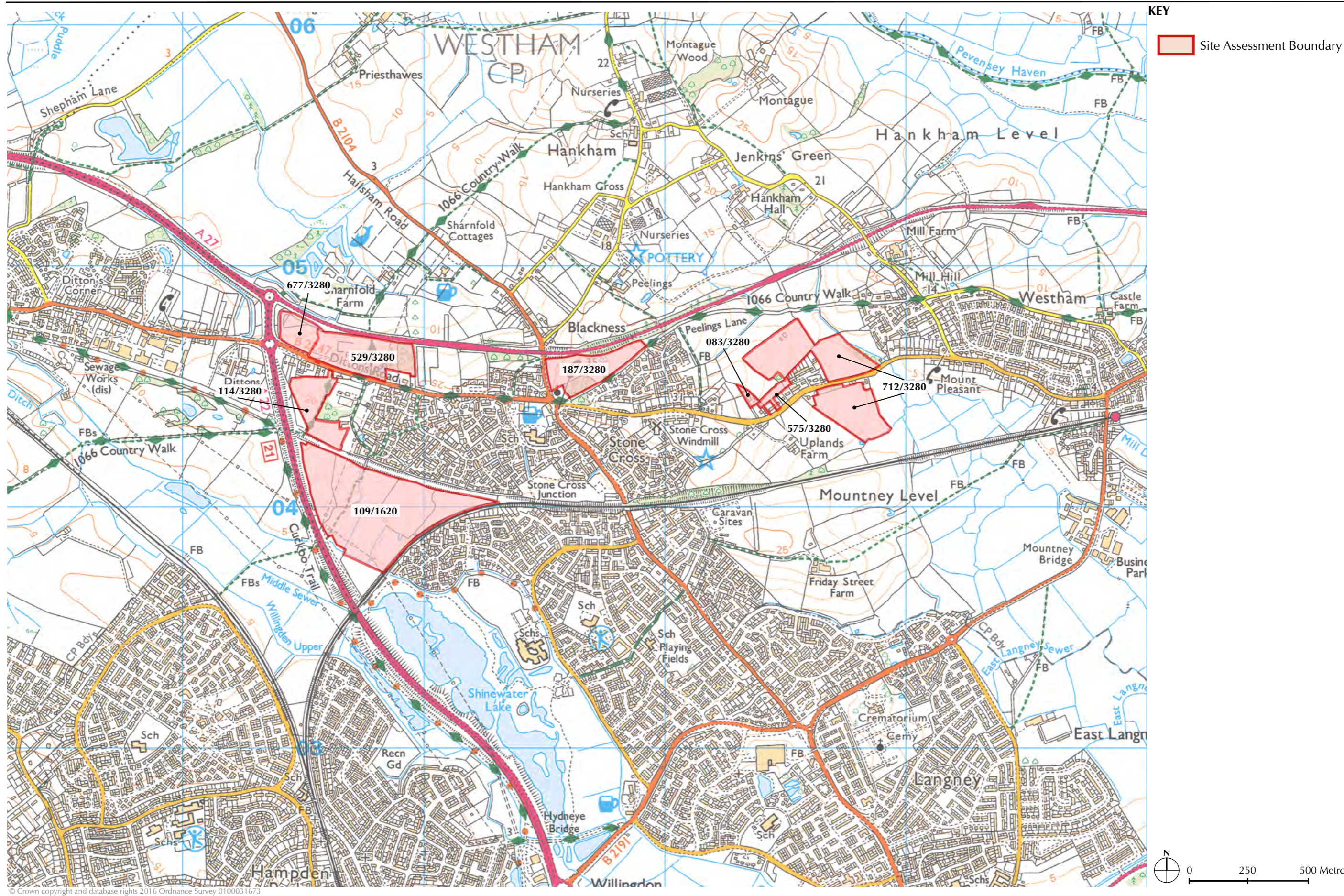
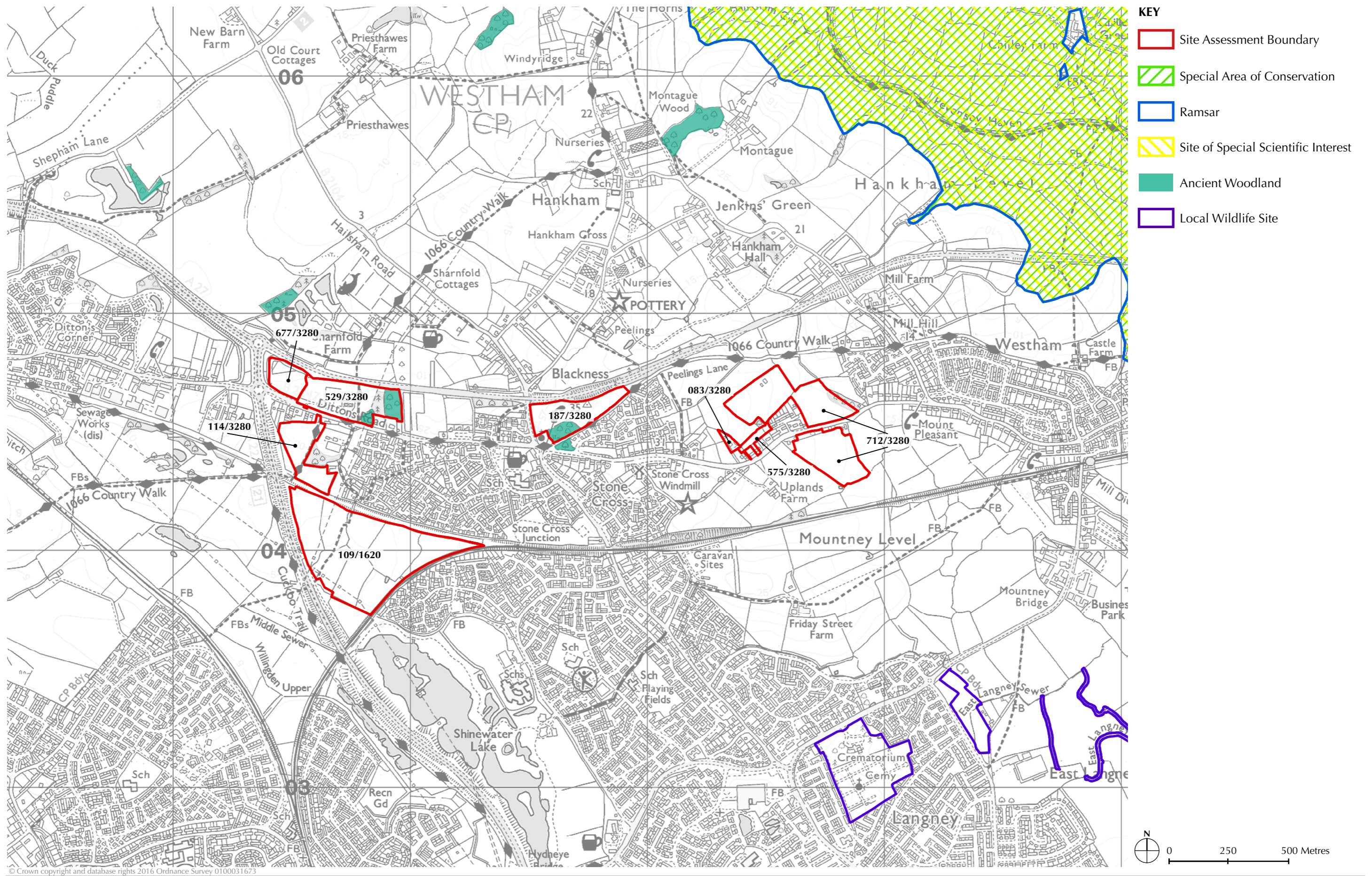


20.0 STONE CROSS SITES





- KEY**
- Site Assessment Boundary
 - Special Area of Conservation
 - Ramsar
 - Site of Special Scientific Interest
 - Ancient Woodland
 - Local Wildlife Site

© Crown copyright and database rights 2016 Ordnance Survey 0100031673

ECOLOGICAL ASSESSMENT	
Settlement/Area:	Stone Cross
Site Address:	Intercon Scaffolding Yard and Adjoining Land at Langsett, Rattle Road, Stone Cross
Site Reference Number:	083/3280
Site Summary Description	
A 0.32ha Industrial yard with associated sheds and other buildings. There are mature oak and ash trees on the eastern boundary and Lombardy poplars on the southern boundary. Also includes areas of tall ruderal and ephemeral/short perennial.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 23.1)	
Stone Cross is a small settlement lying immediately north of the main urban conurbation of Eastbourne. A main railway line runs east-west to the south and the A27 forms the northern border of the settlement, beyond which is an open, low lying, pastoral landscape of large fields bounded by drainage ditches that grade towards the Pevensey Levels, a further 1-2km to the north. Remnant grazing marsh is also present to the south, now largely surrounded by housing development. The Site lies just to the north of Rattle Road, on the eastern outskirts of Stone Cross. Residential development lies to the west and east, whilst the north of the Site opens out onto hedge-lined fields with the A27 just a little further to the north.	
Desk Study : Designated Sites within 1km (See Figure 23.2)	Distance from Site
<ul style="list-style-type: none"> The Site lies approximately 1.2km south west to the nearest point of the Pevensey Levels SAC / SSSI / Ramsar. Extracts from the relevant citations are set out below: Pevensey Levels SAC: Comprising inland water bodies (Standing water, Running water) (2.5%) and humid grassland, Mesophile grassland (97.5%). The SAC is designated for its Annex II population of Ramshorn snail <i>Anisus vorticulus</i>. <i>Anisus vorticulus</i> occurs across a range of sites in southern and eastern England. Pevensey Levels is a large and expansive grazing marsh that supports <i>Anisus vorticulus</i> in both a wide spatial distribution and in good population density classes. Pevensey Levels SSSI: Pevensey Levels is a large area of low-lying grazing meadows intersected by a complex system of ditches which show a wide variety of form and species composition and support important communities of wetland flora and fauna. The Site supports the nationally rare sharp-leaved pondweed <i>Potamogeton acutifolius</i> and several nationally scarce aquatic plants including watersoldier <i>Stratiotes aloides</i>, flat-stalked pondweed <i>Potamogeton friesii</i>, the pondweed <i>Potamogeton trichoides</i>, greater water-parsnip <i>Sium latifolium</i> and river water-dropwort <i>Oenanthe fluviatilis</i>, whose presence are largely the result of ditch management to maintain 'wet fences' for grazing. Rich bankside floras also support a variety of plants such as the nationally scarce marshmallow <i>Althaea officinalis</i> as well as more widespread species such as ragged robin <i>Lychnis flos-cuculi</i>, water mint <i>Mentha aquatica</i> and cuckoo flower <i>Cardamine pratensis</i>. An area of shingle and intertidal muds and sands is included within the Site and although the shingle is largely bereft of vegetation it does support the nationally scarce sea-kale <i>Crambe maritima</i>. The citation states: <i>The Site supports outstanding invertebrate populations and is a top national Site for Molluscs and aquatic Coleoptera ... A ramshorn snail Segmentina nitida</i> 	1.2km North East of the Site.

<p>(RDB: Endangered), is found in well-oxygenated drains with lush vegetation. Particularly widespread and abundant on this Site is an aquatic snail <i>Valvata macrostoma</i> (RDB: Vulnerable). Of the many species of water beetle recorded at the Site, the most interesting are confined to the ditches in areas of permanent pasture. Of particular interest is Britain's largest water beetle, the great silver water beetle <i>Hydrophilus piceus</i> (RDB: Rare) which is found only on grazed levels in the southern part of Britain. Also of importance is <i>Bagous puncticollis</i> (RDB: Endangered), found on Horse Eye Level and several nationally rare water beetles such as the small reddish-brown <i>Hydrovatus clypealis</i> (RDB: Rare) confined to the coast of southern England. Over fifteen species of dragonfly (Odonata) have been recorded including the nationally scarce species, hairy dragonfly <i>Brachytron pratense</i> and variable damselfly <i>Coenagrion pulchellum</i>. Survey has also revealed Britain's only known location of <i>Placobdella costata</i> (provisional RDB), a large leech ... One of Britain's largest spiders <i>Dolomedes plantarius</i> (great raft spider) (RDB: Endangered) has also been recorded. The Site is of national importance for its wintering lapwing <i>Vanellus vanellus</i> which exceed 1% of the total British population. The numbers of snipe <i>Gallinago gallinago</i> may also be of national importance ... Wintering golden plover <i>Pluvialis apricaria</i> are of local significance and in some years are of national importance. Sedge warblers <i>Acrocephalus schoenobaenus</i> and reed warblers <i>Acrocephalus scirpaceus</i> ... breed in numbers of local significance. The Site also supports about one fifth of the breeding yellow wagtails <i>Motacilla flava</i> in Sussex.</p> <ul style="list-style-type: none"> • Pevensey Levels Ramsar: Pevensey Levels is one of the largest and least-fragmented lowland wet grassland systems in southeast England. The low-lying grazing meadows are intersected by a complex system of ditches which support a variety of important wetland communities, including nationally rare and scarce aquatic plants and invertebrates. The Site also supports a notable assemblage of breeding and wintering wildfowl. A small area of shingle and intertidal muds and sands is included within the Site. The Site supports an outstanding assemblage of wetland plants and invertebrates including many British Red Data Book species. The Site supports 68% of vascular plant species in Great Britain that can be described as aquatic. It is probably the best Site in Britain for freshwater molluscs, one of the five best sites for aquatic beetles Coleoptera and supports an outstanding assemblage of dragonflies Odonata. 																	
<p>Desk Study: BAP Priority Habitats within 1km</p>	<p>Distance from Site</p>																
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Pickens Wood • Coastal & floodplain grazing marsh BAP priority habitat – un-named • Orchard BAP priority habitat – un-named 	<ul style="list-style-type: none"> • 650m West • 450m East • 640m East 																
<p>Desk Study: Protected and Notable Species within 1km</p>																	
<table border="0"> <tr> <td colspan="2">Protected Species</td> </tr> <tr> <td><i>Anguis fragilis</i></td> <td>Slow worm</td> </tr> <tr> <td><i>Pipistrellus</i> sp.</td> <td>Pipistrelle sp. bat</td> </tr> <tr> <td><i>Triturus cristatus</i></td> <td>Great crested newt</td> </tr> <tr> <td><i>Zootoca vivipara</i></td> <td>Common lizard</td> </tr> <tr> <td colspan="2">Sussex BAP Species</td> </tr> <tr> <td><i>Erinaceus europaeus</i></td> <td>European hedgehog</td> </tr> <tr> <td><i>Oenanthe fistulosa</i></td> <td>Tubular Water-dropwort</td> </tr> </table>		Protected Species		<i>Anguis fragilis</i>	Slow worm	<i>Pipistrellus</i> sp.	Pipistrelle sp. bat	<i>Triturus cristatus</i>	Great crested newt	<i>Zootoca vivipara</i>	Common lizard	Sussex BAP Species		<i>Erinaceus europaeus</i>	European hedgehog	<i>Oenanthe fistulosa</i>	Tubular Water-dropwort
Protected Species																	
<i>Anguis fragilis</i>	Slow worm																
<i>Pipistrellus</i> sp.	Pipistrelle sp. bat																
<i>Triturus cristatus</i>	Great crested newt																
<i>Zootoca vivipara</i>	Common lizard																
Sussex BAP Species																	
<i>Erinaceus europaeus</i>	European hedgehog																
<i>Oenanthe fistulosa</i>	Tubular Water-dropwort																

Sussex Rare Species Inventory	
<i>Hydrocharis morsus-ranae</i>	Frogbit
Notable Bird Inventory	
<i>Alcedo atthis</i>	Kingfisher
<i>Ardea cinerea</i>	Grey heron
<i>Cettia cetti</i>	Cetti's warbler
<i>Falco subbuteo</i>	Hobby
<i>Gallinago gallinago</i>	Snipe
<i>Tyto alba</i>	Barn owl
<i>Vanellus vanellus</i>	Lapwing
Invasive Alien Species Inventory	
<i>Centranthus ruber</i>	Red valerian
<i>Cotoneaster horizontalis</i>	Wall cotoneaster
<i>Crocasmia pottsii x aurea = C. x crocosmiiflora</i>	Montbretia
<i>Elodea nuttallii</i>	Nuttall's Water-Weed
<i>Hyacinthoides hispanica</i>	Spanish Bluebell
<i>Lamiastrum galeobdolon subsp. Argentatum</i>	Variegated yellow archangel
<i>Rosa rugosa</i>	Japanese rose
Field Survey: Habitat Descriptions (See Figure 23/083)	
<p>Tall Ruderal & Ephemeral/Short Perennial – There is a relatively large stand of mostly nettle in the southern part of the Site. This grades into more open ephemeral/short perennial vegetation where there is disturbance from vehicles. Smaller patches of similar vegetation are scattered throughout the Site, for example along boundaries and beside buildings.</p> <p>Mature trees – includes oak and ash trees on the eastern boundary and Lombardy poplars on the southern boundary.</p> <p>Buildings – largely sheds.</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	
Indian balsam – in woodland beside streams and among adjoining scrub	
Assessment of Potential for Protected and Notable Species Presence	
<p>Great crested newts – There are no ponds within the Site. OS maps indicate the presence of a pond or ponds to the south of Rattle Road, approximately 330-450 south east of the Site, although there may be ponds among residential areas closer to the Site. Given the distance to the pond(s) and the presence of the Rattle Road, which represents a significant barrier to dispersal for great crested newts, as well as the limited suitable terrestrial habitat for great crested newts within the Site, the probability of their being present is considered very low.</p> <p>Reptiles – Limited potential among ruderal vegetation.</p> <p>Breeding birds – In trees.</p> <p>Bats – Trees and mature trees in particular, with features such as cracks and cavities, for example including many within the boundary vegetation and hedgerows have potential to be used as roosts. The buildings appear to have low potential for bats. Activity, including foraging and commuting, is likely throughout but especially along hedges.</p>	

