

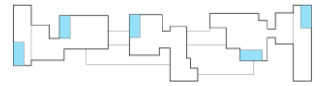


Design, Access, Sustainability and Innovation Statement

Leigh Lane, Bury, Lancashire.

Proposal

A unique landscape and ecologically defined, climate-change resilient and future-proofed residence.



Measuring the Impact of Buildings

'to build and test the project brief with a client at the early stages of development – one that holistically assesses the overall benefits of decisions, rather than just focusing on sustainability targets.

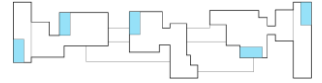
These seemingly intangible benefits have a cascading effect on long-term health and productivity so that social, financial and environmental benefits reinforce one another.

This project has the capability of being a bridge between different ways of approaching a problem, allowing architects, engineers, users and clients to create something meaningfully.

For construction firms, this usually means showing how the construction work will benefit the local economy since it's easier to count apprentices hired than to demonstrate how a building itself might create social value for its users.

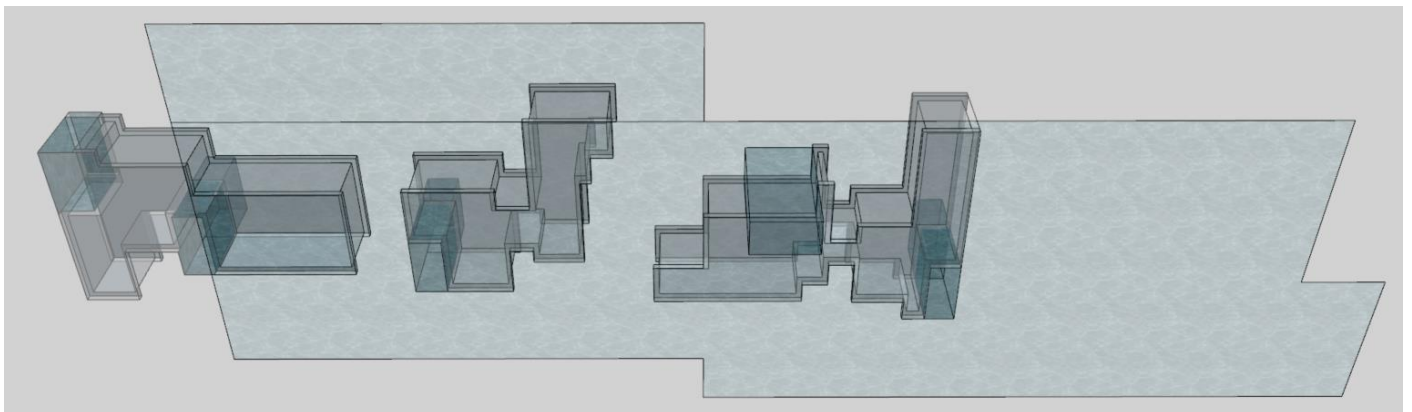
...this is what building back better ought to be about. The pandemic has shown just how little we've learned from the economic crash of 2008; inequality is still baked into our society, and our built environment is doing little to help. Mechanisms like the measurement of a building's impact helps focus attention on what a project is capable of achieving rather than on meeting someone else's rigid definition of what a sustainable project looks like'.

SBE Toolkit 2021



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1.0 Overview

This document examines, amongst other things, assessment of the **surrounding area** and the changes to Bury West and Tottington.

This has informed the manner in which the **property occupies the landscape** and the spatial relationships within its walls.

Ethically, politically, socially and morally..
'it is our duty to link housing needs with climate change and wider societal needs. At present, we are heroically failing to do so. Those schemes that apply careful consideration and an intelligence to design, being mindful of future impacts, will provide the vanguard for a truly sustainable future'.

'..good architecture isn't a matter of aesthetics; it's a matter of creating buildings that respect and meet the needs of people'.

John N. Pickup
RIBA Client Design Advisor
3D Eco
February 2025





This statement is submitted by 3D Eco to accompany the **Planning Application** for the construction of a new domestic dwelling on land 2000 meters to the West of Bury Town Centre.

Site Address:

OS Ref: 86062 48939
Land off Leigh Lane, Bury.
BL8 1RJ

Client:

Mr and Mrs J Oestergaard

Client Address:

Bury, Greater Manchester

Reference:

Planning Application

Date:

February 2025

The proposed development will require site access, utilisation of existing physical landscape structure, site preparation and service infrastructure works to create a **new ecologically focused zero-carbon home with natural landscaping appropriate to, and respectful of, the surrounding countryside.**

The various client requirements have been determined, and a comprehensive brief / schedule of accommodation has been prepared. **This has informed the development of an integrated and comprehensive design solution for the site as a whole.**

The physical context of the site has also been thoroughly assessed, and the design wholly responds to this analysis. This concept house development is completely unique and presents a design solution that truly raises the bar in terms of housing quality and appropriateness.

The effects of the development upon the local area have been carefully considered in physical terms, with the intention that the proposal as a whole positively influences the site's characteristics and aesthetics.

Once completed, the project would, without doubt, be nationally recognised as an exemplar house development that would raise the bar in terms of linking house design, ecology, community, accessibility and sustainability.



1.1 Project Attributes

Exemplar design.

Creative use of previously developed land

Zero carbon

Minimal Ecological impact

Progressive and world class environmental credentials

A focus on nature and landscape

Enhancing existing ecology

Creation of a genuine wildlife corridor, mixed habitats and appropriate planting of native species

A design process open to engagement and enhanced learning with educational institutions and opportunities for research

Improved accessibility

Enhanced boundary treatment

Unique site-responsive design

Integrated 'whole building' design methods

Sensitive treatment of the existing site and topography

Use of materials that accord with the locality.

Integration of landscaping and a clearer focus on the external areas and an appropriate treatment of site boundaries, access and building integration

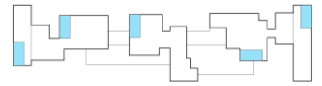
Enhanced privacy and security

Site-specific, responsive and sensitive design

The building to be configured according to need so as to incorporate living, working and ancillary accommodation appropriately.

A design response that champions the benefits of links with nature

The proposed use of the land would address a growing concern with regards to site security and antisocial behaviour.



2.0 Objectives and Background

This is no ordinary house.

Our aim is to demonstrate the potential to develop a small area of previously developed land to the South of Leigh Lane to create a future-proof 21st Century family residence with additional associated community, environmental, and ecological benefits. **By conducting thorough research and using inspirational, inter-connecting design concepts this project is unique in comparison to other developer-led housing projects.**

We aim to illustrate that, by demonstrating a bespoke set of inter-connecting design ideas, we can ultimately present a Planning Application to Bury Council that is a product of collaboration and collecting working and that attracts support such that it **raises the bar in terms of how homes can and should be developed in the Greenbelt and on previously developed, brownfield, land.**

The site is located to the South of Leigh Lane. Although wooded now the site was originally a Garden Centre. **It is not designated agricultural land and has never been farmed.**

Our intention with this application is to illustrate that by linking need with carefully considered design it is

wholly possible to deliver a new house that addresses the needs of the client, the community and the Local Authority.

By embracing the demands of what may initially be seen as a challenging location we aim to show that by adopting a carefully considered, sympathetic and subtle design approach we can **deliver a 21st Century, lifetime inspired home.**

Our approach has been to develop an intelligent building solution whose success stems not only from the internal treatment of space but also how the building relates to the site and wider landscape. The architecture in this instance is far more than the covered part of the site.

The site is in Greenbelt. It does not present the easiest of architectural briefs, but nor should it. The site is deserving and demanding of the highest standards of design and design-uniqueness.

We believe that the design presented in this Planning Application can achieve these exacting standards and can be used as a yardstick to judge other, potentially less well-considered housing developments submitted to Bury Council.



Why?

My clients have been the custodians of the woodland for many years and have invested in the land to safeguard its welfare.

They are now at a stage in their lives where they wish to live a more sustainable lifestyle.

The proposed move to a new low energy, low ecological impact property, designed to their lifestyle and ethos would be emotionally and ethically more fulfilling.

The decision to pursue their ideal was cemented after discussion with a number of their friends and stemmed from a frustration they all felt that, although new houses were being built throughout the country, none were appropriate to those families who were keen to maintain their association with the countryside whilst planning an active work / life balance.

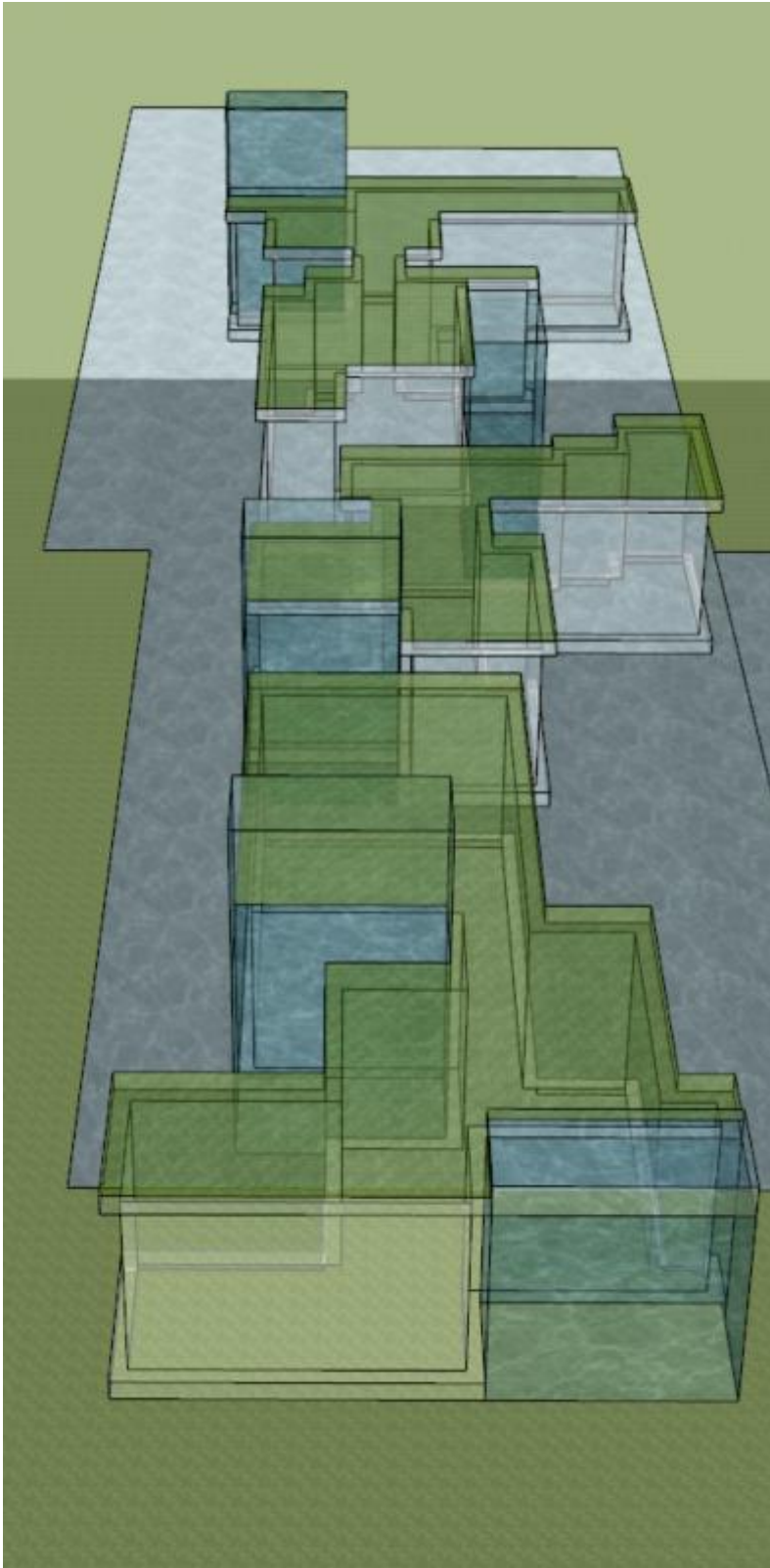
It was felt that not only were the available houses uninspiring in terms of design, but they also offered little in the way of true sustainability and links with nature.

These elements form the foundation of this application.

In addition, the proposals exhibit a myriad of distinctive design ideas; many of which are genuinely unique.

These are listed below, but we would urge Council to read and digest the commentary related to each element as they are all inter-related – they are defining characteristic of 'Responsive [and responsible] Architecture'.

A future-proof home is not just about accessibility and ergonomics and addressing the effects of aging. The properties have to pre-empt the likely effects of climate change in all its forms. Environmental sustainability, energy efficiency and security, temperature control, flood resilience and, significantly – community, are key factors in **ensuring that a house performs to its optimum level now and throughout its extended life**.



Responsive Architecture

‘Responsive architecture has been known for over 50 years. It arose in the middle of the last century and has many definitions. However, its basis is in the creation of buildings or building components that can adapt to external influences, external conditions, and the overall external environment.

The building and its elements use physical states and force effects (light, heat, humidity, noise – and landscape) in the form of sun, wind, and rain. These effects are used to change building elements or the building as a whole and to sensitively adapt in creating appropriate (self-sustaining, self-healing) sustainable architecture, buildings, and environments’.



