ECOLOGICAL REPORT
TEMPORARY ACCESS
PRINCIPAL STREET
GILLINGHAM
ST:82096,25406

PHASE TWO SURVEY
Impact Assessment, Mitigation & Enhancement

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Reviewed by Dr A. King

9th September 2020

(drawing reference amended 11 March 2021)

On behalf of Dorset Council

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Summary

- Ecological Interests were assessed during 2019 - 20 along the proposed route of the eastern temporary access to the proposed Principal Street, Gillingham as part of a phase two survey following a preliminary site survey carried out in 2018. The route runs east-west off the Shaftesbury Road, B3081 for approximately 50 metres.

- The main habitat interests identified within the proposal area were species poor priority hedgerows and ruderal vegetation following abandonment of grazing within a development area of 746m^2.

- Protected species identified were potential for nesting birds using hedgerows and scrub, and common protected reptiles using open ruderal plant communities.

- Two hedgerows totalling 26 metres in length are priority habitats within s41 of the NERC Act (2006); none qualify as important under the Hedgerow Regulations 1997.

- Habitat degradation will be required to mitigate risks to nesting birds and common reptiles.

- Restoration of species rich hedgerow and wildflower grasslands are required on completion and will enhance overall species richness.

- Mitigations and enhancements are included to maintain a functioning ecological network and increase opportunities for biodiversity in line with the National Planning Policy Framework 2019.

- Biodiversity conservation will be secured through planning conditions.

- Surveys may need to be repeated if works are delayed more than 2 years from the date of this report.

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1. INTRODUCTION

This ecological report relates to the proposed development of land for a temporary access road to enable construction of the new Principal Street on the southern edge of Gillingham.

1.1 BACKGROUND

The proposed route of the access is off the Shaftesbury Road B3081 to the east. The temporary access will be used for the construction of Principal Street. The access will be constructed of semi-permeable material with 300mm subbase and crowned to provide "over the edge" drainage onto the adjacent soil. Part of the proposal area south of the access route will be used as storage for removed top-soil to be replaced on completion. A total of 26 linear metres of hedgerow will be removed at the west and east end of the site and all vegetation within the red line Figure 1. Once completed the entire site will be restored to semi-natural vegetation. The following drawing references show the layout.
HI1177-90-01-orig
HI1177-90-02-Orig
HI1177-90-03-Orig
HI1177-90-04-A

Previous ecological work undertaken by WYG Planning & Environmental Consultants has been reviewed; 'Chapter 7 – Ecology - Land to the south of Gillingham, Dorset - Environmental Statement, Volume 1', December 2017. A preliminary ecological survey and assessment of the proposed route of Principal Street was made in 2018 (D. Alder 2018) on behalf of Dorset County Council, now Dorset Council (DC) and included the temporary access. This was updated and revised as an ecological impact assessment in March 2020 as part of the planning application for that scheme 2/2020/0379/FUL and did not include the proposed temporary access as this is a separate scheme.

1.2 COMMISSIONING BRIEF AND SCOPE

The ecology survey was commissioned by Dr A. King Dorset County Council, Natural Environment Team on behalf of Mr P.Hannam, Project Lead at Dorset Highways Improvements, DC.

The aim of this survey was to:

1. Confirm the presence or likelihood of protected species and habitats within the area of the proposed highway shown in Figure 1.
2. To assess the sensitivity of the features identified in providing a baseline against which impacts can be evaluated.
3. The report also gives recommendations for avoidance, mitigation and compensation of protected and priority species and habitats.

The report offers interpretation of impacts resulting from development during construction and after. Consideration of the likely ecological receptors to be found at this location was made following best practice guidelines (CIEEM 2018) and considers the wider ecological network. The report may be used as part of any consultation with the local planning authority or the Environment Agency and Natural England. Details of relevant legislation can be found in the appendices. The National Planning Policy Framework (2019) sets out the guiding principles for protecting the environment including biodiversity for maintaining ecological networks through the appropriate protection, mitigation, compensation and enhancements of ecological interests.

