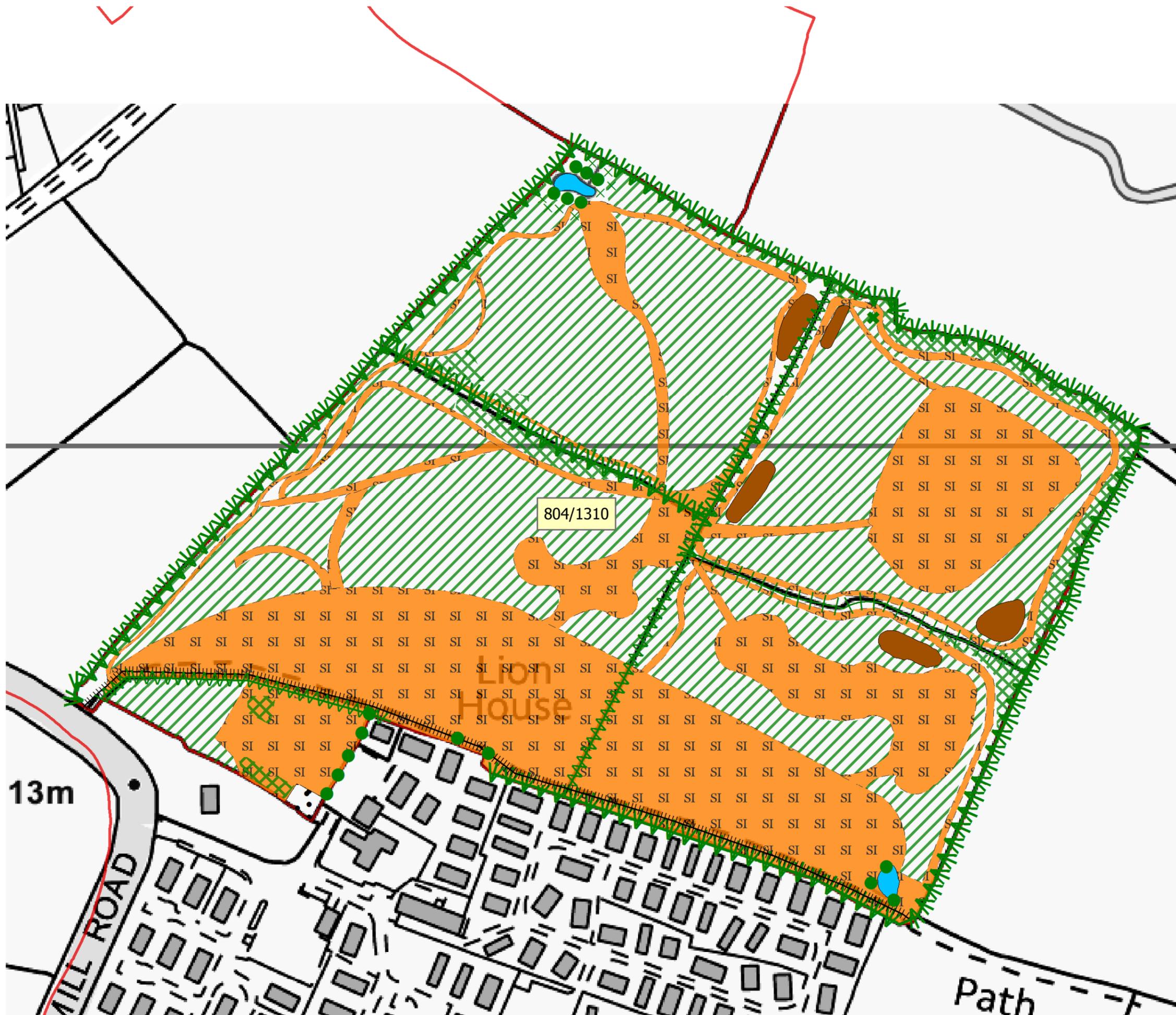
804/1310 Land at Mill Road

- Retention and enhancement of the ponds on site through de-silting and removal of overhanging woody vegetation.
- The boundary vegetation should be strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- Enhancements to the retained young woodland habitat, including thinning out as required.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Design site planting so as to link in to, or add to, surrounding habitat areas (hedgerow, woodland etc.).
- Supplementary planting in gaps in tree and hedgelines will improve connectivity with the surrounding area.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Enhancement of any proposed SUDs features using native wetland plants, and trees, shrubs etc.
- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brash) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

Summary

Likelihood of ecological interest: protected habitats and or species

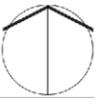
High	Medium	Low	Negligible



L16416 Hailsham Area Action Plan
Hailsham East
804/1310 Land at Mill Road

Site location

Figure 804/1310/E01
1:1500@A3



September 2016



883/1310 Land at Harebeating Farm

Ecological Assessment

Site overview

The site lies on the edge of the Pevensey Levels close to the urban fringe of Hailsham, and comprises sheep-grazed pasture separated by hedges and dry ditches which lead down to a minor watercourse which drains to the Levels.

The local soils are slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 2km

Sites of local importance and protected and/or notable species: 1km

Ponds and waterbodies: 500m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels Ramsar	Adjacent	E	Pevensey Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensey Levels Special Area of Conservation (SAC)	Adjacent	E	Pevensey Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensey Levels SSSI	Adjacent	E	Pevensey Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1% of the total British population of wintering lapwings.

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
------	------------------------------	-----------	-----------------------------------

883/1310 Land at Harebeating Farm

Coastal and floodplain grazing marsh	On site		Priority Habitat lies within the site.
Deciduous woodland	950m (nearest)	W/S	A small number of small woodlands lie within the search area.
Good quality semi-improved grassland	100m (nearest)	N	Small areas of this Priority Habitat lies within 1 km of the site
Traditional orchard	100m (nearest)	W/N	Priority Habitat lies within 1 km of the site

Ecological baseline: protected species

Records covered a broad range of species, including some of the following:

A number of protected species have been recorded from within the search radius; refer to **Figure 4.5** protected species mapping for more details of locations.