Recommendations for Further Survey (and optimal survey timings)

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

INDICATIVE ECOLOGICAL APPRAISAL

Low – largely hard standing and buildings with some ruderal vegetation. The mature trees, especially the oaks and ashes have the greatest value. The habitats and features have low potential to support 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 mature trees, especially the oak and ash, 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

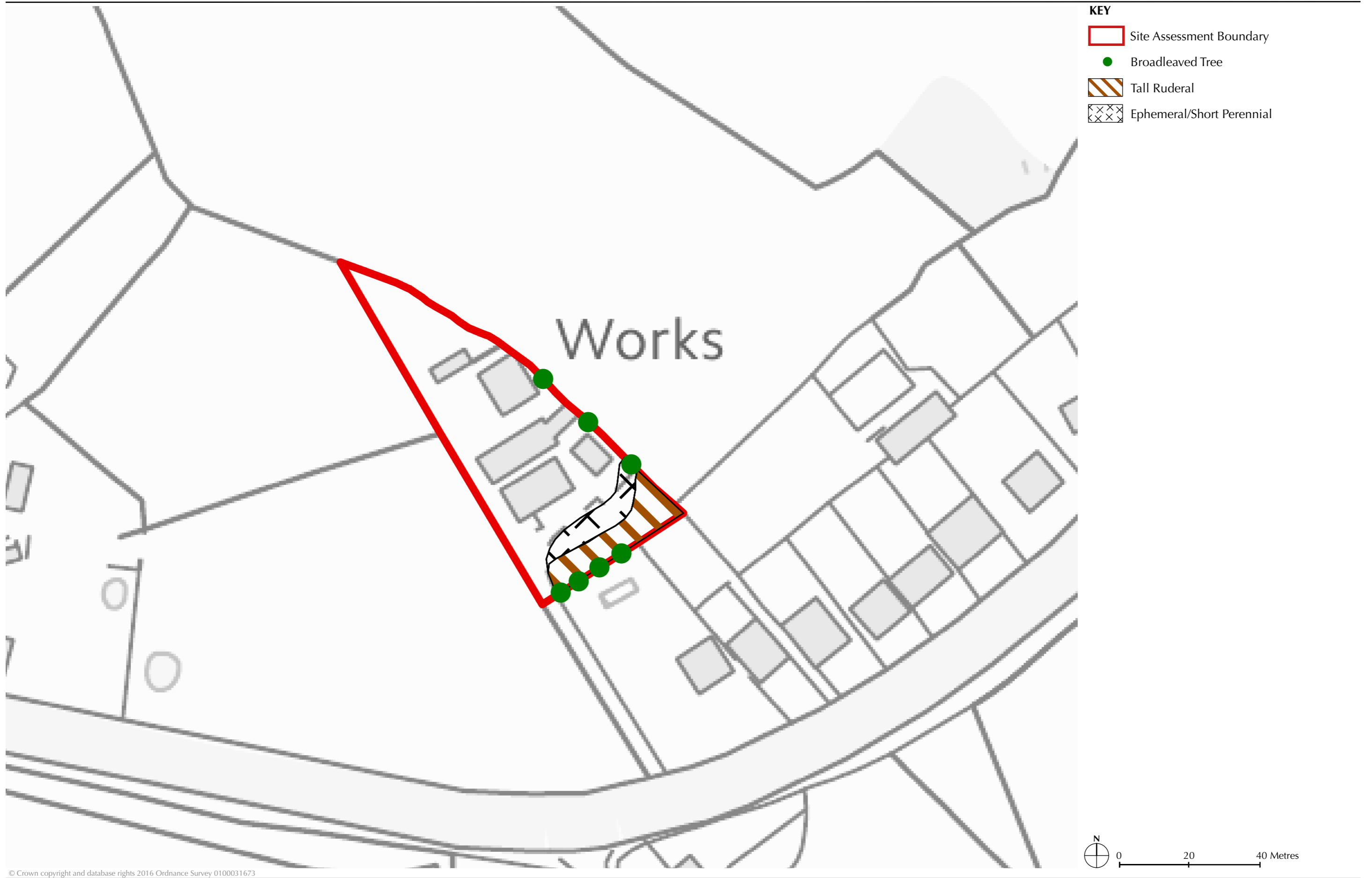
Should development at this Site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- 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;
- 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.
- Buffer the mature trees, especially to oak and ash, and their features.
- 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).
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- 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.

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 and mature trees.
- Strengthen boundary vegetation, for example by planting appropriate native species to form hedges.
- Habitat creation, ideally located adjacent to retained or adjoining habitat 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.



ECOLOGICAL ASSESSMENT	
Settlement/Area:	Stone Cross
Site Address:	Land to the East of Golden Jubilee Way, Stone Cross
Site Reference number:	109/1620
Site Summary Description	
<p>A relatively large, 19.09ha, Site comprising largely of species-poor grassland on gently sloping ground. However, it also includes areas of marshy grassland or swamp vegetation in the flat, lower southern part of the Site, as well as hedges, trees and scrub and ditches and a pond.</p>	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 23.1)	
<p>Stone Cross is a small settlement lying immediately north of the main urban conurbation of Eastbourne. A main railway line runs east-west to the south and the A27 forms the northern border of the settlement, beyond which is an open, low lying, pastoral landscape of large fields bounded by drainage ditches that grade towards the Pevensey Levels, a further 1-2km to the north. Remnant grazing marsh is also present to the south, now largely surrounded by housing development. The Site lies to the south of the main settlement and is bordered to the north by a wooded disused railway line. The eastern boundary is formed by a live railway line and to the west by the A22 Golden Jubilee Way, leaving little by way of connectivity with the grazing marsh that lies further to the west.</p>	
Desk Study: Designated Sites within 1km (See Figure 23.2)	Distance from Site
<ul style="list-style-type: none"> The Site lies approximately 2.3km south west to the nearest point of the Pevensey Levels SAC / SSSI / Ramsar. Extracts from the relevant citations are set out below: Pevensey Levels SAC: Comprising inland water bodies (Standing water, Running water) (2.5%) and humid grassland, Mesophile grassland (97.5%). The SAC is designated for its Annex II population of Ramshorn snail <i>Anisus vorticulus</i>. <i>Anisus vorticulus</i> occurs across a range of sites in southern and eastern England. Pevensey Levels is a large and expansive grazing marsh that supports <i>Anisus vorticulus</i> in both a wide spatial distribution and in good population density classes. Pevensey Levels SSSI: Pevensey Levels is a large area of low-lying grazing meadows intersected by a complex system of ditches which show a wide variety of form and species composition and support important communities of wetland flora and fauna. The Site supports the nationally rare sharp-leaved pondweed <i>Potamogeton acutifolius</i> and several nationally scarce aquatic plants including watersoldier <i>Stratiotes aloides</i>, flat-stalked pondweed <i>Potamogeton friesii</i>, the pondweed <i>Potamogeton trichoides</i>, greater water-parsnip <i>Sium latifolium</i> and river water-dropwort <i>Oenanthe fluviatilis</i>, whose presence are largely the result of ditch management to maintain 'wet fences' for grazing. Rich bankside florals also support a variety of plants such as the nationally scarce marshmallow <i>Althaea officinalis</i> as well as more widespread species such as ragged robin <i>Lychnis flos-cuculi</i>, water mint <i>Mentha aquatica</i> and cuckoo flower <i>Cardamine pratensis</i>. An area of shingle and intertidal muds and sands is included within the Site and although the shingle is largely bereft of vegetation it does support the nationally scarce sea-kale <i>Crambe maritima</i>. The citation states: <i>The Site supports outstanding invertebrate populations and is a top national Site for Molluscs and aquatic Coleoptera ... A ramshorn snail Segmentina nitida</i> 	2.3km to the North East of the Site

<p>(RDB: Endangered), is found in well-oxygenated drains with lush vegetation. Particularly widespread and abundant on this Site is an aquatic snail <i>Valvata macrostoma</i> (RDB: Vulnerable). Of the many species of water beetle recorded at the Site, the most interesting are confined to the ditches in areas of permanent pasture. Of particular interest is Britain's largest water beetle, the great silver water beetle <i>Hydrophilus piceus</i> (RDB: Rare) which is found only on grazed levels in the southern part of Britain. Also of importance is <i>Bagous puncticollis</i> (RDB: Endangered), found on Horse Eye Level and several nationally rare water beetles such as the small reddish-brown <i>Hydrovatus clypealis</i> (RDB: Rare) confined to the coast of southern England. Over fifteen species of dragonfly (Odonata) have been recorded including the nationally scarce species, hairy dragonfly <i>Brachytron pratense</i> and variable damselfly <i>Coenagrion pulchellum</i>. Survey has also revealed Britain's only known location of <i>Placobdella costata</i> (provisional RDB), a large leech ... One of Britain's largest spiders <i>Dolomedes plantarius</i> (great raft spider) (RDB: Endangered) has also been recorded. The Site is of national importance for its wintering lapwing <i>Vanellus vanellus</i> which exceed 1% of the total British population. The numbers of snipe <i>Gallinago gallinago</i> may also be of national importance ... Wintering golden plover <i>Pluvialis apricaria</i> are of local significance and in some years are of national importance. Sedge warblers <i>Acrocephalus schoenobaenus</i> and reed warblers <i>Acrocephalus scirpaceus</i> ... breed in numbers of local significance. The Site also supports about one fifth of the breeding yellow wagtails <i>Motacilla flava</i> in Sussex.</p> <ul style="list-style-type: none"> • Pevensey Levels Ramsar: Pevensey Levels is one of the largest and least-fragmented lowland wet grassland systems in southeast England. The low-lying grazing meadows are intersected by a complex system of ditches which support a variety of important wetland communities, including nationally rare and scarce aquatic plants and invertebrates. The Site also supports a notable assemblage of breeding and wintering wildfowl. A small area of shingle and intertidal muds and sands is included within the Site. The Site supports an outstanding assemblage of wetland plants and invertebrates including many British Red Data Book species. The Site supports 68% of vascular plant species in Great Britain that can be described as aquatic. It is probably the best Site in Britain for freshwater molluscs, one of the five best sites for aquatic beetles Coleoptera and supports an outstanding assemblage of dragonflies Odonata. 			
<p>Desk Study: BAP Priority Habitats within 1km</p>	<p>Distance from Site</p>		
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – The Dell • Ancient & semi-natural woodland – Drockmill Hill Shaw • Ancient & semi-natural woodland – Pickens Wood • Coastal & floodplain grazing marsh BAP priority habitat – un-named 	<ul style="list-style-type: none"> • 425m North • 775m North • 600m North East • Within Site and immediately adjacent to the West and South. 		
<p>Desk Study: Protected and Notable Species within 1km</p>			
<table border="0"> <tr> <td data-bbox="183 1765 758 1957"> <p>Protected Species <i>Anguis fragilis</i> <i>Pipistrellus nathusii</i> <i>Pipistrellus pipistrellus</i> <i>Pipistrellus</i> sp. <i>Triturus cristatus</i></p> </td> <td data-bbox="758 1765 1407 1957"> <p>Slow worm Nathusius's Pipistrelle bat Common Pipistrelle (45 kHz) bat Pipistrelle sp. bat Great crested newt</p> </td> </tr> </table>		<p>Protected Species <i>Anguis fragilis</i> <i>Pipistrellus nathusii</i> <i>Pipistrellus pipistrellus</i> <i>Pipistrellus</i> sp. <i>Triturus cristatus</i></p>	<p>Slow worm Nathusius's Pipistrelle bat Common Pipistrelle (45 kHz) bat Pipistrelle sp. bat Great crested newt</p>
<p>Protected Species <i>Anguis fragilis</i> <i>Pipistrellus nathusii</i> <i>Pipistrellus pipistrellus</i> <i>Pipistrellus</i> sp. <i>Triturus cristatus</i></p>	<p>Slow worm Nathusius's Pipistrelle bat Common Pipistrelle (45 kHz) bat Pipistrelle sp. bat Great crested newt</p>		

<i>Zootoca vivipara</i>	Common lizard
Sussex BAP Species	
<i>Centaurea cyanus</i>	Cornflower
<i>Erinaceus europaeus</i>	European hedgehog
<i>Lasiommata megera</i>	Wall
<i>Limenitis camilla</i>	White admiral
Sussex Rare Species Inventory	
<i>Argiope bruennichi</i>	Wasp spider
<i>Boletus radicans</i>	Rooting Bolete
<i>Bromus secalinus</i>	Rye brome
<i>Cyperus longus</i>	Galingale
<i>Dolichovespula (Dolichovespula) media</i>	
<i>Hippophae rhamnoides</i>	Sea buckthorn
<i>Petroselinum segetum</i>	Corn parsley
Notable Bird Inventory	
<i>Apus apus</i>	Swift
<i>Ardea cinerea</i>	Grey heron
<i>Botaurus stellaris</i>	Bittern
<i>Burhinus oedicephalus</i>	Stone-curlew (?)
<i>Cettia cetti</i>	Cetti's warbler
<i>Corvus corax</i>	Raven
<i>Delichon urbicum</i>	House martin
<i>Falco subbuteo</i>	Hobby
<i>Hirundo rustica</i>	Swallow
Invasive Alien Species Inventory	
<i>Centranthus ruber</i>	Red valerian
<i>Cotoneaster horizontalis</i>	Wall cotoneaster
<i>Crocodymia pottsii x aurea = C. x crocosmiiflora</i>	Montbretia
<i>Elodea canadensis</i>	Canadian Waterweed
<i>Harmonia axyridis</i>	Harlequin Ladybird
<i>Hyacinthoides non-scripta x hispanica</i> (= <i>H. x massartiana</i>)	Hybrid bluebell
<i>Petasites fragrans</i>	Winter heliotrope
<i>Prunus laurocerasus</i>	Cherry laurel
<i>Rosa rugosa</i>	Japanese rose

Field Survey: Habitat Descriptions (See Figure 23/109)

Poor semi-improved grassland – Most of the northern and eastern part of the Site comprises species poor grassland in which Yorkshire fog *Holcus lanatus* and common bent *Agrostis capillaris* are the most abundant grasses, but perennial rye-grass *Lolium perenne* and sweet vernal-grass *Anthoxanthum odoratum* are frequent in parts and other grasses include tufted hair-grass *Deschampsia cespitosa*, meadow barley *Hordeum secalinum* and small cat's-tail *Phleum bertolonii*. Forb content is variable but generally low and comprises largely of creeping buttercup *Ranunculus repens*, white clover *Trifolium repens* and creeping thistle *Cirsium arvense*. Sward structure is somewhat variable, from short to moderately tall, dependent on recent management.

Areas adjoining the marshy grassland in the south of the Site are a little richer, with frequent bird's foot-trefoil *Lotus corniculatus* and Wood dock *Rumex sanguineus* as well as occasional common knapweed *Centaurea nigra*, redshank *Persicaria maculata* and pond sedge *Carex riparia/acutiformis*.

Marshy grassland – The largest areas are on the level ground in the south of the Site. This comprises variable mixtures of soft and jointed rush *Juncus effusus* and *articulatus*, pond sedge, common spike rush *Eleocharis palustris*, reed sweet-grass *Glyceria maxima* and creeping bent *Agrostis stolonifera* with

frequent lesser spearwort *Ranunculus flammula*, marsh bedstraw *Galium palustre*, water pepper *Persicaria hydropiper* and redshank. This area appears likely to flood seasonally and would be considered to be the BAP Priority Habitat Coastal and Floodplain Grassland.

