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Proposed development on land at rear of
No.12 Woodland Avenue, Worthing.

Sustainability Statement:

The applicant is committed to the concept of constructing the proposed dwelling with low environmental impact, by building and achieving the means to live sustainably including the adoption of many of the developments in sustainable technologies and materials.

The plot is a brown field site.

The location of the plot does not lend itself to large scale timber panel construction which requires the use of a crane and additionally, the timber used would normally be impreganated with toxic chemicals. Consideration is therefore being given to achieving a super-insulated building with thermal mass design. Masonry buildings have inbuilt thermal mass with slow response thermal dynamics keeping them warm in winter and cool in summer.

Where practical, the intention is to specify sustainable materials and systems including recycled and recyclable products, non-toxic materials and materials with lower embodied energy (energy used in production and transportation). Where possible priority will be given to the use of natural materials, locally produced or at least UK produced

By using solar, geothermal and wood burning technologies the use of fossil fuels can be avoided. A "Holistic" approach will be taken and the following are some of materials and systems that will be considered for inclusion at the production stage of the design.

Materials:

1. Masonry external walls and solid floors with solid floor coverings to provide thermal mass. Solid floors can absorb solar radiation coming through windows on cold days.
2. Outer walls, ground floor and roof insulated in excess of Building Regulation requirements.
3. Structural and joinery timber from sustainable forests.
4. Building blocks made from recycled aggregates.
5. Argon filled double glazed windows.
6. Avoidance of the use of toxins during construction.
7. Minimal use of PVC.
8. Recycle separation bins and composting bins for domestic waste.

Systems:

1. Ground source heat pump to supply underfloor heating and hot water installation.
2. Solar thermal water heating.
3. Solar/Wind power electricity generation.
4. Wood burning technology.
5. Natural ventilation.
6. Rainwater harvesting with storage to supply toilet flushing and garden tap use.
7. Water efficiency with use of duel flush toilets, aerated taps, low flow shower valves and water metering.

M.G.WARNER. 24.9.07.