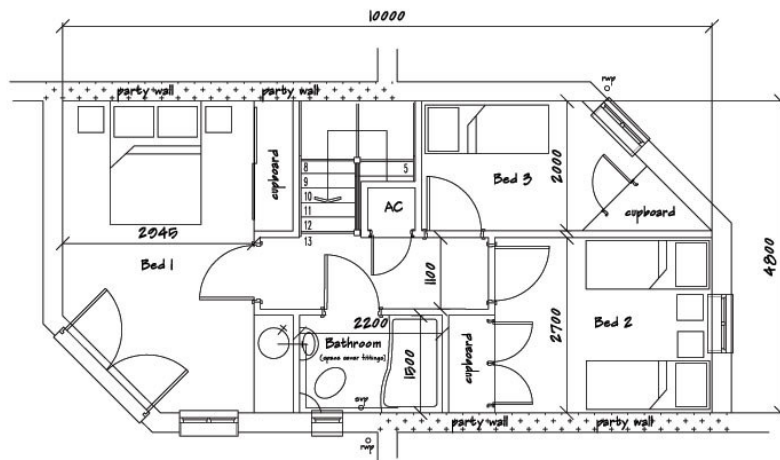


## Design and Access Statement

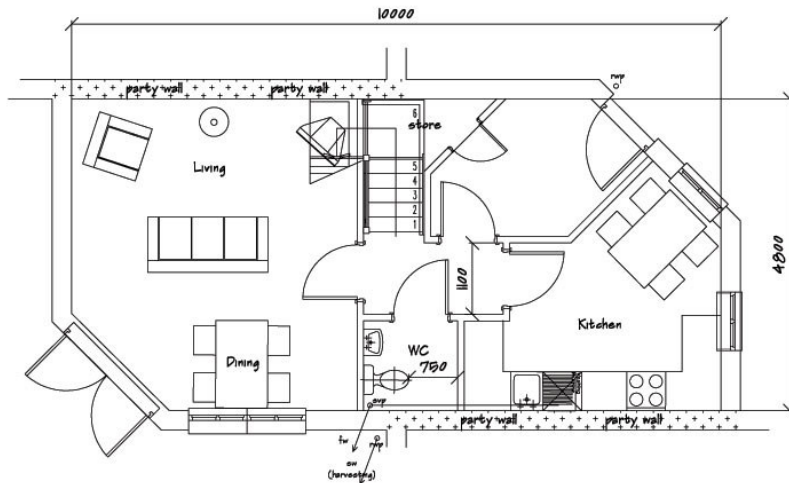
Environmentally responsible housing  
Queens Road, Stourbridge

Black Country Housing Association  
Kier Partnership Homes  
Axis Design Collective

January 2007

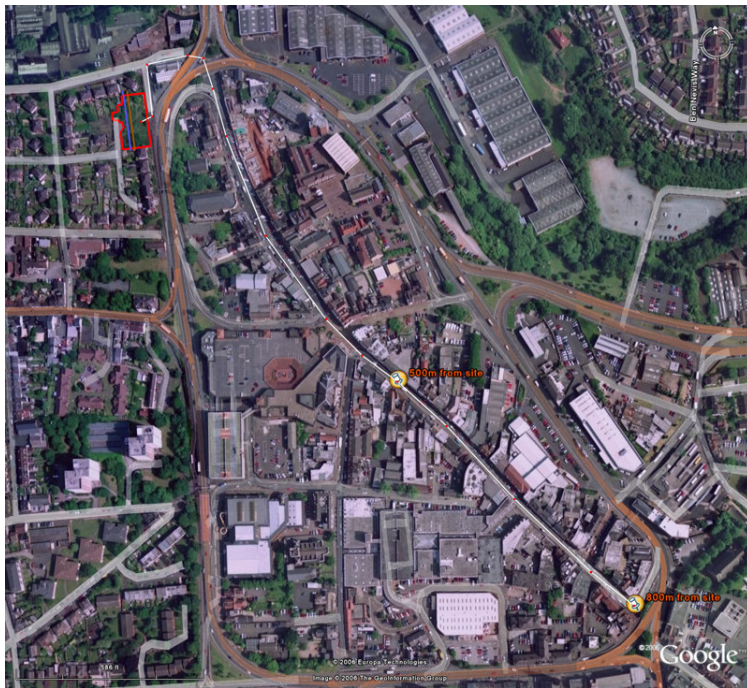


First Floor - 45 sq m



Ground Floor - 45 sq m

The following design and access statement follows the sections recommended in the Dudley Metropolitan Borough Council's guidance. The images accompanying the text are a combination of photos, exploratory drawings completed during the design stage and examples of images discussed during the pre-application discussion with development control.



