

ECOLOGY SCREENING REPORT

<i>HCCET reference</i>	22.0812	<i>Client reference</i>	CMS2798
<i>Site</i>	Morelands Primary School (Footpath), Waterlooville	<i>Client</i>	Hampshire Highways
<i>Written by</i>	Frances King-Smith	<i>Reviewed by</i>	Megan Owen

Introduction

This Ecology Screening Note sets out the methods, findings and conclusions of the ecological screening of a proposed footpath diversion through a recreation ground adjacent to Morelands Primary School, Waterlooville. This minor works scheme is required to create a new accessible east-west footway route to the west of the school site. This screening report has been based on the information provided to Hampshire County Council Ecology Team (HCCET) by the Client, and by the extended Phase 1 habitat survey completed at the site by the HCCET on 22 September 2022.

The scope of the proposed work is to construct a new LTN1/20 compliant pedestrian shared footway from existing footway at Copse Close travelling east to the rear of Morelands Primary School and connecting to the existing footway. A section of the existing pedestrian footway will be removed and replaced with topsoil and grass. The second existing footway will be replaced in situ with an LTN 1/20 compliant footway in order to reduce its steep gradient. Refer to Figures A1.1 and A1.2, **Appendix 1**).

This screening aims to identify potential constraints to, and opportunities for, the design of the proposed work. The site's nearby designated sites, priority habitats and Phase 1 habitats are shown in Figures A1.3, A1.4 and A1.5 of **Appendix 1**.

Methods

The proposals were reviewed, and the site was visited to establish the likely extent of impacts from the scheme at which potential ecological receptors might be affected. The initial review considered the likelihood of particular ecological receptors being present at the site or nearby. Where this confidently concluded that a particular receptor is likely absent, these were not considered further.

Geographical Information Systems (GIS) mapping was used to identify all records of protected species and habitats within a 0.5km radius of the site. Given the localised nature of the proposals and the habitat types present, this search radius was considered sufficient for assessing risk to all ecological features. In addition, records were obtained of all statutory and non-statutory designated nature conservation sites within the search radius.

A field survey of the site, following the Phase 1 Habitat Survey methodology of the Joint Nature Conservation Committee (JNCC, 2010) and the Institute of Environmental Assessment (IEA, 1995), was conducted on 22 September 2022 by HCCET Senior Ecologist Frances King-Smith BSc (Hons) CEcol MCIEEM.

Site photographs from the field survey are included at **Appendix 2**.

Information provided to HCCET by the client and gathered during the field survey was used to inform this report.

Relevant wildlife legislation is set out at **Appendix 3**.

Results

Receptor	Likely presence	Likely impact	Recommendations
<u>Statutory and non-statutory designated sites within site or within 0.5km search radius.</u>			
<i>National Site Network¹</i>	Not present.	No likely impact.	None.
<i>Sites of Special Scientific Interest (SSSI)</i>	Not present.	No likely impact.	None.
<i>Sites of Importance for Nature Conservation (SINC)</i>	Several SINC's present within 0.5km, supporting a range of important habitats, including ancient woodland, semi-improved or impoverished grasslands with a significant element of unimproved grassland, and sites which support one or more Hampshire Notable Species. These are as follows: • Purbrook Park Wood SINC (adjacent to south of site) • Portsmouth Golf Course West SINC (80m south) • Sandy Dell SINC (193m north-west) • Fort Purbrook SINC (337m south) • Fort Purbrook Paddock 1 (Havant) SINC (291m south)	Given the extremely small and localised scale of works, there is not anticipated to be any significant impact on the nearby SINC's. While Purbrook Park Wood SINC abuts the southern boundary, the footpath diversion is away from the woodland and the works are unlikely to entail significant excavations, noise, dust, duration, etc.	None.

¹ The National Site Network (NSN) is the network of statutory designated sites designated under the Conservation of Habitats and Species Regulations 2021. They include Special Areas for Conservation (SAC), Special Protection Areas (SPA), and Ramsar sites.

Receptor	Likely presence	Likely impact	Recommendations
	Portsmouth Golf Course East SINC (375m south)		
<i>Road Verges of Ecological Importance (RVEI)</i>	Not present.	No likely impact.	None.
<i>Ancient Woodland</i>	An area of ancient woodland is listed on the National Inventory of Woodland and Trees falls within Purbrook Park Wood, which is 105m south of the site at its closest point.	There are no impacts anticipated due to the small scale of works and the distance between the site and ancient woodland.	None.
<u>Vegetation</u>			
<i>Notable and Priority Habitats</i>	None present within the site but several areas of the following Priority Habitats within 0.5km: - Lowland mixed deciduous woodland - Lowland calcareous grassland - Lowland meadows The nearest is the lowland mixed deciduous woodland adjacent to the site's southern boundary. See Figure A1.4 at Appendix 1.	No likely impact as the footpath diversion is not in direct contact with the adjoining woodland boundary, and is predicted to cause very little disturbance to the closest area of Priority Habitat, or any other areas.	The central triangle of grass presents an opportunity for enhancement of the habitats on-site, which can provide biodiversity net gain and make the site more suitable for a wider range of faunal species. Enhancement can be facilitated by one of the following options: Option 1: planting of a native woodland in the triangle. This could contribute to HCC's 2050 Tree Planting Programme, which aims to plant 1,000,000 trees by

