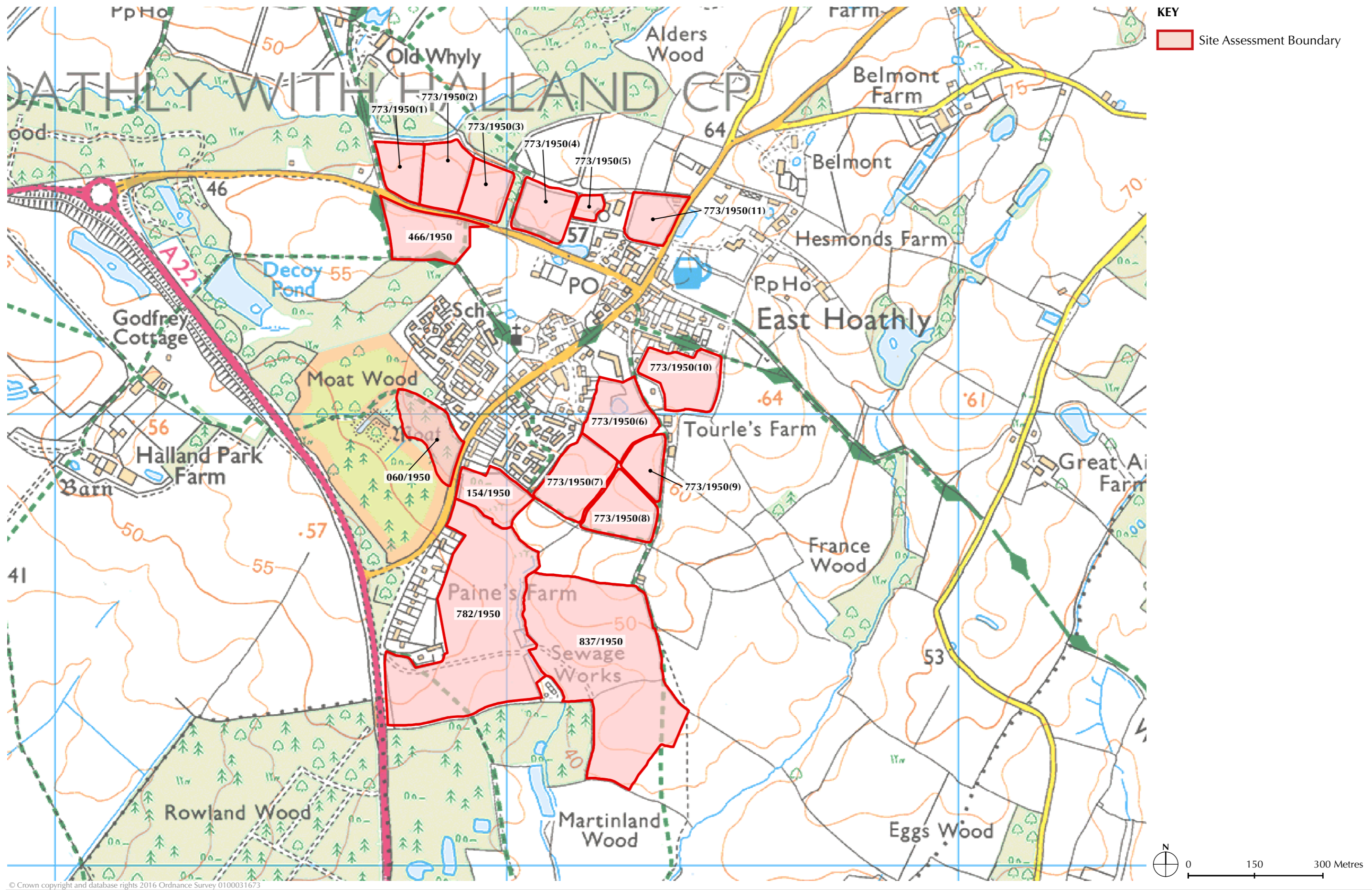
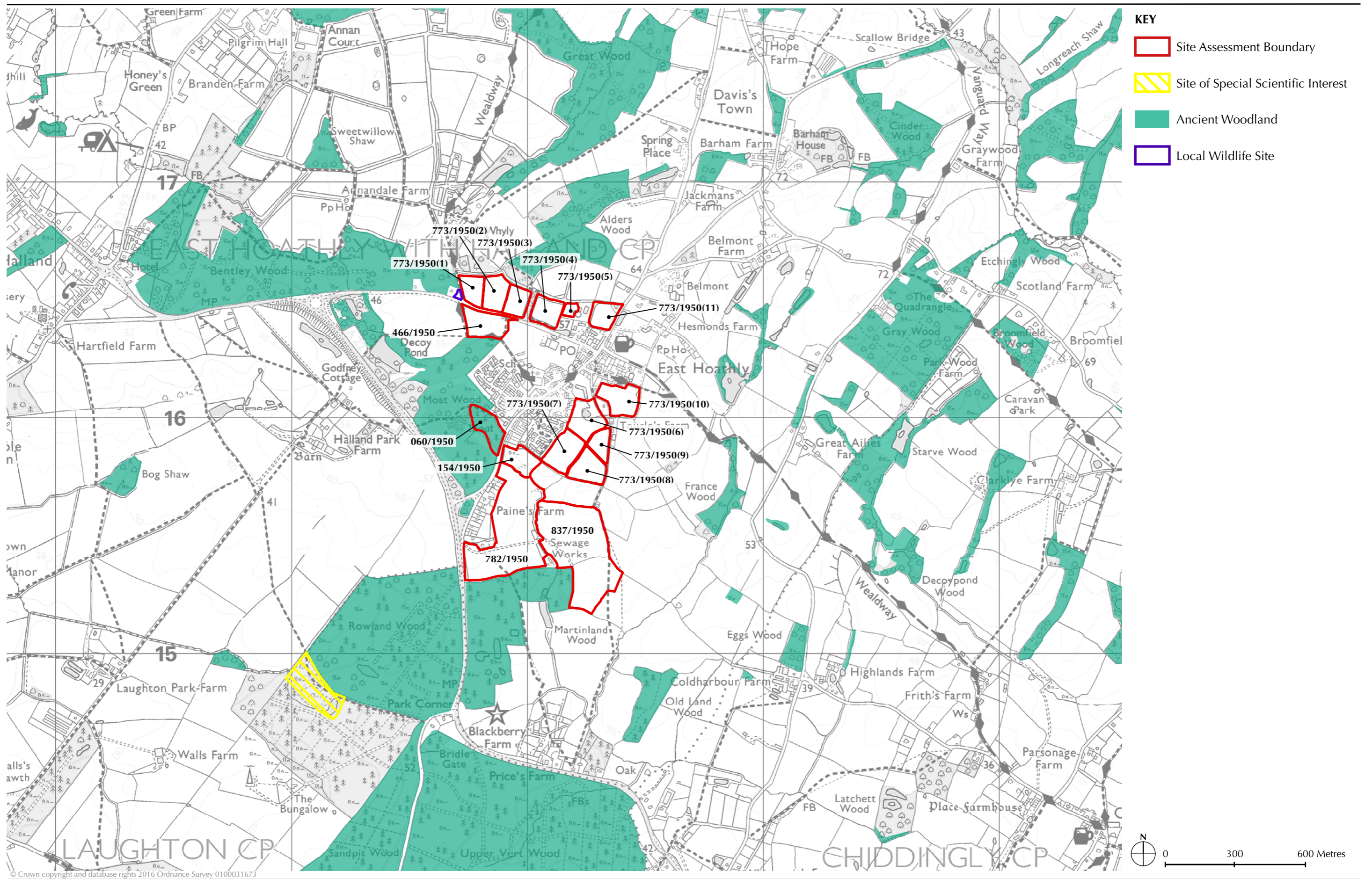


23.0 EAST HOATHLY SITES



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ECOLOGICAL ASSESSMENT	
Settlement/Area:	East Hoathly
Site Address:	Land to West of South Street, East Hoathly
Site Reference Number:	060/1950
Site Summary Description	
A 1.52ha Site comprising largely of an area of young developing woodland consisting mainly of dense willow, birch and hazel with some elm, but also including some small areas of richer and more structurally diverse Ancient Woodland.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 26.1)	
The Site is located within the broader Wealden landscape of small to medium sized grassland and arable fields, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. The Site lies on the south western edge of East Hoathly, to the west of South Street. It forms part of the larger Moat Wood, which includes Ancient Woodland and Ancient Replanted Woodland. A substantial part of the Wood bordering the Site, including both Ancient and Ancient Replanted Woodland, is owned and managed by the Woodland Trust. Moat Wood extends to the north, west and south of the Site. The A22 marks the western boundary of the Wood. Moat Wood is one of a cluster of woods in the area. To the north are residential areas of East Hoathly. To the east, beyond South Street, is a residential development and open countryside comprising grassland and arable fields with hedges, woods and plantations.	
Desk Study : Designated Sites within 1km (See Figure 26.2)	Distance from Site
<ul style="list-style-type: none"> • Croom Cottage Meadow LWS. The Citation summary describes the Site as follows: <i>“Slightly acidic, unimproved grassland meadow managed for hay with exceptionally rich botanical sward and population of green-winged orchid”.</i> 	<ul style="list-style-type: none"> • 470m North
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Moat Wood • Ancient & semi-natural woodland – Alders Wood • Ancient & semi-natural woodland – Great Wood • Ancient & semi-natural woodland – Bentley Wood • Ancient & semi-natural woodland – Harrison’s Shaw • Ancient & semi-natural woodland – France Wood 	<ul style="list-style-type: none"> • Adjacent North & West • 830m North • 975m North • 610m North West • 560m North West • 890m East
Desk Study: Protected and Notable Species within 1km	
Protected Species <i>Anguis fragilis</i> <i>Muscardinus avellanarius</i> <i>Natrix natrix</i> <i>Pipistrellus pipistrellus</i> <i>Pipistrellus sp.</i> <i>Plecotus auritus</i>	Slow worm Hazel dormouse Grass snake Common Pipistrelle (45 kHz) bat Pipistrelle sp. bat Brown Long-eared bat

<i>Vipera berus</i>	Adder
<i>Zootoca vivipara</i>	Common lizard
Sussex BAP Species	
<i>Boloria selene</i>	Small Pearl-bordered Fritillary
<i>Coenonympha pamphilus</i>	Small Heath
<i>Erinaceus europaeus</i>	European hedgehog
<i>Hoplodrina blanda</i>	Rustic (moth)
<i>Lasiommata megera</i>	Wall
<i>Limenitis camilla</i>	White admiral
<i>Melanchra persicariae</i>	Dot moth (moth)
<i>Pyrgus malvae</i>	Grizzled Skipper
<i>Trichiura crataegi</i>	Pale Eggar (moth)
<i>Tyria jacobaeae</i>	Cinnabar (moth)
Sussex Rare Species Inventory	
<i>Apoda limacodes</i>	Festoon (moth)
<i>Argiope bruennichi</i>	Wasp spider
<i>Atolmis rubricollis</i>	Red-necked Footman (moth)
<i>Boletus pruinatus</i>	Matt Bolete
<i>Cordulia aenea</i>	Downy Emerald
<i>Dolichovespula (Dolichovespula) media</i>	
<i>Eilema sororcula</i>	Orange Footman (moth)
<i>Glyphipterix forsterella</i>	Sedge Fanner (moth)
<i>Hygrophoropsis aurantiaca</i>	False Chanterelle
<i>Hypomyces aurantius</i>	
<i>Mitrula paludosa</i>	Bog Beacon
<i>Nigma puella</i>	
<i>Tetheella fluctuosa</i>	Satin Lutestring (moth)
Notable Bird Inventory	
<i>Tyto alba</i>	Barn owl
Invasive Alien Species Inventory	
<i>Harmonia axyridis</i>	Harlequin Ladybird
<i>Prunus laurocerasus</i>	Cherry laurel
<i>Rhododendron ponticum</i>	Rhododendron
Field Survey: Habitat Descriptions (See Figure 26/060)	
<p>Woodland – Comprising mainly of an area of developing, rather scrubby woodland consisting largely of dense young willow, birch and hazel with some elm. Historic aerial images indicate that the woodland has developed since 2004. At this stage in its development there is no real separation of canopy and shrub layers. The field layer is quite species poor, with patchy bramble and much bare ground below the dense woody growth but, for example, small amounts of violet <i>Viola</i> sp. and primrose <i>Primula vulgaris</i> are recorded. This area is categorised as Ancient Replanted Woodland.</p> <p>However, the Site also includes small areas of Ancient Woodland on its northern and south western boundaries, which comprise more established woodland with a high forest structure. Woodland in these general areas (it is difficult to be clear where the Site boundary is located) includes a canopy of especially mature oak and hornbeam, but also sweet chestnut and a shrub layer of hazel, holly and hawthorn. The field layer is richer and includes a number of Ancient Woodland Indicator Species. A more structurally diverse area with mature trees is also present on the eastern boundary, along South Street.</p>	

Field Survey: Protected and Notable Species

No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.