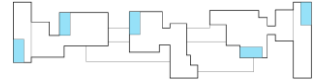
3.0 Design, Access and Innovation Statement

This Design and Access Statement will set out the rationale behind the design of the proposed dwelling at the above location by examining the site and site constraints as well as illustrating the design and development process that has resulted in the configuration and aesthetic of the submitted proposal.

This document forms part of a Full Planning Application and should be examined together with all other associated information – drawings, reports and other application details.

3.1 Location





The site is part of the previous Scholes plant nursery and has an established access off Leigh Lane from the north of the site, opposite Owlerbarrow Lane.

The site is accessed off Leigh Lane approximately 1.5 miles West of Bury town centre and 500 metres North of the B6196.

The site is bounded by school playing fields and residential properties to the North, previously developed commercial land to the East, a reservoir to the South and residential properties and a commercial dog kennels to the West.

The site is essentially previously cultivated scrub land with a small number of specimen trees.

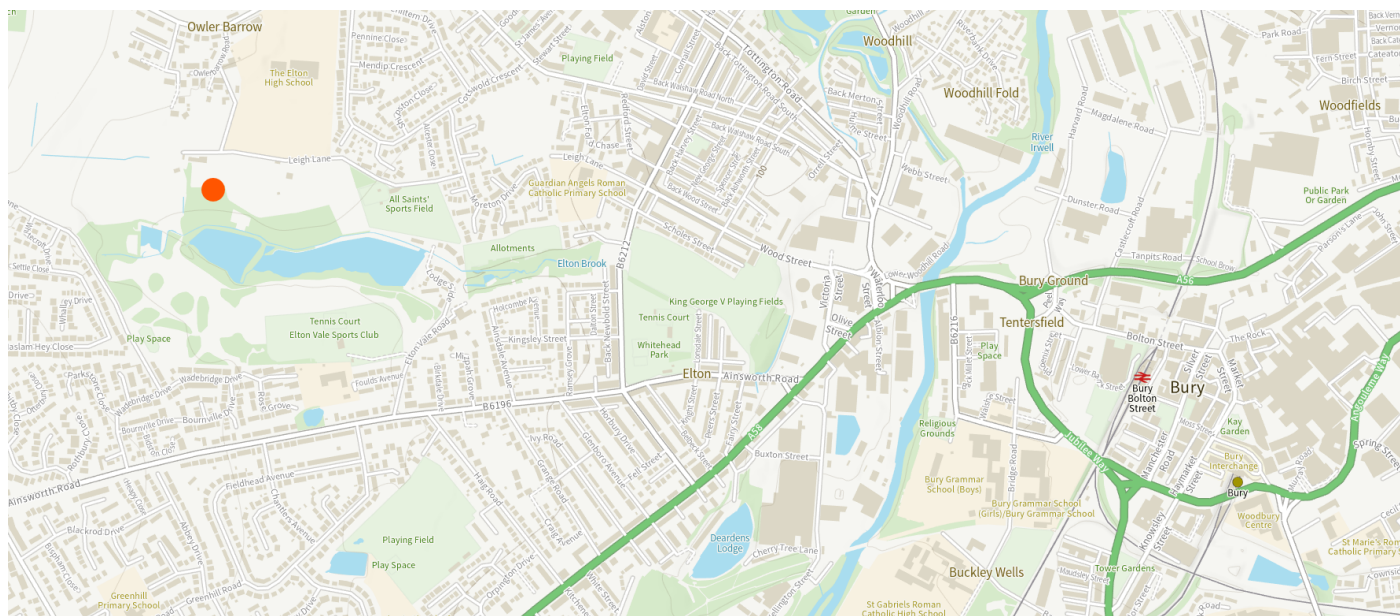
The main development area of the site is relatively with a slight fall towards Elton Brook.



Site boundary - man made development in red

Design, Access, Sustainability and Innovation Statement 2025

Leaf House, Bury.



Mario Maps



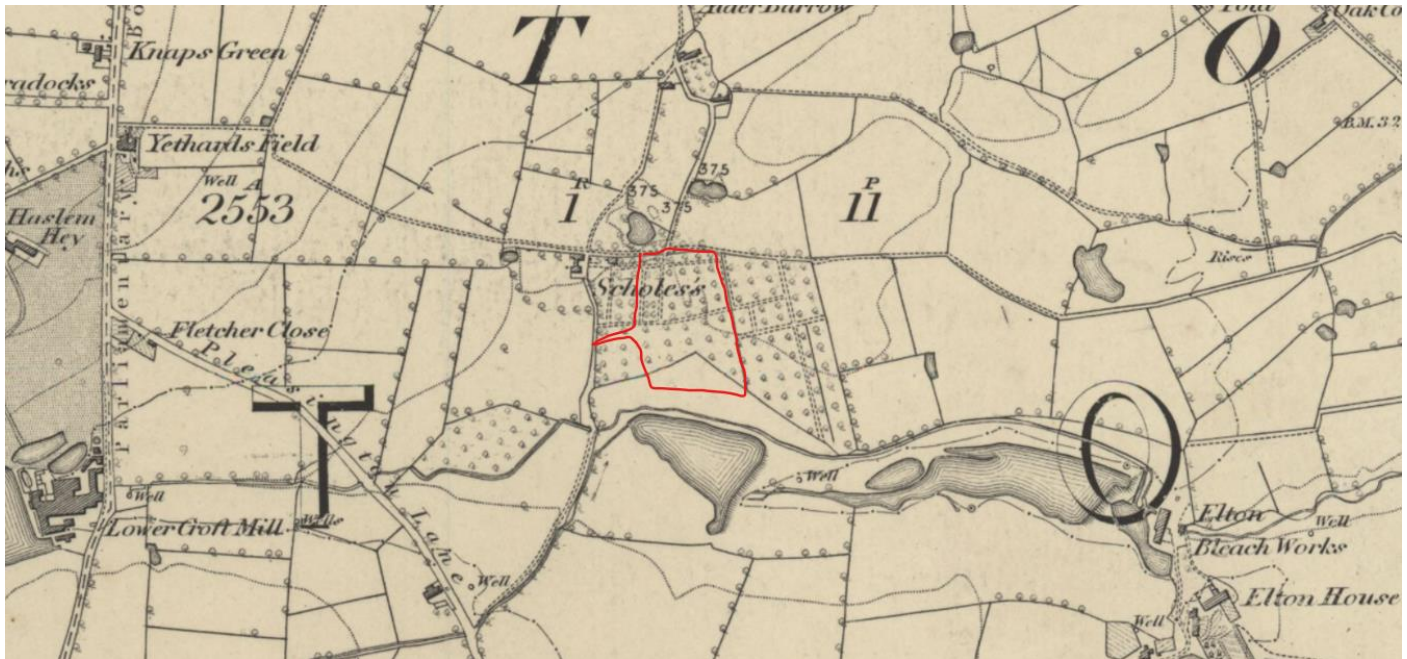
3.2 Leigh Lane – Surroundings



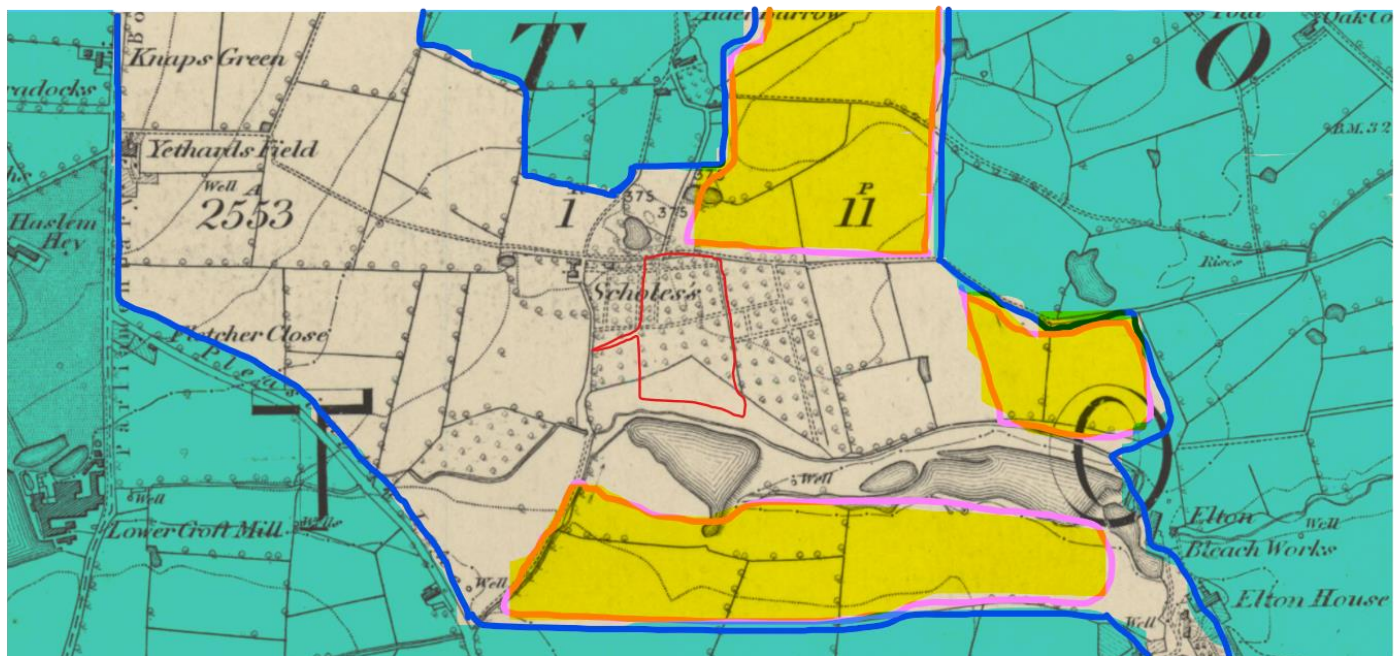
Site entrance from Owlerbarrow Lane and Leigh Lane



3.3 Leigh Lane – Site History

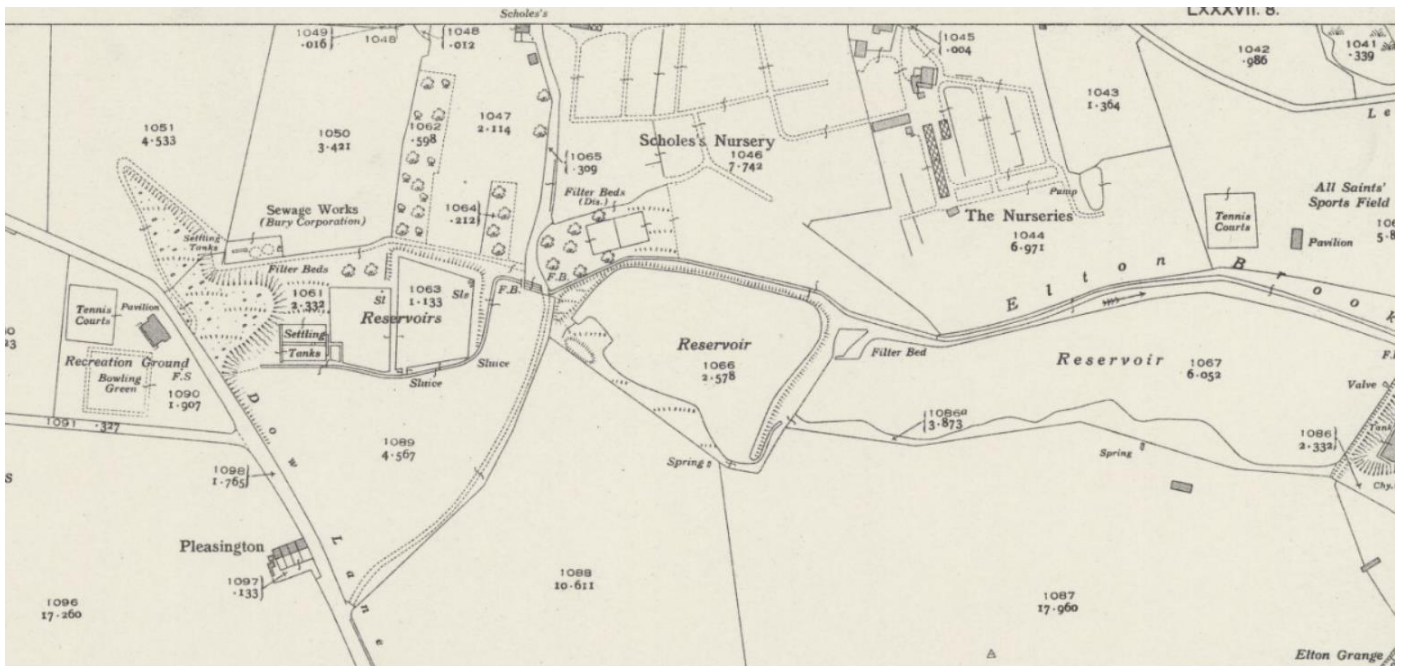


Site changes Since 1850



Red line – the site
Blue – housing
Yellow – Sports and Education

Scottish National Archive



What is clear from reviewing historic site maps is that the land has been subject to considerable direct and indirect change over the last 200 years.