## Introduction

The site lies to the north-west of Stourbridge town centre, between Queens Road and Turney Road, on the boundary created by the ring road between the centre and the surrounding residential neighbourhoods.

Currently unoccupied, the proposed site is within 500m walking distance of the centre, providing a level of access to amenities well suited to the environmentally conscious brief and the national debate about sustainability.

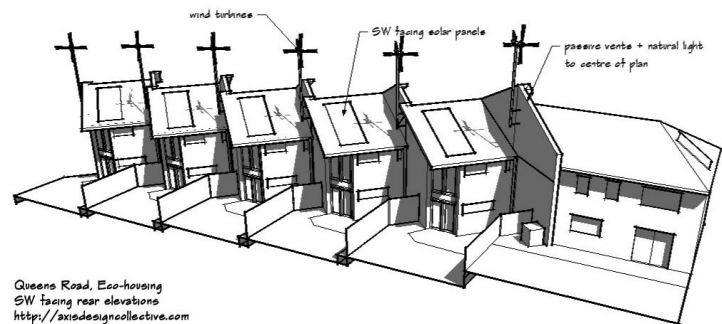
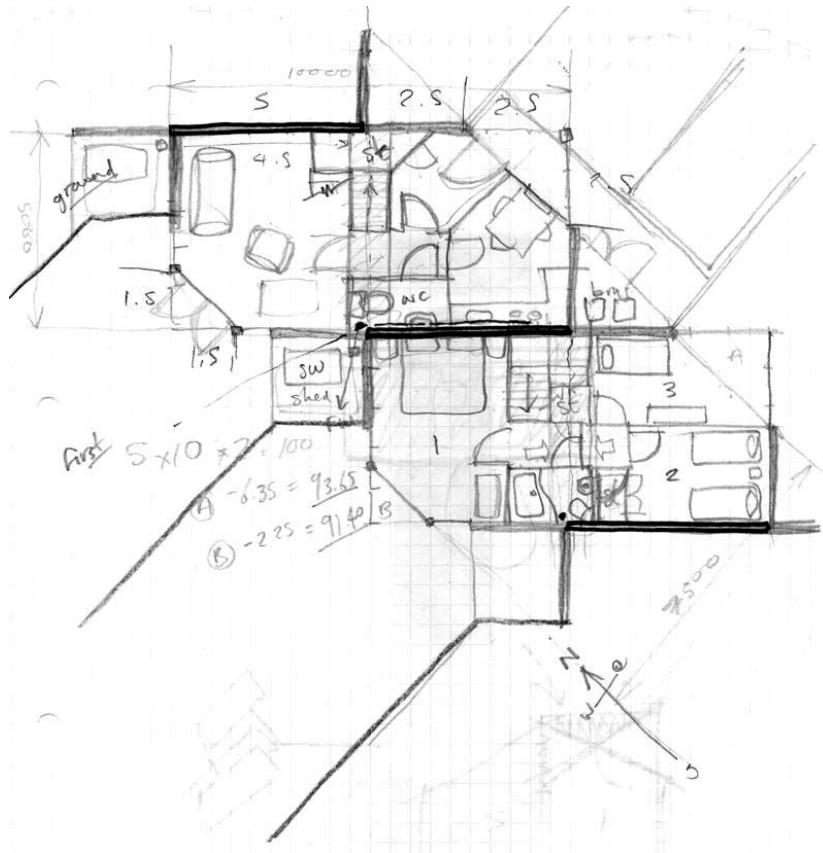
Preliminary energy calculations have been completed, showing that the super insulated structure and careful window placement should result in a space and water heating cost of less than £2 per week.

A critique and positive feedback has been received from a pre-application discussion between the architect and development control and a resident focus group organised by Black Country Housing Association.

### 1. Use

The proposal consists of 6 no. 3 bed 5 person 'shared ownership' houses for Black Country Housing Association.

The area immediately surrounding the site is predominantly social housing circa the 1950s.



