CONTOUR HOUSE

LAND ADJACENT TO GUYDER BOTTOM FARM

COOPER LANE, HOYLANDSWAINE

DESIGN & ACCESS STATEMENT

26275(06)02

document reference

AXIS architecture

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05/07/2013

Contents

1. Introduction

1.1 Type of application & address

This Design and Access Statement has been prepared on behalf of Mr & Mrs Brook to accompany the application for detailed planning permission for the construction of a new dwellinghouse with garage.

The application site is located off Cooper Lane, on gently sloping land to the North of Guyder Bottom Farm, a residential property which was formerly part of a farm.

The Site area is approximately 0.4 Ha in area.

The proposal is to construct a new single storey dwellinghouse with garage, with new hardstanding and associated landscaping, and the construction of a new driveway providing access off Cooper Lane, and running parallel to the existing driveway of Guyder Bottom Farm.

1.2 Information submitted as part of the planning application

Application Form

Drawings

The following drawings are submitted in support of the application

AXIS ARCHITECTURE

26530(02)01D Site Location Plan

26530(02)02D House Plan (Ground Floor)

26530(04)01A Proposed Elevations - Sheet 1

26530(04)02A Proposed Elevations - Sheet 2

26530(05)11A Design Overview

26530(05)12A Design Overview

26530(05)13A Design Overview

26530(05)14A 3D Sketch view

26530(05)15A 3D Sketch view

26530(05)16A Design Overview

Planning Fee

Calculated as £*385* using the planning portal calculator

The calculation is base upon: *1no.* C3 dwelling

2. Assessment & Evaluation

2.1 Assessment

The proposed site is accessed off Cooper Lane approximately 0.4 miles from the junction with the A628 running East-West between Barnsley and Penistone. The site sits at the bottom of a natural bowl in the countryside approximately 3 miles North-East of Penistone and 5 miles West of Barnsley. The village of Hoylandswaine is approximately 1 mile South-West of the site, sitting relatively higher.

The site is bounded on the West and South sides by land belonging to Guyder Bottom Farm. Cooper Lane runs to the North of the site, with the nearest neighbouring property (Glen Cottage) across the road, and the site is bounded on the East side by a small sewage works.

The land and buildings constituting Guyder Bottom Farm are owned by the applicant.

Cooper Lane is a two-way narrow highway which is rural in character, without pavements. Across the front of the site, it is bounded with a dry stone wall and hedgerows and several mature trees.

The site itself tapers and falls North towards Cooper Lane, such that the ground gently slopes away from Guyder Bottom Farm.

Buildings making up Guyder Bottom Farm, including a dwellinghouse and detached garage block are visible beyond the site and are traditional in character, although they are largely screened by hedges and planting. Glen Cottage, on the North side of Cooper Lane, is also traditional and domestic in character and fronts Cooper Lane with a high stone boundary wall and a windowless side wall of the cottage itself.

Only when passing the front of the site on Cooper Lane, are close views into the application site possible.

Figure 1 - Photograph - existing view from Cooper Lane

2.2 Evaluation

The decision has been made to seek consent for a new house on this site by the applicant, as there is a strong desire to downsize to a single storey sustainable modern dwellinghouse, that is purposely designed with accommodation on one level, as a home to be enjoyed during retirement.

The applicant has an exceptionally strong personal connection with the site, with Guyder Bottom Farm having served as the family home for 30 years. Having invested a great amount of effort in bringing the farmhouse and the grounds, which include the site, up to a very presentable standard from its previous state as a dilapidated and redundant farm, this site is very strongly desired to provide the location for the new house, and would represent the culmination of many years of hard work in and around the locality.

The proposed house can be positioned comfortably far enough away from the existing farmhouse in order to make this an entirely self-contained property with private access within its own curtilage, without any detriment to the setting and future enjoyment of the existing house at Guyder Bottom Farm. The site is also large enough to allow the property to be set back a generous distance from Cooper Lane to preserve the rural character of the land and views across it, and also far enough to exceed in all cases the distances between street and dwellings established by the cluster of properties 300m to the East of the site, further along Cooper Lane.