Receptor	Likely presence	Likely impact	Recommendations
			2050. Option 2: three patches of native scrub can be planted in the points of the triangle, with grassed paths between, potentially sown with a hard-wearing mix that includes some wildflowers. Option 3: the triangle could be fenced off and the ground correctly prepared for sowing with a wildflower meadow, or laying of wildflower turf. A species list can be provided by HCCET once landscaping plans develop.
<i>Notable plants</i>	No records within project site. Eight records within 0.5km; closest 70m south-west of site.	No likely impact.	None.
<i>Other flora</i>	Species identified during the field survey within the amenity grassland, which forms the majority of the site, include: Slender Speedwell, Dandelion, Perennial Ryegrass, Creeping	Limited loss of flora and loss of biodiversity at site level resulting from vegetation clearance required to create the new length of footway. There are opportunities for replacement habitat within the section of	The extent of clearance and removal of grass vegetation should be limited to the minimum necessary for the works to be conducted. All works should be kept away from the adjacent trees. Root

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	Buttercup, White Clover, Daisy, Yarrow, Mouse-ear Chickweed, Autumn Hawkbit, Ribwort Plantain, Creeping Cinquefoil, Red Clover, Broad-leaved Plantain, Self-heal, Rough and Annual Meadow-grasses, and Yorkshire Fog. Four further species were recorded at the edge of the field: Hemp Agrimony, Hedge Bedstraw, Snowberry and Dog Rose. Scattered trees in the south of the site comprise narrow-leaved ash, Siberian Elm, Silver Birch and Sycamore.	footpath being replaced, which will be earthed over and seeded.	Protection Zones should be observed where possible. Opportunities should be sought within the site for regeneration of lost flora with replacement via additional sowing of native grass and forb species such as those found within the site.
<u>Protected and notable species</u>			
<i>Bats (roosts)</i>	No records of roosting bats were returned within the 0.5km search radius. Field survey included a ground level visual assessment of trees to identify potential roost features (PRFs). Three trees on or immediately adjacent to the site were identified as having low suitability for supporting roosting bats, and these are identified as target notes 1, 2 and 3 on the Phase 1 habitat map provided at Figure A1.5, Appendix 1,	As no trees are to be felled, there should be no direct impacts on roosting bats. Works to remove the old path and construct the new path are likely to take place in daylight hours when bats are inactive and less likely to be affected by the minor works. Therefore the impacts of construction on roosting bats are likely to be low or negligible.	Given the assessment of impacts, it is recommended that a climb and inspect survey of the three trees with low bat suitability is undertaken ahead of the works to establish whether any roosts are present. A sensitive lighting strategy will need to be developed following Bat Conservation Trust guidance. This should

Receptor	Likely presence	Likely impact	Recommendations
	detailed as follows: Target note 1: Ash standard with peeling bark on one small limb, which is located quite near a lighting column (see Photo 10). Target note 2: Narrow-leaved Ash with peeling bark and a small hollow (Photos 8 and 9). Target note 3: Narrow-leaved Ash with peeling bark (Photos 8 and 10)	The operational stage of the proposal is likely to see a minor positive effect for bats, as the pathway and its lighting will be further away from the western woodland edge, therefore there should be less long-term disturbance to bats and their prey. If lighting is to be increased from existing along the route, there may be an adverse impact on roosting bats if present, for example delayed roost emergence resulting in lost foraging opportunities.	aim to use as little lighting as possible to achieve the safe lighting level required for footpath users. Lighting would ideally comprise low-level hooded bollard lights, which reduce light-spill on adjacent vegetation. However, if this is not possible, low-height, hooded luminaires should be favoured. Light bulbs should be at the warmer end of the spectrum, avoiding cold blue light, which causes more disturbance to bats and their prey.
<i>Bats (foraging and commuting)</i>	Eleven bat records returned within the 0.5km search radius, although none within the site. The records were of Common Pipistrelle, Soprano Pipistrelle and Serotine bats, mainly foraging and commuting. Two of the records were of grounded bats. Site boundary tree lines to east and south, and further treelines to north and east beyond the boundary, are	If additional new lighting is to be installed along the route, bat commuting activity and routes may be further disrupted. If lighting is replaced like-with-like on the new route, there will be a positive impact of moving the lighting away from the woodland edge.	A sensitive lighting strategy will need to be developed following Bat Conservation Trust guidance. Refer to details above. There is a good opportunity to enhance the footpath's lighting conditions for bats and other wildlife by bringing lighting height nearer to