Industrial and commercial activity have directly impacted the lands 'green' value, and we believe that it is only neglect that has contributed to its (limited) ecological value.
The proposal is for the construction of a new house within a previously manmade landscape.

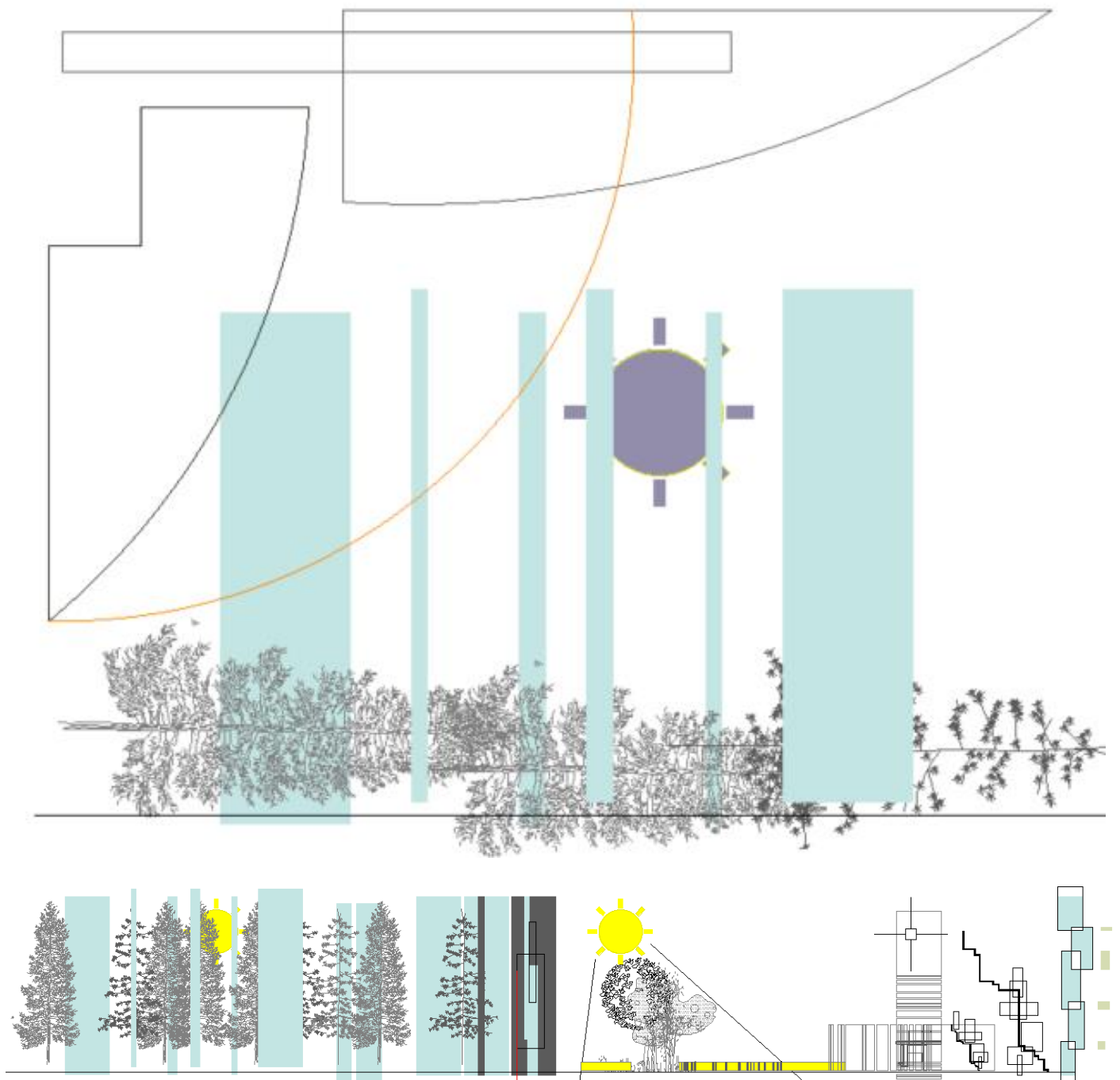
The expansion of Owl Barrow, Elton Brook and Walshaw have had a significant and detrimental effect on the site and the quality and amenity of the greenbelt.

The site is self-contained, and development of the property would not set a precedent in terms of new housing in the area as the site is clearly defined with strong boundaries.



4.0 Design and Sustainability

4.1 Design Development





The concept for the dwelling is first and foremost site-specific. The design is incapable of being lifted and used elsewhere successfully.

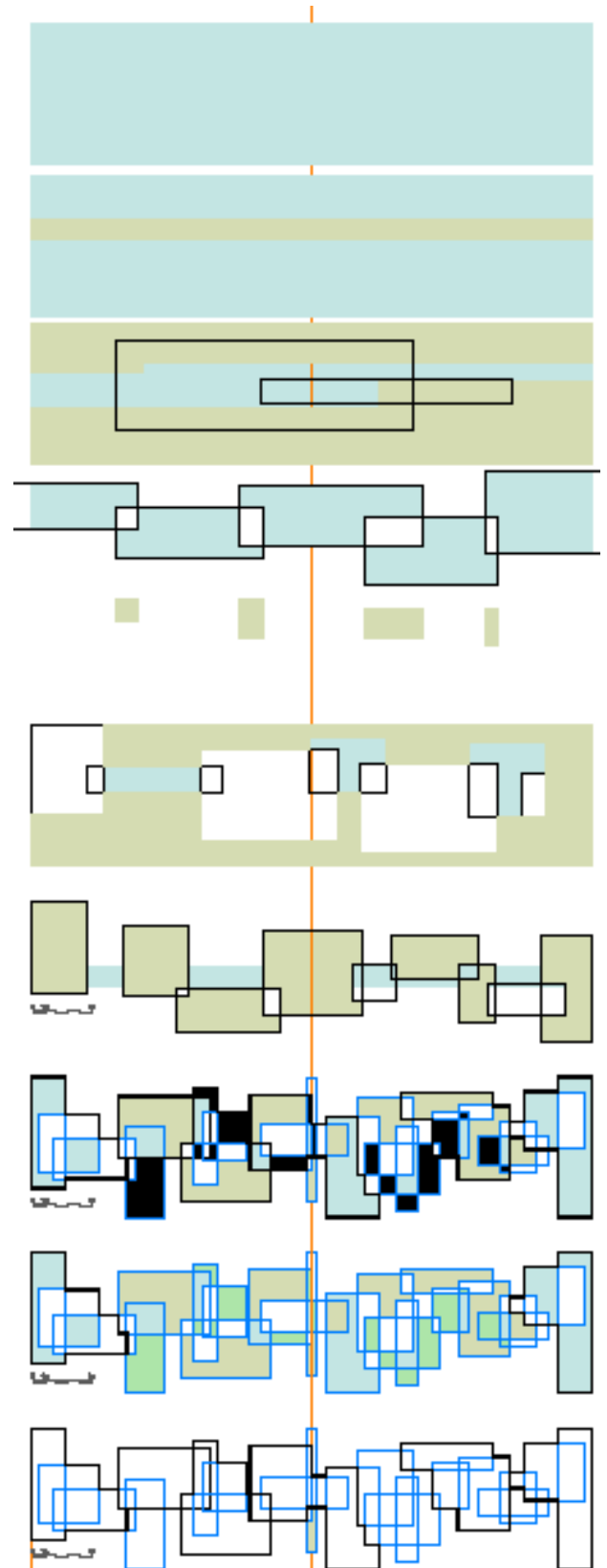
The dwelling is a direct response to the demise of green spaces with our towns. As such, and once complete, the ecological and landscape value of the land would be enhanced not compromised.

Principles

- A direct response to a loss of effective wildlife habitat and the traditional housing approach that de-nudes landscape during construction.
- A response to the loss of landscape infrastructure and the damaging effects on wildlife corridors.
- The championing and celebration of the positive effects of links with nature.

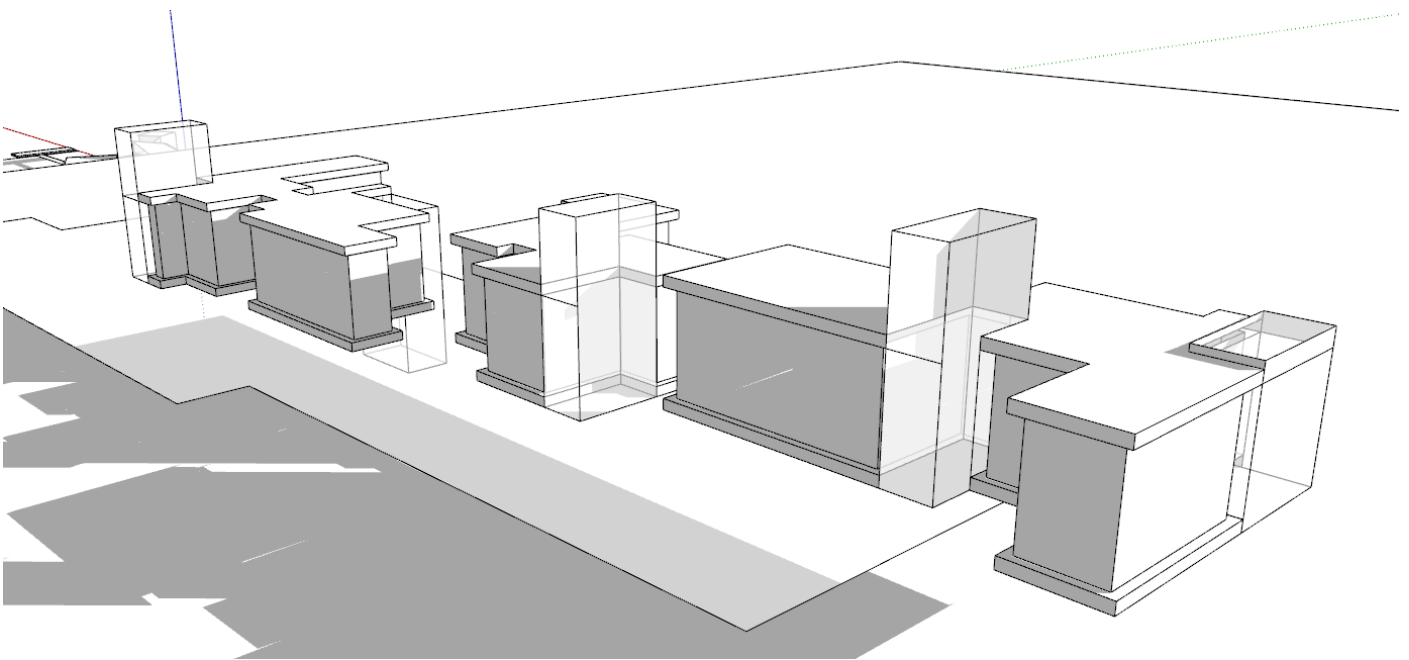
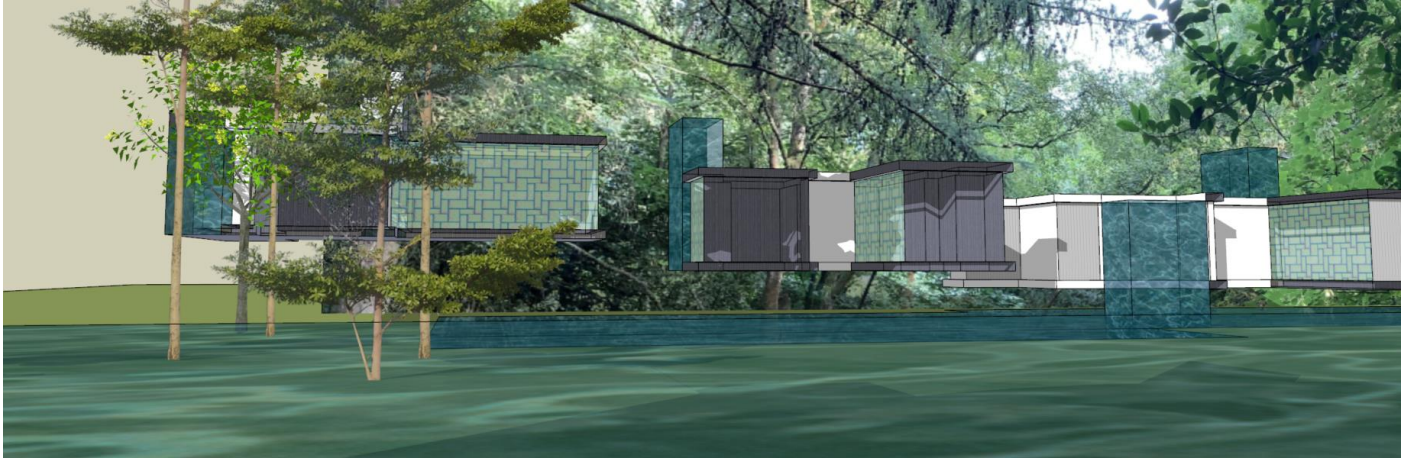
Concept

- Dappled shade – fragmented building form
- A building that sits lightly on the site and encourages wildlife to pass under, over and through the building.
- Appropriate scaling and finishes that are aimed at hiding the building within the landscape.



