

AN ECOLOGICAL SURVEY
of
**LAND AT STATION ROAD,
STURMINSTER MARSHALL**
[STMR02]

for
Dorset Council

October 2021

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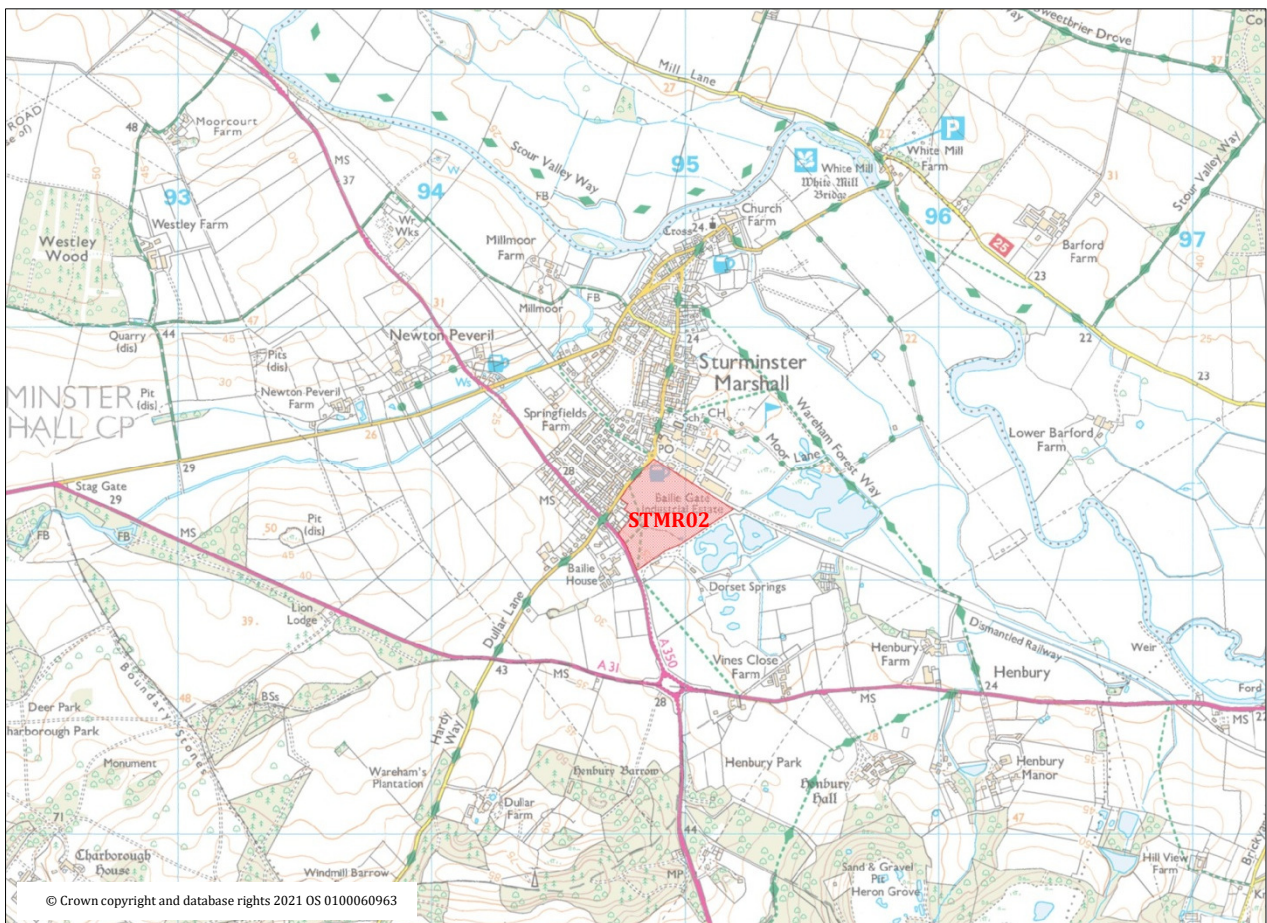
SUMMARY

- This report forms part of a suite of ecological surveys commissioned by Dorset Council's Strategic Planning and Natural Environment Teams. Together the survey reports form part of the evidence base for the Local Plan, containing extended Phase 1 survey information for the potential allocated sites, highlighting important habitats and the likelihood of protected species being present.
- The larger field is regularly cultivated and had a cereal crop this year and is considered to currently of **low ecological interest**.
- The smaller southern field is permanent pasture and has probably been partially improved in the past and does not support a great diversity of herbs. There a few species characteristic of older grasslands present and it is judged to be of **moderate ecological interest**.
- The wide hedgerow between the fields has a good range of woody species plus a ditch and several mature trees and qualifies as hedgerows **Priority Habitat** and Section 41 (NERC Act 2006) habitat of Principal Importance.