Receptor	Likely presence	Likely impact	Recommendations
	part of an ecological network providing connections from the edge of the urban settlement with habitats at Portsdown Hill to the south. The treelines will undoubtedly provide foraging and commuting habitat for bats present within the wider landscape. However, the existing lighting on the western leg of the footpath is likely to provide disturbed foraging and commuting habitat, which may disrupt bats and their prey.		ground level and ensuring hooded lights are used.
<i>Badger</i>	No records returned within project site or 0.5km radius, but field survey confirmed presence of amenity grassland and adjacent woodland habitats that are suitable to support Badger. The field survey observed no evidence, such as tracks, well-used trails, foraging or latrine sites, indicative of Badger using site and there are no suitable areas for sett-building within the site itself. However, given the surrounding woodland, it is likely Badger will pass through the site on a regular basis for foraging and	The small scale of the works, which are away from woodland, have no likely impact on Badger.	None.

Receptor	Likely presence	Likely impact	Recommendations
	commuting purposes.		
<i>Birds</i>	No records returned within project site. Five records within 0.5km search radius, the closest being 175m north-west. The site supports a small number of scattered trees, which should not be affected by the proposals. These trees are suitable for supporting nesting birds, although they are more exposed than the optimal habitat provided by surrounding woodland. Species observed using the site during field survey included: Blackbird, Blue tit, Magpie, Robin, Woodpigeon and Carrion Crow.	While considered unlikely, it is possible that the construction phase could cause disturbance to nesting birds, if present in the scattered trees in the south of the site, and in adjacent woodland.	If possible, construction work should be completed outside the main nesting season of March to August, inclusive. If this is not possible, a nesting bird check must be conducted by an ecologist no sooner than 24 hours prior to the start of construction work. If any active nests are found to be present, a suitable buffer of approximately 5m should be instigated around the nest and this should be left undisturbed, with no noisy works to be undertaken, until the nests have naturally become no longer active, i.e., young have fledged.
<i>Hazel Dormouse</i>	Presence unlikely. No records returned within project site or 0.5km radius. The site itself does not provide suitable Hazel Dormouse habitat. However, the surrounding	No likely impact.	None.

Receptor	Likely presence	Likely impact	Recommendations
	woodland is likely to be suitable.		
<i>Reptiles</i>	No records returned within project site; one record of Common Lizard located 312m south of the site within the adjacent golf course. On-site habitats are heavily managed amenity grassland, which does not provide suitable cover or foraging opportunities for reptiles, therefore they are likely absent from the site.	No likely impact.	None.
<i>Amphibians</i>	No records returned within project site or 0.5km search and field survey confirmed absence of habitats likely to support Amphibians.	No likely impact.	None.
<i>Otter</i>	No records returned within project site or 0.5km radius and field survey confirmed absence of habitats likely to support Otter.	No likely impact.	None.
<i>Water Vole</i>	No records returned within project site or 0.5km radius and field survey confirmed absence of habitats likely to support Water Vole.	No likely impact.	None.
<i>Notable invertebrates</i>	No records returned within project site. Seven records within 0.5km radius, with closest being 320m west. The	No likely impact.	None.

Receptor	Likely presence	Likely impact	Recommendations
	habitats within the site are not suitable to support rare or notable invertebrates or important assemblages, however the surrounding woodland is suitable.		
<i>Other notable species</i>	No records returned within project site or 0.5km radius. It is considered likely that European Hedgehog may use the site and vicinity for foraging and commuting.	No likely impact.	None.

Summary

Diversion of the footpath will entail excavation of the new path, which is set in amenity grassland, construction of the new length of path and removal of the old path, which will be seeded. The existing route is lit and, while lighting proposals have not informed this report, it is presumed that replacement lighting for the new path will be similar in quantity and locations. The work should not require removal of any woody vegetation. The triangle of grassland in the centre of the new path layout is available for ecological enhancement.

Assessment of the site following field survey on 22 September 2022 was as follows:

- No international or national statutory designated sites are present within 0.5km of the site.
- Six SINCs are present within 0.5km, supporting a range of important habitats.
- An area of ancient woodland is listed on the National Inventory of Woodland and Trees is 105m south of the site.
- The nearest Priority Habitat is the lowland mixed deciduous woodland adjacent to the site's southern boundary.
- Eight records of notable plants within 0.5km, the closest of which is 70m south-west of site.
- A range of common grass and forb species were identified during the field survey within the amenity grassland on-site.
- Three trees on or immediately adjacent to the site were identified as having low suitability for supporting roosting bats.

- The site boundary tree lines to the east and south, and further treelines to north and east provide foraging and commuting habitat for bats within the wider landscape.
- Badger will pass through the site on a regular basis for foraging and commuting purposes.
- A small number of scattered trees on-site are suitable for supporting nesting birds.
- European Hedgehog may use the site and vicinity for foraging and commuting.
- Due to a lack of suitable habitat within the site, it is unlikely to be used by Otter, Water Vole, Hazel Dormouse, reptiles, amphibians, or notable species/important assemblages of invertebrates.