The proposals are driven by a desire to construct an exemplary sustainable family home, which will respect and enhance the local environment and will utilise the latest renewable and low carbon technologies to make the house as energy efficient as possible. It is intended that the house will be constructed to achieve Code for Sustainable Homes Level 5, or better, which will exceed current BMBC requirements for new dwellinghouses (presently Level 3 or above).

Figure 2 - Site Location Plan (see 26275(02)01D)

Scheme Overview

The scheme consists of a single storey house, which is gently curved in plan. The house includes three bedrooms, living and dining room, kitchen, office, gym, and bathrooms & en-suites.

The main living areas are open plan and positioned on the front facing North/East side of the house, which is fully glazed and allows pleasant views out over the site towards Cooper Lane and beyond. The master bedroom occupies the North-west end of the house and the kitchen and utility room occupy the opposite East end.

These main living areas are covered with a sloping monopitch green roof which follows the curve of the plan, with each area having a high sloping ceiling at roof level.

The two remaining bedrooms, office and gym are located on the South-west facing rear side of the house, along with the main entrance. These areas occupy a single storey parapet roofed area sitting lower than the eaves of the monopitch roof. At the interface between the two roof profiles is a continuous band of South-facing clerestory glazing which will allow the principal living areas to benefit from sunlight at high level throughout the day and heating via solar gain in wintertime.

Running central through the house below the clerestory glazing is a curved dry stone spine wall, which will be a strong feature that serves to organise the house into main living areas at the front and bedrooms to the rear.

Figure 3 - House plan - see 26275(02)02D

The garage is located at the south end of the house and is designed to accommodate three cars.

It is proposed that a hard-surfaced access driveway is formed with a junction off Cooper Lane in order to serve the new property. This terminates in an area of hardstanding in front of the garage. A rear garden area will be formed with landscape features and planting, along with a paved walkway leading to the entrance.

The possibility of access to the site off the existing driveway to Guyder Bottom Farm along the West boundary of the site has been considered, but discounted as the present owner of the farm intends to maintain this as a private access.

It is proposed that the house will be set low relative to existing site levels, to give the impression that the house is partially sunken into the gently sloping ground. The geometry and orientation of the house have been designed to follow the existing site contours such that the single storey house visually blends into the landscape.

Dry stone walls and espalier trees are positioned in front of the house along existing contour lines and will provide screening to the proposed building. In conjunction with the sloping green roof rising up towards the rear of the house, this is intended to reduce the visual impact of the house when viewed from Cooper Lane across the front of the site, with the eaves height on the front of the house sitting low relative to ground level. The aim is to promote visual continuity with the existing landscape and setting, and to keep the built form minimal.

Figure 4 - Sketch aerial view of front of house from North-east

A narrow margin of hard paving in front of the house is proposed in order to provide ease of access to the outdoors from the principal living areas.

Planting is proposed on the South boundary in order to provide definition and screening between the edge of the site and domestic curtilage associated with the existing house at Guyder Bottom Farm.

Other than the access to the site, no highways adaptation is required in order to implement the development.

Site Analysis

Owing to the site topography the rear of the building benefits from plenty of natural daylight and sunlight, and whilst the front-facing elevation will be in shade for most of the day, it will benefit from high level daylight from the south-facing clerestory glazing.

There are no significant sources of noise which would affect a residential development and traffic noise is not an issue.

There are no residential properties near enough to the building to pose any issues of overlooking or compromise of privacy. The nearest properties, Guyder Bottom Farm and Glen Cottage are each approximately 50m away to the South and North respectively.

The land has been maintained in residential use for approximately 30 years as part of Guyder Bottom Farm. Prior to this, when the site was farmland, much of the site was occupied with large single-storey agricultural outbuildings and stables, as the photograph below demonstrates.