Queens Road, Eco-housing  
 SW facing rear elevations  
<http://axiadesigncollective.com>

Image used during pre-application discussion

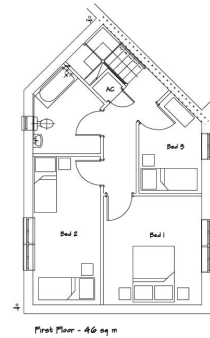
## 2. Amount of development

Each 2 storey unit has a gross internal area of 90 square metres. The development consists of two house types specifically designed to respond to the needs of the site but also provide the qualities and economies of scale sought after by Modern Methods of Construction (MMC).

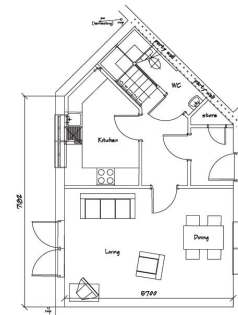
The level of development proposed seeks to ensure that the project is economically viable for the client (despite the complicated physical restraints) and responds to the brief's demand for environmentally 'exemplar', award winning housing design.

The site restraints include an existing drainage wayleave and substantial level changes along the north-south axis of the site.

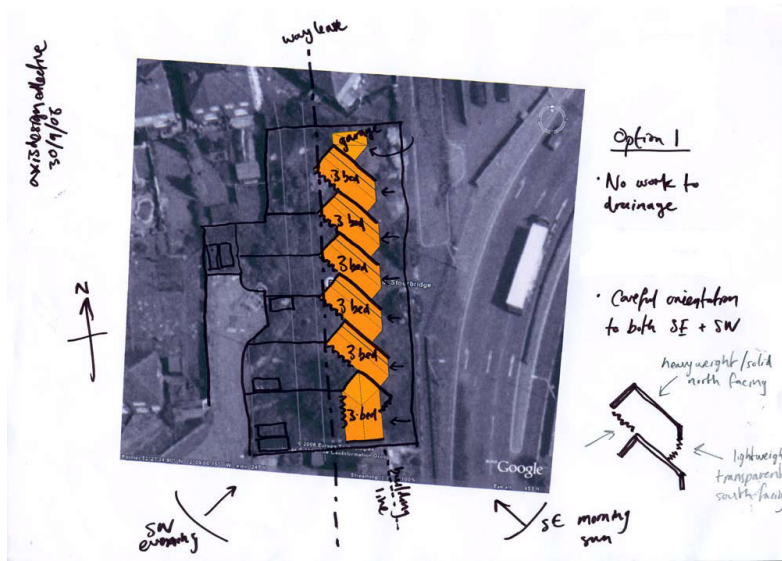
The size, shape and number of properties proposed are a specific, contextually sensitive response that turns the problems of the topography into opportunities for design innovation.



First Floor - 46 sq m

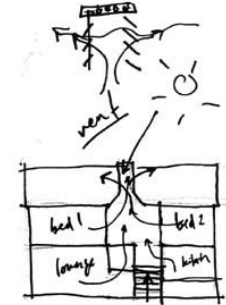


Ground Floor - 46 sq m

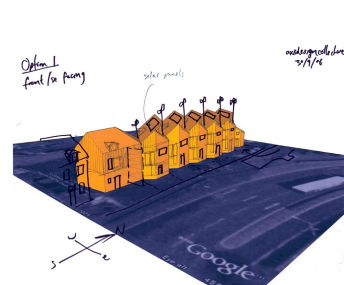
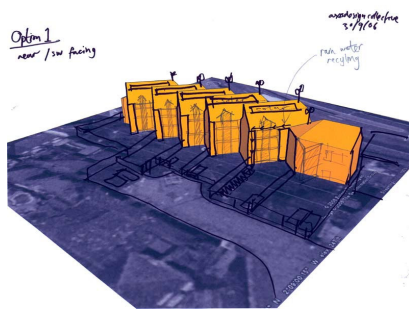


### 3 + 4. Indicative layout + Scale

The 'chevron' planning of the layout is a response to several factors: the tight restrictions put in place by the drainage wayleave along the site, the orientation of the existing properties at either end of the site and the desire to control the environmental performance of the houses with a careful appreciation of solar gain benefits from the south-east and south-west.

