Sherwood Energy Village

Stan Crawford

Director

Sherwood
Energy
Village

"The most Enterprising Place in Britain is Sherwood Energy Village in Ollerton Nottinghamshire"

Gordon Brown Chancellor of the Exchequer
G7 Conference February 2005

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"This project met all the criteria for this particular category and was the strongest entry we looked at overall. Sherwood Energy Village has a national and international significance and is truly committed to creating a sustainable environment".

Judge and Chairman of RICS in the East Midlands, Stephen Anelay, when announcing Sherwood Energy Village as the winner of the Regeneration Category and Project of the Year

Sherwood Energy Village

August 1994

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llerton pit shut in 1994

he concept for the Energy Village came
om the concerns expressed at that time:

Jobs for the future – for our kids"

Diverse economic base"

No more MUCK"

he other factor was that the decision was
aken elsewhere

he decision was made to take control of
uture development

**herwood Energy Village was defined,
eveloped and is owned by the
ommunity itself.**

Sherwood Energy Village

Ownership

Controlled by its members

One Member, One Vote

Profits applied to achieve Aims

Shares redeemed by Society, not Stock Exchange

A Community Business, not a community group

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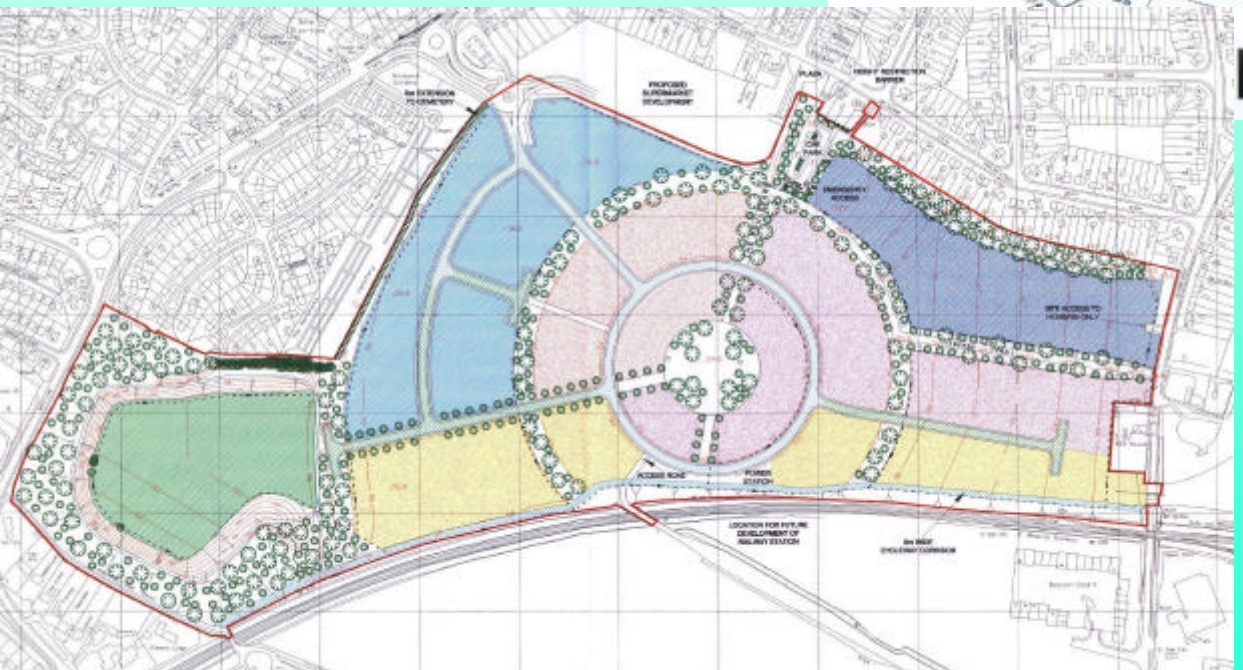
Master Planning

Ideas visualised in this 1995 Conceptual Plan



The Zoned plan shows the different elements:

Housing

Industrial/Commercial

Recreation

Sherwood
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A place to live, work, learn and play

Energy Efficiency

Environmental overlay to whole site

Best practice design and construction

Renewable Energy application

Increase bio-diversity

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996 – 1999: Funding negotiation for reclamation works £4.2 million total

Background work: Engineering surveys,

and searches, legal work, feasibility work.

anuary 2000 – At last work starts!

