

Green Infrastructure & Biodiversity

The development of the proposed Tiled Roof Single Storey Extension will not have an unacceptable impact on the following within this area, and careful consideration to Retain - Protect all of the following:-

Greenfield land Greenspaces

Woodland

Nature Reserves

Hedgerow, tree line or scrub

(No impact, No removals intended).

Wetlands or Marshes

Water courses (sea, rivers or streams)

Ponds / wetlands

(No impact on water quality).

Mines / caves & Quarries.

(No impact)

Protect important biodiversity and geodiversity features, especially where they provide ecological connectivity. Bats, nesting birds such as swifts and house martins badgers, dormice, barn owl, Protection of all wildlife carefully considered at all times. No evidence of bat droppings or even live bats at the property. The Environment (Wales) Act 2016 requires Local Authorities to maintain and enhance biodiversity. **(No impact to Bat Roosts within this area).**

Green Infrastructure & Ecological Enhancement Measures:

The construction / Blocks / Bricks / Roof and Frames will provide extra shelter and habitat for all insects species, bees and pollinating insects to nest within tiny holes and gaps within the building, will provide a valuable habitat for pollinators, birds, and insects, promoting biodiversity within the built environment. The strategically planted native species around the extension will further contribute to a thriving ecosystem by offering food and shelter for local wildlife. This not only enriches the natural world but also serves as an educational resource, raising awareness about the importance of native species and environmental stewardship.

Ongoing management – An annual check of new planting will be carried out, *with replacement planting carried out where necessary*. Once established, the bushes and shrubs may need periodic pruning, with any arising retained on site either as low brash or as chippings to act as mulch, where practicable to do so. Weeding will be carried out where necessary to ensure new planting establishes. The timing of any management /pruning will be carried out during the late winter months (late January into February) before the onset of the main bird nesting season.

The areas planted up will be of benefit to wildlife, providing nesting opportunities.

The planting will require occasional weeding and pruning of plants where necessary. Shrub areas, planted for the benefit of invertebrates, will be covered with mulch for water retention, which will aid flower / nectar production. Regular dead-heading of flowers will encourage further flowering, improving the supply of nectar for butterflies and other insects. At the end of the season, plants will not be pruned or dead-headed until later in the winter, **allowing birds to feed on any seeds.**

Protect important biodiversity and geodiversity features, especially where they provide ecological connectivity. Bats, nesting birds such as swifts and house martins badgers, dormice, barn owl, **(No impact to the Wildlife / Wild Birds Breeding sites).**

Protection of all wildlife carefully considered at all times. No evidence of bat droppings or even live bats at the property. The Environment Act requires Local Authorities to maintain and enhance biodiversity. **(No impact to Bat Roosts within this building).**

Planning permission is being sought to construct a conservatory to the rear elevation of the above property, note the only removal of ground area is the existing concrete patio slabs, No greenfield land gardens, or Hedgerow, trees or scrub are Not to be removed. The proposed development does Not have an unacceptable impact on, Wildlife / animals & plants where naturally occur. *It is therefore considered that the current proposal does not conflict with the objectives of policies, the proposal responds positively to the surrounding area. Also the proposal accords with National Planning Policy objectives.*

Justification: Installing bat boxes, bird feeders, and hedgehog houses provides vital resources and shelter for these species, encouraging them to utilise the site and contributing to a balanced ecosystem. This aligns with the Wales Act 2016's duty to maintain and enhance biodiversity and promotes public awareness about wildlife conservation. The proposal will facilitate 'Bee Bricks' that provide a safe nesting place for non-swarming solitary bees like red masons and leafcutters.



Image; Siting of Proposed Extension

The project's use of reclaimed or locally sourced building materials will minimise its environmental footprint by reducing transportation emissions and conserving resources. This approach not only benefits the planet but also supports the local economy by strengthening the community's fabric.

Installation of *Bat and Bird Boxes* are considered and will be installed within the grounds, *Photographs of the installed Bat box will be sent to the planning department once installed.*

Dunraven building department can confirm that a bat box will be installed to the rear elevation of the main house and at the highest point, *away from bright lighting.*

Ecological Enhancement



Proposed Bat Box:-

The Kent Bat Box.

It is therefore considered that the current proposal does not conflict with the objectives of policies, the proposal responds positively to the surrounding area. Also the proposal accords with National Planning Policy objectives.

Biodiversity is the foundation of life on Earth. It is crucial for the functioning of ecosystems, which provide us with products and services without which we couldn't live, Oxygen, food, fresh water, fertile soil, medicines, shelter, protection from storms and floods, stable climate and recreation all have their source in nature and healthy ecosystems. But biodiversity gives us much more than this. We depend on it for our security and health; *it strongly affects our social relations and gives us freedom and choice.*

Biodiversity is extremely complex, dynamic and varied like no other feature of the Earth. Its innumerable plants, animals and microbes physically and chemically unite the atmosphere (the mixture of gases around the Earth), geosphere (the solid part of the Earth), and hydrosphere (the Earth's water, ice and water vapour) into one environmental system which makes it possible for millions of species, including people, to exist.