1.3 Acknowledgements

Paul Hannam kindly provided background information and plans while Dr Annabel King produced the ecological project brief and assisted with site surveys. Bryan Edwards contributed the section on hedgerows and habitats.

2. Methods

Phase Two walk-over surveys were conducted during autumn 2019 (23rd October) and summer of 2020 (13th July 2020) over the proposed route of the temporary access. Assessment was focussed within a c50m wide search zone to include a wider zone of influence. Previous survey work was reviewed (Edwards 2019) including records obtained from Dorset Environmental Records Centre, and the results included where these remain current and relevant.

An assessment was made for the presence or likelihood of the following protected species, habitats and groups considering the following legislation:

- Nesting birds (Wildlife & Countryside Act 1981 (as amended))
- Common protected reptiles (Wildlife & Countryside Act 1981 (as amended))
- Badgers (Protection of Badgers Act 1992)
- Dormouse (Species and Habitats Regulations 2017)
- Bats (Species and Habitats Regulations 2017)
- Great Crested Newt (Species and Habitats Regulations 2017)
- Hedgerows (Hedgerow Regulations 1997 and UK Biodiversity Action Plan s41 NERC 2006)
- Protected and/or Priority Habitats of Principal Importance (UK Biodiversity Action Plan s41 NERC 2006).
- Invasive species particularly plants; schedule 9 (Wildlife & Countryside Act 1981 (as amended))

All species protected by the Species and Habitats Regulations 2017 are also protected under the Wildlife & Countryside Act 1981 (as amended).

An evaluation of the significance of each of the above receptors has been made where they were believed to have been present. This has been used to produce an impact assessment and mitigation and compensation recommendations where there may be effects.

2.1 Constraints to survey

Surveys provide a snapshot of the presence of protected or priority species although several visits over two years has given a reasonable level of understanding of the likely ecological interests here.

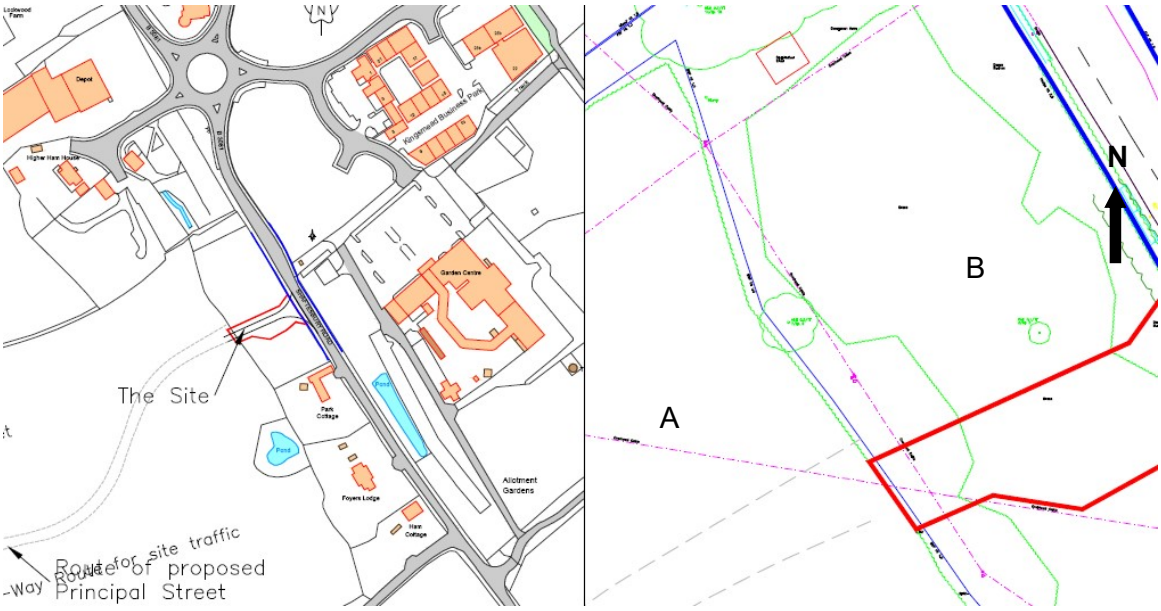


FIGURE 1 Area of survey and red line, where assessment was made in former paddock. Habitats and ecological features within 20m either side of the line of the carriageway edge have been considered. A 7m and B 19m of hedgerow will be removed and all vegetation within red line.

