



Householder

Design & Access Statement

Application Site:

6 Netherwood Close
Huddersfield
HD2 2LR

Date:

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Produced by:

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Further Documents:
Wildlife Trigger & Biodiversity Checklist (Homeowner)
Flood Risk Map
Community Infrastructure Levy Form 1

1 INTRODUCTION

i. Introduction to Arkiplan Architectural Ltd

Arkiplan Architectural Ltd is a nationwide architectural practice that provides designs and advice to owners of residential and commercial properties throughout England and Wales. Working with Local Authorities on such a large scale on a daily basis we truly understand the considerable demands on the resources of the planning service which have taken place in recent years.

We have compiled this Statement to assist the decision-making process, demonstrating our commitment to making the planning system easier for all parties involved, and to relieve some of the recent pressures that some Local Authorities are still experiencing.

As Agents for the Applicant, we respectfully request the Decision Maker to review the full application documents as soon as possible after the consultation period has ended and engage in early conversation with us. We aim to work proactively with you and will in most cases be able to address any concerns or questions regarding the proposals within a short time period.

We are happy to provide site photos, additional information or further clarification on drawings that may be necessary to assist the Decision Maker. We hope that this approach will enable determination deadlines to be met in full and are normally happy to authorise a short time extension if required.

By addressing any concerns at an early stage, we can hopefully reach a mutual agreement for both parties and alleviate the requirement of further

application submissions that could in turn place further burden on the planning system.

We look forward to working with you.

ii. This Statement

This planning statement has been compiled on behalf of the Applicants and accompanies a planning application for a proposal for the above property. It is not a standalone document and should be read in conjunction with the accompanying documents and drawings as submitted.

Working with Local Authorities around the country on a daily basis, it is evident that there is a vast difference between councils for validation requirements for planning applications. As a result, we have revised our standard practice to provide a comprehensive statement demonstrating that we have assessed all requirements under the national and local planning policies. We have also included a Wildlife Trigger Report & Biodiversity Checklist, a Flood Risk Assessment Map and a CIL Form 1 as standard. We appreciate that some of this information may be irrelevant or superfluous to your requirements, and kindly request that you disregard any such information as required.

2 PLANNING POLICY CONTEXT

i. Policy Assessment Statement

The proposal has been assessed against the latest update of national and local policies, including:

- Town and Country Planning Act 1990
- National Planning Policy Framework (NPPF)
- National Planning Practice Guidance (NPPG)
- The adopted Borough Local Development Plan
- The adopted Borough Supplementary Planning Documents
- The adopted Borough Neighbourhood Plan
- The adopted Borough Design Code and Design Quality Guidance

The application is considered to have been positively prepared in accordance with the national and local requirements to assist the Decision Maker and improve efficiency and effectiveness of the planning application system for all parties.

ii. Relevant Planning History

Historic planning applications that are considered to be relevant to the proposal are listed below.

Not applicable

3 THE APPLICATION SITE

i. Location



The application site is located on the southern side of Netherwood Close in Huddersfield.



