

Sustainability Statement for Planning

Client: Trinity Christian School

Site: 62 London Road
Reading
RG1 5AS

Proposals: Change of use of ground floor from Class E (veterinary surgery) to Class F1 (school).

Contents:

Contents:	2
1 - Introduction	3
2 - Planning Policies	3
3 - Existing and Proposed Development	4
4 – Energy Efficiency and CO ₂ Emissions	5
5 – Sustainability	6
Adaptation to Climate Change	8
Decentralised Energy	8
Waste Minimisation & Storage	9
Air Quality	9
Pollution and Water Resources	10
Flooding & Drainage	10
Nature Conservation and Biodiversity	11
6 Conclusion	12

Report Details:

Assessor	Checked	Date	Job
MH	PK	25/04/2024	11984

This document has been prepared solely as a Sustainable Statement for Trinity Christian School. Base Energy Services Ltd. accepts no responsibility or liability for any use that is made of this document other than by the Client for the purposes for which it was originally commissioned and prepared.

1 - Introduction

This Sustainability Statement (SS) has been prepared in support of the planning application for the proposed change of use of 62 London Road, Reading, RG1 5AS from Class E (veterinary surgery) to Class F1 (school).

2 - Planning Policies

National Planning Policy Framework 2023

The NPPF was updated in 2023 to place greater emphasis on beauty, place-making, the environment, and sustainable development. The strengthened environmental objectives aim to protect and enhance the natural, built, and historic environment, and encourage effective land use, greater biodiversity, prudent use of natural resources, minimisation of waste and pollution, and adaptation to climate change alongside a move to a low carbon economy.

Local Planning Policy

The Reading Borough Council Local Plan was adopted in November 2019 and sets out a number of policies relevant to sustainability, energy, and carbon dioxide emissions:

- CC2 Sustainable design and construction
- CC3 Adaptation to climate change
- CC4 Decentralized energy
- CC5 Waste minimisation and storage
- EN15 Air quality
- EN16 Pollution and water resources
- EN18 Flooding and drainage.

Separate reports address several of the above policy requirements in more detail, including but not limited to: Air Quality Report, Noise Assessment, Transport Statement and Ecology Report.

This Sustainability Statement looks at design approaches taken with regard to sustainability, energy efficiency and CO₂ emissions.

An SBEM model has been carried out on the building and energy efficiency details have been provided within this report.

3 - Existing and Proposed Development

The site is located at 62 London Road, Reading (see Figure 1) and consists of a part two-storey, part three-storey building which would have originally formed a large dwelling pre-dating Building Regulations. The ground floor was converted into a veterinary surgery in circa 1992 and an extension to the rear of the building was added in circa 1996.

Proposals are for the change of use from the existing ground floor veterinary surgery to a primary school and will accommodate Trinity Christian School who are relocating from their existing Glebe Road school site.

The proposed development seeks a change of internal layout to the ground floor with no external alterations and only minimal internal alterations proposed.

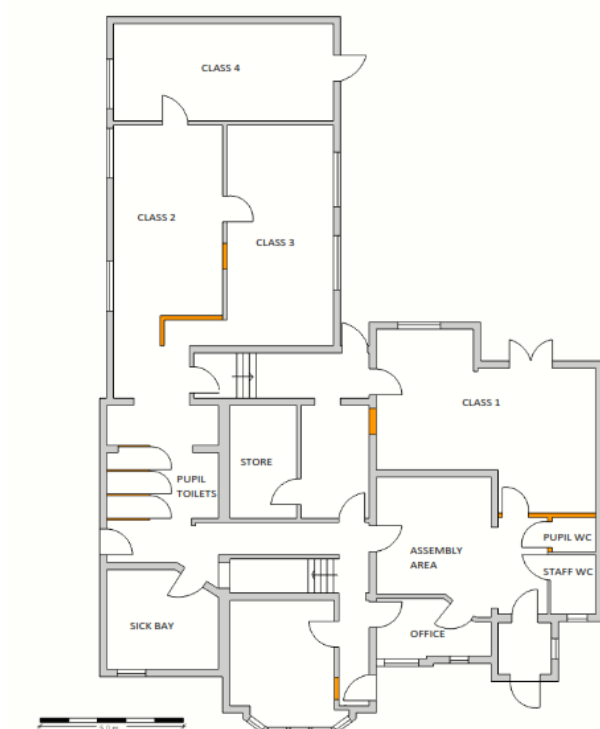
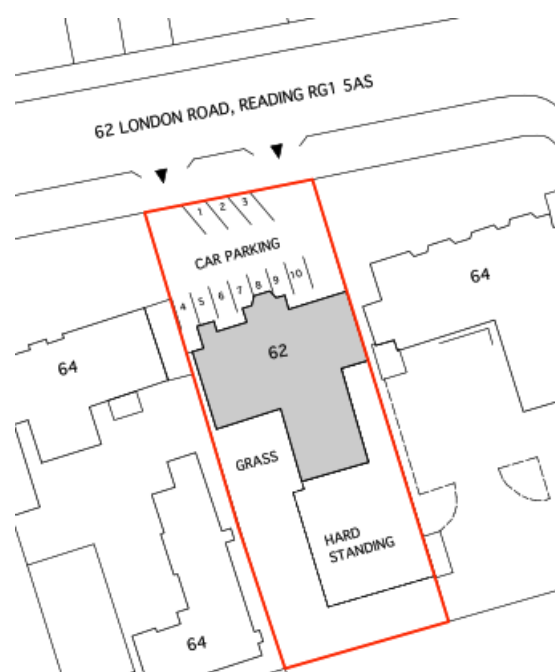


