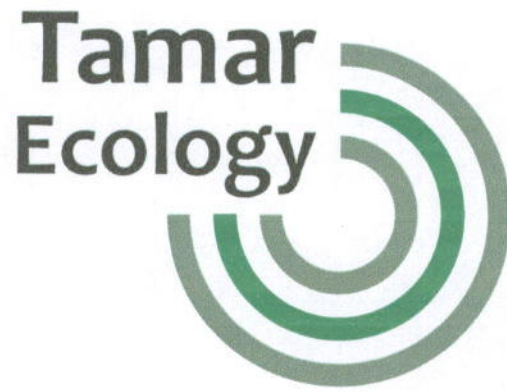
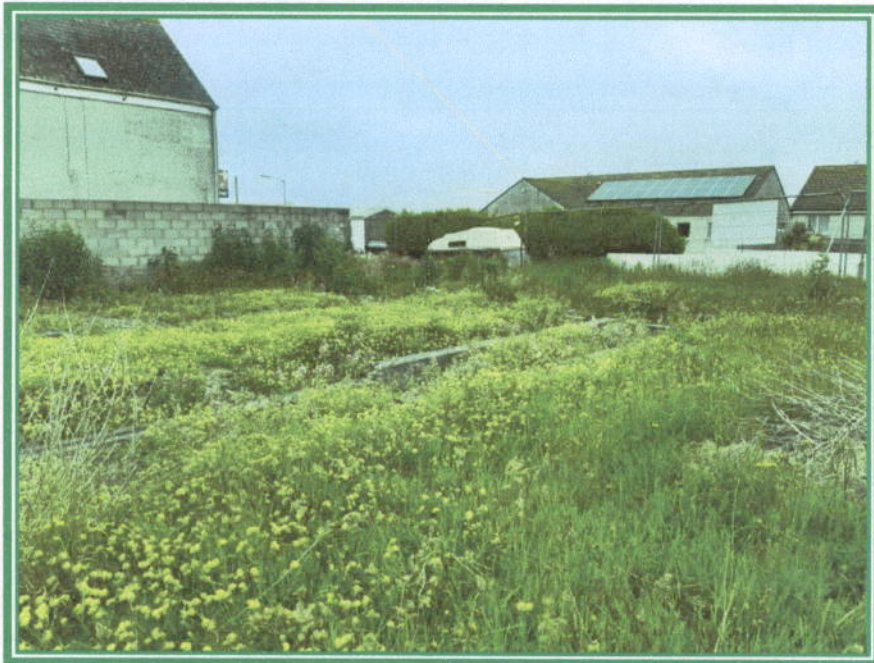


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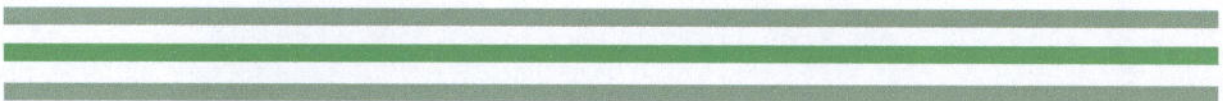


LAND AT PARGOLLA ROAD, NEWQUAY, CORNWALL

Reference TE 729/21/01

ECOLOGICAL IMPACT ASSESSMENT

June 2021



Client	Newquay, Perranporth and St Agnes Methodist Circuit
Report reference	TE 729/21/01
Surveyor (and licence number if applicable)	Nicola Dyer BSc MSc MCIEEM
Date of survey	9 June 2021
Author	Nicola Dyer BSc MSc MCIEEM
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SUMMARY

Background

Tamar Ecology was commissioned to carry out an Ecological Impact Assessment of land off Pargolla Road, Newquay to inform a planning application to construct a community facility and place of worship. The proposed development is located on a 0.09ha brownfield site comprising disturbed ground with colonising grassland and scattered shrubs. It is located within an urban setting and bordered by roads, housing and commercial properties.

Baseline ecological condition

The application site does not lie within any designated wildlife areas but is located within an SSSI Impact Risk Zone and within the zone of influence of four European wildlife sites.

Habitats within the application site are highly disturbed and no legally protected or priority habitats are present. However, the colonising vegetation contains a moderate diversity of common plant species and is of value within this urban area.

The application site has limited potential to support legally protected and priority species. Habitats on the site are suitable for foraging bats, birds, reptiles and hedgehogs and could also provide shelter for reptiles and hedgehogs. Due to the urban location and lack of habitat connections, these species are only likely to use the site in low numbers and on an occasional basis, if present. No further protected species surveys are required to inform the planning application.

Overall, the application site is considered to be of **Site** biodiversity value i.e. of value within the context of the site and its immediate surroundings.

Proposed development

The proposed development is a single community building and parking. This will occupy most of the site, apart from the upper terrace on the western boundary. The site will be landscaped with planted beds along the eastern and southern boundaries. Access into the site will be created off Pargolla Road.

Ecological impacts

The proposed development will not impact on any designated wildlife sites. It does not have a residential element and so there will be no increased recreational impacts designated sites in the local area.

Site clearance will require the removal of most of the grassland and scattered shrubs with the loss of habitats of Site value. This will result in the loss of a small area of potential foraging habitat for bats, birds, reptiles, hedgehogs and invertebrates, however this is unlikely to have a significant impact on local populations. Site clearance could potentially harm reptiles and hedgehogs which may be sheltering under brash piles, garden waste and other loose materials. All reptiles are legally protected against killing and injury and hedgehogs are protected against killing by certain methods.

Mitigation and compensation measures

The following measures will be taken to avoid and reduce impacts to important ecological features:

- A Construction Environmental Management Plan will be prepared to outline methods and timings of works to minimise disturbance to habitats and species.
- Compensatory habitats will be provided within the development to mitigate for those removed, including tree and shrub planting, wildflower grassland and a log pile for reptiles and hedgehogs.

Enhancement measures

In line with national and local planning policies, positive measures to enhance biodiversity will be included in the scheme to achieve an overall net gain for biodiversity:

- An integral bat box will be provided within the new building to provide roosting habitat.
- A sparrow terrace will be installed on the new building to provide nesting habitat.
- A bee brick will be installed within the new building to encourage pollinators.
- Hedgehog access will be maintained through the site by provided a gap in fencing at ground level.

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Land at Pargolla Road, Newquay, Cornwall TR7 1RW

1 Introduction

1.1 Background

Tamar Ecology was commissioned to undertake an Ecological Impact Assessment to inform a planning application to develop land at Pargolla Road, Newquay, Cornwall TR7 1RW. The proposed development is a community facility and place of worship.

1.2 Aims

Ecological Impact Assessment (EclA) is a process of identifying, quantifying and evaluating the potential effects of development-related or other proposed actions on habitats, species and ecosystems (CIEEM, 2018). The aims of this Ecological Impact Assessment are to:

- Carry out ecological surveys to establish the current baseline condition of the site;
- Identify important ecological features which may be affected by the development;
- Assess the potential ecological impacts of the proposed development on these features;
- Identify mitigation and compensation measures to avoid, reduce and compensate for negative ecological impacts;
- Identify ecological enhancements which will enable the development to deliver a biodiversity net gain.

1.3 Site description

The application site is located within the town of Newquay on the north coast of Cornwall (SW81556151). It is a brownfield site covering approximately 865m² (0.09ha) of abandoned land which has been colonised by rough grassland and scattered shrubs. The site is surrounded by residential and commercial properties on all sides and the eastern boundary borders Pargolla Road.

In the wider environment, the site is surrounded by urban habitats with limited green space. The Newquay to Par railway line is located 100m to the east which is bordered by woodland and scrub in places and provides a habitat corridor through the town. Approximately 300m to the south-east, there are areas of woodland, amenity grassland and lakes at Trenance Gardens, Newquay Zoo and Trenance Holiday Park. Newquay beach is located 300m to the north and the Gannel Estuary lies 750m to the south; both these areas lie within designated wildlife sites (Figure 1).

Figure 1. Location

2 Wildlife planning policy and legislation

2.1 Planning policy

Designated wildlife sites, habitats and species of nature conservation value can be material considerations in planning decisions and have policies at national, regional and local levels designed to safeguard their conservation status. Policies related to ecology and nature conservation are set out in the National Planning Policy Framework (Ministry for Housing, Communities and Local Government, 2019) and the Cornwall Local Plan (Cornwall Council, 2016) with its associated Supplementary Planning Documents and biodiversity net gain guidance (Cornwall Council, 2018, 2020^{1,2,3}). Further information is provided in Appendix 1.

These policy documents aim to maintain and enhance biodiversity in planning decisions. Adverse impacts on important ecological features are to be avoided, or appropriate mitigation and compensation must be implemented to reduce the scale of the impacts. In addition, development proposals must incorporate enhancement measures to deliver a biodiversity net gain.

2.2 Legislation

The legislative framework for the protection of designated sites, habitats and wildlife within the UK, and relevant to the development proposals, is provided through Acts of Parliament, Regulations and guidance. Further information regarding this legislation is given in Appendix 2.

The main Acts of Parliament relating to ecological protection are:

- Conservation of Habitats and Species Regulations 2017 (as amended), known as the 'Habitat Regulations' 2017.
- Wildlife and Countryside (W&C) Act 1981 (as amended).
- Countryside and Rights of Way (CROW) Act 2000.
- Natural Environment and Rural Communities (NERC) Act 2006.
- Protection of Badgers Act 1992.
- Hedgerow Regulations 1997.

3 Methods

3.1 Desk study

Ecological records for the site and its surrounds were obtained from the Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS, 2021). These included records of all designated nature conservation sites and important habitats and species within a 1km radius of the site.

The Multi Agency Geographic System for the Countryside website (DEFRA *et al*, 2021) was used to search for internationally important sites, such as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), within 12.5km of the site. This is the zone within which developments with any residential, student or tourist accommodation may affect vulnerable SACs/SPAs through recreational pressure (Cornwall Council, 2020^{1;2}). Aerial photographs were used to provide supplementary information on the land use of the area and to put the site into context with its surroundings.

3.2 Site survey

An Extended Phase 1 Habitat Survey was carried out in accordance with the standardised system developed by the Nature Conservancy Council (JNCC, 2010) and the Institute of Environmental Assessment (1995).

