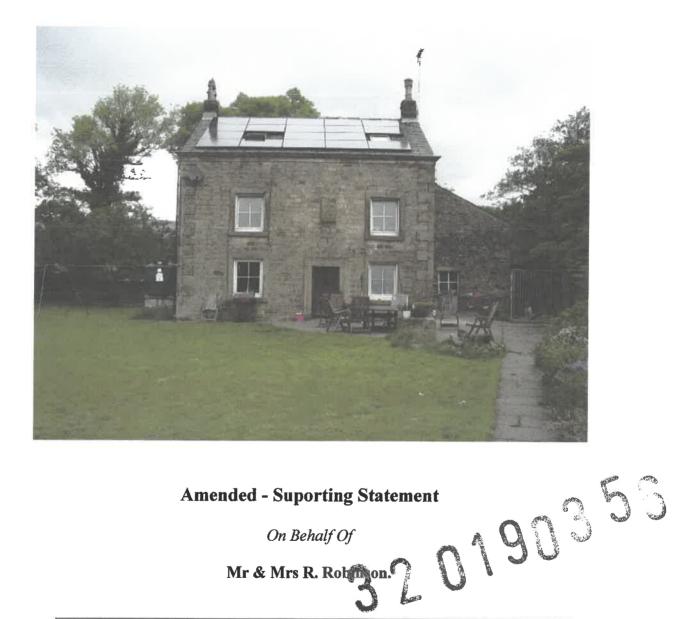
# Proposed Re - Development at Startifant Farm, Longridge Rd, Chipping, Lancashire.



# **Amended - Suporting Statement**

On Behalf Of

Mr & Mrs R. Robinson.

# J HADFIELD ENGINEEERING SURVEYING

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## The proposal:

The applicant Mr. & Mrs. Robinson are seeking consent for the demolition of redundant farm buildings and conversion of one barn to two dwellings, along with the conversion of a mono pitch farm building to a garage for the converted barn occupants and rebuilding the existing main farm house. The site is located at Startinfants Farm, Longridge Rd, Chipping.

The application site comprises a complex of agricultural buildings including a stone barn, the existing farmhouse, a number of timber and portal framed agricultural sheds, and silage store area. The site is located approximately 300 m South of the village of Chipping and lies within the Forest of Bowland AONB. The stone barn that is proposed to be converted lies 50m away from Longridge Rd and have linear plan forms with dual-pitched roofs.

## It is proposed to :-

- Demolish and rebuild the main farm house.
- Convert the existing stone barn to Live / Work unit.
- Demolish 5 No. existing Concrete block & steel farm buildings.
- Convert a stone built mono-pitch building into two single garages for the converted barn.

The concrete / steel farm buildings on site are not considered worthy of retention and would be demolished in order to justify the provision of garden / recreational area required for the converted barn.

## Demolish and rebuild the main farm house.

Within the planning policies, the general principle of a replacement dwelling is acceptable. However, as per Policy DMH3 (Dwellings in the Open Countryside and AONB) of the Ribble Valley Core Strategy; the replacement of existing dwellings must meet the following criteria;

- The residential use of the property should not have been abandoned
- There being no adverse impact on the landscape in relation to the new dwelling
- The need to extend an existing curtilage

The existing farm house is still the main and only residence in use by the applicants at this

time.

The replacement dwelling will remain within the same location and will still have a residential use, and there isn't a need to extend the existing curtilage,

The impact on the landscape. The replacement dwelling in the AONB should be allowed so long as it is similar in size to the existing dwelling, and is in keeping with the general character of the area. The replacement dwelling has a 24% increase in footprint and should be acceptable in principle.

As included in this application there is a flood risk assessment for the area, this shows the existing / proposed site is not within the flood plain area, though recent events have shown the garage as part of the existing house is close to the flood level, as a consequence of this the proposal is to raise the proposed replacement house floor level by 1.013 m the further reduce the risk of ever flooding. This can be achieved with only raising raising the ridge height 453mm above the exiting height of the house since the footprint of the house has been reduced in size from the previous application.

All new buildings must now reach increasingly higher standards of energy conservation. The Approved Documents Part L of the English Building Regulations are driving the reduction of carbon emissions in new buildings. Building in timber frame makes it easy to achieve a high performance building fabric that maximises thermal performance and minimises unwanted air leakage commonly known as draughts.

It should be noted that the English Building Regulations are the minimum required to comply, with the regulations being amended on average every three years imposing ever more stringent requirements of energy conservation it makes sense to consider 'future proofing' your home by building to a better thermal standard now.

## **English Building Regulations - Part L**

Part L of the Building Regulations requires that throughout the building process, greater attention be paid to every factor that contributes to the energy consumption or heat loss of a building. As this Regulation now requires a 'whole house' approach to demonstrating compliance, developers are required to meet an overall energy performance target. There is also a greater emphasis on ensuring that the building construction meets the standards assumed at the design stage and that the heating and hot water systems are correctly commissioned.

