

ENERGY STATEMENT

207 to 209 Bury Old Rd,
Prestwich. Bury. M25 1JF

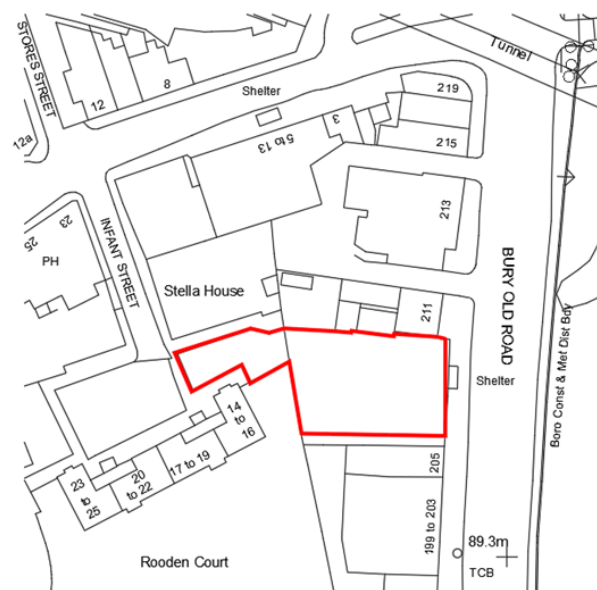
Summary

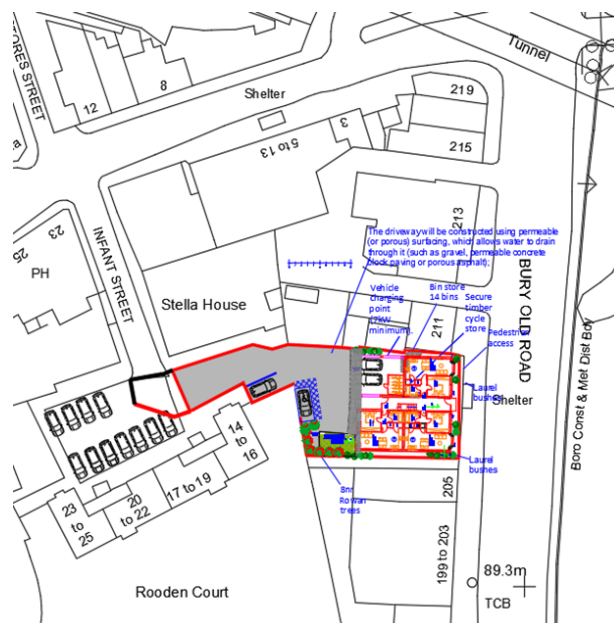
The proposal is for the erection of 7 flats - 3 x 1 Bedroom and 4 x 2 Bedroom over 3 floors. The development is being built in Prestwich, Bury. Prestwich is an inner-city area of Manchester in North West England.

This Energy Assessment has been compiled as part of the Planning submission. It aims to ensure that energy remains an integral part of the development's design and evolution.

Prior to the erection of the above ground super structure, a scheme outlining how the development will incorporate sustainable development measures to follow principles of Code for Sustainable Homes Level 3 including measures to secure predicted carbon emissions and the attainment of specified environmental efficiency and performance, shall be submitted to and approved in writing by the Local Planning Authority. Within 3 months of the completion of the construction of the authorised development a verification statement shall be submitted to and approved in writing, by the Bury MBC as local planning authority, confirming the incorporation of the specified measures at each phase of the construction of the development, including dated photographic documentary evidence of the implementation and completion of required works.

Below is the Location Plan which is clearly marked in RED and also the Site Plan on how the properties are laid out.





Under the policies of Bury MBC, the new build element of this development has to follow the principles of Code for Sustainable Homes Level 3. This has been assessed against the criteria and has gone beyond the carbon target outlined in Part L of the Building Regulations.

Table 1.2 (below) shows the Code Levels for Mandatory Minimum Standards in CO₂ Emissions.