1.0 INTRODUCTION

This report forms part of a suite of ecological surveys commissioned by Dorset Council's Strategic Planning and Natural Environment Teams. Together the survey reports form part of the evidence base for the Local Plan, containing extended Phase 1 survey information for the potential allocated sites, highlighting important habitats and the likelihood of protected species being present. The surveys have been carried out by Dorset Environmental Records Centre who are working with Dorset Council to ensure that ecological data for the Local Plan process is as up-to-date as possible.

MAP 1. Location of site



2.0 METHODS

The survey was undertaken on the 7th September 2021 in fine weather. The area was walked and a plant species list compiled with frequencies assigned to each species using the DAFOR scale¹. Particular attention was paid to the presence of any Section 41 or Red Listed species, and any that are on the Dorset Environmental Records Centre (DERC) lists of Dorset Notable species (DERC, 2012). Habitats present were assessed for their potential to support protected species (see Section 6.1), and visible signs for Badger such as setts, latrines and paths were looked for. Each habitat type present and any species or features of particular note were described using target notes (see Section 5.2.2).

A habitat map was produced in the field by drawing boundaries of the different vegetation types over a print out of the latest aerial photograph. This was then digitized using DERCs Integrated Habitat System (IHS) mapping process.

The sites are assessed for their ecological interest at the time of the survey (see Section 6.0). Those sites assessed as being of **Low Ecological Interest** have very little interest and are generally improved grasslands or arable fields. Those of **Moderate Ecological Interest** may support some interest such as one or more Dorset Notable plant species, but do not qualify as a Site of Nature Conservation Interest (SNCI). Those of **High Ecological Interest** are of SNCI quality and are therefore an important wildlife site within a county context.

Nomenclature for plants follows Stace (2019).

¹The DAFOR scale records species according their abundance as follows:

D = Dominant; **A** = Abundant; **F** = Frequent; **O** = Occasional; **R** = Rare; **L** = Local (e.g. **LF** = Locally Frequent)

3.0 LEGISLATION & POLICY

3.1 LEGISLATION

The following legislation may be of relevance to the proposed works. Full details of statutory obligations with respect to biodiversity and the planning system can be found in DCLG Circular 06/2005.

- **The Conservation of Habitats and Species (Amendments) (EU Exit) Regulations 2019:**

This transposes the EU Habitats Directive (Council Directive 92/43/EEC) into domestic law and ensures that the habitat and species protection and standards will continue to apply upon the UK's exit from the EU. The Regulations provide protection for a number of species including:

- All species of bat
- Dormouse (*Muscardinus avellanarius*)
- Great crested newt (*Triturus cristatus*).

This legislation makes it an offence to deliberately capture, kill or injure individuals of these species listed on Schedule 2 and damage or destroy their breeding site or place of shelter. It is also illegal to deliberately disturb these species in such a way as to be likely to significantly affect: (i) the ability of any significant group of the species to survive, breed or rear or nurture their young; or (ii) the local distribution or abundance of the species.

This legal protection means that where development has the potential to impact on bats, or other species of national interest, the results of a protected species survey must be submitted with a planning application.

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are also protected under this legislation. These are a network of sites designated for supporting habitats or species of high nature conservation importance in the European context. Any activity that has a detrimental effect on these European sites³ is made an offence under the Regulations. Where a development is likely to have a significant impact on a European site, the Regulations require a rigorous assessment of the impacts, known as an Appropriate Assessment.

