Ecological Consultants
Environmental and Rural Chartered Surveyors

Preliminary Ecological Appraisal

Millom RUFC, Haverigg

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ACCURACY OF REPORT

This report has been compiled based on the methodology as detailed and the professional experience of the surveyor. Whilst the report reflects the situation found as accurately as possible, all of the protected species this survey covers are wild and can move freely from site to site. Their presence or absence detailed in this report does not entirely preclude the possibility of a different past, current or future use of the site surveyed.

We would ask all clients acting upon the contents of this report to show due diligence when undertaking work on their site and/or in their interaction with protected species. If protected species are found during a work programme, and continuing the work programme could result in their disturbance, injury or death, either directly or indirectly an offence may be committed.

If in doubt, stop work and seek further professional advice.

Quality and Environmental Assurance

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Author	Flora Whitehead	Date	15/11/23
Checked by	Andrew Gardner	Date	20/11/23
Report Version	1		
Field data entered	☐		
Report Reference	8933		

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1. EXECUTIVE SUMMARY

1.1.1 Envirotech NW Ltd were commissioned in October 2023 to carry out a Preliminary Ecological Appraisal of land at Millom Rugby Union Football Club (RUFC), Haverigg. It is proposed that the clubhouse and car parking/hardstanding areas are extended.

1.1.2 A data search and desk study of the site and an area within 2km of the site were undertaken to establish the presence of protected species and notable habitats.

1.1.3 The site was then visited by a licenced ecologist from Envirotech NW Ltd on the 14th November 2023. A full botanical survey of the site was initially undertaken and this was followed by surveys to establish the presence or absence of notable species at the site or in proximity such that they may be affected by the proposed development.

1.1.4 The plant species assemblages recorded at the site are considered to be of low ecological value. Sympathetically landscaped open space is considered to offer habitat of equal or greater ecological value.

1.1.5 Low numbers of common bat species may forage over the site. No bats were recorded roosting on or near site. It is proposed that some roosting provision for bats will however be incorporated into the new extension on site.

1.1.6 Birds are likely to utilise scrub to the south of the site for nesting between March and September. This area should remain undisturbed. Any removal of trees on the site should be undertaken outside of this period.

1.1.7 The coastal areas locally are designated for use by water fowl and also found are Natterjack Toad, a protected species. The site is not considered functionally linked land for these species. Any possible risk to these and other protected species will be limited by following recommendations proposed.

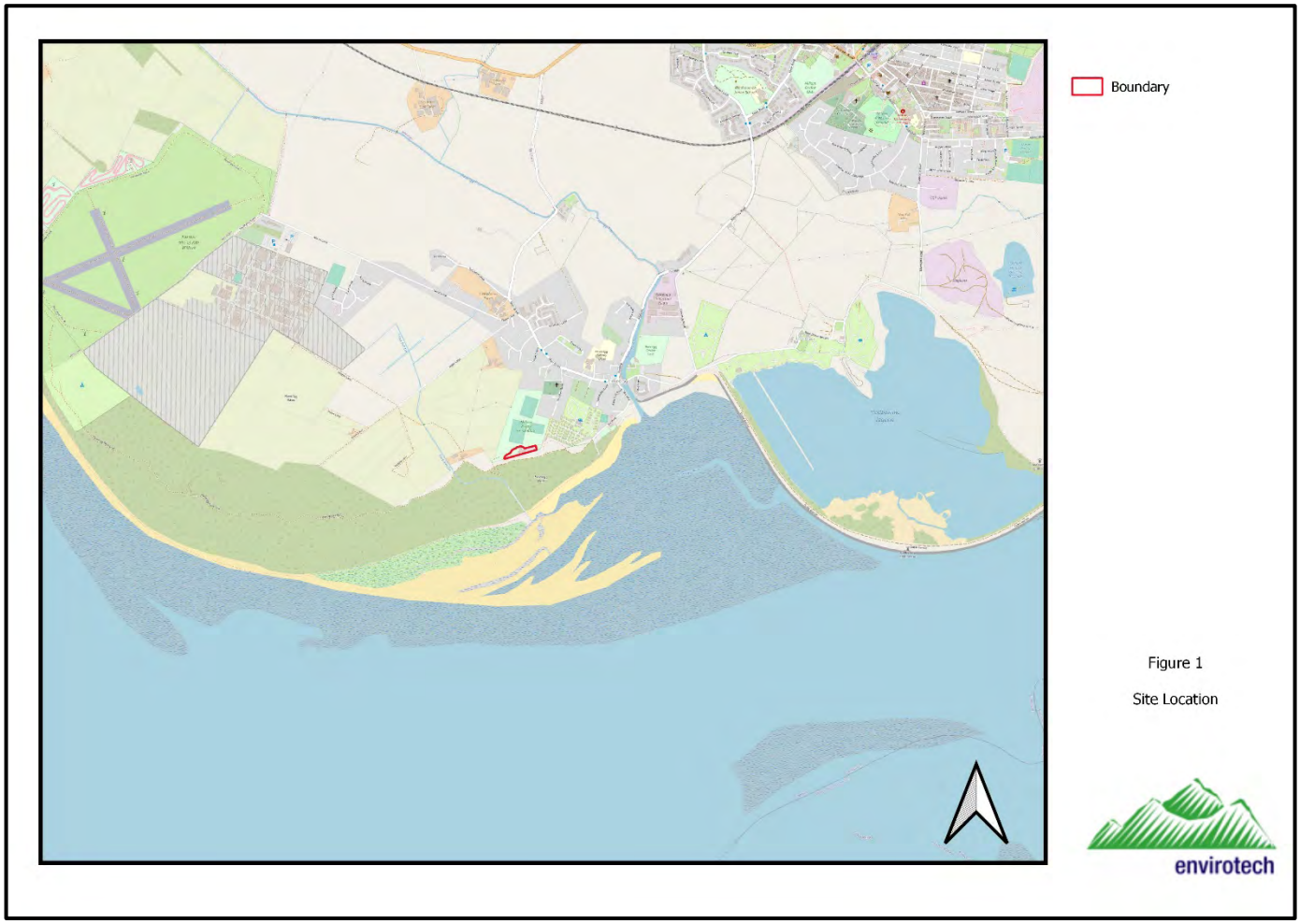
1.1.8 No other notable or protected species were recorded on the site.

2. INTRODUCTION

2.1 Background

2.1.1 In October 2023 Envirotech NW Ltd were commissioned to carry out a Preliminary Ecological Appraisal of land at Millom RUFC, Haverigg, central grid reference SD 1560 7837 (Figure 1). A site investigation was undertaken and a report compiled which includes recommendations for any future actions and or mitigation required.

2.1.2 The survey was requested in connection with the proposed extension of the clubhouse and car-parking/hardstanding areas.



2.2 Objectives

2.2.1 The main objectives of the study were:

- The completion of a Phase 1 Habitat Survey including the preparation of a vegetation and habitat map of the site and the immediate surrounding area.
- The survey and assessment of all habitats for statutorily protected species.
- An evaluation of the ecological significance of the site.
- The identification of any potential development constraints and the specification of the scope of mitigation and enhancement required in accordance with wildlife legislation, planning policy and other relevant guidance, and;
- The identification of any further surveys or precautionary assessments that may be required prior to the commencement of any development activities.

3. METHODOLOGY AND SOURCES OF INFORMATION

3.1 Data Search

3.1.1 The Envirotech dataset, and the Multi-Agency Geographic Information for the Countryside (MAGIC) were searched to establish the presence of any records of statutorily protected, notable or rare species, and any designated sites of international, national, regional or local importance within a 2km radius of the site boundary.

3.1.2 The Envirotech dataset is compiled from extensive field surveys from the period 2004-present, as well as records obtained from third parties during this time.

3.1.3 Google Earth and Google Street View were consulted to establish the presence of any features of ecological importance within the local area.

3.1.4 Due to the scale of development, in accordance with CIEEM guidelines, a data search of the county records centre was not required. The likely presence and impact on protected species could be adequately determined from the level of data search undertaken.