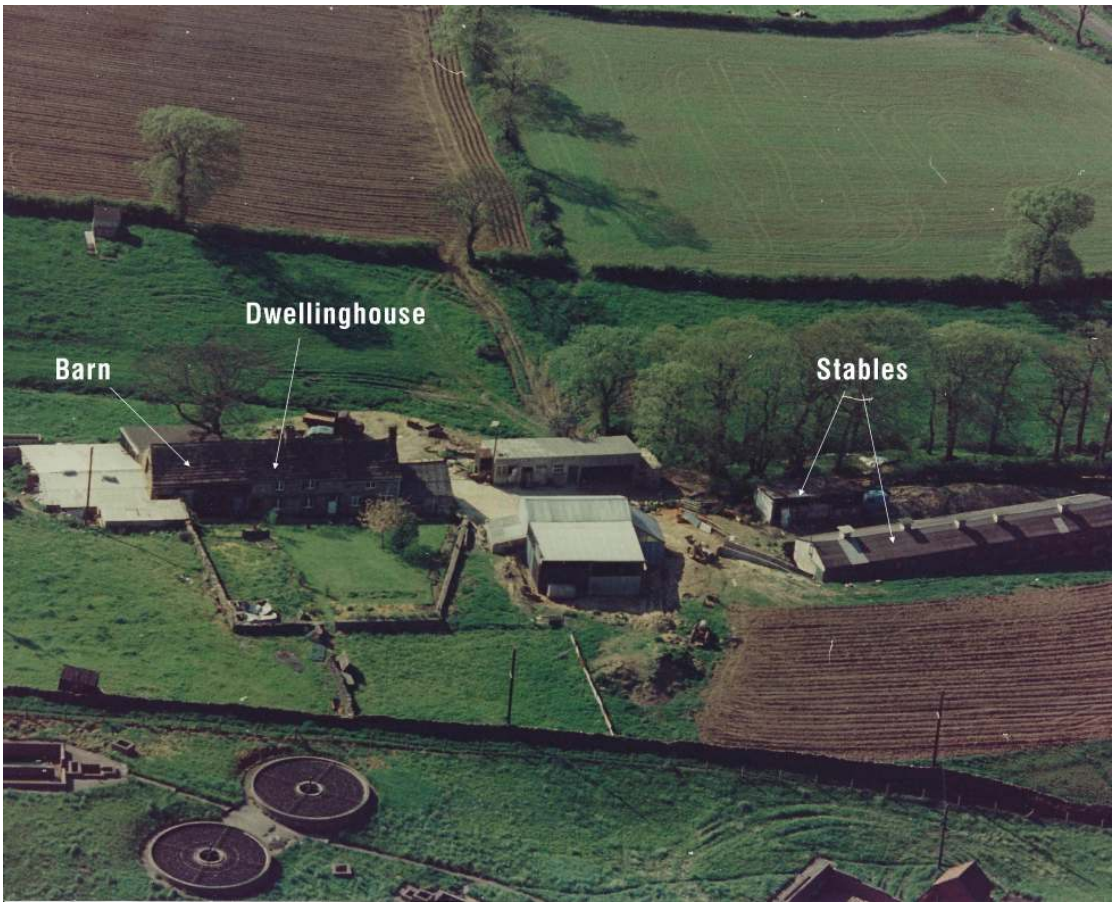

Figure 5- Aerial photograph of Guyder Bottom Farm circa 1980 (site to the right of the photograph)

Materials Palette

Please refer to elevations and scheme visuals

A very simple materials palette is proposed in keeping with the type of materials one would expect to see in a house in a rural setting, albeit executed in a contemporary manner.

The front of the house on the outside of the curve is primarily natural stone in random format to resemble dry stone walling, with areas of glazing from floor to eaves level using a minimal-framed curtain wall glazing system, accommodating aluminium framed patio doors.

Figure 6 - Sketch aerial view showing curved green roof and front elevation

An area of green living wall is proposed for part of the elevation to promote visual continuity with the land in front of the house.

The monopitch roof over the front portion of the house is to be an extensive green roof, which will be seeded with a natural grass mix selected to closely replicate the local rural environment in which the house is set.

Structural supports beneath the lower eaves level of the monopitch roof are positioned on the outside of the house at equal intervals along the curve, and are to be completed in natural hardwood with steel structural connections.

