



# Life In Architecture

Design & Planning  
Domestic  
Commercial  
Conservation

---

## Design and Access Statement

Site Address: - **Aspley House Logan Terrace South Hetton Durham DH6 2UG**

## **1.00 INTRODUCTION**

- 1.01 Full Planning application for 1 number 3 bedroom detached dwelling.
- 1.02 The proposal would be constructed to a high standard, using traditional materials and construction techniques. Environmentally, it is proposed to adopt the use of carbon neutral technological advances in both heating and ventilation systems.

## **2.00 APPEARANCE**

- 2.01 The proposed materials chosen for the walls would be a combination of facing brick and render matched with a roof of blue/grey concrete plain tiles. All new windows will be in a PVC-u casement. The appearance of the proposal could be both contemporary and traditional by using conventional and current materials. The eaves will be closed off with a black PVCU

## **3.00 AMOUNT OF DEVELOPMENT**

- 3.01 The amount of development consists of detached 3 bedroomed dwelling. The proposal will include parking for 2 spaces.
- 3.02 The proposed total ground floor area of the proposed dwelling would amount to modest 73.00m<sup>2</sup>
- 3.03 Car parking will be arranged on the rear elevation of the dwelling, and recreational areas will be designed at the rear and side elevation
- 3.04 The side elevation will allow space for any refuse collection which can be concealed from view by trellises and vegetation. Ample space can be allocated at the rear and be simply wheeled to the frontage for collection by the occupier or others.

## **4.00 LAYOUT**

- 4.01 The vehicular access from the main highway will lead to the parking area providing 2 spaces. The layout will form a 3 bedroomed dwelling over 2 floors. Living areas will provide access to the stair leading from the entrance hall. The rooms will be designed to reduce overlooking, with layout of the space for living area provide acceptable ventilation. The ground floor will have contemporary doors leading of the parking.
- 4.02 The parking area will lead directly off the rear existing access off Ullswater Terrace space and turning areas is illustrated on site. The layout will allow access to the rear being min 1200mm from the main frontage.

## **5.00 SCALE**

- 5.01 The scale of the proposal will be in keeping with the site as the area is primarily domestic. The scale will not increase massing as along the Street-Scene
- 5.02 Massing will be complemented by the elevations and roof pitches which soften the outlook of the dwellings against the existing backdrop.

## **6.00 LANDSCAPING**

- 6.01 The existing boundaries consist of timber fencing and existing hedging and walling. The boundaries will be planted with small shrubs and trees, suitable for a domestic setting.
- 6.02 Most of the site will be paved with areas of planting and small trees. The site will be broken up by paved walking areas. The parking area leading from the main access will be surfaced in paving. [SuDS] designed in accordance with Non-statutory technical standards [Defra] for England.

## **7.00 ACCESS**

- 7.01 The main access to the proposed property will be via the existing highway by means of the existing rear opening to the site.
- 7.02 The parking area will be level and no falls more than 1 in 20 leading to the main entrance at ground level, a level threshold will be included to comply with the building regulations at the main entrance. A surface water channel shall be included to prevent surface water runoff from the site. There will be no obstruction above 1m to within the visual splay. All doors will comply with the Assess for Disabled guidance.
- 7.02 The proposal will use the existing access which will be adapted to meet highways approval.

## **8.00 ENVIRONMENTAL SUSTAINABILITY**

- 8.01 Sustainable architecture is a general term that describes environmentally conscious design techniques in the field of architecture. Sustainable architecture is framed by the larger discussion of sustainability and the pressing economic and political issues of our world. In the broad context, sustainable architecture seeks to minimize the negative environmental impact of buildings by enhancing efficiency and moderation in the use of materials, energy, and development space. Most simply, the idea of sustainability, or ecological design, is to ensure that our actions and decisions today do not inhibit the opportunities for the future.
- 8.02 Sustainable development (SD) refers to a mode of human development in which resource use aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for generations to come. The term 'sustainable development' was used by the Brundtland Commission which coined what has become the most often-quoted definition of sustainable development: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

- 8.03 Sustainable development ties together concern for the carrying capacity of natural systems with the social challenges faced by humanity. As early as the 1970s, "sustainability" was employed to describe an economy "in equilibrium with basic ecological support systems." [3] Ecologists have pointed to *The Limits to Growth*, [4] and presented the alternative of a "steady state economy" [5] in order to address environmental concerns.
- 8.04 Concrete is at the heart of all building projects, when the material comes out of the mixer and is laid down, or used to form bricks, or mixed with other materials; there may from time to time a considerable amount of waste. The extract and manufacture process of concrete if not controlled accurately the pollution of our eco system is would vulnerable.
- 8.05 Throughout its lifecycle, concrete can deliver real sustainability benefits. Sustainability is a key issue for the UK concrete industry. They are tackling the industry's own performance head on, enhancing positive attributes and managing and reducing other impacts through technical innovation and concrete design. The industry is said to be committed to behaving in a responsible way to improve sustainability performance and to deliver sustainable construction solutions. Both with good design, concrete will still have a future in the construction industry.
- 8.06 The insulated floor slab will have a high thermal mass and will perform as a heat sump by releasing energy slowly. Owing to the walls and roof having a design which will be airtight and comply with the building regulations any heat loss would be controlled. The main external door will be constructed of insulated PVCU which unfortunately does have a higher embodied energy score; nonetheless over the lifespan of the material, maintenance intervals are reduced hence this will help achieve a lower environmental impact. Natural materials are generally lower in embodied energy and toxicity than man-made materials. They require less processing and are less damaging to the environment. Natural timber(s) are

theoretically renewable; therefore, once natural materials are incorporated into buildings, the buildings and the products use become sustainable.