The survey was undertaken on the 9 June 2021 in good weather conditions. Habitats were mapped according to the standard Phase 1 habitat codes and described in terms of their dominant vascular plant species. The survey searched for evidence of legally protected/priority species (including invasive species) and a preliminary assessment of the potential of the site to support protected/priority species was undertaken.

Any trees present were inspected from ground level to identify those with features which have potential to support roosting bats, such as cracks, crevices and dense ivy. The inspection was carried out according to the Bat Conservation Trust guidelines (Collins *et al*, 2016) and trees were categorised according to the criteria in Table 1 to identify any which may require further survey for the planning application.

Table 1. Bat roost assessment categories

Roost category	Evidence
Confirmed roost	Bats recorded roosting within the structure or tree.
High potential	A structure or tree with one or more potential roost features that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time.
Moderate potential	A structure or tree with one or more features suitable for roosting bats due to their size, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
Low potential	A structure or tree with a few sub-optimal features for roosting bats that could be used by individual bats opportunistically. However these features do not provide enough space, conditions and/or surrounding habitat to be used on a regular basis by larger numbers of bats.
Negligible potential	A structure or tree with negligible habitat features likely to be used by roosting bats.

3.3 Evaluation

Designated wildlife sites, habitats and species within the zone of influence of the development were evaluated according to the conservation and legal criteria given in Appendix 3.

Using these criteria, each ecological feature was assigned a value based on the geographical framework provided by the Chartered Institute for Ecology and Environmental Management shown in Table 2 (CIEEM, 2018). An overall value was then given for the whole application site.

Table 2. Ecological values

Value	Geographical area
International	Europe
National	UK
Regional	South West England
County	Cornwall
District	Restormel (former district)
Local	Parish of Newquay
Site	Site and immediate surrounds
Negligible	-

3.4 Impact assessment

An impact assessment was carried out to evaluate the impacts of the development on ecological features, based on the guidelines given by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018). The assessment process involved:

- Identifying and characterising impacts and their effects;
- Incorporating mitigation and compensations measures into the development scheme to avoid, reduce and compensate for any negative effects;
- Identifying any significant residual effects after mitigation and compensation measures have been applied;
- Identifying opportunities for ecological enhancement to deliver at least a 10% net biodiversity gain.

3.5 Survey limitations

- The report is based on the findings of a single survey in June 2021 and represents a 'snapshot' of the biodiversity of the site. The presence or absence of a species, especially the more mobile species, will vary from survey to survey.
- Pedestrian access was good across the site apart from the upper terrace on the western boundary. This was viewed from the lower ground level but is not a significant limitation to the survey.
- Field survey data is valid for a restricted period due to changes in ecological conditions over time. In line with recent guidance (CIEEM, 2019), it is recommended that this report is reviewed in June 2022, 12 months after the current surveys.

4 Results

This chapter describes the baseline ecological condition of the application site and ecological features within the zone of influence of the proposed development, based on the results of the desk study and field surveys.

4.1 Designated wildlife sites

The application site does not lie within a designated wildlife area but it is situated within the zone of influence of four European wildlife sites and a Site of Special Scientific Interest. Further information about the legal and planning status of designated wildlife sites is given in Appendices 1 and 4.

4.1.2 European sites

Sites which are important within a European context include Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and wetland sites designated under the Ramsar Convention 1971. In the UK, SACs and SPAs are protected by the Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations') and form part of the UK National Site Network of protected sites. Under this legislation, plans or projects which are capable of affecting the SAC/SPA sites require a Habitats Regulations Assessment to determine whether they cause any likely significant adverse effects (either alone or in combination with other projects in the surrounding area). Ramsar sites are subject to the same policy and process.

The application site is located within a 12.5km radius of four European sites: Penhale Dunes SAC, Newlyn Downs SAC, Breney Common and Goss & Tregoss Moors SAC and Bristol Channel Approaches SAC, as described in Table 3. A 12.5km radius is identified by Cornwall Council as the zone of influence surrounding vulnerable European Sites within which developments could potentially have cumulative recreational impacts (Cornwall Council, 2020^{1:2}).

Table 3. European sites within a 12.5km radius

Site	Description	Distance & direction from the site
Penhale Dunes SAC	<p>Penhale Dunes is an extensive and exposed calcareous dune system. It has a large area of fixed dunes with herbaceous vegetation. Of particular interest are the communities developing on sand overlying the adjacent hillsides which has been blown inland by strong winds. Humid dune slacks with an interesting flora are often found in marshy areas or pools and drier slacks support short-rabbit grazed turf.</p> <p>Qualifying features under the EC Habitats Directive 1992:</p> <ul style="list-style-type: none"> • Fixed coastal dunes with herbaceous vegetation (grey dunes) • Humid dune slacks • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) • Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>) • Petalwort <i>Petalophyllum ralfsii</i> • Shore dock <i>Rumex rupestris</i> • Early gentian <i>Gentianella anglica</i> 	5.6km south-west
Newlyn Downs SAC	<p>Newlyn Downs has the largest area of Dorset heath in Cornwall and is important for the representation of the full geographical distribution of Temperate Atlantic wet heaths with Dorset heath and cross-leaved heath.</p> <p>Qualifying features under the EC Habitats Directive 1992:</p> <ul style="list-style-type: none"> • Temperate Atlantic wet heaths with <i>Erica ciliaris</i> and <i>Erica tetralix</i> • European dry heaths 	6.2km south
Breney Common and Goss & Tregoss Moors SAC	<p>This lowland site exhibits mosaics of various habitats, including dry heaths, wet heaths, acid grassland, bog, swamp, fen and open water communities. The habitat supports rich assemblages of butterflies, including marsh fritillary, moths, dragonflies and damselflies, and also a population of European nightjar.</p> <p>Qualifying features under the EC Habitats Directive 1992:</p> <ul style="list-style-type: none"> • Northern Atlantic wet heaths with <i>Erica tetralix</i> • European dry heaths • Transition mires and quaking bogs • Marsh fritillary butterfly 	11.5km east
Bristol Channel Approaches SAC	<p>The Bristol Channel Approaches SAC spans the Bristol Channel between the northern coast of Cornwall into Carmarthen Bay in Wales. The site has been identified for the protection of harbour porpoise.</p> <p>Qualifying features under the EC Habitats Directive 1992:</p> <ul style="list-style-type: none"> • Harbour porpoise 	0.6km north

4.1.2 National and county sites

There is one national wildlife site and two county sites within the 1km zone of influence around the application site (Table 4). Newquay and the Gannel Marine Conservation Zone is a statutory site and legally protected under the Marine and Coastal Access Act 2009. The county sites are protected by planning policy.

The application site lies 3.4km from the nearest Site of Special Scientific Interest (SSSI) and is located within a SSSI Impact Risk Zone. This is a zone is identified by Natural England within which a proposed planned change to the environment could either create significant damage to a local SSSI or require consultation in order to avoid impacts (DEFRA *et al*, 2021).

Table 4. National and county wildlife sites within a 1km radius

Site	Description	Distance & direction from the site
Newquay and the Gannel Marine Conservation Zone (MCZ)	The MCZ has a variety of important habitats and species including exposed sandy beaches and rocky shores and the rare giant goby fish.	0.3km north
The Gannel County Wildlife Site (CWS)	This site comprises the Gannel Estuary, Crantock Beach, the dunes at Rushy Green and an area known as the Warren on the northern side of the estuary. The estuary is mostly made up of tidal sand and mudflats, with areas of saltmarsh which are important for wintering wildfowl and waders.	0.7km south
Cornwall Roadside Verge no. 87	Biological interest.	0.3km south

4.2 Habitats

The application site is a disturbed brownfield site which is colonised by rough grassland and scattered shrubs. It has been terraced to create a large area of level ground adjacent to Pargolla Road and two higher platforms to the west which are demarked with a low vegetated embankment and an exposed rock face. The site is neglected and there is evidence of fly tipping and garden waste. The distribution of habitats within the application site is shown in Figure 2 and habitat areas are given in Table 4.

4.2.1 Cultivated/disturbed ground

Most of the site is colonised by patchy grassland which has become established on exposed, loose slaty bedrock. The vegetation has a diverse assemblage of grasses and herbaceous species (Plate 1). Dominant grass species include Yorkshire fog with scattered cock's-foot, false oat-grass, red fescue and common bent. Flowering plants include a colourful mix of kidney vetch, red valerian, cat's-ear and white clover, with occasional common figwort, black medick and common broomrape. Around the margins, the grassland contains hemp agrimony, hogweed, herb robert, wood avens and wild strawberry. Small shrubs are scattered throughout the grassland, particularly on the site margins. These include mainly young buddleia, willow and bramble (Plate 2).

4.2.3 Exposed rock

A 1m high wall of artificially exposed bedrock which runs north-south through the site near the western boundary. This comprises slatey material interspersed with clay/silt sized sediments. It is also colonised by scattered grasses and herbs.

4.2.4 Built structures

Breeze block walls form the northern and southern site boundaries. Low block walls are also present in the northern half of the site which delineate building foundations (Plate 4). An area of concrete hardstanding occurs on the upper terrace, this also has a patchy cover of grasses and ruderal plants.

