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116 Weston Road, Aston Clinton, Aylesbury, HP22 5EP

Client	Mr P Flower	Project Name	116 Weston Rd
Status	PLANNING	Project Number	E1589
Author/ Checked	KY/JW	Document	300 - Design and Access Statement
Revision/ Date	E 01-09-2023	Reason for Revision	Update following client comments

This document is to be read in conjunction with all relevant and listed drawings.

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1.0 INTRODUCTION

This design and access statement as been prepared by Eco Design Consultants on behalf of Mr Flower, the owner of the property to which this application relates.

The principal aims of this planning application are to seek approval to carry out demolition of an existing single storey bungalow and erection of one detached residential dwelling that meets Passivhaus standards.



Figure 1- artist views of how the proposal will look in the street scene.

2.0 SETTING & LOCAL CONTEXT

The property is located in Aston Clinton. Situated on Weston Road, the street consists of a mixture of detached houses, detached bungalows, semidetached houses, terraced houses and flats. The neighbouring properties to 116 Weston Road are, to the right, a detached 2 storey house and to the left, a detached bungalow.

The principal elevations of the existing property are of red face brickwork facing Weston Road incorporating brick columns which support an oversailing hipped roof and glazed bay windows. Remaining side and rear elevations are faced with pebble dashed render. Other notable features on the street include decorative brick bonds, use of plain tile creasing and both pitched and half hipped roofs.

Please see the appendix for photos of the property and surrounding area.

2.1 EXISTING BUILDING AND SITE

The existing property is a single storey, detached bungalow. The property is estimated to have been built Circa 1930 and is not listed, nor does it lie within a conservation area.



3.0 PREVIOUS WORKS, PROPOSED WORKS & JUSTIFICATION

In 1975 a rear extension and lean to garage were added. Details can be found under the ref: 75/01286/AV.

The proposed works seek approval to demolish the existing bungalow and erect a new two storey dwelling with four bedrooms. The elevation design proposals present a dwelling built with traditional materials and incorporate vernacular details which take cues from local older properties within the village. Proposed materials will be chosen to complement and be in keeping with existing adjacent properties.

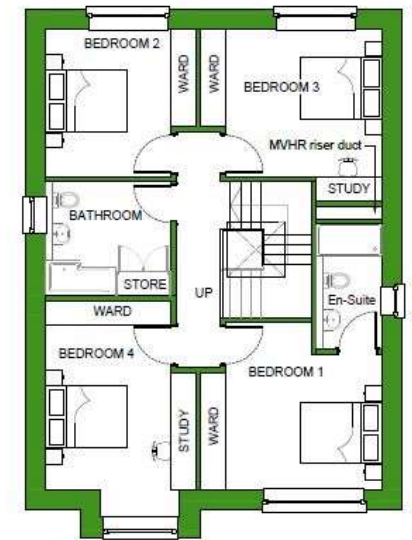
The applicant is looking to create their 'forever home' and has considered their space requirements both now and into the future. They are very aware of comfort issues within homes which are arising from the effects of climate change and are looking to construct a dwelling which would greatly exceed Building Regulations and achieve the Passivhaus Standard to address this. The applicant has taken a design led approach which meets the aims the good design of new development as set out in the Aylesbury Vale Local Plan and also the Aston Clinton Parish Neighbourhood plan 2013-2033 referendum version, may 2018.



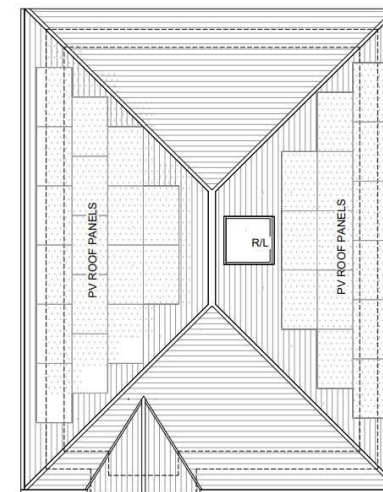
Precedent house taken from Aston Clinton design guide; our proposal shows the use of different materials and gable projection to break the elevation as in this example.



