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Green Acres,
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DESIGN AND ACCESS STATEMENT FOR PLANNING



This Design statement has been compiled to outline the proposal for a new dwelling to be sited to the west end of the garden of Green Acres in Thornborough.

INTRODUCTION

This Design Statement has been prepared by Meller Studios on behalf of Mr. Bernard Garbe (*"the client"*) to support a submission in respect to pre-application advice for a modest new, sustainably built dwelling in the curtilage of Green Acres, Hatchet Leys lane, Thornborough, Buckingham MK18 2BU (*"the site"*)

The client and his family have resided at the address for many years and consider the village their home. Rather than downsizing to a different area they would like to seek advice concerning the proposal to build a three bedroom, very efficient dwelling using a highly insulated timber frame structure with an external finish taking into consideration the character of the area.

We are of the opinion that there is ample scope in the existing garden to provide this without detriment to the character of the village at the same time as providing a building that demonstrates how well a new rural development can perform.

This document should be viewed in conjunction with the following supplied drawings:

- Location and Block Plan, Drawing Ref: A-101
- Site Plan existing new boundary- A-102
- Site plan existing Topography A-104
- Site plan proposed A-105
- Landscape plan A106
- Elevations - A-108
- GA Proposed A-107
- 3D Views - A-109
- Initial sections – A110
- Comparative heights – A111
- Arboreal plan – A112
- 3D renders – A-113
- Site information AR126
- Thornborough Vernacular AR127
- Site images AR128
- Local Heritage assets AR129

THE APPLICATION SITE

The application site consists of a large (6 bedroom) one and a half storey dwelling located to the west of the site and is complete with a number of outbuildings. The site itself is on the northwest edge of the village. As can be seen on sheet AR126 Thornborough conservation area boundary cuts through the existing dwelling (Green Acres) and the proposed plot lies just outside of this.

As can be seen on drawing A-102 the overall existing site is 5389m² (approximately 1.3 acres) the proposal suggests a splitting of the site into two sites of 3286m² for the original Green Acres dwelling and 2103m² for the new dwelling utilizing the existing rear access road.

The new site area has actually had a designated address and postcode (The Bungalow, MK18 2DE) as prior to the clients ownership (possibly sometime in the 1950's) it was intended to have built a retirement dwelling for the parents of the owners of the farm to the Southwest. The land has been

in continuous use as a garden and is shown on previous planning applications as residential curtilage from when the clients took ownership. The stable block hasn't been used by the clients as anything but storage and workshop facilities.

Surrounding context and neighbouring

The proposal site is adjacent to a footpath, which is the only vantage from which the site can be seen by the public. Images shown on Sheet AR128 demonstrate the outlook from various positions around the site. It is our opinion that the proposal will be of very little detriment to public views from this footpath as it is mainly shielded by the hedgerow in the same way that Ashwood house is to the opposite side of the path.

The levels of the proposed dwelling are designed in such a way as to sit the dwelling into the site to be as unobtrusive as possible. As such the dwelling is considerably lower and less prone to overlooking than the nearest neighbour to the site, Ashwood house (granted planning in 1995)

THE APPLICATION PROPOSAL

The client is looking to create a 3-bedroomed dwelling in approximately half of the existing site garden. As Thornborough is a small village with limited housing stock there is little chance in simply downsizing to a smaller dwelling within the village and the client sees this as an opportunity to create a rural dwelling that is both highly sustainable, minimum carbon footprint and able to generate much of its energy on site.

To ensure that the proposal will not be detrimental to the character of the village care will be taken in external finishes and the siting of the dwelling will be of a maximum two storey with the ground floor semi-submerged into the hillside.