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Earthworks – a moving experience

For the next 8 months there was a lot of muck-shifting!

1,000,000 cubic metres of sand moved

100,000 tonnes of concrete debris recycled

Unexpected delays

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Other issues:

- Lack of topsoil – looking at alternatives
- Water strategy – sustainable drainage design
- Planning Issues
- Creating a quality site
- Keeping people informed and involved (five years work undertaken as unpaid volunteers 1994 - 1999)

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Our Sustainable Urban Drainage System (SUD) in Action

4pm 10th August 2004

9am 11th August 2004

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Developing sustainable standards for the site: What we ask of investors/developers to do

Environmental site planning – looking at orientation; wind peeds and direction; solar shading and gain; landscaping

Designing OUT energy use, and then use renewables

Plan for healthy buildings

Design OUT crime

Building materials – making the right choice, then finding if they re available locally.

Build to our requirements and it will decrease your running costs nd has therefore have a positive effect on your profitability.

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The first Private Sector Investor:

Risk Disk they wanted

- 12,000sq.ft of office accommodation which could be built in 2 phases

- Good quality working environment for staff

- A building which met the growing business needs and S.E.V.'s environmental targets and was deliverable for normal commercial building rates in North Nottinghamshire.

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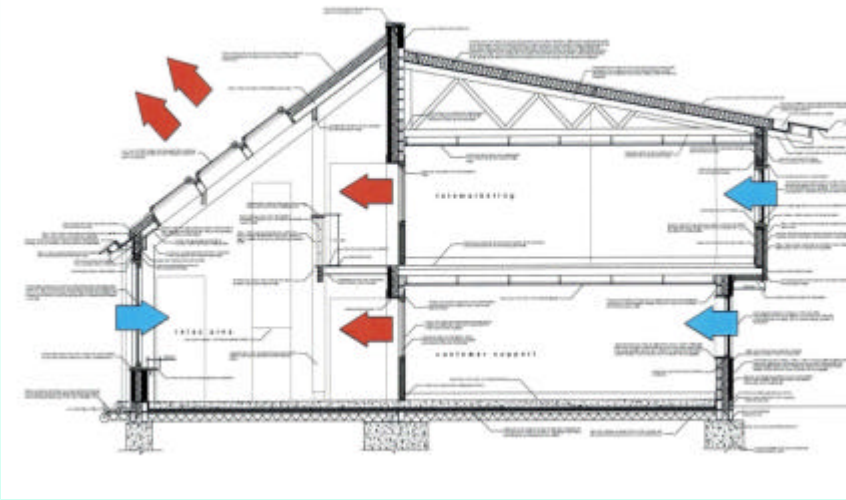

Narrow footprint maximising day lighting

Low fabric “U” values improving heat retention

Simple construction techniques using, where possible, local materials and minimising
aste.

Central draft lobby

South facing conservatory acting as solar harvester and passive ventilation system

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Jackson Design Associates

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EMDA's
Sustainable Construction Pilot Project