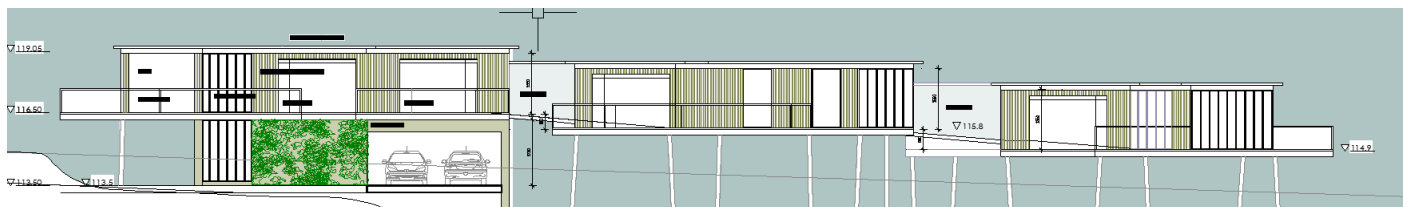
Design, Access, Sustainability and Innovation Statement 2025

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Leaf House, Bury.



Proposed Elevation to West



4.2 Design Objectives and Design Response

The effects of the development upon the local area have been carefully considered in physical terms, with the intention that the proposals as a whole positively influence the site's characteristics and aesthetics and contribute to the quality parameters for other housing developments.

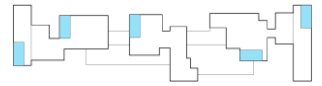
To assess the suitability of an existing parcel of land to provide future proof 21st Century family accommodation with additional associated environmental, and ecological benefits. And to use the findings to explore the potential for the development of new property within the identified site area.

We aim to illustrate that, by demonstrating a unique set of and inter-connecting design ideas, we can ultimately present a Planning Application to Bury Council that attracts support and approval and raises the bar in terms of how new housing can and should be developed in the open countryside.

The land is a utilitarian rather than functional but by embracing what may initially be seen as a challenging site we aim to demonstrate that a sympathetic, subtle and intelligent design application can successfully be applied to it. And, **by doing so we can deliver a 21st Century home that respects tradition and heritage and contributes to a wider design debate on appropriateness.**

Our approach has been to develop intelligent building solutions whose success stems not only from the internal treatment of space but also how the buildings relate to the site and wider landscape. The architecture in this instance is far more than the covered part of the site – it floats within it.

The site is located in Greenbelt and is demanding of the highest standards of design and design-uniqueness. We believe that the design presented in this Planning Application can achieve these exacting standards, and more.



Sensitive treatment of the existing landscape

Use of materials that accord with the surrounding area.

Integration of landscaping and a clearer focus on the external areas and an appropriate treatment of site boundaries, access and building integration

Privacy and security

Site-specific, responsive and sensitive design.

To be as sustainable as possible given the site context and to use Integrated 'whole building' design methods

The buildings will be configured according to need so as to incorporate living and ancillary accommodation appropriately.

The proposed development will incorporate on-site parking which will allow the site to be accessed with ease but at the same time reduce the visual impact of domestic paraphernalia parking will be hidden from view by creating undulations within the existing landscape.

The concept for the site is being developed to meet the recognised key elements of good design as previously referenced by the Design Council:

Character- a place with its own identity

Continuity and enclosure - where public and private spaces are clearly distinguished.

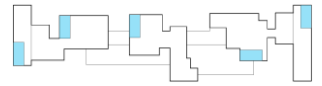
Quality- robust, low energy and low maintenance design

Ease of movement- a place that is easy to get to and move through.

Legibility- a place that is easy to navigate and is accessible.

Adaptability- a place that can change easily future proof facilities.

**Design
Council**



Significantly enhance the ecology on the site

The buildings will be entirely environmental sustainability and low energy use.

The design will integrate landscaping principles that blur the link between the property and the site.

Present a better neighbour development.

Be respectful of the site's history.

Reference the building form and introduce cut outs to get light into the heart of the buildings.

Avoid overlooking.

A creative exercise in finding ways to enhance and improve the places in which people live their lives.

Proactively drive and support sustainable economic development to deliver the home.

Seek to secure the highest quality design and a good standard of amenity.

Support the transition to a low carbon future in a changing climate.

Contribute to conserving and enhancing the natural environment and reducing pollution.

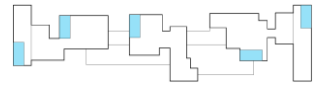
Encourage the effective use of land.

Safeguard over-development by ensuring retention of, and construction within, an 'framed site area'.

The concept presents a unique and site-specific design response.

Retain the character of the existing area in terms of form, mass and scale.

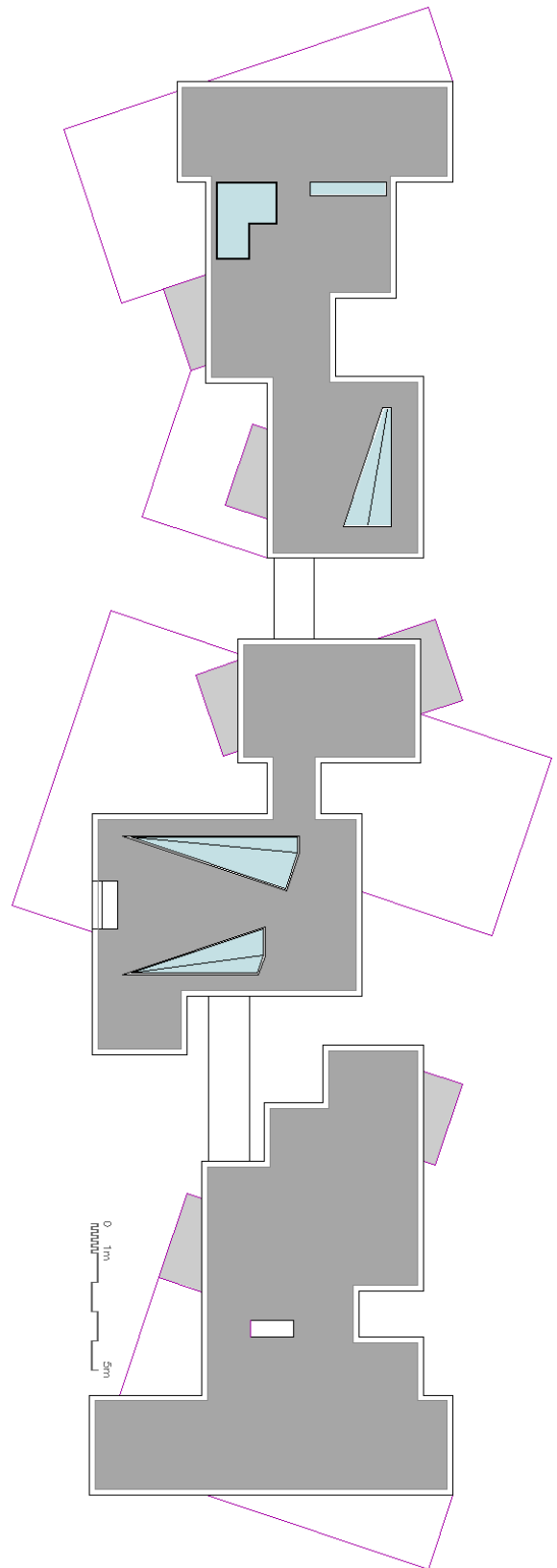
The proposals to present a clear visual aesthetic that will accord with and be unique to this site.



- Avoiding the 'cookie-cutter' housing approach
- Provides a new form of house type currently unavailable in Bury.
- A thoroughly considered site-specific design response.
- Enhanced wildlife habitat
- Landscape integration
- Exceptional environmental credentials
- Genuine community benefit
- Strengthening an urban boundary
- Raising the bar in terms of housing quality
- Encourage community integration.

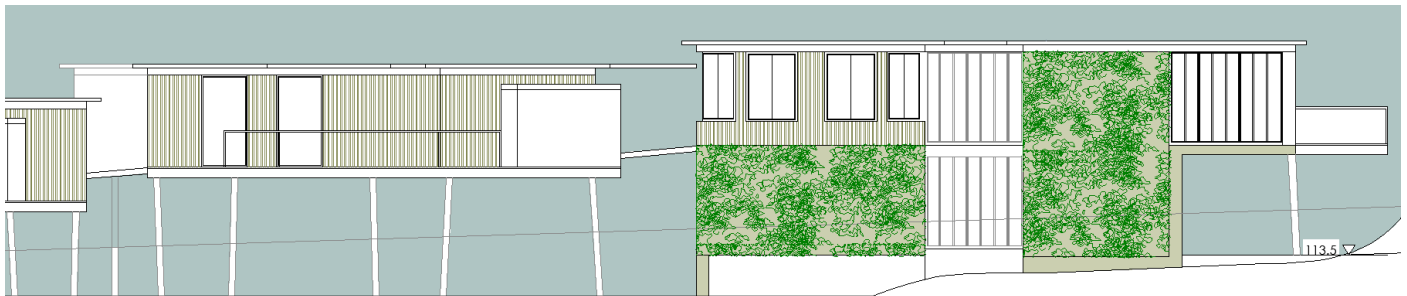
The site has already received considerable interest from third party developers.

It would be easy for the client to negotiate with property developers attracted to the site but, if successful, the resulting mass housing project would fall well short of what a site of this nature could and should provide.

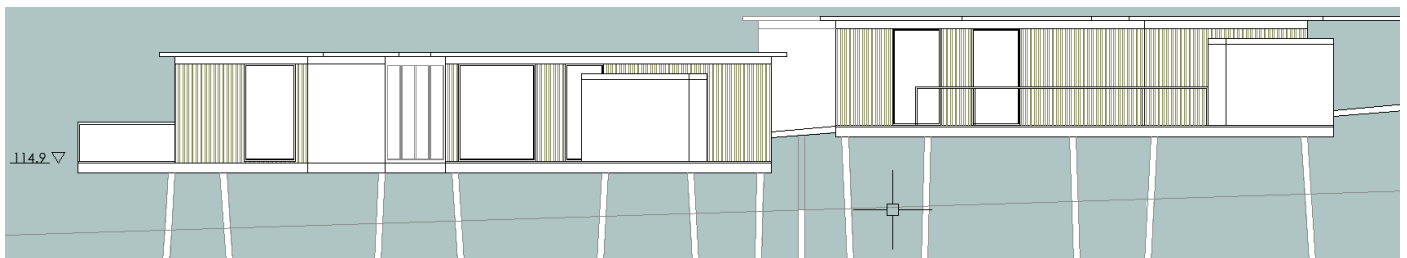


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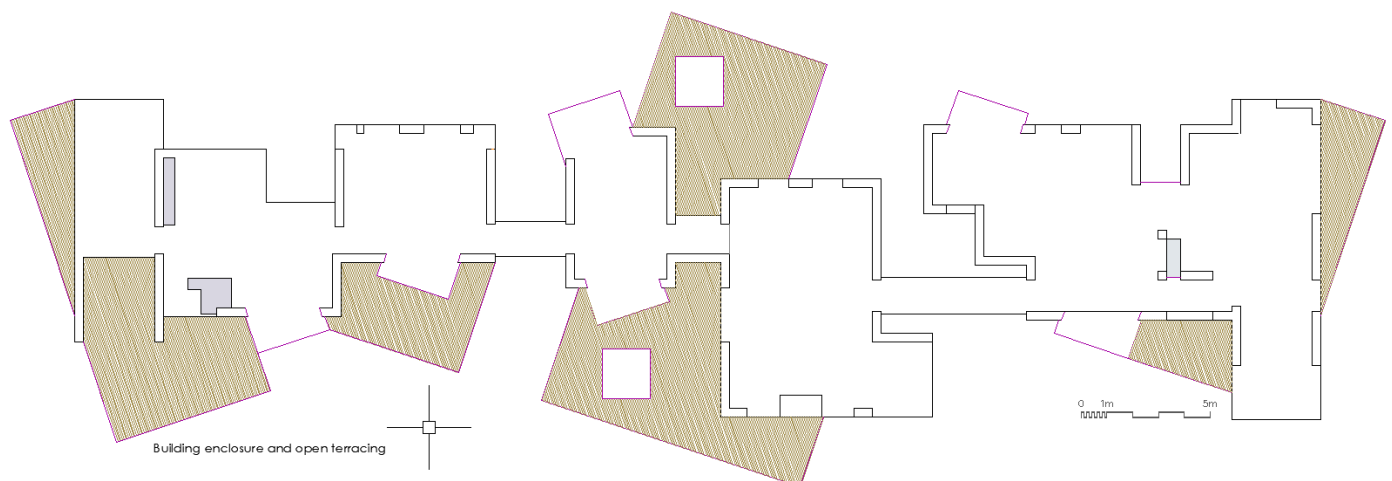
Leaf House, Bury.



Living - green walls will encourage landscape and wildlife integration.