PLANNING HISTORY

Listed below is a planning history of the site showing that the original dwelling has been extensively modified over the years. The stabling (1983) has been only ever used as storage and workshop by the client. The client took ownership of the dwelling in 19xx

Replacement of existing Air Source Heat Pump

Ref. No: 21/00309/APP | Received: Wed 27 Jan 2021 | Validated: Thu 04 Feb 2021 | Status: Approved

Erection of 1 1/2 storey side extension

Ref. No: 09/01949/APP | Received: Tue 20 Oct 2009 | Validated: Thu 29 Oct 2009 | Status: Approved

ERECTION OF EXTENSION

Ref. No: 87/00776/APP | Received: Thu 01 Jan 1987 | Validated: Thu 01 Jan 1987 | Status: Approved

SUN LOUNGE & GARAGE

Ref. No: 84/00619/AV | Received: Sun 01 Jan 1984 | Validated: Sun 01 Jan 1984 | Status: Approved

STABLES TO HOUSE TWO HORSES WITH ADJACENT FODDER STORE

Ref. No: 83/00958/AV | Received: Sat 01 Jan 1983 | Validated: Sat 01 Jan 1983 | Status: Approved

Whilst these applications are not directly relevant to the proposal it is of note that in a recent application to the council for 6 new dwellings it highlighted a need within the parish for smaller family homes as the village stock is of a larger type. This is also highlighted in The Vale of Aylesbury Plan Thornborough Fact Pack April 2011.

Other relevant planning

Ashwood house

95/00703/APP | ERECTION OF DWELLING AND GARAGE

This application was permitted in the neighbouring location to the proposal and would have had the same geographical qualities. Therefore, any argument that the site relates more to open countryside could have also been applied to the above application as this plot similarly had the footpath adjacent and was open to fields.

PLANNING POLICY

In terms of planning policy, the proposal aims to meet National and local planning frameworks. The adopted Development Plan for AVDC comprises the Vale of Aylesbury Local Plan 2013-2033. The application site lies just outside the boundary of Thornborough Conservation Area.

The application site/building is not listed, nor is it within the direct vicinity of any listed building. The application site does lie within Flood Risk 1, which means that it is the lowest level of risk from flooding. (See AR126)

Policy S1 of the VALP (2021) provides support for sustainable development and seeks to secure development that improves the economic, social and environmental conditions in the area.

Consideration should be given to the proposal's location within the existing garden of Green Acres, the development is not considered to be placed in open countryside. Whilst a garden is no longer considered to be brownfield it is part of the existing residential curtilage and there is ample space for the proposal without detriment to the existing dwelling or neighbouring properties

Further consideration should be given to the client's desire to build a highly sustainable and fully accessible building that will sit into the landscape with minimal overlooking of neighbouring buildings. The proposal would allow the clients to remain within the village where they are active members of the community.

Policy S2 sets out the magnitude of growth and the spatial strategy for Aylesbury Vale. The VALP focuses the majority of growth around strategic settlements of Aylesbury, Buckingham, Winslow, Wendover and Haddenham and adjacent to Milton Keynes. Policy S2 of the VALP steers development to sustainable or more sustainable locations. Policy S2 paragraph (j) states "Elsewhere in rural areas, housing development will be strictly limited. This is likely to be incremental infill development and should be principally in line with Policy D5 and other relevant policies in the Plan".

The VALP states in S2 table 2 (page 41) that Thornborough fits into the smaller village categories whereby small-scale development can be accommodated without causing unreasonable harm. This should mean that policy D4 is applicable.

Policy S3 states that “the scale and distribution of development should accord with the settlement hierarchy set out in Table 2, the site allocation policies that arise from it and the requirements of Policy S1. Other than for specific proposals which accord with policies in the plan to support thriving rural communities and the development of allocations in the Plan, new development in the countryside should be avoided, especially where it would:

- a. compromise the character of the countryside between settlements, and*
- b. result in a negative impact on the identities of neighbouring settlements or communities leading to their coalescence.*

It is our opinion that the proposal will not compromise the character of the countryside or be of negative impact to the local community.