Field Survey: Invasive Non-native Species

No invasive non-native species recorded within the Site.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. However, a historic moat forms a pond approximately 20-30m to the west of the Site, and there is a wet depression adjacent to the Sites south western boundary which may well hold water seasonally. There is a further large pond (Decoy Pond) within Moat Wood, approximately 350m to the north west. There are further ponds to the north and north east of the Site but these are separated from it by residential areas and roads, which would represent significant barriers to dispersal for great crested newts. It is considered that there is limited potential for the presence of great crested newts on the Site, although the entire Site represents suitable terrestrial habitat for great crested newts.

Reptiles – Although adders have been recorded in Moat Wood (Woodland Trust. Moat Wood Management Plan 2015-20) the Site itself appears to have low potential for reptiles, although there may be some potential, for example, on the western boundary beside a more open wet area.

Breeding birds – High potential throughout site. Nightingales have been recorded in Moat Wood (Woodland Trust Web-Site <http://www.woodlandtrust.org.uk/visiting-woods/wood/5057/moat-wood/> accesses 14-10-2016) and the Site could provide suitable breeding habitat for this species.

Bats – Trees and mature trees in particular, with features such as cracks and cavities, for example on the northern and western edges of the Site, have potential to be used as roosts. Activity, including foraging and commuting, is likely throughout.

Dormice – High potential in woodland as it forms part of a larger area of woodland, including Ancient Woodland.

Badgers – Some potential for setts throughout the woodland, but with or without setts badgers may also use any part of the Site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of the ponds within Moat Wood to the west of the Site.

Reptiles – In suitable habitat, such as the open area on the Sites south western boundary.

Breeding birds – (April – June) – whole site, and including surveys targeted at nightingale.

Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees to determine the scope for further survey and activity surveys.

Dormice – (April – November) – in suitable habitat.

Badgers – (Year round but Spring / Autumn optimal) – of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Moderate to High value – although most of the woodland is of recent origin and is quite species poor and structurally homogenous it does include small areas of richer and more structurally diverse Ancient Woodland and forms a part of the larger Moat Wood, and this increases its value and sensitivity. The Site has high potential to support notable/protected species.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Given the nature and context of the Site, as part of a larger Ancient Woodland, there are no recommendations that can be made to avoid impacts of development.
- If development were to be permitted on this Site, then as far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.
- Retaining areas of mature trees / ancient woodland.

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.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Timing of vegetation clearance works to avoid the bird breeding season (March – August inclusive).
- Offset buffers to protect retained habitats (minimum 10m, or 20m – 25m in the case of ancient woodland).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents.
- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- If great crested newts are found to be present in ponds to the west of the Site, measures should be put in place to prevent harming or killing them, including for example the erection of herptile fencing to exclude them from work areas, and possibly trapping and translocation to suitable receptor areas elsewhere.
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts, should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of relevant habitat.
- Development should avoid construction works within at least 30m of the nearest badger setts and seek to avoid prime foraging grounds identified through the badger survey and severance of commuting corridors within territories.

Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including woodland.
- Habitat creation, ideally located adjacent to retained or adjoining habitat, or to form habitat corridors or links. To include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit.
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings.
- Incorporate features to SuDS scheme(s), such as the use of native wetland plant species, to enhance their value.



ECOLOGICAL ASSESSMENT	
Settlement/Area:	East Hoathly
Site Address:	Land to the East of South Street, East Hoathly
Site Reference Number:	154/1950
Site Summary Description	
A 1.38ha Site comprising a grassland field enclosed within species rich hedges with mature trees and tree and a tree and shrub belt, with a brick shed in the north western corner. Also includes maturing oaks and birches within the field and areas of tall ruderal vegetation.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 26.1)	
The Site is located within the broader Wealden landscape of small to medium sized grassland and arable fields, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. The Site lies on the southern edge of East Hoathly, to the east of South Street. To the north are residential areas of East Hoathly. To the east is open country of grassland and arable fields with hedges, woods and plantations. To the west, beyond South Street, is Moat Wood, which includes Ancient Woodland and Ancient Replanted Woodland.	
Desk Study : Designated Sites within 1km (See Figure 26.2)	Distance from Site
<ul style="list-style-type: none"> • Croom Cottage Meadow LWS. The Citation summary describes the Site as follows: <i>“Slightly acidic, unimproved grassland meadow managed for hay with exceptionally rich botanical sward and population of green-winged orchid”.</i> 	<ul style="list-style-type: none"> • 655m NNW
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Alders Wood • Ancient & semi-natural woodland – Bentley Wood • Ancient & semi-natural woodland –Harrison’s Shaw • Ancient & semi-natural woodland – Moat Wood • Ancient & semi-natural woodland – France Wood 	<ul style="list-style-type: none"> • 900m North • 785m North West • 740m North West • 160m West • 730m East

Desk Study: Protected and Notable Species within 1km

Protected Species

<i>Anguis fragilis</i>	Slow worm
<i>Musccardinus avellanarius</i>	Hazel dormouse
<i>Natrix natrix</i>	Grass snake
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle (45 kHz) bat
<i>Pipistrellus sp.</i>	Pipistrelle sp. bat
<i>Plecotus auritus</i>	Brown Long-eared bat
<i>Vipera berus</i>	Adder (record within Site boundary)
<i>Zootoca vivipara</i>	Common lizard (record within Site boundary)

Sussex BAP Species

<i>Boloria selene</i>	Small Pearl-bordered Fritillary
<i>Coenonympha pamphilus</i>	Small Heath
<i>Erinaceus europaeus</i>	European hedgehog
<i>Hoplodrina blanda</i>	Rustic (moth)
<i>Lasiommata megera</i>	Wall
<i>Limenitis camilla</i>	White admiral
<i>Melanchra persicariae</i>	Dot moth (moth)
<i>Pyrgus malvae</i>	Grizzled Skipper
<i>Trichiura crataegi</i>	Pale Eggar (moth)
<i>Tyria jacobaeae</i>	Cinnabar (moth)

Sussex Rare Species Inventory

<i>Apoda limacodes</i>	Festoon (moth)
<i>Argiope bruennichi</i>	Wasp spider
<i>Atolmis rubricollis</i>	Red-necked Footman (moth)
<i>Boletus pruinatus</i>	Matt Bolete
<i>Cordulia aenea</i>	Downy Emerald
<i>Dolichovespula (Dolichovespula) media</i>	
<i>Eilema sororcula</i>	Orange Footman (moth)
<i>Glyphipterix forsterella</i>	Sedge Fanner (moth)
<i>Hygrophoropsis aurantiaca</i>	False Chanterelle
<i>Hypomyces aurantius</i>	
<i>Mitrella paludosa</i>	Bog Beacon
<i>Nigma puella</i>	
<i>Tetheella fluctuosa</i>	Satin Lutestring (moth)

Notable Bird Inventory

<i>Tyto alba</i>	Barn owl
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Invasive Alien Species Inventory

<i>Harmonia axyridis</i>	Harlequin Ladybird
<i>Prunus laurocerasus</i>	Cherry laurel
<i>Rhododendron ponticum</i>	Rhododendron

Field Survey: Habitat Descriptions (See Figure 26/154)

Poor semi-improved grassland – Most of the grassland has been recently cut at the time of the survey, making assessment more difficult. Based on the current survey alone it has been attributed to the Poor semi-improved grassland category, but this may need to be revised in the light of more detailed survey under better conditions.

The grassland appears to be quite species poor, with abundant Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris* and cocksfoot *Dactylis glomerata*. Rushes *Juncus* spp. are occasional. Forb content

is quite low and includes occasional and locally frequent tall ruderals, broadleaved dock *Rumex obtusifolius* and common ragwort *Senecio jacobaea*. However, a number of grassland species are present including greater bird's foot trefoil *Lotus pedunculatus*, ribwort plantain *Plantago lanceolata*, bugle *Ajuga reptans*, common knapweed *Centaurea nigra* and cat's ear *Hypochaeris radicata*.

Tall ruderal – Stands on the western boundary and near the building in the north west of the Site.

Trees and scrub – There is a narrow belt of trees and scrub on the northern boundary, including both native and non-native species, ash, oak, sycamore, hazel, blackthorn, hawthorn, holly, willow, broom and magnolia. A number of maturing oak, birch and sycamore stand in a group within the field.

Hedges – On the southern and eastern boundaries are species rich with hawthorn, blackthorn, holly, hazel, rose and willow as well as mature trees of oak, hornbeam and aspen. The southern hedge also includes probably planted horse chestnut and lime as well as the invasive non-native Rhododendron.

Buildings – A single storey brick shed with pitched and tiled roof in the north west corner of the Site.

Field Survey: Protected and Notable Species

No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.

Field Survey: Invasive Non-native Species

Rhododendron – in the hedge on the southern boundary.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. However, there are ponds in Moat Wood, where a historic moat forms a pond approximately 180m to the north west of the Site. There is a wet depression to the south of this, approximately 130m from the Site which may well hold water seasonally. There is also a pond near Tourle's Farm, approximately 260m to the north east. There is also a pond near the church and recreation ground, approximately 370m north west of the Site but this is separated from the Site by residential areas and roads, which would represent significant barriers to dispersal for great crested newts. The hedges, trees and scrub, tall ruderal and some of the taller unmanaged grassland on the edges of the field represent suitable terrestrial habitat for great crested newts.

Reptiles – High potential, especially along boundaries.

Breeding birds – High potential in hedges, trees and scrub.

Bats – High potential in trees and mature trees in particular, with features such as cracks and cavities, which have potential to be used as roosts. Activity, including foraging and commuting, is likely throughout.

Dormice – Moderate to high potential in hedges and scrub due to connectivity with the wider habitat network of hedges and woodland. The brick shed has limited potential.

Badgers – Potential for setts within the hedges and scrub, but with or without setts badgers may also use any or part of the Site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Botanical – (May – June) of grassland.