8.07 The Fenlite range of aggregate blocks contains up to 80% alternative raw materials. These are recycled from Hanson's and other companies' manufacturing processes. The use of these materials helps reduce the amount sent to landfill. All Hanson's block manufacturing sites are certified to ISO 14001 demonstrating responsible sourcing. In addition, void packs are available, eliminating the need for pallets and contributing towards meeting packaging waste regulations.

8.08 The manufacturing of Hanson's Thermalite® range and services are designed to promote sustainability, before and after the product leaves the factory. To be environmentally sustainable, a product needs to be manufactured and used in such a manner as to minimise its impact on the environment. This is a key issue confronting the construction industry and commands construction solutions that minimise the consumption and use of natural resources. Hanson recognises the impact that can have on the environment, so manage all activities to maximise the contribution towards the protection of the environment and the preservation of natural resources.

#### Reduction, re-use and recycling

The Thermalite range of aircrete blocks are made from up to 80% recycled materials. Reduction, re-use and recycling are the only green solutions to the environmental impact of waste. Wherever possible, recycled materials are used in the manufacture of Hanson's products, thereby reducing the use of primary aggregates.

### Pulverised fuel ash

Up to 80% of the material used in Hanson's Thermalite blocks is pulverised fuel ash (PFA). This is a by-product from coal burning power stations, which is both stable and environmentally friendly.

### Waste minimisation

Hanson's claim that a strict waste minimisation scheme is operated during manufacture. All waste is either crushed or recycled into the next mix and used in other concrete products or as an aggregate bulk fill replacement used in road construction.

- 8.09 Timber used in the construction will be sourced from managed forests. The Forest Stewardship Council has grown to be the definitive international guarantor of managed and protected forests. Specifications requiring FSC certification are rapidly becoming the norm.
- 8.10 The heating may be designed around an Air Source system or material gas combined with under floor heating. Air source heat pump extract heat from the outside air in the same way that a fridge extracts heat from its inside. The pump can extract heat from the air even when the outside temperature is as low as minus 15° C. Heat pumps do have some impact on the environment as they need electricity to run, but the heat they extract from the ground, air, or water is constantly being renewed naturally. Unlike gas or oil boilers, heat pumps deliver heat at lower temperatures over much longer periods. This means that during the winter they may need to be left on 24/7 to heat the building efficiently.

## **9.00 COMMUNITY SAFETY**

- 9.01 Although it is the job of the police to fight crime, we can all help to bring crime down. Most crime is against property, not people, and not many crimes are carefully planned. Most crimes are committed on the spur of the moment. Possessions left in a car, a door or window to a house left open, however you can reduce the risk by securing your home and car adequately. This will also assist the police, by giving them more time to tackle serious crime.
- 9.02 The windows will be secured by designed which is a police initiative to encourage the building industry to incorporate crime prevention measures in their design. The security features such as doors and windows as well as the layout help discourage opportunists before they have a chance to cause damage.
- 9.03 Natural surveillance is an important mechanism in preventing crime and Criminals feel least comfortable where legitimate users of a space or building have a high degree of visibility over the area. Natural surveillance occurs when there are few obstacles obstructing visibility, e.g. areas of concealment do not exist, and adequate “but not obtrusive” lighting has been included in the design. The application site will be enclosed by boundary fencing and hedging however the frontage will be open which allows natural surveillance. Therefore reducing the likelihood of Criminal activity.

## **10.00 CHARACTER**

- 10.01 The main walls will be in a combination of brick and render; and the roof will be in Blue grey tiles matching other dwellings in and around the area.
- 10.02 The Character of the building will not detract from the area as the existing buildings are mostly domestic.



## **11.00 MOVEMENT TO, FROM AND WITHIN THE DEVELOPMENT**

11.01 The site lies inside a settlement boundary. Public Transport would not be limited due to the location. The town Hetton is a short travel distance by private vehicle or public transport. A bus stop is a short distance from the proposal. Movement about the site is gained at the frontage and Rear where parking spaces are located with ease of access at the rear of the site. The proposal will allow passage to both sides of the site which will be level and provide simple travel by wheelchair should this at any time be necessary.

11.02 The rear of the site will have level access from the rear of the property. Access within the building will be gained via the main entrance doors. The layout provides unobstructed use of the building whereas doors will be 838mm allowing a clear opening for wheelchairs.