3. RESULTS

3.1 INTRODUCTION

This section describes the main ecological interests identified and provides an appraisal of these in relation to the proposal. A map of locations is shown in Figure 2 to aid interpretation.

3.2 DESCRIPTION OF PLANT COMMUNITIES AND HABITATS

3.2.1 SITE DESCRIPTION

The site lies on the southern side of Gillingham with the River Lodden to the north and Cole Street Lane to the south. The site is largely flat and around 70-71 metres a.s.l. and overlies the Kimmeridge Clay with significant superficial deposits of Head and Alluvial deposits along the River Lodden and its tributaries, both giving rise to better soils than that of the Kimmeridge Clay. The fields are bordered by neatly trimmed hedgerows, this layout is the same on the 2nd Edition Ordnance Survey map c. 1900. The hedges have the appearance of pre-enclosure hedges.

The area falls within the Clay Vales Landscape Character Area of North Dorset (NDDC, 2008) whose characteristics include:

- *'A broad expansive clay Vale which is tranquil and unified.'*
- *'A unique mosaic of woods, straight hedgerows and grassland fields 'dotted' with distinctive mature hedgerow Oaks'*
- *'Open views across the undulating to flat pastoral landscape to the chalk escarpment backdrop.'*
- *'A network of ditches, streams and brooks which drain into the tributaries of the Stour.'*

RESULTS 3.2.2

The survey revealed two different habitats present although only the hedgerows qualify as Priority Habitat under the UK Biodiversity Action and Habitats of Principal Importance for conservation under Section 41 of the NERC Act (2006). The remaining scrub and ruderal vegetation was dominated by invading Blackthorn *Prunus spinosa*, Bramble *Rubus fruticosus* and Bracken *Pteridium aquilinum*.

Dense scrub-Ruderal Vegetation	746 metres^2
Hedgerows	26 linear metres

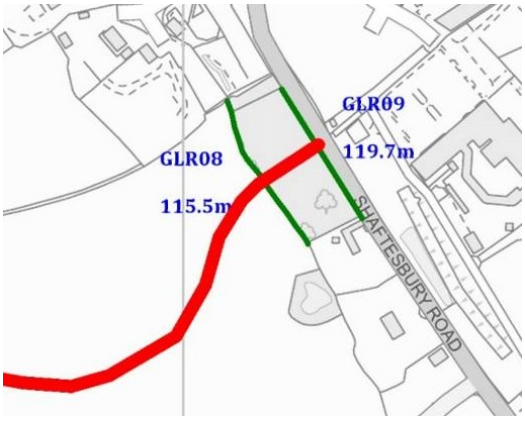
TABLE 1. SUMMARY OF HABITAT TYPES PRESENT WITHIN THE REDLINE

3.2.3 SCRUB-RUDERAL VEGETATION

The area between the two hedgerows to the east and west comprises a species poor mix dominated by Bramble, Bracken, with False-oat grass *Arrhenatherum elatius*. This was interspersed with dense patches of Nettle *Urtica dioica* with occasional Bristly Ox-tongue *Picris echioides* and Great willow herb *Epilobium hirsutum* and Creeping thistle *Cirsium arvense* as abundant with some Common Fleabane *Pulicaria dysenterica* as occasional.