Amphibian (including great crested newt) – (March – June) of the ponds to the west and north east of the Site.

Reptiles – (May – June, September – October) in suitable habitat.

Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees to determine the scope for further survey.

Dormice – (April – November) in suitable habitat, notably the hedgerows.

Badgers – (Year round but Spring / Autumn optimal) of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Low to Moderate value – although the grassland appeared species poor during the survey this assessment may change in the light of further survey under better conditions. The hedges, trees and scrub are of moderate value.

The Site has moderate potential to support notable/protected species.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining the hedges, scrub and mature trees and their features, where feasible.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

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.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Timing of vegetation clearance works to avoid the bird breeding season (March – August inclusive).
- Offset buffers for the southern and south-eastern hedgerows (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents.
- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- If great crested newts are found to be present in ponds to the west or north east of the Site, measures should be put in place to prevent harming or killing them, including for example the erection of herptile fencing to exclude them from work areas, and possibly trapping and translocation to suitable receptor areas elsewhere.
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of hedges and scrub.
- Development should avoid construction works within at least 30m of the nearest badger setts and seek to avoid prime foraging grounds identified through the badger survey and severance of commuting corridors within territories.

Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including hedges, trees and scrub.
- Strengthen boundary vegetation by removing non-native species and planting of appropriate native species to gap up on existing areas on the northern, eastern and southern boundaries and to create a new hedge on the western boundary.
- Habitat creation, ideally located adjacent to retained or adjoining habitat, for example in a corner of the field, or to form habitat corridors or links. To include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit.
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings.
- Incorporate features to SuDS scheme(s), such as the use of native wetland plant species, to enhance their value.



ECOLOGICAL ASSESSMENT																			
Settlement/Area:	East Hoathly																		
Site Address:	Broom Lodge Field, East Hoathly																		
Site Reference Number:	466/1950																		
Site Summary Description																			
A 1.94ha arable field bordered to the north and west by species rich hedges and bordered to the south and east by woodland on the other two sides. Also included a small area of woodland, tall unmanaged grassland and tall ruderal around a brick hut.																			
ECOLOGICAL BASELINE																			
Green Infrastructure Context (see Figure 26.1)																			
The Site is located within the broader Wealden landscape of small to medium sized grassland and arable fields, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. The Site lies on the north western edge of East Hoathly, to the south of London Road. To the north and west are fields and hedges and then woodland. To the south is Moat Wood Ancient Woodland and to the east and south east, beyond a narrow woodland strip is the village of East Hoathly. Allotments are located to the west of the Site.																			
Desk Study : Designated Sites within 1km (See Figure 26.2)	Distance from Site																		
<ul style="list-style-type: none"> • Croom Cottage Meadow LWS. The Citation summary describes the Site as follows: “<i>Slightly acidic, unimproved grassland meadow managed for hay with exceptionally rich botanical sward and population of green-winged orchid</i>”. 	<ul style="list-style-type: none"> • 25m North East 																		
Desk Study: BAP Priority Habitats within 1km	Distance from Site																		
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Great Wood • Ancient & semi-natural woodland – Sweetwillow Shaw • Ancient & semi-natural woodland – Bentley Wood • Ancient & semi-natural woodland – Harrison’s Shaw • Ancient & semi-natural woodland – Moat Wood • Ancient & semi-natural woodland – Alders Wood 	<ul style="list-style-type: none"> • 520m North • 775m North West • 100m North West • 390m West • Adjacent South • 210m North East 																		
Desk Study: Protected and Notable Species within 1km																			
<table border="0"> <thead> <tr> <th colspan="2">Protected Species</th> </tr> </thead> <tbody> <tr> <td><i>Anguis fragilis</i></td> <td>Slow worm</td> </tr> <tr> <td><i>Muscardinus avellanarius</i></td> <td>Hazel dormouse</td> </tr> <tr> <td><i>Natrix natrix</i></td> <td>Grass snake</td> </tr> <tr> <td><i>Pipistrellus pipistrellus</i></td> <td>Common Pipistrelle (45 kHz) bat</td> </tr> <tr> <td><i>Pipistrellus sp.</i></td> <td>Pipistrelle sp. bat</td> </tr> <tr> <td><i>Plecotus auritus</i></td> <td>Brown Long-eared bat</td> </tr> <tr> <td><i>Vipera berus</i></td> <td>Adder (record within Site boundary)</td> </tr> <tr> <td><i>Zootoca vivipara</i></td> <td>Common lizard (record within Site boundary)</td> </tr> </tbody> </table>		Protected Species		<i>Anguis fragilis</i>	Slow worm	<i>Muscardinus avellanarius</i>	Hazel dormouse	<i>Natrix natrix</i>	Grass snake	<i>Pipistrellus pipistrellus</i>	Common Pipistrelle (45 kHz) bat	<i>Pipistrellus sp.</i>	Pipistrelle sp. bat	<i>Plecotus auritus</i>	Brown Long-eared bat	<i>Vipera berus</i>	Adder (record within Site boundary)	<i>Zootoca vivipara</i>	Common lizard (record within Site boundary)
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<i>Pipistrellus sp.</i>	Pipistrelle sp. bat																		
<i>Plecotus auritus</i>	Brown Long-eared bat																		
<i>Vipera berus</i>	Adder (record within Site boundary)																		
<i>Zootoca vivipara</i>	Common lizard (record within Site boundary)																		

Sussex BAP Species	
<i>Boloria selene</i>	Small Pearl-bordered Fritillary
<i>Coenonympha pamphilus</i>	Small Heath
<i>Erinaceus europaeus</i>	European hedgehog
<i>Hoplodrina blanda</i>	Rustic (moth)
<i>Limenitis camilla</i>	White admiral
<i>Melanchra persicariae</i>	Dot moth (moth)
<i>Spilosoma luteum</i>	Buff Ermine (moth)
<i>Trichiura crataegi</i>	Pale Eggar (moth)
<i>Tyria jacobaeae</i>	Cinnabar (moth)
Sussex Rare Species Inventory	
<i>Argiope bruennichi</i>	Wasp spider
<i>Dolichovespula (Dolichovespula) media</i>	
<i>Nigma puella</i>	
Notable Bird Inventory	
<i>Ardea cinerea</i>	Grey heron
<i>Delichon urbicum</i>	House martin
<i>Hirundo rustica</i>	Swallow
Invasive Alien Species Inventory	
<i>Hyacinthoides non-scripta x hispanica</i> (= <i>H. x massartiana</i>)	Hybrid bluebell
<i>Prunus laurocerasus</i>	Cherry laurel
<i>Rhododendron ponticum</i>	Rhododendron
Field Survey: Habitat Descriptions (See Figure 26/466)	
<p>Arable – Recently ploughed and bare.</p> <p>Woodland – Small areas in the north east of the Site near a brick shed. The eastern section forms a small part of a larger woodland strip, with a canopy of oak, hornbeam and aspen and shrub layer of hazel, hawthorn, holly and willow. The field layer is mostly bramble, ivy and nettle but also includes male fern <i>Dryopteris felix-mas</i>. The western extension around the hut is scrubbier in nature with much willow.</p> <p>Hedges – Are species rich with hawthorn, blackthorn, hazel, ash and willow. There is one mature oak tree in the hedge on the northern boundary.</p> <p>Buildings – A brick shed with pitched and tiled roof.</p>	
Field Survey: Protected and Notable Species	
No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.	
Field Survey: Invasive Non-native Species	
No invasive non-native species recorded within the Site.	
Assessment of Potential for Protected and Notable Species	
<p>Great crested newts – There are no ponds within the Site. However, OS maps indicate there are ponds to the east of the Site, north and south of London Road and on the southern edge of the Recreation ground approximately 150-200m distance. There is also a large pond (Decoy Pond) in Moat Wood, approximately 280m to the south west of the Site. Woodland, hedges and tall grassland a ruderal represent suitable terrestrial habitat within the Site.</p> <p>Reptiles – Very limited potential in tall grassland and ruderal near the brick shed in the north east of the Site.</p>	

Breeding birds – High potential in woodland and hedges.
Bats – High potential in trees and mature trees in particular, with features such as cracks and cavities, have potential to be used as roosts. The shed may also have some potential for roosts. Activity, including foraging and commuting, is likely throughout but especially along hedges and woodland edges.
Dormice – High potential in woodland and hedges due to connectivity with adjoining woodland.
Badgers – Potential for setts within the woodland and hedges, but with or without setts badgers may also use parts of the Site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of the ponds to the east of the Site.
Reptiles – (May – June, September – October) in suitable habitat if present.
Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees and shed to determine the scope for further survey and activity surveys.
Dormice – (April – November) in hedges and woodland.
Badgers – (Year round but Spring / Autumn optimal) of whole Site and adjoining woodland.

INDICATIVE ECOLOGICAL APPRAISAL

Moderate value – the arable is of low value but the woodland and hedges, including mature trees are of moderate value.
The Sites location adjoining Moat Wood Ancient Woodland increases its value and sensitivity.
The Sites habitats and features have moderate potential to support notable/protected species.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining and buffering the woodland and hedges, including the mature trees and their features.
- Buffering the adjoining Moat Wood Ancient Woodland.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

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.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Timing of vegetation clearance works to avoid the bird breeding season (March – August inclusive).
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents.
- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- If great crested newts are found to be present in pond to the east of the Site, measures should be put in place to prevent harming or killing them, including for example the erection of herptile fencing to exclude them from work areas, and possibly trapping and translocation to suitable receptor areas

elsewhere.

- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of woodland and hedges.
- Development should avoid construction works within at least 30m of the nearest badger setts and seek to avoid prime foraging grounds identified through the badger survey and severance of commuting corridors within territories.

Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including the hedges, woodland and mature trees.
- Habitat creation, ideally located adjacent to retained or adjoining habitat, such as Moat Wood Ancient Woodland or to form habitat corridors or links. To include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit.
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings.
- Incorporate features to SuDS scheme(s), such as the use of native wetland plant species, to enhance their value.