In the *absence of any avoidance or mitigation measures*, the widening of the existing footway could have the **following adverse impacts**:

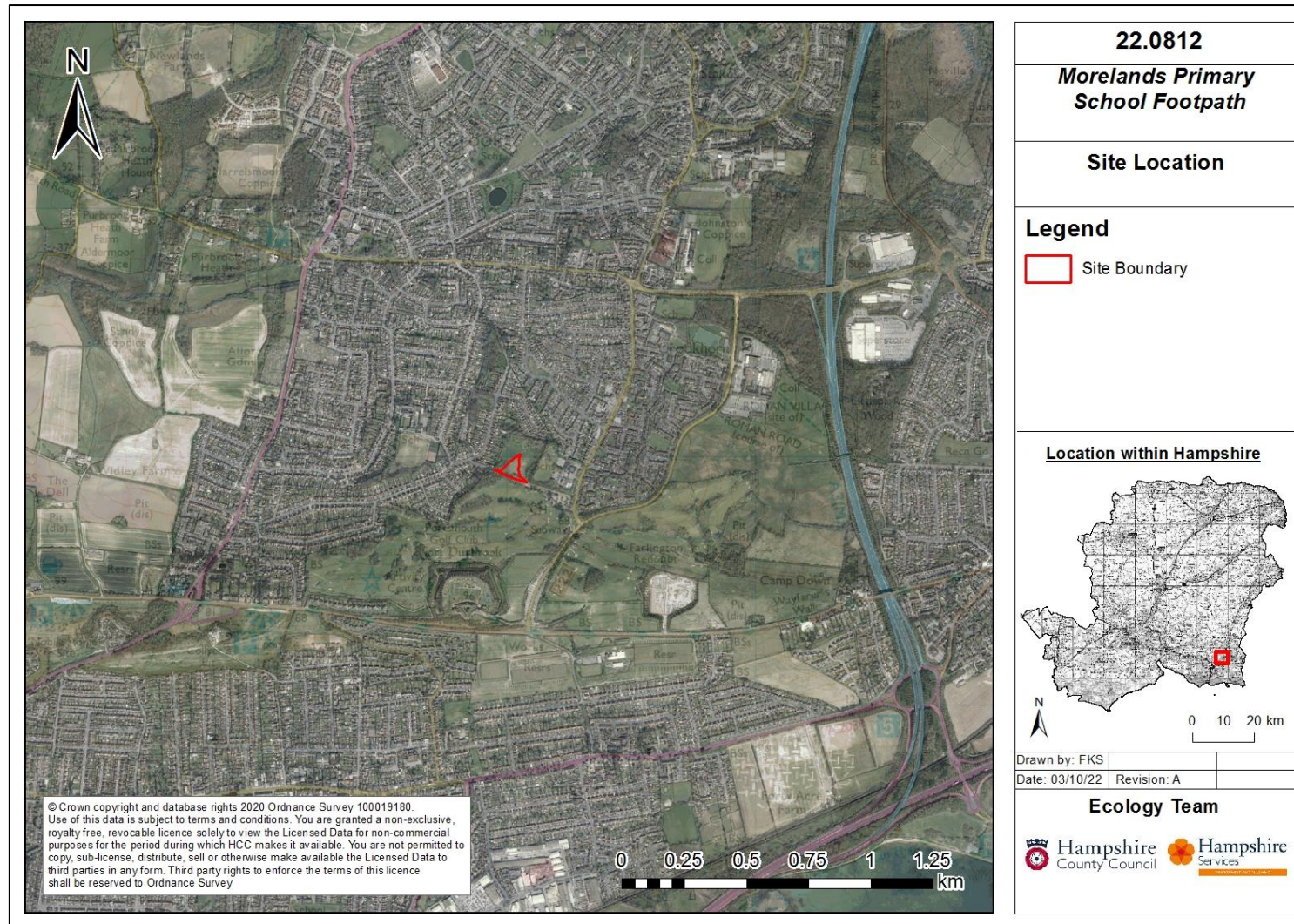
- **Low risk of adverse impacts** (potential for noise disturbance) to **nesting birds** if vegetation removal or clearance takes place during the main nesting season (March to August).
- **Low risk of adverse impacts** (possible disturbance) to **roosting bats**, if present, via disturbance during construction phase.
- **Low risk of adverse impacts** (possible disturbance of commuting activities and flightlines) of **commuting bats** that may commute along site boundaries if lighting is increased.
- **Negligible risk of adverse impacts** to designated sites, Priority Habitats, Badger, Otter, Water Vole, Hazel Dormouse, reptiles, amphibians, or notable species/important assemblages of invertebrates.

