DESIGN & ACCESS STATEMENT

New Dwelling at Land adjacent to Plymouth House West Street Llantwit Major

for Mr D Williams & Ms V Edwards

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Produced in SUPPORT OF THE PLANNING APPLICATION

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Introduction

This Design and Access Statement (DAS) accompanies an application for the approval of a new dwelling on Land adjacent to Plymouth House, West Street, Llantwit Major. The site has a current detailed consent for a single dwelling (2010/00391/FUL and this application proposes to make minor amendments to the approved scheme to suit the needs of current owner.

The Development Plan Framework in The Vale of Glamorgan is currently provided through the Adopted Vale of Glamorgan Unitary Development Plan 1996 - 2011. Policies ENV 27, ENV 28, HOUS2 and HOUS8 of the Adopted Unitary Development Plan.

POLICY ENV 27 - DESIGN OF NEW DEVELOPMENTS PROPOSALS FOR NEW DEVELOPMENT MUST HAVE FULL REGARD TO THE CONTEXT OF THE LOCAL NATURAL AND BUILT ENVIRONMENT AND ITS SPECIAL FEATURES. NEW DEVELOPMENT WILL BE PERMITTED WHERE IT:

- i. COMPLIMENTS OR ENHANCES THE LOCAL CHARACTER OF BUILDINGS AND OPEN SPACES:
- ii. MEETS THE COUNCIL'S APPROVED STANDARDS OF AMENITY AND OPEN SPACE, ACCESS, CAR PARKING AND SERVICING;
- iii. ENSURES ADEQUACY OR AVAILABILITY OF UTILITY SERVICES AND ADEQUATE PROVISION FOR WASTE MANAGEMENT:
- iv. MINIMISES ANY DETRIMENTAL IMPACT ON ADJACENT AREAS;
- v. ENSURES EXISTING SOFT AND HARD LANDSCAPING FEATURES ARE PROTECTED AND COMPLEMENTED BY NEW PLANTING, SURFACE OR BOUNDARY FEATURES:
- vi. ENSURES CLEAR DISTINCTION BETWEEN PUBLIC AND PRIVATE SPACES; vii. PROVIDES A HIGH LEVEL OF ACCESSIBILITY, PARTICULARLY FOR PUBLIC TRANSPORT, CYCLISTS, PEDESTRIANS AND PEOPLE WITH IMPAIRED MOBILITY; viii. HAS REGARD TO ENERGY EFFICIENCY IN DESIGN, LAYOUT, MATERIALS AND TECHNOLOGY; AND
- ix. HAS REGARD TO MEASURES TO REDUCE THE RISK AND FEAR OF CRIME.

POLICY ENV 28 - ACCESS FOR DISABLED PEOPLE
ALL NEW DEVELOPMENT (AND WHERE PREDICTABLE, THE CHANGE OF USE OR
ALTERATIONS TO BUILDINGS) OPEN TO THE PUBLIC AND BUILDINGS USED FOR
EMPLOYMENT AND EDUCATION PURPOSES WILL BE REQUIRED TO PROVIDE
SUITABLE ACCESS FOR CUSTOMERS, VISITORS OR EMPLOYEES WITH MOBILITY
DIFFICULTIES.

POLICY HOUS 2 - ADDITIONAL RESIDENTIAL DEVELOPMENT HOUSING INFILL, SMALL-SCALE DEVELOPMENT AND REDEVELOPMENT WHICH MEETS THE CRITERIA LISTED IN POLICY HOUS 8 WILL BE PERMITTED WITHIN THE SETTLEMENT BOUNDARIES OF THE FOLLOWING: URBAN SETTLEMENTS OF:

BARRY COWBRIDGE WITH LLANBLETHIAN DINAS POWYS LLANDOUGH (PENARTH) LLANTWIT MAJOR PENARTH SULLY POLICY HOUS 8 - RESIDENTIAL DEVELOPMENT CRITERIA - POLICY HOUS 2 SETTLEMENTS

SUBJECT TO THE PROVISIONS OF POLICY HOUS 2, DEVELOPMENT WILL BE PERMITTED WHICH IS WITHIN OR CLOSELY RELATED TO THE DEFINED SETTLEMENT BOUNDARIES PROVIDED THAT IT MEETS ALL THE FOLLOWING CRITERIA:

- (i) THE SCALE, FORM AND CHARACTER OF THE PROPOSED DEVELOPMENT IS SYMPATHETIC TO THE ENVIRONS OF THE SITE;
- (ii) THE PROPOSAL HAS NO UNACCEPTABLE EFFECT ON THE AMENITY AND CHARACTER OF EXISTING OR NEIGHBOURING ENVIRONMENTS BY VIRTUE OF NOISE, TRAFFIC CONGESTION, EXACERBATION OF PARKING PROBLEMS OR VISUAL INTRUSION;
- (iii) THE PROPOSAL DOES NOT HAVE AN UNACCEPTABLE IMPACT ON GOOD QUALITY AGRICULTURAL LAND (GRADES 1, 2 AND 3A), ON AREAS OF ATTRACTIVE LANDSCAPE OR HIGH QUALITY TOWNSCAPE OR ON AREAS OF HISTORICAL, ARCHAEOLOGICAL OR ECOLOGICAL IMPORTANCE;
- (iv) WHEN APPROPRIATE AND FEASIBLE THE PROVISIONS OF POLICY REC 3 ARE MET;
- (v) THE PROVISION OF CAR PARKING AND AMENITY SPACE IS IN ACCORDANCE WITH THE COUNCIL'S APPROVED GUIDELINES;
- (vi) ADEQUATE COMMUNITY AND UTILITY SERVICES EXIST, ARE REASONABLY ACCESSIBLE OR CAN BE READILY AND ECONOMICALLY PROVIDED.

This statement seeks to address the design requirements of Policies ENV 27, ENV 28, HOUS2 and HOUS8 of Adopted Vale of Glamorgan Unitary Development Plan. As this is a proposal for a single dwelling, some aspects such as the social and economic context, are of limited applicability.

The Proposals Character

The Site

The application site is a vacant plot and consists of rough grassland. The site extends to 1036m₂ and falls within the Llantwit Major Conservation Area.

The site is situated on the south side of West Street with Plymouth House to the east and no. 2 West Street to the west. College Street runs along the site's southern boundary. The site falls gradually from north to south.

Plymouth House, which adjoins the application site to the east, is listed grade II, as are the associated garden wall, mounting block and stable buildings attached to the south of Plymouth House.

Layout

The proposal envisages a similar layout to that approved under the current consent consisting of a traditionally roofed two storey bedroom block with a single storey living annex and the addition of a a single storey flat roof double garage. The double garage will be sited in the north west corner of the site tight to the boundary with the adjoining property and the public highway. Both the single storey living annex and the double garage are set at a lower level than the road will be hidden from view along West Street by a 2.1m high random rubble stone boundary wall and a horizontally boarded fence. On the revised layout, the living annex has been rotated slightly from its original position to sit at right angles to the boundary wall with Plymouth House. The proposed new dwelling will meet all aspects of the councils approved standards of amenity, open space, access car parking and servicing in compliance with ENV 27 & HOUS 2.

Scale

The scale of the new proposals are consistent with that which has been approved under the current consent. The two storey element and new stone boundary wall to West Street reinforce the existing traditional character of West Street and the siting of all elements tight to the northern boundary ensure minimal impact on the setting of Plymouth House. The addition of a double garage tucked into the north west corner of the site and at a lower level to the adjoining road will ensure that the scale of the development remains the same as that which has been approved.

Appearance

As with the approved scheme, the revised proposal whilst of a modern, contemporary appearance, is in keeping with the character of the local built environment though its sympathetic design and use of traditional building materials. The external materials for the new dwelling are common in the built form of the area and none of the revisions in layout will fundamentally change the appearance from that which has been approved. The majority of the building is lost from view from West Street, where the new stone boundary wall and timber cladding reinforce the existing street scene. The southern elevation of the house is a simple contemporary design, which incorporating a large percentage of glass to maximise views and sunlight energy gains. The two storey element is of traditional scale complimenting the the adjacent original buildings whereas the single storey annex sits down in its setting to allow Plymouth House and the adjoining open space to take

precedence within the landscape. The addition of the garage on the site will have no additional material visual impact on the street scene as its horizontal timber cladding mimics that of the fencing previously approved.

It is therefor contended that the changes proposed will have a minimal visual impact on the appearance of the area from that which has been approved and that the proposals represent a modern well proportioned new addition, complimenting the setting of the area in accord with policies HOUS 8 of the UDP.

Landscaping

The proposed landscaping changes to the approved scheme are minimal. The only relevant change is that the number of open car parking bays have been reduced from three to two, an additional two car parking spaces being provided in the new garage.

Access

Access Objectives

It is our policy that we strive to create an environment that is easily used, safe, predictable, well designed, and is able to be used by all regardless of age, gender or disability and recognises the different ways people will use it. We endeavour to achieve this by adopting an inclusive approach from the outset of the design process which we believe is in keeping with the guiding principles of the Vale of Glamorgan UDP.

Design Response

The location of the proposal is sustainable as it is located within an existing urban settlement. The siting of the dwelling in the centre of a recognised urban area with good public transport access is essential to reduce the travel reliance on the private car for travel to and from work. The site is located off a main residential road which has a shallow gradient and sufficient width to allow access to emergency vehicles as well as pedestrian and personal transport.