At the upper eaves level of the monopitch roof, a cantilever brise-soleil is to be installed which will provide solar shading to the clerestory glazing, and will be completed in a combination of fabricated steel and colour coated pressed/extruded aluminium.

The rear of the house, on the inside of the curve, is to be constructed in natural coursed dressed stone, with a parapet roof.

The curved spine wall bisecting the house is to be completed in dry stone wall which will echo the dry stone walls prevalent in the rural setting.

The main entrance porchway is to be fully glazed using a minimal framed curtain wall system

The garage block will be constructed in natural stone and will reflect the detailing of the main house, with areas of coursed and random stone. The North-east elevation of the garage will be faced with a green living wall system, to minimise the visual impact of the garage and to allow the building to blend into the landscape.

Figure 7 - Aerial sketch view showing rear of house and garage

Supplementary Reports

N/A

3. Design

3.1 Use

The building is to be used purely for permanent private residential occupation. It is intended for family use, and the open-plan nature of the house means that it will be capable of adaptation in future to suit the requirements of following occupants.

The property has three bedrooms, which is considered appropriate for the size of dwelling and the requirements of the applicant.

An office is included to support the possibility of working from home, a provision which is actively encouraged by Code for Sustainable Homes guidance. This room is capable of future adaptation if required to provide a further bedroom with ensuite bathroom.

3.2 Amount & Scale

The decision has been made to design the property as a single storey house, in order to minimise the visual impact upon the existing site and its setting, but also to provide uniquely flexible and accessible open-plan accommodation without stairs.

The massing of a two storey house, of equivalent area spread over two storeys, with a traditional pitched roof would have a much more significant visual impact on the local environment. The unique contemporary form of the house, in particular the curved plan and shallow pitched green roof, have been conceived in order to work alongside the landscape characteristics of the site and for the house to be as visually inobtrusive as possible, as a single-storey property.

With the house being single storey in height, sitting relatively low to the ground on site, and with the site itself sitting low in the context of the surrounding countryside (with surrounding hills sitting higher in all directions), all possible steps have been taken to ensure that the design of the house has minimal visual impact on its local environment within the green belt. The new house will only be visible up close from Cooper Lane, screened by dry stone walls and espalier trees and will not have any significant impact upon distant views across the countryside from any direction.

Figure 8 - Sketch image showing front elevation of house screened by dry stone walls and espalier trees, with wildflower planting

3.3 Landscaping

Landscaping will be executed to provide green planted and lawned areas around the house and garage.

The curve of the house plan is intended to subtly blend in with the contours of the hill on which the house sits, sitting low relative to the existing landscape.

Where levels are to be reduced at the top of the site, to allow the house to sit relatively low and to blend in with the existing landscape to the front of the house, level changes will be managed with stone gabion walls. These walls will be concealed behind the house when viewed from Cooper Lane.

Figure 9 - Indicative site section

An important feature of the house is the gently sloping extensive green roof which is intended to further help blend the house into the existing landscape. The proposed espalier trees and dry stone walls in front of the house are intended to partially screen the house and are in keeping with the rural appearance of the local area.

Wildflower planting will be provided to the land in front of the house, using indigenous species planted in a naturalistic and unstructured pattern.

The existing site is already well populated with mature trees along the East and West boundaries. Further tree planting is proposed at the South boundary to define the edge of the curtilage as distinct from Guyder Bottom Farm, and adjacent to the North boundary adjoining Cooper Lane, to promote further screening of the property when viewed from Cooper Lane.

The extent of hardstanding is to be kept minimal, and limited to a terrace area adjacent the kitchen, pathways around the house, and the driveway and turning space in front of the garage.

3.4 Appearance

The intention is to create a contemporary building of exceptional quality and originality using a very high standard of materials, utilising modern construction techniques to deliver a sustainable and comfortable home that is sensitive to the defining characteristics of the local environment.

Natural stone is very commonly used in vernacular construction in rural settings and its use in the scheme helps to maintains continuity with buildings within closest vicinity of the site (including Guyder Bottom Farm) and further afield.