Image of Front Elevation

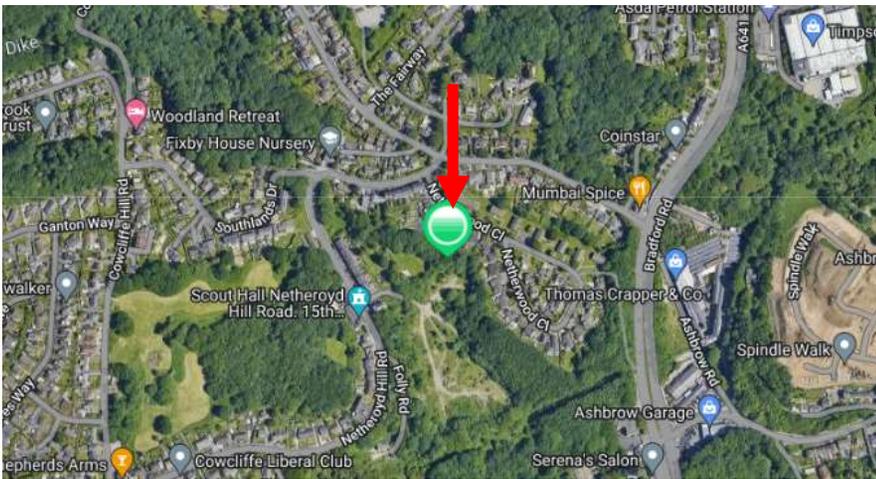


Image of Rear Elevation

ii. Site Assessment

The application site is a broadly rectangular shaped plot comprising a total developed area of approximately 60m² and includes a garden area with hard and soft landscaping.

The existing property is set back from the highway and is orientated in an approximate north-south direction. The host dwelling is of mid 20th Century construction.



Aerial Image

iv. Area Assessment

The application site is situated within an established urban residential area where the surrounding area is characterised by residential dwellings typical of a built-up area, with a wide variety of individual vernacular styles and appearances. Surrounding properties typically comprise of brick, stone or cladding. Roof forms are predominantly pitched with prominent large gables, having a tiled finish. Dwellings within the enclave are arranged in an irregular settlement pattern.



Aerial Image

Number 6 Netherwood Close fronts the highway but is heavily secluded by mature vegetation both within the curtilage and bounding the highway. It is immediately opposite two blocks of apartments under the ownership of the Kirklees Borough Council which form two independent terraced two storey buildings, constructed in the late C20.

iii. Existing Use

The property is a purpose-built detached residential dwellinghouse under Use Class C3 that currently offers accommodation with 1 bedroom arranged over a single storey. It is under private ownership and currently in occupation.



Image of existing streetscene and surrounding area



v. **Site Planning Constraints**

The application site is subject to the following Planning constraints:

| Yes | No | |
|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Agricultural Land Classification |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | World Heritage Site |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Listed Buildings |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Scheduled Monuments |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Area of Outstanding Natural Beauty (AONB) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | National Park |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Site of Importance for Nature Conservation (SINC) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Site of Specific Scientific Interest (SSSI) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Site of Archaeological Importance |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Conservation Area (CA) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Green Belt (GB) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Sensitive Landscape Area |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Contaminated Land |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Tree Preservation Orders (TPOs) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Article 3 Restrictions |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Article 4 Directions |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Assets of Community Value |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Building of Township Merit |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Hazardous Sites |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Environmental Impact Assessment Regulations |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Flood Risk Zones |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Nutrient Neutrality Zone |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Air Quality Management Area |

The application site is not subject to restrictions or planning.

4 THE PROPOSAL

i. The Proposal

As detailed within the accompanying drawings, permission is sought for alterations to an existing dwellinghouse under the Town and Country Planning Act 1990 (as amended).

The application site is located within an established urban residential area that has been subject to alterations in recent years by homeowners, providing a baseline for appropriate development within the locality. As noted above, the application site is not located within a designated Conservation Area or subject to planning constraints. Being of C20 construction the area does not provide a positive contribution to the Borough's historical assets and the individuality and mixed size and tenure surrounding properties do not form a strong local identity.

The proposal seeks Householder planning consent to convert the existing loft area into habitable space to bring the 70-year old property up to modern standards. As with many mid-century dwellings throughout the country, the loft space cannot be easily converted to meet the current building regulations and insulation standards that are now in force. In order to create additional living space in the sought after area in the north of Huddersfield the roof ridge height would have to be increased

The proposed alterations will provide further primary living accommodation and amenities for the occupants as their principal place of residence.

As a result of the planned works, the property will be upgraded to a higher level of energy efficiency, meeting all associated building standards that are currently in operation.

ii. Design Principles & Material Planning Considerations

The proposal has been assessed against the current national and local planning policies, design guides and material planning considerations. It is considered to accord with all relevant material planning principles including:

- **Sustainable Development**

Sustainable development lies at the heart of the National Planning Policy Framework. The application site lies within a sustainable location with appropriate transportation links and amenities for the area.