3.2.4 HEDGEROWS

Two hedgerows were surveyed along the proposed route. The hedgerow pattern has not changed since the 2nd Edition Ordnance Map (1888-1913) Fig.3, so are at least 100 years and some possibly a lot older as they probably pre-date the mid-19th Century Enclosures. However, the hedge GLR09 (Fig.2) appears to have been modified as it has a highway fence and evidence of more recent planting. Blackthorn *Prunus spinosa* is the dominant woody species in the two hedges with English Elm *Ulmus procera* abundant in the east of the area in particular sometimes forming extensive clonal patches. The ground flora of the hedges reflect the agricultural nature of the site with abundant Stinging Nettle *Urtica dioica*, Ivy *Hedera helix*, Cleavers *Galium aparine* and, with Cow Parsley *Anthriscus sylvestris*, Red Campion *Silene dioica*, Ground Ivy *Glechoma hederacea*, Herb Robert *Geranium robertianum*, Cuckoo Pint *Arum maculatum* and Hart's-tongue Fern *Asplenium scolopendrium*. The hedges surveyed have between 5 and 10 woody species.



	GLR08	GLR09
Crataegus monogyna Hawthorn	O	O
Fraxinus excelsior Ash		R
Prunus spinosa Blackthorn	A	A
Rosa canina Dog Rose	O	O
Ulmus procera English Elm	A	A
Salix cinerea Grey Willow	R	
Number of woody species	**5**	**5**

FIGURE 2 LOCATION OF HEDGEROWS SURVEYED AND WOODY SPECIES IN EACH.

Hedge ID	Length	Grid Ref at either end	Assessment
GLR08	115.5m	ST8203 2545 – 8209 2536	BAP Priority
GLR09	119.7m	ST8206 2548 – 8212 2537	BAP Priority

TABLE 3 SUMMARY OF HEDGEROWS SURVEYED

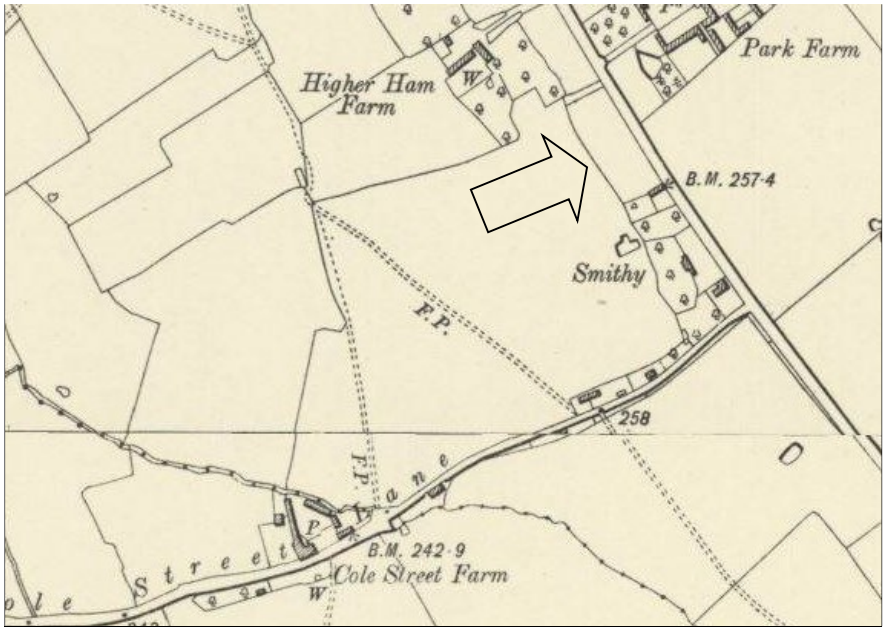


FIGURE 3 2ND EDITION ORDNANCE SURVEY SHOWING THE LAYOUT OF HEDGES (ARROWED) WHICH HAS SURVIVED INTACT.

Both hedgerows supporting at least one native woody species qualify as UK Priority Habitat.
Based on an analysis of Countryside Survey data, using the threshold of at least 80% cover of any UK native woody species, it is estimated that 84% of countryside hedgerows in GB would be included'. (Ref: http://jncc.defra.gov.uk/page-5706). Using the Hedgerow Regulations Criteria (Natural England 2019) [a] none of the hedgerows qualify as Important Hedgerows.

3.3 PROTECTED & PRIORITY SPECIES

This section considers in further detail the ecological receptors identified during the preliminary survey carried out on behalf of DC during 2018-19 and those carried out previously by WYG.