3.2 Vegetation and Habitats

3.2.1 A vegetation and habitat map was produced for the site and the immediate surrounding area. The mapping is based on the Joint Nature Conservation Committee Phase 1 Habitat Survey methodology (JNCC 2003).

3.2.2 Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the Wildlife and Countryside Act (1981) and indicators of important and uncommon plant communities. All plant nomenclature follows Stace (2019).

3.2.3 Searches were carried out for the presence of invasive species, including those listed on Schedule 9 of the Wildlife and Countryside Act (1981), namely Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*) on terrestrial habitat and aquatic species such as floating pennywort (*Hydrocotyle ranunculoides*), water hyacinth (*Eichhornia crassipes*) and New Zealand pygmyweed (*Crassula helmsii*).

3.2.4 The survey was also informed by questioning the landowner/site agent to ascertain the recent history of the site.

3.2.5 Habitats of Principal Importance (HPI) were cross referenced with Natural England's inventory against the site boundary and where found ground truthed.

3.3 Timing and Personnel

3.3.1 During the visit, weather conditions were suitable for the survey types undertaken being cool and dry in late autumn.

3.3.2 The site and surrounding land was visited on the 14th November 2023 by

- (FW) Miss Flora Whitehead BSc (Hons)
  Natural England Bat Class Licence (Level 2)
  Natural England Barn Owl Licence (Agent)
  Natural England Great Crested Newt Licence (Level 1 Agent)

4. SPECIES SURVEY METHODOLOGY

4.1 Amphibian

4.1.1 Great crested newts (*Triturus cristatus*) and Natterjack Toad *(Epidalea calamita)* are protected under Schedule 2 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and Schedule 5 of the Wildlife & Countryside Act (1981).

4.1.2 Water-bodies located within or adjacent to the study area were identified and where access was possible were assessed for their potential to support great crested newts and Natterjack toads.

4.1.3 The criteria used in the assessment for Great crested newts are based on those contained in the Herpetofauna Workers Manual and Oldham et al, 2000, and in applying these criteria a precautionary approach was adopted. Following the criteria developed by Oldham et al (2000), the HSI tool developed for use with great crested newts and forming part of Natural England's Licensing process was used to determine the suitability of ponds for great crested newts.

4.1.4 The pond assessment was undertaken in order to determine which water-bodies, based on their potential to support great crested newt and Natterjack Toad, should be subject to presence/absence surveys.

4.1.5 An assessment of the terrestrial habitat for both species was also undertaken.

4.2 Badger

4.2.1 Badgers (*Meles meles*) and their setts are protected under the Protection of Badgers Act (1992). This legislation arises from animal welfare issues (rather than on the basis of nature conservation grounds) and protects badgers from being killed, injured or disturbed whilst occupying a sett.

4.2.2 A disturbance to badgers in their setts may occur as a result of construction operations. Natural England recommends that the use of heavy machinery in proximity of a sett entrance should be avoided, with a 'disturbance free-zone' being established.

4.2.3 The degree of disturbance attributed to construction activity is a function of the background level of activity badgers are accustomed to and that which will be attributed to a proposed activity. The "disturbance free zone" is therefore site specific.

4.2.4 The survey for badgers comprised an assessment of all suitable habitat within and outside the study area boundary (where this was possible) to a distance of 30m for indications of use by badgers.

4.2.5 Signs of badgers which were searched for included:

- Setts - 'D' shaped entrances at least 25cms wide and wider than they are high with large spoil mounds
- Discarded bedding at sett entrances (this includes grass and leaves)

- Scratching posts on shrubs and trees close to a sett entrance
- The presence of badger hairs which are coarse, up to 100mm long with a long black section and a white tip
- Dung pit latrines and footprints
- Habitual runs through vegetation and beneath fences
- Hedgehog carcases

4.3 Bats

4.3.1 All British bat species are fully protected under Schedule 5 of the Wildlife and Countryside Act (1981), and are included on Schedule 2 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, as a Protected Species. Taken together, these pieces of legislation make it an offence to:

- Intentionally or recklessly kill, injure or capture bats;
- Deliberately or recklessly disturb bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts.

4.3.2 The Bat Conservation Trust (Hundt (2012) and Collins, J. (ed) (2016) issued guidelines on bat survey methodology, a key feature of their recommendation is for the undertaking of a pre-survey assessment – an initial desk-study and a walkover assessment of the survey area and its surrounding area to identify the relative value of the habitats present for bats and likely commuting routes. This is to be followed by a survey program that is appropriate to the likely level of bat activity within the survey area to be determined by and based on the experience of the surveyor.

4.3.3 The potential value of the survey area for foraging bats was assessed through consideration of two main factors: professional knowledge of bat ecology and foraging behaviour in combination with the geographical location, topography and habitats present within the survey area and surrounds.

4.3.4 Trees and structures on and within the survey area boundary were assessed for their potential to support roosting or hibernating bats. This comprised a close inspection of all trees and buildings on the site to allow an assessment of their potential to be used by bats to be made by a licensed surveyor.

4.3.5 Trees were all assessed in accordance with Collins, J. (ed) (2016).

4.4 Birds

4.4.1 All breeding birds, other than pest species, are protected under the Wildlife and Countryside Act of 1981 when building a nest, rearing young or sitting on eggs. Some bird species, such as barn owl (*Tyto alba*), are protected when near an active nest site. Several birds are listed as Species of Principal Importance (SPI).

4.4.2 Bird species and behaviour was noted during the other field surveys. All areas are covered equally, in order to avoid the subjective survey of better quality 'bird habitat'.

4.4.3 The adjacent coastline is known to be used by several species of bird and is designated as a SSSI and RAMSAR for their bird assemblages. None of the habitats on site would support birds associated with the SSSI/ RAMSAR site. The site could not be considered as Functionally Linked Land.

4.5 Brown Hare

4.5.1 The brown hare (*Lepus europaeus*) is a SPI.

4.5.2 The survey method involved walking boundaries and surveying with binoculars. The survey was conducted at a suitable distance to ensure that the hares were not disturbed. Generally, surveys were undertaken throughout the early afternoon and evening when hares are thought to be most active and feeding.

4.5.3 Where present the number of brown hares in each field or hedgerow was recorded, together with the nature and use of the field, climatic conditions and time of day. The presence of forms and faeces where present were also recorded.

4.6 Invertebrates

4.6.1 A general assessment was made of the study area's suitability for supporting invertebrates during the phase 1 survey. The study area's lack of habitat diversity, species-poor composition and uniformity of vegetation structure (i.e., lack of variation in height and microtopography) resulted in our belief that a low diversity of invertebrates would be likely to occur across the site.

4.6.2 The presence of invertebrates was noted during the other surveys which were undertaken. The extent of sampling was limited in that it could be confirmed that no SPI would be likely to be affected by the proposal.

4.7 Reptiles

4.7.1 All native reptiles are protected in Britain under the Wildlife and Countryside Act of 1981. It is an offence to intentionally kill, injure, sell or advertise to sell any of the six native species.

4.7.2 The survey for these species was based on assessing the habitat type and suitability of the site. This comprised an assessment of satellite imagery for the site and surrounding area as well as comparison of the results from the records searches with habitat types. The general habitat at the site was evaluated in terms of its suitability to reptiles for foraging or breeding.

4.7.3 Reptile surveys comprising visual encounter surveys were undertaken. Habitat at the site was not considered sufficiently suitable for a full presence/ absence survey to be warranted.

4.8 Survey limitations

4.8.1 The survey was undertaken in autumn. At this time of year plant species are less easily identified and the activity of some species is reduced.

4.8.2 Due to the habitats present on site there were no significant constraints in respect of identifying the botanical interest of the site.

4.8.3 The duration, extent and scope of the surveys were considered sufficient to plan appropriate mitigation and recommend additional precautionary survey work required prior to the commencement of work.