The use of dry stone walling / random stone walling in the interior and exterior of the house, is a contemporary and original application of an traditional technique, representing an acknowledgement and reinterpretation of the building's setting and its rural context

The use of a sloping green roof with a low eaves line, have been employed in order to minimise the visual impact of the building when viewed from Cooper Lane. Through careful selection of growing medium and seed mixes, the extensive green roof will aim to recreate the natural make-up of grasses and plants local to the site, and will promote biodiversity. Equally importantly, it will help the house to visually blend into the landscape.

The rear of the building is constructed from coursed stone and is more solid and domestic in character in keeping with the smaller, more cellular character of the bedrooms, gym and office contained within.

By contrast, the entrance porch is fully glazed and this is pulled away from the rear of the building for emphasis.

The garage will not be visible from Cooper Lane, as it is set back from the main part of the house and will be screened by planting and existing trees.

4. Access

4.1 Policy Approach

Sources & Guidance

Advice has been sought from a number of sources:

Main design references used include:

- Building Regulations Approved Document Part M (2004)
- British Standards BS8300, Access for Disabled People
- Designing for Lifetime Homes , Joseph Rowntree Foundation 1997

4.2 Consultation

It is envisaged that consultation with the Council's Access Officer will take place during the course of the planning process.

Specific Access Issues

ISSUE	RELEVANT LEGISLATION	STAGE TO BE CONSIDERED
Car parking 3no private spaces in garage & External space for parking for approximately 2no visitors	Planning, Building Regulations and DDA	Planning
Public Transport Existing bus stops are located on A628 Barnsley Road approximately 650metres from the site	Planning and Highways - Transport Assessment	Planning
Pedestrian Approach **A)** Pedestrian approach is via driveway off Cooper Lane **B)** External Lighting along all access routes designed to Part 3 BS5489 to take ensure good access and reduce crime risk and follows DfT Guidance on Inclusive Mobility	**A)** Planning and Building Regulations **B)** Planning/Highways	**A)**Planning **B)**Planning
Routes to entrance: Entrance area highlighted by lighting and contrasting materials	Planning and Building Regulations	Planning
Entrance: **A)** Entrance door is manually operable	Planning and Building Regulations	Planning/Building Regulations
Movement within building House is single storey with accommodation on one level. Principal living areas are open plan and adequate corridor widths and door widths are to be provided elsewhere.	**A)** Building Regulations and Health and Safety	**A)** Building Regulations, management
Signage: N/A Private dwellinghouse	Building Regulations & DDA	Building Regulations and management
Vertical Circulation: **A)** N/A - no stairs	Building Regulations	Building Regulations
Wayfinding: N/A Private dwellinghouse	Building Regulations	Building Regulations
Materials: **A)** External paving / courtyard treatment / hard + soft landscaping - details to be submitted as planning condition and to comply with DfT Guidance on Inclusive Mobility **B)** Internal floor materials and wall finishes to be appropriate for use	**A)** Planning/Highways /Building Regulations **B)** Building Regs/Health & Safety and DDA	**A)** Planning/Building Regulations **B)** Building Control
Means of Escape: All features and materials to comply with Part B of building Regs.	Building Regulations (Fire)	Building Regulations

5. Sustainability Statement

5.1 Economy

Other than the construction phase of the house itself, which would aim to support local construction trades and craftsmen, the impact of occupation of the single house will be negligible on the local economy.

5.2 Neighbourhood & Community

It is considered that the creation of a new dwellinghouse will have no detrimental effect on the neighbourhood and community, as the site is located far from the nearest village, and the nearest neighbouring buildings, which are relatively isolated themselves, are at least 50 metres away.

5.3 Environment & Resources

Whilst open rural land would be built upon through the proposals, it is not the case that the site has never been developed previously, as it is known that the site was previously occupied with agricultural outbuildings up to around 1980. Grass-covered land lost to the footprint of the house and garages will be well compensated for by the provision of a green roof.

Further planting with trees and shrubs will be carried out in numerous locations around the building and site and so the ecological value of the site will be maintained and enhanced.

The rural setting of house allows very easy access to the surrounding countryside for leisure and recreation.