The site is within the built up are of Llantwit Major and is well located for pedestrian access to the town centre. The distance to the shopping centre off Boverton Road is 0.2 miles. The site is also within 0.2 miles of the nearest bus stop and 0.4 miles of the towns train station that feeds access for onward travel to local, regional and national destinations. The site is level and all pedestrian access routes to the town centre, both adopted and non adopted have gradients which comply with highway standards. There is no local special provision for cyclists within the immediate area however the narrowness of the roads in this area ensures that excessive speed is reduced.

Within the proposed site, there is provision for 4 car parking spaces, 2 space being in garaging. There is provision within the garage for the storage of bicycles. From the car parking spaces within the courtyard, there is level access to the principal entrance of the dwelling, which will have a low threshold and be of a suitable width as specified under the building regulations to allow wheelchair access.

The access areas will be covered with appropriate low level lighting with PIR control to ensure good circulation and minimal light pollution. Widths of all paths, gates and circulation areas will be of sufficient size to allow access by all.

As this will be a single private dwelling it would be unfeasible to detail the future maintenance of access features. From a designers perspective we can only ensure that all details are robust and there is documentation in place informing occupants of their obligations to maintain clear access for all.

Community Safety

There is only one gated entrance into the site off West Street. The drive is overlooked by the house throughout its length. The positioning of doors and habitable room windows affords the opportunity for natural surveillance of the building entrance and curtilage. Stone walls and timber fencing will enclose site on all sides providing both privacy and security. The second storey of the building will overlook West Street, providing natural surveillance onto the road.

Environmental Sustainability

Delivering more sustainable buildings through good design is a key part of national planning policy as set out PPW. TAN 22 sets out expectations to achieve a minimum sustainable building standard.

The following sections provide a general overview of each sustainability topic together with detailing the sites specific initiatives committed by the applicant and a commentary on how the initiatives comply with the objectives of sustainable development.

Energy:

Aim To limit CO2 emissions arising from the operation of a dwelling and its services in line with current policy on the future direction of regulations.

Since the beginning of the industrial revolution, concentration of green house gases has risen. Although CO2 is less harmful than other green house gases on an equal mass basis, the quantity of CO2 is so large that it is the main contributor to climate change. Approximately 50% of the total UK CO2 emissions are attributed to energy used in heating, lighting and cooling buildings and a further 10% from energy used during the production and transportation of materials and the construction of the building. An additional 22% is due to the energy consumed by occupants travelling between buildings.

As well as producing CO2, fossil fuels such as oil, coal and gas are finite resources and the electricity they produce should therefore be used as efficiently as possible in homes and work places. Appropriate building design can minimise heat loss and maximise solar heating, natural lighting and passive ventilation to reduce energy requirements, whilst electrical appliances and fittings are becoming increasingly energy efficient.

Description	Commentary
Maximise use of passive energy	Through the development of the scheme, attention has been paid to optimise solar gain to maximise the benefits the building will receive from the sun. This has been achieved through the incorporation of large windows on the southern elevation, insulants and materials able to maximise the use and storage of solar energy.

Increase Energy Efficiency	During the working drawings consideration will be given to ensure that the dwelling will exceed the requirements of part L of the Building Regulations and therefore minimise the heat loss through the building envelope and therefore reduce energy requirements for heating. The design will also ensure that technology and distribution systems used will be as close as possible to 100% efficient. For example, the lighting system will be energy efficient using low energy light bulbs where possible and controls as appropriate to reduce the need for lighting when areas are not occupied.
Renewable Energy Sources	The developer is considering the use of a ground source heat pump drawing energy from the ground in the adjoining rough pasture land. A mechanical heat recovery system is also under consideration in the building.
Conservation of transport related energy	The siting of the dwelling in the centre of a recognised urban area with good public transport access is essential to reduce the travel reliance on the private car for travel to and from work. In the construction phase of the dwelling, local materials, suppliers and labour will be used wherever practicable.

Water:

Aim To reduce the consumption of *potable water* in the home from all sources, including borehole well water, through the use of water efficient fittings, appliances and water recycling systems.

Water is becoming a scarce resource as demand continues to grow. To satisfy this increasing demand, new resources of water and associated infrastructure have been required. However, the construction and operation of this infrastructure (i.e. reservoirs and treatment works) is expensive, energy intensive and damaging to the environment and therefore measures should be taken to reduce water consumption where possible.

Description	Commentary
Water Conservation	All cisterns within the house will be fitted with a dual flushing system to conserve water usage. Showers will be fitted in the ensuite and main bathrooms as an alternative to baths. Water meters will be fitted on all supplies.
	Water storage butts will save rainwater from roofs for garden irrigation.

Materials:

Aim To specify materials with lower environmental impacts over their life- cycle. To promote the specification of responsibly sourced materials for the basic building elements.