Policy D4 states “Where there is no made neighbourhood plan in place, new housing development at smaller villages will be supported where it contributes to the sustainability of that village and is in accordance with all applicable policies in the Local Plan, provided that the proposed development fulfils all of the following criteria:

- a. is located within the existing developed footprint of the village* or is substantially enclosed by existing built development*
- b. would not lead to coalescence with any neighbouring settlement*
- c. is of a small scale (normally five dwellings or fewer) (net) and in a location that is in keeping with the existing form of the settlement and would not adversely affect its character and appearance*
- d. respects and retains natural boundaries and features such as trees, hedgerows, embankments and drainage ditches*
- e. would not have any significant adverse impact on environmental assets such as landscape, historic environment, biodiversity, waterways, open space and green infrastructure, and*
- f. can be served by existing infrastructure*

**the existing developed footprint is defined as the continuous built form of the village, and excludes individual buildings and groups of dispersed buildings. This includes former agricultural barns that have been converted, agricultural buildings and associated land on the edge of the village and gardens, paddocks and other undeveloped land within the curtilage of buildings on the edge of the settlement where the land relates more to the surrounding countryside than to the built-up area of the village*

We consider that for the above points of policy D4 the proposal:

- a) is located within the developed footprint of the village due to its existing postal address and UPRN which relates directly to built environment. furthermore, the village of Thornborough is built in a rough east west line whereby the majority of dwellings would be considered edge of settlement and border open countryside
- b) will not lead to coalescence with neighbouring settlements
- c) is of small scale (single dwelling) and will not adversely affect the character of the village
- d) will retain the existing boundary features
- e) will have a positive impact on biodiversity without damaging the landscape and historic environment
- f) can be served by the existing infrastrucutre

Policy D5 of the VALP states that in other settlements, where there is no neighbourhood plan in place, permission for the construction of new homes will only be granted for infilling of small gaps in developed frontages with one or two homes in keeping with the scale and spacing of nearby homes, where there would be no adverse effect on the character of the countryside or other planning interests.

We have been unable to view a Neighborhood plan for Thornborough however we believe the siting of the proposal will constitute the infilling of a small area on the outskirts of the village due to the proposal site area already being in possession of its own address and being of sufficiently small scale.

Paragraph 79 of the NPPF states that in rural areas, housing should be located where it will enhance or maintain the vitality of rural communities

We are of the opinion that the proposal will maintain/enhance the vitality of the community. As previously mentioned, the client's family have resided in the Thornborough since 1989 and by allowing the construction of the proposal they will continue to remain part of that community. Due to the location of the site being on the outskirts of the village there will be no adverse effect on the physical character of the village.

H5 Self/custom build housing

The plan will expect developments proposing 100 dwellings and above (including partial development(s) of a wider site and the cumulative need for provision) to provide a percentage of serviced plots for sale to self/custom builders. These numbers will be determined on a site-by-site basis dependent on evidence of demand and feasibility, and subject to a legal agreement.

With no prior knowledge of the amount of self/custom built plots that have been approved within the Aylesbury Vale area we consider the proposal to fit this category.

RESPONSE TO PRE-APPLICATION ADVICE

To fulfill this design statement we have collated the advice given during the pre-application

The advice given for pre-application was detailed and brought up a number of considerations for the full application these are listed as: Principle of development, Design and Appearance, Accessibility, Residential amenity, Parking and highways, Refuse, Flood risk, Biodiversity, Sustainability, Impact on heritage assets.

Further to this, external surveys and advice has been sought concerning archaeological impact and ecological impact. Other information has been added to the drawing package from pre-application and further information has been supplied in other statements.

Principle of development

A large proportion of the pre-application advice has been given to the principle of development.

We consider the site to be part of the settlement boundary of the village of Thornborough and indeed the site was part of the earlier settlement hamlet of Hatchett Leys. As previously mentioned, the site has its own UPRN designation for built environment and a postage address. This is highlighted on the planning portal site location map where it outlines the site as its own plot despite being part of the curtilage of Green Acres.

The proposal is designed in such a way as to not impose itself on the landscape or impinge on any views of the countryside. As such the design would be in no way detrimental to the either the village or the few people who walk the footpath to Thornborough bridge.

In response to the comments concerning D4 of the VALP it should be highlighted that the majority of dwellings that exist in the village of Thornborough back onto open countryside.