There are two small areas of marshy grassland, with soft and jointed rush, frequent tufted hair-grass and greater bird's foot-trefoil and marsh thistle *Cirsium palustre* on the southern edge of the northern part of the Site.

Tall ruderal – Generally small patches scattered throughout the Site on and beside boundaries.

Trees and scrub – Scattered especially along boundaries and including hawthorn, blackthorn, gorse, elder, willows, poplars and oak.

Hedges – Apart from the hedge on the western edge of the south eastern part of the Site these are gappy and defunct and comprise discontinuous lines of trees and shrubs.

Ditches – There are several ditches of which the most significant border or cut through the low lying southern part of the Site. They contain water and stands of a range of aquatic, emergent and marginal species, including common duckweed *Lemna minor*, water plantain *Alisma plantago-aquatica*, fools water-cress *Apium nodiflorum*, greater reedmace *Typha latifolia*, common reed *Phragmites australis*, reed sweet-grass, branched bur-reed *Sparganium erectum*, floating Sweet-grass *Glyceria fluitans*, gysywort *Lycopus europaeus*, soft and jointed rush and forget-me-not *Myosotis* sp.. There are also a number of smaller ditches running broadly north to south in the northern part of the Site. These support a number of species present in the ditches to the south, especially fools water-cress.

Pond – There is a pond at **TN1**. It is set beside a field boundary among mature white and crack willows and is quite heavily shaded, though a small section on the western side is more open. It contains water, probably up to at least 10cm in depth and vegetation included common duckweed, soft rush, reed sweet-grass and marsh bedstraw.

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 during the survey.

Assessment of Potential for Protected and Notable Species

Great crested newts – There is a pond within the Site as well as north of the railway line beside Darent Close, approximately 90m from the Site, although the railway line will represent a significant barrier to dispersal for great crested newts. Vegetation along boundaries, including hedges, scrub, tall ruderal, ditch banks etc, represent suitable terrestrial habitat for great crested newts within the Site.

Reptiles – Potential along and beside boundaries.

Breeding birds – In hedges, trees and scrub. The open grasslands may also be used by ground nesting species such as skylark.

Wintering birds - Given the size and nature of the fields/grasslands and their location close to other areas of grazing marsh and other wetland habitats, including Pevensy Levels SSSI, SAC and Ramsar site, there is potential for the Site to be used by wintering wetland birds such as wildfowl, waders and raptors.

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

Water voles – The ditches in the southern part of the Site represent suitable habitat for water voles.

Badgers – Potential for setts within the scrub and hedgerows, 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)

Botanical – of the ditches and the marshy grassland/BAP Priority Habitat Coastal and Floodplain Grassland in the southern part of the Site.

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

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

Breeding birds – (April – June) especially woodland, plantations, and hedge.

Wintering birds – (September – March) of whole site.

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.

Water vole – of the ditches in the southern part of the Site.

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

INDICATIVE ECOLOGICAL APPRAISAL

Moderate value– although much of the Site comprises species poor grassland it does include significant areas of marshy grassland/BAP Priority Habitat Coastal and Floodplain Grassland and associated ditches. It also includes a pond and hedges, trees and scrub.

The Sites habitats and features have 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:

- Retaining and buffering habitats in the southern part of the Site, including marshy grassland/BAP Priority Habitat Coastal and Floodplain Grassland and associated ditches and pond.
- 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.
- 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.
- Buffer habitats in the southern part of the Site, including marshy grassland/BAP Priority Habitat Coastal and Floodplain Grassland and associated ditches and pond, and consider opportunities to diversify and enhance the habitats, especially the wetland habitats, present.
- If great crested newts are found to be present, retention of pond and sufficient area of terrestrial habitat (as part of buffer strip) and other possible measures to safeguard their conservation status, under a Natural England European Protected Species licence.
- 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

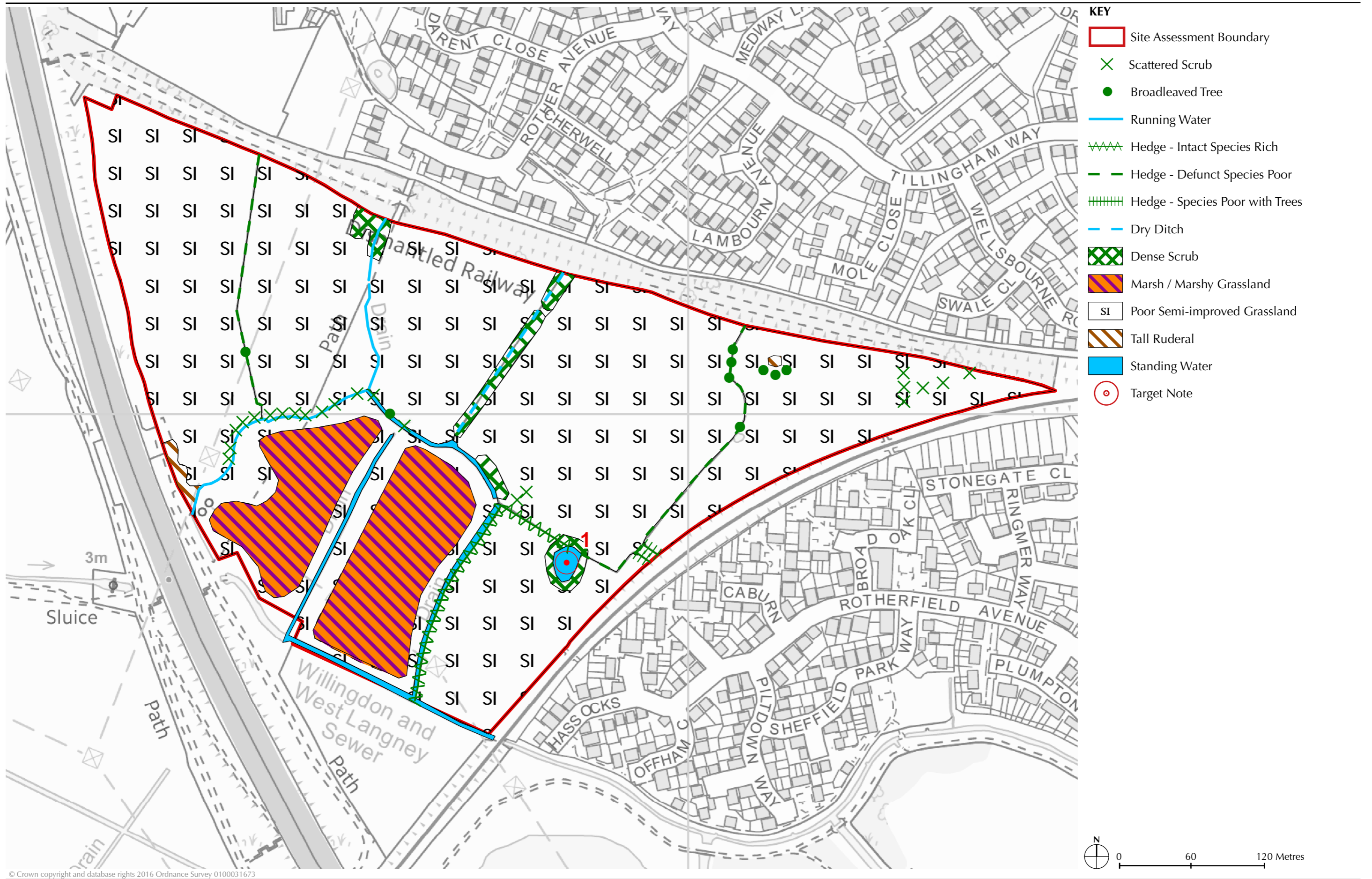
areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).

- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- 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.
- Development should seek to avoid any prime foraging grounds identified through the badger survey, avoid severance to commuting corridors within territories and avoid any construction works within at least 30m of the nearest badger setts.

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 feature, in the southern part of the Site, including marshy grassland/BAP Priority Habitat Coastal and Floodplain Grassland and associated ditches and pond, and consider opportunities to diversify and enhance the habitats, especially the wetland habitats, present.
- Habitat creation, ideally located adjacent to retained or adjoining habitat, for example a field corner, 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 (for example along the northern and eastern boundaries); 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.



ECOLOGICAL ASSESSMENT	
Area:	Stone Cross
Site Name:	Land South of Onestack, Dittons Road, Stone Cross
Site Reference Number:	114/3280
Site Description	
Two very species poor grassland fields totalling 3.71ha. Includes a species rich hedge and a tree and shrub belt, both including mature trees, as well as a small area of dense scrub and unmanaged grassland.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 23.1)	
Stone Cross is a small settlement lying immediately north of the main urban conurbation of Eastbourne. A main railway line runs east-west to the south and the A27 forms the northern border of the settlement, beyond which is an open, low lying, pastoral landscape of large fields bounded by drainage ditches that grade towards the Pevensey Levels, a further 1-2km to the north. Remnant grazing marsh is also present to the south, now largely surrounded by housing development. Residential development, an electricity substation and the B2247 Dittons Road lie to the north and east, with the wooded embankment of the A22 to the west. The wooded disused railway lies to the south.	
Desk Study : Designated Sites within 1km (See Figure 23.2)	Distance from Site
<ul style="list-style-type: none"> The Site lies approximately 2km south west to the nearest point of the Pevensey Levels SAC / SSSI / Ramsar. Extracts from the relevant citations are set out below: Pevensey Levels SAC: Comprising inland water bodies (Standing water, Running water) (2.5%) and humid grassland, Mesophile grassland (97.5%). The SAC is designated for its Annex II population of Ramshorn snail <i>Anisus vorticulus</i>. <i>Anisus vorticulus</i> occurs across a range of sites in southern and eastern England. Pevensey Levels is a large and expansive grazing marsh that supports <i>Anisus vorticulus</i> in both a wide spatial distribution and in good population density classes. Pevensey Levels SSSI: Pevensey Levels is a large area of low-lying grazing meadows intersected by a complex system of ditches which show a wide variety of form and species composition and support important communities of wetland flora and fauna. The Site supports the nationally rare sharp-leaved pondweed <i>Potamogeton acutifolius</i> and several nationally scarce aquatic plants including watersoldier <i>Stratiotes aloides</i>, flat-stalked pondweed <i>Potamogeton friesii</i>, the pondweed <i>Potamogeton trichoides</i>, greater water-parsnip <i>Sium latifolium</i> and river water-dropwort <i>Oenanthe fluviatilis</i>, whose presence are largely the result of ditch management to maintain 'wet fences' for grazing. Rich bankside floras also support a variety of plants such as the nationally scarce marshmallow <i>Althaea officinalis</i> as well as more widespread species such as ragged robin <i>Lychnis flos-cuculi</i>, water mint <i>Mentha aquatica</i> and cuckoo flower <i>Cardamine pratensis</i>. An area of shingle and intertidal muds and sands is included within the Site and although the shingle is largely bereft of vegetation it does support the nationally scarce sea-kale <i>Crambe maritima</i>. The citation states: <i>The Site supports outstanding invertebrate populations and is a top national Site for Molluscs and aquatic Coleoptera ... A ramshorn snail Segmentina nitida (RDB: Endangered), is found in well-oxygenated drains with lush vegetation. Particularly widespread and abundant on this Site is an aquatic</i> 	2km to the North of the Site

<p>snail <i>Valvata macrostoma</i> (RDB: Vulnerable). Of the many species of water beetle recorded at the Site, the most interesting are confined to the ditches in areas of permanent pasture. Of particular interest is Britain's largest water beetle, the great silver water beetle <i>Hydrophilus piceus</i> (RDB: Rare) which is found only on grazed levels in the southern part of Britain. Also of importance is <i>Bagous puncticollis</i> (RDB: Endangered), found on Horse Eye Level and several nationally rare water beetles such as the small reddish-brown <i>Hydrovatus clypealis</i> (RDB: Rare) confined to the coast of southern England. Over fifteen species of dragonfly (Odonata) have been recorded including the nationally scarce species, hairy dragonfly <i>Brachytron pratense</i> and variable damselfly <i>Coenagrion pulchellum</i>. Survey has also revealed Britain's only known location of <i>Placobdella costata</i> (provisional RDB), a large leech ... One of Britain's largest spiders <i>Dolomedes plantarius</i> (RDB: Endangered) has also been recorded. The Site is of national importance for its wintering lapwing <i>Vanellus vanellus</i> which exceed 1% of the total British population. The numbers of snipe <i>Gallinago gallinago</i> may also be of national importance ... Wintering golden plover <i>Pluvialis apricaria</i> are of local significance and in some years are of national importance. Sedge warblers <i>Acrocephalus schoenobaenus</i> and reed warblers <i>Acrocephalus scirpaceus</i> ... breed in numbers of local significance. The Site also supports about one fifth of the breeding yellow wagtails <i>Motacilla flava</i> in Sussex.</p> <ul style="list-style-type: none"> • Pevensey Levels Ramsar: Pevensey Levels is one of the largest and least-fragmented lowland wet grassland systems in southeast England. The low-lying grazing meadows are intersected by a complex system of ditches which support a variety of important wetland communities, including nationally rare and scarce aquatic plants and invertebrates. The Site also supports a notable assemblage of breeding and wintering wildfowl. A small area of shingle and intertidal muds and sands is included within the Site. The Site supports an outstanding assemblage of wetland plants and invertebrates including many British Red Data Book species. The Site supports 68% of vascular plant species in Great Britain that can be described as aquatic. It is probably the best Site in Britain for freshwater molluscs, one of the five best sites for aquatic beetles Coleoptera and supports an outstanding assemblage of dragonflies Odonata. 																					
<p>Desk Study: BAP Priority Habitats within 1km</p>	<p>Distance from Site</p>																				
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – The Dell • Ancient & semi-natural woodland – Drockmill Hill Shaw • Ancient & semi-natural woodland – Pickens Wood • Coastal & floodplain grazing marsh BAP priority habitat – un-named • Coastal & floodplain grazing marsh BAP priority habitat – un-named 	<ul style="list-style-type: none"> • 200m North • 600m North • 900m East • 400m South • 500m North 																				
<p>Desk Study: Protected and Notable Species within 1km</p>																					
<table border="0"> <tr> <td colspan="2">Protected Species</td> </tr> <tr> <td><i>Anguis fragilis</i></td> <td>Slow worm</td> </tr> <tr> <td><i>Pipistrellus nathusii</i></td> <td>Nathusius's Pipistrelle bat</td> </tr> <tr> <td><i>Triturus cristatus</i></td> <td>Great crested newt</td> </tr> <tr> <td colspan="2">Sussex BAP Species</td> </tr> <tr> <td><i>Centaurea cyanus</i></td> <td>Cornflower</td> </tr> <tr> <td><i>Coenonympha pamphilus</i></td> <td>Small Heath</td> </tr> <tr> <td><i>Erinaceus europaeus</i></td> <td>European hedgehog</td> </tr> <tr> <td><i>Lasiommata megera</i></td> <td>Wall</td> </tr> <tr> <td><i>Limenitis camilla</i></td> <td>White admiral</td> </tr> </table>		Protected Species		<i>Anguis fragilis</i>	Slow worm	<i>Pipistrellus nathusii</i>	Nathusius's Pipistrelle bat	<i>Triturus cristatus</i>	Great crested newt	Sussex BAP Species		<i>Centaurea cyanus</i>	Cornflower	<i>Coenonympha pamphilus</i>	Small Heath	<i>Erinaceus europaeus</i>	European hedgehog	<i>Lasiommata megera</i>	Wall	<i>Limenitis camilla</i>	White admiral
Protected Species																					
<i>Anguis fragilis</i>	Slow worm																				
<i>Pipistrellus nathusii</i>	Nathusius's Pipistrelle bat																				
<i>Triturus cristatus</i>	Great crested newt																				
Sussex BAP Species																					
<i>Centaurea cyanus</i>	Cornflower																				
<i>Coenonympha pamphilus</i>	Small Heath																				
<i>Erinaceus europaeus</i>	European hedgehog																				
<i>Lasiommata megera</i>	Wall																				
<i>Limenitis camilla</i>	White admiral																				

Sussex Rare Species Inventory

Argiope bruennichi
Boletus radicans
Bromus secalinus
Cyperus longus
Petroselinum segetum

Wasp spider
 Rooting Bolete
 Rye brome
 Galingale
 Corn parsley

Notable Bird Inventory

Ardea cinerea
Botaurus stellaris
Cettia cetti
Hirundo rustica

Grey heron
 Bittern
 Cetti's warbler
 Swallow

Invasive Alien Species Inventory

Centranthus ruber
Cotoneaster horizontalis
Crocsmia pottsii x aurea = C. x crocosmiiflora
Impatiens glandulifera
Petasites fragrans
Rosa rugosa

Red valerian
 Wall cotoneaster
 Montbretia
 Indian balsam
 Winter heliotrope
 Japanese rose

Field Survey: Habitat Descriptions (See Figure 23/114)

Poor semi-improved grassland – Very species poor and generally short sward (horse pasture). The most abundant grasses are Yorkshire fog *Holcus lanatus* and common bent *Agrostis capillaris*, but perennial rye-grass *Lolium perenne*, is frequent and meadow barley *Hordeum secalinum* and small cat's-tail *Phleum bertolonii* are also present. Forbs comprise a minor component and are of very common and widespread species, mostly meadow and creeping buttercup *Ranunculus acris* and *repens*, white clover *Trifolium repens*, but also including common mouse-ear *Cerastium fontanum* and cinquefoil *Potentilla reptans*. Ragwort *Senecio jacobaea*, creeping thistle *Cirsium arvense* and nettle are occasional. The small area of tall unmanaged grassland in the north of the Site comprises Yorkshire fog, common bent, cocksfoot *Dactylis glomerata*, soft rush *Juncus effusus*, fleabane *Pulicaria dysenterica* and hoary ragwort *Senecio erucifolius*.