4.8.4 No significant survey limitations were encountered.

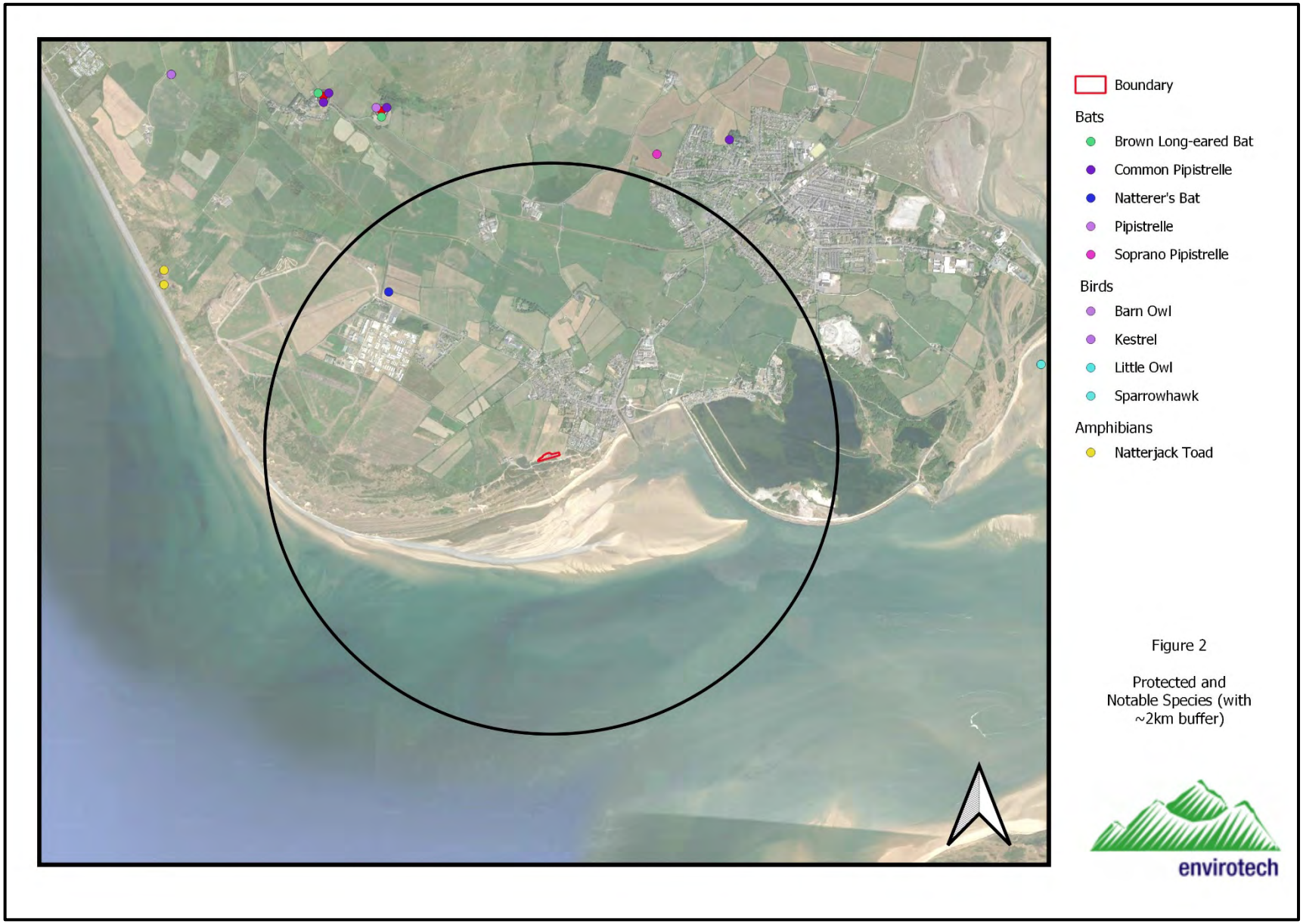
5. RESULTS

5.1 Data Search

5.1.1 Envirotech holds no records of protected or notable species for the site. There are however records of protected or notable species within 2km (Figure 2). These are discussed in the relevant sections below.

5.1.2 The site lies within an area of priority habitat, namely coastal grazing marsh. However, the sports pitches at the site not managed as grazing land. Immediately adjacent to the southern boundary of the site is an area of coastal sand dunes priority habitat. This extends along the coast to the west, where the Duddon Sands meet the Irish sea on the south-west coast of Cumbria (Figure 3).

5.1.3 The nearest statutory protected sites are associated with coastal habitat immediately to the south of the site. These designations comprise the Duddon Estuary SSSI and RAMSAR, the Morecambe Bay SAC and the Morecambe Bay and Duddon Estuary SPA (Figure 4). The area comprises valuable intertidal sands, mudflats, sand dunes and saltmarsh and supports numerous waterfowl.


Boundary
Bats
Brown Long-eared Bat
Common Pipistrelle
Natterer's Bat
Pipistrelle
Soprano Pipistrelle
Birds
Barn Owl
Kestrel
Little Owl
Sparrowhawk
Amphibians
Natterjack Toad
Figure 2
Protected and Notable Species (with ~2km buffer)
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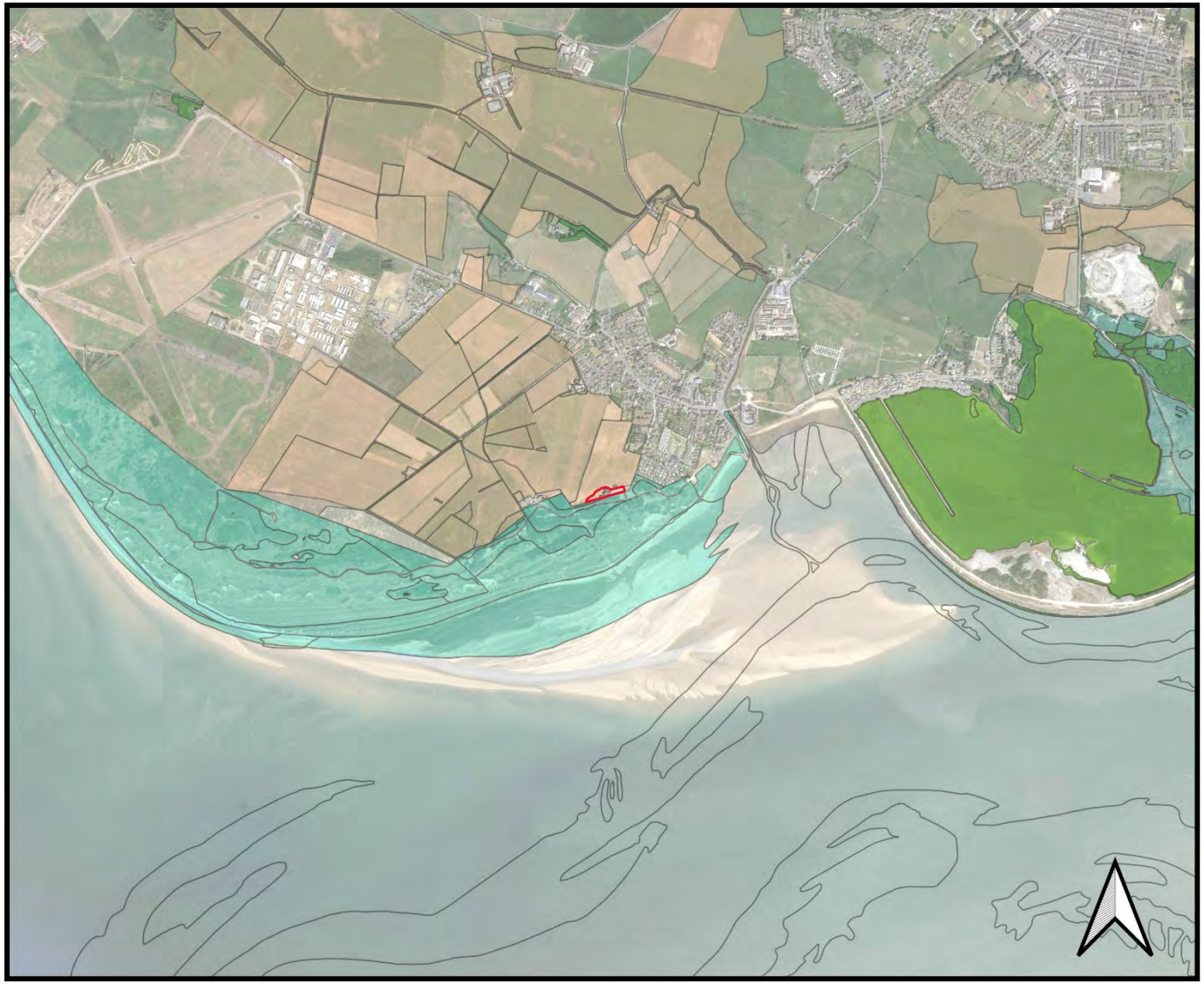