It would appear that the proposal hinges upon the interpretation of part D4 of the VALP and that fundamentally as a smaller village the onus is on whether the building will be detrimental to the character of the village.

Design and Appearance

Attention has been taken in designing the dwelling to sit well with the overall village vernacular. Sheet AR 127 shows some examples of various dwellings from around the village. Comment was made in the pre-app report concerning the roof pitch and as can be seen on this sheet there is a precedent for shallow pitch roofs in the more modern houses in the village.

The following is a basic outline of the design brief that has been put together between Meller studios and the client.

1. New sustainable dwelling – The design of the dwelling should set a benchmark for rural sustainable dwellings. The proposed system of build should steer away from traditional building techniques and instead use a more modern and highly insulated system to minimise energy requirements throughout its lifespan. Whilst not designed to a strict Passivhaus criteria the design should aim for performance values as close to that as possible.
2. Orientation – The siting of the new dwelling should be assessed in regard to its best possible performance whilst avoiding direct overlooking of neighbouring dwellings and maximising the outlook for the occupants.
3. 3 bedroom – The client requires the basic layout to be of 3 bedrooms, but the room size shouldn't be minimal, and each bedroom should be capable of containing a king size bed with sufficient storage. Although the floorplan is yet to be confirmed as to whether the dwelling is single storey or double it should allow for at least one bedroom on the ground floor to future proof for any accessibility needs.
4. 2 ensuite shower room – The client requires two of the three bedrooms to have en-suites and at least one bedroom on the ground floor should be fitted with an en-suite large enough to cater for disabled access.
5. 1 main bathroom – A family bathroom should be fitted but this along with the other sanitary areas should be planned to use minimal amounts of water. A discussion with the client should be had concerning the possibility of rainwater harvesting for some of the functionality.
6. Open plan kitchen dining – The main living space of the dwelling should open up directly into the outside space and make use of the uninterrupted views to the more northerly directions.
7. Living room /snug – living room for television and evening relaxation
8. Utility/wc ground floor space for laundry storage and WC
9. Double garage – A two car garage is required by the client along with sufficient space around vehicles to allow easy access and some storage /workshop area.
10. Plant room – The building will use a number of different technologies to conserve and generate its own heat and power. Due to the size of some of the items (eg battery systems and inverters, Heating manifolds and pumps, MVHR ducting) the building will need its own dedicated plant room. This should be accessible from the garage and be sufficiently sound proofed to protect the living spaces from any noise.
11. Ground source heat pump – The feasibility of onsite heat generation should be considered and cost/efficiency of either Air or ground source heat pumps should be considered. Due to the overall size of the site and the amount of groundworks that would take place it is probable that a ground source system will be utilised

12. MVHR - Mechanical Ventilation with Heat Recovery will be a necessary addition to the dwelling, taking heat from the building through a heat exchange unit to warm new incoming air. This will allow for a tighter build and less heat loss through drafts.
13. Underfloor heating throughout
14. Solar pv south facing roof – As the site already has Solar panels on the existing workshop roof it will be beneficial to augment this system by adding further panels to the roof of the main dwelling. These panels will need to be on a roof facing between southeast and southwest.
15. 1 or 2 storey – Provision should be made in Pre-application stages to allow for one and a half/two storey design. Whilst it is possible to create a single storey building on the site we feel that the increased floor area of this design would be detrimental to the site as a whole
16. Joinery – High performing joinery systems should be used throughout the project, the possibility of using triple glazed units throughout the building should be assessed.
17. Render and stone finish in keeping with the character of other houses in the village.
18. U values – current u values for new build according to building control are 0.13W/m²K for floors 0.11W/m²K for all roof types and 0.18W/m²K for walls. This is based on the 15th June 2022 Part L revision of building regulations. It is assumed that the 2025 revision will make further revisions specifically to glazing and that this project should at least align itself with the as yet unreleased thermal performance.
19. Roof pitch 30-35degrees - for solar panels to work at their most efficient it will be important to keep the roof pitch between these figures.
20. Living space approximately 200mtrs sq – This area comprises living space only any plant room or garaging would be added to this figure.
21. Minimise concrete use – To adequately conform to as sustainable design as possible the use of concrete should be kept to a minimum. While certain structural elements will by necessity use concrete it should be possible to use different building methods for the superstructure to reduce the amount of carbon used in the project. At this moment the design is lending itself towards a timberframe construction with a mixture of external wall rendering and feature stonework which is in keeping with many of the local dwellings.