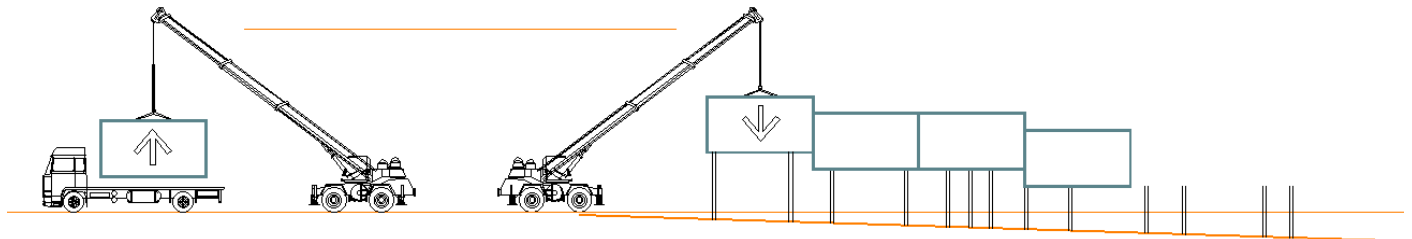
Canted piloti or supporting columns reflect the natural landscape, to emulate the form of existing tree trunks. The building becomes the tree canopy.



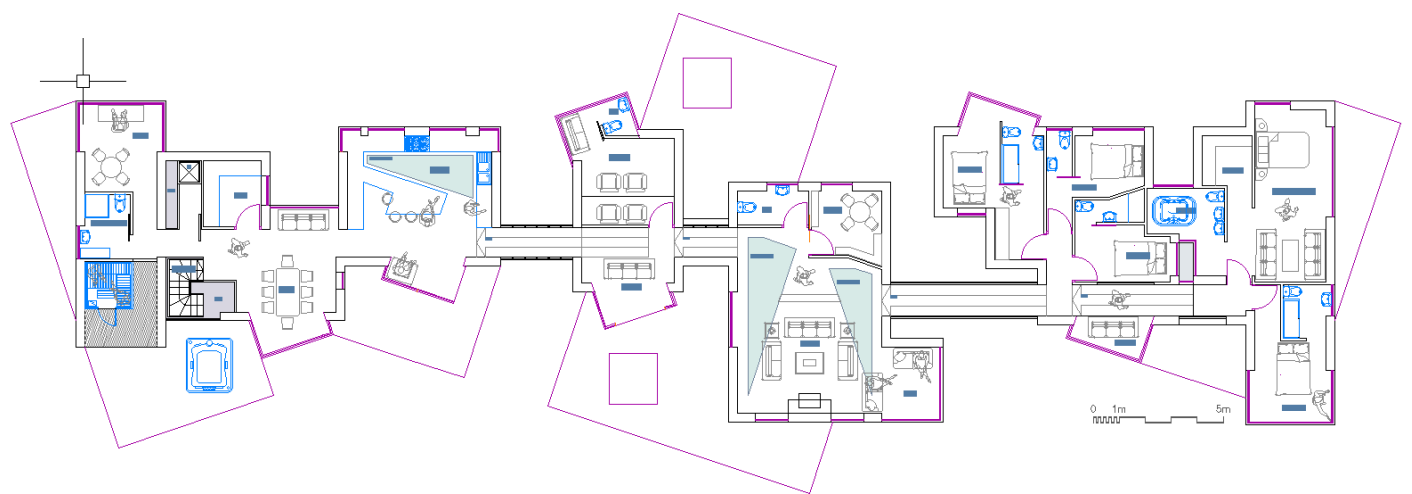
External areas are elevated above the woodland floor to reduce the buildings physical impact on the site.

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Leaf House, Bury.



The form of construction will reduce site harm ensuring the building sits lightly on the site.



Canopy-level accommodation is fragmented to reduce the visual impact of the building.



The structure is open-form, allowing the landscape to penetrate the building - through, round, under and over.



4.3 Environmental Sustainability

Energy Use in the Home

In 1970, only 30% of UK houses had gas central heating; by 2005, this has risen to a staggering 95%. Despite the huge advances in all areas of technology since 2005, the number of households using gas heating has remained relatively constant, with 85% of households still using gas heating in 2019.

Research on global greenhouse gas emissions by sector from 2016 indicated that 73.2% of the global greenhouse gas emissions were from energy (electricity, heat, and transport). Heat accounts for half of the global energy consumption. In fact:

- As of 2019, modern renewables were only supplying 11% of the energy for heating, and so fossil fuels continue to dominate and heat use still has a large environmental impact, contributing 40% of global CO₂ emissions.
- A 2019 survey carried out in the UK by the Department for Business Energy and Industrial Strategy (BEIS) found that 85% of respondents use gas central heating, whereas only 5% use electric. In fact, half of respondents had never even heard of renewable heat.

Further data from 2018 suggests that the distribution of energy consumption within EU households was the following:

Space heating



Water heating



Light and appliances



Cooking



Other



Space cooling



The Energy Saving Trust Reference Zero Carbon (or Code 6 for Sustainable Homes) as:

Being able to reach zero carbon, all emissions that are accounted for under the SAP methodology (space heating, water heating and lighting) must be zero or negative. In addition to this, all CO₂ emissions from cooking and domestic appliances must be offset. The required offset is based on floor area. This offset can be achieved with micro generation, other onsite generation.



The opportunity to deliver a 'flagship' carbon neutral or negative house in this area would be exceptional and would certainly raise the bar in terms of local authority development expectations on other sites.

The house will be airtight to reduce heat loss and oriented to utilise site-specific factors such as solar gain. Appropriate and integrated renewable technologies will be incorporated within the site as an addition to, rather than substitute for, good design.

We would aim to undertake a full environmental lifecycle analysis of the development once the detailed method of construction and delivery is agreed. This would illustrate the sites carbon footprint at beginning and end of life.

Waste minimisation. Avoid construction and site waste.

Potentially installing battery storage to provide an accessible and flexible energy source and to address the growing concerns regarding energy security.

We would above all, ensure that the construction of the property is to the highest standards and well executed, as environmental success relies almost entirely on high insulation levels, airtightness and control.

Other Site-Specific Features

Site layout dictated by orientation / sun path.

House located and orientated for optimum efficiency:

- The open area of site to the South used for photovoltaic array.
- Ground source heat pump located in the open area to the South.
- Air-source heat pumps to be attached to each building unit.
- Back up biomass boiler.

Building Specific

Enhanced levels of insulation
Increased airtightness
....then
Appropriate renewable technologies



4.4 Objectives

Many clients are confused about how to achieve their personal environmental targets particularly with Government policy and best practice often seeming to be moving in opposite directions. Advice is often confusing, not assisted by unhelpful companies wanting to sell products at any price.

Environmental improvements need not be cost-prohibitive, particularly when they are considered at the outset of a project and form part of the initial Brief, and the supporting infrastructure is built-in rather than bolted on later. For example, orientating buildings appropriately, focusing on fabric first and planning how the buildings will react in all temperatures can reduce reliance on mechanical and electrical solutions, but achieve the same result.

This has been the approach at Leigh Lane with the location of the site fully evaluated at the outset in order to ensure effective environmental integration from concept stage design. The resulting detailed design will produce an 'A' rated scheme with technical compliance way above current Building Regulations.



A sustainable building, or green building is an outcome of a design philosophy which focuses on increasing the efficiency of resource use — energy, water, and materials — while reducing building impacts on human health and the environment during the building's lifecycle, through better siting, design, construction, operation, maintenance, and removal.

Global Development Research Centre



4.5 Sustainability and the Proposed Site

Every building is unique, so why should the majority of environmental solutions be the same. The three principle considerations regarding the Leigh Lane site and sustainability are:

- The form of the buildings will allow the utilisation of natural stack ventilation as much as possible.
- Early decision in terms of method of construction – to maximise airtightness and insulation.

The project will be an exemplar environmental project:

NATIONAL

Addressing climate change / mitigation – link to planning
CLIMATE CHANGE RESILIENCE

REGIONAL

Genuine Zero carbon development
Use of land and design to reduce carbon footprint

LOCALISED

Orientation and Configuration to enhance / maximise / promote exceptional environmental performance

Environmental integration: Linking the building form and functionality and their effects on visual aesthetic.

Lowering flood risk / reduced run-off – improving land 'value'

Lowering the sites carbon footprint

Environmental trajectory – policy – energy security. Aim for self-sufficiency.

Air filtration – air quality - wellbeing

Taking sustainability seriously

With energy costs constantly rising and climate change affecting us all, better design and low-carbon technologies have a bigger role to play in the future of UK energy.

The 3D principles of sustainable architecture:

Work with what you have got – it's not necessarily about the 'bling'.

Determine the right approach early.

Keep it simple and honest.

Be realistic about the objectives.

Establish clear and concise objectives.

Produce intelligent not overly complex solutions.



4.6 Outline (considered) Specification.

Outline (considered) Specification.

Water Consumption

Design water consumption less than 125 litres per person per day.

Design Air Test Value

Design permeability 2. m³/hm².

Floor

U-value floor 0.1 W/m²K

Walls

U-value walls 0.11 W/m²K

Roof

U-value roof 0.11 W/m²K - to be calculated in detail.

Windows

Windows WER 'A' Transmittance 0.41 U-value 1.4 W/m²K

Heating Systems

To be confirmed – potentially heat pumps and biomass.

Lighting

100% low energy fittings

Thermal Bridging

It has been assumed that Accredited Construction Details will be followed in relation to the traditional build elements and that best practice will be adopted with regards to all construction elements.

Water Treatment

A sewage treatment plant using rotating biological contactor (or similar) to produce wastewater qualities of better than 15mg/l BOD*, 25mg/l SS and 3.8mg/l ammonia.

The Environmental Performance

In addition to the embedded environmental performance of the building the intention is to utilise sustainable cellulose fibre insulation. Cellulose fibre made from recycled newspaper is a high-performing carbon-negative insulation. Cellulose fibre also provides enhanced air tightness, excellent sound reduction properties and fire resistance and contains no harmful chemicals.

We would hope that by incorporating green technology we would have, ideally, **no reliance on fossil fuels so that in the long-term running the house would have a minimal carbon footprint.**

By intelligent use of appropriate materials and design, we hope we will **create a building that will provide us with a low maintenance, economic and flexible design that can adapt to changing circumstances when needed.**

This would allow us to be more self-reliant and able to remain in our home town despite increasing age and possible infirmity.

AJ Ostergaard



We will ensure that the form of construction is as sustainable as possible in order to Increase speed of delivery, reduce waste, increase air tightness, encourage local manufacture and sourcing, re-use materials and improve quality. Almost all - above 90% of the building will be capable of being recycled at end of life.

The method of construction, where possible, will involve off-site manufacture in order to:

- Increase speed of construction
- Reduce waste.
- Improve air tightness.
- Utilise local products.
- Improve and control quality.
- Reduce carbon footprint.

Technology / Process
Electricity
Solar PV: Solar cells or arrays convert light into electricity.
LED lighting: LED lights have a longer operational life and can provide like for like illumination for less Wattage (power consumption).
Energy Management & Monitoring: Energy monitoring systems and software record and detail energy consumption in real time, allowing for a balance assessment of consumption.
Voltage Optimisation (VO): Voltage optimisation equipment provides a reduced supply voltage to the site's equipment to the required demand.
Battery Storage: Energy storage systems, also known as batteries or thermal stores, capture heat or electricity when it is readily available, typically from a renewables system, to be discharged at a time when renewable generation isn't present or to supplement high demand.
Heating & Cooling
Air Source Heat Pump: Air source heat pumps (ASHPs) absorb heat from the outside air to heat your space and hot water.
Ground Source Heat Pump: Ground source heat pumps (GSHPs) use pipes that are buried in the ground to using the temperature difference to transfer heat for use in heating and hot water applications.
Indirect Biomass/Biofuel Heating System: Using biofuel as the heat source indirect systems heat a primary medium to transfer heat to air, steam or water. Many indirect systems qualify for the renewable heat incentive.
Transport & Logistics
Electric vehicles (EV): Vehicles charged and powered by electricity.
Building Condition: Aimed at highlighting where the building fabric can be improved.



4.7 EDGE Environmental



Welcome

Welcome to Edge Efficiency. With over 80 years collective experience in energy, engineering, and design, we are well-versed in delivering market leading efficiency improvements for businesses, organisations, and residential properties across the UK.

We offer independent and trusted services to our Clients, taking a pragmatic and transparent approach to finding the right solution, based on careful consideration of each Client's organisational, operational and ethical drivers.

'We are all aware of the impact of global warming and climate change. Latest government statistics indicate an average increase in the earth's temperature of 0.18C per decade since 1981. An increase of 0.7C increases the ability of the atmosphere to hold 4% more moisture with the inevitable consequence of increased and concentrated precipitation.

It is a sad inevitability that extremes of weather will continue apace and as such, we believe the majority of housing, even being built today, will become environmentally obsolete within a very short space of time.

Historic Owler Barrow exists because of buildings' (and residents), capability and willingness to adapt to change. Surely this is a lesson to be learned!

Constructing new climate-resilient properties' is commendable, but the question how to ensure new development does not add to the problem has to be dealt with on an individual basis and in a site-specific manner.