Hedges – There is a species-rich hedge on the northern boundary of the northern field, part of which includes mature oak and ash trees. Other species include blackthorn, field maple, hazel, rose and oak. There is also a tree and shrub belt between the two fields with mature oaks, hawthorn, blackthorn and rose.

Scrub – Small area of dense blackthorn and bramble in the north 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 during the survey.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. However, there are ponds near Dittons Nursery, north of the B2247 Dittons Road, approximately 140-180m to the east and north east of the Site. OS maps also indicate the presence of a pond at the end of Rother Avenue, approximately 50m to the east of the Site. Hedges, scrub and unmanaged grassland within the Site represent suitable terrestrial habitat for great crested newts. However, given the presence of barriers to dispersal of great crested

newts, including the B2247, as well as the limited extent of suitable terrestrial habitat, the probability of great crested newts being present within the Site is considered to be low.

Reptiles – Potential in unmanaged grassland in the north of the Site and possibly in some areas on boundaries

Breeding birds – Especially hedges and woodland, though the northern field particularly may also be suitable for ground nesting species such as skylark.

Wintering birds – The size of the northern field may make it suitable, for example, to wintering lapwing.

Bats – Trees and mature trees in particular, with features such as cracks and cavities, for example including many within the boundary vegetation and hedgerows have potential to be used as roosts. Activity, including foraging and commuting, is likely throughout but especially along hedges and site's boundaries.

Badgers – Potential for setts within the adjoining woodland and in hedgerows, but with or without setts badgers may also use any or all 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 in the northern part of the Site and along boundaries.

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.

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

INDICATIVE ECOLOGICAL APPRAISAL

Low value – the grassland is very species poor. The most valuable features are the hedge and mature trees as well as scrub and unmanaged grassland. The habitats and features have low potential to support 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 hedge and tree and shrub belt, including the 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.
- 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.

- Buffer the hedge and tree and shrub belt, including the mature trees and their features
- If great crested newts are found in the ponds to the east of the Site appropriate measures will need to be put in place to prevent harm to them during their terrestrial phase, for example herptile fencing the development Site and possibly trapping and translocation to a suitable receptor site.
- 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).
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- 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.
- Development should seek to avoid any prime foraging grounds identified through the badger survey, avoid severance to commuting corridors within territories and avoid any construction works within at least 30m of the nearest badger setts.

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 and mature trees.
- Undertake landscape planting and habitat creation, for example by planting appropriate native species to strengthen existing hedges, as well as creating new ones, particularly where the Site adjoins existing residential properties.
- Habitat creation, ideally located adjacent to retained or adjoining habitat 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.



© Crown copyright and database rights 2016 Ordnance Survey 0100031673

ECOLOGICAL ASSESSMENT	
Area:	Stone Cross
Site Name:	Land off Peelings Lane, Adjoining Pickens Wood, Stone Cross
Site Reference Number:	187/3280
Site Summary Description	
A 4.44ha, generally rather species poor grassland field, a small Ancient Woodland (Pickens Wood) and species-rich hedge with mature trees and species poor hedge alongside Peelings Lane.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 23.1)	
Stone Cross is a small settlement lying immediately north of the main urban conurbation of Eastbourne. A main railway line runs east-west to the south and the A27 forms the northern border of the settlement, beyond which is an open, low lying, pastoral landscape of large fields bounded by drainage ditches that grade towards the Pevensey Levels, a further 1-2km to the north. Remnant grazing marsh is also present to the south, now largely surrounded by housing development. The Site lies immediately north of Stone Cross, bordered to the north by the tree belt landscaping of the A27. Minor roads and residential development form the Site's western and southern boundaries, with Pickens Wood Ancient Woodland located in the south of the Site.	
Desk Study: Designated Sites within 1km (See Figure 23.2)	Distance from Site
<ul style="list-style-type: none"> The Site lies approximately 1.5km south west to the nearest point of the Pevensey Levels SAC / SSSI / Ramsar. Extracts from the relevant citations are set out below: Pevensey Levels SAC: Comprising inland water bodies (Standing water, Running water) (2.5%) and humid grassland, Mesophile grassland (97.5%). The SAC is designated for its Annex II population of Ramshorn snail <i>Anisus vorticulus</i>. <i>Anisus vorticulus</i> occurs across a range of sites in southern and eastern England. Pevensey Levels is a large and expansive grazing marsh that supports <i>Anisus vorticulus</i> in both a wide spatial distribution and in good population density classes. Pevensey Levels SSSI: Pevensey Levels is a large area of low-lying grazing meadows intersected by a complex system of ditches which show a wide variety of form and species composition and support important communities of wetland flora and fauna. The Site supports the nationally rare sharp-leaved pondweed <i>Potamogeton acutifolius</i> and several nationally scarce aquatic plants including watersoldier <i>Stratiotes aloides</i>, flat-stalked pondweed <i>Potamogeton friesii</i>, the pondweed <i>Potamogeton trichoides</i>, greater water-parsnip <i>Sium latifolium</i> and river water-dropwort <i>Oenanthe fluviatilis</i>, whose presence are largely the result of ditch management to maintain 'wet fences' for grazing. Rich bankside floras also support a variety of plants such as the nationally scarce marshmallow <i>Althaea officinalis</i> as well as more widespread species such as ragged robin <i>Lychnis flos-cuculi</i>, water mint <i>Mentha aquatica</i> and cuckoo flower <i>Cardamine pratensis</i>. An area of shingle and intertidal muds and sands is included within the Site and although the shingle is largely bereft of vegetation it does support the nationally scarce sea-kale <i>Crambe maritima</i>. The citation states: <i>The Site supports outstanding invertebrate populations and is a top national Site for Molluscs and aquatic Coleoptera ... A ramshorn snail Segmentina nitida (RDB: Endangered), is found in well-oxygenated drains with lush</i> 	1.5km to the North East of the Site

<p>vegetation. Particularly widespread and abundant on this Site is an aquatic snail <i>Valvata macrostoma</i> (RDB: Vulnerable). Of the many species of water beetle recorded at the Site, the most interesting are confined to the ditches in areas of permanent pasture. Of particular interest is Britain's largest water beetle, the great silver water beetle <i>Hydrophilus piceus</i> (RDB: Rare) which is found only on grazed levels in the southern part of Britain. Also of importance is <i>Bagous puncticollis</i> (RDB: Endangered), found on Horse Eye Level and several nationally rare water beetles such as the small reddish-brown <i>Hydrovatus clypealis</i> (RDB: Rare) confined to the coast of southern England. Over fifteen species of dragonfly (Odonata) have been recorded including the nationally scarce species, hairy dragonfly <i>Brachytron pratense</i> and variable damselfly <i>Coenagrion pulchellum</i>. Survey has also revealed Britain's only known location of <i>Placobdella costata</i> (provisional RDB), a large leech ... One of Britain's largest spiders <i>Dolomedes plantarius</i> (RDB: Endangered) has also been recorded. The Site is of national importance for its wintering lapwing <i>Vanellus vanellus</i> which exceed 1% of the total British population. The numbers of snipe <i>Gallinago gallinago</i> may also be of national importance ... Wintering golden plover <i>Pluvialis apricaria</i> are of local significance and in some years are of national importance. Sedge warblers <i>Acrocephalus schoenobaenus</i> and reed warblers <i>Acrocephalus scirpaceus</i> ... breed in numbers of local significance. The Site also supports about one fifth of the breeding yellow wagtails <i>Motacilla flava</i> in Sussex.</p> <ul style="list-style-type: none"> • Pevensey Levels Ramsar: Pevensey Levels is one of the largest and least-fragmented lowland wet grassland systems in southeast England. The low-lying grazing meadows are intersected by a complex system of ditches which support a variety of important wetland communities, including nationally rare and scarce aquatic plants and invertebrates. The Site also supports a notable assemblage of breeding and wintering wildfowl. A small area of shingle and intertidal muds and sands is included within the Site. The Site supports an outstanding assemblage of wetland plants and invertebrates including many British Red Data Book species. The Site supports 68% of vascular plant species in Great Britain that can be described as aquatic. It is probably the best Site in Britain for freshwater molluscs, one of the five best sites for aquatic beetles Coleoptera and supports an outstanding assemblage of dragonflies Odonata. 																	
<p>Desk Study: BAP Priority Habitats within 1km</p>	<p>Distance from Site</p>																
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Pickens Wood • Ancient & semi-natural woodland – The Dell • Coastal & floodplain grazing marsh BAP priority habitat – un-named • Coastal & floodplain grazing marsh BAP priority habitat – un-named 	<ul style="list-style-type: none"> • Within Site • 550m West • 875m South West • 990m East 																
<p>Desk Study: Protected and Notable Species within 1km</p>																	
<table border="0"> <tr> <td colspan="2">Protected Species</td> </tr> <tr> <td><i>Pipistrellus nathusii</i></td> <td>Nathusius's Pipistrelle bat</td> </tr> <tr> <td><i>Pipistrellus</i> sp.</td> <td>Pipistrelle sp. bat</td> </tr> <tr> <td><i>Triturus cristatus</i></td> <td>Great crested newt</td> </tr> <tr> <td colspan="2">Sussex BAP Species</td> </tr> <tr> <td><i>Centaurea cyanus</i></td> <td>Cornflower</td> </tr> <tr> <td colspan="2">Sussex Rare Species Inventory</td> </tr> <tr> <td><i>Argiope bruennichi</i></td> <td>Wasp spider</td> </tr> </table>		Protected Species		<i>Pipistrellus nathusii</i>	Nathusius's Pipistrelle bat	<i>Pipistrellus</i> sp.	Pipistrelle sp. bat	<i>Triturus cristatus</i>	Great crested newt	Sussex BAP Species		<i>Centaurea cyanus</i>	Cornflower	Sussex Rare Species Inventory		<i>Argiope bruennichi</i>	Wasp spider
Protected Species																	
<i>Pipistrellus nathusii</i>	Nathusius's Pipistrelle bat																
<i>Pipistrellus</i> sp.	Pipistrelle sp. bat																
<i>Triturus cristatus</i>	Great crested newt																
Sussex BAP Species																	
<i>Centaurea cyanus</i>	Cornflower																
Sussex Rare Species Inventory																	
<i>Argiope bruennichi</i>	Wasp spider																

Notable Bird Inventory

<i>Ardea cinerea</i>	Grey heron
<i>Botaurus stellaris</i>	Bittern
<i>Burhinus oedicnemus</i>	Stone-curlew (?)
<i>Cettia cetti</i>	Cetti's warbler
<i>Falco subbuteo</i>	Hobby
<i>Hirundo rustica</i>	Swallow
<i>Vanellus vanellus</i>	Lapwing

Invasive Alien Species Inventory

<i>Centranthus ruber</i>	Red valerian
<i>Cotoneaster horizontalis</i>	Wall cotoneaster
<i>Crassula helmsii</i>	New Zealand pigmyweed
<i>Crocsmia pottsii</i> x <i>aurea</i> = <i>C. x crocosmiiflora</i>	Montbretia
<i>Impatiens glandulifera</i>	Indian balsam
<i>Myriophyllum aquaticum</i>	Parrot's-feather
<i>Petasites fragrans</i>	Winter heliotrope
<i>Prunus laurocerasus</i>	Cherry laurel
<i>Rosa rugosa</i>	Japanese rose

Field Survey: Habitat Descriptions (See Figure 23/187)

Poor semi-improved grassland – Relatively short (cut) and homogenous sward. Rather species poor, especially in the eastern half. The sloping western half is somewhat richer. Grasses include abundant Yorkshire fog *Holcus lanatus* and common bent *Agrostis capillaris*, and frequent perennial rye-grass *Lolium perenne*. The western part of the field includes frequent meadow buttercup *Ranunculus acris*, bird's foot trefoil/greater bird's foot trefoil *Lotus corniculatus/pedunculatus*, white and red clover *Trifolium repens* and *pratense* and hoary ragwort *Senecio erucifolius*. Common vetch *Vicia sativa*, self-heal *Prunella vulgaris*, greater plantain *Plantago major*, fleabane *Pulicaria dysenterica*, dandelion *Taraxacum officinale* agg., ox-eye daisy *Leucanthemum vulgare* and common knapweed *Centaurea nigra* are also occasional. Other species include tufted vetch *Vicia cracca* and grass vetchling *Lathyrus nissiola*. Most of these species are less frequent or absent in the eastern part of the field where white clover is abundant.

Hedges – The hedge on the western boundary is species poor and dominated by hawthorn. The hedge along Peelings Lane is species rich with hazel, hawthorn, blackthorn, field maple, ash, willows and rose. There are also mature oak and ash trees.

Broadleaved semi-natural woodland – Pickens Wood Ancient Woodland has a canopy with frequent ash and oak and occasional field maple and wild cherry. Hazel and field maple are the most frequent species in the shrub layer, but hawthorn, holly and elder are occasional. The field layer appears only moderately rich, with much dominated by bramble and ivy, and includes areas of bare ground due to footfall. However, it does include a number of Ancient Woodland Indicator Species (AWIS) such as stands of bluebell *Hyacinthoides non-scripta* as well as greater stitchwort *Stellaria holostea*, black bryony *Tamus communis* and stinking iris *Iris foetidissima*. Other species include cow parsley *Anthriscus sylvestris*, wood brome *Brachypodium sylvaticum*, common dog violet *Viola riviniana*, and cleavers *Galium aparine*, wood avens *Geum urbanum* and lords and ladies *Arum maculatum*.

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 during the survey.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. However, OS maps indicate the presence of ponds near to Peelings Lane, from approximately 160m north east of the Site on the far side of the A27. Habitats within the Site, including hedges and woodland represent suitable terrestrial habitat for great crested newts. However, the A27 represents a very significant barrier to dispersal of great crested newts and the probability of their being present on Site is therefore considered to be low.

Reptiles – Very limited potential along boundaries, especially northern and western.

Breeding birds – especially hedges and woodland, though the field may also be suitable for ground nesting species such as skylark.

Wintering birds – The size of the field may make it suitable, for example, to wintering lapwing.

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

Dormice – Low potential in woodland and hedges due to very limited habitat connectivity as a result of adjoining residential and A27.

Badgers – Potential for setts within the adjoining woodland and in hedgerows, 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)

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

Breeding birds – (April – June) especially woodland and hedges.

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 woodland and hedges.

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

INDICATIVE ECOLOGICAL APPRAISAL

Low to Moderate value – the species-poor grassland is of relatively low value but the Ancient Woodland and hedge along Peelings Lane are of at least moderate value. The habitats and features have some potential to support 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, buffering and positively managing the woodland and hedges, including the 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.