ECOLOGICAL ASSESSMENT															
Settlement/Area:	East Hoathly														
Site Address:	Land at Hesmond's Stud, East Hoathly														
Site Reference Number:	773/1950 (1-5)														
Site Summary Description															
<p>A 5.37ha Site comprising five species poor grassland fields divided by species rich hedges, some of which include trees. The three western fields are adjacent to one another, as are the two eastern most, but the two blocks are divided by a narrow strip of woodland. A track runs along the northern boundary of all the fields, with four of the five fields adjacent to London Road to the south.</p>															
ECOLOGICAL BASELINE															
Green Infrastructure Context (see Figure 26.1)															
<p>The Site is located within the broader Wealden landscape of small to medium sized grassland and arable fields, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. The Site lies on the north western edge of East Hoathly, to the north of London Road. To the north and west are fields and hedges and Ancient Woodland, including Bentley and Alders Woods. To the south, beyond the London Road is a small arable field and Moat Wood Ancient Woodland as well as the Recreation Ground. To the south east is a residential area of East Hoathly.</p>															
Desk Study : Designated Sites within 1km (See Figure 26.2)	Distance from Site														
<ul style="list-style-type: none"> • Croom Cottage Meadow LWS. The Citation summary describes the Site as follows: "<i>Slightly acidic, unimproved grassland meadow managed for hay with exceptionally rich botanical sward and population of green-winged orchid</i>". 	<ul style="list-style-type: none"> • Adjacent West 														
Desk Study: BAP Priority Habitats within 1km	Distance from Site														
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Alders Wood • Ancient & semi-natural woodland – Great Wood • Ancient & semi-natural woodland – Bentley Wood • Ancient & semi-natural woodland – Harrison's Shaw • Ancient & semi-natural woodland – Moat Wood • Ancient & semi-natural woodland – France Wood • Ancient & semi-natural woodland – Hesmonds Cottages Shaw • Ancient & semi-natural woodland – Barham Farm Shaw 	<ul style="list-style-type: none"> • 260m North • 440m North • 50m West • 360m WSW • 120m South • 999m South East • 850m East • 790m North East 														
Desk Study: Protected and Notable Species within 1km															
<p>Protected Species</p> <table> <tbody> <tr> <td><i>Anguis fragilis</i></td> <td>Slow worm</td> </tr> <tr> <td><i>Muscardinus avellanarius</i></td> <td>Hazel dormouse</td> </tr> <tr> <td><i>Natrix natrix</i></td> <td>Grass snake</td> </tr> <tr> <td><i>Pipistrellus pipistrellus</i></td> <td>Common Pipistrelle (45 kHz) bat</td> </tr> <tr> <td><i>Pipistrellus sp.</i></td> <td>Pipistrelle sp. bat</td> </tr> <tr> <td><i>Plecotus auritus</i></td> <td>Brown Long-eared bat</td> </tr> <tr> <td><i>Vipera berus</i></td> <td>Adder (record within Site boundary)</td> </tr> </tbody> </table>		<i>Anguis fragilis</i>	Slow worm	<i>Muscardinus avellanarius</i>	Hazel dormouse	<i>Natrix natrix</i>	Grass snake	<i>Pipistrellus pipistrellus</i>	Common Pipistrelle (45 kHz) bat	<i>Pipistrellus sp.</i>	Pipistrelle sp. bat	<i>Plecotus auritus</i>	Brown Long-eared bat	<i>Vipera berus</i>	Adder (record within Site boundary)
<i>Anguis fragilis</i>	Slow worm														
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<i>Plecotus auritus</i>	Brown Long-eared bat														
<i>Vipera berus</i>	Adder (record within Site boundary)														

<i>Zootoca vivipara</i>	Common lizard (record within Site boundary)
Sussex BAP Species	
<i>Boloria selene</i>	Small Pearl-bordered Fritillary
<i>Coenonympha pamphilus</i>	Small Heath
<i>Erinaceus europaeus</i>	European hedgehog
<i>Hoplodrina blanda</i>	Rustic (moth)
<i>Limenitis camilla</i>	White admiral
<i>Melanchra persicariae</i>	Dot moth (moth)
<i>Spilosoma luteum</i>	Buff Ermine (moth)
<i>Trichiura crataegi</i>	Pale Eggar (moth)
<i>Tyria jacobaeae</i>	Cinnabar (moth)
Sussex Rare Species Inventory	
<i>Argiope bruennichi</i>	Wasp spider
<i>Dolichovespula (Dolichovespula) media</i>	
<i>Nigma puella</i>	
Notable Bird Inventory	
<i>Apus apus</i>	Swift
<i>Ardea cinerea</i>	Grey heron
<i>Delichon urbicum</i>	House martin
<i>Hirundo rustica</i>	Swallow
Invasive Alien Species Inventory	
<i>Crocasmia pottsii</i> x <i>aurea</i> = <i>C. x crocosmiiflora</i>	Montbretia
<i>Harmonia axyridis</i>	Harlequin Ladybird
<i>Hyacinthoides non-scripta</i> x <i>hispanica</i> (= <i>H. x massartiana</i>)	Hybrid bluebell
<i>Prunus laurocerasus</i>	Cherry laurel
<i>Rhododendron ponticum</i>	Rhododendron
Field Survey: Habitat Descriptions (See Figure 26/773(1-5))	
<p>Improved grassland – Is generally short and quite homogenous. It is very species poor in which Yorkshire fog <i>Holcus lanatus</i>, common bent <i>Agrostis capillaris</i> and perennial rye-grass <i>Lolium perenne</i> are dominant. Forb content is low and consists of very few common and widespread species of which the most frequent and abundant is white clover <i>Trifolium repens</i>. Other species include creeping buttercup <i>Ranunculus repens</i>, self-heal <i>Prunella vulgaris</i> and greater plantain <i>Plantago major</i>.</p> <p>Hedges – Are species rich with hawthorn, blackthorn, hazel, holly, rose, oak and willow. One hedge includes wild service tree (TN1). Some sections of hedge include trees, including mature oaks.</p>	
Field Survey: Protected and Notable Species	
No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.	
Field Survey: Invasive Non-native Species	
No invasive non-native species recorded within the Site.	

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. However, OS maps indicate there are ponds adjacent to the south east corner of the Site, north and south of London Road, and on the southern edge of the Recreation ground approximately 170m distant. There are also ponds at Old Whyly, approximately 260-370m north of the Site. Suitable terrestrial habitat within the Site is limited to the hedges.

Reptiles – Very limited potential along field boundaries, for example in an field corner with taller unmanaged grassland (TN2).

Breeding birds – In hedges and trees.

Bats – Trees and mature trees in particular, with features such as cracks and cavities, have potential to be used as roosts. Activity, including foraging and commuting, is likely throughout but especially along hedges.

Dormice – Moderate to high potential in hedges due to connectivity with adjoining woodland etc..

Badgers – Potential for setts within the hedges and adjoining woodland, but with or without setts badgers may also use any part of the Site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of the ponds to the north and east of the Site.

Reptiles – (May – June, September – October) in suitable habitat if present.

Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees. to determine the scope for further survey and activity surveys.

Dormice – (April – November) in suitable habitat.

Badgers – (Year round but Spring / Autumn optimal) of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Low to Moderate value – the grassland is very species poor and of low value. The hedges and mature trees are of value.

The Sites location, adjacent to the relatively large Bentley and Alders Woods Ancient Woodland , increases its value and sensitivity.

The Site has low – moderate potential to support notable/protected species.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining and buffering the hedges and mature trees.

As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

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.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Timing of vegetation clearance works to avoid the bird breeding season (March – August inclusive).
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to

prevent lightshed into surrounding habitats.

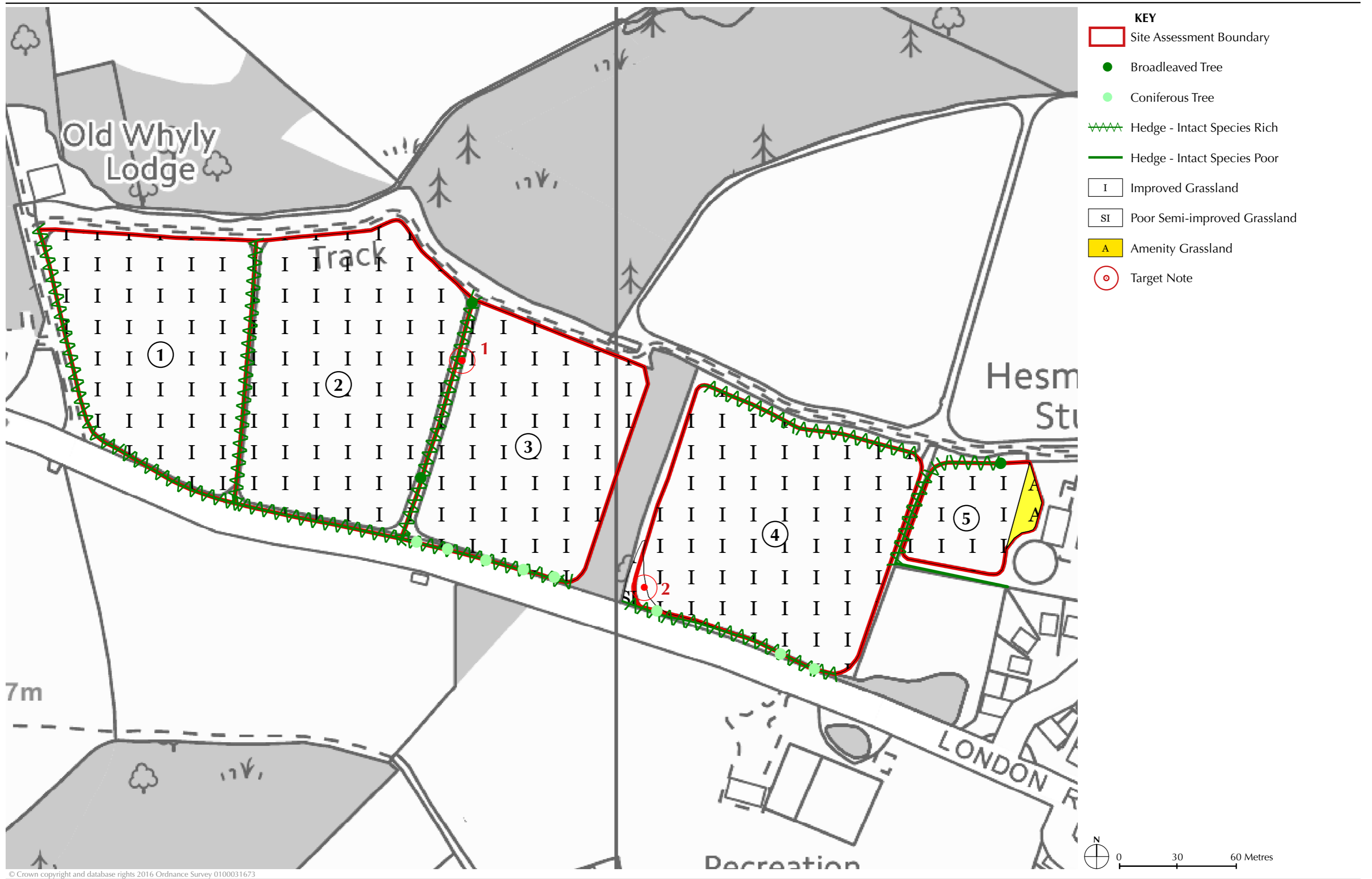
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents.
- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- If great crested newts are found to be present in pond to the north and west of the Site, measures should be put in place to prevent harming or killing them, including for example the erection of herptile fencing to exclude them from work areas, and possibly trapping and translocation to suitable receptor areas elsewhere.
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of hedges.

Development should avoid construction works within at least 30m of the nearest badger setts and seek to avoid prime foraging grounds identified through the badger survey and severance of commuting corridors within territories.

Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including hedges and mature trees.
- Strengthen boundary vegetation, for example by planting appropriate native species to form new hedges on boundaries that currently lack them, such as the northern boundary of the western part of the Site and eastern boundary of the eastern part of the Site.
- Habitat creation, ideally located adjacent to retained or adjoining habitat, or to form habitat corridors or links. To include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit.
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings.
- Incorporate features to SuDS scheme(s), such as the use of native wetland plant species, to enhance their value.