Plate 1. Semi-improved grassland



Plate 2. Scattered scrub on boundaries



Plate 3. Embankment with rockface behind



Plate 4. Built structures



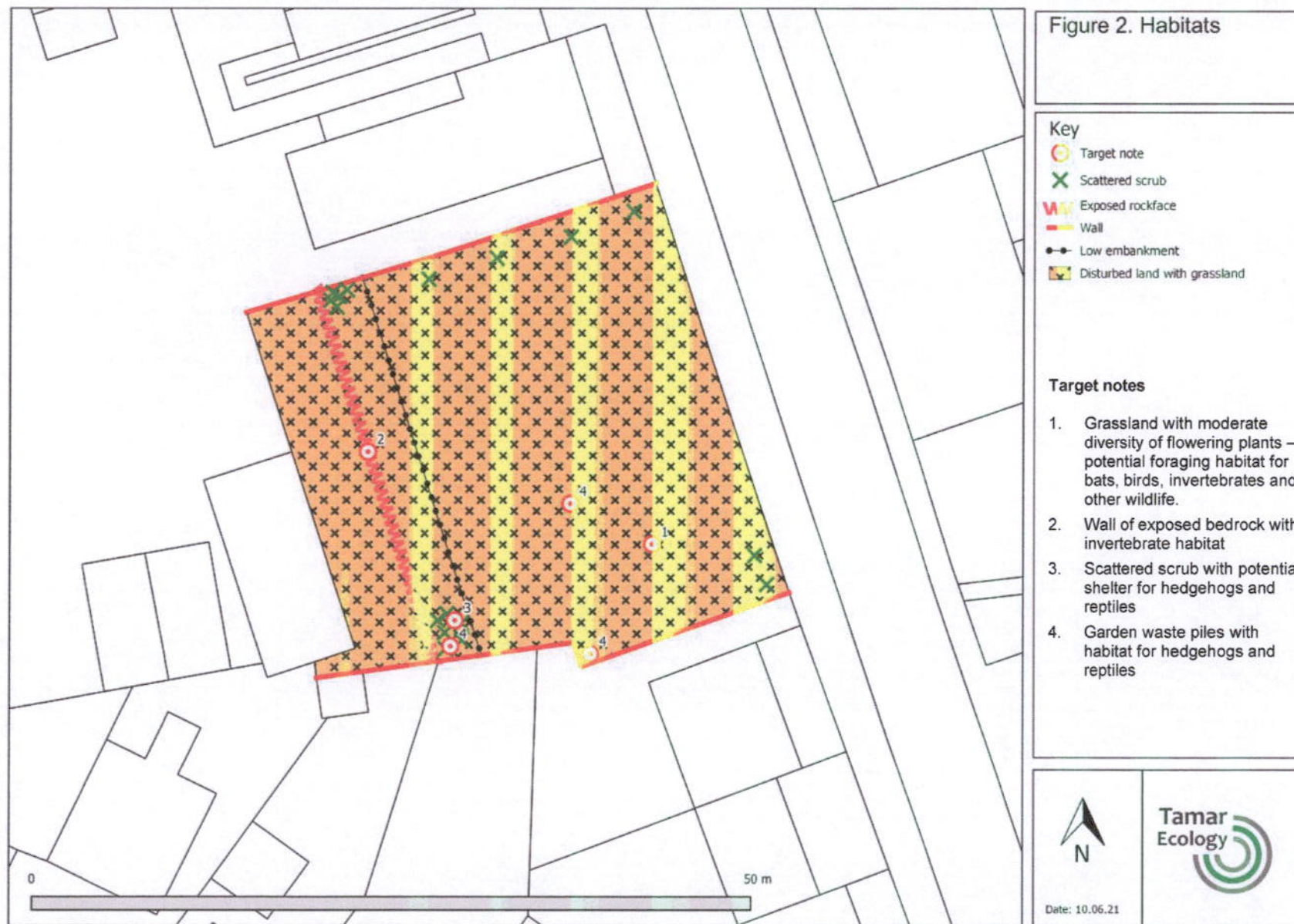


Table 4. Pre-development habitat areas

Habitat	Habitat area (m ²)	Habitat length (m)
Cultivated/disturbed land	863	-
TOTAL AREA SURVEYED (0.09ha)	863	-
Artificial exposed rock	-	27
Built walls	-	65

4.3 Protected species

This section identifies the legally protected/priority species which are either known to occur within the application site or could potentially be present due to local records from within a 1km radius and habitat suitability.

4.3.1 Bats

All species of bat have a high level of legal protection under the Conservation of Habitats and Species Regulations 2017, the Wildlife and Countryside Act (WCA) 1981, and the Countryside and Rights of Way (CRoW) Act 2000. This legislation makes it an offence to kill, injure, capture or disturb bats, obstruct access to bat roosts or damage/destroy bat roosts. Some species, including brown long-eared and lesser horseshoe bats, are UK priority species and receive additional legal protection in the planning process under the NERC Act 2006.

There are confirmed records of 8 species of bats from within a 1km radius of the application site: Natterer's, noctule, common pipistrelle, soprano pipistrelle, brown long-eared, greater horseshoe and whiskered/Brandt's. Within this data search area, there are no known roost records.

Habitats within the application site have limited potential for bats and no further bat surveys were required to inform the EclA. There are no trees or buildings which could be used for roosting. The grassland could potentially be used for occasional foraging but the site is bordered by roads and housing and prone to moderate levels of artificial light which are likely to deter bat activity.

4.3.2 Otter

Otters and their resting places also have a high level of legal protection under the Conservation of Habitats and Species Regulations 2017, the WCA 1981, CRoW Act 2000 and NERC Act 2006.

Otter has been recorded from the River Gannel and a tributary near Newquay Zoo but there are few sightings. The application site is unsuitable for this protected species due to its urban location, lack of connection to watercourses and poor habitat.

4.3.3 Badger

Badgers and their setts are protected under the Protection of Badgers Act 1992. There are occasional records for badgers within 1km of the application site and this species may forage within residential gardens in the town. However, no evidence of badger was found during the survey.

4.3.4 Hedgehog

Hedgehog is a UK priority species and protected under the NERC Act 2006. It is also protected under Schedule 6 of the WCA 1981, making it illegal to kill or capture hedgehogs unless they are suffering or need to be rehabilitated then released back into the wild.

Hedgehog has been recorded from the local area but the site has limited potential for this species. The grassland provides some occasional foraging and the shrubs and brash piles may be used for shelter but the densely urban setting and poor habitat connections restrict potential for this species.

4.3.5 Birds

All wild birds are legally protected under the WCA 1981, making it an offence to intentionally or recklessly take, damage or destroy eggs or any nest while it is in use or being built. In addition to this legislation:

- Certain species are protected under Schedule 1 of the Act, making it an offence to intentionally or recklessly disturb birds at, on, or near an 'active' nest.
- Certain birds with declining populations are UK priority species and protected under the NERC Act 2006.
- Habitats for wild birds are also protected under the Conservation of Habitats and Species Regulations 2017.

High numbers of bird species have been recorded from within a 1km radius of the application site but these mainly relate to birds which typically occur in the nearby coastal and estuarine habitats. Urban species which could be present inland include house sparrow, song thrush and herring gull which are priority NERC Act species, as well as more common birds such as robin, wren and blackbird. However, the application site does not have any trees or dense shrub cover which could be used for nesting and habitats only offer occasional foraging. No bird species were recorded on site during the June 2021 survey but there was house sparrow activity in the Leylandii shrubs adjacent to the southern boundary.

4.3.5 Reptiles and amphibians

All species of reptiles are priority species protected by the NERC Act 2006 and also receive protection from killing and injury under the WCA 1981.

The four widespread species of amphibian, smooth and palmate newts, common frog and common toad, are protected from sale only under the WCA 1981. Certain species, including common toad, are protected by the NERC Act 2006.

There are desk study records for common lizard, slow worm and common toad from within a 1km radius of the application site. The site does have some potential for slow worm and common lizard which may shelter under brash piles and forage within the grassland. It is possible that low numbers may be present, although the lack of habitat connections offsite in this urban setting may be a deterrent. There is no water to provide breeding habitat for amphibians.

4.3.6 Invertebrates

A number of invertebrates in the UK are legally protected, with internationally important species protected under the Conservation of Habitats and Species Regulations 2017 and nationally important species protected under the WCA 1981. UK priority species are also protected in the planning system under the NERC Act 2006.

There are numerous records of priority NERC Act moth species from the Newquay area and wall butterfly. The grassland has a diversity of flowering plants which are likely to support a range of common invertebrates, particularly pollinators. The exposed rock face has insect holes, possibly attributable to mining bees.

4.3.7 Plants

Highly threatened plants have a high level of legal protection under the Conservation of Habitats and Species Regulations 2017 and WCA 1981, making it an offence to pick, uproot, possess or destroy them. Certain plant species with declining populations are UK priority species and protected under the NERC Act 2006.

Notable plants recorded from within the data search area include true fox-sedge which is a priority NERC Act species and the Nationally scarce western rampion fumitory and balm-leaved figwort which do not have any legal protection. The survey in June 2021 recorded a diversity of common plants but no notable species.

Several non-native invasive plants have been recorded locally, including Japanese knotweed, Japanese rose, montbretia, three-cornered leek, rhododendron and entire-leaved cotoneaster. These species are legally controlled on Schedule 9 of the WCA 1981, making it an offence to cause them to spread in the countryside. The survey did not record any invasive legally controlled plants on the site.

5 Site evaluation

This chapter evaluates the application site and surrounding area potentially affected by the development. Designated wildlife sites, habitats and species in the zone of influence of the development are evaluated in a geographical context, based on the findings of the desk study and site survey (Table 5).

In summary:

- The application site does not lie within a designated wildlife area but is located within the zone of influence of four European sites and within a SSSI Impact Risk Zone.
- The site supports habitats which are typical of early colonisation and does not have any UK priority or notable habitats.
- Due to the small size and low habitat quality, the application site has limited potential to support legally protected species. It may be used for occasional foraging by bats and birds and for both occasional foraging and shelter by hedgehogs and reptiles.
- Overall, the application site is considered to be of **Site** ecological value i.e. of importance within the context of the site and its immediate surroundings.