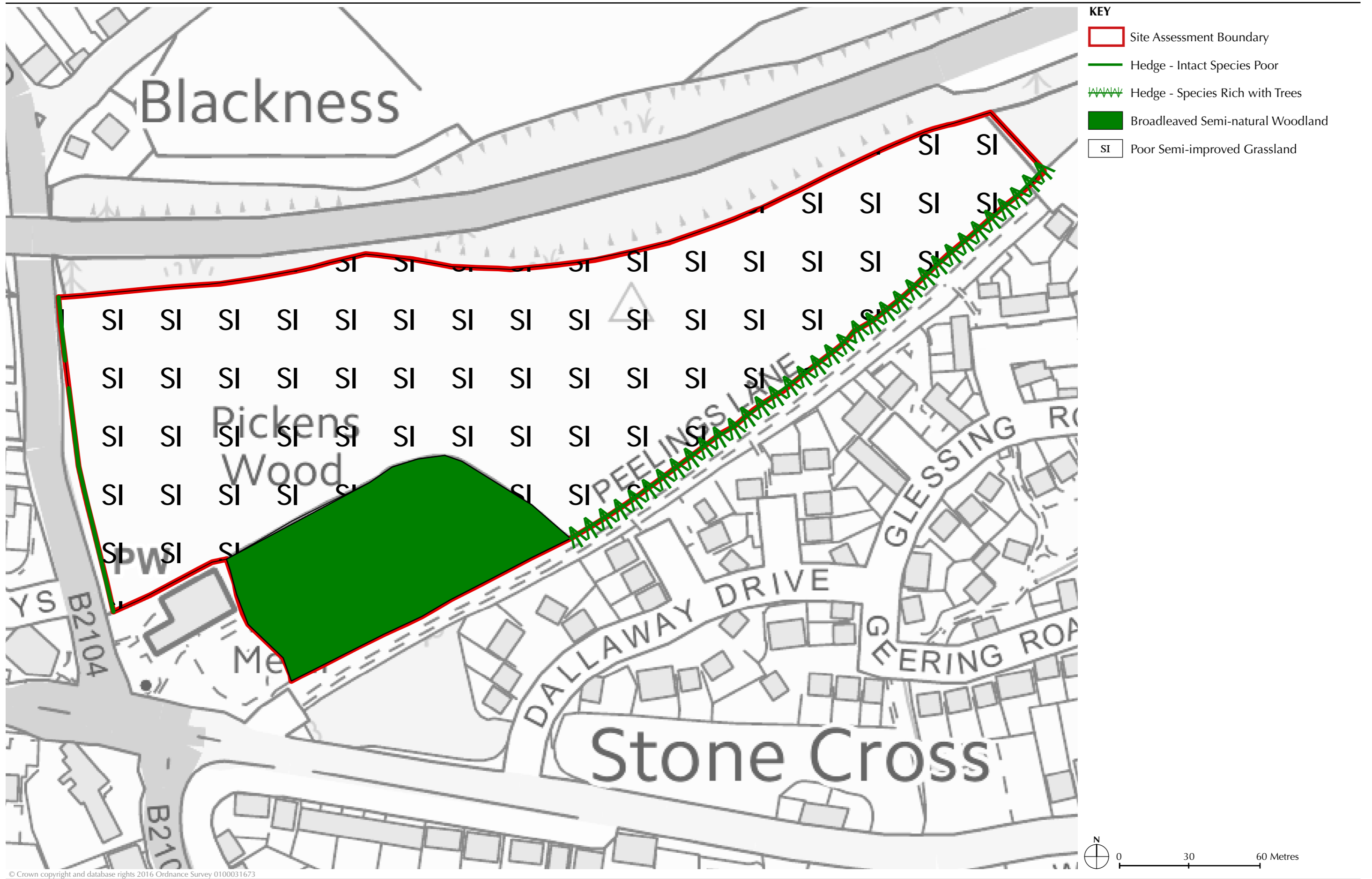
- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Offset buffers to protect retained habitats (minimum 10m).

- 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.
- Buffer the woodland and hedges, including the mature trees and their features.
- 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).
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- 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 woodland (as noted above).
- Development should seek to avoid any prime foraging grounds identified through the badger survey, avoid severance to commuting corridors within territories and avoid any construction works within at least 30m of the nearest badger setts.

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 Ancient Woodland, hedges and mature trees.
- Undertake landscape planting and habitat creation, for example by planting appropriate native species to strengthen existing hedges, as well as creating new ones, particularly where the Site adjoins existing residential properties.
- Habitat creation, ideally located adjacent to retained or adjoining habitat 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 bird boxes suitable for a range of bird species on retained trees or incorporated into buildings.



ECOLOGICAL ASSESSMENT	
Settlement/Area:	Stone Cross
Site Address:	Dittons Nursery, Stone Cross
Site Reference Number:	529/3280
Site Summary Description	
A varied 5.94ha Site set around and plant nursery/garden centre. Includes Ancient Woodland, developing broadleaved plantation, conifer plantation, ponds, scattered scrub, tall ruderal and species-poor amenity and tall grassland.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 23.1)	
Stone Cross is a small settlement lying immediately north of the main urban conurbation of Eastbourne. A main railway line runs east-west to the south and the A27 forms the northern border of the settlement, beyond which is an open, low lying, pastoral landscape of large fields bounded by drainage ditches that grade towards the Pevensey Levels, a further 1-2km to the north. Remnant grazing marsh is also present to the south, now largely surrounded by housing development. The Site is bounded on three sides by roads; the A27 to the north, A22 to the west and the B2247 to the South. The eastern end of the Site is formed by The Dell Ancient Woodland, beyond which is further development.	
Desk Study : Designated Sites (See Figure 23.2)	Distance from Site
<ul style="list-style-type: none"> The Site lies approximately 1.75km south to the nearest point of the Pevensey Levels SAC / SSSI / Ramsar. Extracts from the relevant citations are set out below. Pevensey Levels SAC: Comprising inland water bodies (Standing water, Running water) (2.5%) and humid grassland, Mesophile grassland (97.5%). The SAC is designated for its Annex II population of Ramshorn snail <i>Anisus vorticulus</i>. <i>Anisus vorticulus</i> occurs across a range of sites in southern and eastern England. Pevensey Levels is a large and expansive grazing marsh that supports <i>Anisus vorticulus</i> in both a wide spatial distribution and in good population density classes. Pevensey Levels SSSI: Pevensey Levels is a large area of low-lying grazing meadows intersected by a complex system of ditches which show a wide variety of form and species composition and support important communities of wetland flora and fauna. The Site supports the nationally rare sharp-leaved pondweed <i>Potamogeton acutifolius</i> and several nationally scarce aquatic plants including watersoldier <i>Stratiotes aloides</i>, flat-stalked pondweed <i>Potamogeton friesii</i>, the pondweed <i>Potamogeton trichoides</i>, greater water-parsnip <i>Sium latifolium</i> and river water-dropwort <i>Oenanthe fluviatilis</i>, whose presence are largely the result of ditch management to maintain 'wet fences' for grazing. Rich bankside floras also support a variety of plants such as the nationally scarce marshmallow <i>Althaea officinalis</i> as well as more widespread species such as ragged robin <i>Lychnis flos-cuculi</i>, water mint <i>Mentha aquatica</i> and cuckoo flower <i>Cardamine pratensis</i>. An area of shingle and intertidal muds and sands is included within the Site and although the shingle is largely bereft of vegetation it does support the nationally scarce sea-kale <i>Crambe maritima</i>. The citation states: <i>The Site supports outstanding invertebrate populations and is a top national Site for Molluscs and aquatic Coleoptera ... A ramshorn snail Segmentina nitida (RDB: Endangered), is found in well-oxygenated drains with lush vegetation. Particularly widespread and</i> 	1.75km to the North of the Site

<p>abundant on this Site is an aquatic snail <i>Valvata macrostoma</i> (RDB: Vulnerable). Of the many species of water beetle recorded at the Site, the most interesting are confined to the ditches in areas of permanent pasture. Of particular interest is Britain's largest water beetle, the great silver water beetle <i>Hydrophilus piceus</i> (RDB: Rare) which is found only on grazed levels in the southern part of Britain. Also of importance is <i>Bagous puncticollis</i> (RDB: Endangered), found on Horse Eye Level and several nationally rare water beetles such as the small reddish-brown <i>Hydrovatus clypealis</i> (RDB: Rare) confined to the coast of southern England. Over fifteen species of dragonfly (Odonata) have been recorded including the nationally scarce species, hairy dragonfly <i>Brachytron pratense</i> and variable damselfly <i>Coenagrion pulchellum</i>. Survey has also revealed Britain's only known location of <i>Placobdella costata</i> (provisional RDB), a large leech ... One of Britain's largest spiders <i>Dolomedes plantarius</i> (great raft spider) (RDB: Endangered) has also been recorded. The Site is of national importance for its wintering lapwing <i>Vanellus vanellus</i> which exceed 1% of the total British population. The numbers of snipe <i>Gallinago gallinago</i> may also be of national importance ... Wintering golden plover <i>Pluvialis apricaria</i> are of local significance and in some years are of national importance. Sedge warblers <i>Acrocephalus schoenobaenus</i> and reed warblers <i>Acrocephalus scirpaceus</i> ... breed in numbers of local significance. The Site also supports about one fifth of the breeding yellow wagtails <i>Motacilla flava</i> in Sussex.</p> <ul style="list-style-type: none"> • Pevensey Levels Ramsar: Pevensey Levels is one of the largest and least-fragmented lowland wet grassland systems in southeast England. The low-lying grazing meadows are intersected by a complex system of ditches which support a variety of important wetland communities, including nationally rare and scarce aquatic plants and invertebrates. The Site also supports a notable assemblage of breeding and wintering wildfowl. A small area of shingle and intertidal muds and sands is included within the Site. The Site supports an outstanding assemblage of wetland plants and invertebrates including many British Red Data Book species. The Site supports 68% of vascular plant species in Great Britain that can be described as aquatic. It is probably the best Site in Britain for freshwater molluscs, one of the five best sites for aquatic beetles Coleoptera and supports an outstanding assemblage of dragonflies Odonata. 																			
<p>Desk Study: BAP Priority Habitats</p>	<p>Distance from Site</p>																		
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – The Dell • Ancient & semi-natural woodland – Drockmill Hill Shaw • Ancient & semi-natural woodland – Pickens Wood • Coastal & floodplain grazing marsh BAP priority habitat – un-named • Coastal & floodplain grazing marsh BAP priority habitat – un-named 	<ul style="list-style-type: none"> • Within Site • 425m North West • 625m East • 300m North • 600m South 																		
<p>Desk Study: Protected and Notable Species</p>																			
<table border="0"> <tr> <td colspan="2">Protected Species</td> </tr> <tr> <td><i>Anguis fragilis</i></td> <td>Slow worm</td> </tr> <tr> <td><i>Pipistrellus nathusii</i></td> <td>Nathusius's Pipistrelle bat</td> </tr> <tr> <td><i>Pipistrellus</i> sp.</td> <td>Pipistrelle sp. bat</td> </tr> <tr> <td><i>Triturus cristatus</i></td> <td>Great crested newt</td> </tr> <tr> <td colspan="2">Sussex BAP Species</td> </tr> <tr> <td><i>Centaurea cyanus</i></td> <td>Cornflower</td> </tr> <tr> <td><i>Coenonympha pamphilus</i></td> <td>Small Heath</td> </tr> <tr> <td><i>Erinaceus europaeus</i></td> <td>European hedgehog</td> </tr> </table>		Protected Species		<i>Anguis fragilis</i>	Slow worm	<i>Pipistrellus nathusii</i>	Nathusius's Pipistrelle bat	<i>Pipistrellus</i> sp.	Pipistrelle sp. bat	<i>Triturus cristatus</i>	Great crested newt	Sussex BAP Species		<i>Centaurea cyanus</i>	Cornflower	<i>Coenonympha pamphilus</i>	Small Heath	<i>Erinaceus europaeus</i>	European hedgehog
Protected Species																			
<i>Anguis fragilis</i>	Slow worm																		
<i>Pipistrellus nathusii</i>	Nathusius's Pipistrelle bat																		
<i>Pipistrellus</i> sp.	Pipistrelle sp. bat																		
<i>Triturus cristatus</i>	Great crested newt																		
Sussex BAP Species																			
<i>Centaurea cyanus</i>	Cornflower																		
<i>Coenonympha pamphilus</i>	Small Heath																		
<i>Erinaceus europaeus</i>	European hedgehog																		

<i>Lasiommata megera</i>	Wall
<i>Limenitis camilla</i>	White admiral
Sussex Rare Species Inventory	
<i>Argiope bruennichi</i>	Wasp spider
<i>Boletus radicans</i>	Rooting Bolete
<i>Bromus secalinus</i>	Rye brome
<i>Cyperus longus</i>	Galingale
<i>Petroselinum segetum</i>	Corn parsley
Notable Bird Inventory	
<i>Ardea cinerea</i>	Grey heron
<i>Hirundo rustica</i>	Swallow
Invasive Alien Species Inventory	
<i>Centranthus ruber</i>	Red valerian
<i>Cotoneaster horizontalis</i>	Wall cotoneaster
<i>Crocsmia pottsii</i> x <i>aurea</i> = <i>C. x crocosmiiflora</i>	Montbretia
<i>Impatiens glandulifera</i>	Indian balsam
<i>Petasites fragrans</i>	Winter heliotrope
<i>Rosa rugosa</i>	Japanese rose
Field Survey: Habitat Descriptions (See Figure 23/529)	
<p>Amenity grassland – Very short and comprising a large part of the western part of the Site. Generally species poor but includes bird's foot trefoil <i>Lotus corniculatus</i>, white clover <i>Trifolium repens</i>, black medick <i>Medicago lupulina</i>, self-heal <i>Prunella vulgaris</i>, fleabane <i>Pulicaria dysenterica</i>, hoary ragwort <i>Senecio erucifolius</i> and autumn hawkbit <i>Leontodon autumnalis</i>.</p> <p>Poor semi-improved grassland – Areas of tall grassland around the edges of the Site and among the broadleaved plantation. Species poor and dominated by Yorkshire fog <i>Holcus lanatus</i> and false oat-grass <i>Arrhenatherum elatius</i>. However, fleabane is notably abundant and other species include hoary ragwort, common knapweed, bristly ox-tongue <i>Picris echioides</i>, creeping thistle <i>Cirsium arvense</i>, great willowherb <i>Epilobium hirsutum</i>, and meadow buttercup <i>Ranunculus acris</i>.</p> <p>Tall ruderal – Merges with the tall grassland and is scattered throughout but is present between the nursery and southern boundary.</p> <p>Hedges – There is a species poor hedge dominated by hawthorn along the southern boundary.</p> <p>Broadleaved semi-natural woodland – Two small areas of Ancient Woodland (The Dell) in the east of the Site. The canopy is dominated by oak and ash with a little field maple. The shrub layer is dominated by hazel but hawthorn, field maple, blackthorn and holly are also present. The field layer is locally dominated by ivy or dense stands of bluebell <i>Hyacinthoides non-scripta</i> with frequent male and broad buckler ferns <i>Dryopteris felix-mas</i> and <i>dilatata</i>. As well as bluebell, a number of other Ancient Woodland Indicator Species (AWIS) are present, including wood speedwell, primrose <i>Primula vulgaris</i>, red currant <i>Ribes rubrum</i> and stinking iris <i>Iris foetidissima</i>. The smaller western area includes a pond and is more open in character with a grassier field layer.</p> <p>Broadleaved plantation – Of variable stages of development but mostly young set among poor semi-improved grassland to the west of the Ancient Woodland. There is also an area of more developed plantation in the west of the Site. Comprises a mix of native and non-native species.</p> <p>Coniferous plantation – A small mature plantation of spruce with frequent ash to the west of the Ancient Woodland. The field layer is dominated by ivy with frequent male fern and harts tongue <i>Asplenium scolopendrium</i>.</p> <p>Ponds – A small pond at TN1 is filled with greater reedmace <i>Typha latifolia</i> and set beside the Nursery among amenity grassland and tall ruderal. The larger pond at TN2 is set within woodland but is quite open. It includes stands of sedge <i>Carex</i> sp., yellow iris <i>Iris pseudoacorus</i>, branched bur-reed <i>Sparganium erectum</i>, greater reedmace, water mint <i>Mentha aquatica</i>, marsh marigold <i>Caltha palustris</i> and water plantain <i>Alisma plantago-aquatica</i>. The surface is covered in duckweed <i>Lemna</i> sp..</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 during the survey.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are two ponds within the Site and most of the habitats within the Site, excluding the amenity grassland, represent suitable terrestrial habitat for great crested newts.

Reptiles – potential among tall grassland and ruderal and among broadleaved plantation and beside ponds.

Breeding birds – especially woodland, plantations and hedges.

Bats – Trees and mature trees in particular, with features such as cracks and cavities, for example including many within the boundary vegetation and hedgerows have potential to be used as roosts. Activity, including foraging and commuting, is likely throughout but especially in the woodlands, plantations and along hedges.

Dormice – low potential in woodland, plantations and hedges due to limited habitat connectivity as a result, for example of adjoining roads and development.

Badgers – Potential for setts within the woodland and plantations, but with or without setts badgers may also use any or the entire 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 throughout the Site.

Breeding birds – (April – June) especially woodland, plantations, and hedge.