- Records covered a broad range of species, including some of the following:
- Amphibians and reptiles (slow worm, adder, common lizard, grass snake, great crested newt, common toad)
- Birds (lapwing, Cetti's warbler, redshank, swift, tree sparrow, barn owl, hobby, tallow wagtail)
- Invertebrates (wall, small heath butterfly, moths including; orange footman, cypress carpet, red-green carpet, toadflax brocade, maple pug, festoon, broad-bordered bee hawk-moth, dusky-lemon sallow, lunar thorn, great silver water beetle, variable damselfly)
- Mammals (water vole, dormouse, Daubenton's bat, noctule, whiskered bat, brown-long eared bat, common, soprano and Nathusius's pipistrelle, Bechstein's bat, serotine)
- Mollusc (large mouthed valve-snail, shining rams-horn, little whirlpool ram's-horn snail)
- Flowering plants (Three-lobed crowfoot, tubular water-dropwort, golden dock, rootless duckweed, corn parsley, bladderwort, frogbit, sickle medick, greater yellow-cress, lesser quaking grass, sharp-leaved pondweed)

Refer to **Figure 4.5** protected species mapping for more details of locations.

Ecological baseline: non-native species

The following non-native species have previously been recorded from within the search radius:

- Plants; Indian balsam, winter heliotrope, giant knotweed, floating pennywort, cherry laurel, hybrid bluebell, montbretia, Himalayan cotoneaster, parrot's feather, red valerian, three-cornered garlic
- Invertebrates; harlequin ladybird, horse chestnut leaf-miner
- Mammals; American mink

The invasive alien parrot's feather was found in the pond during the Phase 1 survey.

Setting and green infrastructure

The site lies in a largely rural landscape on the outskirts of Hailsham, and is associated with a ribbon of development along Marshfoot Lane. There is a moderately strong green infrastructure network comprising boundary hedgerows; to the east these start to become replaced by the marsh ditches of the Pevensy Levels. The site is sheep-grazed in its entirety. Surrounding landuse is mainly pastoral.

There are a series of dry ditches on the site which seasonally will bear water to the Whelpley Sewer

There are over 10 ponds within the search area. There is one small pond on site.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

883/1310 Land at Harebeating Farm

Management and habitat condition

The majority of this site is comprised of improved grassland fields which are grazed by sheep. Managed hedgerows and fencing mark most of the site boundaries.

Habitat Description

Figure 883/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A2.1 Dense/continuous scrub

In the south-east of the site, dense/continuous scrub replaces part of a hedgerow. The dominant species is bramble *Rubus fruticosus* agg. Common nettle *Urtica dioica* and spear thistle *Cirsium vulgare* were also present.

A2.2 Scattered scrub

Scattered scrub is found along several of the site borders; bramble *Rubus fruticosus* agg. dominates.

Scattered scrub is also present surrounding a seasonally wet pond in the south-east of the site. Species present here include grey willow *Salix cinerea*, goat willow *Salix caprea*, hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa*.

A3.1 Scattered broadleaved trees

Trees are found throughout the site in association with the pond and boundary features; and are mostly oak *Quercus robur* and poplar *Populus* spp.

B4 Improved grassland

The majority of the site comprises this habitat. The sward is dominated by perennial rye grass *Lolium perenne*. Other species recorded include timothy *Phleum pratense*, common bent *Agrostis capillaris*, creeping bent *Agrostis stolonifera*, meadow barley *Hordeum secalinum*, and crested dog's tail *Cynosurus cristatus*. Soft rush *Juncus effusus* occurs locally in association with damp ground and annual meadow grass is present where the turf is broken. Associated forbs are mainly 'weed species' associated with open ground and/or field margins, and include lesser burdock *Arctium minus*, common mouse-ear *Cerastium fontanum*, shepherd's purse *Capsella bursa-pastoris*, creeping cinquefoil *Potentilla reptans*, red clover *Trifolium pratense*, white clover *Trifolium repens*, creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, daisy *Bellis perennis*, greater plantain *Plantago major*, common nettle *Urtica dioica*, common sorrel *Rumex acetosa*, curled dock *Rumex crispus*, creeping buttercup *Ranunculus repens* and dandelion *Taraxacum* agg.

G1 Standing water

A seasonally wet pond is present within the site. It was dry at the time of survey. Vegetation associated with the pond include soft rush *Juncus effusus*, hard rush *Juncus inflexus*, water plantain *Alisma plantago-aquatica* and yellow flag iris *Iris pseudacorus*; though greater willowherb *Epilobium hirsutum* dominates. The invasive alien parrot's feather *Myriophyllum aquaticum* is also present.

J2.1.2 Species-poor hedge

Many of the hedgerows within the site fall under this category.

The section of the southern boundary of the eastern field that borders gardens and scrubland is comprised of solely conifer *Cupressus* sp.

The entire northern boundary of the site also comprises this habitat. Species recorded include blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna* and oak *Quercus robur* with scramblers and climbers such as bramble *Rubus fruticosus* agg. and dog rose *Rosa canina*. There is also a very occasional presence of holly *Ilex aquifolium*, field maple *Acer campestre* and apple *Malus pumila*. The ground flora is dominated by creeping thistle *Cirsium arvense* and spear thistle *Cirsium vulgare*.

Woody species present along the eastern boundary and the central dividing hedge are limited to hawthorn and blackthorn.

J2.3.2 Species-poor hedge with trees

Many of the hedgerows within the site are listed as species-poor hedges with trees.

883/1310 Land at Harebeating Farm

The eastern border of the site contains hedge species such as blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna*, and holly *Ilex aquifolium* with trees present being oak *Quercus robur* and ash *Fraxinus excelsior*. Hop *Humulus lupulus* is also present.

The southern border adjacent to the track is comprised of species such as wild privet *Ligustrum vulgare*, dog rose *Rosa canina*, blackthorn and hawthorn, with trees such as field maple *Acer campestre*, oak and ash. The ground flora is dominated by bramble *Rubus fruticosus* agg.

J2.4 Fence

Fencing is present throughout the site.

J2.6 Dry ditch

Several dry ditches are present throughout the site. Species associated with the ditches include common nettle *Urtica dioica*, soft rush *Juncus effusus*, spear thistle *Cirsium vulgare* and common reed *Phragmites australis*.

Protected species

The site is known to support, or considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	There are no notable site habitats excepting the hedgerows
<i>Rare and scarce plants</i>	The site is considered unlikely to support rare or scarce plant species.
<i>Rare and scarce invertebrates</i>	The site is considered unlikely to support rare or scarce invertebrates.
<i>Amphibians including great crested newts</i>	Some of the habitat on site (ditches, hedgebases etc) is suitable for this group and there are a number of ponds in the local area including a seasonal pond on site. The presence of amphibians, including great crested newt cannot be ruled out.
<i>Reptiles</i>	Records of common lizard, slow worm, adder and grass snake exist within 1km of the site. The following habitats are suitable for this species group: hedgerow, ditches; and presence on site is possible.
<i>Breeding/Wintering birds</i>	The hedgerow habitats are likely to support nesting birds. The presence of, and proximity to high quality habitat (Pevensy Levels) means that the presence of less common species cannot be ruled out. The site is considered to have some potential to support populations of wintering birds
<i>Dormouse</i>	There are records of dormouse being present within 1km of the site boundaries. The hedgerows have some potential to support dormouse.