The proposal is not considered to have an adverse impact on the continued sustainability of the surrounding area.

- **Good Design**

The proposal is considered to reflect both local design policies and government guidance on design to achieve better places in which to live and work. It is considered to assist in raising the standard of design within the general neighbourhood and to fit with the overall built form and layout of its immediate and wider surroundings.

At a finer scale, residential design must fully understand the implications of design choices to make a house a home, and to ensure it contributes to creating or improving the immediate block and street network.

The proposal has been designed to reflect the character and grain of the locality, providing continuity with the gabled design to provide a good integration into the existing developed environment. The proposal is not considered to have a detrimental impact on the overall design and character of the area or the local identity, continuing a two storey arrangement as is seen heavily opposite.

- **Social, Lifestyle and Housing Trends**

The past decades have seen a number of fundamental changes to the social, cultural, digital and physical infrastructure, laying the foundations for new models of urban and residential living.

The majority of our existing housing stock was originally constructed to meet the needs and lifestyles of previous generations. It is important to recognise and acknowledge that our lifestyles have changed considerably through the decades, and our homes have had to adapt to technology, home working, multi-generation living and the need for space.

Our proposals consider the needs of future occupants and ensure that the property is adaptable and flexible as necessary for the long-term community.

The existing host property was originally constructed to meet the needs and lifestyles of previous generations. The proposal will allow for the existing property to meet the applicant's current requirements and provide future generations to develop and grow.

- **Space and Light Amenity**

The quality of space and light has a profound impact on a resident's experience and enjoyment of their home. It is highly documented that well planned and sufficient space for living and sleeping, together with adequately sized kitchen, bathroom and storage facilities are key requirements for today's lifestyle. The proposal exceeds the National Described Space Standards and will provide the occupants with a comfortable sense of space allowing clear movement between different spaces.

The proposal incorporates increased levels of natural daylight to provide the occupants with a higher quality of living conditions. This will help to reduce the requirement for artificial lighting and further reduce the energy consumption of the property.

- **Private Amenity**

As densities continue to grow, personal privacy will become progressively important for both the host dwelling and its neighbouring units. Consideration on privacy must be given where there is a proposed increase in daylight from additional or enlarged fenestration.

The proposal has been designed to ensure that the occupants have sufficient access to their own private amenity space whilst respecting the privacy of neighbouring properties.

- **Future Proofing**

The world is committed to achieving carbon zero by 2050 and the UK has committed to reducing our net carbon emissions from our built environment

through increases in energy efficiency and the use of renewable energy. The majority of Local Authorities have now officially declared a Climate Emergency seeking to address these challenges at the planning stage of developments.

Our housing stock is among the oldest and least efficient buildings in the world and the existing property was constructed to lower standards than required today. The proposal will see the existing dwelling upgraded through the design and construction of higher levels of insulation to reduce the requirement of fossil fuels. Further details are discussed in our Climate Change and Sustainability Statement.

- **Scale and Massing**

Good design is required to ensure that any development respects the existing setting and character of the surrounding area, that any additional footprint and volume provides a suitable subservience to the host dwelling, the surrounding properties and the wider setting.

The proposal is considered to be sympathetic to the host building in terms of scale and massing. It is not considered to create any detrimental impacts upon the living conditions and amenities of either existing or future occupants within the vicinity.

- **Highway Connection Details**

The proposal does not include for a new or altered vehicle access or pedestrian access to or from the public highway.

The proposal does not require any diversions, extinguishment and/or creation of public rights of way and is not considered to have any negative impacts on the safety of highway or pedestrian users.

- **Parking Provision**

The application site is considered to provide for sufficient off-road parking spaces for vehicles within the curtilage.

The proposal is not considered to have any adverse impact on parking provisions for the surrounding area.