5.5 Design & Construction

Materials and Building Fabric

The very highest standards of materials are to be employed in the construction of the building, ensuring that high levels of insulation and thermally efficient materials are incorporated into the building fabric.

Materials will be carefully selected from sustainable sources and with low environmental impact in accordance with the Green Guide ratings system. Reclaimed stone will be used where possible.

The building will be constructed to stringent air-tightness standards to minimise loss of energy through junctions in the external envelope.

Lighting

All of the internal and external lighting is to be through dedicated energy efficient fittings, utilising photo-cell daylight cut-off sensors where possible.

Low or zero carbon technologies are to be utilised in the servicing of the building, with a combination of the following:

- Air Source/Ground Source Heat pumps

  Heating to be provided by use of Air Source or Ground source heat pumps and wet under floor heating. The air source air intakes may be ducted through the ground to provide a natural frost protection/pre-heat facility. This will help maintain air source operating efficiencies during winter.

- Solar Thermal Heating.

Domestic hot water will be provided by a central cylinder. In winter, pre-heat shall be provided from the heat pump installation. Throughout the year an electric element shall provide temperature top up/anti-legionella purge facility. During summer, solar thermal panels, located on areas of South-facing roof shall provide 40-70% of the domestic water energy input requirements.

- Solar Photovoltaic cells, for generating clean and free electricity for use in the house
- Wood-burning stoves

Fireplaces will be provided to the living and dining rooms to allow smokeless fuel wood-burning stoves for space heating, to reduce energy demand from reliance on underfloor heating alone.

