01.1 Sustainable Design

Sustainable design underwrites the founding principles of the scheme. The structure and aesthetic selection will be developed with sustainable techniques and materials in mind.

01.2 Building Fabric

The fabric requirements of the construction of the building will be in full accordance with current regulations. Where appropriate further enhancements such as insulation levels and renewable energy resources will be introduced to bring the building performance in excess of current standards.

01.3 Lighting and Ventilation

Low energy lighting in the form of LED luminaires will be used throughout. Ventilation will be achieved via traditional rapid ventilation (opening of windows & doors) with supporting background trickle ventilation (in window frames or through walls).

where mechanical ventilation is required it will be suplemented with heat recovery units.

01.4 Surface Water Drainage

A sustainable Urban Drainage Solution will comprise the disposal of Surface water from downpipes and gullies within the site through swale type soakaways which will be subject to detail ground investigation and design.

Consideration will be given to the incoporation of rainwater harvesting and permeable surfaces if practicable to the development.

01.5 Construction Waste Management

Practical project management opportunities will be employed that will assist the process of site based waste management and will include:

- Ordering materials 'just in time' to minimise on site storage, potential damage and loss due to theft.
- Keeping accurate cutting lists and quantity surveys to avoid over ordering and subsequent restocking.
- Organising site facilities to encourage effective waste management.
- Establishment of a separate waste storage area on site.
- Separating waste materials for recycling and reuse.

01.6 Designing for Deconstruction

Specific detailing for the deconstruction of the buildings will be incorporated where appropriate, aimed at maximising materials and resources and reusing where possible.

Consideration of future requirements and possibilities for reuse, adaption or alteration of the designed structure will be given to ensure longevity and flexibility of the design.

Construction techniques that allow for effective deconstruction of the building will be used where appropriate and will potentially include:

- simple fixing methods that do not require special tools.
- Reversible construction and assembly sequences.
- Component parts that can be easily separated.
- Mechanical fixings preferred to adhesives, chemical welding or welding.
- Connections and components designed to withstand the deconstruction process.

01.7 Sustainable Materials

The scheme will consider at the detail design stage:

- Responsible sourcing of materials, especially timber products, from renewable resources and where possible limiting travelling distances.
- Investigate opportunities of prefabrication and off site manufacture to limit site waste.
- Incorporate the use of recycled materials in the construction.

01.8 Lifetime Waste Management

The scheme will integrate at the detail design stage:

- Integration of recycled waste storage and collections from both individual units and communal areas to be collected from central disposal point.
- The building management team will be responsible for managing the separation of waste and promoting recycling throughout the scheme.

01.9 Conclusion

the techniques outlined above will be utilised at detailed design stage to acheive BREEAM 'very good' rating or above.