883/1310 Land at Harebeating Farm

<i>Aquatic mammals including water vole and otter</i>	The ditches are unlikely to have potential to support otter, however the presence of water vole cannot be ruled out given the proximity to Pevensy Levels.
<i>Terrestrial mammals including badger</i>	No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use or the presence of setts cannot be ruled out.
<i>Bats (roosting potential)</i>	A number of the trees on site are of sufficient size, or age, or have structural features which are suitable for roosting bats. Detailed bat inspections have not been undertaken and so the existence of an on-site roost cannot be ruled out.
<i>Bats (foraging and commuting)</i>	The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	European	Major Adverse	Possible	Moderate Adverse
<i>Sites of national importance</i>	High	National	Major Adverse	Possible	Moderate Adverse
<i>Sites of local importance</i>	Medium	County	Moderate Adverse	Probable	Moderate Adverse
<i>Habitats</i>	Lower	District	Moderate Adverse	Probable	Minor Adverse
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	N/A	N/A			
<i>Invertebrates</i>	N/A	N/A			
<i>Amphibians including great crested newts</i>	Unknown	Unknown			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			
<i>Aquatic mammals including water voles and otters</i>	Unknown	Unknown			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

883/1310 Land at Harebeating Farm

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	X
Hedgerow survey	May to October	✓
Rare plant survey	April to September (depending upon species)	X
Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	✓
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	✓
Dormouse survey	April to November	✓
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	✓
Otter survey	Year round (Spring is optimal)	X
Bat inspection survey (trees)	Year round (Winter is optimal)	✓
Bat inspection survey (buildings)	Year round	X
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features should be protected in the built scheme.
- All mature trees should be retained in-situ.
- Retention of linear features such as ditches and internal hedges.
- Avoid floodplain development

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Heras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.

883/1310 Land at Harebeating Farm

- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped.
- Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures and regular monitoring to record a decline in habitat quality or quantity.

Potential enhancements

A number of improvements could be implemented in order to enhance the site for wildlife, including some of the following:

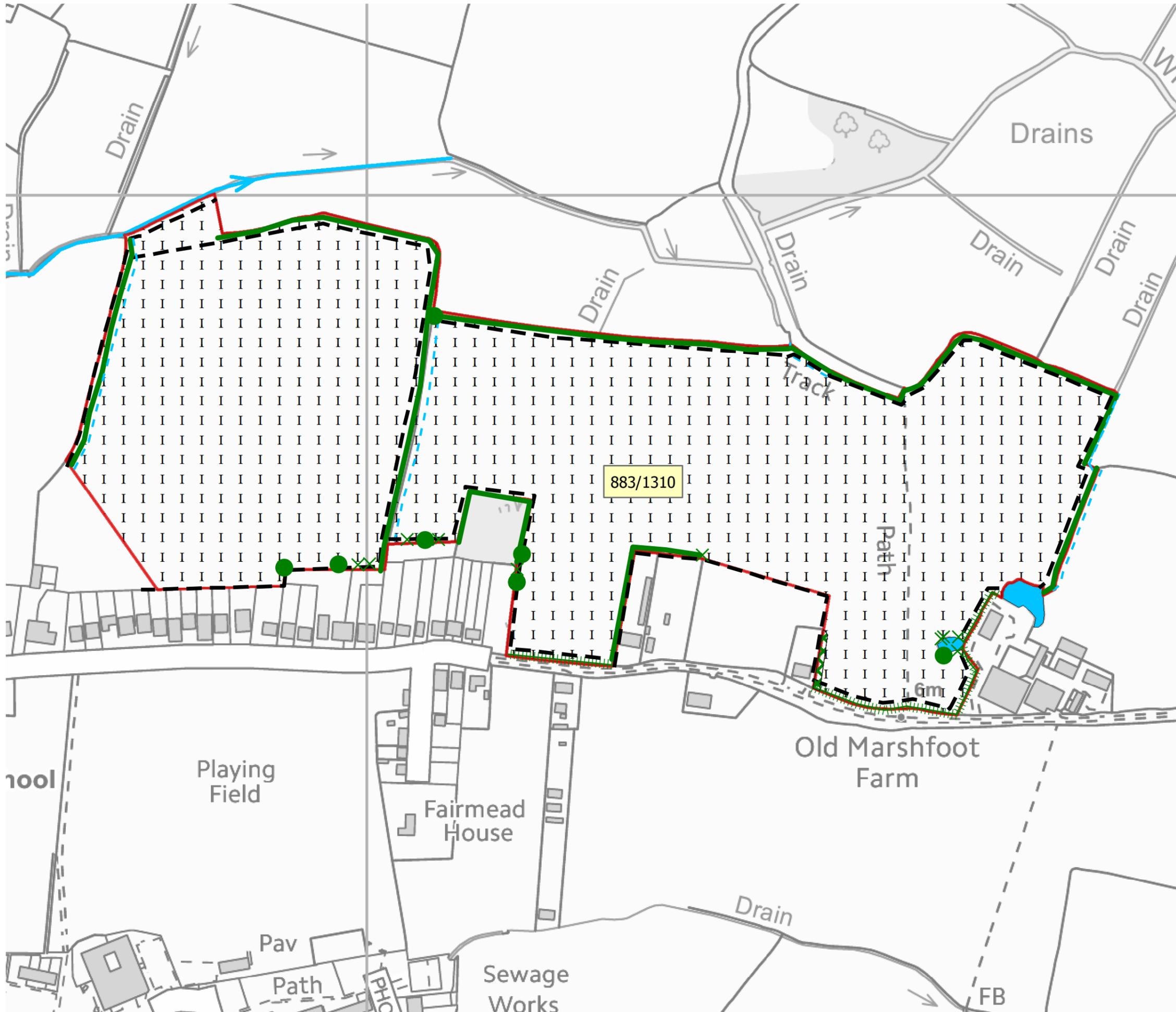
- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Retention and enhancement of the ditches through selective removal of overhanging woody vegetation and sensitive re-profiling.
- Retention and enhancement of the pond on site through de-silting and removal of overhanging woody vegetation and alien plant material.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- The boundary vegetation should be strengthened by further native planting.
- The internal and external boundary vegetation should be allowed to develop to a broader, taller form and strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Enhancement of SUDs features using native wetland plants, and trees, shrubs etc.
- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brash) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

Summary

Likelihood of ecological interest: protected habitats and or species

High	Medium	Low	Negligible

Locations of features indicative only

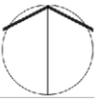


L16418 Hailsham Area Action Plan
Hailsham East
883/1310 Land at Harebeating Farm

Phase 1 Habitat Survey

Figure 883/1310/E01
1:2500@A3

October 2016



895/1310 Hailsham Ambulance Station

Ecological Assessment

Site overview

The site comprises a modern ambulance station comprising a building and associated hardstanding set in the built-up area of central Hailsham.