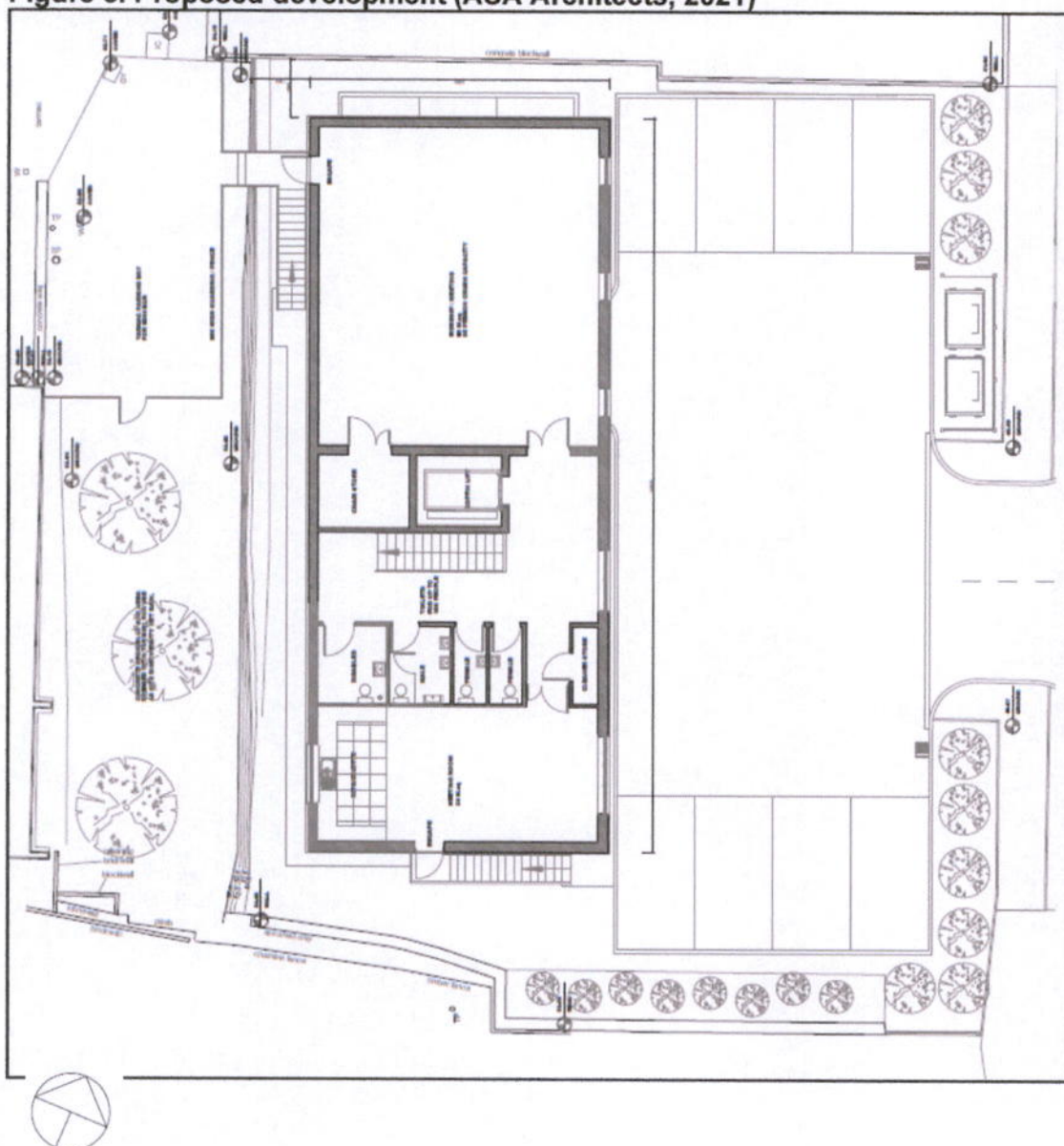
Table 5. Ecological evaluation of the zone of influence

Feature	Value	Rationale
Designated sites		
European sites: – Special Area of Conservation (SAC) – Special Protection Area (SPA)	Inter-national	There are four European sites within 12.5km of the application site which are considered to be within the zone of influence and could potentially be affected by development.
National sites: – Marine Conservation Zone (MCZ) – Site of Special Scientific Interest (SSSI)	National	Newquay and the Gannel MCZ lies 0.3km from the application site and is within the zone of influence. The application site lies within a SSSI Impact Risk Zone.
County sites: – County Wildlife Site (CWS)	County	The Gannel CWS lies 0.3km from the application site and is considered to be within the zone of influence of the development.
Habitats		
Semi-improved grassland and scattered scrub	Site	The site is small and habitats are disturbed but the grassland is of value within the urban setting.
Exposed rock	Site	The exposed rock provides habitat diversity within the site and habitat for insects.
Hard landscaping	Negligible	No wildlife interest.
Protected/ Priority species		
Bats	Site	The site has no roosting habitat and has low potential as a foraging resource.
Hedgehog	Site	The site low potential for shelter and foraging.
Birds	Site	The site has no nesting habitat and has low potential as a foraging resource.
Reptiles	Site	The site has low potential for shelter and foraging.
Invertebrates	Site	A diversity of common species is likely to be present and the site is of value for invertebrates within the urban setting.
Plants	Site	The site has a moderate range of common plants which provide foraging for other wildlife. The site is of value for plants within the urban setting.

6 Proposed development

The proposed development is a single community building and place of worship to be constructed in the centre of the plot, with parking for staff and visitors. Vehicle access will be off Pargolla Road (Figure 3). The site will be landscaped to provide an attractive frontage along Pargolla Road and deliver a biodiversity net gain. The scheme will include a lawn with specimen trees along the eastern boundary, a shrubbery along the southern boundary to provide shelter for wildlife, a zone of woodland wildflowers and ferns on shaded ground adjacent to the building and a wildflower grassland area with native shrubs on the upper terrace (Figure 4). An estimate of the post-development habitats is given in Table 6.

Figure 3. Proposed development (ASA Architects, 2021)



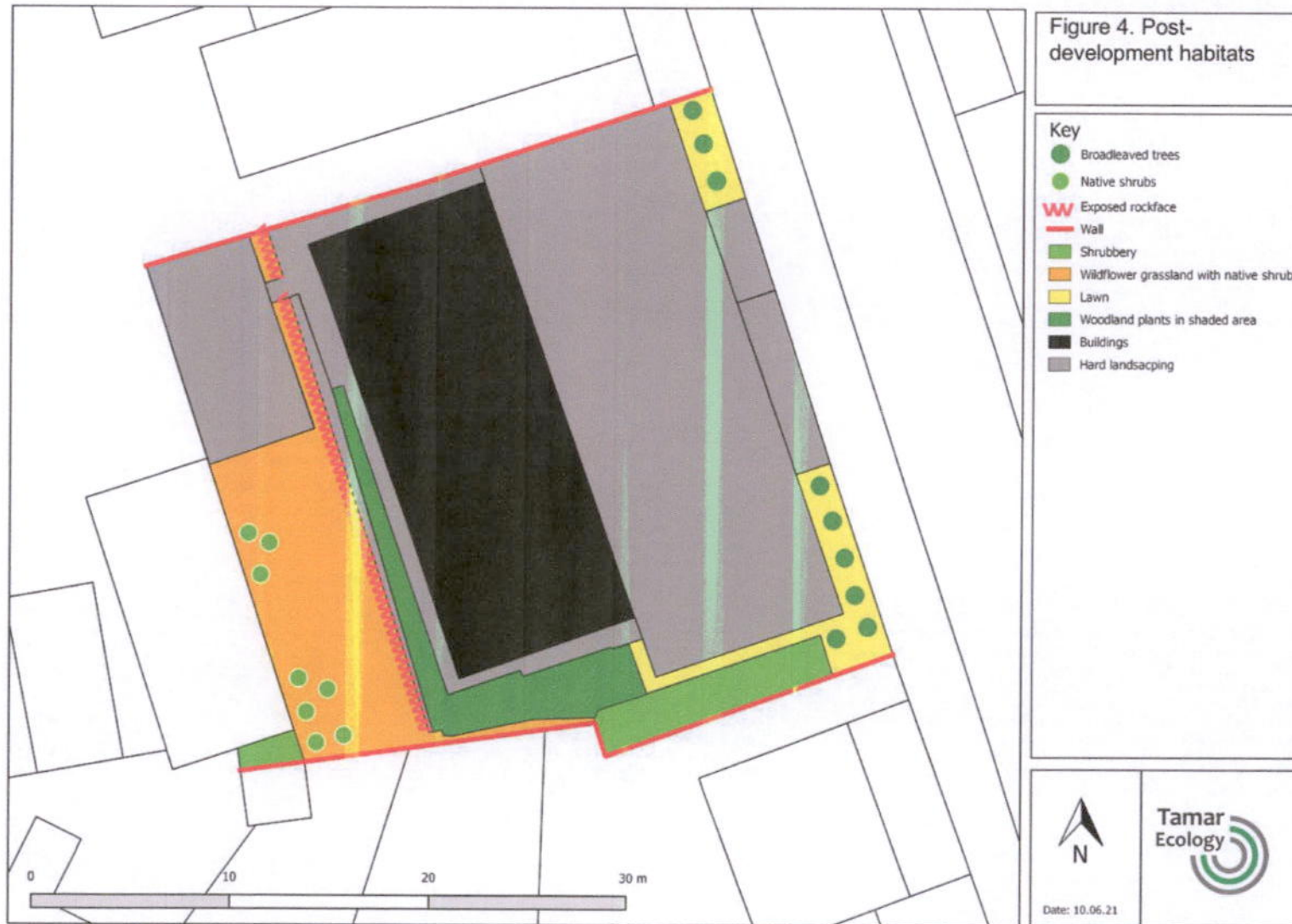


Table 6. Post-development habitat areas

Habitat	Habitat area (m ²)	Habitat length (m)
Ornamental shrubbery	30	-
Wildflower grassland with native shrubs	115	-
Lawn with specimen trees	42	-
Woodland flora and ferns in shaded area	42	-
Building	220	-
Hard standing	414	-
TOTAL AREA SURVEYED (0.09ha)	863	-
Artificial exposed rock	-	26
Built walls	-	-

7 Ecological impact assessment

7.1 Impact characterisation

Without mitigation, the proposed development may have impacts to ecological features during the construction and operational phases. Table 7 below identifies the potential impacts to ecological features which have been identified as being of **Site value** and above.

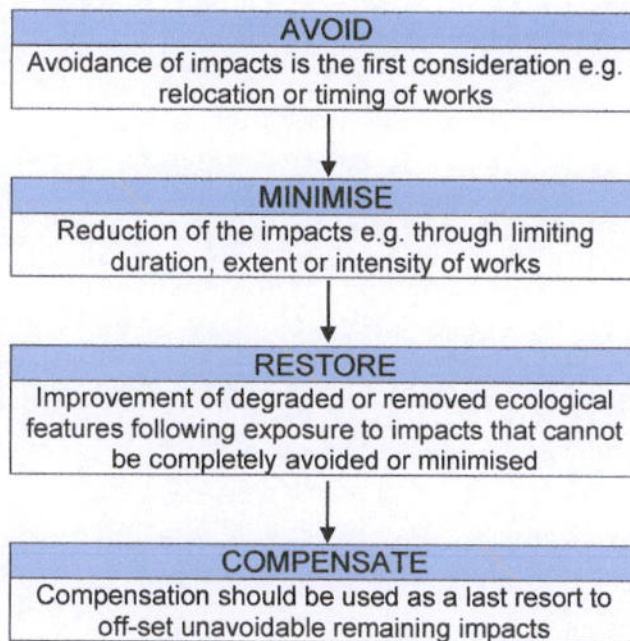
The significance of the impacts is assessed according to characteristics such as:

- Positive or negative (improvement or reduction in the quality of the environment)
- Extent (spatial or geographical area over which the impact may occur)
- Magnitude (size, amount, intensity or volume of the impact)
- Duration (short, medium or long-term; permanent or temporary)
- Frequency and timing (how often an activity occurs; timing of an activity)
- Reversibility (reversible effect if recovery is possible within a reasonable timescale).