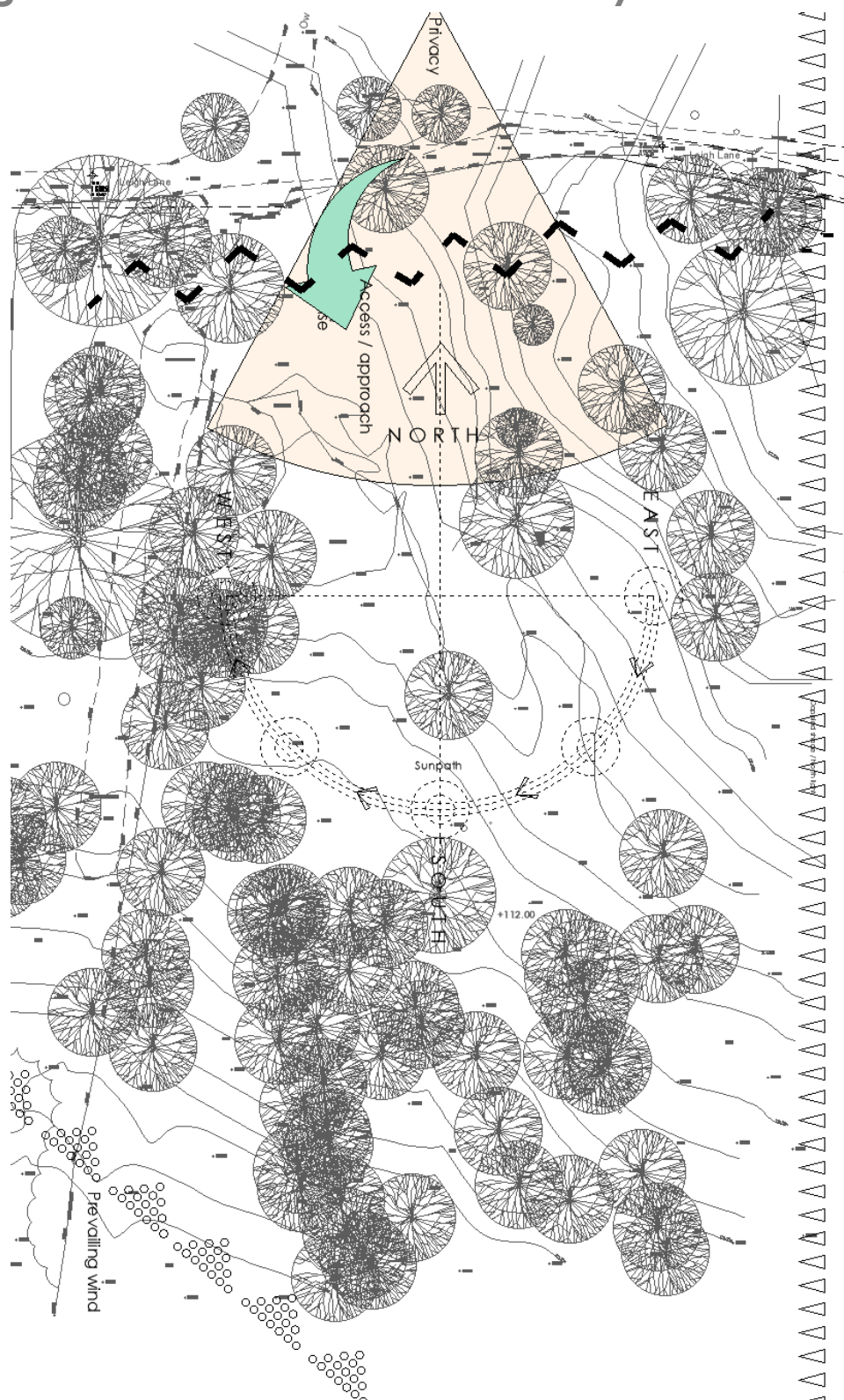
Our involvement would ensure adherence to strict environmental standards with a focus and remit to ensure that the details of this amazing, responsive and genuinely unique design comes to fruition.

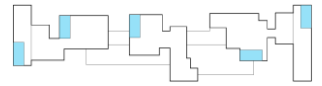


Andrew Brunt Director
MSc, BSc. IEMA, BREEAM –
www.edgeefficiency.co.uk



5.0 Design Context - Site and Site Analysis





5.1 What the Client Needs

Physical Accommodation Requirements

General requirements

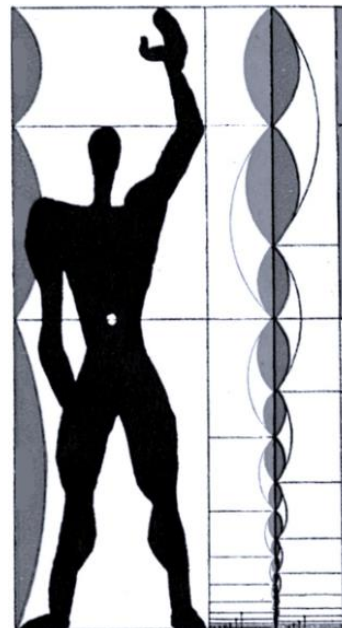
- Plenty of natural light
- Flexibility of space
- Storage
- Fully open to landscape
- Access to shared external areas.
- Access to self-growing area
- Privacy but neighbourly
- Natural materials with contemporary interpretation
- Office space for home working

External Areas

- Sitting area
- Designated car parking
- Focus on house not car
- Wildlife Pond / water
- Raised Kitchen Garden
- Garage / Workshop

Emotional Requirements

- Zero carbon footprint
- Low energy bills
- Sustainable construction
- Security
- Remain residents within the area and to live according to the seasons.
- Future-proof home
- Blur the edges between internal and external space.
- To avoid visually experimental design
- To design a bespoke residence specific to the site
- To utilise the topography to model the property.
- Innovative blend of design and technology solutions which satisfy the project's environmental objectives.
- Integrated 'whole building' design methods





5.2 M4(2) – Accessibility and Flexibility

The house will be designed above M4(2) standards.

Each design feature adds to the comfort and convenience of the home and supports the changing needs of individuals and families at different stages of life. M4(2) standards are about flexibility and adaptability and are thoughtfully designed to create and encourage better living environments for everyone.

M4(2) of Part M of the Building Regulations Approved Document M - for accessible and adaptable dwellings.

Access:

At the point or points at which an occupant or visitor would expect to get in and out of a car:

- Level access to the principal entrance or suitable alternative entrance
- 900mm wide approach route
- All other external doors including those to the garden and parking area will have clear opening width of 850mm (one leaf on double leaf doors), 300mm nib and level threshold

Parking:

The dedicated parking bay to be 3.3m wide x 4.8m long. With a minimum clear access zone of 900mm to one side. The parking bay will be level.

Surface finishes to be firm and even with no loose laid materials

Entrance:

Canopy at level entrance 900mm wide and 600mm deep

Dusk to dawn timer or motion detection lighting to be provided to the parking bay, access route and adjacent to the building entrance
Entrance door will have a minimum 850mm clear opening.

Circulation:

A minimum nib of 300mm will be provided to the leading edge of doors (entrance storey only)

All internal spaces will be step-free
All corridors will have a 900mm unobstructed corridor width.

The Living area is included within the entrance storey (by lift) - living room, dining room or kitchen/dining.

Stairs to have a 850mm clear width
1,200mm minimum clear space will be provided in front of the kitchen units and appliances

Glazing within the principle living spaces will have a cill height no greater than 850mm above floor level

Bedrooms:

The main double bedroom will have 750mm clear zone to both sides and foot of bed (2m x 1.5m bed)

The Bedroom will have a clear access route 750mm from windows and doors.



Sanitary Facilities:

A dedicated accessible Bathroom will be provided – all bathrooms will be accessible.

The Bathroom door will be dual swing

Bathrooms:

The [house] will have a bathroom including WC, basin and bath on the same floor as the main double bedroom. This will incorporate 1,100mm x 700mm clear access zones in front of WC and basin and to the side of a bath

A walk-in bath will be installed.

A track will be installed to facilitate a hoist between the Bedroom and Bathroom (refer to drawing). The building structure will allow for the later addition of this facility.

Services:

Service and switches mounted at 900mm above floor level.

All handles to be mounted between 450mm and 1200mm above floor level

Heating system control to incorporate a separate zone for the annexed area.

The HVAC system will ensure enhanced air quality within the building and reduce air borne pollutants.

The lighting system will be designed to be controllable to reduce glare and afford improved contrast between surfaces.

Accommodation:

By the simple introduction of inter-connecting doors at ground and first floor, the accessible annexe will provide full 2 bed, 2 bath living accommodation.

Why this matters

Legislation

The legislation emanating from the EU, as well as, within the UK is one of equality. There is an expectation that new buildings will provide accessibility levels consummate with the anticipated users. Planned progressive improvements should relate to changes in circumstance and demographics.

Providers (designers) need to continually review their design processes, practices and procedures .

In relation to physical aspects of premises, it is important for the building and surroundings, to foresee possible alterations which may be required during the life of the Home.

Disability

People with a disability, include people with physical, sensory, or cognitive impairments and those with mental or other health issues.

According to the Disability facts and figure report, in 2014 there were over 11 million people with a limiting long term illness, impairment or disability.

Sixteen percent of all working age adults and 45% of adults over the pension age have a disability.



6.0 Landscape and Ecology

The countryside idyllic...

- Space
- Surrounded by greenery.
- Serenity
- Peace and calm.
- Avoiding hustle and bustle
- Cleaner
- Close-knit community
- Safety
- Privacy
- Exercise

In a recent survey, 60% of people interviewed said they would prefer to live in the countryside.

The benefits of living in the countryside are numerous and the opportunities to do so are increasing particularly given the present house building programme, improvements in transportation and the post pandemic changes in working patterns.

When we remove ourselves from nature, our innate emotional relationship with other living beings, known as “biophilia,” is hampered. Merely viewing nature scenes is enough to remind us of how expansive and soothing a direct experience with nature is. When we do not have access to natural beauty, we shut down.

This is backed up by the United States Centres for Disease Control and Prevention's 2007 Behavioural survey. This study found that residents in urban areas were seventeen percent more likely to suffer from psychological disturbance than their counterparts living in rural areas.

Happy Brain Science 2022



The irony of course is that the more houses that are built in the countryside, the more urban the countryside becomes and the more tenuous those all-important links with nature are.

House building at scale is a production process and in the main the only reference to green location tends to be reserved for the marketing strategy where lifestyle is promoted as a focus.

The physical act of building causes irreparable damage to the landscape, and it is left to the new owners to attempt to attract nature back onto the site.

This proposed development is different.

Assessing what is present on site and within the immediate vicinity creates a framework in which to build. **This starts with the identification of outcomes and works back to a design solution that supports them, rather than planning a layout and then retrofitting nature.**

Nature, in its wider context, will be the focus for the development.





6.1 Landscape – Unique Characteristics

What sets the proposed development apart from other housing developments is the care afforded to the development of concept and the avoidance of rushing headlong into the design process.

The principles embedded in the design have been given time to mature. **At its heart is the desire to reduce to an absolute minimum the impact on the existing ecology during construction, and the embracing of nature as an integral part of the long terms stewardship of the land.**

In a direct contrast to traditional housing projects, the proposed design and layout is informed by the landscape strategy.

A thorough site analysis was undertaken at the outset of the project. This provided valuable information in terms of the siting of the house and orientation of the development as a whole.

In addition to this evaluation was a review of other approved housing schemes in the area and an analysis of their inherent weaknesses in relation to ecology and landscape integration.

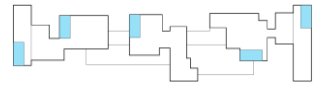
The landscape and ecology attributes of the scheme will be developed through collaboration and research.

The strategy will be designed to accord with the best available ecological and environmental practices.

We will present the design development and construction process as an opportunity to undertake research into the minimisation of construction disturbance on existing ecosystems and the development of an appropriate and sustainable permaculture.

The project will weave together elements of biodiversity, and changes in land management affected by climate change.

Again, it is believed that this area is a significant opportunity for research particularly when this is focused on sustainability.



Key Attributes

- Landscape design first, house design second
- Maximised environmental credentials.
- Ecology – zero impact
- Landscape value – enhanced.
- Ecology value – promoted.
- Edges blurred between domestic and non-domestic landscape.
- Avoiding the sterilisation of development land
- Integration of wildlife areas
- The site itself is a wildlife corridor.
- Minimal domestic garden area
- Hidden domestic paraphernalia.
- Enhanced planting
- Improved biodiversity
- Mixed habitats
- Improvements is the ecology value of the surrounding landscape.
- Visually softened design
- Focus of ecological research

Ecology

The scheme will be zero-impact from an ecology perspective. The existing wood offers little in the way of biodiversity at present. **The introduction of hedge improvement strategies, areas of water, wildlife zones and corridors and enhanced wetland areas will significantly improve the diversity of the area.** The intention is that the implementation of ecological improvements will be overseen by PhD / research – Manc / UCLAN, Bolton University.

The construction process will be open to school children to monitor and study the building's construction.



Community

Already mentioned is the desire to encourage involvement in the scheme from other organisations and institutes.

The project would be progressed to planning with full local authority and community engagement. **Aspects of design and construction will be promoted as educational opportunities to local schools, advanced research establishments.**

The opportunities afforded by this approach will, we hope, create a positive dialogue with local decision makers and help raise the bar in term of stakeholder engagement and transparency.