The local soils are slightly acid loamy and clayey soils with impeded drainage.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 1km

Sites of local importance and protected and/or notable species: 500m

Ponds and waterbodies: 250m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

None

Sites of national importance

None

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Deciduous woodland Priority Habitat	250m	S	One small area of deciduous woodland lies to the south of the site.

Ecological baseline: protected species

Records covered a small number of species comprising the following:

- Reptiles (slow worm)
- Birds (red kite, grey heron)
- Invertebrates (Moths; garden tiger, buff ermine, knot grass, lackey, small square-spot, beaded chestnut, powdered quaker, green brindled chestnut, dusky-lemon sallow, oak hook tip)
- Mammals (hedgehog, dormouse, brown-long eared bat, Daubenton's bat common pipistrelle, soprano pipistrelle)

Refer to **Figure 4.5** protected species mapping for more details of locations.

895/1310 Hailsham Ambulance Station

Ecological baseline: non-native species

The following non-native species have previously been recorded from within the search radius:

- Winter heliotrope

Setting and green infrastructure

The site is set in an entirely urban environment with minimal local green infrastructure connectivity.

There are no ponds within the search area.

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

Hardstanding, which constitutes the majority of the sites area, is frequently used (and so maintained in terms of keeping vegetation at bay), particularly at the west. The grassland strip beyond the fence at the east of the site, adjacent to The Cedars, is frequently mown.

Habitat Description

Figure 885/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A3.1 Scattered broadleaved trees

In the east of the site, beyond the fence that encloses the main body of the site, and within the area of amenity grassland, one cherry *Prunus avium* tree is present.

J1.2 Amenity grassland

A strip of amenity grassland occurs at the east of the site beyond the fence and adjacent to The Cedars. Perennial ryegrass *Lolium perenne* is dominant. Yorkshire fog *Holcus lanatus* is also present. Associated forbs include yarrow *Achillea millefolium*, daisy *Bellis perennis*, dandelion *Taraxacum* agg., selfheal *Prunella vulgaris*, herb robert *Geranium robertianum*, spear thistle *Cirsium vulgare*, and bristly oxtongue *Helminthotheca echioides*.

J1.3 Ephemeral/short perennial

Several areas of ephemeral/short perennial vegetation occur at the margins of the hardstanding where thin deposits of soil are present. Species present include herb robert *Geranium robertianum*, dandelion *Taraxacum* agg., smooth sowthistle *Sonchus oleraceus*, petty spurge *Euphorbia peplus*, horsetail *Equisetum arvense*, bristly oxtongue *Helminthotheca echioides*, spotted medick *Medicago arabica*, red clover *Trifolium pratense*, annual meadow grass *Poa annua*, chickweed *Stellaria media*, fat hen *Chenopodium album*, and common field speedwell *Veronica persica*.

J2.1.2 Species-poor hedge

At the south-east corner of the site, along the fence line a laurel *Prunus laurocerasus* hedgerow occurs.

895/1310 Hailsham Ambulance Station

J2.4 Fence

Most of the site is enclosed by wooden panel fencing. A brick wall occurs at the northern corner of the site, forming part of the enclosure of the hardstanding.

J3.6 Buildings

The centre of the site features part of a building complex used as an ambulance station (now decommissioned).

J4 Hardstanding and bare ground

Enclosed hardstanding constitutes the majority of the site. See J1.3 for associated species.

Protected species

The site is known to support, or considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	There are no veteran trees on site.
<i>Notable site habitats</i>	There are no notable habitats present.
<i>Rare and scarce plants</i>	The site is considered unlikely to support rare or scarce plant species.
<i>Rare and scarce invertebrates</i>	The site is considered unlikely to support rare or scarce invertebrates.
<i>Amphibians including great crested newts</i>	The habitat on site is unsuitable for this group.
<i>Reptiles</i>	The habitat on site is unsuitable for this group.
<i>Breeding/Wintering birds</i>	The habitat on site is unsuitable for this group.
<i>Dormouse</i>	The habitat on site is unsuitable for this species.
<i>Aquatic mammals including water vole and otter</i>	The habitat on site is unsuitable for this group.
<i>Terrestrial mammals including badger</i>	The habitat on site is unsuitable for this species.
<i>Bats (roosting potential)</i>	The buildings on site are modern, and in good decorative order, and given that there are no high quality foraging habitats in close proximity it is considered that the likelihood of a bat roost being present is low.

895/1310 Hailsham Ambulance Station

Bats (foraging and commuting)

The site is unlikely to offer bat foraging opportunity.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	N/A	N/A			
<i>Sites of national importance</i>	N/A	N/A			
<i>Sites of local importance</i>	N/A	N/A			
<i>Habitats</i>	Lower	Parish	Neutral	Probable	
<i>Veteran trees</i>	N/A	N/A			
<i>Plants</i>	N/A	N/A			
<i>Invertebrates</i>	N/A	N/A			
<i>Amphibians including great crested newts</i>	N/A	N/A			
<i>Reptiles</i>	N/A	N/A			
<i>Breeding birds</i>	N/A	N/A			
<i>Dormice</i>	N/A	N/A			
<i>Aquatic mammals including water voles and otters</i>	N/A	N/A			
<i>Terrestrial mammals including badgers</i>	N/A	N/A			
<i>Bats</i>	N/A	N/A			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	X
Hedgerow survey	May to October	X
Rare plant survey	April to September (depending upon species)	X
Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	X
Reptile survey	April to June and September to October	X
Breeding bird survey	April to June	X
Wintering bird survey	December to February	X
Dormouse survey	April to November	X

895/1310 Hailsham Ambulance Station

Badger survey	Year round (Spring/Autumn are optimal)	X
Water vole survey	April to October	X
Otter survey	Year round (Spring is optimal)	X
Bat inspection survey (trees)	Year round (Winter is optimal)	X
Bat inspection survey (buildings)	Year round	X
Bat activity survey	April to October	X
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- None apply.