ECOLOGICAL ASSESSMENT	
Settlement/Area:	East Hoathly
Site Address:	Land at Hesmond's Stud, East Hoathly
Site Reference Number:	773/1950 (6-10)
Site Summary Description	
An 8.27ha Site comprising five species poor grassland fields with species rich hedges, and trees. Also includes a pond with adjoining small area of woodland and scrub. Site 6-9 are a group of adjacent fields. Site 10 is a little detached from these to the north east.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 26.1)	
The Site is located within the broader Wealden landscape of small to medium sized grassland and arable fields, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. The Site lies on the eastern side of East Hoathly. To the north and west are residential and other areas of East Hoathly. To the south and east is open country of fields and hedges, trees, woods and plantations.	
Desk Study : Designated Sites within 1km (See Figure 26.2)	Distance from Site
<ul style="list-style-type: none"> • Croom Cottage Meadow LWS. The Citation summary describes the Site as follows: <i>"Slightly acidic, unimproved grassland meadow managed for hay with exceptionally rich botanical sward and population of green-winged orchid"</i>. 	<ul style="list-style-type: none"> • 670m North West
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Alders Wood • Ancient & semi-natural woodland – Great Wood • Ancient & semi-natural woodland – Bentley Wood • Ancient & semi-natural woodland – Harrison's Shaw • Ancient & semi-natural woodland – Moat Wood • Ancient & semi-natural woodland – France Wood • Ancient & semi-natural woodland – Starve Wood • Ancient & semi-natural woodland – Hesmonds Cottages Shaw 	<ul style="list-style-type: none"> • 510m North • 960m North • 750m North West • 950m WNW • 330m West • 440m ESE • 990m East • 465m East

Desk Study: Protected and Notable Species within 1km

Protected Species

<i>Anguis fragilis</i>	Slow worm
<i>Muscardinus avellanarius</i>	Hazel dormouse
<i>Natrix natrix</i>	Grass snake
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle (45 kHz) bat
<i>Pipistrellus sp.</i>	Pipistrelle sp. bat
<i>Plecotus auritus</i>	Brown Long-eared bat
<i>Vipera berus</i>	Adder (record within Site boundary)
<i>Zootoca vivipara</i>	Common lizard (record within Site boundary)

Sussex BAP Species

<i>Boloria selene</i>	Small Pearl-bordered Fritillary
<i>Coenonympha pamphilus</i>	Small Heath
<i>Erinaceus europaeus</i>	European hedgehog
<i>Hoplodrina blanda</i>	Rustic (moth)
<i>Lasiommata megera</i>	Wall
<i>Limenitis camilla</i>	White admiral
<i>Melanchra persicariae</i>	Dot moth (moth)
<i>Spilosoma lubricipeda</i>	White Ermine (moth)
<i>Spilosoma luteum</i>	Buff Ermine (moth)
<i>Trichiura crataegi</i>	Pale Eggar (moth)
<i>Tyria jacobaeae</i>	Cinnabar (moth)

Sussex Rare Species Inventory

<i>Apoda limacodes</i>	Festoon (moth)
<i>Argiope bruennichi</i>	Wasp spider
<i>Atolmis rubricollis</i>	Red-necked Footman (moth)
<i>Boletus pruinatus</i>	Matt Bolete
<i>Cordulia aenea</i>	Downy Emerald
<i>Dolichovespula (Dolichovespula) media</i>	
<i>Eilema sororcula</i>	Orange Footman (moth)
<i>Glyphipterix forsterella</i>	Sedge Fanner (moth)
<i>Hygrophoropsis aurantiaca</i>	False Chanterelle
<i>Hypomyces aurantius</i>	
<i>Mitrula paludosa</i>	Bog Beacon
<i>Nigma puella</i>	
<i>Tetheella fluctuosa</i>	Satin Lutestring (moth)

Notable Bird Inventory

<i>Apus apus</i>	Swift
<i>Ardea cinerea</i>	Grey heron
<i>Delichon urbicum</i>	House martin
<i>Hirundo rustica</i>	Swallow
<i>Tyto alba</i>	Barn owl

Invasive Alien Species Inventory

<i>Crocsmia pottsii x aurea = C. x crocosmiiflora</i>	Montbretia
<i>Harmonia axyridis</i>	Harlequin Ladybird
<i>Hyacinthoides non-scripta x hispanica</i> (= <i>H. x massartiana</i>)	Hybrid bluebell
<i>Prunus laurocerasus</i>	Cherry laurel
<i>Rhododendron ponticum</i>	Rhododendron

Field Survey: Habitat Descriptions (See Figure 26/773(6-10))

Improved grassland – Is generally short and quite homogenous. It is very species poor in which Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris* and perennial rye-grass *Lolium perenne* are dominant. Forb content is low and consists of very few common and widespread species of which the most frequent and abundant are white clover *Trifolium repens* and creeping buttercup *Ranunculus repens*.

Hedges – Are species rich with hawthorn, blackthorn, hazel, holly, rose, oak, ash, field maple and willow. Some sections of hedge include trees, including mature oak and field maple.

Trees – Outside the hedge there are mature trees, including oak and horse chestnut, on the western boundary and within one of the fields.

Woodland – A very small area around the pond. Includes mature oak as well as sycamore and wild cherry. Shrubs include holly, hazel, blackthorn and the invasive non-native cherry laurel. The field layer appears to comprise largely of bramble and bracken and some grassy areas. Adjoining areas include scrub and tall unmanaged grassland and ruderal.

Pond – Set within a depression and surrounded by woodland and scrub on banks and therefore quite heavily shaded. Abundant duckweed *Lemna* sp. but there appears to be little emergent or marginal vegetation.

Field Survey: Protected and Notable Species

No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.

Field Survey: Invasive Non-native Species

Cherry laurel – in the small area of woodland beside the pond.

Assessment of Potential for Protected and Notable Species

Great crested newts – In addition to the pond within the Site there is a pond within Moat Wood, approximately 350m to the west of the south western corner of the Site. There are also ponds to the north and south of the Recreation Ground to the north west of the Site, from about 220m distant, although the roads and residential and other areas of East Hoathly would be significant barriers to dispersal from this direction. Suitable terrestrial habitat within the Site includes woodland, scrub, hedges and tall unmanaged grassland and ruderal.

Reptiles – Limited potential along boundaries, for example near the small woodland area.

Breeding birds – In woodland, hedges, trees and scrub.

Bats – Trees and mature trees in particular, with features such as cracks and cavities, have potential to be used as roosts. Activity, including foraging and commuting, is likely throughout, but especially along hedges and around woodland and pond.

Dormice – Moderate potential in woodland, hedges and scrub due to connectivity with wider hedgerow network.

Badgers – Potential for setts within the woodland, hedges and scrub, but with or without setts badgers may also use any part of the Site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of the pond on Site and in Moat Wood.

Reptiles – (May – June, September – October) in suitable habitat.

Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees to determine the scope for further survey and activity surveys.

Dormice – (April – November) in suitable habitat.

Badgers – (Year round but Spring / Autumn optimal) of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Low to Moderate value – the grassland is very species poor and of low value. The hedges, woodland, pond and mature trees are of moderate value.

The Site has moderate potential to support notable/protected species.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining and buffering the woodland, pond, hedges and mature trees and their features.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

Outline Mitigation

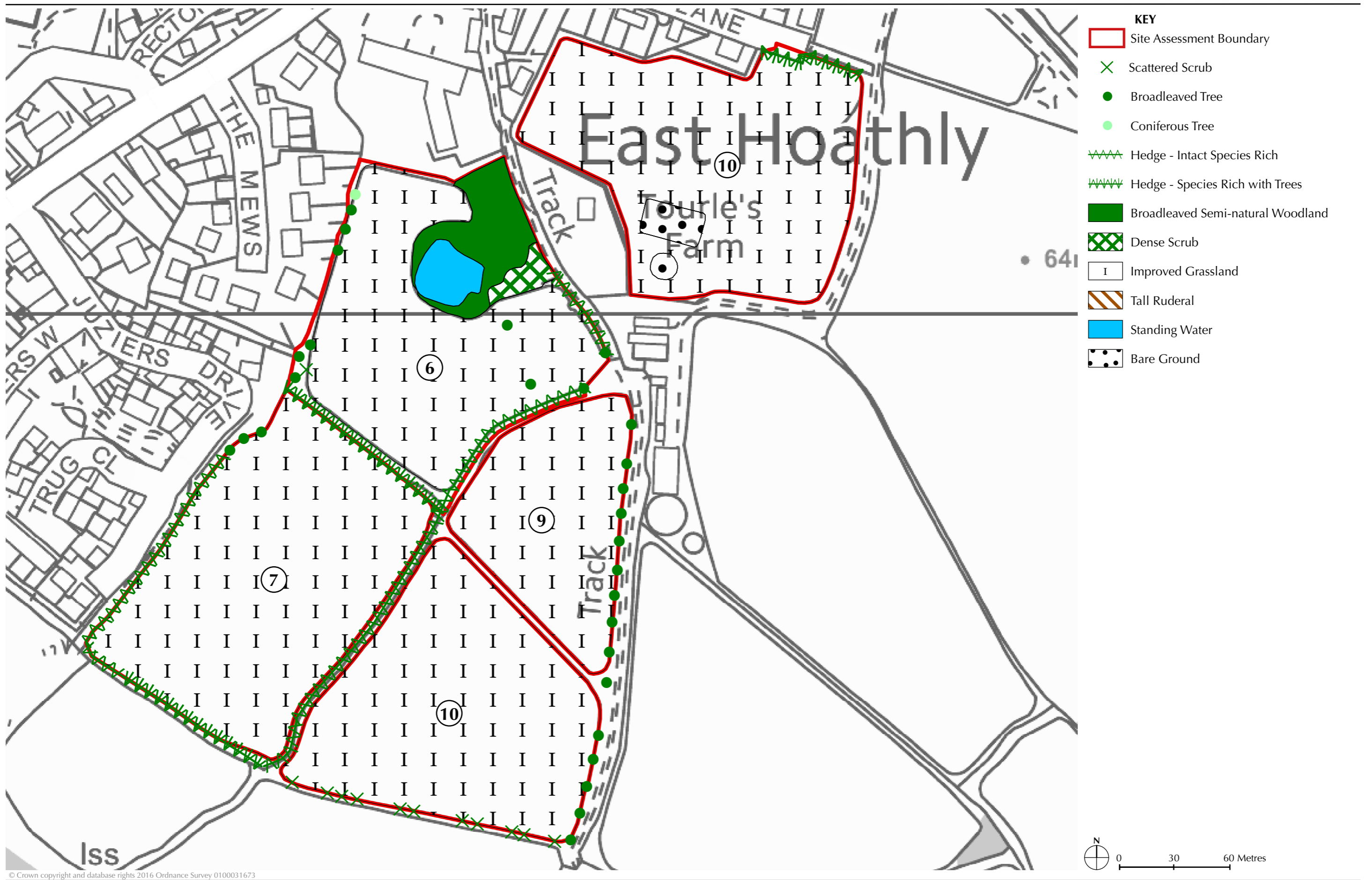
Should development at this Site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Timing of vegetation clearance works to avoid the bird breeding season (March – August inclusive).
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents.
- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- If great crested newts are found to be present in the pond on site, retention of pond and sufficient area of terrestrial habitat (e.g. as part of buffer strip) and other possible measures to safeguard their conservation status, under a Natural England European Protected Species licence. If not present in this pond but present in any of the ponds nearby then measures should be put in place to prevent harming or killing them, including for example the erection of herptile fencing to exclude them from work areas, and possibly trapping and translocation to suitable receptor areas elsewhere.
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of woodland and hedges.
- Development should avoid construction works within at least 30m of the nearest badger setts and seek to avoid prime foraging grounds identified through the badger survey and severance of commuting corridors within territories.

Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including woodland, pond, hedges and mature trees.
- Strengthen boundary vegetation by planting appropriate native species to gap-up existing hedges and create new ones, for example on the eastern boundary (incorporating mature oaks), the eastern section of the southern boundary and parts of the western boundary of sites 6-9 and around most of Site 10.
- Habitat creation, ideally located adjacent to retained or adjoining habitat, or to form habitat corridors or links. To include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit.
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings.
- Incorporate features to SuDS scheme(s), such as the use of native wetland plant species, to enhance their value.



ECOLOGICAL ASSESSMENT																			
Settlement/Area:	East Hoathly																		
Site Address:	Land at Hesmond's Stud, East Hoathly																		
Site Reference Number:	773/1950 (11)																		
Site Summary Description																			
A 1.17ha Site comprising species poor grassland field with species rich hedges, including sections with mature trees along the southern and eastern boundaries.																			
ECOLOGICAL BASELINE																			
Green Infrastructure Context (see Figure 26.1)																			
The Site is located within the broader Wealden landscape of small to medium sized grassland and arable fields, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. The Site lies on the northern edge of East Hoathly, to the west of Waldron Road. To the north and west are fields and hedges and Ancient Woodland, including Bentley and Alders Woods. To the east are some residential properties set within large plots or gardens and then open country of fields with hedges, trees and woodland. To the south are residential and other areas of East Hoathly.																			
Desk Study : Designated Sites within 1km (See Figure 26.2)	Distance from Site																		
<ul style="list-style-type: none"> • Croom Cottage Meadow LWS. The Citation summary describes the Site as follows: "<i>Slightly acidic, unimproved grassland meadow managed for hay with exceptionally rich botanical sward and population of green-winged orchid</i>". 	<ul style="list-style-type: none"> • 560m West 																		
Desk Study: BAP Priority Habitats within 1km	Distance from Site																		
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Alders Wood • Ancient & semi-natural woodland – Great Wood • Ancient & semi-natural woodland – Bentley Wood • Ancient & semi-natural woodland – Harrison's Shaw • Ancient & semi-natural woodland – Moat Wood • Ancient & semi-natural woodland – France Wood • Ancient & semi-natural woodland – Hesmonds Cottages Shaw • Ancient & semi-natural woodland – Barham Farm Shaw 	<ul style="list-style-type: none"> • 170m North • 610m North • 600m West • 890m West • 550m South West • 680m South East • 630m East • 655m North East 																		
Desk Study: Protected and Notable Species within 1km																			
<table border="0"> <tr> <td>Protected Species</td> <td></td> </tr> <tr> <td><i>Anguis fragilis</i></td> <td>Slow worm</td> </tr> <tr> <td><i>Musccardinus avellanarius</i></td> <td>Hazel dormouse</td> </tr> <tr> <td><i>Natrix natrix</i></td> <td>Grass snake</td> </tr> <tr> <td><i>Pipistrellus pipistrellus</i></td> <td>Common Pipistrelle (45 kHz) bat</td> </tr> <tr> <td><i>Pipistrellus sp.</i></td> <td>Pipistrelle sp. bat</td> </tr> <tr> <td><i>Plecotus auritus</i></td> <td>Brown Long-eared bat</td> </tr> <tr> <td><i>Vipera berus</i></td> <td>Adder (record within Site boundary)</td> </tr> <tr> <td><i>Zootoca vivipara</i></td> <td>Common lizard (record within Site boundary)</td> </tr> </table>		Protected Species		<i>Anguis fragilis</i>	Slow worm	<i>Musccardinus avellanarius</i>	Hazel dormouse	<i>Natrix natrix</i>	Grass snake	<i>Pipistrellus pipistrellus</i>	Common Pipistrelle (45 kHz) bat	<i>Pipistrellus sp.</i>	Pipistrelle sp. bat	<i>Plecotus auritus</i>	Brown Long-eared bat	<i>Vipera berus</i>	Adder (record within Site boundary)	<i>Zootoca vivipara</i>	Common lizard (record within Site boundary)
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<i>Zootoca vivipara</i>	Common lizard (record within Site boundary)																		

Sussex BAP Species

<i>Boloria selene</i>	Small Pearl-bordered Fritillary
<i>Coenonympha pamphilus</i>	Small Heath
<i>Erinaceus europaeus</i>	European hedgehog
<i>Hoplodrina blanda</i>	Rustic (moth)
<i>Limenitis camilla</i>	White admiral
<i>Melanchra persicariae</i>	Dot moth (moth)
<i>Spilosoma luteum</i>	Buff Ermine (moth)
<i>Trichiura crataegi</i>	Pale Eggar (moth)
<i>Tyria jacobaeae</i>	Cinnabar (moth)

Sussex Rare Species Inventory

<i>Argiope bruennichi</i>	Wasp spider
<i>Dolichovespula (Dolichovespula) media</i>	
<i>Nigma puella</i>	

Notable Bird Inventory

<i>Apus apus</i>	Swift
<i>Ardea cinerea</i>	Grey heron
<i>Delichon urbicum</i>	House martin
<i>Hirundo rustica</i>	Swallow

Invasive Alien Species Inventory

<i>Crocasmia pottsii x aurea = C. x crocosmiiflora</i>	Montbretia
<i>Harmonia axyridis</i>	Harlequin Ladybird
<i>Hyacinthoides non-scripta x hispanica</i> (= <i>H. x massartiana</i>)	Hybrid bluebell
<i>Prunus laurocerasus</i>	Cherry laurel
<i>Rhododendron ponticum</i>	Rhododendron

Field Survey: Habitat Descriptions (See Figure 26/773(11))

Improved grassland – Is generally short and quite homogenous. It is very species poor in which Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris* and perennial rye-grass *Lolium perenne* are dominant. Forb content is low and consists of very few common and widespread species of which the most frequent and abundant are white clover *Trifolium repens* and creeping buttercup *Ranunculus repens*.

Hedges – On the western and eastern boundaries are species rich with hawthorn, blackthorn, hazel, holly, rose, oak and willow. The hedge on the western boundary includes mature oak and ash trees. The hedge on the southern boundary is species poor cypress, but does include maturing ash as well as oak and sycamore.

Trees – includes some Scot's pine, birch and non-native maple in the north east of the Site.

Field Survey: Protected and Notable Species

No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.

Field Survey: Invasive Non-native Species

No invasive non-native species recorded within the Site.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. However, OS maps indicate there are ponds north and south of London Road, and on the southern edge of the Recreation ground approximately 90-300m distant. Suitable terrestrial habitat within the Site is limited to the hedges.

Breeding birds – In hedges.

Bats – Trees and mature trees in particular, with features such as cracks and cavities, have potential to be used as roosts. Activity, including foraging and commuting, is likely throughout but especially along hedges.

Dormice – Low – moderate potential in hedges due to connectivity with adjoining woodland.

Badgers – Potential for setts within the hedges, but with or without setts badgers may also use any part of the Site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of the ponds to the south west of the Site.

Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees to determine the scope for further survey.

Dormice – (April – November) in suitable habitat.

Badgers – (Year round but Spring / Autumn optimal) of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Low value – the grassland is of low value but the native hedges and trees, especially mature trees, have value.

The Site has low potential to support notable/protected species.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining the native hedges and trees.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

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.

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- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- If great crested newts are found to be present in ponds to the south west of the Site, measures should

be put in place to prevent harming or killing them, including for example the erection of herptile fencing to exclude them from work areas, and possibly trapping and translocation to suitable receptor areas elsewhere.

- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
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- Habitat creation, ideally located adjacent to retained or adjoining habitat, or to form habitat corridors or links. To include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit.
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings.
- Incorporate features to SuDS scheme(s), such as the use of native wetland plant species, to enhance their value.



ECOLOGICAL ASSESSMENT	
Settlement/Area:	East Hoathly
Site Address:	Land East of South Street, East Hoathly
Site Reference Number:	782/1950
Site Summary Description	
<p>A 9.72ha Site comprising largely of arable, but also a species poor grassland field, broadleaved plantation and semi-natural woodland, a stream and a species rich hedge with mature trees that forms the eastern boundary of the Site. The Site is bordered to the south by woodland and residential development to the west.</p>	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 26.1)	
<p>The Site is located within the broader Wealden landscape of small to medium sized grassland and arable fields, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. The Site lies on the southern edge of East Hoathly, to the east of South Street. To the north are a small field then residential areas of East Hoathly. To the east is open country of grassland and arable fields with hedges, woods and plantations. To the west is a row of residential properties, then beyond South Street is Moat Wood, which includes Ancient Woodland and Ancient Replanted Woodland. To the south is Martinland Wood, which is Ancient Replanted Woodland.</p>	
Desk Study : Designated Sites within 1km (See Figure 26.2)	Distance from Site
<ul style="list-style-type: none"> • Park Corner Heath SSSI <i>Park Corner Heath is a small area of grassy heath, woodland and scrub lying on sand over the Weald Clay ... This diversity of habitats provides food and shelter for an outstanding assemblage of moths including the nationally-rare silky wave moth <i>Idaea dilutaria</i>, as well as other notable species such as the sloe carpet <i>Aleucis distinctata</i>, the white-banded carpet <i>Spargania luctuata</i>, the dotted fanfoot <i>Macrochilo cribrumalis</i> and the straw belle <i>Aspitatis gilvaria</i>.</i> • Croom Cottage Meadow LWS. The Citation summary describes the Site as follows: <i>"Slightly acidic, unimproved grassland meadow managed for hay with exceptionally rich botanical sward and population of green-winged orchid"</i>. 	<ul style="list-style-type: none"> • 770m South East • 710m North
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Alders Wood • Ancient & semi-natural woodland – Bentley Wood • Ancient & semi-natural woodland – Harrison's Shaw • Ancient & semi-natural woodland – Moat Wood • Ancient & semi-natural woodland – Rowland Wood • Ancient & semi-natural woodland – Martinland Wood • Ancient & semi-natural woodland – Vert Wood • Ancient & semi-natural woodland – Old Land Wood • Ancient & semi-natural woodland – France Wood 	<ul style="list-style-type: none"> • 885m North • 930m North West • 765m North West • 20m West • 40m West • Adjacent South • 760m South • 610m South East • 760m East

Desk Study: Protected and Notable Species within 1km

Protected Species

<i>Anguis fragilis</i>	Slow worm
<i>Natrix natrix</i>	Grass snake
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle (45 kHz) bat
<i>Pipistrellus pygmaeus</i>	Soprano pipistrelle (55kHz) bat
<i>Pipistrellus sp.</i>	Pipistrelle sp. bat
<i>Plecotus auritus</i>	Brown Long-eared bat
<i>Triturus cristatus</i>	Great crested newt
<i>Vipera berus</i>	Adder (record within Site boundary)
<i>Zootoca vivipara</i>	Common lizard (record within Site boundary)

Sussex BAP Species

<i>Boloria selene</i>	Small Pearl-bordered Fritillary
<i>Brachylochia viminalis</i>	Minor Shoulder-knot (moth)
<i>Bufo bufo</i>	Common toad
<i>Coenonympha pamphilus</i>	Small Heath
<i>Hoplodrina blanda</i>	Rustic (moth)
<i>Lasiommata megera</i>	Wall
<i>Limenitis camilla</i>	White admiral
<i>Melanchra persicariae</i>	Dot moth (moth)
<i>Platanthera bifolia</i>	Lesser Butterfly-orchid
<i>Pyrgus malvae</i>	Grizzled Skipper
<i>Ranunculus tripartitus</i>	Three-lobed Crowfoot
<i>Spilosoma lubricipeda</i>	White Ermine (moth)
<i>Spilosoma luteum</i>	Buff Ermine (moth)
<i>Trichiura crataegi</i>	Pale Eggar (moth)
<i>Tyria jacobaeae</i>	Cinnabar (moth)