- **The Wildlife and Countryside Act 1981 (and amendments):**

Protected fauna and flora are listed under Schedules 1, 5 & 8 of the Act. Species likely to be of relevance include:

- All species of **bat**. It is an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost or to intentionally or recklessly obstruct access to a bat roost
- All species of **British reptile** (in particular grass snake (*Natrix helvetica*), common lizard (*Zootoca vivipara*), adder (*Vipera berus*) and slow-worm (*Anguis fragilis*)). It is illegal to kill or injure these species
- **Great crested newt**. It is illegal to obstruct access to any structure or place which great crested newts use for shelter or protection or to disturb any great crested newt while it is using such a place.

This Act also makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built). In addition, it is an offence to disturb any nesting bird listed on Schedule 1 or their young.

Schedule 9 of the Act lists those species for which it is an offence to plant or cause their spread. Species listed under Schedule 9 that are most likely to be encountered are Japanese knotweed (*Fallopia japonica*) and giant hogweed (*Heracleum mantegazzianum*).

Sites of Special Scientific Interest (SSSIs) are also protected under the Wildlife and Countryside Act 1981. These are a network of sites identified as being of national nature conservation importance and hence afforded legal protection.

National Nature Reserves (NNRs) are also protected under the Act (section 35 (1)) and established under the National Parks and Access to the Countryside Act 1949. These are nature reserves which are considered to be of national importance by the relevant statutory bodies i.e. Natural England, Natural resource Wales.

- **Natural Environment and Rural Communities Act (NERC) 2006:**

This Act enforces a duty on the planning authority and local council to conserve biodiversity (section 40). Additionally, section 41 encourages the local councils to be aware of the species and habitats of 'principal importance' and to act accordingly to protect and manage these habitats and species.

- **The Countryside and Rights of Way Act 2000:**

This Act strengthens nature conservation and wildlife protection through a number of mechanisms. It places a duty on Government Ministers and Departments to conserve biological diversity, provides police with stronger powers relating to wildlife crimes, and improves protection and management of SSSIs.

- **The Protection of Badgers Act 1992:**

This Act makes it an offence to wilfully take, injure or kill a badger (*Meles meles*); cruelly mistreat a badger; interfere with badger setts, sell or possess a live badger; mark or ring a badger. A licence is required for work affecting badgers and their setts.

- **Wild Mammals (Protection) Act 1996:**

This Act provides protection for all wild animals from intentional acts of cruelty.

- **Hedgerow Regulations 1997:**

These Regulations establish a set of criteria for assessing the importance of hedgerows. Where a hedgerow is deemed to be 'important' its removal is prohibited without consent from the local Planning Authority.

3.2 POLICY

The following policy is of relevance to this report:

- **National Planning Policy Framework (NPPF):**

This sets out the Government's vision for biodiversity in England with the broad aim that planning, construction, development and regeneration should maintain and enhance, restore or add to biodiversity and geological conservation interests. NPPF (2018) includes sections on legally protected species and sites (see Section 2.1).

- **Local Sites (including Sites of Nature Conservation Interest (SNCI), Local Nature Reserves (LNR), and Biological Notification Sites (BNSs)/County Wildlife Sites (CWSs)):**

These are a network of sites designated for their nature conservation importance in a local context. Although they are not afforded legal protection they contribute towards local and national biodiversity.

- **Natural England Protected Species Standing Advice:**

The standing advice is used by local authorities as a fall-back position when in pre-application consultation or during the determination period to define habitat and species survey efforts and mitigation proposals.

4.0 EXISTING DATA

The following summary is based on the desk study carried out by DERC for Dorset Council covering the Local Plan Emerging Site Allocations (DERC 2020). The species records are based on post-2010 data.

4.1 PROTECTED SPECIES

Species	Status	Distance from site
Badger	WCA	Within 1-km radius
Bats	EPS; WCA	Within 1-km radius
Dormouse	S41; EPS; WCA	-
Otter	EPS; WCA	-
Water Vole	S41; WCA	-
Brown Hare	S41	-
Hedgehog	S41	-
Great Crested Newt	EPS; S41	-
Reptiles	S41; WCA	-

4.2 PROTECTED HABITATS

Lowland Mixed Deciduous Woodland – Section 41; UK Priority Habitat 415 metres to the east

4.3 PROTECTED SITES

Corfe Mullen Meadows Site of Special Scientific Interest (SSSI) 3.5-km to the southeast

Poor Common Site of Special Scientific Interest (SSSI) 4-km to the southeast

Dorset Heaths Special Area of Conservation (SAC) 4-km to the southeast

Dorset Heathlands Special Protection Area (SPA) 4.6-km to the east-southeast

5.0 RESULTS

5.1 SITE DESCRIPTION

The site lies on the southeast edge of Sturminster Marshall with Station to the west, Bailie Gate Industrial Estate to the north and the A350 Blandford Road to the south. The land is flat and overlies River Terrace deposits over chalk resulting in fertile free-draining soils. The larger northern field is used for arable and the smaller southern one is grassland which had been cut prior to the survey.