3.3.1 BADGERS

Surveys following Harris *et al.* (1989) were carried out on 26th July 2019 during dry warm conditions in daytime for a walk-over survey of activity and again on 23rd October 2019 in dry conditions which included supervised vegetation clearance for a sett search in a dense patch of scrub. There was evidence of badgers foraging in surrounding fields during the July survey. Badgers are clearly using the pastures as important foraging sites (Kruuk & Parish 1982). No setts were found within the proposal area during vegetation clearance. A badger skull was found within the scrub alongside the cleared area. There are several records of main and annex setts from previous ecology work (Ecology Solutions Ltd PLAN ECO2: WIDER STUDY AREA -HAM FARM CONSTRAINTS setts s1 to s6). The nearest recorded Setts were found by a pond pond (P1 in Ecology solutions Ltd Plan) and was found to be inactive with no signs of current use when checked on both dates in 2019.

Badgers are clearly using the area although they do not have a sett within the zone of influence which includes a 20-metre buffer each side of the red line.

3.3.2 REPTILES

The habitat suitability of the temporary access route was assessed during the preliminary survey in September 2018 (Alder 2018) and was reappraised during June 2019. The report Reptile Presence/Likely Absence Survey produced by WYG November 2017 on behalf of the south Gillingham Consortium was reviewed again. However, during field visits in 2019 only the immediate area affected by the road corridor including the eastern access was assessed for suitable habitat. Much of the habitat within the proposed access route is overgrown and has a high proportion of ruderal plant growth some of which is suitable reptile habitat. However, in this field the route of the temporary access corridor traverses through dense bramble and blackthorn scrub which is generally unsuitable as a basking and foraging habitat for reptiles as it is shaded (Edgar *et al.* 2010).

It is therefore assumed there will be a low population of common protected reptiles along the proposed route of the temporary access route, and mitigation has been designed accordingly.

3.3.3 DORMICE

Previous surveys by WYG were reviewed during desktop study (WYG 2017) and had not identified Dormouse from any of the locations surveyed. During the current assessment of the proposed eastern access, hedgerows and dense bramble patches were systemically searched for nests and signs of activity (Bright *et al.* 2006) within the corridor of the proposed access route.

There was a previous record from DERC held for 2005 at Ham Farm but this is not within or close to the proposal area. There were no records of Dormouse from recent nest-tube surveys which included the hedgerows affected by the current proposal (WYG 2017) and there was no evidence of any nests or signs of Dormouse activity in any of the hedgerows and bramble patches affected.
Dormouse is unlikely to be present here and no further consideration for mitigation is proposed.

3.3.4 GREAT CRESTED NEWTS

Surveys were conducted during 2019-20 as part of the Principal Street application and identified a pond with a low population of Great Crested Newts which is more than 500m from the proposal. Impacts on GCN are being addressed through an approved method statement following consultation with Natural England and is not part of this application. As the eastern access is more than 500m from the pond the likelihood of harm is deemed to be low to negligible and it is unlikely there will be any likely significant effects. No further evaluation is required other than to include a watching brief during the preliminary clearance work.

3.3.5 BIRDS

The hedges will be highly suitable for nesting birds and as such they are assumed to be used during the spring-summer. Both the hedgerows will provide nesting habitat for a range of birds including open and closed nesting species. Dunnock, *Prunella modularis* and Song thrush *Turdus philomelos* were seen using the dense Blackthorn and Bramble east of hedgerow GLR08 on 12th June 2019 during a brief site visit. Both species are associated with hedgerows and scrub; Dunnock is amber listed Bird of Conservation Concern and Song thrush is a red-listed BoCC (Eaton *et al.* 2015).

3.3.6 BATS

Previous bat surveys identified thirteen species of bats along the hedges approximately 500m west of the proposed access route. There were no bat roosts identified during this survey. There will be temporary loss of 26m of hedgerows which may be important as foraging and commuting corridors for bats including several species already identified for the adjacent planning application for Principal Street.