Figure 3

BAP and Notable Habitats

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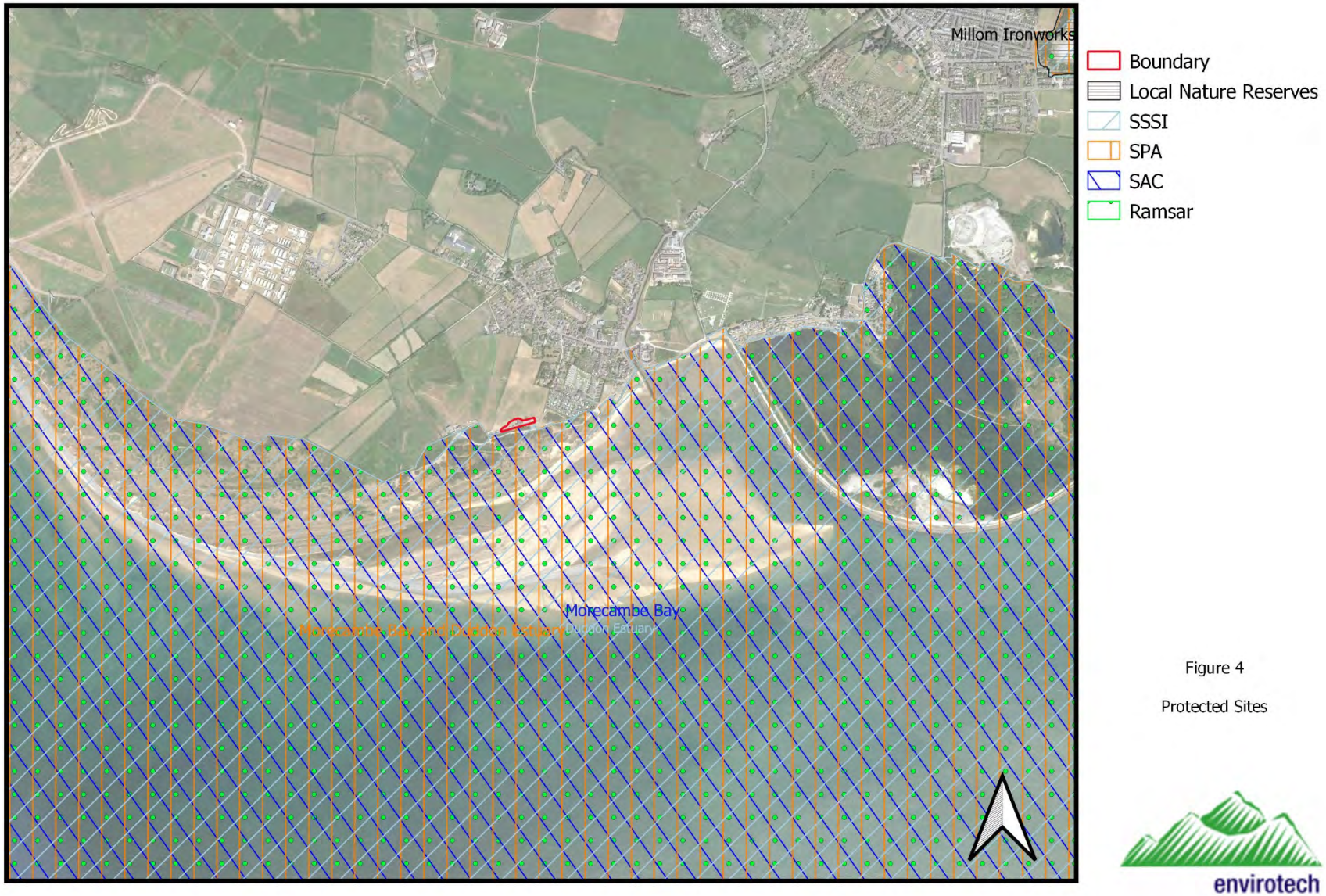


Figure 4

Protected Sites

6. PHASE 1 SURVEY RESULTS

6.1 Habitat Results

6.1.1 A drone was overflown on the 14th November 2023. This produced a number of images which were stitched together to form a orthomosaic map and provided upto date imagery of the site from which phase 1 habitat mapping has been based. Figure 5 shows the hi-resolution imagery overlain to google earth without the phase 1 mapping overlay.

6.1.2 The site comprises hardstanding around the clubhouse, with closely mown rugby and football pitches extending to the north-east. Fences separate the pitches from the surrounding coastal grazing land to the west, and Haverigg housing and caravan sites to the north and east. A wall separates the site from the sand dunes to the south