PROPOSED GROUND FLOOR
G.I.AREA = 94.1m²



PROPOSED FIRST FLOOR
G.I.AREA = 93.8m²



PROPOSED ROOF PLAN

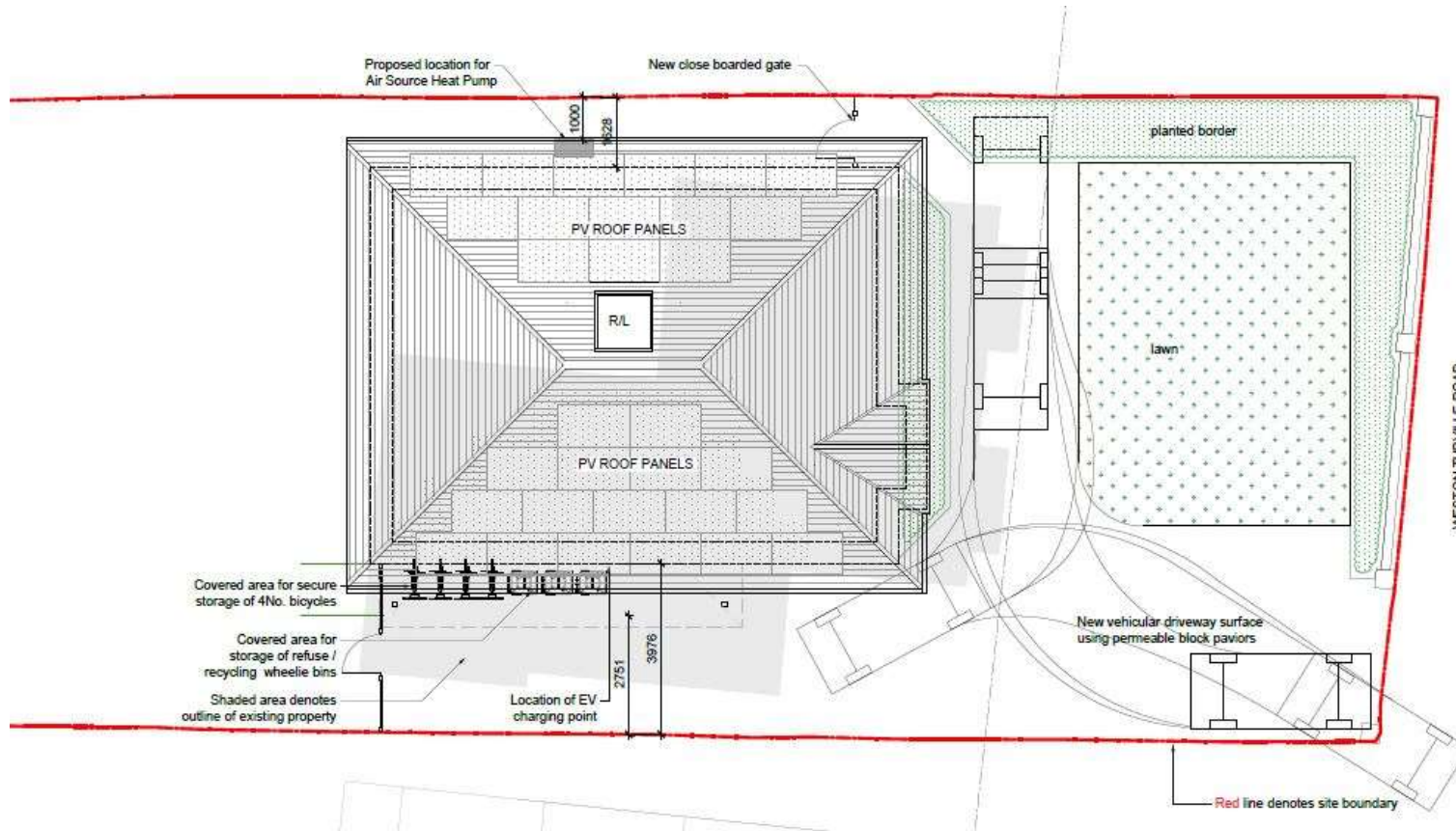
3.1 SCALE/LAYOUT/USE

The property is a private dwelling house which this application does not seek to change.

The proposed dwelling will be positioned orthogonal to 114 Weston Road. The existing bungalow is currently orthogonal to 118 Weston Road. The proposed realignment together with front garden landscaping works will permit vehicles to enter the site, turn around and exit onto the road in a forward manoeuvre thus improving traffic management.