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 value – although the amenity grassland is of relatively low value, the mosaic of habitats present, including Ancient Woodland and ponds is of at least moderate value. The habitats and features have moderate potential to support protected/notable 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 Ancient Woodland, including the pond 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

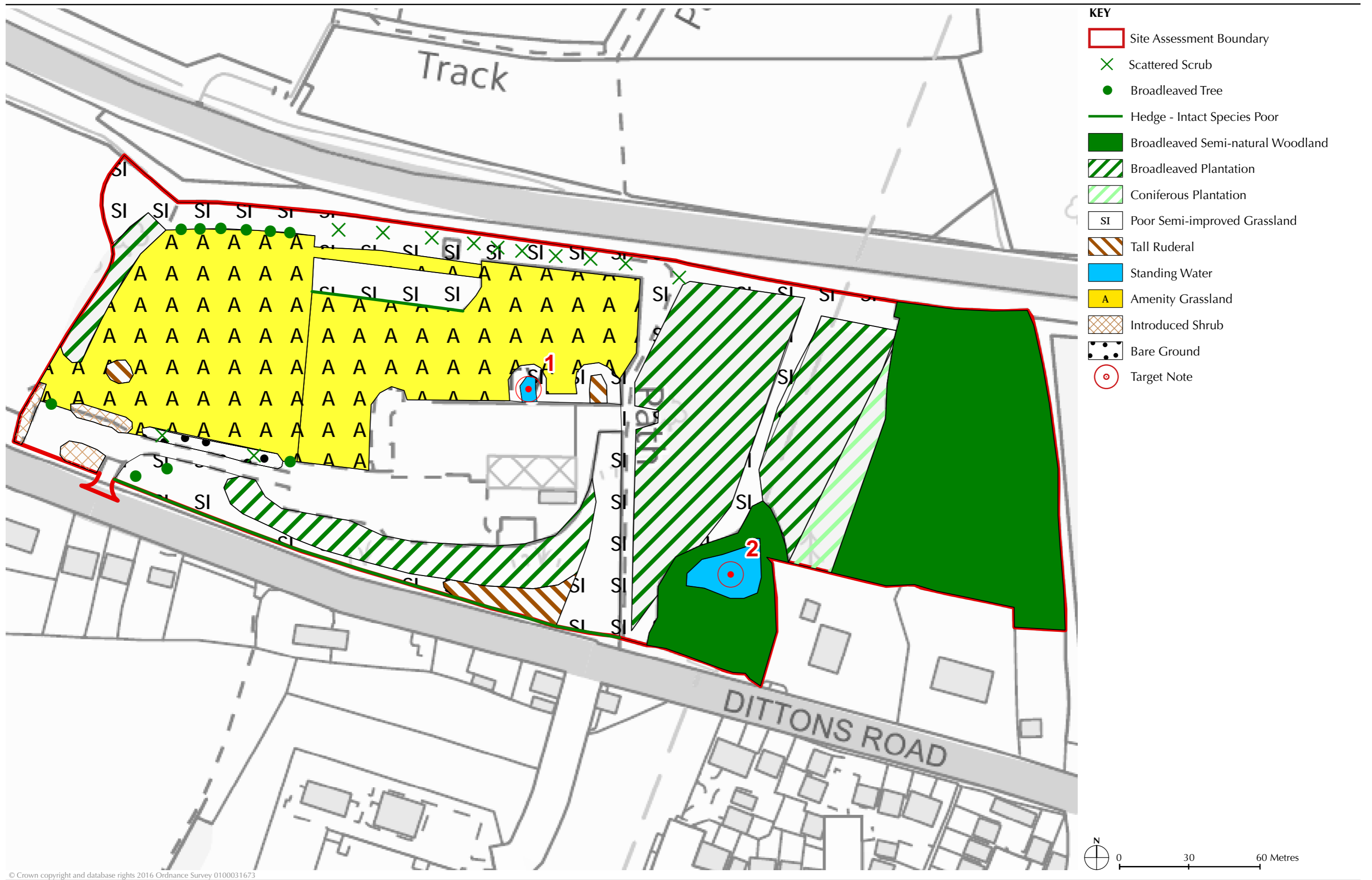
Should development at this Site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- 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.
- 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 any of the ponds on site, retention of pond(s) and sufficient area of terrestrial habitat (as part of buffer strip) and other possible measures to safeguard their conservation status, under a Natural England European Protected Species licence.
- 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).
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- 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 (as noted above).
- Development should seek to avoid any prime foraging grounds identified through the badger survey, avoid severance to commuting corridors within territories and avoid any construction works within at least 30m of the nearest badger setts.

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 Ancient Woodland, hedges and mature trees.
- Strengthen boundary vegetation example by removing non-native species planting appropriate native species to form hedges, for example on the western boundary.
- Habitat creation, ideally located adjacent to retained or adjoining habitat, for example the Ancient Woodland in the east of the Site, 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 bird boxes suitable for a range of bird species on retained trees or incorporated into buildings.



ECOLOGICAL ASSESSMENT	
Area:	Stone Cross
Site Name:	Land at Hazelbank, Stone Cross
Site Reference Number:	575/3280
Site Summary Description	
A small, 0.51ha, Site comprising largely of species poor grassland used for horse pasture with trees and scrub on boundaries. Also includes an adjoining house and garden.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 23.1)	
Stone Cross is a small settlement lying immediately north of the main urban conurbation of Eastbourne. A main railway line runs east-west to the south and the A27 forms the northern border of the settlement, beyond which is an open, low lying, pastoral landscape of large fields bounded by drainage ditches that grade towards the Pevensey Levels, a further 1-2km to the north. Remnant grazing marsh is also present to the south, now largely surrounded by housing development. The Site is surrounded by existing residential development to the east, west and south. To the north, the Site opens out onto hedge-lined fields with the A27 further beyond.	
Desk Study : Designated Sites within 1km (See Figure)	Distance from Site
<ul style="list-style-type: none"> The Site lies approximately 1.2km south west to the nearest point of the Pevensey Levels SAC / SSSI / Ramsar. Extracts from the relevant citations are set out below: Pevensey Levels SAC: Comprising inland water bodies (Standing water, Running water) (2.5%) and humid grassland, Mesophile grassland (97.5%). The SAC is designated for its Annex II population of Ramshorn snail <i>Anisus vorticulus</i>. <i>Anisus vorticulus</i> occurs across a range of sites in southern and eastern England. Pevensey Levels is a large and expansive grazing marsh that supports <i>Anisus vorticulus</i> in both a wide spatial distribution and in good population density classes. Pevensey Levels SSSI: Pevensey Levels is a large area of low-lying grazing meadows intersected by a complex system of ditches which show a wide variety of form and species composition and support important communities of wetland flora and fauna. The Site supports the nationally rare sharp-leaved pondweed <i>Potamogeton acutifolius</i> and several nationally scarce aquatic plants including watersoldier <i>Stratiotes aloides</i>, flat-stalked pondweed <i>Potamogeton friesii</i>, the pondweed <i>Potamogeton trichoides</i>, greater water-parsnip <i>Sium latifolium</i> and river water-dropwort <i>Oenanthe fluviatilis</i>, whose presence are largely the result of ditch management to maintain 'wet fences' for grazing. Rich bankside floras also support a variety of plants such as the nationally scarce marshmallow <i>Althaea officinalis</i> as well as more widespread species such as ragged robin <i>Lychnis flos-cuculi</i>, water mint <i>Mentha aquatica</i> and cuckoo flower <i>Cardamine pratensis</i>. An area of shingle and intertidal muds and sands is included within the Site and although the shingle is largely bereft of vegetation it does support the nationally scarce sea-kale <i>Crambe maritima</i>. The citation states: <i>The Site supports outstanding invertebrate populations and is a top national Site for Molluscs and aquatic Coleoptera ... A ramshorn snail Segmentina nitida (RDB: Endangered), is found in well-</i> 	1.2km North East of the Site.

<p>oxygenated drains with lush vegetation. Particularly widespread and abundant on this Site is an aquatic snail <i>Valvata macrostoma</i> (RDB: Vulnerable). Of the many species of water beetle recorded at the Site, the most interesting are confined to the ditches in areas of permanent pasture. Of particular interest is Britain's largest water beetle, the great silver water beetle <i>Hydrophilus piceus</i> (RDB: Rare) which is found only on grazed levels in the southern part of Britain. Also of importance is <i>Bagous puncticollis</i> (RDB: Endangered), found on Horse Eye Level and several nationally rare water beetles such as the small reddish-brown <i>Hydrovatus clypealis</i> (RDB: Rare) confined to the coast of southern England. Over fifteen species of dragonfly (Odonata) have been recorded including the nationally scarce species, hairy dragonfly <i>Brachytron pratense</i> and variable damselfly <i>Coenagrion pulchellum</i>. Survey has also revealed Britain's only known location of <i>Placobdella costata</i> (provisional RDB), a large leech ... One of Britain's largest spiders <i>Dolomedes plantarius</i> (great raft spider) (RDB: Endangered) has also been recorded. The Site is of national importance for its wintering lapwing <i>Vanellus vanellus</i> which exceed 1% of the total British population. The numbers of snipe <i>Gallinago gallinago</i> may also be of national importance ... Wintering golden plover <i>Pluvialis apricaria</i> are of local significance and in some years are of national importance. Sedge warblers <i>Acrocephalus schoenobaenus</i> and reed warblers <i>Acrocephalus scirpaceus</i> ... breed in numbers of local significance. The Site also supports about one fifth of the breeding yellow wagtails <i>Motacilla flava</i> in Sussex.</p> <ul style="list-style-type: none"> • Pevensey Levels Ramsar: Pevensey Levels is one of the largest and least-fragmented lowland wet grassland systems in southeast England. The low-lying grazing meadows are intersected by a complex system of ditches which support a variety of important wetland communities, including nationally rare and scarce aquatic plants and invertebrates. The Site also supports a notable assemblage of breeding and wintering wildfowl. A small area of shingle and intertidal muds and sands is included within the Site. The Site supports an outstanding assemblage of wetland plants and invertebrates including many British Red Data Book species. The Site supports 68% of vascular plant species in Great Britain that can be described as aquatic. It is probably the best Site in Britain for freshwater molluscs, one of the five best sites for aquatic beetles Coleoptera and supports an outstanding assemblage of dragonflies Odonata. 															
<p>Desk Study: BAP Priority Habitats within 1km</p>	<p>Distance from Site</p>														
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Pickens Wood • Coastal & floodplain grazing marsh BAP priority habitat – un-named • Orchard BAP priority habitat – un-named 	<ul style="list-style-type: none"> • 650m West • 450m East • 640m East 														
<p>Desk Study: Protected and Notable Species within 1km</p>															
<table border="0"> <tr> <td colspan="2">Protected Species</td> </tr> <tr> <td><i>Anguis fragilis</i></td> <td>Slow worm</td> </tr> <tr> <td><i>Pipistrellus</i> sp.</td> <td>Pipistrelle sp. bat</td> </tr> <tr> <td><i>Triturus cristatus</i></td> <td>Great crested newt</td> </tr> <tr> <td><i>Zootoca vivipara</i></td> <td>Common lizard</td> </tr> <tr> <td colspan="2">Sussex BAP Species</td> </tr> <tr> <td><i>Erinaceus europaeus</i></td> <td>European hedgehog</td> </tr> </table>		Protected Species		<i>Anguis fragilis</i>	Slow worm	<i>Pipistrellus</i> sp.	Pipistrelle sp. bat	<i>Triturus cristatus</i>	Great crested newt	<i>Zootoca vivipara</i>	Common lizard	Sussex BAP Species		<i>Erinaceus europaeus</i>	European hedgehog
Protected Species															
<i>Anguis fragilis</i>	Slow worm														
<i>Pipistrellus</i> sp.	Pipistrelle sp. bat														
<i>Triturus cristatus</i>	Great crested newt														
<i>Zootoca vivipara</i>	Common lizard														
Sussex BAP Species															
<i>Erinaceus europaeus</i>	European hedgehog														

Sussex Rare Species Inventory*Hydrocharis morsus-ranae*

Frogbit

Notable Bird Inventory*Alcedo atthis*

Kingfisher

Ardea cinerea

Grey heron

Cettia cetti

Cetti's warbler

Falco subbuteo

Hobby

Gallinago gallinago

Snipe

Tringa totanus

Redshank

Tyto alba

Barn owl

Vanellus vanellus

Lapwing

Invasive Alien Species Inventory*Cotoneaster horizontalis*

Wall cotoneaster

Crocsmia pottsii x aurea = C. x crocosmiiflora

Montbretia

Elodea nuttallii

Nuttall's Water-Weed

Fallopia japonica

Japanese Knotweed

Hyacinthoides hispanica

Spanish Bluebell

*Hyacinthoides non-scripta x hispanica**(= H. x massartiana)*

Hybrid bluebell

Hydrocotyle ranunculoides

Floating pennywort

Lamiastrum galeobdolon subsp. Argentatum

Variegated yellow archangel

Rhododendron ponticum

Rhododendron

Rosa rugosa

Japanese rose

Field Survey: Habitat Descriptions (See Figure 23/575)

Poor semi-improved grassland – Most of the Site comprises tightly grazed horse pasture. It is very species poor. Yorkshire fog *Holcus lanatus* and common bent *Agrostis capillaris* are the most abundant grasses. White clover trifolium repens and creeping buttercup *Ranunculus repens* are the most frequent forbs and there is occasional creeping and spear thistle *Cirsium arvense* and *vulgare* and nettle. Taller species-poor grassland is also present along the access drive to the Site.

Tall ruderal – Present to variable degrees on boundaries.

Trees and scrub – Includes mature ash as well as willows and sycamore. Also conifers, including Scot's pine and a line of cypresses.

Garden – Front and back of house, comprising amenity grassland, beds and borders, cultivated areas and trees.

Buildings – Comprising shed-style stables and house with pitched and tiled roof.

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 during the survey.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. OS maps indicate the presence of a pond or ponds to the south of Rattle Road, approximately 300-380 south and south east of the Site, although there may be ponds among residential areas closer to the Site. Given the distance to the pond(s) and the

presence of the Rattle Road, which represents a significant barrier to dispersal for great crested newts, as well as the limited suitable terrestrial habitat for great crested newts within the Site, the probability of their being present is considered very low.

Reptiles – Very limited potential along boundaries.

Breeding birds – In trees and scrub.

Bats – Trees and mature trees in particular, with features such as cracks and cavities, for example including many within the boundary vegetation have potential to be used as roosts. The buildings also have some potential to support bat roosts.

Recommendations for Further Survey (and optimal survey timings)

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

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

INDICATIVE ECOLOGICAL APPRAISAL

Low value – largely species poor grassland and garden. The trees and scrub on the boundaries have some value. The Site has low potential to support 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 trees and scrub on Site boundaries.

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.

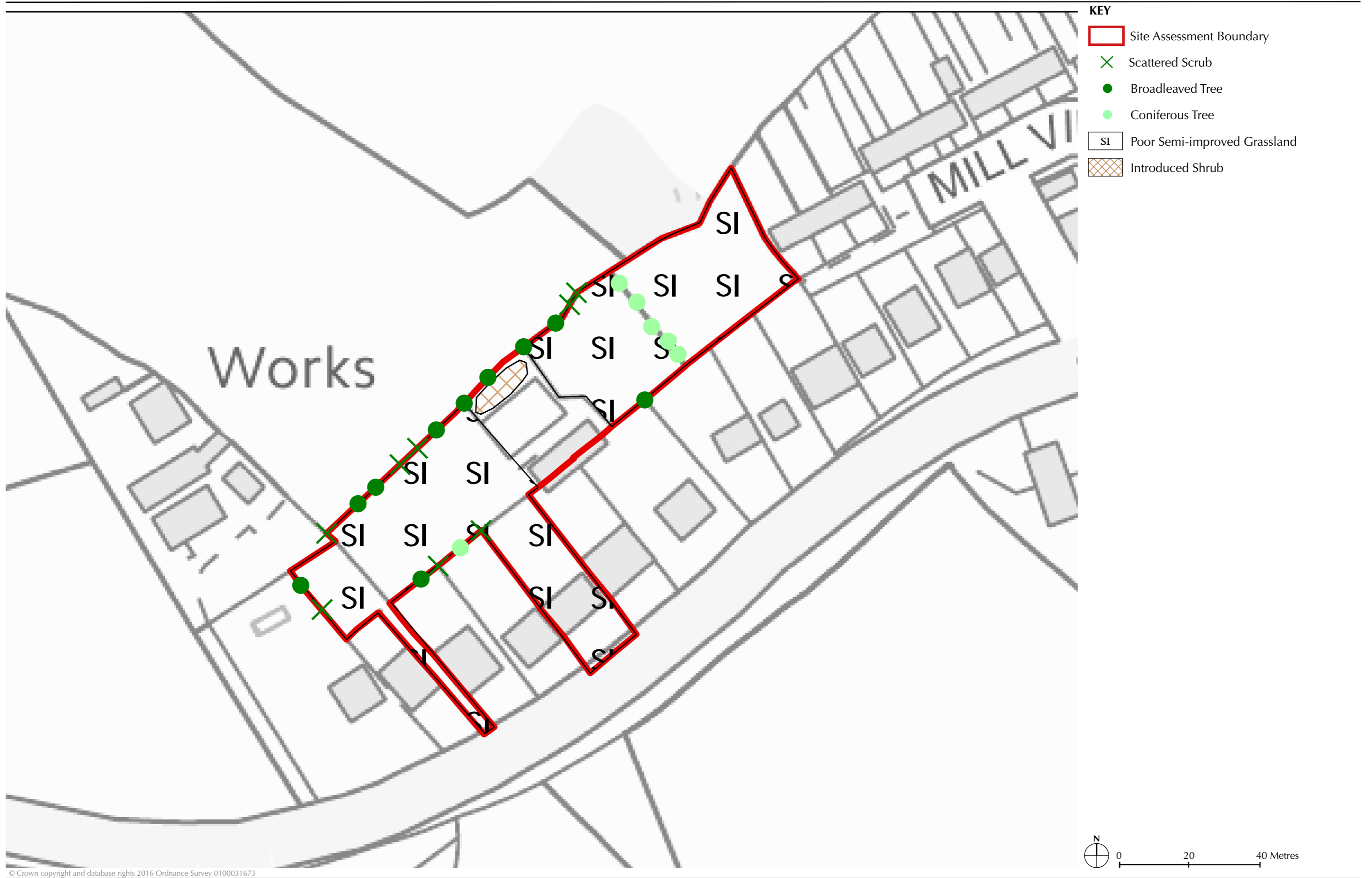
- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction 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.
- Planting of native trees and shrubs on boundaries to form continuous hedge(s).
- 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).
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.