Figure 1: Site Location and Proposals

4 – Energy Efficiency and CO₂ Emissions

Whilst there are no local planning policies that stipulate an energy or CO₂ reduction target, the proposed development is considered as a material change of use and should comply with the requirements for existing buildings in Building Regulations Approved Document Part L: Conservation of fuel and power in buildings other than dwellings 2021.

The building fabric standards for existing elements in existing buildings are shown in table 1 below. The table includes the threshold figures for existing elements as well as the improved standards if the threshold values cannot be achieved.

Table 1.0: Building Fabric Standards (including u-values W/m²K)

Element	Part L 2021 Threshold U-values	Part L 2021 Improved U-values
Walls	0.70	0.30
Ground Floor	0.70	0.25
Roof	0.35	0.16

Given that the building was converted in 1992 and extended in 1996, it is assumed that the original building would have been upgraded and that the threshold u-values are achieved. Therefore, no improvement to the building fabric is necessary in order to comply with Part L.

Several energy efficiency measures are suggested below to improve on the minimum standards of Part L:

- Lighting: LED lighting throughout with a minimum efficacy of 110 lumens per watt and Daylight/occupancy sensors to relevant areas
- Highly efficient condensing boiler (Seasonal efficiency of 92%) with efficient control features
- Air test to identify/seal any significant areas of infiltration to reduce heat loss.

Energy modelling software has been used to calculate a Part L compliant baseline. The performance of the proposed development is compared against this baseline in table 2 below.

Table 2.0: Energy and CO₂ figures for Part L compliance and the proposed development

Scenario	Energy (kWh/m ² /yr)	CO ₂ emissions (kg.CO ₂ /m ² /yr)
Part L 2021 Compliant Baseline	149.4	26.2
Proposed Development	131.6	23.1
% Reduction on Part L Baseline	12%	12%

5 – Sustainability

<u>Sustainable Design & Construction</u>	
Issue	Compliance
Energy	The proposed development is not considered as a 'Major Development' and therefore a full energy statement is not required. An exercise has been carried out using Energy modelling software to calculate the proposed development's performance against a Part L compliant baseline. The following energy efficiency measures are proposed: • LED lighting throughout with a minimum efficacy of 110 lumens per watt and Daylight/occupancy sensors to relevant areas • A highly efficient condensing boiler (Seasonal efficiency of 92%) with efficient control features • An Air test to identify/seal any significant areas of infiltration to reduce heat loss. This has shown to be an improvement over building regulations Part L 2021 baseline, by achieving a potential of 12% improvement in regulated Energy Consumption and CO₂ emissions.
Water	Water efficient fixtures, fittings and appliances shall be installed to reduce water consumption of the proposed development. As there is a low water demand for the building, water efficiency measures such as greywater and rainwater harvesting are not viable.
Materials	The proposed development is a conversion of an existing building with minimal external alterations and only internal alterations being made. As such, the impact of material use is expected to be negligible.

	The proposed development shall have considerably less embodied carbon when compared to a new-build development as the existing structure and materials shall be retained. Where feasible, the developer should select new materials and products with Environmental Product Declaration (EPD) certificates.
Transport	A Transport Statement has been carried out which finds that the proposed development site is in an area with good access to a range of sustainable transport modes and local amenities. The proposed development includes the provision of 6no. cycle storage spaces, 10No. car parking spaces and 1No. EV charging space.