The existing bungalow area is currently 126m²

The proposed new dwellings area is ~187.7m²



3.2 MATERIALS & APPEARANCE

All proposed works are intended to provide a solution to the difficult balance that must be struck between addressing the client's long-term housing needs whilst also tackling the current climate emergency. In addition, the materials set out below are considered to compliment and blend into the local context.

- WALLS: A mixture of red facing brickwork to match the local context, with a neutral coloured render to match the local
- ROOF: Red concrete plain tiles with inset PV panels on the Southwest and Northeast elevations. UPVC Fascias / Soffits will be used around the roof's perimeter.
- WINDOWS: High performance, triple glazed windows to meet Passivhaus standards.
- DOORS: High performance doors to meet Passivhaus standards.
- RAINWATER GOODS: UPVC guttering and down pipes: Black.

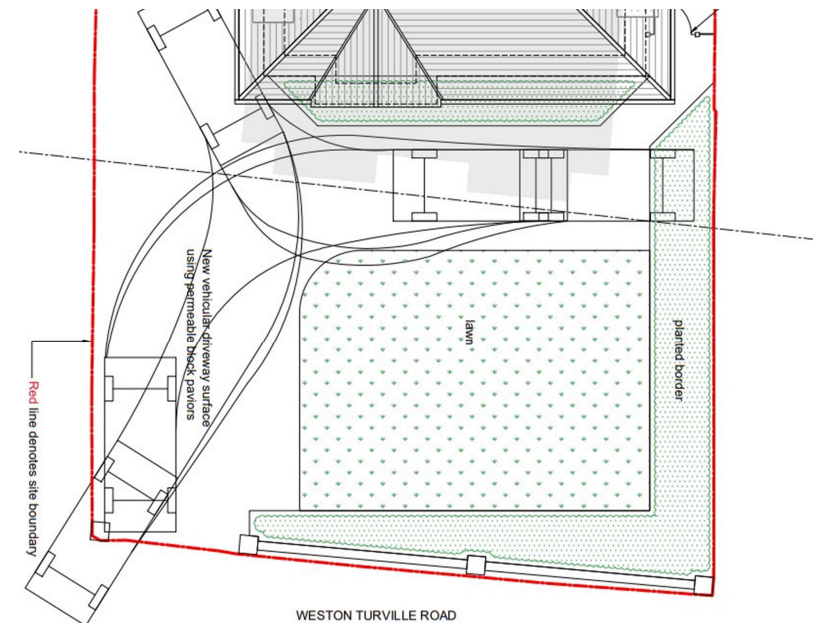
3.3 LANDSCAPING

There are no intended works to the existing rear garden, helping to protect the site's local ecology and biodiversity. There are, however, proposed works to the existing landscape at the front of the site (fronting Weston Road). The proposed works involve;

- Replacing the existing concrete driveway with a new permeable block paved drive
- Trimming back the existing front lawn
- Installing a planted border along the new dwelling's front elevation

- Increasing the width of the drive between the front of the house and the front lawn.
- Construction of new low brick wall and piers along the front boundary of the property.

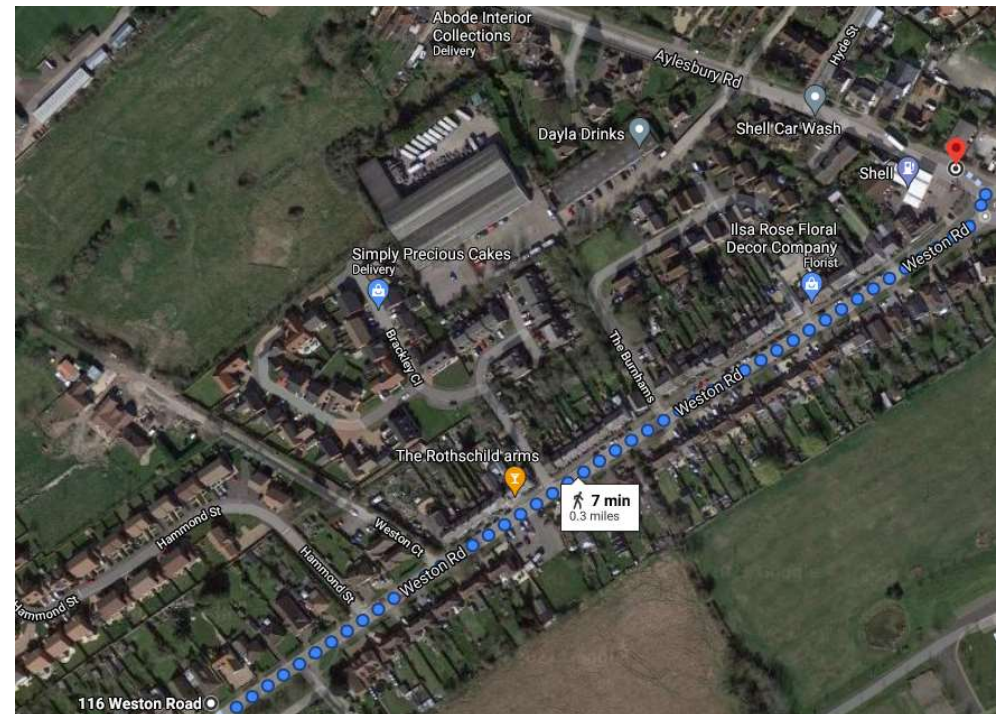
It is believed that this approach will not only improve vehicular access to the site, but also provide a solution to easily maintain the front elevation to ensure the house is presentable and respectful to the local area.