Landscape

The landscape and ecology attributes of the scheme will be integrated seamlessly. **The project will weave together elements of biodiversity, and changes in land management affected by climate change.**

History / context

Again, linking landscape, ecology and architectural design, the overall intention is to create a natural 'setting' for the scheme. The wider landscape will be based on the natures design principles. This approach allows un-forced integration of landscape form and undulations, water, vistas and appropriate planting. **The overall effect will be to produce a context, once matured, that appears to have been in place for many years.**





Essential contribution to and enhancement of a significant but threatened wildlife corridor.

Development of the site undeniably provides connectivity between natural landscape areas to the East and West of the site. The illustration above highlights in yellow an enhanced wildlife corridor.

Biodiverse, species rich, hedgerows would be extended and maintained, planting of native species of flowers and other would encourage pollinating insects such as bees as well as other animals currently at risk from loss of habitat. Enhancing the habitat to increase carbon capture and storage would help towards the aim of developing a carbon neutral site.





6.2 Proposed Ecology

Enhancement of existing hedgerows.

Introduction of new well-design and managed hedgerows

Introduction of wetland areas at the fringes of the new naturally edged pond will encourage wildlife to re-populate the site. The right environment will be created to encourage invertebrates, amphibians and aquatic creatures to thrive.

Introduction of multiple habitats on site, including water but also unmanaged areas with log piles and brush to encourage an increase in the insect population.



LIVING WALL

In order to encourage the house to merge with the landscape both visually and physically, the taller two storey vertical access unit to the North of the site will include living walls.

The living walls will avoid the need to create large expanses of cladding whilst again encouraging an increase in biodiversity. As well as improving the acoustic properties of the house, the walls will attenuate rainwater run-off.



We are proposing to design the site and properties from the perspective of enhancing natural environments.

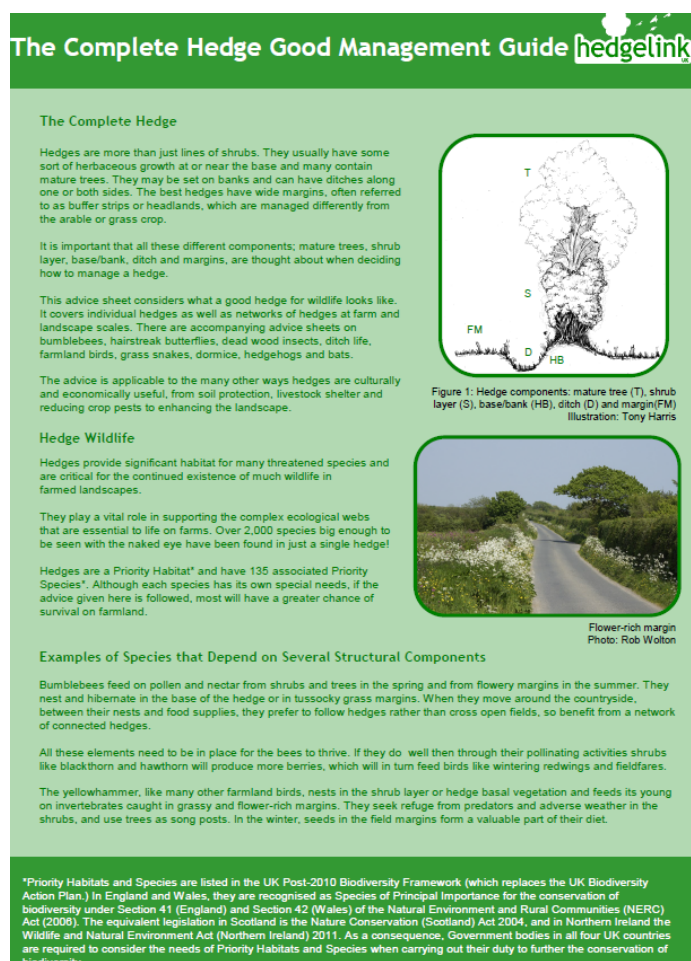
The project will be designed to encourage the integration of wildlife by enhancing natural habitats. It is proposed that these design features are developed in partnership with local ecology experts and research groups. However, as an illustration of this we have highlighted below a number of proposed interventions that can act as an ecological foundation moving forward:

Bats: Identification of 'dark corridors' for use by bats.

Reptiles: Areas of natural / unmanaged areas of land together with new ponds and pools.

Enhancement of the existing watercourse to encourage biodiversity.

Birds: Exceptionally well-planned landscape with species-specific planting. Enhanced hedgerows.

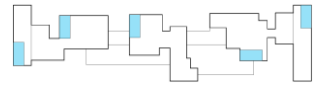


The scheme will be developed in line with the local Biodiversity / Habitat Action Plan (BAP).

The starting point is the protection of existing habitat and then, through informed improvement strategies, develop an ecological management plan for the years ahead.

This will focus on establishing:

- Conservation objectives
- Protection of habitat
- Habitat management
- Surveys, research and monitoring
- Ongoing research and further study



It would be our intension to establish a design group to focus on landscape and ecology. We would aim to create strategic links between educational institutes - local schools, colleges and Universities together with the local Wildlife Trust.

We believe that by doing so, a meaningful and informative relationship can be established that would deliver absolutely site-specific ecological improvements and become a model of good practice for other developments in the countryside.

'I was once invited to the Japanese embassy. Over lunch, a senior official told me: 'We have a big problem in Japan. We cannot get our people to live in the countryside. Everyone wants to live in Tokyo or Osaka. What does your government do to make people move out of towns?'

I explained that it was the opposite in the UK, where people aspire to live in the countryside. A move to the provinces is seen as a mark of success. This desire for rural life is a defining part of our nation but doesn't happen in France or Italy. Indeed, the only people who yearn to live in the French countryside are the British'.

Mark Hedges – Country Life 2017

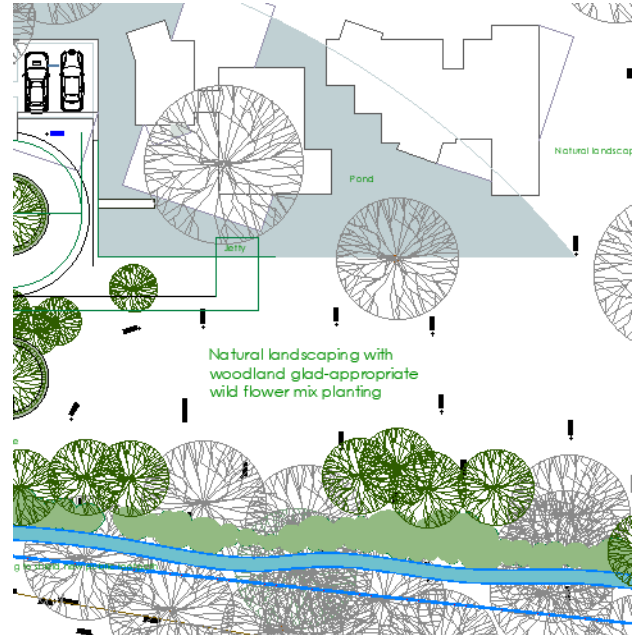


6.3 Existing Ecology and Links to Design

Carbon dioxide loving plants and trees will help to reduce pollution in the air, via oxygenic photosynthesis and will assist in improving the local environment. The planting of native species will reduce the amount of pesticides and fertilisers required on site and also reduce maintenance levels.

Our intention is to create the conditions and habitats on site for numerous species to thrive by focusing on: Appropriately designed new landscape areas and managed wildlife areas, such as the introduction of native woodland wild flowers, and pollen and nectar mixes, that will promote species rich under-canopy grassland for birds, insects and vertebrates, together with the enhancement of the existing hedgerows.

Enhancing the habitat to increase carbon capture and storage would help towards the aim of developing a carbon neutral site.



A creative exercise in finding ways to enhance and improve the places in which people live their lives.

Proactively drive and support for sustainable economic and ecological development

Diversification of flora and fauna

Seek to secure the highest quality design and a good standard of amenity.

Support the transition to a low carbon future in a changing climate.

Contribute to conserving and enhancing the natural environment and reducing pollution.

The concept presents a unique and site-specific design response.



6.4 New Public Footpath





It is the clients intention to construct a new, meandering, public footpath through the site.

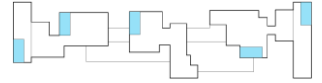
This will lead from the bottom of Owlerbarrow Lane and link with the North/South footpath that leads to Dow Lane.

The footpath will have a timber gated entrance at both ends and bark chippings will cover the length of the pathway. A timber post and rail fence will separate the pathway from the site. The path will not be edged to allow it to merge with the landscape seamlessly. Native species of trees and shrubs will be planted to provide privacy to the new property and to enhance the woodland experience.

The path will bend towards the West at its mid-point and a number of timber benches will be located in this location so that walkers can stop and enjoy the woodland setting and associated wildlife.

To enhance the experience, an interpretive nature trail sign will be installed in this location.





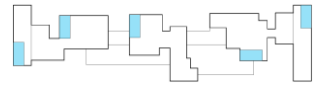
11.0 Flood Resilience

Constructing new flood resilient properties' and infrastructure is commendable, but this requires individual and site-specific approaches. We have considered the plans associated with the Leigh Lane site and support the approach adopted by 3D Eco. It will serve not only to manage the effects of increased precipitation but will deliver an integrated solution that would benefit being applied to other proposed housing schemes.



Andrew Brunt – Director
December 2024

www.edgeefficiency.co.uk



8.0 Planning

To even engage with planning on a site as unique as this requires serious consideration.

It is a privilege to be considered worthy of putting forward a concept for this site at Leigh Lane.

As an architect and registered RIBA Client Design Adviser, it seems to me, that there is generally a rush to design things, without thought of implication. **When the quality of output is dictated by care, a little time, a sense of responsibility and a desire to work in partnership with everyone with a roll to play in the process. Good design is not the preserve of one profession.**

Designing buildings is difficult. Designing the right buildings is particularly demanding. Designing the right buildings on a planning-sensitive site is wholly consuming and deserving of the very best in unique thought.

This application is heart-felt. That goes some way to establishing a degree of trust with the officers afforded the task of determining applications, but nowhere near far enough to assume or encourage positivity.

Having been involved in a dozen Green Belt / Open Countryside-approved applications, I recognise the importance of thoroughness of concept and clarity of approach and that each results in a different precedent.

Precedents are forever being set. I fully recognise that the responsibility on the shoulders of those responsible for approving such schemes is considerable and therefore should not be taken lightly. **We believe that this proposal is an opportunity not a challenge.** We would urge you to read and consider in detail this application. We believe it worthy of serious consideration.



This planning application seeks feedback for the proposed construction of a new dwelling.

The project is multi-faceted and considerable care has been taken to produce a unique house concept incorporating a site specific environmental solution and integrated landscaping and ecological enhancement.

This extensive D&A Statement illustrates how these dwelling can be integrated effectively within the landscape.

The proposed design solution is clearly dictated by landscape and the desire to enhance the ecological value of the site as a whole.

The site can effectively be accessed off Leigh Lane.

We are confident that the architecture will be entirely appropriate to setting.

We recognise that any application in this location will be assessed against certain established planning guidance, and we schedule below what we believe to be the defining policies likely to affect the scheme.

'Planning law requires applications for planning permission to be determined in accordance with the Development Plan unless other material considerations indicate otherwise.

The Government's overall objective for the planning system is to deliver sustainable development, and one of the major material considerations of the decision-making process is the provisions of Government policy and the NPPF.

The NPPF places a general presumption in favour of sustainable development at the heart of the planning system. Paragraph 11 of the NPPF highlights that planning permission should be granted unless there are specific policies that indicate that development should not take place, or where any identified harm is so significant and demonstrable that it outweighs the benefits of the development.

.....unless any adverse effects of development "substantially" and "demonstrably" outweigh the benefits of a development, the expectation is that planning permission should be granted. even in cases where there is conflict with the Development Plan'.



8.1 Pre-Planning Application

A pre-application submission was made on the site in November 2019.

Ref: 02380E

Officer: Helen Goldsbrough

The following planning references relate to and accord with the findings of that pre-application.

The original wording of the pre-application response is highlighted in blue text.

This section details how the specific design of this home will enhance the site location, promote economic benefits to the local area and social advantages to the community. It will acknowledge through an assessment of planning policy and in response to the previous pre-application feedback, how by developing an architectural responsive and creative solution, these concerns can be addressed.

Paragraphs 143 and 144 state that inappropriate development in the Green Belt is by definition, harmful and should not be approved except in Very Special Circumstances (VSC). Planning Authorities should ensure that substantial weight is given to any harm in the Green Belt. VSC will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations.

The project is widely supported by the National Planning Policy Framework and the Bury Local Plan - Core Strategy:

- The scheme is considered exceptional from an architecture, sustainability and ecology perspective and as such is considered to address the requirement for 'very special circumstances'.
- Development of a high quality, sustainable build, appropriate to its type and setting, with no adverse impacts on neighboring properties.
- The quality of the Greenbelt in this area is compromised by previous use.