Sussex Rare Species Inventory

<i>Anacaena bipustulata</i>	
<i>Apoda limacodes</i>	Festoon (moth)
<i>Argiope bruennichi</i>	Wasp spider
<i>Atolmis rubricollis</i>	Red-necked Footman (moth)
<i>Boletus pruinatus</i>	Matt Bolete
<i>Boloria euphrosyne</i>	Pearl-bordered Fritillary
<i>Callitriche truncate</i>	Short-leaved Water-starwort
<i>Capperia britanniodactyla</i>	Wood Sage Plume
<i>Cordulia aenea</i>	Downy Emerald
<i>Criorhina ranunculi</i>	
<i>Dolichovespula (Dolichovespula) media</i>	
<i>Eilema sororcula</i>	Orange Footman (moth)
<i>Elaphria venustula</i>	Rosy Marbled
<i>Eupithecia indigata</i>	Ochreous Pug (moth)
<i>Furcula bicuspis</i>	Alder Kitten (moth)
<i>Glyptopterix forsterella</i>	Sedge Fanner (moth)
<i>Hemaris fuciformis</i>	Broad-Bordered Bee Hawk
<i>Hydrochus angustatus</i>	
<i>Hygrophoropsis aurantiaca</i>	False Chanterelle
<i>Hypomyces aurantius</i>	
<i>Meganola albula</i>	Kent Black Arches
<i>Mitridia paludosa</i>	Bog Beacon
<i>Mythimna l-album</i>	L-album Wainscot (moth)
<i>Nigma puella</i>	

<i>Perizoma albulata</i>	Grass Rivulet
<i>Pyrochroa coccinea</i>	Black-headed Cardinal Beetle
<i>Ranunculus tripartitus</i>	Three-lobed Crowfoot
<i>Synanthedon vespiformis</i>	Yellow-legged Clearwing
<i>Tetheella fluctuosa</i>	Satin Lutestring (moth)
<i>Volucella inanis</i>	
Notable Bird Inventory	
<i>Apus apus</i>	Swift
<i>Ardea cinerea</i>	Grey heron
<i>Corvus corax</i>	Raven
<i>Delichon urbicum</i>	House martin
<i>Hirundo rustica</i>	Swallow
<i>Milvus milvus</i>	Red kite
<i>Phylloscopus sibilatrix</i>	Wood warbler
<i>Tyto alba</i>	Barn owl
Invasive Alien Species Inventory	
<i>Crassula helmsii</i>	New Zealand pigmyweed
<i>Crocsmia pottsii</i> x <i>aurea</i> = <i>C. x crocosmiiflora</i>	Montbretia
<i>Harmonia axyridis</i>	Harlequin Ladybird
<i>Hyacinthoides non-scripta</i> x <i>hispanica</i> (= <i>H. x massartiana</i>)	Hybrid bluebell
<i>Lamiastrum galeobdolon</i> subsp. <i>Argentatum</i>	Variigated yellow archangel
<i>Petasites fragrans</i>	Winter heliotrope
<i>Prunus laurocerasus</i>	Cherry laurel
<i>Rhododendron ponticum</i>	Rhododendron

Field Survey: Habitat Descriptions (See Figure 26/782)

Arable – Includes patchy weeds, especially on the margins, including scentless mayweed *Tripleurospermum inodorum*, black nightshade *Solanum nigrum*, swinecress *Lepidium squamatum*, dove’s foot cranesbill *Geranium molle*, greater plantain *Plantago major*, red deadnettle *Lamium purpureum*, field and thyme-leaved speedwell *Veronica persica* and *serpyllifolia*, hedge mustard *Sisymbrium officinale*, charlock *Sinapsis arvensis*, goosefoots *Chenopodium* spp., black grass *Alopecurus myosuroides*, round and sharp-leaved *Kickxia spuria* and *elatine*, broadleaved willowherb *Epilobium montanum* and redshank *Persicaria maculata*.

Ruderal – A disturbed area beside a ditch in the northern part of the field in the north of the Site supports patchy ruderal vegetation, including smooth tare *Vicia tetrasperma*, willowherbs *Epilobium* spp., redshank, common cudweed *Filago vulgaris*, and toad rush *Juncus bufonis*. There are stands of tall ruderal, including nettle, docks, thistles and coarse grasses, for example between the arable field and adjoining residential.

Poor semi-improved grassland – The field in the north of the Site is species poor. It has been cut and comprises a relatively short and homogenous sward. Most is dominated by Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris* and creeping buttercup *Ranunculus repens* but also includes soft rush *Juncus effusus*, white clover *Trifolium repens*, meadow vetchling *Lathyrus pratensis* and fleabane *Pulicaria dysenterica*.

A strip of tall unmanaged species poor grassland and patchy tall ruderal is present between the broadleaved plantation and the ditch in the north east of the Site. There is a strip of species poor grassland on the western edge of the arable field as well as an area of tall sward near the entrance to the Site at the end of South Street (**TN1**).

Hedges – the hedge on the western boundary of the field in the north of the Site is species poor and dominated by hazel. There is a species rich hedge, including hawthorn, blackthorn, hazel, holly and willow, with mature oak, ash and alder trees on the eastern boundary beside the stream.

Broadleaved plantation and semi-natural woodland – Plantation to the north and east of the arable field comprises quite dense, even-aged ash, oak and alder, but also self-sown willow, at varying stages of

development, but not mature. The field layer is species poor and comprises largely of species poor grassland and tall ruderal.

There are three small areas of semi-natural woodland. In the north east of the Site a small area to the north of the ditch with a canopy of oak, alder and aspen, shrub layer of hazel, holly, blackthorn and willow and a moderately species rich field layer with bluebell *Hyacinthoides non-scripta*, male and broad buckler ferns *Dryopteris felix-mas* and *dilatata* and pendulous and remote sedges *Carex pendula* and *remota*.

There is a small area of wet woodland beside the stream at **TN2**. This has a canopy of alder and crack willow, a shrub layer of hazel, hawthorn and elder and the field layer is dominated by nettle and hemlock water dropwort *Oenanthe crocata*, but also includes ground ivy *Glechoma hederacea* and wood avens *Geum urbanum*.

In the south west corner of the Site is a narrow wooded strip beside the A22 with oak, birch, willow and gorse and much bracken.

Ditch – Is damp at the time of the survey but does not contain standing water. It has been recently (re)excavated. Associated species included willowherbs, rushes *Juncus* spp. and pendulous and remote sedges.

Stream – a small stream on or near the eastern boundary of the Site and flowing from north to south. Set within steep banks, some of which have been recently (re)profiled, and with a bed of gravel and silt. There are some pool and riffle structures.

Spoil and wood piles – Spoil, probably from excavation of the adjoining ditch has been spread in a strip across the northern grassland field and is largely bare at the time of survey. There is also a pile of woody material, including stumps, brush etc. within the field.

Field Survey: Protected and Notable Species

No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.

Field Survey: Invasive Non-native Species

No invasive non-native species recorded within the Site.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. However, OS maps indicate there is a pond approximately 350m to the north east of the Site, near Tourle's Farm, and several in Martinland Wood from about 100 to 400m distant. Plantation, woodland, hedges, tall ruderal and undisturbed grassland are suitable terrestrial habitats for great crested newts within the Site.

Reptiles – Some potential among taller and more diverse grassland and ruderal on boundaries (e.g. **TN1**) and among less well developed parts of plantation.

Breeding birds – In woodland, plantation, hedges, trees and scrub. Ground nesting species such as skylark in the arable field.

Wintering birds – the field is large enough for it to be used by wintering birds such as lapwing, although the probability of this is considered to be low as wintering lapwing tend to be concentrated in coastal areas and on river floodplains.

Bats – Trees and mature trees in particular, with features such as cracks and cavities, have potential to be used as roosts. Activity, including foraging and commuting, is likely throughout but especially around woodland, plantation and hedges.

Dormice – Moderate potential in woodland and hedges due to connectivity to the wider network. Plantation is mostly structurally unsuitable.

Brown hare – in arable, grassland and boundary vegetation.

Badgers – Potential for setts within the woodland, plantation and hedges, but with or without setts badgers may also use any or part of the Site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of the ponds to the north east, north west and especially south of the Site, in Martinland Wood.

Reptiles – (May – June, September – October) in suitable habitat.

Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees to determine the scope for further survey and activity surveys.

Dormice – (April – November) in suitable habitat.

Badgers – (Year round but Spring / Autumn optimal) – of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Low to Moderate value – the grassland, arable and plantation are of relatively is of low value but the woodland, hedges and stream are of moderate value.

The Site has moderate potential to support notable/protected species.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining and buffering the woodland, hedges and mature trees and their features.
- Buffering the stream.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

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.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Timing of vegetation clearance works to avoid the bird breeding season (March – August inclusive).
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents.
- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- If great crested newts are found to be present in ponds near the Site, measures should be put in place to prevent harming or killing them, including for example the erection of herptile fencing to exclude them from work areas, and possibly trapping and translocation to suitable receptor areas elsewhere.
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is

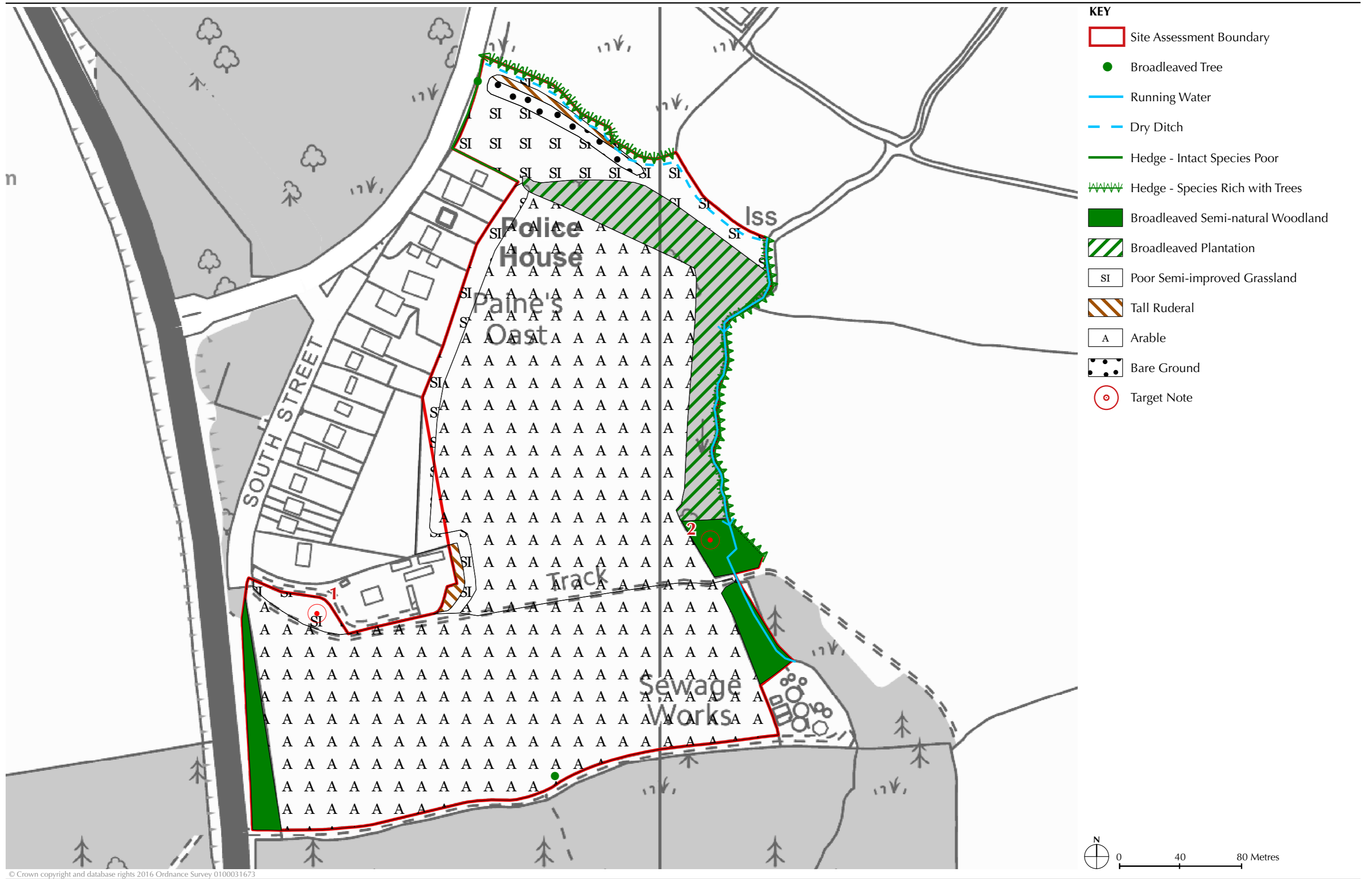
directed into the Site and light spill into the adjacent areas of retained habitat is minimised.