- **Access and Accessibility**

General access to the existing property will remain unaltered. It is accessible to all emergency vehicles and refuse collections with suitable connections to water and waste supplies, high speed telecom and utilities.

The application site benefits from a reasonably level ground which is considered to be accessible to all ambulant and non-ambulant pedestrians with no inherent hazards. The proposal is not considered to have any prejudicial impact on the accessibility of any person regardless of disability, genders or age.

- **Cycle Storage**

The use of green transport is increasing around the world, and this upsurge has required many homeowners to adapt their properties to create a suitable and safe storage area for cycles.

The property currently provides suitable storage for cycles within the curtilage and the proposal is not considered to have any adverse impact.

- **Refuse Storage**

As we move into an era of reducing waste and encouraging the recycling of products, households have had to adapt their properties to create suitable space. The property has existing arrangements to enable separation and storage of household waste and recycling.

The proposal is not considered to have a negative impact on the surrounding environment and will continue to provide easy access for collections.

- **Safe Neighbourhoods**

The application site is located within a safe neighbourhood and the proposal is not considered to have any adverse impacts to the continued safety of the area. All fenestration will be fitted with appropriate security in accordance with the Approved Documents and Security by Design.

- **Building Regulations**

Building regulations are a set of standards designed to ensure that a property is safe, comfortable and energy efficient. They cover all aspects of design and construction including structural stability, fire safety, insulation, ventilation and drainage through a set of Approved Documents.

The proposal has been designed to ensure that all relevant and current Approved Documents under the Building Act 1984 will be met in full. All

required aspects of the proposal will be fully inspected and approved by an appropriate qualified person.

5 IMPACT ASSESSMENTS

The proposal has been evaluated against our standard Design Principles and the material planning considerations as detailed in the previous chapter and is further appraised through the following assessments for impact on the immediate and wider areas.

Where potential impacts may be perceived, we have provided guidance on appropriate mitigation measures.

i. Visual Impact Assessment

The design principles have been carefully considered to ensure that the proposal reflects and maintains the overall character and grain of the area, including the vernacular architectural styles and pattern of development within the immediate and wider enclaves.

The road displays a range of dwellings differing in size, design and materiality through its individuality or through historic alterations. The proposal uses materials that are either matching or complementary to the existing building to reduce any potential impacts on the surrounding area and ensure a visual assimilation with its setting.

The increase in footprint and volume of the proposal is considered to respect and relate positively to the appearance and proportions of the host dwelling as well as the general surrounding neighbourhood. It is not considered to have a harmful impact on the local area by resulting in an incoherent and incongruous alteration.

ii. Neighbourhood Impact Assessment

Throughout the design concept, careful consideration has been given to neighbouring properties to ensure that any perceived impacts are minimal.

The scale is considered appropriate in context to the adjoining and nearby neighbouring properties and has been designed to prevent any potential overshadowing that would not result in an excessive sense of enclosure. Any associated loss of natural daylight or sunlight for the immediate neighbours has been mitigated through careful design reducing any potential harm to the living conditions of the current and future occupants.

The proposal has been designed to ensure there are no aspects that could harmfully influence the existing private amenities of adjoining properties through unfavourable placement and style of fenestration.

iii. Flood Risk Impact Assessment

The accompanying Flood Risk Map confirms that the application site is located within the Environment Agency's Flood Zone 1 where it is at a low risk of potential flooding from nearby natural watercourses.

- **Recommended Mitigation Measures**

In order to avoid or minimise any sources which could contribute to potential flooding in the future, the proposal will incorporate flood proofing, resilience and resistance mitigation measures including:

- Appropriate SuDS drainage measures will be installed around the property to reduce the risk of surface water flooding in extreme

conditions as required by Building Regulations. These will include soakaways to all new and existing rainwater connections

- Permeable landscaping materials will be used throughout the proposal as necessary
- Appropriately sized waterbutts will be installed to new or existing rainwater systems with overflow connections leading to soakaways to encourage rainwater harvesting
- Electrical sockets will be raised to levels required under Building Regulations and NICEIC Regulations
- All new finished floor levels will match the existing levels at the minimum

A Sequential Test, Flood Modelling, Screening or FRA report should not be required for this proposal.