Paragraph 145 of the NPPF regards the construction of new buildings in the Green Belt as inappropriate development. Exceptions to this are:

- a) buildings for agriculture and forestry;
- b) provision for appropriate facilities (in connection with the existing use of land or a change of use) for outdoor sport and recreation;
- c) extension or alteration of a building providing it does not result in disproportionate additions over and above the size of the original building;
- d) replacement of a building, providing the new building is in the same use and not materially larger than the one it replaces;
- e) limited infilling in villages;
- f) limited affordable housing for community needs under policies set out in the development plan (including policies for rural exceptions sites); and
- g) limited infilling or the partial or complete redevelopment of previously developed land, whether redundant or in continuing use excluding temporary buildings) which would
 - not have a greater impact on the openness of the Green Belt than the existing development; or
 - not cause substantial harm to the openness of the Green belt, where the development would re-use previously developed land and contribute to meeting an identified affordable housing need with in the area of the local planning authority.

Policy OL1/2 - New Buildings in the Green Belt states that the construction of new buildings in the Green Belt is inappropriate unless it is for agriculture and forestry; essential facilities for outdoor sport and recreation; limited extension, alteration or replacement of existing dwellings provided that this would not result in disproportionate additions over and above the size of the original dwelling; and limited infilling in existing villages. as set out under Policy OL1/3.

- The land has for at least 160 years been managed for commercial purposes, although this use is now redundant. The undulations in the landscape and other features compromise the quality of the greenbelt when in fact the land could be considered brownfield.
- The location of the property, within an existing woodland serves to minimise the impact of the development on the openness of the greenbelt.

UDP Policy EN1/1 - Visual Amenity states that development will not be permitted where proposals would have a detrimental effect on public views of prominent or important buildings, especially those in areas of architectural or historic interest, or the visual amenity both within, or viewed from, areas of environmental interest such as the Green Belt, Special Landscape Areas or the river valleys.

- Approval of the scheme would see the preservation and enhancement of the landscape.



- The proposals present a building at one with and complimenting nature. The domestic area of the property is limited and avoid being over manicured.
- Development of the building will harmonise with nature and promote enhanced wildlife and biodiversity.
- The house is designed to last a lifetime and allow the family to reside in the area.

The proposal does not fall under one of the exceptions listed above and is therefore considered to be inappropriate development in the Green Bel. A case for very special circumstances would therefore be required. Significant weight is placed upon the preservation of openness of the Green Belt therefore the aim should always be to preserve the openness of the Green Belt and to keep built development to the minimum scale. Any supporting statement would need to address how this proposal protects the openness of the Green Belt. OL1/2 also states that when planning permission is sought for an inappropriate development it will be for the applicant to demonstrate the 'very special circumstances' why permission should be granted.

As discussed on site application 58848 may be useful to review in terms of what needs to be submitted in relation to houses within the Green Belt that require VSC.

- The land has for at least 160 years been managed for commercial purposes, although this use is now redundant. The undulations in the landscape and other features compromise the quality of the greenbelt when in fact the land could be considered brownfield.
- The location of the property, within an existing woodland serves to minimise the impact of the development on the openness of the greenbelt.

Principle (Residential)

The National Planning Policy Framework should be treated as a material planning consideration and it emphasises the need for local planning authorities to boost the supply of housing to meet local housing targets in both the short and long term. There is a particular emphasis, as in previous national planning guidance, to identify a rolling five year supply of deliverable housing land.

Bury's Strategic Housing Land Availability Assessment sets out the latest housing supply position, which is made up with sites that have an extant planning permission and sites that have potential to obtain planning permission in the future. This shows that there are a number of sites within the Borough with the potential to deliver a significant amount of housing. However, not all of these sites will contribute to the five year supply calculations as many sites will take longer than five years to come forward and be fully developed (e.g. some large sites could take up to ten years to be completed). As such, latest monitoring indicates that the Council is unable to demonstrate a five year supply of deliverable housing land and this needs to be treated as a material factor when determining applications for residential developments.



Bury – Five Year Supply Statement:

- 1.11 The envisaged housing trajectory shows that 1,676 units are expected to be completed on housing sites within Bury over the next five years (2022-2027). This equates to an average completion rate of 335 dwellings per annum over the next five years.
- We would suggest that approval of the property contributes to the ever-changing housing needs requirement in Bury but by the definition of uniqueness, the value of the contribution would be significant in terms of enhancing housing quality.

UDP Policy H1/2 states that the council will have regard to various factors when assessing a proposal for residential development, including whether the proposal is within the urban area, the availability of infrastructure and the suitability of the site, with regard to amenity, the nature of the local environment and the surrounding land uses.

Whilst the proposal site is located within the Green Belt, there is a former kennels and dwelling to the west, and properties along Owler Barrow Road and Leigh Lane that can be viewed from the site. The principle of a new house on the site, subject to the considerations of the Green Belt policies are capable of being considered to be acceptable in terms UDP Policies H1/2 Further Housing Development and H1/2 - Further Housing Development.

- Access to local amenities and the reduction on the reliance of vehicular use is considered important, particularly when considering the carbon impact of the proposal in general.

Layout and Design

Policy H2/1- The Form of New Residential Development requires all new residential development to make a positive contribution to the form and quality of the surrounding area.

Policy H2/2 - The Layout of New Residential Development seeks to ensure that new residential development will be acceptable in terms of layout in order to provide a good quality residential environment. In addition to this, Policy EN1/2 - Townscape and Built Design seeks to ensure that any proposals would not have an adverse impact on the particular character and townscape of an area.

No formal elevations or layouts have been submitted with the application to comment on.

Careful consideration should be given to the impact of any proposed new building from several locations, in both the immediate vicinity and the wider countryside. The view of the proposal from main roads, public footpaths and settlements will be given significant weight.



Any submission should also include site sections to allow the relationship of the proposal in relation to the topography of the site to be fully assessed.

As stated above VSC would need to be demonstrated to overcome any harm from the development to the openness of the Green Belt. The application will also need considering against Paragraph 79 e of the NPPF if you wish to argue that the proposal is an isolated home of exceptional quality. This will aid the VSC case.

- We do not believe that the proposal have any negative effect on the character of the area. In fact, due to the design form, the building will be largely obscured from public view.
- A topographical survey and site assessment form part of this submission.
- We do believe that the house design is exceptional and that although accessible, the site is separate from and not isolated from, its local community.

Residential Amenity

UDP Policy H2/1 seeks to ensure that the position and proximity of proposals does not impact on the residential amenity of neighbouring properties.

Due to the location of the proposal, the only properties likely to be impact are Schole's House and Brook View. The application should seek to ensure that the aspect standards within Supplementary Planning Document 6 are adhered to when considering the location of any proposed dwelling.

- The house has been positioned to avoid almost all existing trees and also to the East of the site to avoid compromising the residential amenity of neighbouring properties.

Ecology

The plot is located within a site of nature conservations interest and as such UDP Policy EN6/2 - Sites of Nature Conservation Interest (Local Nature Reserves and Grade B and C Sites of Biological Importance) applies. Planning permission will not be granted for development which would damage either directly or indirectly, the nature conversation interests of sites of particular ecological significance (Local Nature Reserves or Grade B and C Sites of Biological Importance) unless conditions can be imposed that would acceptably mitigate those impacts.

- Extreme care has been taken in designing the proposals such that the resulting building form and location enhances the ecological benefits of the site.

These designated sites are areas of important nature conservation interest in the Borough and will continue to be part of the Council's long-term wildlife protection and



management policies. Grade B SBI's are those of district importance and Grade C SBI's are those of more than local importance. Each is considered to have substantive nature conservation value.

- Nature conservation and landscape improvements are a fundamental aspect of the proposal.

The presence of a Grade B or C SBI is a material consideration in determining an application for development. The proposed development lies within the Cyrus Ainsworth and Parkers Lodges Grade B Site of Biological Importance. As such, the Greater Manchester Ecology Unit have been consulted as part of the pre-application process. GMEU have confirmed that it would consider that the proposal would be contrary to UDP policy and that they would most likely object and recommend refusal of any application for residential development unless it can be demonstrated that suitable mitigation can be provided. Should the LPA be minded to approve such an application contrary to GMEU recommendations above, GMEU would expect very detailed ecological survey information and comprehensive mitigation and or compensation proposals with a minimum of 10% net gain in line with recent government recommendations. This would include the provision of:

- A full extended phase 1 ecological survey would be required including breeding bird and winter birds survey (recorded as historically important, but no recent data);
- A full landscape and environmental management plan (GMEU are aware that the site has significant issues with invasive species) demonstrating full mitigation and or compensation, most likely through enhancement of the remainder of the Woodland element of the SBI and beyond the SBI to create new habitats. GMEU recommend the use of the defra off-set matrices given the likelihood of them becoming mandatory as part of the forthcoming Environment Bill.

In addition to the above there are a number of TPO trees located within the site as such policies EN8/1 - Tree Preservation Orders and EN8/2 - Woodland and Tree Planting need to be taken into consideration. Policy EN8/1 ensures that the Council will make Tree Preservation Orders where they are needed to protect trees and woodlands whilst policy EN8/2 ensures that the Council will support and encourage new woodland and tree planting in the Borough. In considering development proposals, the Council will encourage the planting of hedges, trees and woodlands using locally native species. With the tree cover, the site does add to the character of the locality. However, without the findings of a detailed arboriculture report, it is difficult to give an accurate assessment at this stage. The quality of the trees on the site appears to be mixed but most the larger trees are, in my opinion decent quality and worthy of retention. Any removal of trees should be justified within a qualified assessment and any loss should be mitigated by appropriate replacements and a wider tree management plan.



- We would welcome engagement with GMEU. We see the potential of the site from an ecology perspective as being one of partnership and education.
- The house has been designed to retain almost all of the existing trees. Where a couple of trees are required to be removed, these will be replaced as part of the overall ecological mitigation measures.

Highways

The applicant would need to demonstrate that they have private vehicular rights of access over Leigh Lane/Public Right of Way (Bridleway) No. 143, Bury and include the access route within any red-edge site when submitting an application. Adequate access arrangements from Leigh Lane and provision of parking facilities within the curtilage of the site would need to be demonstrated along with confirmation that refuse can be collected from the property at a point (and from facilities) agreed with Waste Management.

The proposal would intensify the use of the access point and therefore the access should be improved to the required standards set out within the 'Manual for Streets' – this would include improving visibility, width of access, etc.

<https://www.gov.uk/government/publications/manual-for-streets>

The fire risks need to be considered in view of the potential access issues that could be presented if this development were to go ahead. Greater Manchester Fire and Rescue Service have been consulted as part of the pre-application process but have not responded at the time of writing. Should a response be received it will be forwarded on.

- Visibility splays are included on the landscape plan.
- On site parking is provided.
- Waste management will be addressed in detail and in such a manner as to avoid compromising the highway.
- The provision of on site water in the form of a large pond will improve fire safety.

Drainage

A sustainable surface water drainage scheme would be required. Given the nature of the site and presence of trees, all new surfacing/ buildings should respect the root structures of the trees and be porous.

- The design takes into account the management of both surface and soil water. The drainage solution will not adversely affect nor increase surface water run off from the site. In fact, this will be improved.
- Tree protection measures are included on the Landscape Management and Construction Methodology plans submitted as part of this application.



Environmental Health

Contaminated Land

The site is currently occupied by woodland. Current land uses in the surrounding area include residential, open space and woodland. Previous uses at the site and in the surrounding area have included plant nurseries, filter beds associated Lower Croft Mill and a sewage works with associated waste disposal activity. The site is not located within 250m of a known landfill site but is located approximately 35m to the north of Elton Brook. The site is situated on glacial till deposits over the Lower Coal Measures Secondary A Aquifer. The site is not located within a Radon Affected Area.

Based on the environmental setting and the proposed development (1 dwelling), it is recommended that a desk study/preliminary risk assessment is carried out. However, this can be submitted after a decision has been made on any application for residential development. Contaminated Land conditions would be recommended.

It is also recommended that a Japanese Knotweed and invasive species survey be carried out.

- We would request that this aspect of the application is subject to treatment by Condition.

Air-Quality

The site is not located within an Air Quality Management Area. Due to the scale of the development (1 dwelling) it is considered very unlikely that the development would create an increase of more than 500 AADT (annual average daily traffic). Therefore, in line with the EPUK Guidance, an air quality assessment will not be required.

However, Bury Council has been identified by DEFRA as an area requiring to significantly improve air quality. The Government report, 'UK Plan for Tackling Roadside NO₂', published in July 2017, identified Bury Council as an area having one or more roads with concentrations of NO₂ above statutory limits, according to more recent modelling results. Bury is therefore required to address these exceedances and we are currently engaging with Government on our proposed plans to reduce NO₂ concentrations across the borough.

Due to this requirement and in line with the principles of Good Practice set out in the EPUK Guidance, the environment section will recommend that a condition be attached to any permission that requires the installation of an Electric Vehicle charging points at the dwelling.

- Noted. Electric vehicle charging will be afforded on site. Refer to environmental analysis which forms part of this report.



9.0 Conclusion

This Design, Access, Sustainability and Innovation Statement sets out the background to the proposals.

We believe that the concerted effort to develop a site-specific and complex design solution is considered worthy of this site and would urge Bury Council to secure approval of the application.

John N. Pickup - 3D Eco
BA(Hons) B(Arch) RIBA, ARB
RIBA Client Design Adviser

(Co-author of the RIBA Client Adviser Sustainability Briefing Toolkit)

Red Cottage
February 2025