6.1.3 See Figure 6 for the Phase 1 Habitat Plan and Table 1 for the descriptive Target Notes.

Figure 5

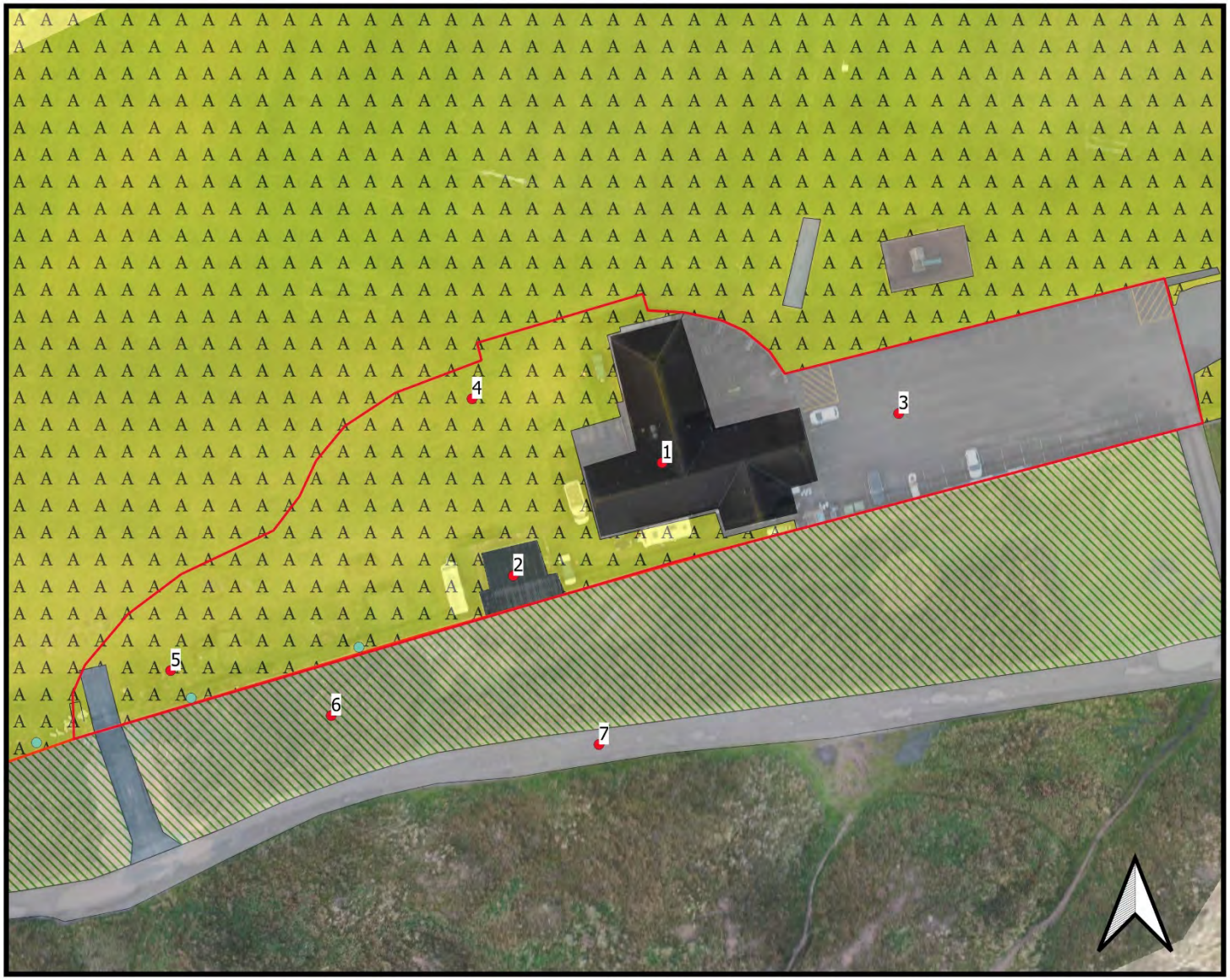
Orthomosaic map
drone imagery taken

14/11/2023

envirotech

Target Note	Description	Comment
TN1	Building	The clubhouse building is in good condition with rendered walls, boxed soffits and roof verges and sealed tile roof.
TN2	Building	A smaller storage building also has sealed rendered walls and metal roof.
TN3	Hardstanding	A carpark lies to the east of the building, and there is a paved patio and walkway around the building.
TN4	Amenity grassland	The sports pitches are highly managed and closely mown grass, likely a specific sports turf mix including Ryegrass (*Lolium* sp.*)* and Fescue *(Festuca* sp.*).* To the extreme south-west of the site, where a track enters the area, there is a slight increase in species diversity in the sward, with Daisy *(Bellis perennis)*, Plantain *(Plantago major)* and Bird's-foot *(Ornithopus perpusillus)*.
TN5	Scattered trees - broadleaf	Along the wall boundary are a low number of scattered trees, including Cherry *(Prunus* sp.*)*, Ash *(Fraxinus excelsior)*, Willow *(Salix* sp.*)* and Sycamore (*Acer pseudoplatanus).*
TN6	Coastal – dune scrub	South of the boundary wall there is coastal dune habitat, initially with large patched of dense dune scrub dominated by Gorse *(Ulex europaeus, Ulex gallii)*, frequent Bramble *(Rubus fruticosus agg)* and occasional Rosebay Willowherb *(Epilobium angustifolium).* Beyond the first patch of scrub is a hardstanding track, frequently used by the public for recreation and dog-walking. Approaching the estuary and sea, there is dune grassland and dune slack habitat, with more exposed sand. Smaller paths through the dunes are also frequently used by the public.
TN7	Hardstanding	A track runs through the dunes to the south of the site. It is a popular route for dog walkers and recreational use.

Table 1 *Details of Target Notes.*



Boundary
Target Note
Building
Hardstanding
Cultivated/Disturbed Land - Amenity Grassland
Coastal - Sand Dune - Dune Scrub
Wall

Figure 6

Phase 1 Habitat Survey

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	Existing clubhouse and hardstanding carpark
	
	View to north/north-west across rugby pitches

	View east from clubhouse car park
	Amenity grassland to west of clubhouse
	View north-east across sports pitches

	Scattered tress along wall on southern boundary
	Clubhouse seen through dune scrub to south of site
	Track through dunes/coastal habitat to south of site

	The clubhouse (TN1) is in good condition, in a relatively exposed location
	The roof tiles and roof verges are all in place and closely fitted
	Soffits are sealed

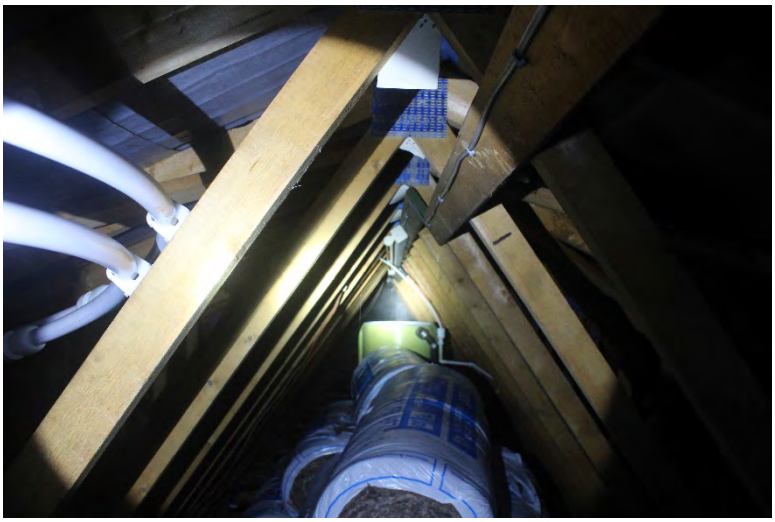
	The roof voids in the clubhouse have timbers in good condition, and are relatively cluttered with struts. The roof lining is intact and the eaves lines are sealed. No signs of bats were found.
	
	Outbuilding (TN2) to west of clubhouse, to be lost as part of proposal. The building is well sealed with no indications of use by bats.

Table 2 *Photographs*

6.2 Vegetation

6.2.1 Details of the plant species found on site are included in the target notes. Species recorded are all commonly occurring and undoubtedly occur elsewhere in similar habitats in the local area.

6.2.2 The amenity grassland has a very low species diversity and ecological value. The species are all indicative of specific sports pitch management with frequent mowing. This habitat does not constitute a Habitat of Principal Importance (HPI).

6.2.3 The area in the south-east of the site where the grassland is not within the main sports pitch area has a sightly increased species diversity, with some species found typical of grasslands and coastal habitat. However, this is still frequently mown and used for access and this habitat does not constitute a Habitat of Principal Importance (HPI).

6.2.4 Trees within the site boundary comprise a low number of small Ash and Sycamores along the southern wall boundary.

6.2.5 There is no evidence of Japanese Knotweed, Giant Hogweed or Himalayan balsam on the site. No other invasive or notable weed species listed on Schedule 9 (Section 14) of the Wildlife and Countryside Act (1981) (as amended) was identified within the site or adjacent land.

6.2.6 The dune scrub and coastal habitat to the south of the site will not be altered by the proposals. Use of the area for recreation and dog-walking is frequent due to the proximity to residential and holiday accommodation.

6.3 Amphibian

6.3.1 There are no records for amphibians within 2km of the site. However, Natterjack Toads are known to use some areas of the dune habitat locally. There are specifically-managed duneslack ponds for use by this species for breeding to the south-east of the site on the edge of the dunes, closer to the shoreline. The nearest records for the species are over 2.5km on coastline to the north-east.

6.3.2 The core development area has a low value to amphibians, including Natterjack toads. The sports pitches and hardstanding are devoid of suitable habitat for refuge of breeding. For example, in winter Natterjack toads hibernate under rocks, logs or in mud/sand, digging their own burrows or using those created by a rodent, rabbit or even sand martin in some areas. Other species of Amphibian also require water bodies for breeding and either hibernate of take refuge under rocks, logs and other debris.

6.3.3 Structural diversity at ground level across the site is very poor. There are no areas with log, rubble piles or compost heaps which would be particularly favourable to amphibians. The existing buildings are well sealed at ground level.

6.3.4 The dune scrub to the south could be used for refuge, and this area will not be disturbed by the proposed works. The area is already frequently used for recreational purposes including dog-walking. This habitat is also on the other side of a stone wall which would block the movement of amphibians onto the grassland.

6.3.5 Whilst Natterjack toad favour short grassland, amphibians would generally be unlikely to attempt to cross the site as it comprises an area that is mostly open with uniform length grass. Whilst not a physical barrier to the dispersal of amphibians, the site is regarded as being a potentially hostile environment to them.

6.3.6 The proposed development will not result in the permanent loss of or a substantial negative effect on any waterbodies or foraging areas linked to them. Boundary areas which may provide foraging or refuge sites, are to be retained.