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped.

Potential enhancements

A number of improvements could be implemented in order to enhance the site for wildlife, including some of the following:

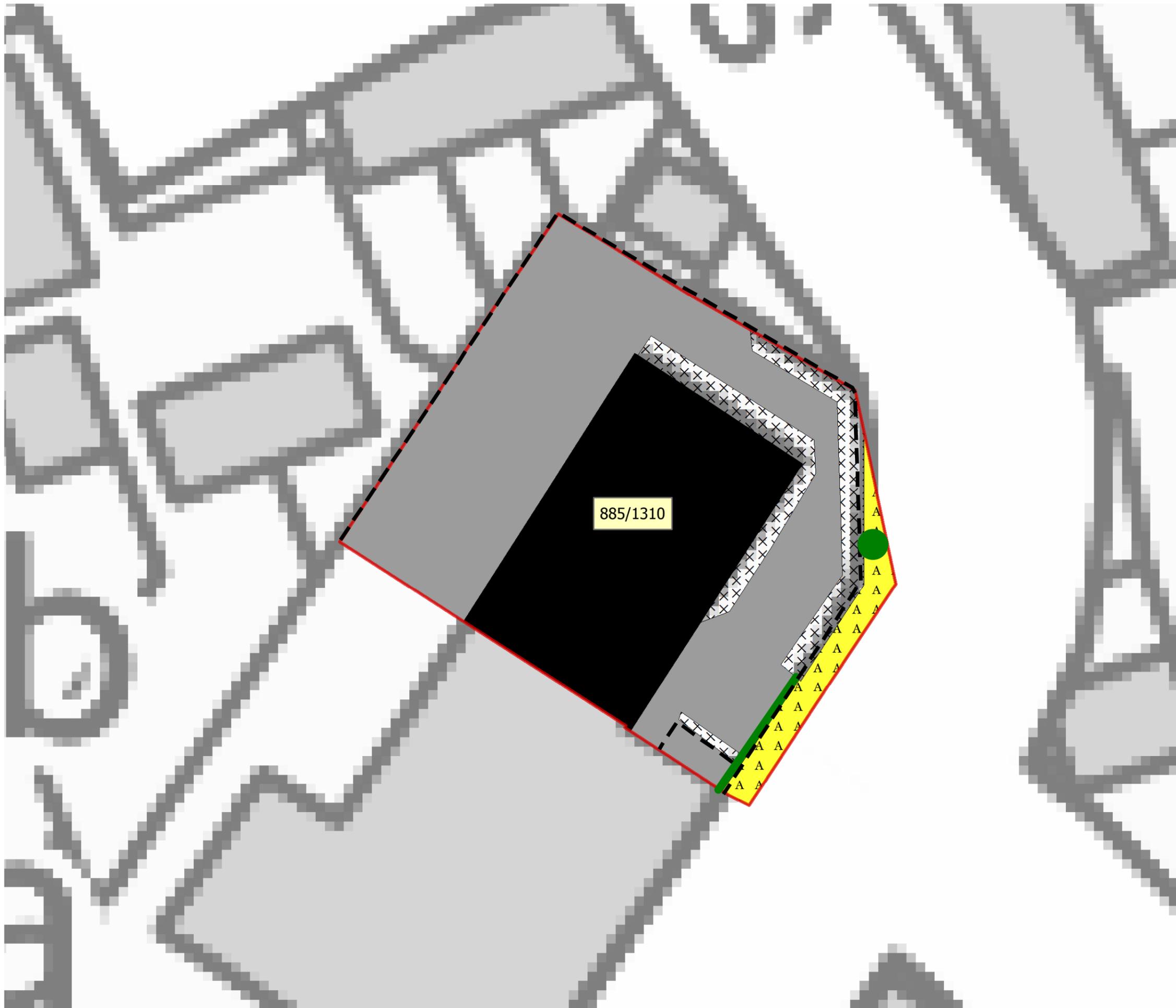
- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Enhancement of SUDs features using native wetland plants, and trees, shrubs etc.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

895/1310 Hailsham Ambulance Station

Summary

Likelihood of ecological interest: protected habitats and or species

High	Medium	Low	Negligible



L16418 Hailsham Area Action Plan
Hailsham East
885/1310 Hailsham Ambulance Station,
London Road

Phase 1 Habitat Survey

Figure 885/1310/E01
1:250@A3



October 2016



Ecological Assessment

Site overview

The site is situated in open countryside adjacent to the main road between Hailsham and Magham Down, in the settlement of Amberstone. The majority of the site is comprised of improved horse-grazed grassland, together with a dwelling and associated outbuildings, gardens and hardstanding.

The local soils are slightly acid loamy and clayey soils with impeded drainage.

Ecological baseline: search radii from site boundary

Sites of European and national importance: 1km

Sites of local importance and protected and/or notable species: 500m

Ponds and waterbodies: 500m

Ecological baseline: designated sites

A number of designated sites have been recorded from within the search radius; refer to **Figure 4.4** designated sites mapping for more details of locations.

Sites of European importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels Ramsar	600m	SE	Pevensy Levels Ramsar covers a large, mostly unfragmented area of lowland wet grassland. It is designated for supporting an outstanding assemblage of wetland plants and invertebrates, and is one of the best site in Britain for freshwater molluscs, aquatic beetles and dragonflies.
Pevensy Levels Special Area of Conservation (SAC)	600m	SE	Pevensy Levels SAC comprises large areas of grazing marsh and is designated for supporting good populations of Ramshorn snail across a wide spatial distribution.

Sites of national importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
Pevensy Levels SSSI	600m	SE	Pevensy Levels SSSI is a large area of grazing meadows with a complex system of ditches. It supports a number of nationally rare and scarce aquatic plants and invertebrates, in addition to over 1% of the total British population of wintering lapwings.

Sites of local importance

Site	Distance from site (approx.)	Direction	Key habitat/ features of interest
CW97 Jarvis's, Nobody's Wood & Park Wood Complex LWS	450m	NE	These sites form a large area of mostly ancient and/or semi-natural woodland containing ancient earthworks and have

897/1310 Land at Peppers adj. Amberstone Grange

			had a long history of varying use and management. The woodlands are mainly oak with a history of coppiced hornbeam, sweet chestnut and hazel, with some areas of ash and alder in calcareous and wetter soils, respectively. The wooded stream valley supports a diversity of bryophytes and ferns.
Notable Road Verge: Amberstone Roundabout	Adjacent	N	Early purple and green winged orchids
Coastal and floodplain grazing marsh (Priority Habitat)	On site		Priority Habitat lies within the site.
Deciduous woodland (Priority Habitat)	450m	N	One woodlands lie partly within the search area.
Ancient Woodland	450m	N	On enamed Ancient Woodland lies within the search area

Ecological baseline: protected species

Records covered a small range of species, comprising the following:

- Reptiles (slow worm, common lizard)
- Birds (grey heron, lesser spotted woodpecker)
- Mammals (water vole, hedgehog, brown-long eared bat, noctule, pipistrelle sp.)