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Center Parcs Head Office

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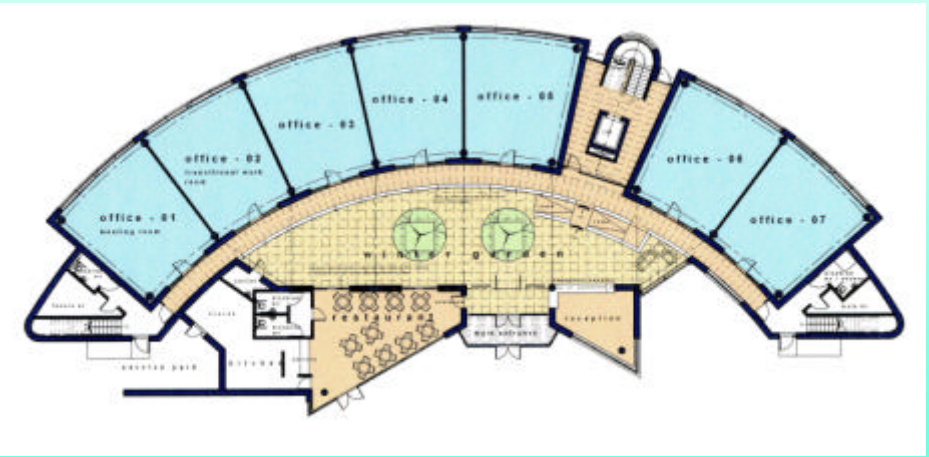
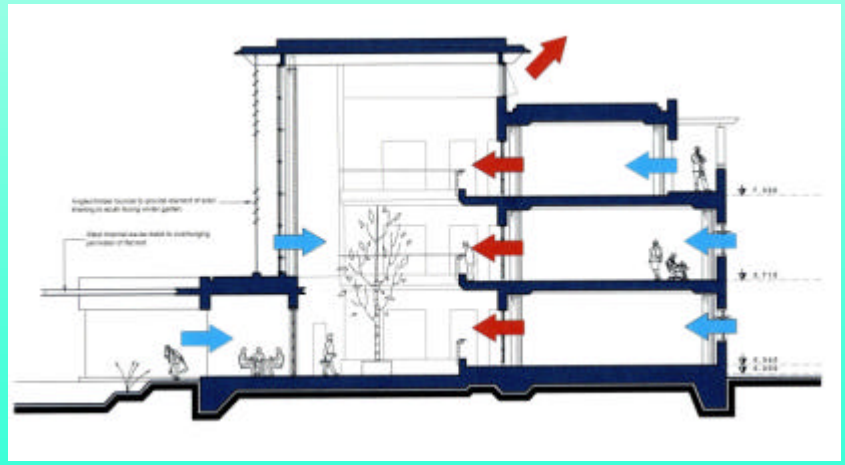
The E Centre our Head Office we wanted

2000sq.m serviced office accommodation for rent

Designed as an exemplar in environmental design

A building which was commercially affordable within the constraints of the business plan.





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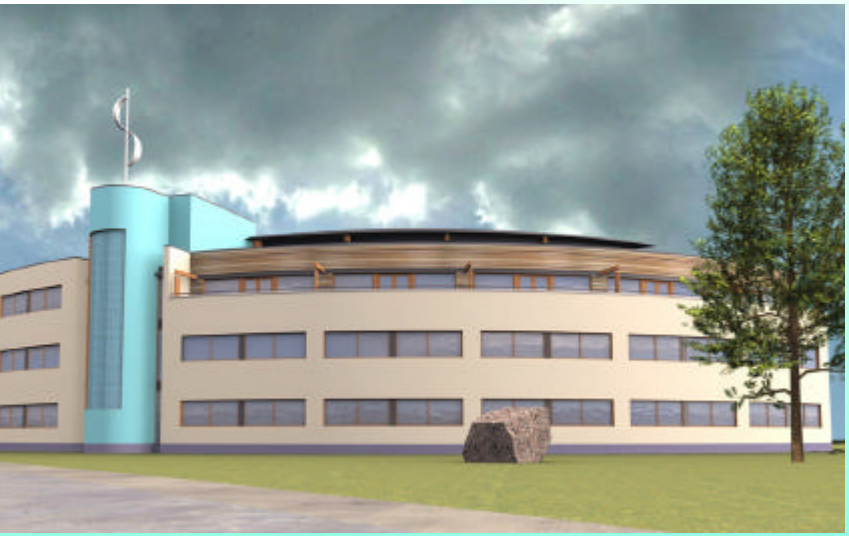

- Narrow plan to maximise day lighting
- Orientation - south facing winter garden which tempers internal climate and provides passive stack ventilation.
- Low fabric “U” values in excess of building regulations.
- Using materials throughout with low environmental impact
- Solar hot water heating
- Ground source heat pumps to provide heating, cooling and some hot water
- Wind turbine and Photovoltaics to provide some electrical provision.
- Rainwater harvesting