The proposal is not considered to have a negative impact on flood risk to either the existing property or surrounding area.

iv. Fire Safety Impact Assessment

The design incorporates all appropriate safety measures for the protection of the occupants in the event of a fire within the property. This includes the installation of an interlinked smoke and heat detection system and installation of fire doors where necessary. The proposal will fully comply with the Approved Documents as part of the Building Regulations application stage. Measures to provide safe egress from the property with a protected passage to the exterior assembly points have been included as standard practice to comply with the latest Fire Safety Regulations.

The proposal is not considered to have any adverse impacts through the spread of fire to neighbouring properties.

v. Noise Impact Assessment

• Construction Works

Noise levels for the construction phase will be kept to the minimum to avoid disturbance to neighbouring properties and will working times will be strictly adhered to. Working hours for all Construction/Demolition operations including delivery/removal of materials on/off site will be restricted to 08:00 - 18:00Hrs on weekdays, 09.00 - 13:00Hrs on a Saturday and no Sunday or Bank Holiday working.

• Sound Transmittance

The proposal is not considered to have a negative impact on the transmittance of noise to neighbouring properties.

vi. Land Contamination Assessment

The application site is not known to contain any contaminative features and the proposal is not considered to have any adverse impact on the application site or surrounding area.

• Recommended Mitigation Measures

In the event that contamination is found at any time when carrying out the approved development that was not previously identified, works will be

halted on that part of the site affected by the unexpected contamination and will be reported in writing immediately to the Local Planning Authority. An investigation and risk assessment will be undertaken to the extent specified by the Local Planning Authority prior to resumption of the works. Following completion of measures identified in the approved remediation scheme, a verification report will be submitted in writing and approval by the Local Planning Authority.

vii. Nutrient Neutrality Assessment

Nutrient neutrality is a means of ensuring that a project does not add to the existing nutrient burdens of an area such as nitrogen and phosphorus that can cause harmful algal blooms and damage the aquatic ecosystems.

Nutrient neutrality is achieved at planning stage by assessing the proposal in risk areas, and demonstrating either a reduction of nutrient inputs, an increase in nutrient removal or proposing an offset.

The application site does not lie within a designated Nutrient Neutrality Zone. As such, the proposal will not have any impact on the nutrient levels within the locality.

• Recommended Mitigation Measures

In order to avoid or minimise any sources which could impact the local nutrient levels within an established residential area, the proposal will incorporate the following Low-Impact Development (LID) techniques:

- Ensuring all hardscaping is permeable to manage stormwater runoff and reduce nutrient loads entering water bodies

- Retaining and enhancing the natural vegetation within the curtilage to filter pollutants and retain nutrients on-site
- Limit uses of any harmful chemicals on-site within the landscaping that can leach into groundwater and surface water
- Harvesting rainwater from roofing to reduce the need for treated tap water for gardening
- Composting food scraps and vegetation waste to create nutrient-rich compost for gardens and reduce the reliance on chemical fertilizers
- Planting native plant species which require fewer chemicals and help promote biodiversity and soil health
- Adopting low maintenance lawn care practices such as mulching grass clippings, mowing at higher heights and aerating soil to promote healthy growth and reduce the need for additional chemical fertilizers
- Using certified environmentally-friendly products throughout the curtilage to reduce damage to the soil
- Disposal of all household chemicals and cleaning agents properly, according to local regulations to prevent contamination of soil and water

viii. Air Quality Impact Assessment

The application site does not currently lie within a designated Air Quality Management Area (AQMA). Furthermore, the proposal is considered to be outside the scope of AQMA developments as it is not classed as either a major residential scheme, new non-residential floorspace or change of use to non-residential. Consequently, the proposal is not considered to have any detrimental impact on the air quality of the surrounding and wider areas.