5.2 HABITAT DESCRIPTION

Arable land

The larger northern field had a cereal crop which had been harvested at the time of the survey. The narrow margins supported a range of ruderal plants and species of enriched soils such as, Pale Persicaria *Persicaria lapathifolia*, Knotgrass *Polygonum aviculare*, Scarlet Pimpernel *Anagallis arvensis*, Common Speedwell *Veronica persica*, Scentless Mayweed *Tripleurospermum inodorum* and Annual Meadow-grass *Poa annua*.

Grassland

The smaller southern field is grassland which had been cut before the survey but was ungrazed at the time of the survey. The dense sward comprises Yorkshire Fog *Holcus lanatus* and Common Bent *Agrostis capillaris*, with smaller quantities of Perennial Rye-grass *Lolium perenne*, Cock's-foot *Dactylis glomerata*, Sweet Vernal Grass *Anthoxanthum odoratum* and Red Fescue *Festuca rubra*, with False Oat-grass *Arrhenatherum elatius* at the margins. Herbs are not particularly diverse and most are only occasional in the dense grassy sward. Meadow Buttercup *Ranunculus acris*, Creeping Buttercup *Ranunculus repens* and Common Sorrel *Rumex acetosa* are the most prominent species with more scattered Germander Speedwell *Veronica chamaedrys*, Ribwort Plantain *Plantago lanceolata* and Dandelion *Taraxacum officinale* agg., plus a few plants of Meadow Vetchling *Lathyrus pratensis* and Bird's-foot-trefoil *Lotus corniculatus*.

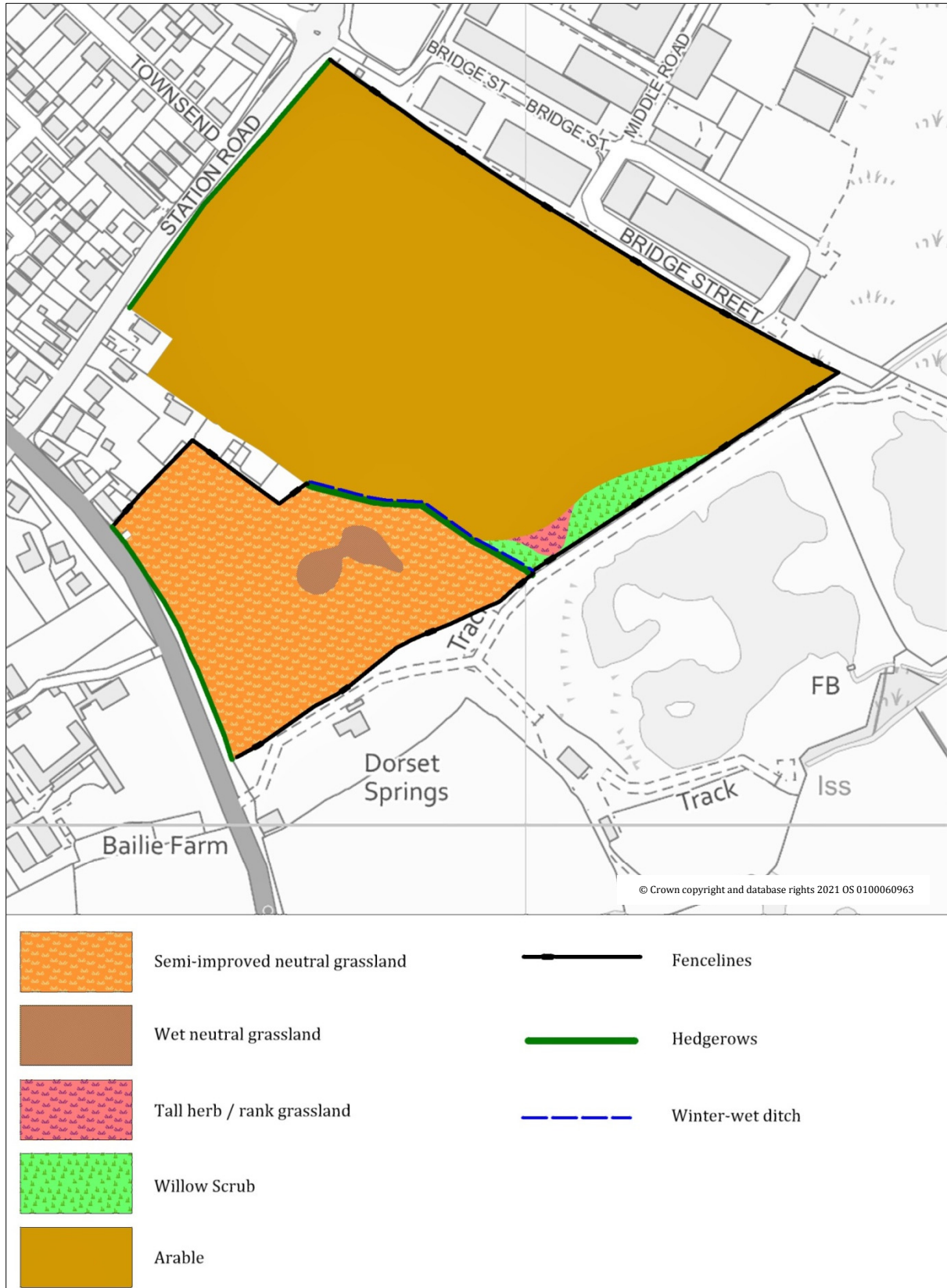
In one there is a shallow hollow which appears to be flooded in the winter. This has abundant Creeping Bent *Agrostis stolonifera*, Hairy Sedge *Carex hirta* and Silverweed *Potentilla anserina*, with Sharp-flowered Rush *Juncus acutiflorus*, Floating Sweet-grass *Glyceria fluitans* and a few clumps of Meadowsweet *Filipendula ulmaria*.