To avoid and mitigate these potential adverse impacts and provide Biodiversity Net Gain, the following measures should be implemented:

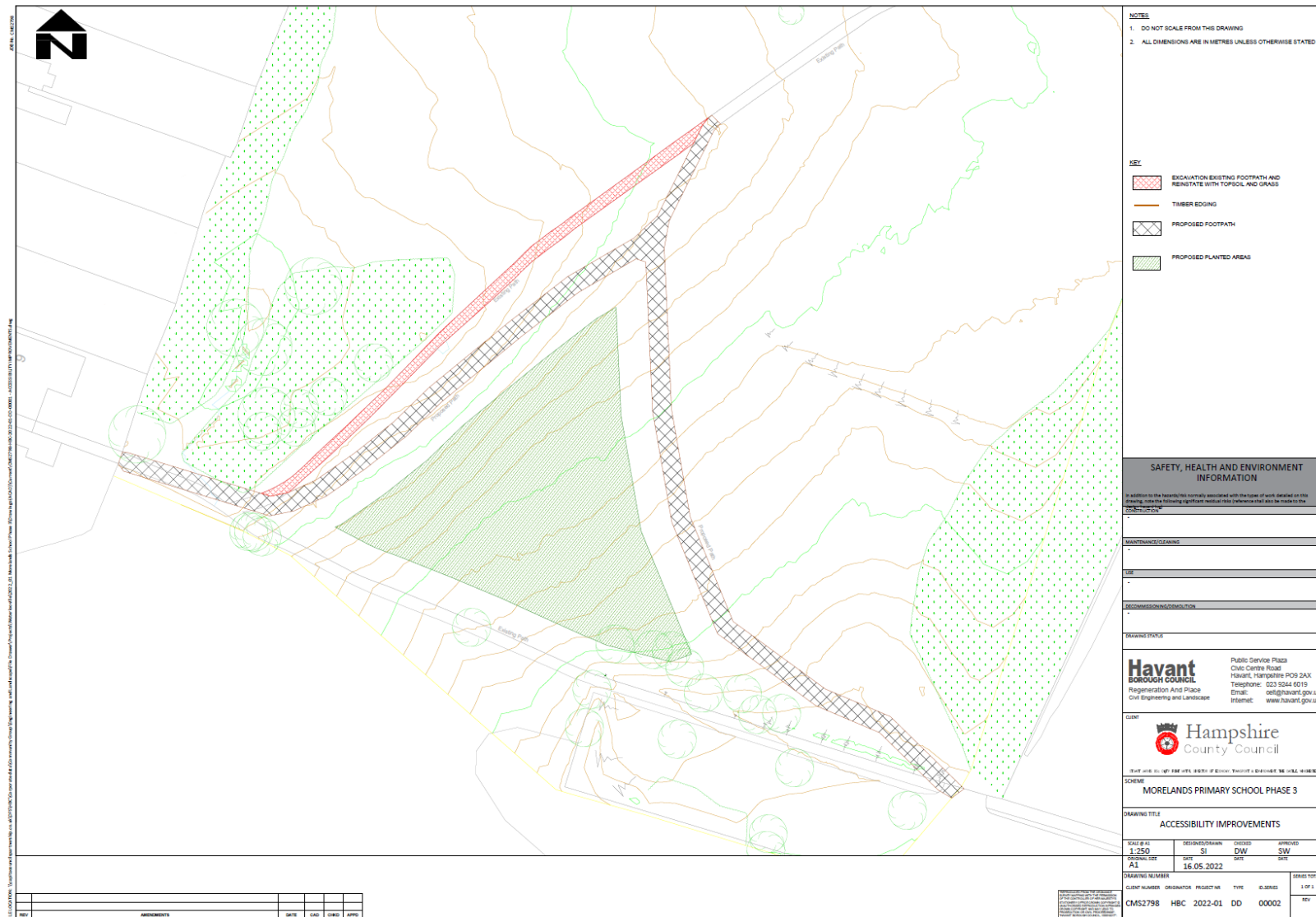
- The central triangle of grass should be enhanced to make the site more suitable for a wider range of faunal species. Three planting options are put forward in this report and HCCET are happy to explore this further.
- The extent of clearance and removal of grass vegetation should be limited to the minimum necessary for the works to be conducted. All works should be kept away from the adjacent trees. Root Protection Zones should be observed where possible.

- Opportunities should be sought within the site for regeneration of lost flora with replacement via additional sowing of native grass and forb species such as those found within the site.
- A climb and inspect survey of the three trees with low bat suitability should be undertaken ahead of the works to establish whether any roosts are present.
- A sensitive lighting strategy will need to be developed following Bat Conservation Trust guidance: [Artificial Lighting Guidance - Buildings, planning and development](#).
- If possible, construction work should be completed outside the main nesting season of March to August. If this is not possible, a nesting bird check must be conducted by a suitably experience ecologist no sooner than 24 hours prior to construction work commencing. If any active nests are found to be present, a suitable buffer of approximately 5m should be instigated around the nest and this should be left undisturbed, with no noisy works to be undertaken, until the nests have naturally become no longer active, i.e. young have fledged and left the nest area.