3.4 ENVIRONMENTAL RECORDS

3.4.1 STATUTORILY DESIGNATED SITES WITHIN 5KM: Nationally Designated Sites, sites of special scientific interest (SSSI): Breach Fields SSSI, ST82/003 sits 4.2km from the site south of the A30 on the western edge of Shaftesbury, Figure 4. This is an area designated for its rich unimproved neutral grassland.

FIGURE 4 FIVE-KILOMETRE RADIUS SEARCH AREA SHOWING DESIGNATED SITES; BREACH COMMON SSSI IS LOCATED WEST OF SHAFTESBURY (GREEN OUTLINE).

3.4.2 COUNTY WILDLIFE SITES: One site ST82/012 Palemead Coppice SNCI lies to the east approximately 1km away and is ancient woodland. While Kings Court wood SNCI is approximately 2km to the north-east another ancient woodland.

None of these sites will be affected by the proposal and no further consideration is deemed necessary.

3.4.3 OTHER PROTECTED SPECIES

No other protected or priority species were identified from within the site. No invasive species were identified during this survey.

4. ASSESSMENT OF IMPACTS & MITIGATION

4.1 INTRODUCTION TO ASSESSMENT

This section addresses each of the ecological receptors identified which are potentially significant in the absence of avoidance or mitigation. These relate to the area within the red line and covers the immediate area up to 20m either side of it. Recommendations are made which inform mitigation, compensation and enhancement.

4.2 ASSESSMENT OF IMPACTS FOR VEGETATION

4.2.1 INTRODUCTION TO VEGETATION ASSESSMENT: In this section an assessment of direct and indirect effects is made and whether these will lead to temporary or residual impacts which are positive or negative to the communities affected.

4.2.2 HEDGEROWS: In the absence of avoidance, mitigation or compensation there will be impacts to the following ecological receptors:

There will be a temporary loss of species poor hedgerow where the proposed access route will break through in two locations, requiring the **removal of 26 linear metres of hedge**. Neither hedge is an important hedgerow under the 1997 Hedgerow Regulations but both are classed as habitat of principal importance under NERC 2006.

There will be fragmentation of hedgerow through breaks caused by the proposed road. This will have effects on other receptors associated with this habitat including bats. Mitigations to reduce fragmentation are necessary for those species which depend on hedgerows as well as to conserve hedgerows as important habitats within the scheme design.

Mitigation: Replacement of the hedgerow will be undertaken through replacement planting of a native species rich mixture of the following species; Hazel, *Corylus avellana*, Blackthorn *Prunus spinosus*, Hawthorn *Cratageus monogyna*, Field Maple *Acer campestre* and Spindle *Euonymus europaeus,* Dog Rose *Rosa canina*, and Grey Willow *Salix cinerea*. There will be an enhancement through the slightly increased number of species to be included in the replanted hedgerow.

Method: these are to be planted into prepared weed free soils onto a small reformed hedgebank of 0.5m height and 1m wide with a double-staggered row of 5 whips/linear metre. The bank will be made up from existing soils and likely to contain propagules of Blackthorn which readily suckers and also seed bank of the existing ground flora. All planting must be caned and protected by rabbit guards with a mulch of composted bark/woodchip to a depth of 100mm and at least 300mm around each plant.

4.2.3 SCRUB & RUDERAL VEGETATION: While there were no notable plants identified within the scrub and ruderal habitats, their loss is a consideration under the Dorset Council Biodiversity Protocol (Dorset Council 2020). **There is a temporary loss of 746m^2 of Scrub-Ruderal habitat**

Mitigation: will include reseeding using a wildflower grassland mix based around a Heritage Seeds HS4 https://www.heritageseeds.co.uk/hs4-reclaimation/
Sown at 3gms / m^2 therefore 2.3 kg of seed mix is required for this area. Species to include Bird's Foot Trefoil *Lotus corniculatus*, Red Clover *Trifolium pratense*, Ox-Eye Daisy *Leucanthemum vulgare*, Smooth Stalked Meadow Grass *Poa pratensis*, Crested Dog's Tail *Cynosurus cristatus* and Creeping bent *Agrostis stolonifera*. This will be an overall enhancement because of the increase in plant species richness which includes these in the mix.