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.

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 mature trees.
 - Undertake landscape planting and habitat creation, for example by planting appropriate native species to strengthen existing hedges, as well as creating new ones, particularly where the Site adjoins existing residential properties.
 - Habitat creation, ideally located adjacent to retained or adjoining habitat 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.



ECOLOGICAL ASSESSMENT	
Area:	Stone Cross
Site Name:	Land West of Dittons Nursery, Stone Cross
Site Reference Number:	677/3280
Site Summary Description	
An unmanaged grassland field with an area of developing planted trees and shrubs, hedges and a ditch.	
Green Infrastructure Context (see Figure 23.1)	
<p>Stone Cross is a small settlement lying immediately north of the main urban conurbation of Eastbourne. A main railway line runs east-west to the south and the A27 forms the northern border of the settlement, beyond which is an open, low lying, pastoral landscape of large fields bounded by drainage ditches that grade towards the Pevensey Levels, a further 1-2km to the north. Remnant grazing marsh is also present to the south, now largely surrounded by housing development. The Site is bounded on three sides by roads; the A27 to the north, A22 to the west and the B2247 to the South. The eastern boundary of the Site borders Dittons Nursery.</p>	
ECOLOGICAL BASELINE	
Desk Study : Designated Sites within 1km (See Figure 23.2)	Distance from Site
<ul style="list-style-type: none"> The Site lies approximately 1.75km south to the nearest point of the Pevensey Levels SAC / SSSI / Ramsar. Extracts from the relevant citations are set out below: Pevensey Levels SAC: Comprising inland water bodies (Standing water, Running water) (2.5%) and humid grassland, Mesophile grassland (97.5%). The SAC is designated for its Annex II population of Ramshorn snail <i>Anisus vorticulus</i>. <i>Anisus vorticulus</i> occurs across a range of sites in southern and eastern England. Pevensey Levels is a large and expansive grazing marsh that supports <i>Anisus vorticulus</i> in both a wide spatial distribution and in good population density classes. Pevensey Levels SSSI: Pevensey Levels is a large area of low-lying grazing meadows intersected by a complex system of ditches which show a wide variety of form and species composition and support important communities of wetland flora and fauna. The Site supports the nationally rare sharp-leaved pondweed <i>Potamogeton acutifolius</i> and several nationally scarce aquatic plants including watersoldier <i>Stratiotes aloides</i>, flat-stalked pondweed <i>Potamogeton friesii</i>, the pondweed <i>Potamogeton trichoides</i>, greater water-parsnip <i>Sium latifolium</i> and river water-dropwort <i>Oenanthe fluviatilis</i>, whose presence are largely the result of ditch management to maintain 'wet fences' for grazing. Rich bankside floras also support a variety of plants such as the nationally scarce marshmallow <i>Althaea officinalis</i> as well as more widespread species such as ragged robin <i>Lychnis flos-cuculi</i>, water mint <i>Mentha aquatica</i> and cuckoo flower <i>Cardamine pratensis</i>. An area of shingle and intertidal muds and sands is included within the Site and although the shingle is largely bereft of vegetation it does support the nationally scarce sea-kale <i>Crambe maritima</i>. The citation states: <i>The Site supports outstanding invertebrate populations and is a top national Site for Molluscs and aquatic Coleoptera ... A ramshorn snail Segmentina nitida (RDB: Endangered), is found in well-oxygenated drains with lush vegetation. Particularly widespread and abundant on this Site is an aquatic snail Valvata macrostoma (RDB: Vulnerable). Of the many species of water</i> 	1.75km to the North of the Site

<p>beetle recorded at the Site, the most interesting are confined to the ditches in areas of permanent pasture. Of particular interest is Britain's largest water beetle, the great silver water beetle <i>Hydrophilus piceus</i> (RDB: Rare) which is found only on grazed levels in the southern part of Britain. Also of importance is <i>Bagous puncticollis</i> (RDB: Endangered), found on Horse Eye Level and several nationally rare water beetles such as the small reddish-brown <i>Hydrovatus clypealis</i> (RDB: Rare) confined to the coast of southern England. Over fifteen species of dragonfly (Odonata) have been recorded including the nationally scarce species, hairy dragonfly <i>Brachytron pratense</i> and variable damselfly <i>Coenagrion pulchellum</i>. Survey has also revealed Britain's only known location of <i>Placobdella costata</i> (provisional RDB), a large leech ... One of Britain's largest spiders <i>Dolomedes plantarius</i> (great raft spider) (RDB: Endangered) has also been recorded. The Site is of national importance for its wintering lapwing <i>Vanellus vanellus</i> which exceed 1% of the total British population. The numbers of snipe <i>Gallinago gallinago</i> may also be of national importance ... Wintering golden plover <i>Pluvialis apricaria</i> are of local significance and in some years are of national importance. Sedge warblers <i>Acrocephalus schoenobaenus</i> and reed warblers <i>Acrocephalus scirpaceus</i> ... breed in numbers of local significance. The Site also supports about one fifth of the breeding yellow wagtails <i>Motacilla flava</i> in Sussex.</p> <ul style="list-style-type: none"> • Pevensey Levels Ramsar: Pevensey Levels is one of the largest and least-fragmented lowland wet grassland systems in southeast England. The low-lying grazing meadows are intersected by a complex system of ditches which support a variety of important wetland communities, including nationally rare and scarce aquatic plants and invertebrates. The Site also supports a notable assemblage of breeding and wintering wildfowl. A small area of shingle and intertidal muds and sands is included within the Site. The Site supports an outstanding assemblage of wetland plants and invertebrates including many British Red Data Book species. The Site supports 68% of vascular plant species in Great Britain that can be described as aquatic. It is probably the best Site in Britain for freshwater molluscs, one of the five best sites for aquatic beetles Coleoptera and supports an outstanding assemblage of dragonflies Odonata. 																	
<p>Desk Study: BAP Priority Habitats within 1km</p>	<p>Distance from Site</p>																
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – The Dell • Ancient & semi-natural woodland – Drockmill Hill Shaw • Ancient & semi-natural woodland – Pickens Wood • Coastal & floodplain grazing marsh BAP priority habitat – un-named • Coastal & floodplain grazing marsh BAP priority habitat – un-named 	<ul style="list-style-type: none"> • 330m East • 350m North West • 800m East • 300m North • 600m South 																
<p>Desk Study: Protected and Notable Species within 1km</p>																	
<table border="0"> <tr> <td colspan="2">Protected Species</td> </tr> <tr> <td><i>Anguis fragilis</i></td> <td>Slow worm</td> </tr> <tr> <td><i>Triturus cristatus</i></td> <td>Great crested newt</td> </tr> <tr> <td colspan="2">Sussex BAP Species</td> </tr> <tr> <td><i>Coenonympha pamphilus</i></td> <td>Small Heath</td> </tr> <tr> <td><i>Erinaceus europaeus</i></td> <td>European hedgehog</td> </tr> <tr> <td><i>Lasiommata megera</i></td> <td>Wall</td> </tr> <tr> <td><i>Limenitis camilla</i></td> <td>White admiral</td> </tr> </table>		Protected Species		<i>Anguis fragilis</i>	Slow worm	<i>Triturus cristatus</i>	Great crested newt	Sussex BAP Species		<i>Coenonympha pamphilus</i>	Small Heath	<i>Erinaceus europaeus</i>	European hedgehog	<i>Lasiommata megera</i>	Wall	<i>Limenitis camilla</i>	White admiral
Protected Species																	
<i>Anguis fragilis</i>	Slow worm																
<i>Triturus cristatus</i>	Great crested newt																
Sussex BAP Species																	
<i>Coenonympha pamphilus</i>	Small Heath																
<i>Erinaceus europaeus</i>	European hedgehog																
<i>Lasiommata megera</i>	Wall																
<i>Limenitis camilla</i>	White admiral																

Sussex Rare Species Inventory	
<i>Argiope bruennichi</i>	Wasp spider
<i>Boletus radicans</i>	Rooting Bolete
<i>Bromus secalinus</i>	Rye brome
<i>Cyperus longus</i>	Galingale
Notable Bird Inventory	
<i>Ardea cinerea</i>	Grey heron
<i>Hirundo rustica</i>	Swallow
Invasive Alien Species Inventory	
<i>Centranthus ruber</i>	Red valerian
<i>Crocsmia pottsii</i> x <i>aurea</i> = <i>C. x crocosmiiflora</i>	Montbretia
<i>Fallopia japonica</i>	Japanese Knotweed
<i>Hyacinthoides non-scripta</i> x <i>hispanica</i> (= <i>H. x massartiana</i>)	Hybrid bluebell
<i>Impatiens glandulifera</i>	Indian balsam
Field Survey: Habitat Description (See Figure 23/677)	
<p>Poor semi-improved grassland – An unmanaged tall and quite coarse sward. Somewhat variable in species composition, though generally rather species-poor. Includes quite a large number of grass species, of which Yorkshire fog <i>Holcus lanatus</i> and common bent <i>Agrostis capillaris</i>, are abundant, false oat-grass <i>Arrhenatherum elatius</i> is frequent and locally abundant and cocksfoot <i>Dactylis glomerata</i> and sweet vernal-grass <i>Anthoxanthum odoratum</i> are frequent. Other grasses are tufted hair-grass <i>Deschampsia cespitosa</i>, meadow barley <i>Hordeum secalinum</i>, meadow foxtail <i>Alopecurus pratensis</i> and timothy <i>Phleum pratense</i> and rarely common reed <i>Phragmites australis</i> and floating Sweet-grass <i>Glyceria fluitans</i>. Forb content is variable but moderate. The northern part of the field being somewhat richer. The most frequent and abundant species are creeping and meadow buttercup <i>Ranunculus repens</i> and <i>acris</i>, bird's foot trefoil/greater bird's foot trefoil <i>Lotus corniculatus/pedunculatus</i>, fleabane <i>Pulicaria dysenterica</i>, hoary ragwort <i>Senecio erucifolius</i> and common knapweed <i>Centaurea nigra</i>. Other species include smooth tare <i>Vicia tetrasperma</i>, cinquefoil <i>Potentilla reptans</i>, self-heal <i>Prunella vulgaris</i>, ribwort plantain <i>Plantago lanceolata</i>, broadleaved dock <i>Rumex obtusifolius</i>, hogweed <i>Heracleum sphodyllium</i>, yarrow <i>Achillea millefolium</i>, ox-eye daisy <i>Leucanthemum vulgare</i>, bristly ox-tongue <i>Picris echioides</i> and creeping and spear thistle <i>Cirsium arvense</i> and <i>vulgare</i>.</p> <p>Scrub – Comprising developing planted trees and shrubs in the north western corner of the field.</p> <p>Hedges – Species-rich, with hawthorn, ash, rose, dogwood and oak on the southern boundary and species-poor, dominated by hawthorn beside the ditch near the northern boundary.</p> <p>Ditch – By the northern boundary. Some water and greater reedmace <i>Typha latifolia</i> and soft rush <i>Juncus effusus</i>.</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 during the survey.	
Assessment of Potential for Protected and Species	
<p>Great crested newts – There are no ponds within the Site. However, there are ponds at Dittons Nursery and nearby, approximately 180-280m east of the Site and most of the Site represents suitable terrestrial habitat for great crested newts.</p> <p>Reptiles – Throughout site.</p>	

Breeding birds – In scrub and hedges.
Bats – There are no trees or structures with potential to be used as roosts. However, the field and its boundaries may be used for foraging and commuting.
Dormice – Low potential in scrub and hedges due to limited connectivity as a result of adjoining roads, development etc.
Badgers – Potential for setts within the scrub and hedges, but with or without setts badgers may also use any or all 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 throughout the Site.
Bats – (April – October) activity surveys.
Dormice – (April – November) in suitable habitat.
Badgers – (Year round but Spring / Autumn optimal) of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Low value – although retaining some diversity the grassland field is rather species poor. Scrub, hedges and ditch have some value. The habitats and features have moderate potential to support protected/notable 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, especially that on the southern boundary.
- 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.
- 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.
- Buffer the hedges, especially that on the southern boundary.
- If great crested newts are found in the ponds to the east of the Site appropriate measures will need to be put in place to prevent harm to them during their terrestrial phase, for example herp fencing the development Site and possibly trapping and translocation to a suitable receptor site.
- 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).

- In light of the potential presence of breeding birds, if possible cutting back or removal of woody vegetation, including trees, shrubs/scrub and hedgerows, as well as disturbance of areas of arable, grassland or ruderal, should not be carried out during the bird breeding season, which is March-August inclusive. If this is not possible then the relevant vegetation/areas should be inspected by a suitably qualified ecologist for the presence of breeding birds prior to the commencement of works.
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- 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 (as noted above).
- Development should seek to avoid any prime foraging grounds identified through the badger survey, avoid severance to commuting corridors within territories and avoid any construction works within at least 30m of the nearest badger setts.

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, such as the hedgerows.
- Strengthen boundary vegetation by planting appropriate native species, for example on the eastern boundary.
- Habitat creation, ideally located adjacent to retained or adjoining habitat 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.



© Crown copyright and database rights 2016 Ordnance Survey 0100031673

ECOLOGICAL ASSESSMENT	
Area:	Stone Cross
Site Name:	Land North and South of Rattle Road, Stone Cross
Site Reference Number:	712/3280
Site Summary Description	
<p>There fields of species poor grassland with hedges, trees and scrub on boundaries totalling 11.74ha. Also includes a small area of moderately rich marshy grassland and ruderal. The southern field was viewed only from the northern boundary.</p>	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 23.1)	
<p>Stone Cross is a small settlement lying immediately north of the main urban conurbation of Eastbourne. A main railway line runs east-west to the south and the A27 forms the northern border of the settlement, beyond which is an open, low lying, pastoral landscape of large fields bounded by drainage ditches that grade towards the Pevensey Levels, a further 1-2km to the north. Remnant grazing marsh is also present to the south, now largely surrounded by housing development. The Site is bounded by existing residential development and Rattle Road, but to the north east and west, the Site opens out onto a network of hedge-lined fields beyond which is further development and the A27.</p>	
Desk Study : Designated Sites within 1km (See Figure 23.2)	Distance from Site
<ul style="list-style-type: none"> The Site lies approximately 800m south west to the nearest point of the Pevensey Levels SAC / SSSI / Ramsar. Extracts from the relevant citations are set out below: Pevensey Levels SAC: Comprising inland water bodies (Standing water, Running water) (2.5%) and humid grassland, Mesophile grassland (97.5%). The SAC is designated for its Annex II population of Ramshorn snail <i>Anisus vorticulus</i>. <i>Anisus vorticulus</i> occurs across a range of sites in southern and eastern England. Pevensey Levels is a large and expansive grazing marsh that supports <i>Anisus vorticulus</i> in both a wide spatial distribution and in good population density classes. Pevensey Levels SSSI: Pevensey Levels is a large area of low-lying grazing meadows intersected by a complex system of ditches which show a wide variety of form and species composition and support important communities of wetland flora and fauna. The Site supports the nationally rare sharp-leaved pondweed <i>Potamogeton acutifolius</i> and several nationally scarce aquatic plants including watersoldier <i>Stratiotes aloides</i>, flat-stalked pondweed <i>Potamogeton friesii</i>, the pondweed <i>Potamogeton trichoides</i>, greater water-parsnip <i>Sium latifolium</i> and river water-dropwort <i>Oenanthe fluviatilis</i>, whose presence are largely the result of ditch management to maintain 'wet fences' for grazing. Rich bankside floras also support a variety of plants such as the nationally scarce marshmallow <i>Althaea officinalis</i> as well as more widespread species such as ragged robin <i>Lychnis flos-cuculi</i>, water mint <i>Mentha aquatica</i> and cuckoo flower <i>Cardamine pratensis</i>. An area of shingle and intertidal muds and sands is included within the Site and although the shingle is largely bereft of vegetation it does support the nationally scarce sea-kale <i>Crambe maritima</i>. The citation states: <i>The Site supports outstanding invertebrate populations and is a top national Site for Molluscs and aquatic Coleoptera ... A ramshorn snail Segmentina nitida (RDB: Endangered), is found in well-oxygenated drains with lush</i> 	800m North East of the Site.