Refer to **Figure 4.5** protected species mapping for more details of locations.

Ecological baseline: non-native species

No non-native species records were available for the site. The presence of non-native species cannot however be discounted on this basis.

Setting and green infrastructure

The site is situated on the main road between Hailsham and Magham Down, in the settlement of Amberstone.

The area features moderately strong green infrastructure connectivity comprising mature hedgerows which link larger and smaller woodlands in the local area; the connectivity of these is however substantially compromised by the local road network in the vicinity of the site; and the site itself lacks connectivity with the green infrastructure of the local area.

There are an estimated 2 ponds within the search area. There are no ponds on site. A minor watercourse the Magham Sewer, flows to the southwest of the site, and provides aquatic connectivity with Pevensey Levels

Local wildlife corridors and green infrastructure connectivity are mapped at **Figure 4.3A**.

'Blue' infrastructure connectivity and ponds are mapped at **Figure 4.3B**.

Management and habitat condition

The majority of the site is comprised of improved grassland fields which are used for horse grazing. An area of hardstanding is also present which is used for exercising horses. A house and shed are present within the site boundary and a managed garden/amenity grassland area containing trees and ornamental species is associated with these.

Habitat Description

Figure 897/1310/E01 shows the results of the Phase I survey and the habitats present. Each of these is described below.

A1.1.1 Broadleaved semi-natural woodland

There is a small patch of woodland towards the south of the site. Tree species present include ash *Fraxinus excelsior*, elder *Sambucus nigra*, crack willow *Salix x fragilis*, spindle *Euonymus europaeus*, oak *Quercus robur* (some specimens approach veteran), hawthorn *Crataegus monogyna*, dog rose *Rosa canina*, and sycamore *Acer pseudoplatanus* over an understorey of ivy *Hedera helix*, bramble *Rubus fruticosus* agg., greater willowherb *Epilobium hirsutum*, common nettle *Urtica dioica*, nipplewort *Lapsana communis*, bearded couch *Elytrigia canina*, false oat grass *Arrhenatherum elatius*, wood dock *Rumex sanguineum*, cock's foot *Dactylis glomerata*, creeping bent *Agrostis stolonifera*, timothy *Phleum pratense* and cleavers *Galium aparine*.

A3.1 Scattered broadleaved trees

Scattered trees are found throughout the site, mostly within the amenity grassland. Species present include red oak *Quercus rubra*, oak *Quercus robur*, goat willow *Salix caprea* and weeping willow *Salix x sepulcralis*.

A3.2 Scattered coniferous trees

Scattered conifer (cypress) trees are present within the central improved grassland field.

B4 Improved grassland

The majority of the site is comprised of this habitat. The sward is generally dominated by Yorkshire fog *Holcus lanatus*. Other species include meadow barley *Hordeum secalinum* with occasional sweet vernal grass *Anthoxanthum odoratum*. There are few associated forbs but those present include common mouse-ear *Cerastium fontanum*, creeping buttercup *Ranunculus repens*, common sorrel *Rumex acetosa*, white clover *Trifolium repens*, ground ivy *Glechoma hederacea*, greater plantain *Plantago major*, creeping cinquefoil *Potentilla reptans*, common fleabane *Pulicaria dysenterica*, self-heal *Prunella vulgaris*, marsh cudweed *Gnaphalium uliginosum* and bristly ox-tongue *Helminthotheca echioides*.

J1.2 Amenity grassland

The amenity grassland area is found in the north of the site, surrounding the house. The area is regularly mown. The sward is short and is dominated by perennial rye grass *Lolium perenne*. Associated forbs include white clover *Trifolium repens*, dandelion *Taraxacum* agg., greater plantain *Plantago major*, ribwort plantain *Plantago lanceolata*, creeping buttercup *Ranunculus repens*, daisy *Bellis perennis* and self-heal *Prunella vulgaris*.

J1.4 Introduced shrub

Several non-native ornamental species are present within the amenity grassland.

J2.1.1 Native species-rich hedge, intact

The hedgerow north of the house contains mostly non-native species.

There is a very short hedge surrounding a pathway within the amenity grassland. Species present include ivy *Hedera helix*, rhododendron *Rhododendron ponticum*, cherry *Prunus* spp. and Wilson's honeysuckle *Lonicera nitida*.

J2.1.2 Species-poor hedge

The west border of the southern field contains species such as hazel *Corylus avellana*, blackthorn *Prunus spinosa* and sycamore *Acer pseudoplatanus* with climbers and scramblers such as bindweed *Calystegia* sp. and bramble *Rubus fruticosus* agg. The ground flora is dominated by creeping cinquefoil *Potentilla reptans*.

The hedgerow behind the stables in the north is made up of conifer *Cupressus* sp.

Other areas of species-poor hedge are comprised solely of hawthorn *Crataegus monogyna*.

J2.3.1 Native species-rich hedge with trees

In the north of the site, bordering the A271, there is an area of native species-rich hedge with trees. Species present include a mixture of native and non-native shrubs, including snowberry *Symphoricarpos alba*, Wilson's honeysuckle *Lonicera nitida*, Griselinia *Griselinia littoralis*, Leyland cypress *x chamaecyparis leylandii*, goat willow *Salix caprea*, hawthorn *Crataegus monogyna*, hazel *Corylus avellana*, ivy *Hedera helix*, elder *Sambucus nigra*, rhododendron *Rhododendron ponticum* and sycamore *Acer pseudoplatanus*. The trees are oak *Quercus robur* and silver birch *Betula pendula*. The ground flora is dominated by ground ivy *Glechoma hederacea*.

J2.4 Fence

Fencing is present throughout the site.

J2.6 Dry ditch

A drainage ditch is present along the western border and is fringed with tall ruderal and emergent plant species. Species present include water figwort *Scrophularia auriculata*, hemlock water dropwort *Oenanthe crocata*, bramble *Rubus fruticosus* agg, common nettle *Urtica dioica*, spear thistle *Cirsium vulgare*, cow parsley *Anthriscus sylvestris*, false brome *Brachypodium pinnatum*, greater reedmace *Typha latifolia*, greater willowherb *Epilobium hirsutum*, false oat grass *Arrhenatherum elatius*, hedge woundwort *Stachys sylvestris* soft rush *Juncus effusus*, pendulous sedge *Carex pendula* and hedge bindweed *Calystegia sepium*.

