



ENERGY and SUSTAINABILITY STATEMENT

101 Pixmore Avenue, Letchworth, Hertfordshire, SG6 1QX

Development Proposal: First Floor extension to rear to create one self-contained one-bedroom flat.

This development is designed to meet current Building Regulations Part L standards for energy efficiency. The new dwelling will incorporate the following measures to improve thermal performance and reduce energy use:

- **High-performance building fabric:** walls, roof, windows, and doors will be insulated to exceed minimum U-value requirements, reducing heat loss.
- **Double-glazed windows:** High-performance glazing will minimize heat loss and solar gain, contributing to thermal comfort year-round.
- **Low-energy lighting:** 100% of fixed internal lighting will be high efficacy LED lighting.
- **Efficient heating system:** The flat will be heated via a highly efficient electric system (subject to mechanical and electrical design), compliant with current efficiency standards.
- **Ventilation:** Background ventilation and extractor fans will comply with Part F, with consideration of low energy mechanical systems to reduce heat loss.

The proposal contributes to sustainable development in line with North Hertfordshire District Council's local policies and national objectives. Key sustainability considerations include:

- **Efficient land use:** The scheme makes efficient use of an existing building footprint and urban land, adding residential capacity without further land take.
- **Sustainable transport:** The site benefits from good access to local services, shops, and public transport, reducing reliance on private vehicles. Provision for secure cycle storage is included within the proposal.
- **Water efficiency:** Fixtures and fittings will be selected to comply with Building Regulations Part G, with water efficient aerated taps and shower head and dual-flush systems to reduce water usage.
- **Waste and materials:** Construction waste will be minimized and managed responsibly. Materials will be selected for durability and environmental performance where possible, with a preference for responsibly sourced timber and low-VOC products.

- **Climate resilience:** The design considers thermal comfort and ventilation to reduce the risk of overheating. Surface water run-off will not increase as the extension is at first-floor level.

This modest, infill-style development aligns with the principles of sustainable design and demonstrates good practice in energy and environmental performance for a small residential unit.