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Ground Source Solutions

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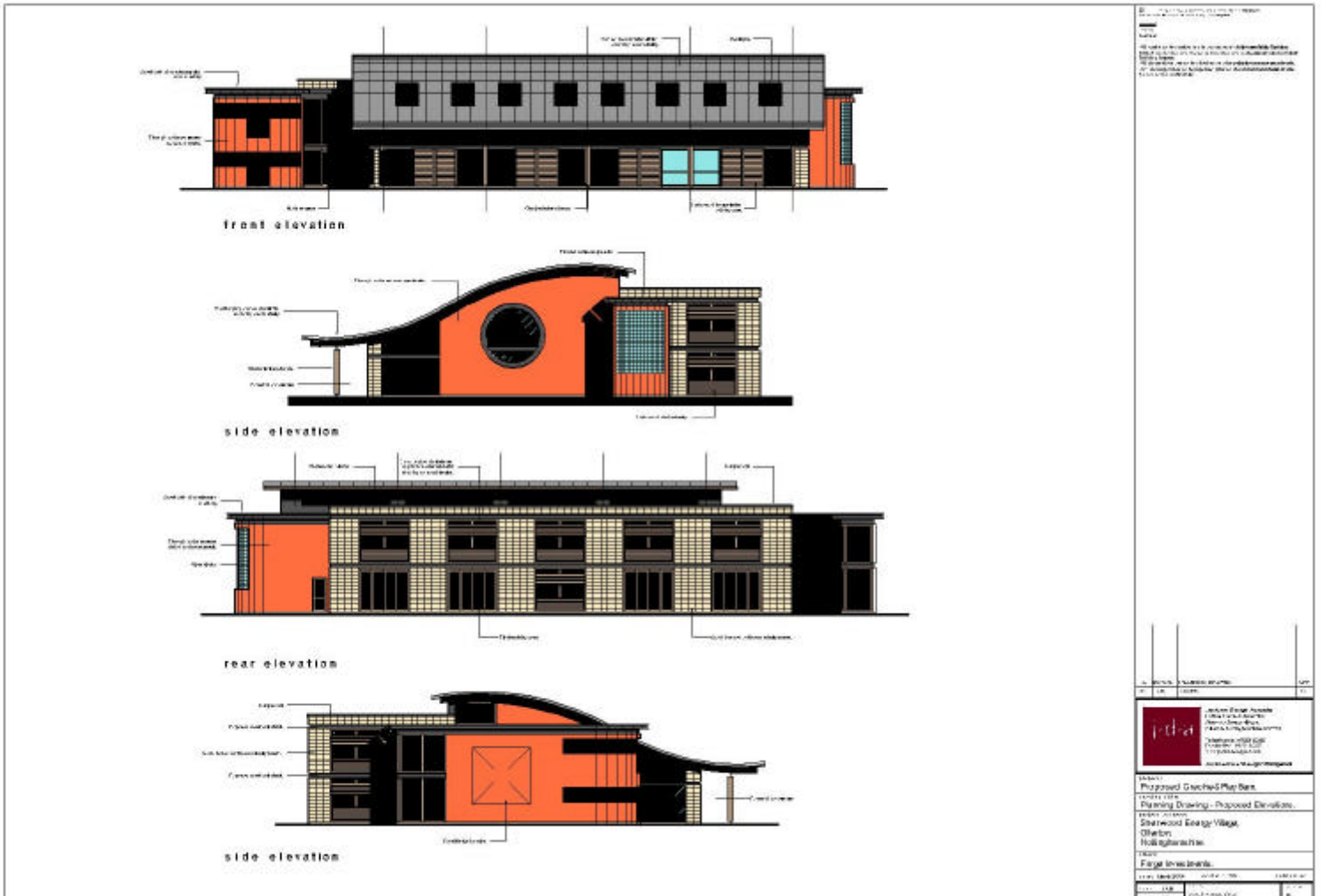
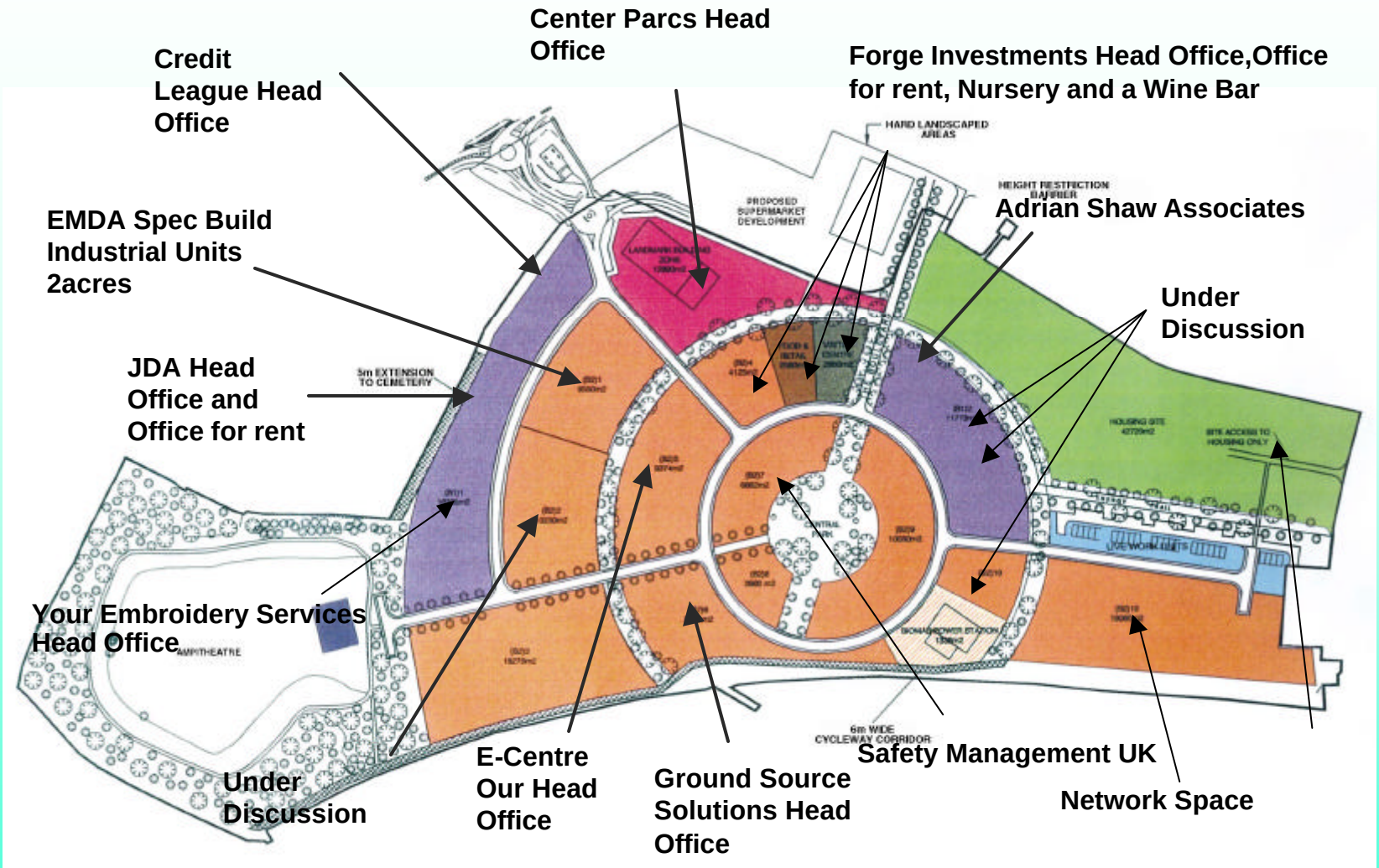
Adrian Shaw Associates