4.0 ACCESS

There is no proposed change to the access route into the site, with all the access being via the existing driveway fronting Weston Road. However, the site's front garden is subject to a redesign in order to achieve effective vehicular turning points.

- Inclusive access is offered to user's accessing the site and the building by providing level thresholds and ensuring compliance with Approved Document M(4) 1.
- Retention of the existing driveway position also ensures access for bin collection is easy. The food (grey caddy or green), waste (green lidded), recycling (blue lidded) and garden waste (brown) bins can easily be left at the entrance to the driveway on the relevant days for collection.
- The nearest bus stop is in the North-West direction approximately a 7-minute walk away (0.3 miles) on Aylesbury Street (bus stop ID: bucdwawj). Bus services that run from this stop are: 61, 61A, 62, 164, 500 and 501. Services travelling North-West allow for travel into Aylesbury town centre and services travelling South-East allow for travel into Berkhamsted town centre (both of which have a train station).
- The site's location also allows for easy access to key motorways. For instance, user's travelling Southeast of the site can easily join the A41 which directs them through either Watford (20.7 miles, 32 minutes) or Hemel Hempstead (15.4 miles, 22 minutes). Both of which lead onto the M1.



5.0 SUSTAINABILITY

Energy Efficiency

To achieve an energy efficient building the heat loss must be minimised. This can be achieved through high levels of insulation in the walls, roof and floor. It is also important to install highly efficient windows.

Another area where heat is lost is through draughts, ensuring the building is as draught free as possible will help to reduce the building's energy demand.

Passive Solar gain

Calculations have been carried out to ensure the property doesn't overheat during the summer whilst making the most of the solar gains from the south.

Natural Day lighting

An abundance of windows have been included on the northern elevations to ensure there will be adequate natural light in the darker areas of this home. This will help with well-being as well as reduce the reliance on artificial lighting. This in turn will reduce the energy demand for the building.

Renewable Technologies

The house will be targeting a net zero energy status. It will have Photovoltaic panels on the North-East and South-West roof slopes, supplying more than the houses electrical requirements; An ASHP will pick up any remaining heating requirements.

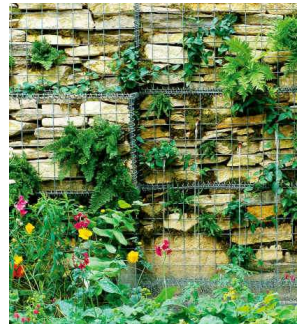
Water Efficiency

Efficient water fittings, low flush toilets and water butts will be installed to reduce the water demand for the property.

Materials

Where possible local, natural materials will be sourced to reduce the carbon footprint of the dwelling.

Full recycling facilities will be provided for the dwelling.



6.0 PASSIVHAUS

A Passivhaus is designed to deliver a **comfortable, healthy, quality building** with **low running costs**. Most of our time is spent indoors, therefore it is important that our buildings are healthy and happy places to be. A Passivhaus is an energy-efficient building with all **year-round comfort** with minimal use of space heating or cooling systems.

