Green Infrastructure Statement

Application Ref: P/2025/0672

Proposal: Proposed Change of Use from Shop and Dwelling to One Dwellinghouse, Installation of Air Source Heat Pump, Solar Panels and Alterations to Fenestration

Address: Broad Oak High Street, Glyn Ceiriog, Llangollen , LL20 7EH

LPA: Wrexham County Borough Council

Introduction

This Green Infrastructure Statement has been prepared in support of a planning application for the change of use of the existing mixed-use property comprising a ground floor shop with residential accommodation to a single dwellinghouse (Use Class C3). The proposals also include:

- Installation of an air source heat pump;
- Replacement of existing windows with high-performance double glazed units matching the existing appearance;
- Installation of roof-mounted photovoltaic solar panels;
- Minor alterations associated with the change of use.

The proposal represents the re-use and improvement of an existing building without extending its footprint or resulting in the loss of any existing green infrastructure.

Existing Site

The application site comprises an existing detached property within the settlement of Broad Oak. The site includes:

- Existing residential curtilage;
- Existing hardstanding and parking areas;
- Existing mature trees and boundary vegetation;
- Existing domestic garden areas.

The proposal does not involve development onto previously undeveloped land, nor does it require the removal of mature trees or established vegetation.

Green Infrastructure Assessment

Existing Trees and Vegetation

The existing trees and established boundary vegetation are to be retained as part of the proposal. No tree removal is proposed, thereby maintaining the site's contribution to local biodiversity, visual amenity and ecological connectivity.

Boundary planting will continue to provide habitat opportunities for birds and invertebrates while softening the appearance of the site within the surrounding streetscape.

Land Use

The proposal makes efficient use of an existing previously developed site by converting an underused mixed-use property into a single family dwelling.

No additional building footprint is proposed and there is no encroachment onto greenfield land.

Surface Water

The proposal results in minimal changes to external hard surfacing.

Existing drainage arrangements will remain largely unchanged. An ACO drainage channel (or similar) is proposed at the driveway entrance to intercept surface water runoff, reducing the potential for water to discharge onto the public highway.

As there is no significant increase in impermeable surfaces, the development is not expected to increase surface water runoff.

Biodiversity

Given the limited nature of the proposals, ecological impacts are considered negligible.

The proposal retains:

- Existing trees;
- Existing garden areas;
- Existing planting;

- Existing habitat connectivity.

No protected habitats are affected.

Climate Change and Sustainability

The proposal delivers significant environmental improvements through the upgrading of the existing building.

These include:

Air Source Heat Pump

The installation of an air source heat pump will replace the existing fossil fuel heating system, significantly reducing operational carbon emissions and improving the energy efficiency of the dwelling.

Solar Photovoltaic Panels

The proposal includes the installation of photovoltaic solar panels to both roof slopes (exact specification to be confirmed by the specialist installer), enabling the property to generate renewable electricity and further reduce reliance on grid-supplied energy.

Improved Building Fabric

Existing windows are to be replaced with high-performance 28 mm double glazed units designed to match the existing appearance of the building, improving thermal performance while preserving its character.

Collectively these measures substantially improve the environmental performance of the existing building.

Landscape Character

The proposal has a negligible impact upon the surrounding landscape.

The existing building remains substantially unchanged in appearance, with replacement windows matching the existing style and the air source heat pump positioned discreetly adjacent to the dwelling.

Existing trees and vegetation are retained, ensuring the character of the site is preserved.

Net Effect on Green Infrastructure

The proposal results in a positive overall outcome for Green Infrastructure by:

- Retaining all existing mature trees and boundary vegetation;
- Retaining existing garden areas;
- Avoiding development on undeveloped land;
- Re-using an existing building;
- Improving energy efficiency through replacement windows;
- Introducing renewable energy generation via photovoltaic panels;
- Installing an air source heat pump to reduce operational carbon emissions;
- Maintaining existing biodiversity features;
- Improving sustainability without increasing the building footprint.

Conclusion

The proposed development has been carefully designed to minimise impacts on existing Green Infrastructure whilst delivering meaningful environmental improvements through renewable energy generation and enhanced building efficiency.

There is no loss of trees, landscaping or ecological features, and the proposal represents the sustainable re-use of an existing building within the settlement. Overall, the development is considered to make a positive contribution towards local Green Infrastructure objectives and is consistent with the principles of sustainable development.