6.4 Badger

6.4.1 No records of badgers occur within 2km of the site.

6.4.2 Badger setts do not occur on site and a lack of feeding signs or runs across the site would suggest that they do not occur within 30m of site boundaries. The local habitat is not considered favourable for badgers, with a lack of woodland and suitable mixed open habitat.

6.4.3 The proposed development will not impact on any existing badger runs or setts. The porosity of the surrounding fields to the passage of badgers will not be affected.

6.5 Bats

6.5.1 There is one record of one species of bat within 2km of the site, namely a Natterer's bat *(Myotis nattereri)*. The lack of records is likely to be in part due to lack of recording effort, but the open, exposed local landscape is not highly favourable for use by large numbers of bats.

6.5.2 The foraging habitat at the site is very poor for bat species being open and exposed. The amenity grassland offers negligible foraging opportunities for bats. The coastal scrub offers some foraging habitat, but sparse treelines are poor in terms of their structure, diversity and interconnectivity.

6.5.3 More extensive areas of medium quality habitat occur locally, including hedgerows and trees around the local farmland further inland and the residential areas to the east.

6.5.4 It is not considered there would be significant degradation of foraging habitat as a result of the proposal so long as the trees are retained and or their loss is compensated for in any landscaping scheme.

6.5.5 All trees around the site perimeter were also assessed in accordance with Collins ed. (2016) and assigned a risk category. All of the trees on site were category 3 (negligible) risk. No indications of roosting or highly suitable roost sites were located within the trees. All of the trees could be adequately inspected. Risk categories from Hundt (2012) and the requirement for mitigation for each tree category are shown on Figure 7.

6.5.6 The buildings at the site were inspected for their potential for use by bats. The clubhouse (TN1) was found to be in excellent condition, with rendered walls and boxed soffits sealed. The roof tiles, ridge tiles and verge caps were in place, tightly fitted.

6.5.7 The roof voids in the clubhouse had timbers and roof lining in good condition, and the spaces seemed well sealed, with insulation present. The voids were cluttered with struts. There was no evidence of use by bats found associated with the building. Overall, this building has negligible potential for use by bats, our categorisation would be 1. Further details of our categorisation can be found in Table 3.

6.5.8 The outbuilding (TN2) is to be removed as part of the proposals. The rendered walls were sealed. The flat corrugated metal roof is intact, and securely held in place by verge caps at the roof edges. The metal roof is unsuitable for bats, having poor insulating properties. The building has no separate roof void and there were no potential roost features externally or internally. Overall, this building has negligible potential for use by bats, our categorisation would be 1.

6.5.9 We consider bat species are highly unlikely to rely on the site for feeding but may occur in the local area. Roosting by bats will not occur on the site.

Suitability Collins (2023)	**Description Roosting habitats**	**Risk Level**	**Survey level**
	Modified from Collins (2023)		
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels). No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).	0	A Preliminary Roost Assessment (PRA) / Daytime Bat Walkover (DBW) sufficient
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion. No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.	1	

Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats) Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.	2	Surveyor to make judgement as to if additional surveys likely to provide useful information about the site. RAM's and provision of new roosting provision to be recommended
		3	Single bat emergence survey in the optimum time period (May and August). Roosts are often transitional, surveys early and late in season may be appropriate. Consider additional survey in transitional period April and September
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed). Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.	4	Two bat emergence surveys between May and September with at least one survey in the optimum time period (May to August).

High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site. Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.	5	Three bat emergence surveys between May and September with at least two surveys completed in the optimum time period (May and August).

Table 3 *Risk and need for additional survey following preliminary appraisal for bats.*

Tree category and description	Stage 1 Initial survey requirements	Stage 2 Further measures to inform proposed mitigation	Stage 3 Likely mitigation
Known or confirmed roost	Follow SNCO guidance and these guidelines wherever possible, to establish the extent to which bats use the site. This is particularly important for roosts of high risk species and/or roosts of district or higher importance and above		The tree can be felled only under EPS licence following the installation of equivalent habitats as a replacement.
Category 1* Trees with multiple, highly suitable features capable of supporting larger roosts	Tree identified on a map and on the ground. Further assessment to provide a best expert judgement on the likely use of the roost, numbers and species of bat, by analysis of droppings or other field evidence. ***A consultant ecologist is required***	Avoid disturbance to trees, where possible. Further dusk and pre-dawn survey to establish more accurately the presence, species, numbers of bats present and the type of roost, and to inform the requirements for mitigation if felling is required.	Felling would be undertaken taking reasonable avoidance measures[3] such as 'soft felling' to minimise the risk of harm to individual bats.
Category 1 Trees with definite bat potential, supporting fewer suitable features that category 1* trees or with potential for use by single bats	Tree identified on a map and on the ground. Further assessed to provide a best expert judgement on the potential use of suitable cavities, based on the habitat preferences of bats. ***A consultant ecologist required***	Avoid disturbance to trees, where possible. More detailed, off the ground visual assessment. Further dusk and pre-dawn survey to establish the presence of bats, and if present, the species and numbers of bats and type of roost, to inform the requirements for mitigation if felling is required.	Trees with confirmed roosts following further survey are upgraded to Category 1* and felled under licence as above. Trees with no confirmed roosts may be downgraded to Category 2 dependent on survey findings
Category 2 Trees with no obvious potential, although the tree is of a size and age that elevated surveys may result in cracks or crevices being found; or the tree supports some features which may have limited potential to support bats.	None. ***A consultant ecologist is unlikely to be required***	Avoid disturbance to trees, where possible. No further surveys.	Trees may be felled taking reasonable avoidance measures. Stop works and seek advice in the event bats are found, in order to comply with relevant legislation.
Category 3 Trees with no potential to support bats	None. ***A consultant ecologist is not required unless new evidence is found***	None.	No mitigation for bats required.

Figure 7 *Tree risk categories from Hundt (2012).*

6.7 Birds

6.7.1 There are no records of birds within 2km of the site. However, the coastline is likely to be used by overwintering waterfowl but there may be a lack of recording locally.

6.7.2 The amenity grassland has a low potential for use by nesting birds as the grassland is frequently mown and use for practices and matches. Trampling risks are very high within this area of the site.

6.7.3 The small trees close to the site boundary are exposed and have insufficient density to be of high value to nesting birds.

6.7.4 The stone wall on the southern boundary mostly has mortar between the stonework, only slightly recessed. There are occasional gaps where nesting by species such as Pied Wagtail *(Motacilla alba)* may be possible.

6.7.5 The dune scrub with gorse bushes to the south of the site offers better habitat for small nesting birds as it offers shelter and protection. These areas should remain unaltered by the proposed works.

6.7.6 A risk assessment of the site in respect of its future potential for and value to nesting birds could be adequately made.

6.7.7 No signs of nesting birds were found on the site. Precautionary mitigation is considered appropriate.

6.7.8 The site does not offer habitat for overwintering waterfowl, as the it is frequently used and mown grassland, unsuitable for use by foraging or nesting waterfowl.

6.8 Brown Hare

6.8.1 Brown hare are a SPI. There are no records of brown hares within 2km of the site.

6.8.2 No indication of brown hares was recorded on the site.

6.8.3 The site has low potential for brown hares to create forms and use of the site is likely to be limited due to its regular human presence and lack or vegetative diversity.

6.8.4 The farmland and fields in the wider local area are considered more suitable for this species.

6.8.5 A risk assessment of the site in respect of its future potential for and value to brown hares could be adequately made. We consider the risk to brown hares is very low.

6.9 Invertebrates

6.9.1 Notable invertebrates have been recorded within 2km of the site.

6.9.2 No deadwood or vegetation on site was recorded which would provide an important resource for invertebrates in the local area.

6.9.3 The plant species assemblages found on site are not representative of those found in the coastal habitat to the south, in which specialise invertebrates will live in the coastal habitat.

6.9.4 Given the poor quality habitats contained within the site in comparison to the wider area, it is not considered that this site is of any local significance for invertebrates.