Hedgerows & Scrub

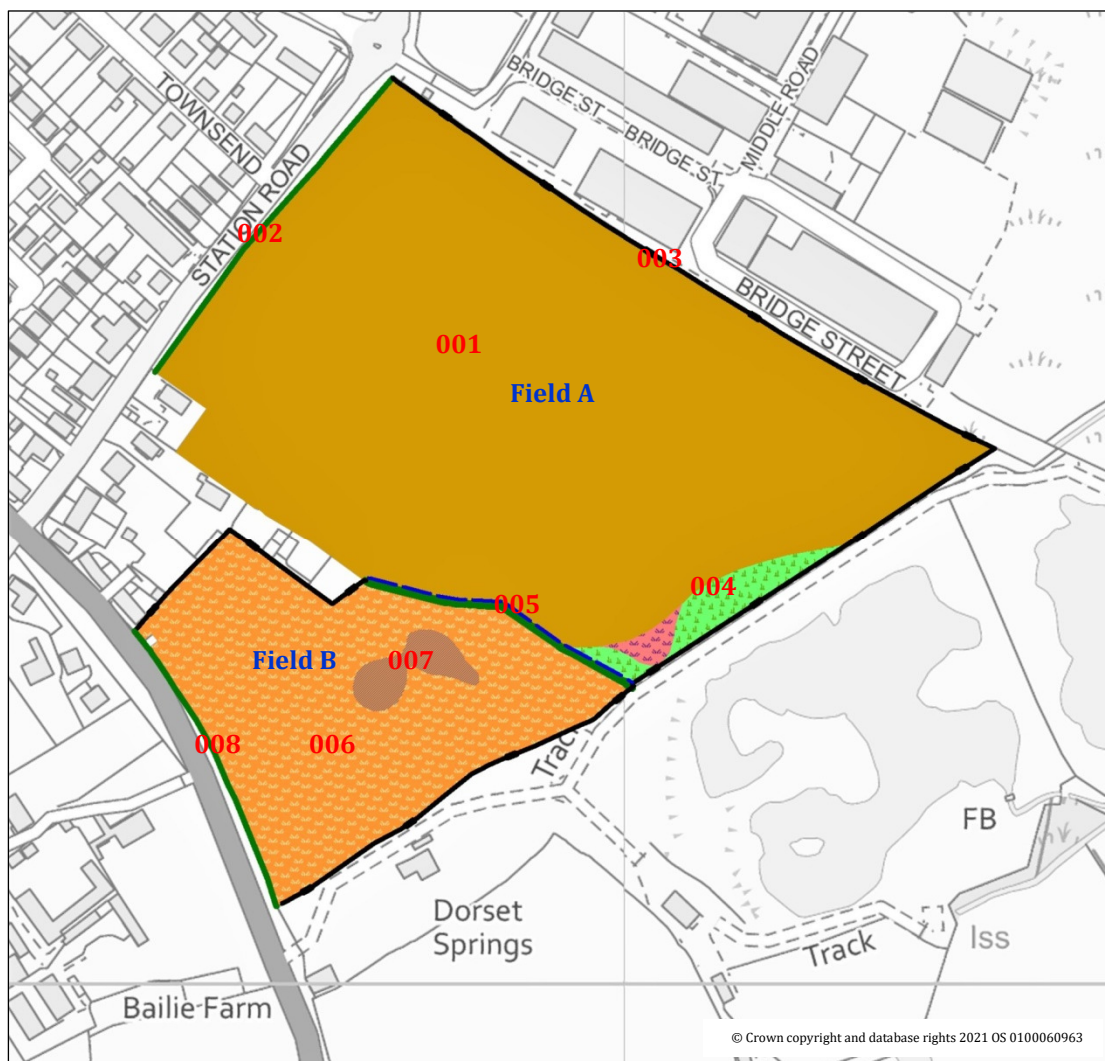
There are three main hedgerows on the site, two of which are relatively recent being planted, one when the road were widened along Station Road, and the other along the A350 Blandford Road. These are dominated by Hawthorn *Crataegus monogyna*, with scattered Ash *Fraxinus excelsior*, Elder *Sambucus nigra* and Dog Rose *Rosa canina*.