J3.6 Buildings

A house, stables and a shed are present within the site.

J4 Hardstanding and bare ground

There are two areas of hardstanding within the site.

Protected species

The site is known to support, or considered to have potential to support the following protected species and features:

Species/Features	Present/potentially present (suitable habitats onsite)
<i>Veteran trees</i>	Some of the trees on site may fall within this category.
<i>Notable site habitats</i>	The site features woodland and hedegrow habitats.
<i>Rare and scarce plants</i>	The presence of uncommon spring-flowering plant species in the woodland is possible.
<i>Rare and scarce invertebrates</i>	The site is considered unlikely to support rare or scarce invertebrates.
<i>Amphibians including great crested newts</i>	Some of the habitat on site (hedgerows, woodland) is suitable for this group and there are ponds in the local area. The presence of amphibians, including great crested newt cannot be ruled out.
<i>Reptiles</i>	Records of common lizard and slow worm exist within 1km of the site. The following habitats are suitable for this species group: hedgerow, woodland; and presence on site is likely.
<i>Breeding/Wintering birds</i>	The hedgerow and woodland habitats are likely to support nesting birds. Nesting birds may also use the site buildings where access to structures is possible. The site is not considered likely to support significant populations of wintering birds
<i>Dormouse</i>	The woodland and mature hedgerows have potential to support dormouse.
<i>Aquatic mammals including water vole and otter</i>	The ditch is unlikely to have potential to support otter, however the presence of water vole cannot be ruled out.

897/1310 Land at Peppers adj. Amberstone Grange

<i>Terrestrial mammals including badger</i>	No badger setts or other signs were noted during the Phase I survey. However, the habitats in the local area are very suitable for this species and foraging use or the presence of setts cannot be ruled out.
<i>Bats (roosting potential)</i>	A number of the trees on site are of sufficient size, or age, or have structural features which are suitable for roosting bats. The dwelling lies in a location which features a number of habitats which are highly suited to bat foraging use. Detailed bat inspections have not been undertaken and so the existence of an on-site roost in this, or the associated outbuildings, cannot be ruled out.
<i>Bats (foraging and commuting)</i>	The site is likely to offer bat foraging opportunity and may also be used by bats moving between wooded areas within the local landscape.

Indicative Ecological Appraisal

The table below summarises the likely or potential value of ecological receptors with a provisional assessment of the unmitigated impact of any development. This assessment is indicative until such time the recommended further surveys can be undertaken. The precautionary principal has been adopted in arriving at this assessment.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
<i>Sites of European importance</i>	Very High	European	Major Adverse	Possible	Major Adverse
<i>Sites of national importance</i>	High	National	Moderate Adverse	Possible	Moderate Adverse
<i>Sites of local importance</i>	Medium	County	Moderate Adverse	Possible	Moderate Adverse
<i>Habitats</i>	Lower	Parish	Moderate Adverse	Probable	Minor Adverse
<i>Veteran trees</i>	Unknown	Unknown			
<i>Plants</i>	Unknown	Unknown			
<i>Invertebrates</i>	N/A	N/A			
<i>Amphibians including great crested newts</i>	Unknown	Unknown			
<i>Reptiles</i>	Unknown	Unknown			
<i>Breeding birds</i>	Unknown	Unknown			
<i>Dormice</i>	Unknown	Unknown			
<i>Aquatic mammals including water voles and otters</i>	Unknown	Unknown			
<i>Terrestrial mammals including badgers</i>	Unknown	Unknown			
<i>Bats</i>	Unknown	Unknown			

Recommendations for further survey

Detailed development proposals must be informed by an updated Phase 1 Habitat Survey and species surveys as set out below to identify the likely mitigation requirement in respect of these habitats and species and ensure that potential impacts are identified and appropriate mitigation developed.

Recommended further survey

Survey type	Season for survey	Survey required?
Phase III NVC habitat survey	May to September	X
Hedgerow survey	May to October	✓
Rare plant survey	April to September (depending upon species)	✓

897/1310 Land at Peppers adj. Amberstone Grange

Invertebrate survey	April to September (depending upon species)	X
Great crested newt survey	March to June	✓
Reptile survey	April to June and September to October	✓
Breeding bird survey	April to June	✓
Wintering bird survey	December to February	X
Dormouse survey	April to November	✓
Badger survey	Year round (Spring/Autumn are optimal)	✓
Water vole survey	April to October	✓
Otter survey	Year round (Spring is optimal)	X
Bat inspection survey (trees)	Year round (Winter is optimal)	✓
Bat inspection survey (buildings)	Year round	✓
Bat activity survey	April to October	✓
Bat emergence/re-entry survey	May to August	NK

Impact avoidance

Should development at this site proceed, consideration should be given to the following impact avoidance measures:

- All site boundary features should be protected in the built scheme.
- The woodland habitat should be safeguarded.
- All mature trees should be retained in-situ.
- Retention of linear features such as hedgerows and the vegetated ditch.

Outline mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Ensure a minimum 10m working offset from retained habitats.
- To mitigate for loss of woody vegetation, semi-natural planting should include berry bearing native trees and shrubs to enhance food availability for wildlife. The proposed planting should be structurally diverse with tree, shrub and ground layers with areas of dense scrub as well as more open areas.
- Ornamental planting should constitute at least 50% by area of native species or species of known value to wildlife, such as fruiting/berrying species and species known to provide a good nectar source. All ornamental planting should be structurally diverse with tree, shrub and ground layers with areas of dense planting as well as more open areas.
- Vegetation removal required for the construction phase should take place outside of the breeding bird season to prevent disturbance to birds nesting on site within retained hedgerows and trees. Harm to active birds' nests during site clearance would be avoided by this work taking place outside the bird nesting season of March to July inclusive.
- Heras or similar secure fencing should be deployed to ensure that retained habitats remain undisturbed for the duration of the development.
- Retained habitats should not be illuminated either deliberately or via light spill. If external lighting, e.g. security lighting, is required, it should be reduced to a minimum, and designed in accordance with guidelines from the Bat Conservation Trust.
- Trenches should be filled in prior to the end of the working day, or a plank left leaning up from the base of the trench to the surface so animals falling in can exit the excavation.
- Pipework should be closed off at the end of each working day to avoid animals becoming trapped.
- Long term management of habitats should be detailed in a Landscape and Habitat Management Plan (LHMP), including newly created as well as retained habitats to ensure the long-term viability of such habitats. Any LHMP should include remedial measures and regular monitoring to record a decline in habitat quality or quantity.