6.10 Reptiles

6.10.1 There are no records for reptiles within 2km of the site.

6.10.2 The majority of the site has a very low value to reptiles being devoid of significant ground cover in conjunction with undisturbed basking sites. There are no areas of the core development area which would be particularly favourable to reptiles.

6.10.3 Reptiles may occur within the dune scrub to the south of the site, although the area is frequently disturbed by humans/dogs. It is also outside the site boundary and should be unaffected by the proposal.

6.10.4 No indication of reptiles was recorded at the site.

6.10.5 As a consequence, precautionary mitigation would be appropriate in respect of construction activities so as to ensure reasonable avoidance measures are taken to avoid the killing or injury of these species.

6.11 Other

6.11.1 The site may be crossed by species such as fox (*Vulpes vulpes*) and rabbit (*Oryctolagus cuniculus*) which are known to occur locally.

6.12 Statutory and Non-Statutory Sites

Direct Impacts:

6.12.1 There are no statutory or non-statutory sites which are connected to the site such that site development would directly affect the dispersal of species between them or directly impact upon their integrity.

6.12.2 The habitats on site do not represent or are linked to those found in any of the statutory or non-statutory sites locally.

Indirect Impacts:

6.12.3 There are no statutory or non-statutory sites which are connected to the site such that site development would indirectly affect the dispersal of species between them or indirectly impact upon their integrity.

6.12.4 There may an increase in recreational use of the adjacent SSSI/ SAC. This impact is not easily quantifiable but it is possible. To mitigate the effect, it is recommended that

signage is provided in the clubhouse highlighting the sensitivity of the area and impacts caused as a result of recreational disturbance.

7. MITIGATION/RECOMMENDATIONS

7.1 Compensatory planting and habitat enhancement

7.1.1 The roots of trees on the site boundaries should be adequately protected during work in accordance with industry standards. All trees should as far as possible be retained in the scheme. Where a tree must be removed, it should be replaced with trees/shrubs that can tolerate the exposed coastal conditions at the site, for example Hawthorn *(Crataegus monogyna)*.

7.1.2 The landscaping scheme should utilise plants which are native and wildlife friendly. Native seed and fruit-bearing shrubs could be used to plant verges to enhance the ecological value of the site and continuity between the site and the wider area. For example, Elderberry (*Sambucus nigra)* and Dog Rose *(Rosa Canina).*

7.2 Amphibians

7.2.1 This method statement should be followed for all construction works required during the Scheme. The following measures will be adopted throughout the construction period of the proposed development:

- In order to ensure that the Method Statement is adhered to, a copy MUST be kept on site at all times during the works.
- The appended toolbox talk sheet must be displayed in the site cabin.
- All areas of vegetation to be removed must be strimmed and cut back to ground level with hand tools to remove cover prior to the start of works. A walkover of the site will be undertaken prior to ground works commencing to confirm the absence of NJT and suitable refuges.
- Any site compound MUST be sited on an area of hard standing or short grassed area. To ensure that no potential newt resting sites are created, the disturbance of which, if occupied by NJT, would constitute an offence.
- Should any trenches and excavations be required, an escape route for animals that enter the trench must be provided, especially if left open overnight. Ramps should be no greater than of 45 degrees in angle. Ideally, any holes should be securely covered. This will ensure NJT are not captured which would otherwise constitute an offence.
- All excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling. Back filling should be completed immediately after any excavations, ideally back filling as an on-going process to the work in hand.
- If NJT is found, work must stop immediately and contact should be made with a licensed, qualified ecologist, who will liaise with Natural England. The client and site staff should be made aware of the slight risk that NJT could be encountered on the site. If NJT are found during the course of the works, the Appointed Ecologist must

be contacted immediately and work ceased until further advice to ensure legal compliance can be given.

7.3 Badger

7.3.1 Badger setts are not known to occur within 2km of the site. However, any setts will be undisturbed by work but in order to minimise impacts on badgers passing over the site the following points should also be followed.

- All work must take place during daylight hours as badgers are more likely to be commuting over the site at night and this will ensure the risk to any badgers passing through the site will be minimised.

- Should any trenches and excavations be required, an escape route for animals that enter the trench must be provided, especially if left open overnight. Ramps should be no greater than of 45 degrees in angle. Ideally, any holes should be securely covered. This will ensure badgers are not trapped during work.

- All excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling. Back filling should be completed immediately after any excavations, ideally back filling as an on-going process to the work in hand.

- Boundary fences/walls should incorporate gaps at their base to facilitate the passage of badgers across the site.

7.4 Bats

7.4.1 Work at night should be restricted and light spill onto the boundary should be minimised.

7.4.2 New planting within the site should enhance structural diversity

7.4.3 New roosting provision for crevice dwelling bats could be incorporated into the new buildings on site (see Figure 8).

7.4.4 Overall it is considered there is more than sufficient scope for mitigation and compensation at the site such that there will be no adverse impact on the favourable conservation status of bats affected by the proposal.

7.5 Birds

7.5.1 Nesting by birds within the development area is considered unlikely to occur. Birds may nest within scrub to the south of the site.

7.5.2 Any vegetation to be trimmed or cleared should be checked for nesting birds before it is removed. Ideally this should occur outside the bird nesting period March- September. If vegetation clearance is to occur in the March-September period a check for nesting birds should be conducted first by a suitably qualified individual.

7.5.3 New planting within the site and the retention of trees and shrubs on the site boundary will maintain the ecological functionality of the site for breeding birds.

7.5.4 If nesting birds are found at the site all site works shall cease and further ecological advice shall be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

7.6 Brown Hares

7.6.1 There is no requirement for specific mitigation for this species. However, as a precautionary measure, in the unlikely event that any signs of any brown hare activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

7.6.2 The points in respect of not working at night and leaving open trenches with means of escape detailed for badgers are also applicable to this species.

7.7 Invertebrates

7.7.1 Landscaping should include native or wildlife friendly species including night flowering plants.

7.7.2 Contaminants should not be allowed to enter substrates during work. To effect this, spill kits should be provided on site. Re-fuelling of all plant and machinery should be undertaken away from open drains and water courses. Drip trays should be used under static machinery.

7.8 Reptiles

7.8.1 There is no requirement for specific mitigation for these species. However, as a precautionary measure, in the unlikely event that any signs of any reptile activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

7.8.2 Dune scrub to the south of the site should remain undisturbed because it is in proximity to open areas of ground which may also be suitable for basking (although human and dog disturbance are frequent).

7.8.3 The points in respect of not leaving open trenches without means of escape detailed for badgers are also applicable to these species.