Accessibility

Part of the initial design brief for the project was to design in and future proof for accessibility needs. As the client wishes to build this as a downsized retirement home in comparison to Green Acres which is a 6 bedroom dwelling, we have decided upon a fully accessible 3 bedroom building. This means that the dwelling will exceed the provisions laid out by building control standards part M and the design brief allows for the inclusion of at least one bedroom and en-suite to be placed on the ground floor. This will future proof the dwelling for the client and make the design far more inclusive to any future owner.

Residential amenity

Great care has been taken with the design of the proposal to ensure that it sits favourably with other residences and has sufficient amenity space in itself. The floor levels are critical in ensuring that this

is the case and a height comparison can be seen on drawing no A- 111 which shows the proposal in relation to both Green Acres and Ashwood house.

The pre-application report stated *"It is not considered that the proposed development is likely to have an impact on occupiers of nearby dwellings in relation to overshadowing or appearing overbearing given the separation distances between the proposed dwelling and the nearest existing dwellings at Green Acres and Ashwood House."* This is especially true when considering the trees and hedgerows that surround the site which will limit any form of overlooking even to pedestrians on the footpath.

Parking and highways

Thornborough is a small village with road access via narrow country roads although it is considered that a single dwelling application won't have any significant impact on traffic to and from the village. Public transport is available in the form of a bus route from the village post office to Buckingham.

There is a large amount of parking space with the existing dwelling, and this is augmented by the existing access road that leads up to the west end of the garden where there is further hard standing adjacent to one of the outbuildings. This road and building would be part of the new title and form part of the parking area going forward.

Refuse

Waste and recycling strategy – An area adjacent to the existing workshop building will be set aside for the storage (see drawing A-106) of up to three standard council size wheelie bins (standard waste, Recycling, garden waste) This is located under 30mtrs from the proposed dwelling.

Flood risk

A flood map for planning has been supplied on Sheet No AR126 which demonstrates that the site is in flood zone 1 and is a very low risk from flooding.

Biodiversity

A full PEA compliant to BS42020 has been commissioned and attached (see appendix A) in recommendation from the pre-application report.

Initial findings are that there is no potential loss of habitat to local species and that considerate building methods will be sufficient to avoid any harm to species (i.e. visual checks of working areas , covering excavated areas etc)

Due to the nature of the site as existing being predominantly lawn we would expect a considerable Biodiversity net gain. In basic we have every intention to retain the existing trees and hedgerows and add further indigenous planting (Hazel, Hawthorne) to the new separating boundary. If this application is approved We would look to developing a landscape plan based on a biodiversity net gain assessment which we feel could be conditional.

Sustainability

The proposal is designed to be highly sustainable and provide a benchmark for rural development. In order for a new build dwelling to be correctly sustainable it must achieve sustainability in both its build and in use. Furthermore, the build should attempt to meet sustainability in three fundamental pillars, those are social sustainability, economic development and environmental conservation. This proposal will address these issues as follows:

Structure and materials

The plan for the building of the proposal is to use a timber frame or SIPs structure with an external wall insulation which will allow us to achieve extremely good U values and airtightness that will exceed the standards set in building regulations part L. All timberworks will be responsibly sourced, and suppliers will be selected based upon their own level sustainability. High levels of insulation will be necessary in both roof and floor structures to allow for minimal heating /cooling.

The glazing and joinery will all be high performance to further enhance the thermal envelope and the internal atmosphere of the dwelling will be maintained with an MVHR system to ensure minimal heat loss without compromising the air quality. While we will be using concrete for the main floor this will be insulated below slab so we will be able to use it as thermal mass which will assist in keeping the dwelling at a constant pleasant temperature.