Sherwood Energy Village

Fasthandle





Approximately 160,000 square feet of office space and 90,000 square feet of industrial/commercial space only 2.3 acres left

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Housing

- 186 Houses
- 11 different House types
- ECO Homes Excellent as a minimum
- Interest from a diverse range of people
- 150 people are on our housing database todate

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What Makes These Buildings Sustainable?

Built to Eco homes, excellent has a minimum

Built to zero heating standards using a range of construction techniques

Mixed housing provision providing housing for all sectors of the community.

Solar hot water heating where applicable

Ground source heating and cooling

Rainwater harvesting

Not designed every house to be south facing - “not relied on the English weather!”

Natural materials sourced locally where possible

Natural ventilation

Draft lobbies

Recycling facilities - internal and external

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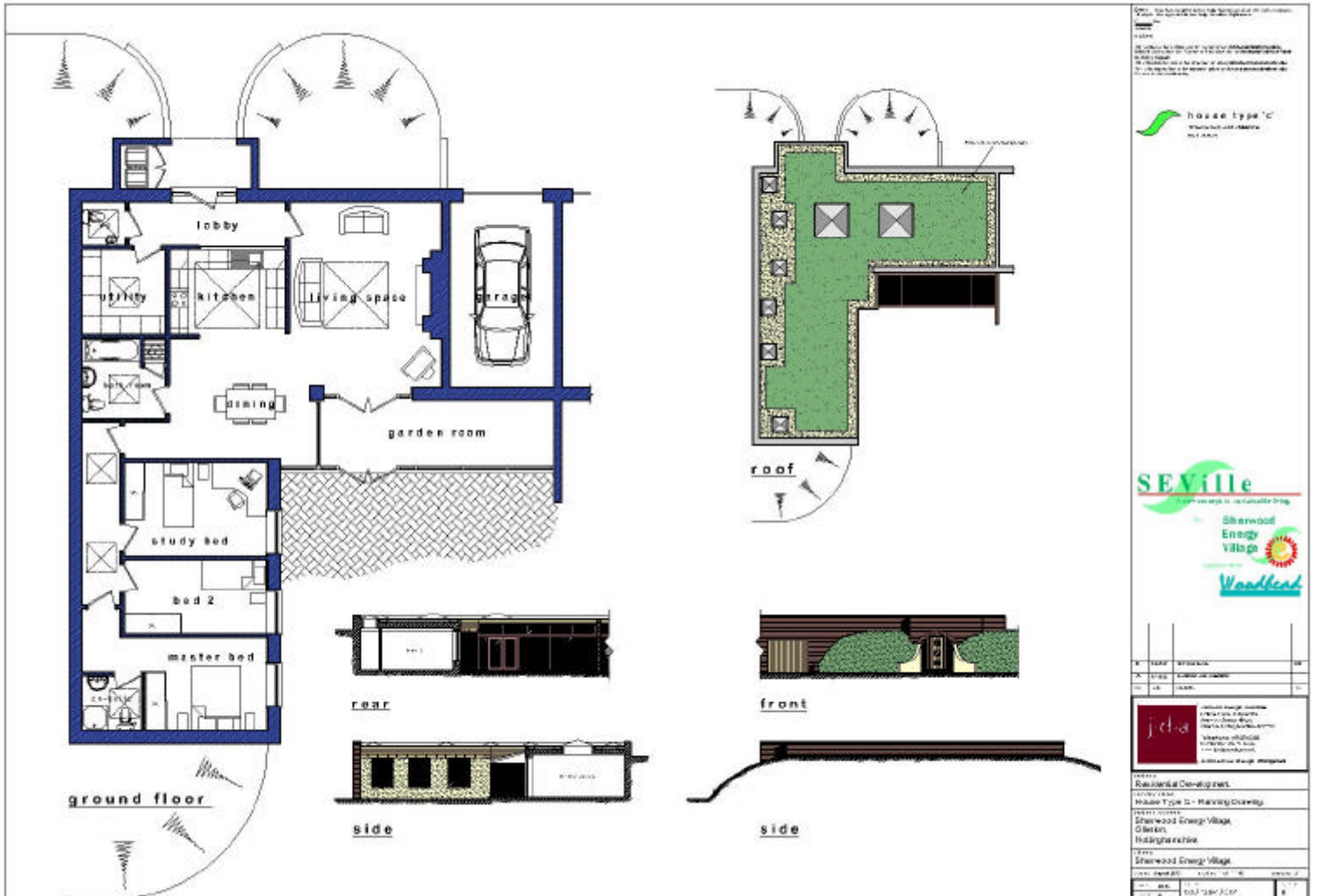
Housing Development – Typical Layout



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Housing Development – Typical Layout

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Low Carbon Developments can be delivered on a large scale, in a commercial way and with a quality product.

The development needs to be addressed holistically and a consistent stance needs to be taken

To be Sustainable it has to address three issues, they are Economic, Environmental and Social

Its not rocket science.