Potential enhancements

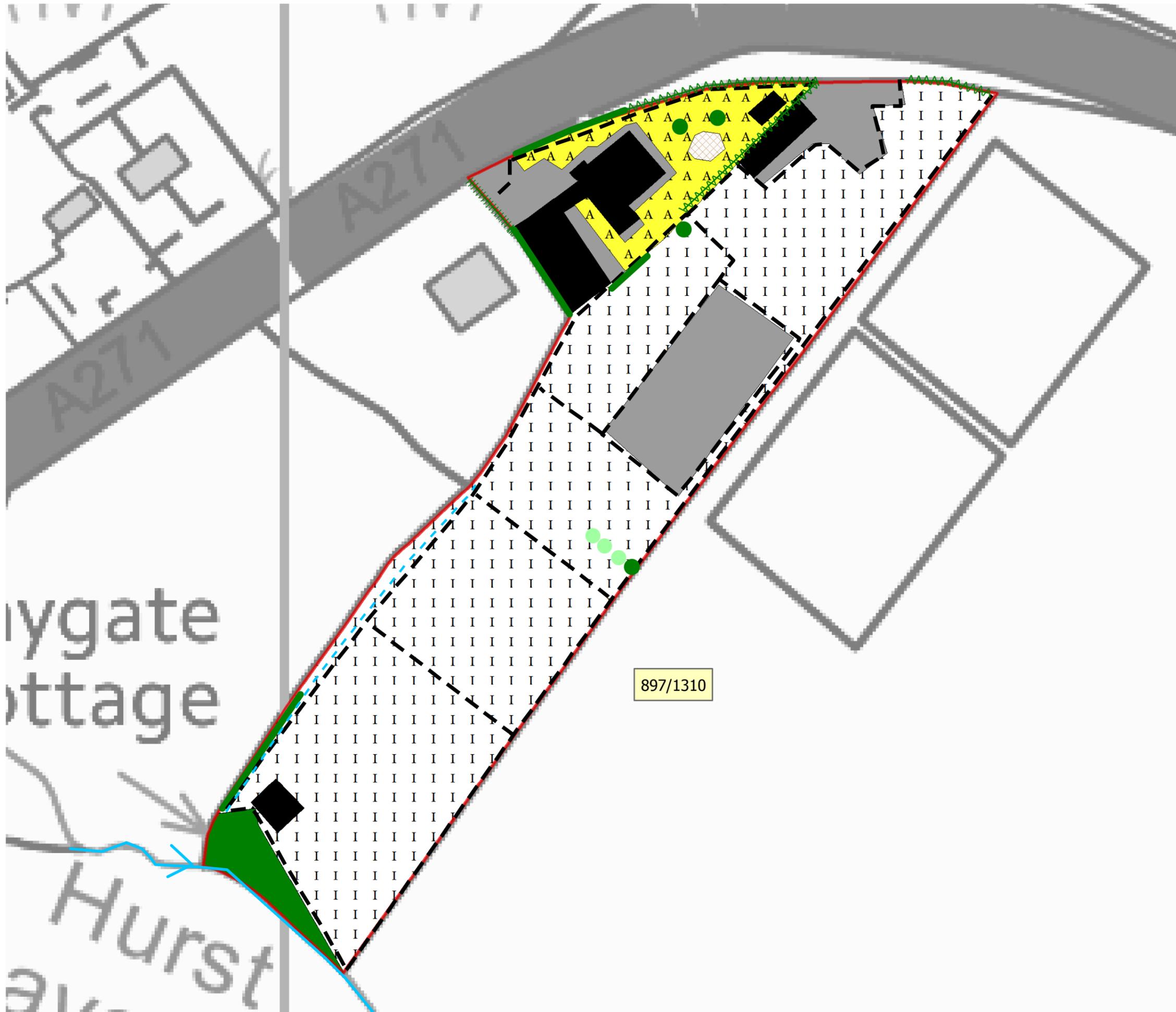
A number of improvements could be implemented in order to enhance the site for wildlife, including some of the following:

- Contribution to 'B-Lines' project through seeding with native wildflower seed mix and use of native flowering trees and shrubs in planting scheme.
- Retention and enhancement of the ditch through selective removal of overhanging woody vegetation and sensitive re-profiling.
- Creation of a new wildlife pond in a secluded corner of the site.
- Creation of permanent wildflower grassland and native scrub habitat on the site boundaries and within areas of public open space.
- The boundary vegetation should be strengthened by further native planting.
- Enhancements to the retained woodland habitat, including extending the area of woodland, thinning out non-native deciduous tree species, and replacement planting with native species.
- The internal and external boundary vegetation should be allowed to develop to a broader, taller form and strengthened by further planting, including berry bearing species to provide for bird foraging, and native species to attract insects. A structurally diverse range of plants should be used, including shrubs large enough to support nesting birds.
- In-site structural native tree and shrub planting to provide cross-site corridors and a foraging resource for a variety of species.
- Enhancement of SUDs features using native wetland plants, and trees, shrubs etc.
- Implementation of good practice with regard to hedgerow maintenance, such as leaving one side of the hedgerow uncut, and the cutting of one side of hedgerow on alternate years, will benefit hedgerow species such as breeding birds, small mammals and bats.
- Creation of wildlife habitat including grassland, woodland and scrub on land outside the development site boundary.
- Erect bat boxes (e.g. Schwegler) suitable for a range of bat species, on retained standard trees or buildings in unlit parts of the site.
- Erect bird boxes (e.g. Schwegler) suitable for a range of bird species, on retained standard trees or buildings in undisturbed parts of the site.
- Creation of habitat piles, using woody arisings (brash) from site clearance. These should be stacked in a quiet, sheltered corner of the site to form piles measuring approximately 1m x 1m x 1m.
- Retain logs from felled trees, and partly bury them in a quiet, sheltered corner of the site to provide dead-wood beetle habitat e.g. for stag beetle.

Summary

Likelihood of ecological interest: protected habitats and or species

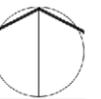
High	Medium	Low	Negligible



L16418 Hailsham Area Action Plan
Hailsham East
897/1310 Peppers House, Amberstone

Phase 1 Habitat Survey

Figure 897/1310/E01
1:750@A3



October 2016