6 BIODIVERSITY STATEMENT

i. Policy Context

The “3 Tests” have been assessed against Schedule 2 of Conservation of Habitats and Species Regulations 2010 (as amended) and Annex 2 Habitats Directive. The proposal is not considered to affect the integrity of the site:

- The application site is not protected under International Importance
- The application site is not protected under National Importance
- The application site is not protected under Local Importance

The accompanying Biodiversity Checklist confirms that the application site is not within any areas that carry a high risk of impact to smaller wildlife habitats.

ii. Tree and Hedge Protection

The application site does not contain any protected or notable species of trees and there are no mature or protected hedgerows within the curtilage.

An Arboricultural Survey should not be required for the application.

iii. Wildlife Triggers

The application site is not within 400m of any ancient woodland, fresh water ponds or grasslands. It is not situated within any know protected sites.

A Wildlife Trigger Report is included with the application.

iv. Biodiversity

• **Biodiversity Net Gains (BNGs)**

The Proposal does not currently fall within the requirements of Biodiversity Net Gains.

• **Recommended Mitigation Measures**

To avoid, mitigate, compensate, enhance or manage wildlife measures have been reasonably taken which include:

- Maintaining the current environmental conditions such as temperature, availability of natural light, prevailing winds and existing ground conditions
- Providing underpasses in boundary fencing to enable movement of small animals between habitat sites
- Removal of any non-native species to the benefit of native species
- Installation of bird and bat nesting boxes within the curtilage
- Creation of suitable landscaping within urban gardens to encourage species such as butterflies, bees and small birds
- Use of Soakaways for rainwater drainage

Measures to avoid and manage potential impacts on wildlife features will be taken at the construction stage. These include but are not limited to:

- Prior to the commencement of any works, the existing property and its neighbouring properties will be inspected for the presence of protected species
- Should evidence suggest that there is a likelihood of notable or Priority species within the vicinity, a competent person with suitable qualifications, licenses and experience will be engaged to determine if there are any likely impacts
- No works will take place until appropriate measures have been completed as recommended by the competent person

The proposal will not adversely affect the integrity of the site for protection, enhancement or management of wildlife.

A further Habitats Regulation Assessment (HRA) or Preliminary Ecological Appraisal (PEA) should not be required for the determination of this application.

v. Green Infrastructure Statement

The Welsh government has recently announced an investment of over £1.8bn in green infrastructure over the next few years. The investment will support the creation of a National Forest, improve access to landscapes and outdoor recreation, and provide newer and greener rolling stock for public transport. A Green Infrastructure Statement must accompany all planning applications in Wales. An increasing number of Local Authorities in England are now also requiring a Green Infrastructure Statement as part of their validation process. The green infrastructure principles encourage the best use of land to provide green open space for all whilst helping wildlife to flourish. They will help communities adapt to climate change by reducing the urban heat island effect

which can help to reduce energy consumption and greenhouse gas emissions. It can promote sustainability and provide economic benefits to communities with employment opportunities and education.

Green infrastructure can create, maintain and enhance biodiversity habitats for both priority and non-priority species.

Arkiplan are committed to incorporating green infrastructure into our projects and provide our clients with educational tools to raise awareness. We have ensured that our proposal is proportionate to the scale and nature of the development and have explored all opportunities for connectivity and enhancement of the existing resources through our design proposals.

The proposal is for a modest residential application which would have a minimal impact on the wider surroundings. The above Biodiversity mitigation measures have been recommended to the applicants to enhance their current surroundings and increase their awareness of environmental pressures.