7.2 Mitigation and compensation

The Mitigation Hierarchy is applied to each impact to avoid and reduce negative impacts where possible, in accordance with the National Planning Policy Framework biodiversity guidance (Figure 5).

Table 7 outlines the mitigation and compensation measures which will be taken during the construction and operational phases of the proposed development. These include following best practice during construction and providing compensatory habitats.

Figure 5. Mitigation hierarchy

7.3 Residual impacts

Table 7 describes the residual impacts which will remain after mitigation and compensation measures have been implemented.

The construction phase will cause short-term, temporary impacts to habitats and species until new habitats are generated by the landscaping scheme, including tree and shrub planting and the creation of wildflower grassland and woodland flora areas. Although these will take some time to become fully established, in the long-term, the scheme will deliver a minor positive residual effect on habitats and species.

Table 7. Impact assessment

FEATURE	POTENTIAL IMPACTS WITHOUT MITIGATION	IMPACT CHARACTERISTICS	MITIGATION AND COMPENSATION MEASURES	RESIDUAL IMPACTS
1. Designated sites				
European sites: - Penhale Dunes SAC - Newlyn Downs SAC - Breney Common and Goss & Tregoss Moors SAC - Bristol Channel Approaches SAC	<u>Construction phase</u> The application site is located 0.6km from the nearest European site and therefore no direct impacts or indirect impacts from construction activities are predicted. There are no hydrological links to the European sites.	<u>Construction phase</u> No impact predicted	<u>Construction phase</u> None required	<u>Construction phase</u> Neutral
	<u>Operational phase</u> Once the development is occupied, there will be no direct impacts on any European sites. The proposed development will be used as a community facility and there is no residential element which could potentially cause indirect recreational impacts on any European sites.	<u>Operational phase</u> No impact predicted	<u>Operational phase</u> None required	<u>Operational phase</u> Neutral
National sites - Newquay and the Gannel MCZ - SSSI Impact Risk Zone	<u>Construction phase</u> The application site lies 0.3km from the MCZ and 3.4km from the nearest SSSI. There will be no direct or indirect impacts to the designated areas during construction.	<u>Construction phase</u> No impact predicted	<u>Construction phase</u> None required	<u>Construction phase</u> Neutral
	<u>Operational phase</u> Once the development is occupied, there will be no direct or indirect impacts on any national sites. Single buildings within the Impact Risk Zone are not identified as a potential threat to local SSSIs (DEFRA <i>et al</i> , 2021).	<u>Operational phase</u> No impact predicted	<u>Operational phase</u> None required	<u>Operational phase</u> Neutral

FEATURE	POTENTIAL IMPACTS WITHOUT MITIGATION	IMPACT CHARACTERISTICS	MITIGATION AND COMPENSATION MEASURES	RESIDUAL IMPACTS
County sites - The Gannel CWS - Cornwall Roadside Verge	<u>Construction phase</u> The CWS lies 0.7km from the application site and there will be no direct or indirect impacts during the construction phase.	<u>Construction phase</u> No impact predicted.	<u>Construction phase</u> None required.	<u>Construction phase</u> Neutral
	<u>Operational phase</u> Once the development is occupied, there will be no direct or indirect impacts on any county sites.	<u>Operational phase</u> No impact predicted.	<u>Operational phase</u> None required.	<u>Operational phase</u> Neutral
2. Habitats				
Habitats	<u>Construction phase</u> The development will require the removal of all the vegetation on the site with the loss of rough grassland with a diversity of flowering plants and scattered scrub. This will result in a reduction in biodiversity in an urban area. Site clearance will also affect protected species which may use these habitats (see Protected species below).	<u>Construction phase</u> Permanent, adverse, high magnitude impact at Site level.	<u>Construction phase</u> A Construction Environmental Management Plan (CEMP) will be prepared to include best practice for minimising impacts to habitats and species. A landscaping plan will be designed to provide compensatory wildflower grassland and native trees and shrubs which will also deliver a biodiversity net gain (see Chapter 8. Ecological Enhancements). Specific compensatory habitats for protected species will be provided within the development (see Protected species below).	<u>Construction phase</u> Temporary adverse minor, residual impact on habitats.
	<u>Operational phase</u> Once occupied, there will be a small, localised increase in lighting, noise and human activity. Disturbance to habitats on the site will be negligible. Without ongoing management, habitats created in the landscaping scheme may not establish successfully or thrive in the long term.	<u>Operational phase</u> Temporary, adverse, moderate magnitude impact at Site level.	<u>Operational phase</u> A Landscaping and Ecological Management Plan (LEMP) will be prepared with 5-year work programme to ensure created habitats establish well and are managed appropriately in the long-term to maximise their biodiversity value.	<u>Operational phase</u> Permanent, positive minor residual impact on habitats once they are established and managed.

FEATURE	POTENTIAL IMPACTS WITHOUT MITIGATION	IMPACT CHARACTERISTICS	MITIGATION AND COMPENSATION MEASURES	RESIDUAL IMPACTS
3. Protected species				
Bats	<p><u>Construction phase</u></p> <p>Site clearance will cause the loss of a small area of potential foraging habitat. This is considered unlikely to impact on local bat populations.</p> <p>Construction lighting is not anticipated but, even if required for exceptional circumstances, it is unlikely to affect bat activity in this urban area.</p>	<p><u>Construction phase</u></p> <p>No impact predicted.</p>	<p><u>Construction phase</u></p> <p>None required.</p>	<p><u>Construction phase</u></p> <p>Neutral</p>
	<p><u>Operational phase</u></p> <p>Once occupied, the site will result in a small, localised increase in lighting, noise and human activity. Within this dense urban area, these are unlikely to significantly affect bat activity.</p>	<p><u>Operational phase</u></p> <p>No impact predicted.</p>	<p><u>Operational phase</u></p> <p>A lighting plan will be designed to keep external lighting to a minimum across the site. Even though in an urban area, this will reduce cumulative impacts of increased illumination.</p>	<p><u>Operational phase</u></p> <p>Neutral</p>
Hedgehog	<p><u>Construction phase</u></p> <p>Vegetation clearance could cause death/injury to any hedgehogs which are sheltering or hibernating within garden waste piles; this is a legal offence. Clearance will also result in the loss of a small area of potential habitat in this urban area.</p>	<p><u>Construction phase</u></p> <p>Permanent, adverse, moderate impact at Site level.</p>	<p><u>Construction phase</u></p> <p>The CEMP will specify that the garden waste piles are removed carefully in the spring/summer, outside the hedgehog hibernation period. If any hedgehogs are found, they will be moved to a safe location nearby. If garden waste has to be moved in the hibernation period, this would be carried out under an ecological watching brief.</p> <p>Compensatory habitat will be provided by planting shrubs in the landscaping scheme and creating a small log pile near the southern boundary of the site (see Figure 6).</p>	<p><u>Construction phase</u></p> <p>Neutral</p>
	<p><u>Operational phase</u></p> <p>There will be a small, localised increase in noise, human activity and lighting when the building is</p>	<p><u>Operational phase</u></p> <p>No impact predicted.</p>	<p><u>Operational phase</u></p> <p>None required.</p>	<p><u>Operational phase</u></p> <p>Neutral</p>

FEATURE	POTENTIAL IMPACTS WITHOUT MITIGATION	IMPACT CHARACTERISTICS	MITIGATION AND COMPENSATION MEASURES	RESIDUAL IMPACTS
	occupied. However, given that the site is already in use as a residential garden, the impact on hedgehogs is not considered significant.			
Birds	<p><u>Construction phase</u></p> <p>The scattered shrubs are too small to provide potential nest sites and their removal will not affect breeding birds. Site clearance will result in the loss of a small area of foraging habitat but this is unlikely to affect local populations.</p> <p>The construction phase could also affect nesting birds indirectly through increased noise and human activity. House sparrow activity was noted in the trees adjacent to the southern boundary.</p>	<p><u>Construction phase</u></p> <p>Temporary, adverse, moderate magnitude impact at Site level.</p>	<p><u>Construction phase</u></p> <p>The CEMP will specify methods and timings of works to minimise disturbance to birds and other wildlife.</p> <p>Compensatory foraging habitat for birds will be provided through the landscaping scheme.</p>	<p><u>Construction phase</u></p> <p>Neutral</p>
	<p><u>Operational phase</u></p> <p>Once the building is occupied there will be a small, localised increase in noise, human activity and lighting. However, given that the site is lies within a busy urban area, the impact on bird activity is not considered significant.</p>	<p><u>Operational phase</u></p> <p>No impact predicted</p>	<p><u>Operational phase</u></p> <p>No mitigation required.</p>	<p><u>Operational phase</u></p> <p>Neutral</p>
Reptiles	<p><u>Construction phase</u></p> <p>Low numbers of reptiles may shelter within the garden waste and under piles of bricks and loose rock. Site clearance could result in killing/injury reptiles which would be a legal offence.</p>	<p><u>Construction phase</u></p> <p>Permanent, adverse high magnitude impact at Site level.</p>	<p><u>Construction phase</u></p> <p>The CEMP will specify that waste and loose material is removed in the spring/summer, outside the reptile hibernation period. If this is not feasible, then an ecological watching brief will be carried out during its removal. Clearance of vegetation on the rest of the site will be carried out carefully to minimise the risk of injury to reptiles.</p> <p>Compensatory habitat for reptiles will be provided by creating a small log pile in an undisturbed location along the southern boundary of the site (Figure 6).</p>	<p><u>Construction phase</u></p> <p>Neutral</p>

