



Sustainable design and construction statement for:

1 Moorend Crescent,
Cheltenham
GL53 0EJ

1.0 Introduction

1.1 The following Sustainability Statement is submitted in support of a householder planning application for a single storey rear extension.

1.2 While not a major development this domestic extension will seek to incorporate the following sustainability principles:

- * Sustainable drainage systems
- * Renewables
- * Minimising water consumption
- * Energy
- * Waste facilities
- * Minimising energy requirements and waste arising from construction

2.0 Sustainable drainage systems

2.1 It is recognised that incorporating as many measures as possible, even into minor domestic renovations can make a difference. This development will look to use permeable paving to allow natural ground drainage and water butts to reduce water consumption.

3.0 Renewables

3.1 During the extension & renovation works consideration will be given to adopting appropriate renewable technologies. Looking into the potential introduction of solar panels and ground or air source heat pump.

4.0 Minimising water consumption

4.1 During renovation works low water consumption fittings will be installed in the kitchen toilets, bathrooms and kitchen

5.0 Energy

5.1 Low U-values and good detailing will help to limit heat losses through the fabric of the building.

5.2 The use of solid wall insulation in the extension will contribute to lower U-values.

5.3 It is proposed that only energy efficient lighting is installed at the property. This means that all light fittings should have lamps with a luminous efficacy of greater than 45 lamp lumens per circuit-watt and a total output greater than 400 lamp lumens.

6.0 Waste facilities

6.1 Along with general recycling and refuse management an area for composting will be set aside in the rear garden to aid in the reduction of waste being sent to landfill.

7.0 Minimising energy requirements and waste arising from construction

7.1 Along with construction materials chosen for their reduced environmental impact the construction of the extension will re-use, as much as possible any materials that can be recycled from any demolitions and excavations. Such as reusing any removed brickwork for hardcore/sub-base formation.

Other methods of recycling building materials will also be considered such as:

- * Re-used timber member or floorboards
- * Bricks – cleaned up and reused
- * Crushed concrete or bricks for hardcore
- * Crushed glass recycled as sand or cement replacement

8.0 Conclusion

8.1 Although the domestic extension is relatively minor the development can still provide an opportunity to adopt measure to becoming more sustainable. While some measures may not be feasible it is recognised that all measures, no matter how minor will make a difference. The above statement highlights a few methods which can be incorporated into the project to make it more sustainable.