Method- Restored soils must be prepared by treating and removing any pernicious weed species prior tom sowing which can be carried out between September-November and again March-May.

4.3 BADGERS

4.3.1 Assessment of setts: No setts were identified within the survey area of the proposed access route. If the route changes then surveys must be repeated to ensure beyond doubt that setts remain unaffected. Previous surveys identified setts outside of the proposal corridor although none were found active.

4.3.2 Mitigation: **Any trenching work during construction will need to ensure badgers do not become trapped and either secured to prevent access or allow escape using a ramp.**

4.4 REPTILES

4.4.1 ASSESSMENT: The main area of potential reptile interest does not form part of this planning application. The remaining area has low-negligible reptile potential because it is closely grazed and periodically reseeded improved grassland. There is one small area of 50 linear metres alongside the single main ditch which may support grass snake in the steep sided embankments.

4.4.2 Mitigation: The extent of suitable reptile habitat affected by the highway scheme is minimal and the risk of killing or injury is low to negligible. Mitigation based on careful vegetation removal and subsequent cutting and removal of arisings undertaken over the site to displace any eptiles present into surrounding habitat. This will take place prior to construction and will be overseen by an ecologist. Any reptiles found will be captured and removed to retained habitat north and south of the proposed access route.

4.5 BIRDS

4.5.1 ASSESSMENT: Although there were red and amber listed birds of conservation concern identified during this survey none are likely to be significantly affected by this proposal. Consideration is required in respect of avoidance of harm during work and mitigation/compensation planting for removal of nesting and foraging vegetation.

4.5.2 MITIGATION: Any removal of hedgerow or scrub should be undertaken outside of the main bird nesting season which is usually between March and August. The safest period is September to February. Otherwise a detailed survey by an ecologist will be necessary which may lead to delays if nesting evidence is found or suspected. Buffer zones of at least 10m should be in place where works

are taking place close to habitats likely to support nesting birds during the breeding season and can only be reduced following a nesting bird survey by a suitably experienced ecologist.

4.6 BATS

4.6.1 ASSESSMENT: It is assumed that bats will use the location of the proposed access route especially on the western side of the site away from the busy B3081. No potential roost sites were identified and so the main considerations for impacts in the absence of mitigation of the proposed access route to bats are;

Temporary loss of 26 linear metres of hedgerow which can lead to fragmentation where bats avoid crossing gaps when commuting and foraging.

Mitigation will be required to restore native hedgerow on completion. Please refer to hedgerow mitigation above. Enhanced habitat restoration will include creation of wildflower grassland, see above.

4.7 ENHANCEMENTS

4.7.1 In addition to the enhanced species richness resulting from native hedgerow and wildflower grassland restoration three habitat brushwood and log piles will be created. These will measure 2m diameter and 1m high and will be positioned alongside and within the redline to provide suitable refuges for any reptiles and amphibians.

5. CONCLUSION

The report concludes that, having considered the likely effects and impacts (during construction and long-term) on the ecological receptors identified, the recommendations given are appropriate and proportionate to the scale of development and follow best practice for the species and habitats identified during surveys. These are compliant with NPPF (2019) wildlife legislation and local plan policies for North Dorset.

The total area of the site is below 800m^2 which is below the 0.1ha threshold for consideration for a biodiversity Appraisal adopted by Dorset Council for developments. However, the presence of hedgerows as priority habitat under s41 Natural Environment and Rural Communities Act (2006) is a material consideration.

An Ecological Management Plan will be produced to capture the required mitigations and enhancements and to include method statements to be used as part of the project phasing plan e.g. staged vegetation clearance. The EMP will outline in detail the specifications for hedgerow planting and wildflower seeding.

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Appendices
Appendix 1 Photos of site

Photo 1 View across Field 1 with dense bracken, nettle and bramble.