FEATURE	POTENTIAL IMPACTS WITHOUT MITIGATION	IMPACT CHARACTERISTICS	MITIGATION AND COMPENSATION MEASURES	RESIDUAL IMPACTS
	<u>Operational phase</u> Once the building is occupied there will be a small, localised increase in noise, human activity and lighting but the impact on reptiles is not considered significant.	<u>Operational phase</u> No impact predicted	<u>Operational phase</u> None required.	<u>Operational phase</u> Neutral
Invertebrates	<u>Construction phase</u> Clearance of grassland and scattered shrubs will result in the loss of invertebrate habitat and loss of nectar source for pollinators.	<u>Construction phase</u> Permanent, adverse high magnitude impact at Site level.	Compensatory habitat for invertebrates will be provided through the landscaping scheme. In addition, the log pile to be built for reptiles and hedgehogs will also provide invertebrate habitat. A small bug house will also be created on the upper terrace (see Figure 6).	<u>Construction phase</u> Neutral
	<u>Operational phase</u> Once the building is occupied there will be a small, localised increase in noise, human activity and lighting but the impact on invertebrates is not considered significant.	<u>Operational phase</u> No impact predicted	<u>Operational phase</u> None required.	<u>Operational phase</u> Neutral
Plants	<u>Construction phase</u> Site clearance will result in the loss of existing vegetation cover and result in a reduction in flowering plants for invertebrates and other wildlife in this urban location.	<u>Construction phase</u> Permanent, adverse minor impact at Site level.	<u>Construction phase</u> Compensatory habitats will be created through the landscaping scheme to provide a diversity of native woodland and grassland plants.	Neutral
	<u>Operational phase</u> There will be no further impacts to plants once the building is in occupation.	<u>Operational phase</u> No impact predicted	<u>Operational phase</u> No mitigation required.	<u>Operational phase</u> Neutral

Figure 5. Ecological Mitigation and Enhancement Plan

Red: Mitigation which is a legal requirement; **Green:** mitigation which is a planning requirement; **Orange:** is an ecological enhancement

Removal of the waste piles will be timed to avoid disturbance to any hibernating hedgehogs or reptiles, otherwise an ecological watching brief will be undertaken during site clearance to minimise the risk of killing/injuring these species.

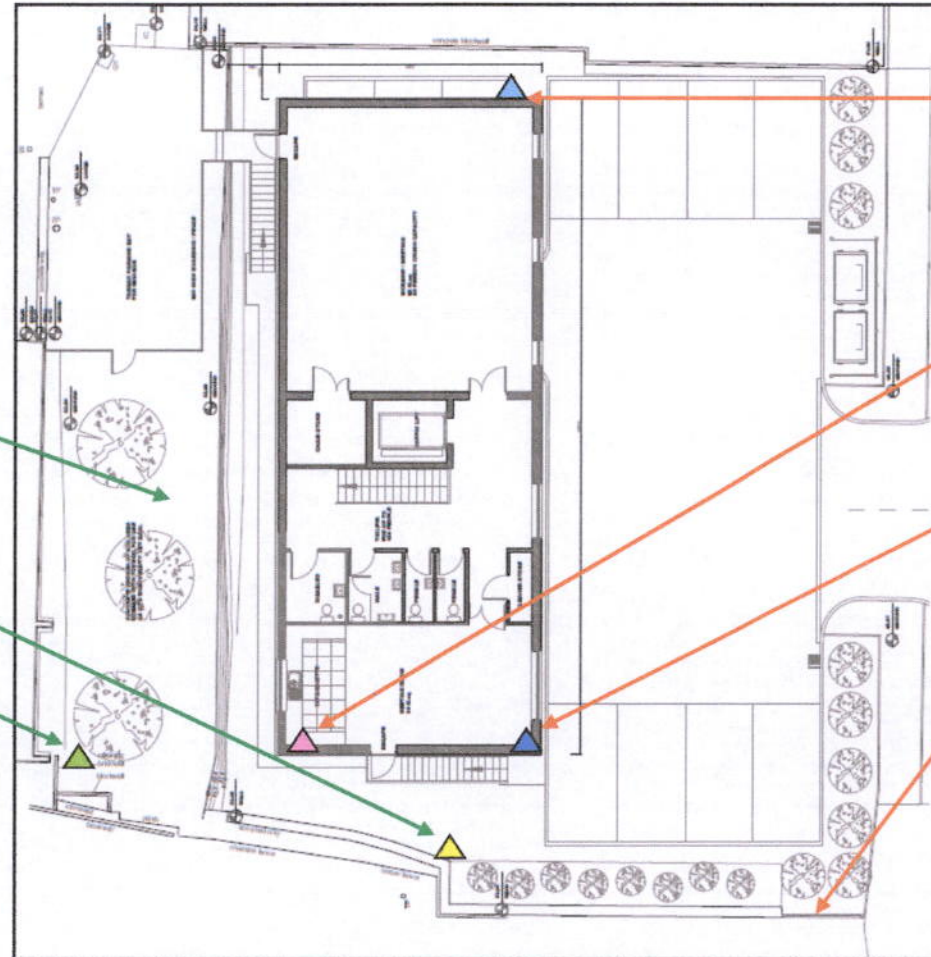
A Construction and Environmental Management Plan will be prepared to minimise construction impacts to habitats and species within the site.

Compensatory wildlife habitat will include wildflower grassland on the upper terrace, woodland flora on shaded ground and native trees and shrubs.

A permanent log pile will be created in the south-east corner to provide habitat for reptiles and hedgehogs.

A permanent bug house will be provided for invertebrates.

A Landscape and Ecological Management Plan will be prepared to ensure habitats are managed appropriately in the long-term.



A sparrow terrace will be installed on the north or east aspect of the new building to provide new bird nesting habitat.

A bat tube will be installed on the southern aspect of the new building to provide new roosting habitat within the site.

A bee brick will be installed on the southern aspect of the new building, in accordance with planning policy.

Hedgehog access will be maintained through the site by leaving gaps in new fencing.

8 Ecological enhancements

National and local planning policies require that developments provide a biodiversity gain so that there is no net loss of wildlife or their habitats. The scheme will deliver a biodiversity gain through a range of habitat enhancement and creation measures described below and shown in Figure 6. The scheme is a 'minor' development and a detailed Biodiversity Metric to demonstrate a 10% biodiversity net gain is not required.

8.1 Landscaping enhancements

The landscaping scheme will provide compensation for habitats removed from the site and will also deliver a biodiversity net gain. The upper terrace will be seeded with a species-rich wildflower mix suitable for more open, sunny spaces, such as *Emorsgate EM2 General purpose meadow mixture*. Small native shrubs will be planted around the periphery of this area. On the lower terrace, an area of native woodland plants will be created on shaded ground behind the new building. *HabitatAid Woodland Edge Seed Mix* would be suitable here which could be supplemented by planting native ferns. The eastern side of the site will be landscaped to create an attractive frontage along Pargolla Road, to include short mown grassland, specimen trees and an ornamental shrubbery.

The species-rich grassland, woodland flora, trees and shrubs will provide foraging habitat, shelter and nesting areas for a range of wildlife encourage a greater range of species to use the site.

8.2 Species enhancements

Habitats will be enhanced for protected and declining species in accordance with Cornwall Council's Biodiversity Supplementary Planning Document (CC, 2018):

- One integral bat box will be built into the southern aspect of the new building, at a height of at least 5m, to provide new bat roost habitat within the site. A 1FR Schwegler bat tube or similar would be suitable.
- One bird box would be provided to encourage urban species to breed on the site. A 1SP Schwegler sparrow terrace or similar on the northern or eastern aspect of the building would be suitable.
- An integral bee brick will be installed in the new building to improve habitat for pollinators.
- Hedgehog access will be maintained across the site by creating a 13cm x 13cm gap in fencing at ground level.

9 Conclusion

Without mitigation, the proposed development of a single community building will cause adverse impacts to habitats and species. This report identifies a range of measures to avoid and reduce these impacts including appropriate construction methods and timing of works and the provision of new habitats within the landscaping scheme. Overall, the scheme will have a minor positive residual ecological impact. Ecological enhancements have been included within the development design to achieve a biodiversity net gain. These include the provision of specific enhancements for bats, birds bees and hedgehogs.

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Appendix 1. Wildlife planning policy

1. National Planning Policy

Ministry for Housing, Communities and Local Government (2018) National Planning Policy Framework.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/740441/National_Planning_Policy_Framework_web_accessible_version.pdf

The National Planning Policy Framework is a key part of the government's reforms to make the planning system less complex and more accessible. The framework acts as guidance for local planning authorities and decision-takers, both in drawing up plans and making decisions about planning applications. *Chapter 15 Conserving and Enhancing the Natural Environment* outlines national policies for protecting wildlife.

ODPM (2005) Circular 06/05: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact within the Planning System.

<https://www.gov.uk/government/publications/biodiversity-and-geological-conservation-circular-06-2005>

This circular provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It complements national planning policy outlined in the National Planning Policy Framework and the Planning Practice Guidance.

2. Local Planning Policy for Cornwall

Cornwall Local Plan: Strategic Policies 2010-2030. Adopted November 2016.

<http://www.cornwall.gov.uk/media/22936789/adopted-local-plan-strategic-policies-2016.pdf>

Policy 22: European Protected Sites– mitigation of recreational impacts from development

For residential development and student and tourist accommodation, mitigation measures for recreational impacts on European Sites will be required where development is proposed within the identified zones of influence around those European Sites that are vulnerable to adverse recreational impacts. Residential development, student and tourist accommodation within these zones of influence will be required to provide for appropriate management, mitigation and monitoring on site, and/ or financial contributions towards off site mitigation and management. This will need to be agreed and secured prior to approval of the development. Mitigation measures will include:

- On site access and management
- Off-site provision of suitable alternative recreational facilities.

The required level of contributions will be set out in more detail in the European Sites Mitigation Strategy Supplementary Planning Document.

Policy 23: Natural Environment

1. Development proposals will need to sustain local distinctiveness and character and protect and where possible enhance Cornwall's natural environment and assets according to their international, national and local significance.

2. Cornish Landscapes

Development should be of an appropriate scale, mass and design that recognises and respects landscape character of both designated and un-designated landscapes.