7 CLIMATE CHANGE & SUSTAINABILITY STATEMENT

i. Introduction

The world has committed to decarbonise by 2050 and the UK is legally-bound to reduce the carbon emissions from buildings, transport and industry. The built environment is responsible for approximately 40% of the UK's current emissions through its housing stock and commercial properties with some of the oldest and draughtiest homes in the world. There are currently more than 28 million homes in occupation in the UK that were constructed to old building standards, more than 20% were constructed prior to 1919 from traditional methods in response to the Industrial Revolution. It is estimated that over 24 million of these homes will still be in occupancy in 2050.

ii. Energy Efficiency – Current EPC “F”

The existing property was constructed to extremely low building standards and is consequently classed as having very poor energy efficiency. Poor energy efficiency ultimately leads to an increase in the use of fossil fuels to create an optimal internal temperature throughout the year. It is also the main trigger of fuel poverty which is recognised as causing health implications through poor indoor air quality, mould and bacterial growth, condensation, damp and structural damage, all leading to preventable loss of life.

It is highly documented that properties constructed prior to the recent Building Standards experience considerable unwanted heat losses apportioned as 35% through poorly insulated exterior walls, 25% through insufficient roof insulation, 15% through poorly fitted entrance doors, 10% through low performance fenestration and 10% through uninsulated ground floors. Walls that are subject to damp are over 30% less efficient.

iii. Fabric First Retrofit – PAS 2035 Principles

The government has placed great importance on upgrading our existing housing stock through suitable retrofitting practices. A national standard has been introduced which provides a framework setting out specifications for the design and construction of government-owned properties.

Taking a holistic approach, the retrofit principles upgrade the overall energy efficiency of the property through processes including the education of the occupants, upgrading the insulation of the building fabric and providing adequate ventilation.

The ‘Fabric First Approach’ is the correct sequence of upgrading our existing buildings to meet Carbon Zero targets. This global method seeks to increase the level of insulation and airtightness of the thermal envelope as the priority so that the amount of energy required to heat or cool a property is greatly reduced. The method also ensures that the moisture levels are managed correctly within the building fabric preventing growth of deadly mould and bacteria internally, reducing the risk of interstitial condensation that could lead to structural damage and improving the overall internal air quality for the occupants.

Smaller mechanical heating and cooling systems can then be installed to provide the optimum internal living conditions, with renewable energy where it is practical.

The proposal will ensure that the new construction will meet the latest Building Standards, greatly increasing the overall energy efficiency of the property as a whole. This will result in lower levels of mechanical heating and cooling systems, prevent overheating and reduce the carbon emissions through use of fossil fuels.

Further Retrofit works to the existing structure can be installed in due course as required for the individual property to ensure that the legally-binding Carbon Zero targets are met in 2050.

iv. Renewable Energy Systems

The proposal includes installation of renewable energy as part of the application.

As noted above, it is widely accepted that the Fabric First Approach is the correct sequence to reduce the requirement for energy. A smaller renewable system can subsequently be installed as part of the proposed measures.

v. Recommended Climate Mitigation Measures by 2050

Measures to manage and mitigate Climate Change have been or will be introduced where appropriate for the current proposal or for future upgrades to the property. These include but are not limited to:

- To reduce carbon emissions, the thermal insulation will be upgraded to modern standards increasing the overall energy efficiency of the property and reducing the use of mechanical heating and cooling systems to obtain required internal temperatures
- Unwanted air leakage through key junctions on the existing property will be examined and mitigated as part of the proposal. This includes ensuring a continuous thermal envelope is present, all penetrations through the building envelope are suitably sealed with airtight tapes and grommets, and high-risk airtight areas such as doors and windows are correctly fitted