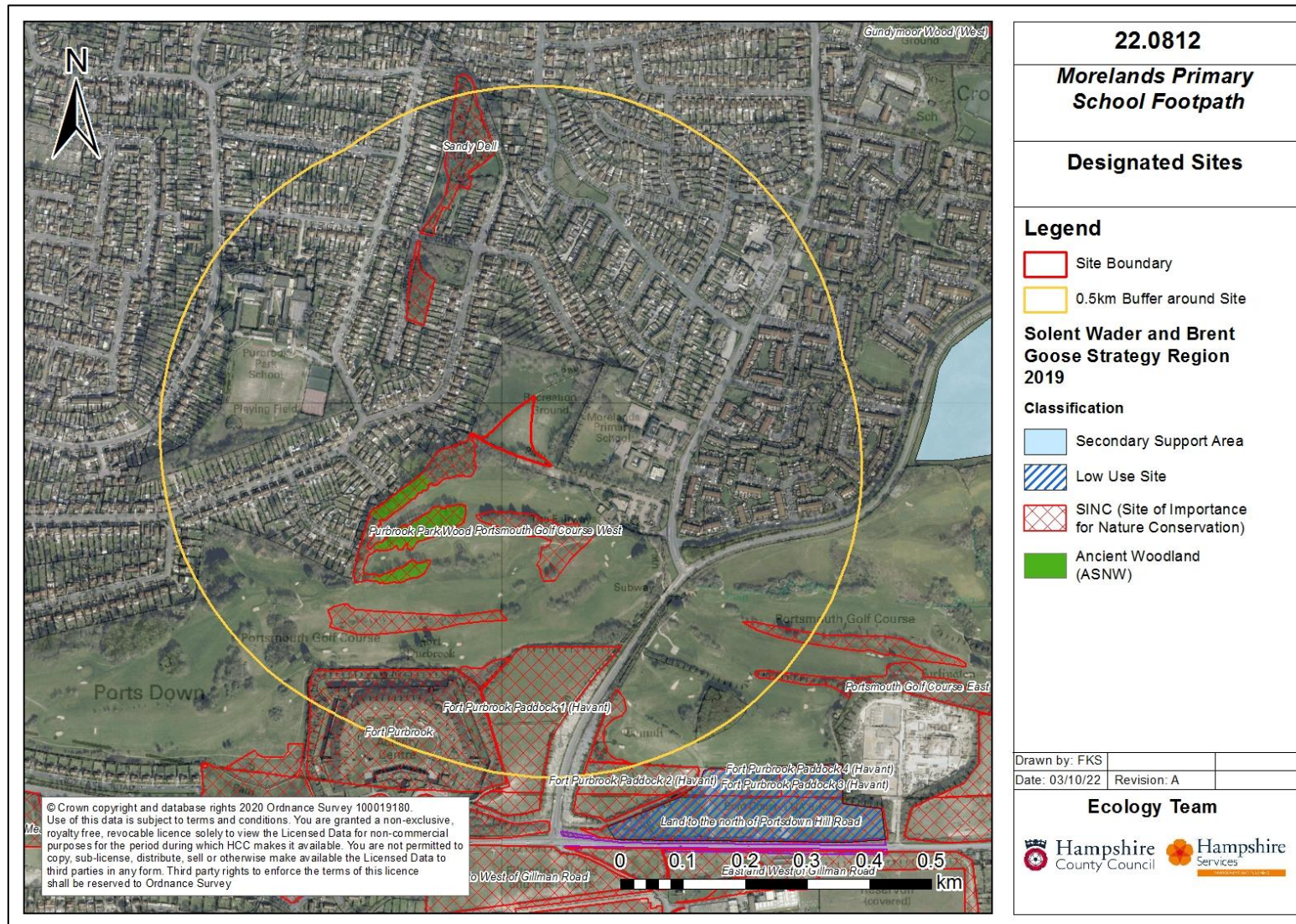
Appendix 1 – Maps and Plans



A1.1 Site location



A1.2 Existing and proposed footpath route

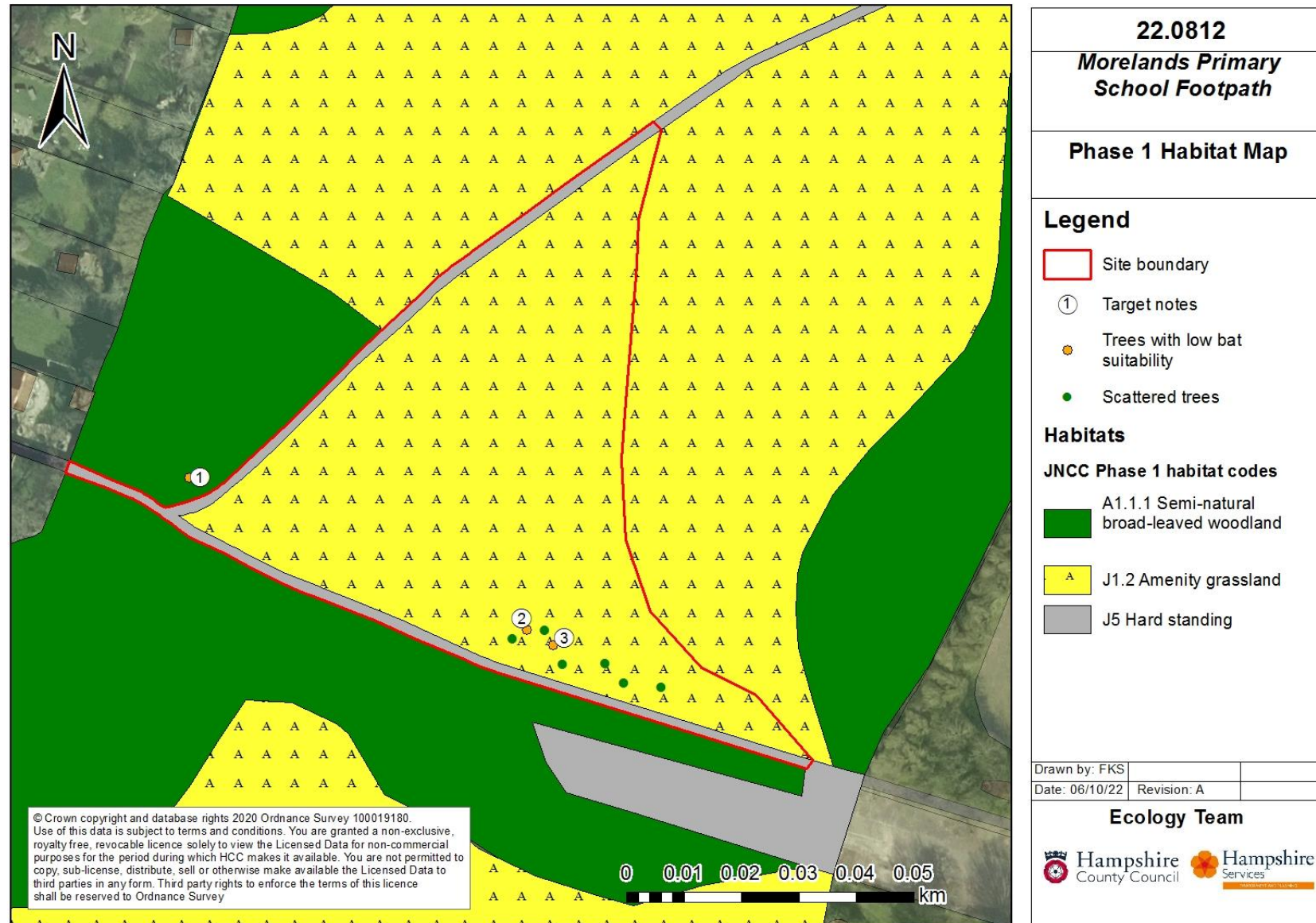


A1.3 0.5km search radius and nearby designated sites



22.0812		
Morelands Primary School Footpath		
Designated Sites		
Legend Site Boundary 0.5km Buffer around Site HBIC Priority Habitats (19Jun2019) BAP Priority Habitats Lowland Calcareous Grassland Lowland Meadows Lowland Mixed Deciduous Woodland		
Drawn by: FKS		
Date: 03/10/22	Revision: A	
Ecology Team Hampshire County Council Hampshire Services		

A1.4 0.5km search radius and priority habitats.



A1.5 Phase 1 habitat map

Appendix 2 - Field Survey Photos



Photo 1 South-western corner of the site showing existing footpath.