Development must take into account and respect the sensitivity and capacity of the landscape asset, considering cumulative impact and the wish to maintain dark skies and tranquillity in

areas that are relatively undisturbed, using guidance from the Cornwall Landscape Character Assessment and supported by the descriptions of Areas of Great Landscape Value. In areas of undeveloped coast, outside main settlements, only development requiring a coastal location and that cannot be achieved elsewhere, will be acceptable.

2(a). The Cornwall and Tamar Valley Area of Outstanding Natural Beauty

Great weight will be given to conserving the landscape and scenic beauty within or affecting the setting of the AONB. Proposals must conserve and enhance the landscape character and natural beauty of the AONB and provide only for an identified local need and be appropriately located to address the AONB's sensitivity and capacity. Proposals should be informed by and assist the delivery of the objectives of the Cornwall and Tamar Valley AONB Management Plans including the interests of those who live and / or work in them. Major development in the AONB will be refused subject to the tests of exceptional circumstances and where it can be demonstrated that the development is in the public interest as set out in national policy.

2(b) The Heritage Coast and Areas of Great Landscape Value

Development within the Heritage Coast and / or Areas of Great Landscape Value should maintain the character and distinctive landscape qualities of such areas. 3. Biodiversity and Geodiversity Development should conserve, protect and where possible enhance biodiversity and geodiversity interests and soils commensurate with their status and giving appropriate weight to their importance. All development must ensure that the importance of habitats and designated sites are taken into account and consider opportunities for the creation of a local and county-wide biodiversity network of wildlife corridors which link County Wildlife Sites and other areas of biodiversity importance, helping to deliver the actions set out in the Cornwall Biodiversity Action Plan.

3 (a) European Sites

The highest level of protection will be given to potential and existing Special Protection Areas, candidate and existing Special Areas of Conservation and listed or proposed Ramsar sites. Proposals having an adverse impact on the integrity of such areas that cannot be avoided or adequately mitigated to remove any adverse effect will not be permitted other than in exceptional circumstances. These circumstances will only apply where there are: a) no suitable alternatives; b) imperative reasons of overriding public interest; and c) necessary compensatory provision can be secured to ensure that the overall coherence of the Natura 2000 network of European sites is protected. Development will only be permitted where the Council is satisfied that any necessary mitigation is included such that, in combination with other development, there will be no adverse effects on the integrity of European Nature Conservation Sites.

3(b) National sites

Development proposals within or outside an SSSI or Marine Conservation Zone which would be likely to adversely affect the site (either individually or in combination with other developments) will not be permitted unless the benefits of the development, at this site, clearly outweigh both the adverse impacts on the site and any adverse impacts on the wider network of SSSIs and Marine Conservation Zones.

3 (c) Local Sites

Development likely to adversely affect locally designated sites, their features or their function as part of the ecological network, including County Wildlife Sites, Local Geological Sites and sites supporting Biodiversity Action Plan habitats and species, will only be permitted where the need and benefits of the development clearly outweigh the loss and the coherence of the local ecological network is maintained.

3(d). Priority species and habitats

Adverse impacts on European and UK protected species and Biodiversity Action Plan habitats and species must be avoided wherever possible (i) subject to the legal tests afforded

to them, where applicable (ii) otherwise, unless the need for and benefits clearly outweigh the loss.

3(e). Ancient woodland and veteran trees

Development must avoid the loss or deterioration of ancient woodland and veteran trees, unless the need for, or benefits of, development on that site clearly outweigh the loss.

4. Avoidance, mitigation and compensation for landscape, biodiversity and geodiversity impacts

Development should avoid adverse impact on existing features as a first principle and enable net gains by designing in landscape and biodiversity features and enhancements, and opportunities for geological conservation alongside new development. Where adverse impacts are unavoidable they must be adequately and proportionately mitigated. If full mitigation cannot be provided, compensation will be required as a last resort.

Policy 25: Green Infrastructure

The existing green infrastructure network in Cornwall, which is important to recreation, leisure, community use, townscape and landscape quality and visual amenity will be protected and enhanced. Development proposals should contribute to an enhanced connected and functional network of habitat, open spaces and waterscapes by:

1. Retaining and enhancing the most important environmental infrastructure assets and connections that contribute to the functionality of networks of ecosystems and our Strategic Environmental Infrastructure Network in their existing location; and
2. Demonstrating that all the functional environmental infrastructure and connections have been taken into account in the design of the scheme or site layout, including impacts on ecosystem services; biodiversity; coastal processes and recreation within and near to the application site and show how this understanding has positively contributed to place making and influenced the proposal; and
3. Providing appropriate buffers to natural spaces that have community, biodiversity and heritage significance; and
4. Restoring or enhancing connectivity for nature and people through the site and linking to adjacent sites or green routes, helping to provide better links between urban and rural landscapes and coastal areas, creating accessible and attractive places for communities to make regular contact with the natural environment; and
5. Providing accessible and good quality open space and where applicable improved access to coastal space; and
6. Providing clear arrangements for the long-term maintenance and management and/or enhancement of the green infrastructure assets. In exceptional circumstances where retention of the most important green infrastructure assets and connections is outweighed by the benefits arising from the development proposals and they cannot be retained on site, the loss resulting from the proposed development should be replaced by equivalent or better provision in terms of quantity and quality of ecological or open space value in a suitable location.

Policy 26: Flood Risk Management and Coastal Change

3. Development proposals of 10 dwellings or more or over 0.5 ha should provide a long-term water management plan, which includes maintenance of surface water drainage systems, measures to improve the network of surface water drainage systems on and around the site (e.g. culverts etc.) and identifies opportunities and funding for future enhancement.

Policy 28: Infrastructure

Developer contributions will be sought to ensure that the necessary physical, social, economic and green infrastructure is in place to deliver development. Contributions will be

used to provide or enhance local infrastructure that is adversely affected by the development of a site but which will not be delivered on that site. Development will be permitted where it would:

1. Be supported by appropriate infrastructure provided in a timely manner; and
2. Provide on-site mitigation measures or make financial contributions for site specific infrastructure provision not in the Regulation 123 list, including maintenance and management contributions, to be negotiated on a site-by-site basis.
3. Where it can be demonstrated that it is not feasible to do this, the Council will seek to ensure all 'allowable solutions' or 'biodiversity off setting' payments are invested in projects within Cornwall with priority given to projects which achieve multiple benefits.

Biodiversity Supplementary Planning Document

<https://www.cornwall.gov.uk/media/38341273/biodiversity-guide.pdf>

This SPD sits alongside the Cornwall Local Plan to provide additional information on biodiversity and it is integrated into the development management process. The SPD supplements several local plan policies but mainly focuses on Policies 22 and 23 (see above).

The SPD states that the assessment of biodiversity within the planning system should follow British Standard *Biodiversity - Code of practice for planning development* (BS 42020: 2013). Developments should follow the Mitigation Hierarchy principle which states that developments should seek to avoid biodiversity impacts, then to mitigate for unavoidable impacts. As a last resort, developments should compensate for unavoidable residual impacts which remain after avoidance and mitigation measures.

Development should provide biodiversity enhancements to create new benefits for wildlife and deliver a net gain for biodiversity wherever possible, in line with NPPF policy. The SPD provides guidance on enhancements and states that developments should provide integral bat, bird and bee boxes/bricks, gaps in fences for hedgehogs and other wildlife and sustainable treatment of hedges.

Planning applications submitted to Cornwall Council's strategic planning team (usually for more than 10 dwellings) are required to prepare an Ecological Constraints and Opportunities Plan (ECOP) and a Balance Sheet to show habitats gained and lost as a result of the development.

Biodiversity Net Gain

<https://www.cornwall.gov.uk/media/43031716/draft-chief-planning-officer-note-biodiversity-net-gain.pdf>

From 1st March 2020, Cornwall Council requires that all major developments must demonstrate at least a 10% net gain in biodiversity. The Council requires that biodiversity is measured before and after development using the DEFRA Metric. The Metric assesses the pre-development and post-development habitats to produce a Biodiversity Unit score for each. The final net gain score is then determined by subtracting the number of baseline Biodiversity Units from the number of future development Biodiversity Units.

Definition of major development:

- 10+ dwellings / over half a hectare / building(s) exceeds 1000sqm
- Office / light industrial - 1000sqm+ / 1+ hectare
- General industrial - 1000sqm+ / 1+ hectare
- Retail - 1000sqm+ / 1+ hectare
- Gypsy/traveller site – 10+ pitches / site area exceeds 1ha.

In line with DEFRA recommendations, developments will be monitored for up to 30 years to ensure that they accord with their biodiversity obligations. These obligations will be secured by way of planning conditions.

Terrestrial European Sites Mitigation SPD

<https://www.cornwall.gov.uk/media/26847746/terrestrial-european-sites-mitigation-spd.pdf>

The SPD sits alongside the Cornwall Local Plan and supplements Policy 22 on the provision of mitigation for increased recreational impacts on terrestrial European Sites, arising from new housing and tourism growth. It provides more detailed guidance on the application of Policy 22 for the terrestrial sites identified in the Cornwall Local Plan Habitats Regulations Assessment as being potentially at risk from an increase in recreational use. A separate SPD will be developed for marine and estuarine sites.

Visitor surveys are currently being undertaken by Cornwall Council of those European Sites initially identified as being at potential risk, including:

- Terrestrial Sites: Marazion Marsh SPA, Godrevy Head to St Agnes SAC, Penhale Dunes SAC and Carrine Common SAC
- Marine and Estuarine Sites (to be dealt with in a separate SPD): Fal and Helford SAC, Falmouth Bay to St Austell Bay SPA, Plymouth Sound and Estuaries SAC and Tamar Estuaries Complex SPA.

To date, visitor surveys of the terrestrial sites have concluded that only Penhale Dunes SAC is vulnerable to recreational impacts and identified that developments within a 12.5km zone of influence around the SAC are required to provide mitigation. Additional residential, tourist or student dwellings are required to provide for appropriate management, mitigation and/or financial contributions towards off-site mitigation. This will need to be agreed and secured prior to approval of the development and delivered through section 106 agreement, Unilateral Undertaking or a planning condition as appropriate.

The required level of contributions will be based on **X/Y** where:

- **X** = the assessed overall costs of the package of mitigation measures set out in (a) and (b) above needed to offset potentially harmful visits to the European Nature Conservation Sites, and **Y** = the number of contributing dwellings.