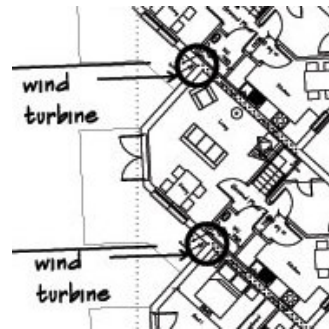
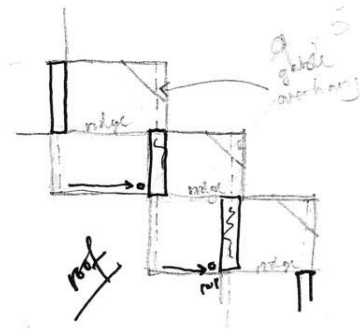


The existing property to the north of the site continues in a similar orientation but is substantially lower down beyond a major level change at the boundary. Our adjacent plot carefully controls overlooking by orientating all the windows away from its neighbour.



Timber framed, modern methods of construction are proposed and a repetition of the main house type will assist with economic benefits of MMC. However, we have proposed a second house type at the southern end of the site to ensure that the development responds to the building line and elevation of the existing, east facing properties.

The site slopes towards the north and we are proposing a regular change between each plot of around 600mm. The innovative design for the roof of each unit assists with the stepped arrangement and provides an opportunity to explore improved ventilation and natural light to the centre of the house.





## 5. Landscaping

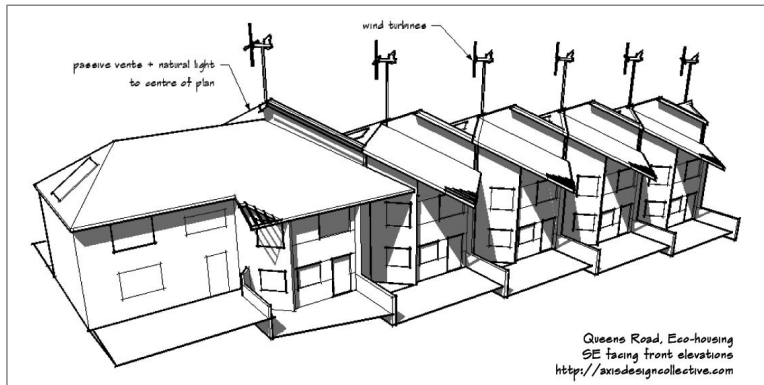
The areas of publicly visible landscaping follow the existing houses use of low retaining walls. This provides clear ownership demarcation, key level changes to ensure routes to houses are as level as possible and also distinguishes the boundaries of public and private space.

A mixture of soft and hard landscaping, the front gardens have varying path layouts depending on the door position of the plot and the overall location on the street.

The most northerly plot has an area of extensive defensive planting to ensure good 'Secured by Design' practice to an otherwise vulnerable boundary.

Rear gardens will follow the housing associations standard specification, with patio areas directly outside doors from the living space which wraps round the building to provide an area for rainwater harvesting goods.

Image used during pre-application discussion

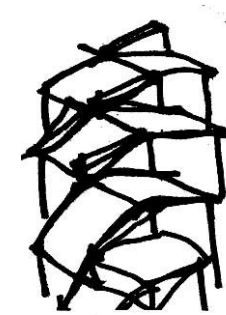


Further developed with chimney detail and cladding options



## 6. Appearance

The 'saw tooth' housing layout has many precedents. Shortly before the completion of the application drawings we discovered an almost identical example that was exhibited in the 1939 Ideal Home exhibition. It was brought the UK from Sweden by the then Housing Minister, Elizabeth Denby, author of the seminal 'Re-housing Europe' in 1932. In this example however, the site constraints and environmental performance have driven a innovative approach to the roof design and it is this that dominates the street scene.



Each individual unit has two different sections of roof, front and back, pitched in opposite directions. Combined with the adjacent unit this results in a standard 'up and over' roof spanning across two properties.

The initial proposal (shown at pre-application discussion stage) sought to construct a section of wall between the two roof pitches to provide potential for natural ventilation and daylight into the centre of the plan. During development this has become a chimney sited above the 1<sup>st</sup> floor cupboard space; possibly housing the boiler flue and a passive ventilation outlet.

The rear roof planes will carry solar water heating panels and each property will have a small, domestic scale wind turbine.

Front door positions can be varied to provide a street presence in two directions and ensure variety is introduced into the repeated house type.

Timber clad first floors and predominantly brick ground floors ensure a visual connection with the existing split brick/render properties, whilst creating buildings that are of their time – contemporary detailing, environmentally conscious materials that are suitably scaled for vernacular domestic architecture.