Photo 2 Woodland adjacent to western boundary.



Photo 3 Purbrook Park Wood SINC where it abuts the south-western site boundary.



Photo 4 Existing route to be diverted, showing existing lighting columns west of the path.



Photo 5 Woodland block located adjacent to the western boundary, with adjacent lighting column.



Photo 6 Looking across footprint of proposed new footpath, which runs from left to right of photograph, from southern boundary.



Photo 7 Scattered trees in south of site.



Photo 8 Trees with low bat suitability.



Photo 9 Narrow-leaved Ash with hollow and peeling bark (target note 2).



Photo 10 Narrow-leaved ash with peeling bark (target note 3).

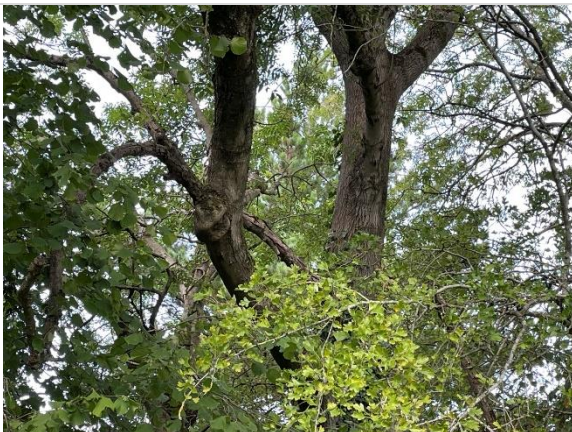


Photo 11 Off-site ash to west with peeling bark (target note 1).