The energy efficiency standards in Approved Document Part L were further strengthened in the 2010 amendments, requiring a 25% decrease in target CO<sup>2</sup> emissions and lower levels of unwanted air-leakage, the high thermal performance provided by using timber frame in the building fabric makes the new targets easily achievable.

The proposed development will be built to exceed the current Building Regulations giving an energy performance above Level 6.

This will be achieved by using the timber frame system manufactured by "Scotframe", It uses the principals of Sip's (Structural insulated panels) though making a larger composite panel of up to 12m in length with the structural integrity of the frame within.

## Structural Insulated Panels (SIPS) and Their Sustainability.

The proposed building is to be constructed from Structural Insulated Panels (SIPS).

Structural Insulated Panels (SIPS) are an advanced method of construction offering excellent thermal performance, light-weight structural strength and time and cost saving benefits over traditional construction methods or systems. SIP panels are used in floors, walls and roofs for residential, commercial and educational applications, providing ecologically friendly and energy efficient buildings.

SIP Major Benefits:-

**Excellent Thermal Performance.** 

Structural Insulated Panels provide superior thermal performance, which will last the life span of the building. This is due to the solid core of polyurethane (PUR) insulation throughout the structure which ensures that the building is heated evenly, remains free from cold spots and will benefit from reduced heating costs.

Low U-value walls and roof.

Structural Insulated Panels offer extremely high thermal performance, the Polyurethane (PUR) core of rigid insulation and OSB/3 achieves U-Values as low as 0.025 Watts per Meter Squared Kelvin (W/m²K) or better, making significant savings on your annual heating costs.

Integral Insulation

The insulation is integral to the Building System, and therefore eliminates the need and cost for cavity insulation.

Habitable Roof Space

SIP Building Systems do not require roof trusses, therefore providing an additional habitable room in the roof.

Extra Floor Space

Structural Insulated Panels create more internal floor space for the same external dimensions in comparison to masonry construction. This is because a SIP structure

provides excellent strength and insulation in a smaller wall section.

### **Environmental Sustainability**

A Structural Insulated Panel home is environmentally friendly for several reasons. Structural Insulated Panels are made from timber, which is sourced from managed plantations. Timber is seen as a green building material because trees produce oxygen and remove carbon dioxide from our atmosphere and timber is the only truly renewable building material.

The polyurethane (PUR) core of insulation in the Structural Insulated Panels is CFC/HCFC-free with zero Ozone Depletion Potential and has a Low Global Warming Potential (GWP).

## Low Wastage

Structural Insulated Panels are pre-engineered in a factory environment, which results in less defects and wastage throughout the manufacturing and construction processes.

#### **Fast Construction Method**

By using Structural Insulated Panels, on-site construction time can typically be reduced by up to three times.

Improved Scheduling & Programme Control

External and internal follow on trades can start work sooner as the SIP Building System, when wrapped with a breather membrane, offers a weather-tight shell helping you complete your project faster.

With a SIP Building System it is easier to predict project completion times as the system is relatively simple to erect and requires no wet trades or brick layers.

## **Design Flexibility**

Using specialist in-house 3D CAD software, Structural Insulated Panels can be designed to accommodate a wide variety of building applications.

### Robust and Solid Feel

A SIP home delivers a robust and solid feel compared to other timber frame systems. This is achieved due to its solid core construction and the fixing of plasterboard directly to the inner face of the SIP Panel.

## Air-Tightness

Poor air-tightness is a major cause of heat loss. A Structural Insulated Panels constructed home provides a controllable indoor environment due to the superior air tightness of the system. This is enhanced with the use of a Mechanical Ventilation with Heat Recovery (MVHR) system or similar.

### **Limited Cold Bridging**

Structural Insulated Panels are joined together with an insulated SIP spline providing a continuous polyurethane (PUR) core through the walls and roof of the building. This greatly improves the thermal efficiency of the building compared to timber frame studs and cavity insulation, which is prone to slumping and mortar drops during the construction process.

## Solid Panels Provide a Rigid Surface For Fixings

In most cases, no additional timber 'noggins' are required to facilitate the hanging of radiators and a kitchen unit as is required with timber frame construction.

### **Excellent Resale Potential**

Structural Insulated Panel homes are attractive to future buyers and occupiers, due to the inexpensive running costs of a SIP structure and the many other benefits a SIP home provides.

### The Code For Sustainable Homes

Structural Insulated Panels contribute to The Code for Sustainable Homes through excellent thermal performance, air tightness and limited cold bridging.

British Board of Agrément (BBA)

The SBS SIP Building System is a certified product of the British Board of Agrément (BBA).