Energy

To provide a level of sustainability that is to be suitable for future proofing any living space the amount of energy used and how it is generated must be taken into consideration. There is a large reliance on fossil fuel derived heating systems especially in rural environments where oil-based heating is common across the UK. This proposal is looking at removing this type of energy generation from its supply by using a ground source heat pump and heat recovery units for the primary heat source. This type of pump does require a large amount of energy to run and while the dwelling is still going to be connected to the national grid for its electricity supply this will be supplemented by a large solar array set on the roofing with storage batteries in the plant room. Subsequently we hope to eliminate a large portion of the running costs of the heat pump with self-generated electricity.

Pollution and Waste

Wastewater will be sent to an onsite sewage treatment plant with clean outflow pipes directed towards the field to the northwest this will provide a suitable amount of irrigation to the site planting without affecting any local mains drainage. The plumbing fixtures will be selected for low usage and an assessment will be done on overall water usage for the dwelling. It may be possible to add rainwater harvesting to the scheme dependant on structural advice from an engineer.

Due to the methods of heat generation and only running the dwelling on electricity rather than fossil fuels there will be no detriment to air quality directly from the site.

Site management

The site during construction would benefit from very simple access and due to its semi submerged design requiring less handling plant machinery in build. The project would rely upon local trades people and suppliers wherever pragmatic to do so.

Community impact

The whole project has been developed to allow the clients, current residents of the village of Thornborough, to be able to remain within their home village with a downsized home that is cheaper and considerably more efficient to run. e. By creating the dwelling to be completely wheelchair accessible the design fully supports the ethos of equality.

Impact on heritage assets

Please see the separate heritage statement. (Appendix B) and archaeology report (Appendix C) along with drawing No AR129 which shows the positioning of local assets.

Other

Mineral assessment – The pre-application advice stipulated that a mineral assessment should be sought for the site. However, on closer inspection of Exemptions from policy 1 Safeguarding Mineral resources. Part b) stipulates that a development is exempt from consultation if it is “*provision of dwelling house(s)(i) within an urban area – less than 10 dwelling houses, or a site area of less 0.5Ha or (ii) elsewhere – one dwelling house within the recognised settlement boundary*”

As the site is a single dwelling on less than 0.5 Ha and has its own UPRN, postage address and is part of a residential garden we feel that it should qualify for exemption from a mineral survey. Furthermore, any mineral excavation in this location would compromise the archaeological asset adjacent to the site and be impractical due to the proximity of neighbouring dwellings making the survey a moot point.

Radon – As shown on drawing AR126 the proposal would benefit from suitable mitigating measures to protect against Radon gas. This would most likely take the form of a ventilated ground floor system with protective membranes to the liveable compartment.

Arboriculture impact assessment – As demonstrated in drawing A-112 the surrounding trees and hedgerows have been surveyed by type and given diameters of their current root zone of influence. The design of the building is such that the foundations will be considerably lower than a standard 1 metre footing which will dramatically lessen the possibility of damage by root intrusion. The foundation and retaining wall, built design, would be under consultation to a structural engineer to ensure the building safety and minimal impact on planting.

AQMA AND ENERGY USAGE

The design of the structure of the dwelling will incorporate high levels of insulation allowing an efficient use of both ground or air source heat pumps for heating. This will be augmented with the use of MVHR and a PV solar array. By this means there will be no necessity for an oil fired heating system and subsequently a guarantee of a clean build, in use. The new dwelling will be designed to achieve a class A energy rating

SUMMARY

It is our intention to create a versatile modern living accommodation that will be attractive to both the client and residents of Thornborough. We have made every effort to ensure that the proposal is sustainable, versatile and highly energy efficient. The positioning and overall design are such as to not be detrimental to its surroundings and by careful planning will improve the biodiversity of the site.

Due regard has been given to ensure compliance to all the relevant policies and we consider that the proposal will not be detrimental to the appearance of the existing dwelling or from the surrounding area.