Appendix 2 - Legislation
The National Planning Policy Framework sets out the requirements to consider Biodiversity in respect of development. Several species and habitats are afforded legal protection which Local Planning Authorities must consider when determining planning applications. Protected species and habitats are a material consideration under planning law. The following species and habitats are of particular relevance at this site. Similarly, habitats and species cited within the UK Biodiversity Action Plan must be considered under the Biodiversity duty placed on public bodies.[1]

Bats, Dormouse, Otter: All bats species and dormouse are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and by the EC Directive 92/43/EEC, which is enforced in the UK by the Conservation of Habitats and Species Regulations 2017 (known as the Habitats Regulations).The Wildlife and Countryside 1981 Act states that 'it is an offence to 'intentionally' or 'recklessly' damage or destroy any structure or place which a bat/dormouse uses for shelter or protection. It is also an offence to intentionally disturb these species whilst it is occupying such a structure or place and/or obstruct the access or entrance to such a place.

Birds: All birds and their active nests are protected under the wildlife and countryside act 1981 (as amended). Section 1 of this Act, makes it an offence to kill, injure or take any wild bird, and to intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built. It is also an offence to take or destroy any wild bird eggs. In addition, bird species listed under Schedule 1(3) of the Act receive extra protection. The Act states that *'it is an offence to intentionally or recklessly(4) disturb any wild bird listed in Schedule 1 while it is nest building, or at (or near) a nest containing eggs or young, or disturb the dependent young of such a bird'.*

Common protected reptiles: (slow worm *Anguis fragillis*, grass snake, *Natrix natrix*, adder, *Viperus berus* and common lizard, *Zootoca vivipara*) are protected under the Wildlife and Countryside Act 1981 (as amended). All are Biodiversity Action Plan Priority Species and as such are included within s41 of the Natural Environment and Rural Communities Act 2006.[1]

Badgers: are protected under the 1992 Badgers Act which covers the animals against killing, capture, taking and injury, and their setts from disturbance, obstruction and destruction.

Water vole: Wildlife & Countryside Act 1981 (as amended) protection against intentional killing, injury and disturbance, damage, obstruction and destruction to burrows.

Protected species surveys are to ensure that the client and relevant planning authority complies with wildlife legislation protecting species and habitats, e.g. The Wildlife & Countryside Act 1981 as amended, and the Species and Habitats Regulations 2017. If protected species are found on a site, then a licence may need to be sought, before work can take place, from the appropriate licensing authority (i.e. Natural England). A licence means that work that would otherwise be unlawful can be carried out. A licence can take several weeks to be granted so planning ahead is essential for work to proceed smoothly and good survey information is crucial in determining the size of populations of some species. In addition to licensing, the conservation of ecological interests may be achieved through planning agreements, conditions and informatives.

[1]. *'Local authorities have a Duty to have regard to the conservation of biodiversity in exercising their functions. This Duty was introduced under s40 of the Natural Environment and Rural Communities Act and came into force on 1 October 2006. The Duty affects all public authorities and aims to raise the profile and visibility of biodiversity, to clarify existing commitments with regard to biodiversity, and to make it a natural and integral part of policy and decision making. Conserving biodiversity includes restoring and enhancing species populations and habitats, as well as protecting them'* (DEFRA 2007, Min.of Housing et al 2016).

Planning Policy and Biodiversity

The National Planning Policy Framework (NPPF, 2019) sets out the Government's national planning policies on conserving and enhancing the natural environment. It is accompanied by ODPM Circular 06/2005 which explains the statutory obligations of planning authorities towards biodiversity in the planning process. The latter is due to be replaced following revised guidance to be issued by DEFRA. For Habitats & Biodiversity NPPF 2019 is clear and requires plans to, a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

NPPF (2019) states 'When determining planning applications, local planning authorities should apply the following principles: a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.'
The principles of Mitigation follow an iterative process; Avoidance, Mitigation (reducing likelihood of harm or effects, including all on-site works e.g. creation of replacement water vole habitat), Compensation (for residual loss e.g. grasslands where payments to fund targeted biodiversity work ex-situ will need to be considered adopting the Dorset Biodiversity Compensation Framework implemented by Dorset County Council.
Enhancements to achieve net gain are measures taken that are over and above any measures to mitigate and compensate for impacts. Enhancements are integral to the NPPF (2019) to meet with the requirement for net gain; 'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures'.