Agrément Certificate No. 06/4312 (PDF)

About the Code for Sustainable Homes

The UK Government introduced the Code as a voluntary standard in 2007, complementing the current system of Energy Performance Certificates for new homes. From September 2010 all new build dwellings, both public and private sector are obliged to comply with the Code.

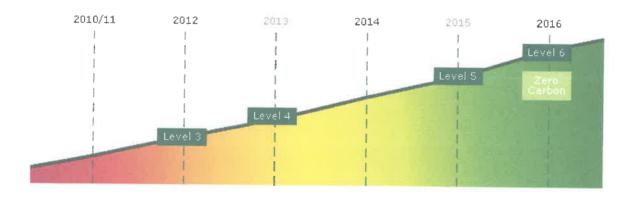
#### How it works

The Code awards new homes a rating from Level 1 to Level 6, based on performance against nine of the below sustainability criteria's:

- Energy and CO2 Emissions.
- Water H2O & Surface Water Run-off.
- Materials the environmental impact of construction materials.
- Management of surface water run-off from the development and flood risk.
- Waste generated as a result of the construction process and facilities.
- Pollution resulting from the operation of the dwelling.
- Health and Well-Being the effects that the dwelling's design and indoor environment has on its occupants.
- Management steps to allow good management of the environmental impacts of the construction and operation of the home.
- Ecology impact of the dwelling on the local ecosystem, bio-diversity and land use.

Level 1 is entry level above building regulations, and Level 6 is the highest, reflecting exemplary developments in terms of sustainability.

Graphic of a time line that shows compliance requirements for each year:



It is anticipated that the Building Regulations as well as the minimum mandatory Code level will continue to improve until the 2016 target of 'net zero CO2 emissions' per annum is met. Compliance with higher levels of the Code is voluntary at present. However, landowners and agents are already selling sites with stipulations to build at a certain Code level as it is seen as commercially advantageous. The total extra-over cost of building to Code Level 3 is typically under 5% of a standard build cost.

The building fabric of a SIP Building System exceeds the standards from code level 4.

#### 5.0 - The Benefits of Structural Insulated Timber Frame

### **Accurately Engineered**

Manufactured under factory controlled conditions, timber frame components are an engineered product, and the structure is highly accurate. This simplifies the erection process on site, with accurate components fitting together exactly as they were designed and specified.

### **Light to Transport**

While timber frame components are strong, they are relatively lightweight and easy to transport. This makes timber frame particularly suitable for remote sites and also for sites where ground conditions would not permit a heavier form of construction.

### **Speedy to Construct**

In ideal conditions, a timber frame home can be wind and watertight within two to three days and can be finished in as little as eight to ten weeks. Once wind and watertight, other trades can carry on with their work regardless of the weather. A real bonus in avoiding costly delays due to our unpredictable climate.

### **Highly Insulated**

Because timber frame homes are highly insulated as standard they are very energy efficient - indeed considerably more energy efficient than current Building Regulations demand. This means that timber frame homes are economic to run, heating up quickly and retaining there heat for longer.

### Strong and Durable

A timber frame house is long lasting, comparing well with all other standard forms of modern construction. It will easily last the 60 years plus which is the requirement of institutions such as insurers and building societies.

#### Straightforward to Finance

Timber frame construction is recognised by building societies, banks and insurance companies for lending purposes. Indeed, many lenders offer stage payment schemes specially designed for self-builders.

## A "Greener" Way to Build

The energy efficiency of timber frame makes it the environmentally friendly way to build and the system relies on renewable softwoods from well managed forests and uses only CFC free insulation. Finally, the amount of energy taken to produce timber components - their "embodied energy" - is much less than that of plastic, steel or concrete alternatives.

#### Beautiful to Look At

Sometimes people think timber frame is only right for low rise construction such as bungalows. While timber frame is highly successful in this type of building, it can be used for almost any type of house design - from cosy bungalows to multi story flats - and can be clad in any standard finish, such as tile, timber, render, stone or brick. All over the developed world timber frame is being used to build beautiful exciting homes.

With the use of the Structural insulated frame giving the required air-tightness, combined with a heating system using a Ground heat source pump, and Photo voltaic cells, the property if the window where unable to open and a heat recovery ventilation system installed instead, it could be classed as "Passive House" standard, as the clients wish to benefit from the fresh air of living in the countryside, the property will be one level down from this in respect of Sustainability.

## Convert the existing stone barn to a Live / Work Unit.

The principle of converting the barn to a live / work unit use should be acceptable in principle. This should however be subject to consideration given to any landscape harm resulting from the development and any harm to the character of the buildings while keeping a viable use for an existing building.