- If dormice are found to be present the retention and appropriate buffering of woodland and hedges.
- Development should avoid construction works within at least 30m of the nearest badger setts and seek to avoid prime foraging grounds identified through the badger survey and severance of commuting corridors within territories.

Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including woodland and hedges.
- Strengthen boundary vegetation by planting appropriate native species, for example on the western boundary.
- Habitat creation, ideally located adjacent to retained or adjoining habitat, or to form habitat corridors or links. To include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit.
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings.
- Incorporate features to SuDS scheme(s), such as the use of native wetland plant species, to enhance their value.



Sussex BAP Species*Boloria selene**Bufo bufo**Coenonympha pamphilus**Cupido minimus**Hoplodrina blanda**Lasiommata megera**Limenitis camilla**Melanchra persicariae**Pyrgus malvae**Spilosoma luteum**Trichiura crataegi**Tyria jacobaeae*

Small Pearl-bordered Fritillary

Common toad

Small Heath

Small blue

Rustic (moth)

Wall

White admiral

Dot moth (moth)

Grizzled Skipper

Buff Ermine (moth)

Pale Eggar (moth)

Cinnabar (moth)

Sussex Rare Species Inventory*Anacaena bipustulata**Apoda limacodes**Argiope bruennichi**Atolmis rubricollis**Boletus pruinatus**Boloria euphrosyne**Chenopodium glaucum**Cordulia aenea**Dolichovespula (Dolichovespula) media**Eilema sororcula**Eupithecia indigata**Glyphipterix forsterella**Hygrophoropsis aurantiaca**Hypomyces aurantius**Mitrula paludosa**Nigma puella**Synanthedon vespiformis**Tetheella fluctuosa**Volucella inanis*

Festoon (moth)

Wasp spider

Red-necked Footman (moth)

Matt Bolete

Pearl-bordered Fritillary

Oak-leaved Goosefoot

Downy Emerald

Orange Footman (moth)

Ochreous Pug (moth)

Sedge Fanner (moth)

False Chanterelle

Bog Beacon

Yellow-legged Clearwing

Satin Lutestring (moth)

Notable Bird Inventory*Apus apus**Ardea cinerea**Delichon urbicum**Hirundo rustica**Tyto alba*

Swift

Grey heron

House martin

Swallow

Barn owl

Invasive Alien Species Inventory*Crassula helmsii**Crococsmia pottsii x aurea = C. x crocosmiiflora**Harmonia axyridis**Hyacinthoides non-scripta x hispanica*(= *H. x massartiana*)*Prunus laurocerasus**Rhododendron ponticum*

New Zealand pigmyweed

Montbretia

Harlequin Ladybird

Hybrid bluebell

Cherry laurel

Rhododendron

Field Survey: Habitat Descriptions (See Figure 26/837)

Arable – Comprises most of the Site. There is little or no weed flora visible at the time of the survey.

Poor semi-improved grassland – A small species poor area between the arable and the plantation.

Broadleaved plantation – Dense even-aged developing ash and oak with much probably self-sown willow. Species poor field layer of bramble and nettle.

Hedges – Are species rich with hazel, holly, hawthorn, blackthorn, hornbeam, rose, spindle and oak. Most sections, apart from that between the two arable fields include mature trees, largely oak but also ash and hornbeam, and on the western boundary beside the stream alder.

Field Survey: Protected and Notable Species

No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.

Field Survey: Invasive Non-native Species

No invasive non-native species recorded within the Site.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. However, OS maps indicate there are ponds to approximately 380m to the north of the Site, near Tourle's Farm, approximately 210m to the north west in Moat Wood and several in Martinland Wood from about 100 to 400m distant. Plantation and hedges are suitable terrestrial habitats for great crested newts within the Site.

Reptiles – Limited potential along boundaries, for example beside the hedge in the north east corner of the Site.

Breeding birds – In plantation and hedges and ground nesting species such as skylark in the arable fields.

Wintering birds – the arable fields are large enough to be used by wintering birds such as lapwing, although the probability of this is considered to be low as wintering lapwing tend to be concentrated in coastal areas and on river floodplains.

Bats – Trees and mature trees in particular, with features such as cracks and cavities, have potential to be used as roosts. Activity, including foraging and commuting, is likely throughout, but especially along hedges and around plantation.

Dormice – Moderate potential in hedges and plantation due to connectivity to the wider network.

Badgers – Potential for setts within the hedges and plantation, but with or without setts badgers may also use any or part of the Site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of the ponds to the north and in Martinland Wood.

Reptiles – (May – June, September – October) in suitable habitat if present.

Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees to determine the scope for further survey and activity surveys.

Dormice – (April – November) – in suitable habitat.

Badgers – (Year round but Spring / Autumn optimal) – of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Low to Moderate value – the arable and plantation are of relatively low value but the hedges and mature trees are of moderate value.

The Site has moderate potential to support notable/protected species.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining and buffering the hedges and mature trees.
- Buffering the adjoining Martinland Wood.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

Outline Mitigation

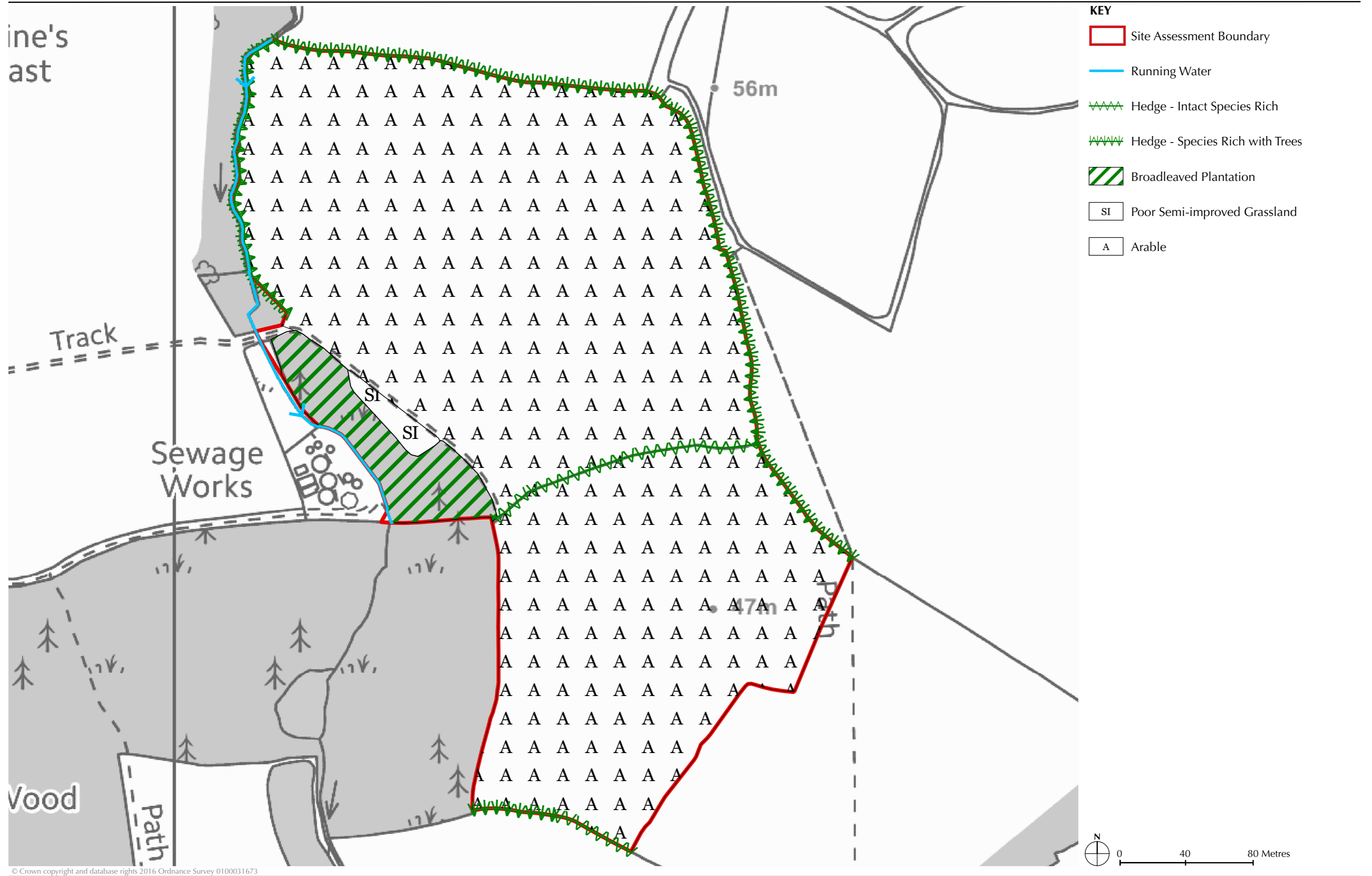
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- Sealing of pipework overnight, to prevent animals becoming trapped.
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- On-site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- If great crested newts are found to be present in pond to the north and west of the Site, measures should be put in place to prevent harming or killing them, including for example the erection of herptile fencing to exclude them from work areas, and possibly trapping and translocation to suitable receptor areas elsewhere.
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of hedges.
- Development should avoid construction works within at least 30m of the nearest badger setts and seek to avoid prime foraging grounds identified through the badger survey and severance of commuting corridors within territories.

Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including hedges and mature trees.
- Strengthen boundary vegetation by planting appropriate native species, for example on the southern eastern boundary.
- Habitat creation, ideally located adjacent to retained or adjoining habitat, or to form habitat corridors or links. To include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit.
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings.
- Incorporate features to SuDS scheme(s), such as the use of native wetland plant species, to enhance their value.



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