The oldest hedge is that between the two fields, which is now open grown and has a ditch running through it which widens out to a pond-like area in the east. The ditch was dry at the time of the survey. Grey Willow *Salix cinerea* is the most abundant woody species with scattered Blackthorn *Prunus spinosa*, Hawthorn and Dogwood *Cornus sanguinea*, plus rare Hazel *Corylus avellana* and Holly *Ilex aquifolium*. There are several mature trees, Ash *Fraxinus excelsior* and Pedunculate Oak *Quercus robur*, these have some characteristics of veteran trees such as holes, splits and dead attached wood. The very shaded ground flora has few species with a lot of bare ground, especially those areas flooded in the winter. Ivy *Hedera helix* is most abundant with Rough Meadow-grass *Poa trivialis*, a few scattered plants of Wood Dock *Rumex sanguineus*, Creeping Buttercup *Ranunculus repens* and Red Campion *Silene dioica*. On the northern side of the hedge bordering the arable field the hedge margins has species typical of nutrient-rich ground such as Hogweed *Heracleum sphondylium*, Stinging Nettle *Urtica dioica*, Cleavers *Galium aparine* and False Oat-grass *Arrhenatherum elatius*. On the south side these species are less frequent, and others are present including Western Polypody *Polypodium interjectum*, Greater Stitchwort *Stellaria holostea*, Hedge Woundwort *Stachys sylvatica* and False Brome *Brachypodium sylvaticum*.

5.2.1 Habitat map



5.2.2 Target notes



No.	Grid Ref	Target Note
001	SY9494 9931	Field A. An arable field, a cereal crop harvested at the time of the survey. The field margins have a few widespread arable plants such as Common Speedwell, Pale Persicaria, Scentless Mayweed, Scarlet Pimpernel and Annual Meadow-grass.
002	SY9481 9940	Field A. Road hedge of fairly recent origin when Station Road was widened. Hawthorn is dominant with scattered Dog Rose, and rare Ash and Pedunculate Oak. The margins have abundant Bramble with Stinging Nettle, Cleavers and Cow Parsley.
003	SY9503 9937	Field A. Northern boundary. A narrow band of rank grassland with abundant False Oat-grass and Cock's-foot with patchy Bramble plus Hogweed and Cow Parsley. There are scattered trees and shrubs, mainly on the Baillie Gate Industrial Estate side of the fence.