Photo 12 Southern boundary where young trees may have ash die-back.

Appendix 3 - Relevant legislation and guidance

The following legislation gives legal protection to many species of flora and fauna, and is therefore considered relevant to this assessment:

- The Conservation of Habitats and Species Regulations 2017²;
- The Wildlife and Countryside Act 1981 (as amended)³;
- Natural Environment and Rural Communities Act 2006⁴
- Hedgerows Regulations 1997⁵;

The Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (commonly referred to as the Habitats Regulations) provides the mechanism for the designated and protection of Special Protection Areas (SPAs) and Special Areas of Conservation (SACs)

Under the provisions of the regulations, competent authorities (such as Highways Authorities and Local Planning Authorities) are required to undertake a Habitats Regulation Assessment (HRA) if a development is proposed within or adjacent to a SPA or SAC. The project should only proceed or be permitted where the HRA concludes that the proposal will not result in a likely significant effect upon the designated site in question.

If the assessment concludes that there would be a likely significant effect on the site, a further assessment, an 'Appropriate Assessment,' will need to be undertaken. Through this assessment, further studies may be needed, and measures may be put in place that allow the HRA to conclude that the proposals would not adversely affect the integrity of the sites in question.

The regulations also make it an offence to:

- Deliberately capture, injure, or kill European protected animals listed in Schedule 2 of the Regulation
- Deliberately disturb, take/destroy eggs or damage/destroy the breeding/resting site of such an animal.
- Deliberately pick, collect, cut, uproot, or destroy a European protected plant listed in Schedule 5 of the Regulations.

Should the development works impact any species protected under this legislation, a licence from Natural England would need to be obtained before work starts. The licence may permit disturbing, trapping, taking, or handling European protected species and destroying or damaging their habitats in order to carry out the proposed

² <https://www.legislation.gov.uk/uksi/2019/579/contents/made>

³ <http://www.legislation.gov.uk/ukpga/1981/69>

⁴ <http://www.legislation.gov.uk/ukpga/2006/16/contents>

⁵ <http://www.legislation.gov.uk/uksi/1997/1160/contents/made>

works. Licence applications usually take at least six weeks to be approved by Natural England.

The Convention on Wetlands of International Importance

The Convention on Wetlands of International Importance, (the Ramsar Convention) provides an international mechanism for protecting wetland sites of global importance.

The designation of these sites within the UK are generally underpinned by SSSIs, SPAs and / or SACs, thus they receive statutory protection under the Wildlife and Countryside Act and the Habitats Regulations. Under UK government policies, the protection of Ramsar sites extend to the same level as SPAs and SACs. Developments impacting Ramsar sites therefore have the same legal requirements as a SPAs and SACs.

The Wildlife and Countryside Act 1981 (as amended)

The designation The Wildlife and Countryside Act 1981 (As amended) makes it an offence to:

- Intentionally kill, injure, or take any species of wild bird.
- Intentionally take, damage, or destroy the nest of any wild bird whilst the bird is in the nest or while the nest is being built.
- Intentionally kill, injure or take any wild animal listed in Schedule 5 of the Act.
- Intentionally pick, uproot, or destroy any wild plant listed in Schedule 8 of the Act.
- Introduce invasive non-native species listed in Schedule 9 of the Act.

If any species protected under this act are found to be present on the development site, they will need to be removed safely from site before development works can take place and where necessary compensatory habitat created.

The Wildlife and Countryside Act also provides the mechanism for the designated and protection of Sites of Special Scientific Interest (SSSI).

Should any development impact a SSSI, assent is required from Natural England (NE) before that work can proceed. Appropriate measures would need to be devised and approved by NE to ensure impacts are avoided or mitigated. Permanent net loss of habitats within internationally or nationally designated sites is highly unlikely to be permitted.

Natural Environment and Rural Communities Act 2006

Section 40 of the Natural Environment and Rural Communities Act 2006 (NERC) sets out that all public bodies must have regard to conserving biodiversity as part of any policy or decision making. This includes HCC as Highways Authority.

With respect to this scheme, the Highways Authorities need to demonstrate compliance with this duty. This involves integrating biodiversity within the design when developing new infrastructure.

Hedgerow Regulations 1997

The Hedgerows Regulations 1997 gives legal protection to:

- Hedgerows which are deemed 'important' as they meet specified criteria.

Should the development work impact 'important' hedgerows, a hedgerow assessment will need to be conducted. This assessment should be sent to the local authority which may grant a hedgerow removal notice. This will permit the hedgerow to be removed but is likely to require mitigation.