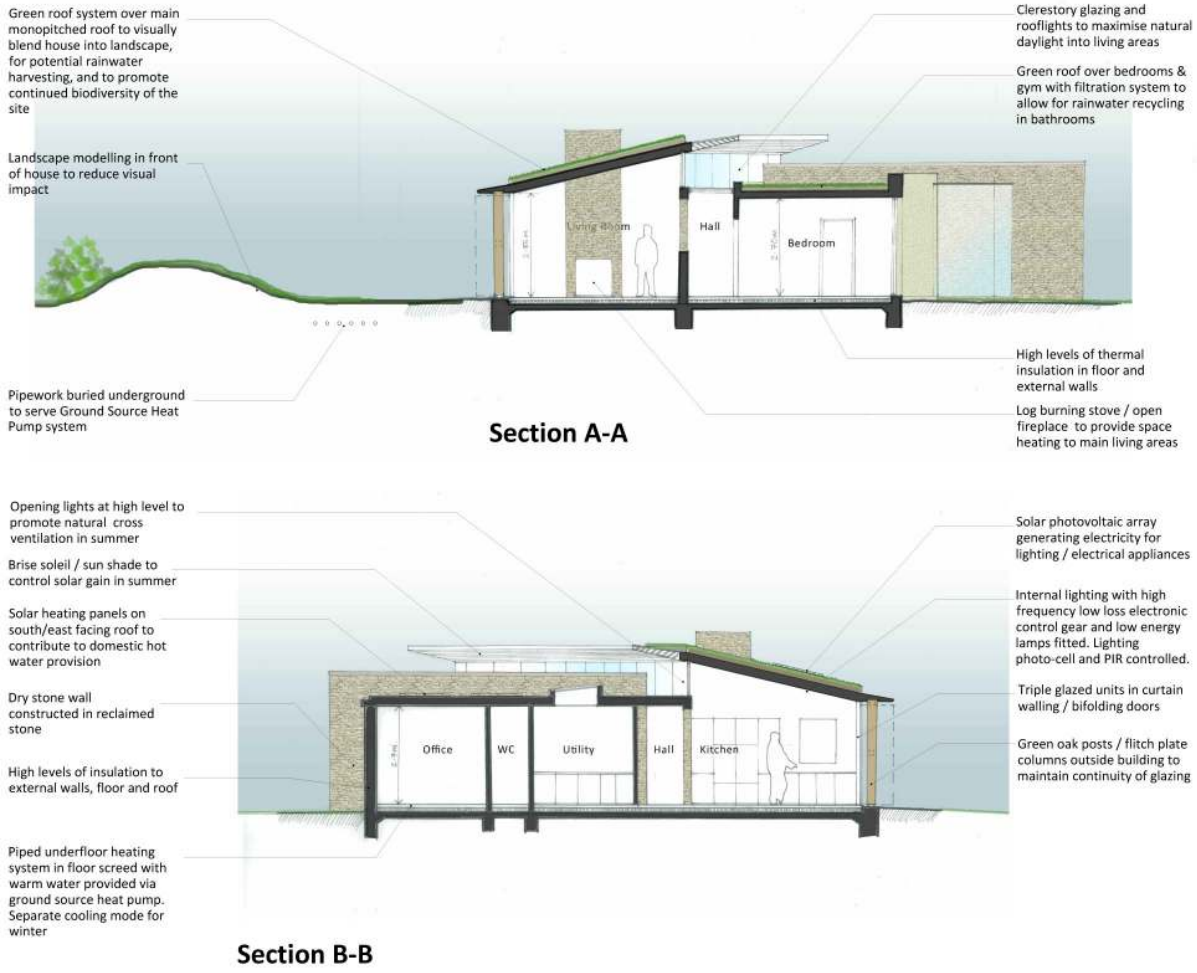

Figure 10 - Concept sections showing possible use of low/zero carbon & renewable technologies in servicing the building

Water

Water is to be conserved on site through the use of rainwater butts which will reduce surface water run off from the site and will be recycled for irrigation of the gardens. Surface water will be carefully controlled through the use of sustainable urban drainage systems (SUDS) where appropriate, to ensure that surface water run-off is no worse off after the development than prior to development. The green roof system will inherently slow the rate of surface water run off due to the capacity of the proprietary drainage membrane included within the roofing build up.

Showers and bathroom fittings are to generally have controlled flow fittings to reduce overall water consumption.

Carbon Footprint

In addition the carbon footprint of the site and building will be further reduced by the following measures:

- A layout which makes effective use of solar gain and natural daylight
- Windows and doors will exceed the minimum standards under Part L of the Building Regulations
- The development will be fully compliant with Building Regulations and carbon emissions ratings achieved as necessary

Flood Risk

A flood risk assessment is not required for this application.

Air Quality

There are no know air pollution issues within the local area and no detriment to air quality is envisaged as a result of the construction and occupation of the house

Waste and Recycling

A secure store which includes separate containers for waste recycling in line with the local authority programme will be provided. Domestic compost bins are being considered to reduce amount of waste sent to landfill.

Flexibility in building design

The house with all accommodation at ground floor level has been designed in such a way that it provides flexible contemporary living space, capable of being adapted to suit changing needs of the family and future occupants

5. Summary

The proposals for the new single storey house are driven by a desire to construct a contemporary family home of an exceptional quality using a very high standard of materials and modern construction techniques.

The development will utilise the most recently available renewable and low carbon technologies in an aim to be as energy efficient as possible, to deliver a highly sustainable and comfortable home that is also sensitive to the defining characteristics of the local environment. The house will aim to achieve Code for Sustainable Homes Level 5, exceeding the BMBC standard for new housing.

This Document has been prepared inline with SCC guidance on sustainability statements and the guide 'Design and access statements. How to write, read and use them' published by CABE.

5.1 Contact Details

If, during the Council's consideration of the planning application and this accompanying Design & Access Statement, any further elaboration of the details contained within the application or this Statement are necessary, please contact the clients agent on the details below:

Andy Gee

AXISarchitecture

2-6 North Church St

Sheffield

S1 2DH

t: 0114 2490944

f: 0114 2490966

e: designed@axis-architecture.com

Appendix 1

Photographic Survey

Figure 11 - From site looking North towards Cooper Lane

Figure 12 - From site looking North-East towards Cooper Lane / Glen Cottage

Figure 13 - South-east corner of site looking East with trees on boundaries

Figure 14 - Access to Guyder Bottom Farm off Cooper Lane with tall mature tree

Figure 15 - Access to Guyder Bottom Farm off Cooper Lane, opposite Glen Cottage