Description	Commentary
Sustainable Materials	It is proposed that the dwelling will be constructed of materials with a low environmental impact, where possible from locally sourced materials and to sustainable building standards. The new inner walls will be of timber frame construction using timber from sustainable forests. The use of materials in keeping with the surrounding built environment will ensure that the new building will have no detrimental impact on the locality and maintain a good appearance of sustainable character.

Surface water run off:

Aim To design surface water drainage for housing developments which avoid, reduce and delay the discharge of rainfall run-off to watercourses and public sewers using SuDS techniques. This will protect receiving waters from pollution and minimise the risk of flooding and other environmental damage in watercourses.

Description	Commentary
Sustainable drainage	In line with approvals obtained from Dwr Cymru and the environment agency, surface water runoff will be directed to soakaways on the site. Foul water will be directed to existing public sewers system.
Flood Prevention	The site is not within a zone that is considered to be at risk of flooding

Waste:

Aim To provide adequate internal and external storage space for non- recyclable waste and recyclable household waste.

Waste, if not managed safely, can also result in pollution of the environment. The most sustainable approach is to reduce the overall amount of waste generated 'at source'. Wastes that are generated should then be reused whenever possible, or recycled as the next best environmental option. The least sustainable waste option is disposal (e.g. land fill).

Description	Commentary
Waste management during construction	The contractor will be obliged to develop and implement a site wide strategy for maximising the recovery of materials and reducing, recovering and recycling construction waste on site whenever possible.
Waste management during the operational phase	On completion of the development, recycling will be encouraged through the provision of adequate storage for recyclable materials. There is also an aspiration to provide facilities for composting

Pollution:

Aim To promote the reduction of emissions of gases with high *GWP* associated with the manufacture, installation, use and disposal of foamed thermal and acoustic insulating materials.

Chemical pollution can have significant adverse health effects of humans, animals, plants and eco systems. It can also reduce the amenity value of the environment and damage buildings. As well as affecting plants and animal species, other forms of pollution such as light and noise can cause nuisance to neighbours. The reduction or prevention of pollution is therefore critical to sustainable development.

Description	Commentary
Insulants	Insulating materials in the elements of the dwelling will only use substances that have a GWP < 5 (in manufacture AND installation)

Health & Well-being:

Aim To improve quality of life in the home and reduce the need for energy by promoting the provision of good daylighting, sound insulation, private space and design for lifetime homes

Good planning and design can ensure that the quality of life in the home

Description	Commentary
Daylighting	Sufficient windows and rooflights will be installed to ensure a minimum Average Daylight Factor in all rooms
Sound Insulation	Solid walls to reduce noise levels will be incorporated between all rooms

External space	The enclosed rear garden has been designed to provide an inclusive private outside space
Lifetime Homes	The layout of the dwelling has been designed to make it accessible and flexible to changes in lifestyle

Management:

Aim To promote the provision of guidance enabling occupants to understand and operate their home efficiently and make the best use of local facilities.

It is important to give homeowners better information about the dwelling in respect of the everyday use of the home in operational terms, the environmental impact of their home and its potential running costs. A Home users guide, compiled in accordance with the Code for Sustainable Homes checklist Man parts 1 & 2 will ensure that all the relevant information for sustainability is easily accessible.

Description	Commentary
Home user guide	A home users guide will be compiled on completion of the project in compliance with checklist Man parts 1 & 2 of Code for Sustainable Homes

Ecology:

Aim To promote development on land that already has a limited value to wildlife, and to enhance the ecological value of a site on completion.

The conservation of biodiversity is another essential element of sustainable development. Two key causes of reduced biodiversity are habitat loss and habitat fragmentation. During the planning of developments an opportunity exists to lessen or remove the causes of biodiversity reduction by reusing previously developed sites and therefore relieving pressure on green field wild life habitats, as well as creating opportunities to increase biodiversity within the redevelopment. Sites that already have significant ecological resources should ensure that preservation and enhancement are key considerations during the development of landscaping infrastructure.

Description	Commentary
Retain existing habitats	The existing site consists of a mature pasture which over 50% is to be retained.
Create/enhance habitats/ wildlife sites	Drought resistant habitat with sedum roof concept (encourages insect life and birdlife)

Movement

Being within the Llantwit Major Conservation are, there are there are several sustainable transport choices within easy access of the site with links to the wider transport network beyond. The bus stop at the Old Swann Inn provides a direct and sustainable link to the train station from which all nearby villages, towns and cities can be accessed.

The town facilities are easily accessible on foot with a wide range of shops, banks, a post office and library available. There is also a primary and secondary school within half a mile of the site.

There are numerous public footpaths within easy access for recreational purposes and with nearby public parks and beach the site is well located for sustainable residential use.