- All new construction will include overlapping insulation to create a continuous thermal envelope, appropriate use of airtight membranes and suitably taped penetrations to achieve a high quality and energy efficient property
- New fenestration will be installed with higher performing sealed units to reduce the temperature difference between internal and external surfaces thus reducing the requirements of mechanical heating and cooling systems to obtain the optimal internal temperature
- All new fenestration will be installed with trickle vents to provide a source of natural ventilation to the interior reducing the growth of mould and bacteria
- All 'wet' areas will be fitted with mechanical ventilation to ensure excess moisture is removed from the interior, reducing the risk of mould and bacterial growth
- Using the Fabric First Approach, low carbon heating and cooling systems can be successfully installed including Air Source or Ground Source Heat Pumps
- Renewable energy systems including PV Solar collectors and battery storage can be installed as appropriate
- To reduce the consumption of water and appropriately manage waste water, water efficient fixtures and fittings will be installed including sanitaryware and water outlets in accordance with Approved Document G. This will include aerators on taps and showerhead outlets to reduce the household consumption rates and installation of low/dual flush WCs to reduce the outflows to the local foul water systems. Inline flow limiters will be used where fittings do not achieve the required flow rates

- Rainwater harvesting can be installed using 200L domestic water butts fixed to rainwater outlets, with a suitable overflow connection
- All new rainwater systems will be fed to an appropriate soakaway system as required by the Building Control Officer
- All light fittings should be replaced with new low energy lightbulbs or fixtures
- All appliances should be replaced when required with low energy appliances
- Flood risk measures will be introduced as detailed below to prevent damage to the property and surrounding areas
- A full Climate Emergency Mitigation Checklist for Householders will be provided to occupants to enable a suitable retrofit programme can be carried out successfully as required

vi. Carbon Footprint

Where possible, all materials will be sourced locally and installed by local contractors, reducing the need for transportation as much as possible. All timber products will be FSC certified from sustainably managed sources, and the use of natural insulation products have been incorporated into the scheme.

Where possible, low-embodied carbon alternatives will be used with a low GWP.

vii. Climate Emergency Impact Assessment

The proposal will ensure that the overall energy efficiency of the existing building will be improved, reducing the current requirements for mechanical heating and cooling systems. Consequently, this will reduce the present levels of carbon emissions of the individual property and is considered to be a positive impact.

The proposed works will similarly lessen the risk of fuel poverty, provide a healthier indoor environment for the occupants and reduce the risks of structural damage. They will also provide a good foundation for the full retrofit of our existing privately-owned housing stock to meet the Carbon Zero legal targets.

The proposal is considered to have a positive impact on the Climate Emergency.

8 SUMMARY

The proposal seeks planning permission under the Town and Country Planning Act 1990 (as amended) for alterations to an existing dwellinghouse that is in occupation under private ownership. It has been designed to meet all local and national design guides and to minimise all potential impacts to the immediate and wider surrounding area. A baseline for alterations to existing dwellings within the surrounding area supports the principle that appropriate modifications could be acceptable for suitable proposals.

The proposed design has been chosen to reflect the individual character and grain of the existing area, using materials that will be sympathetic and in keeping with the both the host dwelling and the overall vernacular style of the immediate enclave and the wider surrounding area. It is considered to integrate well into the existing developed form with no detrimental impact by virtue of scale, appearance, privacy or loss of daylight. The use of similar materials and colours in the construction of the external surfaces will provide a satisfactory visual relationship between the existing and proposed.

The design will enable the building to be used for modern living which can be adapted as required for future generations. It is considered to meet the principles of the NPPF to provide good design that will raise the standard of local housing and create better places to live and work. This is considered to be a positive impact on local market housing stock.

The new construction will meet all Approved Documents for building standards in operation including upgrading the current building fabric to increase the overall energy performance. This is considered to have a positive impact on the existing housing stock with regards to the health of the occupants and reducing its current carbon emissions. It is considered to have a positive impact on the wider environment with a positive impact on climate change.

The proposal is not considered to have any adverse impacts on the surrounding ecology and would not result in the loss of local ecological assets including wildlife habitats or significant or protected trees. It is not considered to have any adverse impact on the wider green infrastructure.

The proposal will not increase the risk of either surface or fluvial flooding for the individual property nor have any detrimental impacts on the wider locality.

We hope that the proposal meets with your approval.



Arkiplan Architectural Ltd