No.	Grid Ref	Target Note
004	SY9505 9920	Field A. Willow scrub developed on seasonally wet area on eastern boundary with very little ground flora and it is probably flooded in the winter. Common Fleabane, Hemlock Water-dropwort, Water Pepper and Marsh Cudweed are present on the field margins.
005	SY9490 9920	Thick hedgerow between Fields A and B with a winter-wet ditch running along the northern side and widening to a pond-like area in the east. Grey Willow is the most abundant woody species with scattered Blackthorn, Hawthorn and Dogwood, plus rare Hazel and Holly, plus several mature Ash and Pedunculate Oak which have features of veteran trees such as holes and splits. The shaded ground layer is dominated by Ivy with few other species apart from a few plants of Red Campion, Wood Dock and Cuckoo Pint.
006	SY9483 9913	Field B. Permanent pasture, semi-improved Yorkshire Fog and Common Bent, with smaller quantities of Perennial Rye-grass, Cock's-foot, Sweet Vernal Grass and Red Fescue. Herbs are not particularly diverse and most are only occasional in the dense grassy sward. Meadow Buttercup, Creeping Buttercup and Common Sorrel are most frequent with scattered Germander Speedwell, Ribwort Plantain and Dandelion. A few plants of Bird's-foot-trefoil and Meadow Vetchling were also noted.
007	SY9487 9916	Field B. Seasonally wet area with abundant Creeping Bent, Hairy Sedge and Silverweed, plus Sharp-flowered Rush, Floating Sweet-grass and a few clumps of Meadowsweet.
008	SY9478 9910	Field B. Roadside hedge of fairly recent origin and dominated by Hawthorn with rare Elder and Ash. The margin has frequent Bracken, Bramble and Nettle.

6.0 ASSESSMENT

The larger field is regularly cultivated and had a cereal crop this year and is considered to currently be of **low ecological interest**. The smaller southern field is permanent pasture and has probably been partially improved in the past and does not support a great diversity of herbs. There are a few species characteristic of older grasslands present including Germander Speedwell *Veronica chamaedrys*, Meadow Vetchling *Lathyrus pratensis* and Bird's-foot-trefoil *Lotus corniculatus*. Although these are only present in small quantity, this field is judged to be of **moderate ecological interest**. The wide hedgerow between the fields has a good range of woody species plus a ditch and several mature trees and qualifies as hedgerows **Priority Habitat** and Section 41 (NERC Act 2006) habitat of Principal Importance.

6.1 PROTECTED SPECIES ASSESSMENT

Species	Status	Habitat Potential	Future surveys
Badger	WCA	No setts or latrines seen, several mammal tracks seen through the main hedgerow.	
Bats	EPS; WCA	The thick hedge between Fields A & B is tall with mature shrubs and several mature trees. This forms good potential foraging habitat and flight-lines. The trees have holes, splits and crevices that could support roosting bats.	Survey required
Dormouse	S41; EPS; WCA	The mature hedge could potentially support this species.	
Otter	EPS; WCA	No permanent water on the site.	
Water Vole	S41; WCA	No permanent water on the site.	
Brown Hare	S41	Suitable habitat present.	
Hedgehog	S41	Suitable habitat present in the mature hedgerow and around the margins.	
Great Crested Newt	EPS; S41	No permanent water on the site.	
Reptiles	S41; WCA	Suitable habitat is present for Slow Worm along south-facing margins, especially of the mature hedge.	

REFERENCES

DERC 2012 *Dorset Notable Species Lists*. Dorset Environmental Records Centre, Dorchester

DERC 2020 *Local Plan Emerging Site Allocations: Ecological Data*. [Unpublished report for Dorset Council]

Stace, C.A. 2019 *New Flora of the British Isles* (4th Ed). C & M Floristics, Suffolk.