The reason for changing the original application to a live / work unit from a conversion to two dwellings is a result of the flood risk assessment, this report impact is that for the building to be used within a flood area, the planning policies do not allow sole residential use, as the building is to be used with a 60 / 40 % split, the lower ground floor will be used for work space ( as partially at present ) with all electrical & plumbing sources to be serviced from the first floor void and remain above the predicted flood level. There for the residential floor space remaining will not be effected if the building where to flooded.

It is also important to consider the principle of the development, its impact of the visual appearance of the surrounding area and AONB, its impact on the character and appearance of the buildings, its effect on the residential amenity of neighbouring occupiers and its impact on protected species and trees.

Principle of Development, Guidance on proposals to convert barns to dwellings is provided by Core Strategy Policy DMH4. Criterion 1 Core Strategy Policy DMH4 confirms that planning permission will be granted for such works where "the building is not isolated in the landscape, i.e. it is within a defined settlement or forms part of an already group of buildings...". The barns are located within a wider farm complex. They are not isolated in the landscape and form part of an already defined group of buildings and as such it accords with criterion 1 of Core Strategy Policy DMH4.

Due to the local character and age of the building, it is considered to be a non-designated Heritage Asset (when considered against National Guidance) of historical interest. The NPPF, specifically Chapter 12, details 'Conserving and enhancing the historic environment'. Paragraph 131 provides advice when determining planning applications, noting that local planning authorities should take account of:

- the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
- the desirability of new development making a positive contribution to local character and distinctiveness.

In line with Core Strategy Policy DMH4, a structural appraisal has been submitted that highlights that the building is in an acceptable state of repair. The smaller detached mono pitch building is capable of re-use without rebuilding.

A full timber first floor is required and replacement of some of the roof structure however the original blue slates are in good condition and are capable of re-use.

Policy DMH4 requires the buildings to be converted to be structurally sound and capable of conversion for the proposed use without the need for extensive building or major alteration which would adversely affect its character or appearance. It is considered that the extent of the works required to stabilise the building as stated in the structural survey are acceptable.

As the proposed site is situated only 300m from the village boundary, along with being on the main village bus route, to access local facilities, the proposal would be 'suitably located' in accordance with Core Strategy Policies DMH3 and DMH4 and would create a viable use for a building of historic and heritage merit. Therefore the proposed development is considered acceptable in principle.

## Design and Visual Impact

In this case the development is proposed on land designated as AONB (see Policy EN2 of the Core Strategy) which has the highest status of protection in relation to landscape and scenic beauty. Within these areas development is required to be in keeping with the landscape area and should reflect local vernacular, scale, style, features and building materials. Policies DMH3 and DMH4 require alterations to the barn to be sympathetic to the character of the building and should not harm the landscape qualities of the area. The current proposals will unavoidably require the removal or alteration of some of the key features of the building. The proposal makes use of the existing openings of the building as far as is practical. English Heritage guidance 'Conversion of traditional farm buildings' states 'there should always be a presumption in favour of maximising the use of these existing openings without changing their size, and limiting the formation of new ones. Where new openings are added or new windows inserted within existing door openings, great care needs to be given to their placing and design'. There is a public footpath that passes through the farm complex and therefore any alterations to the buildings would be in public view.

As stated above, conversion of the barn to a live work unit would require only new window opening. The blank West elevation would have a single window to the upper floor level.

The barn doors would have inset glazing screens to provide natural light and new and existing window frames and doors would be timber with natural stone surrounds.

The creation of curtilages can have a significant impact upon visual amenity and patterns of land use. Ideally the curtilage needs to be kept as minimal as possible and any enclosed private areas need to be carefully sited and contained, particularly in relation to public views and the surrounding landscape. The application proposes the creation of small areas of residential curtilage to the South -West and East of the barn to serve the two dwellings. These areas would be delineated by 1.2m high post & rail fence and would be commensurate to the floor area of the former buildings.

Further landscaping details can be seen on the proposed site plan accompanying this application.

## Demolish 5 No. existing Concrete block & steel farm buildings.

As the five concrete block & steel / cement sheet cladding building are of no architectural merit, there demolition should be seen as a positive impact to the landscape.

Convert a stone built mono-pitch building into two single garages for the converted barn.

The proposed buildings would have a blue slate roof to a maximum height of 4.2m. replacing the existing cement sheet existing one. The walls will remain natural stone and will be re-pointed to match the barn.

Whilst the provision of garages is considered a domestic addition, the buildings would be converted and remain in an agricultural style and using materials typically found in the surrounding landscape, as well as the re-use of what would become a redundant building.

## Conclusion

To conclude, the proposal should be assessed as a whole, as well as all the key element of the application being acceptable in regard to the relevant planning policies, the reorganisation of the farm to allow its future development as a home & business should be of significant value, both visually and economically to the rural locality situated in the ANOB.