Table 1.2: Code Levels for Mandatory Minimum Standards in CO ₂ Emissions (Ene 1)	
Code Level	Minimum Percentage Improvement in Dwelling Emission Rate over Target Emission Rate
Level 1 (★)	0% (Compliance with Part L 2010 only is required)
Level 2 (★★)	0% (Compliance with Part L 2010 only is required)
Level 3 (★★★)	0% (Compliance with Part L 2010 only is required)
Level 4 (★★★★)	25%
Level 5 (★★★★★)	100%
Level 6 (★★★★★★)	Net Zero CO ₂ Emissions

Table 1.3 (below) shows the Code Levels for Mandatory Maximum Standards in Indoor Water Consumption.

Table 1.3: Code Levels for Mandatory Maximum Standards in Indoor Water Consumption	
Code Level	Maximum Indoor Water Consumption in Litres per Person per Day
Level 1 (★)	120
Level 2 (★★)	120
Level 3 (★★★)	105
Level 4 (★★★★)	105
Level 5 (★★★★★)	80
Level 6 (★★★★★★)	80

This development will need to achieve Code Level 3 of 105 litres per person per day. This will be evidenced with a Water Calculation once the development has decided on fixture and fittings of bathrooms, WCs, Kitchen's and Utility rooms.

Table A shows how Part L compliance has been achieved by improving the u values of the fabric of the buildings.

Table A- Baseline Specification

Showing the minimum specification required to achieve Part L2A compliance

Category	Item	Specification /U-Value	
		Limit	Actual
Building Fabric (W/m2K)	Ground Floor / Exposed Floor	0.25	0.11
	Roof / Exposed Ceiling	0.20	0.14
	Wall Construction	0.30	0.26
Fenestration (W/m2K)	Solid Door	2.0	2.0
	Glazed Door	2.0	1.4
	Window/Rooflight	2.0	1.4
Thermal Bridging (y-value)	Accredited Construction Details	Yes	
Ventilation	Air Permeability (m3/hm2)	10	5.00
	Mechanical Ventilation	Intermittent extractor fans	
	Primary Heating System	Condensing Combination Boiler Ideal Logic ESP1 30	

Heating		Efficiency – 91.10%
	Controls	Time and temperature zone controls
	Heat Distribution	Radiators
	Water Heating	From Main Heating
	Other Heating System	None
Additional Features	Low Energy Lighting	100% (LED)
	Renewables	None

Table B- Renewables and low carbon technologies – considerations

Technology	Requirements	Suitable for project?	Appropriate?
Photovoltaic panels (PV)	Roof facing east to west (or flat roof)	Yes	YES
	Little/no or modest over shading	Yes	
	Flat roof or pitched roof no greater than 45 degrees	Yes	
	Any size development	Yes	
Solar thermal	All requirements as for photovoltaic panels	No	No
	water tank (not suitable for instantaneous hot water)	No	

Ground source heat pumps	External space for horizontal trench or vertical borehole	No	NO
	Medium to large sized development	No	
	Archaeology	Unknown	
	Best suited for underfloor heating	No	
	Space needed for plant, fuel storage and deliveries	No	
	Medium to large size development	No	

Biomass	Minimal impact on residents (air quality, deliveries)	No	NO
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Selected Low Carbon Technology – **NONE (As we have already achieved Code 3 Standard)**

Table C – Total Reduction of CO² of Development

	Carbon dioxide (Tonnes Co2 per annum)	Carbon dioxide savings (%)
Target CO ₂ Emissions Rate (TER) kg CO ₂ /m ² .annum	210.48	0
Building CO ₂ Emissions Rate (BER) kg CO ₂ /m ² .annum	203.53	3.30%

Target was the BER to equal the TER. The site has exceeded Building Regulations 2010 Part L1A and has saved an extra 6.95kgCO₂/yr/m²

Conclusion

These houses will be well designed to mitigate against the effects of climate change and it has been demonstrated that they have exceeded the Building Regulations (2010) Part L1A with a further 3.30% reduction in CO₂.

A verification statement within 3 months of the completion of the construction. This statement will confirm the incorporation of the specific measures at each phase of construction and photographic evidence (dated) of the implementation and the completion of the required works.