Appendix 2. Wildlife legislation in England and Wales

The Conservation of Habitats and Species Regulations 2017

These 2017 Regulations, also referred to as the 'Habitat Regulations', implement the EC Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna (92/43/EEC) and the EC Directive on the Conservation of Wild Birds (79/409/EEC). They consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments.

The Regulations provide for the designation and protection of European sites. They convey a statutory requirement for local planning authorities to undertake an 'Appropriate Assessment' of the potential impacts of plans and projects, including development proposals, on European sites.

Under the Regulations, competent authorities i.e. any Minister, government department, public body, or person holding public office, have a general duty, in the exercise of any of their functions, to have regard to the EC Habitats Directive and Wild Birds Directive.

Certain provisions implement aspects of the Marine and Coastal Access Act 2009 (the "Marine Act"), such as the transfer of certain licensing functions from Natural England (NE) to the Marine Management Organisation (MMO); and for Marine Enforcement Officers to use powers under the Marine Act to enforce certain offences under the Habitats Regulations.

Wildlife and Countryside Act 1981 (as amended)

This Act is the principal wildlife legislation in Great Britain. It includes provisions for important habitats to be designated and protected as Sites of Special Scientific Interest (SSSIs). Notable species, and the places that they use for shelter and protection, are protected under the Act. All birds, their nests and eggs, are also protected. The Act also makes provision for the control of invasive non-native species.

Countryside and Rights of Way Act 2000

Referred to as the CROW Act, this legislation increases the protection of SSSIs and strengthens wildlife enforcement action. The Act also strengthens the protection of protected species through the introduction of a new offence of 'reckless disturbance'.

Natural Environment and Rural Communities Act 2006

Section 40 of the NERC Act places a duty on all public bodies and statutory undertakers to have due regard to the conservation of biodiversity in all their functions. Section 41 of the Act requires the publication of a list of habitats and species of primary importance for the conservation of the biodiversity in England, in consultation with Natural England. The Section 41 (S41) list, includes all Priority Habitats and Species in the UK Biodiversity Action Plan (BAP). The Devon BAP details all Priority Habitats and Species that occur in Devon in order to guide local conservation work to meet the national UK BAP targets.

Protection of Badgers Act 1992

This Act was introduced primarily for animal welfare reasons rather than species conservation. It provides protection for badgers and their setts.

Hedgerow Regulations 1997

These Regulations include provisions for the protection of hedgerows and make it an offence to remove 'important' hedgerows without consent from the local planning authority. Hedges are assessed according to their historical and ecological condition according to eight Regulations criteria. Where planning permission is granted for a development proposal, the removal of 'important' hedgerows is deemed to be permitted.

Weeds Act 1959

This Act allows the Secretary of State to enforce occupiers to control injurious weeds on their land. The five species identified in the Act are common ragwort, creeping thistle, spear thistle, broad-leaved dock and curled dock.

Appendix 3. Criteria for ecological assessment

1. WILDLIFE SITES

Geographical Scale at which Feature is Important	Example of Feature
International	<ul style="list-style-type: none"> Special Area of Conservation (SAC) Special Protection Area (SPA) Ramsar sites World Heritage Site (if designated for its biodiversity)
National	<ul style="list-style-type: none"> Sites of Special Scientific Interest (SSSIs) National Nature Reserves (NNRs).
Regional	<ul style="list-style-type: none"> Designated wildlife sites supporting a regionally significant area of a UK priority habitat; or large population of species in the UKBAP or of national nature conservation concern protected species level.
County	<ul style="list-style-type: none"> Non-statutory sites designated at county level – County Wildlife site or County Geology Site. Ancient woodlands, large areas of priority BAP habitat offering a significant wildlife resource at county level. Large populations of a legally protected species or species included in the UK or Local BAP or other species considered to be threatened at a national level.
District	<ul style="list-style-type: none"> Non-statutory sites designated at district level, Local Nature Reserves (LNRs) Moderately sized examples of priority BAP habitats.
Local	<ul style="list-style-type: none"> Old hedges, woodlands, ponds, significant areas of species rich grassland or other habitat, small scale examples of priority BAP habitat areas supporting small populations of protected species, species included in the UK or Local BAP or other species considered to be threatened at a national level.
Of value within the context of the Site or zone of influence of the scheme	<ul style="list-style-type: none"> Woodland plantations, structure planting, small areas of species rich grassland Other species rich habitat that is not included in the UK or Local BAP

2. HABITATS

Geographical Scale at which Feature is Important	Example of Feature
International	<ul style="list-style-type: none"> EC Habitats Directive – habitat type is listed on Annex 1 Habitat meets selection criteria for the designation of an internationally important site
National	<ul style="list-style-type: none"> UK Biodiversity Action Plan - Priority Habitat Habitat meets selection criteria for the designation of a nationally important site
Regional	<ul style="list-style-type: none"> Regional Biodiversity Action Plan – Priority Habitat Habitat meets selection criteria for the designation of a nationally important site
County	<ul style="list-style-type: none"> County Biodiversity Action Plan – Priority Habitat Habitat meets selection criteria for the designation of a site of county importance
District	<ul style="list-style-type: none"> Moderately sized examples of priority BAP habitats.
Local	<ul style="list-style-type: none"> Old hedges, woodlands, ponds, significant areas of species rich grassland or other habitat, small scale examples of priority BAP habitat
Of value within the context of the Site or zone of influence of the scheme	<ul style="list-style-type: none"> Woodland plantations, structure planting, small areas of species rich grassland or other species rich habitat that is not included in the UK or Local BAP.

3. SPECIES

International	<ul style="list-style-type: none"> • Berne Convention – Appendices 1 and 2 • Bonne Convention – Appendices 1 and 2 • EC Birds Directive – Annex 1 • EC Habitats Directive – Annex 2 • International Union for the Conservation of Nature - Red list of threatened species • A species which regularly occurs in internationally or nationally important numbers.
National	<ul style="list-style-type: none"> • Species of principal importance for the conservation of biodiversity • British Red Data Books • Nationally rare, notable and scarce species • Wildlife and Countryside Act 1991 – Schedules 1, 5 and 8 • Conservation Regulations 2010 – Schedules 2 and 4 • Royal Society for the Protection of Birds - Red and Amber lists • Species which regularly occurs in nationally or regionally important numbers • A nationally important assemblage of species.
Regional	<ul style="list-style-type: none"> • South West Biodiversity Action Plan Priority species • Species which regularly occur in regionally important numbers. • Sustainable populations of species that are rare or scarce within a region.
County	<ul style="list-style-type: none"> • Local Biodiversity Action Plan Priority species • Species which regularly occurs in county important numbers. • Sustainable populations of species that are rare or scarce within a county, or listed in a county BAP.
District	<ul style="list-style-type: none"> • Species listed as priority in the UK BAP, which are not covered above, and are rare in the locality or in the relevant Natural Area profile. • Species present in numbers just short of county importance • Sustainable populations of species that are rare or scarce within the locality.
Local	<ul style="list-style-type: none"> • Other species of conservation interest (which are not covered above) regularly occurring in locally sustainable populations
Of value within the context of the Site or zone of influence of the scheme	<ul style="list-style-type: none"> • All other common and widespread species.

Appendix 4. Designated Wildlife Sites

1. European Sites

Special Areas of Conservation (SAC): SACs are strictly protected sites designated under the EC Habitats Directive. Article 3 of the Habitats Directive requires the establishment of a European network of important high-quality conservation sites, known as Natura 2000 series. These are identified as sites which make a significant contribution to conserving habitats and species identified in Annexes I and II of the Directive. On land, almost all candidate SACs are, or will be notified as SSSIs. Natural England needs to be consulted before any operations likely to damage the special interest are undertaken. SAC is a statutory designation with legal implications.

Special Protection Areas (SPA): SPAs are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species. All SPAs are notified as SSSIs, so Natural England needs to be consulted before any operations likely to damage the special interest are undertaken. SPA is a statutory designation with legal implications.

Ramsar Site: these are wetlands of international importance, designated under the Ramsar Convention (1971). Ramsar sites are designated if they contain natural or near-natural wetlands; if they support vulnerable, endangered or critically endangered species or threatened ecological communities; if they regularly support 20,000 or more water birds; if they support a significant proportion of indigenous fish species; if they are an important source of food, spawning ground, nursery or migration path for fish; if they regularly support 1% of the individuals in a population of wetland-dependant non-avian animal species. Ramsar sites are also notified as SPAs and SSSIs, so Natural England needs to be consulted before any operations likely to damage the special interest are undertaken. A Ramsar site is a statutory site with legal implications.

2. National Sites

National Nature Reserves (NNR) - these are designated under the National Parks and Access to the Countryside Act 1949 by Natural England because of their important habitats and/or species. They are the best examples of a particular habitat or have important populations of rare species. Natural England needs to be consulted before any operations likely to damage the special interest are undertaken. NNR is a statutory designation with legal implications.

Sites of Special Scientific Interest (SSSI): these statutory sites of national conservation importance, protected under the Wildlife and Countryside (W&C) Act 1981 and the Countryside and Rights of Way (CRoW) Act 2000. They are notified by Natural England because of their plants, animals or geological features (the latter are geological SSSIs or gSSSI). Natural England needs to be consulted before any operations likely to damage the special interest are undertaken. SSSI is a statutory designation with legal implications.

3. County and Local Sites

County Wildlife Sites / County Geological Sites (CWS/ CGS): these are sites of county importance for wildlife or geology. They are not covered by a statutory designation like SSSIs, and do not have any legal status. The National Planning Policy framework requires local authorities to identify and map locally designated sites of biodiversity importance as part of the Local Plan process and to draw up criteria based policies against which proposals for development affecting them will be assessed.

Regionally Important Geological and Geomorphological Sites (RIGS): these are earth science sites that are of regional or local importance. Like CWS, they are included in Local Plans and referred to under NPPF.

Local Nature Reserve (LNR): Local Nature Reserves are statutory sites which are protected under the National Parks and Access to the Countryside Act 1949, and the Natural Environment and Rural Communities (NERC) Act 2006. They are designated by the local authority with support from Natural England and managed by the local authority through ownership, lease or agreement with the owner. They are places with wildlife or geological features that are of interest locally, which give people special opportunities to study and learn about them or simply enjoy and have contact with nature.