Adaptation to Climate Change

Issue	Compliance
Resistance & Resilience to Climate Change	As the proposed development is the change of use of an existing building the opportunities to implement adaptation measures are limited. The proposed development does benefit from glazing on the north, east and south orientations. This ensures that the proposed development shall benefit from a good balance of passive solar gains to reduce heating demand. The proposed development shall benefit from shading from the existing trees to the south of the site which will reduce indoor temperatures and the potential for overheating. There shall be no increase in hardstanding (impermeable area) and therefore no increase in surface water run-off as a result of the proposed development.

Decentralised Energy

Issue	Compliance
Decentralised Energy	Given the size and form of the proposed development, there are limited opportunities for decentralised energy. Solar PV could potentially be installed on the rear south-facing roof of the proposed development, but this area appears to be heavily shaded by neighbouring trees.

Waste Minimisation & Storage

Issue	Compliance
Construction	The Contractor will need to reduce waste during the construction phase of the development via the hierarchy of, Reduce, Reuse (prioritising on-site reuse of demolition materials, followed by offsite reuse), Recycle (prioritising on-site recycling, then off-site recycling), Resource recovery (for energy generation processes – fuels, heat and power), and Disposal.
Waste Management	There is adequate space on the hardstanding to the front of the building, for a dedicated refuse area to include external waste bins for the storage and segregation of waste.

Air Quality

Issue	Compliance
Air Quality	An air quality assessment has been carried out for the proposed development as part of the planning application to understand the potential impacts of existing and future air quality on the proposed development. This report concludes that the current proposals are considered acceptable in terms of the potential air quality impacts across the development.

Pollution and Water Resources

Issue	Compliance
Land Pollution	As there shall be no external alterations to the existing site, there shall no be impact on land pollution.
Noise Pollution	The proposed development will be small in scale and only operate between 9am and 3pm. The small-scale school will have limited impact on neighbouring properties in relation to noise and disturbance. A noise report carried out by Venta Acoustics 0.5.4.2024 shows that noise impact within neighbouring dwellings and to amenity space will be low from the playground.
Light Pollution	No additional external is included as part of the proposals and therefore, there shall be no impact on light pollution.
Ground & Surface Water Pollution	The change of use of the existing building will not result in any activities that would have an impact on ground and surface water pollution.

Flooding & Drainage

Issue	Compliance
Flood Risk	The site is located within flood zone 1 which has a low probability of flooding.
Surface Water Run-Off	There shall be no increase in hardstanding (impermeable area) and therefore no increase in surface

	water run-off as a result of the proposed development. Therefore, there is no requirement to implement any additional drainage measures.
<u>Nature Conservation and Biodiversity</u>	
Issue	Compliance
Protecting Species Promoting the Protection and Planting of Trees	The site is an existing building with hardstanding areas and is considered to be of moderate ecological value. There will be no impact on the ecology within the site due to no proposed external alterations. Existing trees (and the space they require) have been considered throughout this development. It has not been necessary to remove any trees on site. However, there are trees of ecological significance within the site. These will have to be adequately protected. Whilst measures to enhance the ecological potential of the site will be investigated where possible, opportunities to enhance the ecological value of the site are limited.
Biodiversity Net Gain	A biodiversity report and ecology appraisal has been carried out by Arbtech Ltd. The reports recommend a biodiversity increase of 10% which is 0.044 units. This would consist of planting native trees and hedgerows along the site boundary. Efforts will be made to improve the ecological value of the site were feasible.

6 Conclusion

The site is located at 62 London Road, Reading and consists of a part two-storey, part three-storey building which would have originally formed a large dwelling. Proposals are for the change of use from the existing ground floor veterinary surgery to a primary school and will accommodate Trinity Christian School who are relocating from their existing Glebe Road school site.

This Sustainability Statement outlines the relevant local planning policies and details how the proposed development shall meet the requirements of these policies.

Given that the proposed development is a conversion of an existing building with no external alterations, the potential to implement changes to the layout, positioning and orientation are limited. Subsequently, these constraints will impact on the feasibility of certain sustainability and energy efficient measures that can feasibly be incorporated into the proposed development.

The main features of the proposed development to meet the requirements of the Reading Borough Council Local Plan are:

- Energy efficiency measures to ensure the building goes beyond the minimum requirements of Part L 2021, achieving a potential reduction of 12% in energy and CO₂ emissions against a Part L compliant baseline.
- Installing efficient water-consuming fixtures and fittings to reduced overall water use of the proposed development.
- The re-use and refurbishment of an existing building to reduce material use and embodied carbon, when compared to a similar new-build development.
- The inclusion of cycle spaces and an EV Charging space to encourage sustainable transport modes.
- No impact to pollution of the surrounding area as a result of the proposed development.