APPENDIX I: Plant species recorded 7th September 2021

Species	Common Name	Frequency¹
<i>Acer campestre</i>	Field Maple	Pl ²
<i>Acer pseudoplatanus</i>	Sycamore	Pl
<i>Agrostis capillaris</i>	Common Bent	O-LA
<i>Agrostis stolonifera</i>	Creeping Bent	O-LA
<i>Anagallis arvensis</i>	Scarlet Pimpernel	R
<i>Anisantha sterilis</i>	Sterile Brome	R-O
<i>Arrhenatherum elatius</i>	False Oat-grass	O-LA
<i>Arum maculatum</i>	Cuckoo Pint	R
<i>Brachypodium sylvaticum</i>	False Brome	R
<i>Calystegia sepium</i>	Hedge Bindweed	O
<i>Capsella bursa-pastoris</i>	Shepherd's Purse	R
<i>Carex hirta</i>	Hairy Sedge	R-LF
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Cirsium vulgare</i>	Spear Thistle	R
<i>Cornus sanguinea</i>	Dogwood	R
<i>Corylus avellana</i>	Hazel	R
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Dactylis glomerata</i>	Cock's-foot	O-LF
<i>Elytrigia repens</i>	Common Couch	R-O
<i>Equisetum arvense</i>	Field Horsetail	R
<i>Festuca rubra</i>	Red Fescue	O-LF
<i>Filipendula ulmaria</i>	Meadowsweet	R
<i>Fraxinus excelsior</i>	Ash	R
<i>Galium aparine</i>	Cleavers	O-LA
<i>Gnaphalium uliginosum</i>	Marsh Cudweed	R
<i>Glyceria fluitans</i>	Floating Sweet-grass	R
<i>Hedera helix</i>	Ivy	O-LA
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Holcus lanatus</i>	Yorkshire-fog	LA
<i>Hypericum tetrapterum</i>	Square-stalked St John's-wort	R
<i>Ilex aquifolium</i>	Holly	R
<i>Jacobaea vulgare</i>	Ragwort	R
<i>Lathyrus pratensis</i>	Meadow Vetchling	R
<i>Lepidium didymus</i>	Lesser Swine-cress	R
<i>Lolium perenne</i>	Perennial Rye-grass	O-LF
<i>Lotus corniculatus</i>	Common Bird's-foot-trefoil	R
<i>Oenanthe crocata</i>	Hemlock Water-dropwort	R
<i>Persicaria lapathifolia</i>	Pale Persicaria	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Plantago major</i>	Greater Plantain	O-LF
<i>Poa annua</i>	Annual Meadow-grass	O-LF

Species	Common Name	Frequency ¹
<i>Poa trivialis</i>	Rough Meadow-grass	O
<i>Pteridium aquilinum</i>	Bracken	R-LF
<i>Pulicaria dysenterica</i>	Common Fleabane	R
<i>Quercus robur</i>	Pedunculate Oak	R
<i>Ranunculus acris</i>	Meadow Buttercup	O-LA
<i>Ranunculus repens</i>	Creeping Buttercup	O-LA
<i>Rosa canina</i>	Dog Rose	O
<i>Rubus fruticosus</i> agg.	Bramble	LF
<i>Rumex acetosa</i>	Common Sorrel	O-LF
<i>Rumex crispus</i>	Curled Dock	R
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Rumex sanguineus</i>	Wood Dock	R
<i>Salix caprea</i>	Goat Willow	R
<i>Salix cinerea</i>	Grey Willow	O-LA
<i>Senecio vulgaris</i>	Groundsel	O-LF
<i>Sonchus asper</i>	Prickly Sow-thistle	R
<i>Sorbus aucuparia</i>	Rowan	Pl
<i>Stachys sylvatica</i>	Hedge Woundwort	R
<i>Stellaria holostea</i>	Greater Stitchwort	R
<i>Tamus communis</i>	Black Bryony	R
<i>Veronica persica</i>	Common Field Speedwell	O-LF
<i>Viola arvensis</i>	Field Pansy	R

¹ **D** = Dominant; **A** = Abundant; **F** = Frequent; **O** = Occasional; **R** = Rare; **L** = Local (e.g. **LF** = Locally Frequent)

² Pl = Planted

APPENDIX II: Photographs



FIG 01. Field A; SY9511 9931. Looking west across Field A from the southern boundary with Baillie Gate Industrial Estate.



FIG 02. Field B; SY9484 9916, Looking east across Field B with a seasonally wet area in the foreground.



FIG 03. Field B; SY9496 9916. Northern edge looking at overgrown hedgerow with mature Oak and Ash trees.