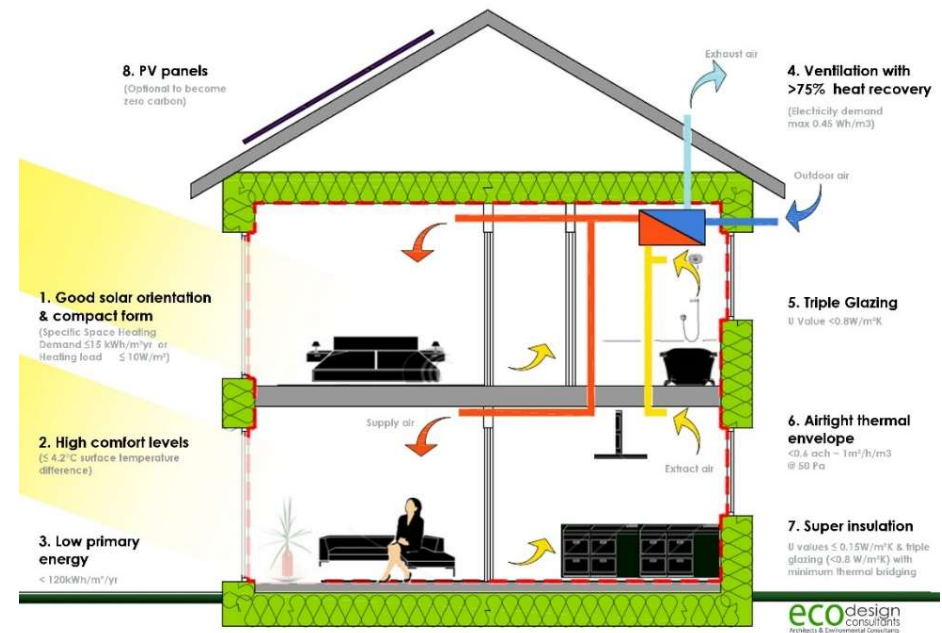
The primary focus whilst designing and building to the Passivhaus Standard is directed towards creating a **thermally efficient envelope** which **optimises free heat gains** (such as solar and heat from cooking and showering). A draught free, carefully detailed building, with a **good form factor** is essential.

To ventilate a Passivhaus a mechanical ventilation system with heat recovery (MVHR) is used, providing fresh, filtered air to the whole house. The principle is that incoming fresh air is pre-conditioned via a heat exchanger, by outgoing warm stale air.

In order to maintain high comfort levels in any building, heat losses must be replaced by heat gains. **Heat losses occur through poorly insulated walls, floors, ceilings, as well as through leaky construction and poorly fitted windows and doors.** Ensuring all these issues are carefully considered will result in a smaller space heating system being required.

The energy requirements of a house built to the Passivhaus Standard are:

- Annual space heating requirement of 15 kWh/(m²a);
- The total primary energy demand (for space and water heating, ventilation, household appliances, and lighting) ≤ 60 kWh/(m²a);
- The frequency of excessive internal temperature (> 25 °C) should be limited to ≤ 10 % but a level of ≤ 5 % is recommended; The air-leakage test results must not exceed 0.6 air changes per hour (ac/hr) using 50 Pascal over-pressurisation and under-pressurisation testing.



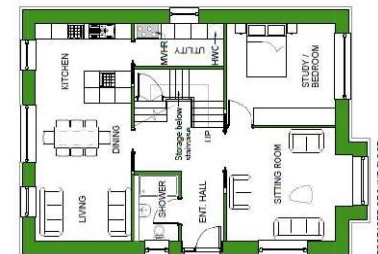
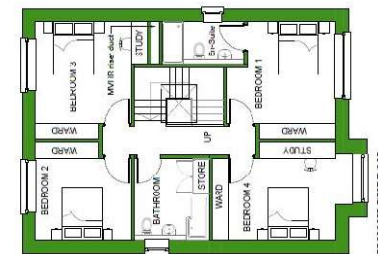
7.0 SUMMARY

In conclusion, the proposal offers a feasible, long-term housing solution which also helps to tackle the current climate emergency through ensuring the building exceeds the Building Regulations and achieves Passivhaus standard.

This home is going to be thermally comfortable and energy efficient for the owners to live in. The proposed layout reflects the needs of the owners for now and into the future. The low energy bills and comfortable environment will ensure that they can continue to live in their own home.

We feel that the proposal is in keeping with the local context and continues the local area's high-quality aesthetics and appreciation for well-integrated architecture.

We hope the local authority share these views.



APPENDIX A (local context photographs)



118, 116 & 114 Weston Road



95 Weston Road – Brick and render mix



112 Weston Road – Brick detailing



112 Weston Road – Decorative brick