Environmental Sustainability

In preparing this statement, reference to the relevant guidance for sustainable homes has been made, the guidelines establishes six key principles of sustainable design, which are; Energy, Materials & Resources, Water usage, Landscape & Biodiversity, Place & Local distinctiveness, & Robust Building.

Energy

The internal and external works will comply with current building regulations. Both the applicant and contractors are committed to ensuring all aspects of the build will be efficient as practically possible, and this includes energy efficient equipment.

Low energy lights and lighting controls to automatically switch off when not needed.

The existing dwelling currently benefits from the following: energy efficient combi boiler, cavity wall & loft insulation, upvc double glazed windows & doors.

The proposal will be well insulated to walls and floor, and benefit from upvc double glazed low E window glazing, Low energy lighting will be used, ensuring at least 75% usage.

All additional appliances to be 'A' rated type.

Water Management

The Existing building is connected to the mains sewage system. Rain water will be harvested in water butts, and used for watering the gardens. *No new foul sewage drains required or proposed.*

Climate Change

Dunraven is working out a strategy for decarbonising homes and development over the next decade, (Lower Carbon Footprint) Carbon emitted will depend on construction / production and consumption choices, Greenhouse gases are emitted through the production and consumption of goods and services, Carbon footprint is a concept used to quantify the impact of activity, a person or a company on Climate Change.

Manufacturing of product:

Utilisation of factory LED lighting to reduce energy consumption of electricity. 6 metre length of profile used with planning tools used to minimise waste of UPVC profile. UPVC and aluminium profile ordered in bulk batches once a week from previously twice weekly, from suppliers in order to reduce the number of deliveries. Therefore, reducing carbon footprint from diesel emissions on delivery vehicles. Roller shutter door system controlled during winter months to reduce oil used for heating factories, therefore using less energy. Lighting system in operation which only lights up areas being walked or worked in, this reduces electrical energy usage. Dusk to dawn sensors fitted to external lighting to increase safety and minimise electricity used.

Materials & Resources:

The use of locally sourced materials will be encouraged, with established well known sources available local to the site. Recycled products will be used where possible, and products from sustainable sources which can be confirmed by established chain of custody procedures. They will ensure they minimise the environmental impact of the site with regard to noise, light and air pollution. Also, they have to use all effort to use local resources, and have a waste management scheme in place to reuse, recycle materials, and reduce waste. The sustainability of the upvc windows are widely recognised as a truly sustainable option, thanks to advances in recycling. When old upvc windows are removed from buildings they can now be recycled and fabricated into new finished products up to ten times with no detriment to the physical properties of the upvc. Combine this with the average 35 year lifespan of upvc window, upvc offers hundreds of years of re-use with minimal impact on the environment. Few other construction materials can claim such exemplary sustainable credentials, Therefore, reducing carbon footprint from Remanufacturing emissions, (*The most Energy Efficient windows & Doors*).

Selecting materials that have a long life and require little maintenance.

Delivery of product to customer home:

Product is collected from factories by building and fitting teams, teams arrive in site in pairs. Twin travelling allows the reduction of vehicles on the road which reduces carbon footprint. Delivery to site of product and teams reduces requirement of extra delivery vehicles to site with product. Therefore, reducing carbon emissions.

Trackers fitted to all vehicles with heavy braking and speeding monitored. The reduction in heavy braking and speeding reduces the amount of diesel used per vehicle to and from the customers homes. Miles per gallon efficiency is increased through safe driving. Non-compliant drivers are re trained and removed from the fleet if they continue to speed or harsh brake. Diesel consumption is reduced by at least 15% through the fleet by this process.

Waste materials:

Waste materials on site are recycled with authorised and licensed waste contractors. Glass, soil, UPVC, cardboard, paper, polythene, hard plastics, bricks, gypsum and wood are all recycled and supplied back into the construction sector once processed at recycling sites in the United Kingdom. Waste is segregated at each installation in order to ensure all waste streams can be recycled, the general waste is kept to a minimum on site, at approximately 10%.

Installations on site:

Ensuring the use of cement mix is kept to a minimum at each stage, this allows for zero waste of cement and the use of minimal water which is a precious resource. The zero waste procedure helps to reduce the volume of water (water usage) in litres per job considerably.

The plaster process also involves the use of precious water, plastic 38 litre sealed buckets with no holes are used to store the water. Only 10 litres of water at a time is stored in rooms being plastered, the water is used per each stage of the plaster process. Using 10 litres at a time allows for minimal waste from a 38-litre bucket. The water added to the plaster mix is kept to a minimum, just enough is added to avoid cracking. Customers own welfare facilities are used wherever possible, this allows for the reduction in hire of portable welfare units, which reduces the diesel emissions from the vehicles which deliver and collect the welfare units.

During winter months working hours are reduced to daylight hours in order to avoid additional lighting used on site for working in dark areas. This reduces electricity usage from the use of additional power required to use external lighting.

The off road parking will not be affected and will remain as it is present.

The pedestrian and vehicle access will not be altered or affected.

There will be no trees removed, and no foul sewage drains required.

Local Materials will be used wherever possible.

Imported materials are minimised.

Materials are chosen from sustainable sources.

All Waste Materials are recycled by Dunraven.

Please note we are not Ecological Consultant's.

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