<p>vegetation. Particularly widespread and abundant on this Site is an aquatic snail <i>Valvata macrostoma</i> (RDB: Vulnerable). Of the many species of water beetle recorded at the Site, the most interesting are confined to the ditches in areas of permanent pasture. Of particular interest is Britain's largest water beetle, the great silver water beetle <i>Hydrophilus piceus</i> (RDB: Rare) which is found only on grazed levels in the southern part of Britain. Also of importance is <i>Bagous puncticollis</i> (RDB: Endangered), found on Horse Eye Level and several nationally rare water beetles such as the small reddish-brown <i>Hydrovatus clypealis</i> (RDB: Rare) confined to the coast of southern England. Over fifteen species of dragonfly (Odonata) have been recorded including the nationally scarce species, hairy dragonfly <i>Brachytron pratense</i> and variable damselfly <i>Coenagrion pulchellum</i>. Survey has also revealed Britain's only known location of <i>Placobdella costata</i> (provisional RDB), a large leech ... One of Britain's largest spiders <i>Dolomedes plantarius</i> (great raft spider) (RDB: Endangered) has also been recorded. The Site is of national importance for its wintering lapwing <i>Vanellus vanellus</i> which exceed 1% of the total British population. The numbers of snipe <i>Gallinago gallinago</i> may also be of national importance ... Wintering golden plover <i>Pluvialis apricaria</i> are of local significance and in some years are of national importance. Sedge warblers <i>Acrocephalus schoenobaenus</i> and reed warblers <i>Acrocephalus scirpaceus</i> ... breed in numbers of local significance. The Site also supports about one fifth of the breeding yellow wagtails <i>Motacilla flava</i> in Sussex.</p> <ul style="list-style-type: none"> • Pevensey Levels Ramsar: Pevensey Levels is one of the largest and least-fragmented lowland wet grassland systems in southeast England. The low-lying grazing meadows are intersected by a complex system of ditches which support a variety of important wetland communities, including nationally rare and scarce aquatic plants and invertebrates. The Site also supports a notable assemblage of breeding and wintering wildfowl. A small area of shingle and intertidal muds and sands is included within the Site. The Site supports an outstanding assemblage of wetland plants and invertebrates including many British Red Data Book species. The Site supports 68% of vascular plant species in Great Britain that can be described as aquatic. It is probably the best Site in Britain for freshwater molluscs, one of the five best sites for aquatic beetles Coleoptera and supports an outstanding assemblage of dragonflies Odonata. 			
<p>Desk Study: BAP Priority Habitats within 1km</p>	<p>Distance from Site</p>		
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Pickens Wood • Orchard BAP priority habitat – un-named • Coastal & floodplain grazing marsh BAP priority habitat – un-named • Part of the Site is described as “Priority Habitat Inventory - No main habitat but additional habitat exists” 	<ul style="list-style-type: none"> • 640m West • 110m East • Partially within Site and adjacent South • Within Site, north Rattle Rd 		
<p>Desk Study: Protected and Notable Species within 1km</p>			
<table border="0"> <tr> <td data-bbox="183 1709 758 1899"> <p>Protected Species <i>Anguis fragilis</i> <i>Pipistrellus pipistrellus</i> <i>Pipistrellus</i> sp. <i>Triturus cristatus</i> <i>Zootoca vivipara</i></p> </td> <td data-bbox="758 1709 1407 1899"> <p>Slow worm Common Pipistrelle (45 kHz) bat Pipistrelle sp. bat Great crested newt Common lizard</p> </td> </tr> </table>		<p>Protected Species <i>Anguis fragilis</i> <i>Pipistrellus pipistrellus</i> <i>Pipistrellus</i> sp. <i>Triturus cristatus</i> <i>Zootoca vivipara</i></p>	<p>Slow worm Common Pipistrelle (45 kHz) bat Pipistrelle sp. bat Great crested newt Common lizard</p>
<p>Protected Species <i>Anguis fragilis</i> <i>Pipistrellus pipistrellus</i> <i>Pipistrellus</i> sp. <i>Triturus cristatus</i> <i>Zootoca vivipara</i></p>	<p>Slow worm Common Pipistrelle (45 kHz) bat Pipistrelle sp. bat Great crested newt Common lizard</p>		

Sussex BAP Species

<i>Erinaceus europaeus</i>	European hedgehog
----------------------------	-------------------

Sussex Rare Species Inventory

<i>Argiope bruennichi</i>	Wasp spider
<i>Hydrocharis morsus-ranae</i>	Frogbit
<i>Potamogeton acutifolius</i>	Sharp-leaved pondweed

Notable Bird Inventory

<i>Alcedo atthis</i>	Kingfisher
<i>Ardea cinerea</i>	Grey heron
<i>Cettia cetti</i>	Cetti's warbler
<i>Falco subbuteo</i>	Hobby
<i>Gallinago gallinago</i>	Snipe
<i>Milvus milvus</i>	Red kite
<i>Tringa totanus</i>	Redshank
<i>Tyto alba</i>	Barn owl
<i>Vanellus vanellus</i>	Lapwing

Invasive Alien Species Inventory

<i>Centranthus ruber</i>	Red valerian
<i>Cotoneaster horizontalis</i>	Wall cotoneaster
<i>Crassula helmsii</i>	New Zealand pigmyweed
<i>Crocsmia pottsii</i> x <i>aurea</i> = <i>C. x crocosmiiflora</i>	Montbretia
<i>Elodea nuttallii</i>	Nuttall's Water-Weed
<i>Hyacinthoides hispanica</i>	Spanish Bluebell
<i>Hydrocotyle ranunculoides</i>	Floating pennywort
<i>Rhododendron ponticum</i>	Rhododendron

Field Survey: Habitat Description (See Figure 23/712)

Poor semi-improved grassland – The grassland in the two northern fields is species poor. In both fields Yorkshire fog *Holcus lanatus* and common bent *Agrostis capillaris* are the most abundant grasses, although perennial rye-grass *Lolium perenne* is frequent in the north western field and false oat-grass *Arrhenatherum elatius* is locally frequent in the north western. Other grasses include cocksfoot *Dactylis glomerata* and small cat's-tail *Phleum bertolonii*. The south eastern field is a little more rich than the north western, with frequent common sorrel *Rumex acetosa*, meadow buttercup *Ranunculus repens* and ribwort plantain *Plantago lanceolata*, as well as bird's foot trefoil/greater bird's foot trefoil *Lotus corniculatus/pedunculatus*, white and red clover *Trifolium repens* and *pratense*, smooth tare *Vicia tetrasperma*, cinquefoil *Potentilla reptans*, self-heal *Prunella vulgaris*, ribwort plantain *Plantago lanceolata*, broadleaved dock *Rumex obtusifolius*, hogweed *Heracleum sphodyllium*, yarrow *Achillea millefolium* and cat's ear *Hypochaeris radicata*. This field has been cut and the arisings removed. Forbs in the north western field comprised mostly of white clover, creeping buttercup *Ranunculus repens* and creeping thistle *Cirsium arvense*. This field appears to have been used as pasture and had a short to moderately tall sward.

The field to the south of Rattle Road has been cut but the arisings left in place. The field was not walked over so species composition could not be assessed.

Marshy grassland – This comprises a narrow strip on the southern edge of the north western field. It includes frequent/abundant soft rush *Juncus effusus*, floating Sweet-grass *Glyceria fluitans*, greater bird's foot trefoil, fools water-cress *Apium nodiflorum*, water pepper *Persicaria hydropiper* and water figwort *Scrophularia auriculata* as well as hard, jointed and toad rush *Juncus inflexus, articulatus* and *bufonis*, woody nighshade *Solanum dulcamara*, water mint menthe aquatic, redshank *Persicaria maculosa*, silverweed, hemp agrimony *Eupatoria cannabina*, gyswort *Lycopus europaeus*, marsh thistle *Cirsium palustre* and fleabane *Pulicaria dysentrica*.

Tall ruderal & ephemeral/short perennial – Patchily present along boundaries but there are also stands of nettle, creeping thistle, burdock *Arctium* sp. and bramble around buildings in the north western field.

This grades into ephemeral/short perennial, including silverweed *Potentilla anserina*, swinecress *Lepidium coronopus*, red goosefoot *Chenopodium rubrum* and field speedwell *Veronica persica* in more trampled areas.

Trees and scrub – There is an area of dense scrub or scrubby woodland, including ash, hawthorn and willows with a field layer of nettle, bramble and ivy, on the northern edge of the field to the south of Rattle Road. This field is bordered by trees and scrub, on the western side including oak, hawthorn and willows, but also much bramble. On the southern and eastern boundaries it comprises largely of mature white and crack willows. There is a stand of mature trees, mostly ash and horse chestnut, in the south western corner of the north western field.

Hedges – The two fields to the north of Rattle Road are enclosed by hedges. These are mostly species rich, with willows, hawthorn, blackthorn, field maple and hazel, but also mature trees, especially ash and oak. However, those on the northern and western boundaries of the north western field are very gappy and the hedges on the western and southern boundaries of the south eastern field are species poor and dominated by hawthorn.

Ditch – Although not surveyed, from OS maps it appears there may be a ditch or watercourse on the southern boundary of the field south of Rattle Road.

Buildings – There is a group of barns and shed in the north western 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 during the survey.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. However, OS maps indicate the presence of a pond or ponds to the west of the southern edge of the field south of Rattle Road, immediately adjacent to and approximately 230m from the Site, although there may be ponds among residential areas closer to the Site. Hedges, scrub, tall ruderal and marshy grassland, for example, represent suitable terrestrial habitat for great crested newts within the Site.

Reptiles – Some potential along boundaries.

Breeding birds – In trees, hedges and scrub.

Wintering birds – Given the size of the fields and their location close to significant areas of grazing marsh and other wetland habitats, including Pevensey Levels SSSI, SAC and Ramsar site, there is potential for the Site to be used by wintering birds such as waders (lapwing, curlew etc.).

Bats – Trees and mature trees in particular, with features such as cracks and cavities, for example including many within the boundary vegetation and hedgerows have potential to be used as roosts. Activity, including foraging and commuting, is likely throughout the Site but especially along its boundaries.

Dormice – Limited potential in hedges.

Water voles – The ditch or watercourse on the southern boundary of the field south of Rattle Road may represent suitable habitat for water voles.

Badgers – Potential for setts along boundaries and within the scrub and hedgerows, but with or without setts badgers may also use any or all 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 west of the Site.

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

Breeding birds – (April – June) especially woodland, plantations, and hedge.

Wintering birds – (September – March) of whole site.

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.
Water vole – (April/May and September) of the ditch or watercourse on the southern boundary of the field south of Rattle Road.
Badgers – (Year round but Spring / Autumn optimal) of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Low to Moderate value – mostly species-poor grassland but the marshy grassland and hedges have value. The habitats and features have 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 and other boundary vegetation, including the 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.
- 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.
- Buffer the hedges and other boundary vegetation, including the mature trees and their features.
- If great crested newts are found in the ponds to the west of the Site appropriate measures will need to be put in place to prevent harm to them during their terrestrial phase, for example herp fencing the development Site and possibly trapping and translocation to a suitable receptor site.
- 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).
- In light of the potential presence of breeding birds, if possible cutting back or removal of woody vegetation, including trees, shrubs/scrub and hedgerows, as well as disturbance of areas of arable, grassland or ruderal, should not be carried out during the bird breeding season, which is March-August inclusive. If this is not possible then the relevant vegetation/areas should be inspected by a suitably qualified ecologist for the presence of breeding birds prior to the commencement of works.
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery

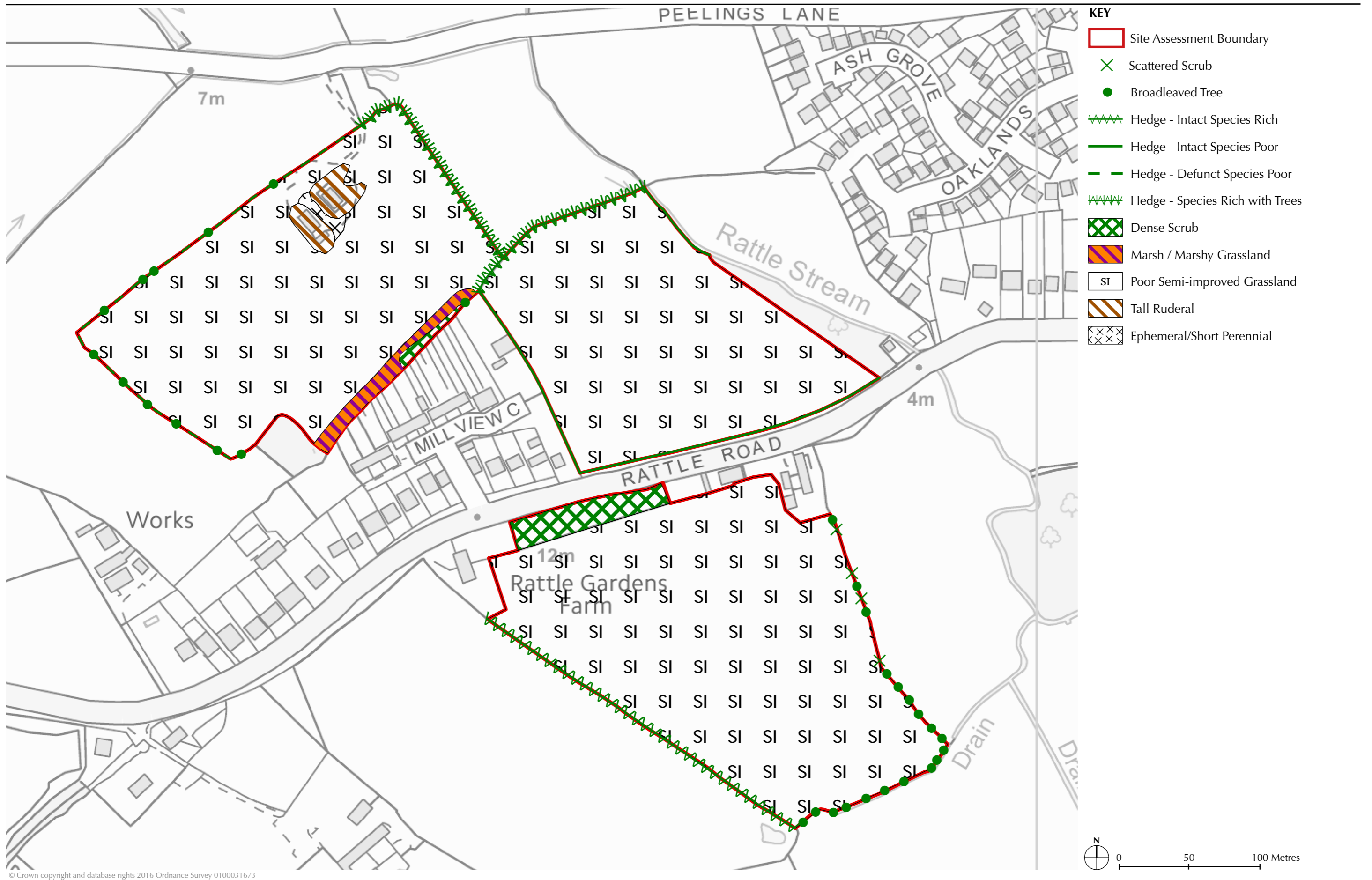
of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed 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 (as noted above).
- Development should seek to avoid any prime foraging grounds identified through the badger survey, avoid severance to commuting corridors within territories and avoid any construction works within at least 30m of the nearest badger setts.

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 and boundary vegetation.
- Strengthen boundary vegetation by planting appropriate native species to gap-up existing hedges, as well as creating new ones.
- Habitat creation, ideally located adjacent to retained or adjoining habitat 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.



© Crown copyright and database rights 2016 Ordnance Survey 0100031673