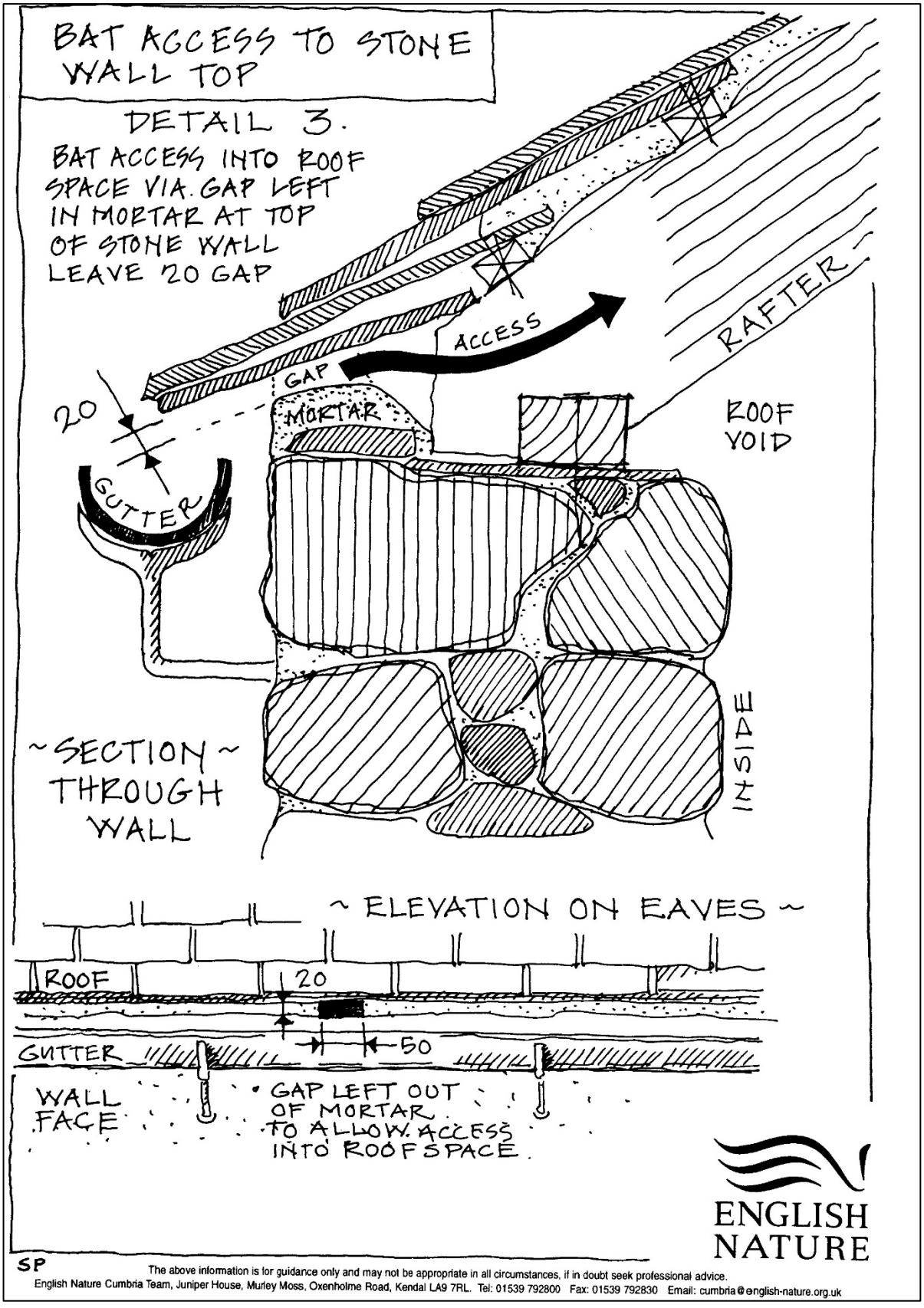


Figure 8 *Example of new roost site creation, to be adapted for rendered walls and tile roof.*

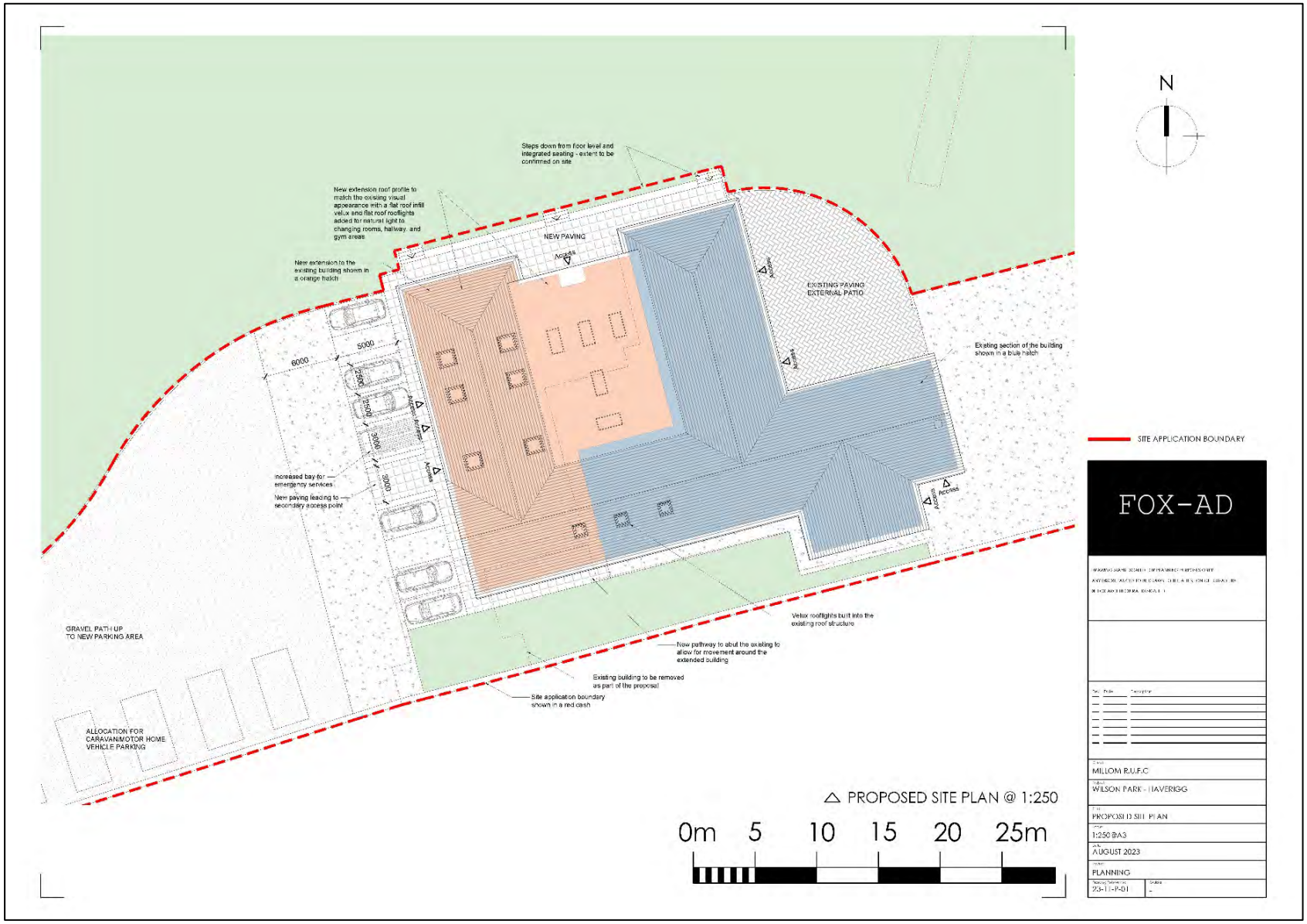


Figure 9 *Proposed site plan*

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Toolbox talk: protected species

Natterjack toad

What are they and how are they recognised?

Natterjack toads are extremely rare and occur in the UK only on a small number of carefully monitored sites. The natterjack toad has warty skin that is patchy grey-brown to dark olive green in colour with a narrow yellow stripe running along the length of its back (young toadlets also have this stripe), and it has a distinctive metallic sounding croak. The common toad is larger and does not have the yellow stripe.

Where are they found?

The natterjack toad lives in coastal sand dune systems, coastal grazing marshes and lowland heaths, and occasionally can be found on upland moor, salt-marshes and disused ironworks. It occurs in shallow, usually temporary, ponds and also large ponds or small lakes with shallow margins.

When are they found?

Adult natterjack toads can be found in breeding pools from April to August with tadpoles can being found in breeding pools from May to early September. Toadlets are only 7 mm in size when they leave the pools to feed on land. Both adults and juveniles can also be found on land at any time of year. They hibernate underground during the winter months.

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What should be done if a Natterjack Toad is found?

Natterjack toads are fully protected against killing, capture, injury and disturbance, and the places that they use for shelter or protection are protected against damage, destruction or obstruction. If a natterjack toad is found (or suspected) on site after works have started, works in the area must stop immediately to avoid breaking the law. Without a licence, it is illegal to injure, kill, capture or disturb a natterjack toad, or to damage its sheltering place. Advice must be sought from an experienced ecologist.

Penalties

If there is any doubt as to the species that has been found, stop work immediately and consult an expert.

Penalties

Breaking the law can lead to fines of up to £5000 per offence and, potentially, prison sentences of up to six months. Any vehicle used to commit the offence may be forfeited. Both the company and/or individuals can be held liable.

Natterjack Toads have a distinctive yellow dorsal stripe, red/pink/brown warts and are small in size with short limbs meaning they crawl rather than hop or jump.

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