



Hook Norton Community Housing

Design and Access Statement
January 2020

Contents



Introduction	3
Team	4–5
Site	6
Site Photos	7
Site Opportunities and Constraints	8
Hook Norton Analysis	9
Site Survey Summaries	10
Community Engagement Process	11–15
Architectural and Sustainability Strategy	16
Pre-application Advice	17
Proposal – Masterplan	18
Public / Private & Surveillance	19
Routes and Connections	20
Materiality	21
Site Sections	22
Terrace Design	23
North Terrace	24–26
South Terrace	27–29
Community Building	30–33
Storage Buildings / Bike Store	34
Landscape Design	35–41
Sustainability	42–46
Mobility & Access	47–48
Precedents	49–52
Addendum List	53

Introduction

At a time of climate emergency when many new housing developments lack sustainable measures, the people of Hook Norton have generated an innovative community-led project of affordable homes that will have a positive impact on the environment and be fit for the future.

The opportunity arose when Hook Norton Low Carbon (HNCL) identified a piece of neglected and overgrown land to the east of the Sports & Social Club (SSC) behind Bourne Lane, owned by Cherwell District Council (CDC). The council were approached and were keen to work with the community and HNLC on developing an affordable and sustainable housing project for those in need with a strong local connection.

The Low Carbon Hub in Oxford provided grant funding via the OxFutures programme for a feasibility study and an extensive round of community engagement and consultation took place from February 2018 to January 2020. Following a community wide survey in March 2018 that yielded an unusually high return and a series of open meetings, the needs of the community began to be defined. It became clear that a different way of living was popular, with homes that could be designed to increase social contact and neighbourliness with access to shared spaces and facilities such as communal gardens and allotments. The idea of a community building began to take shape where people could meet and share activities with the whole village. The sustainability element proved equally important and enthusiasm for electric vehicles and a shared car club, along with renewable energy features, was high.

The project generated considerable local interest and excitement and in August 2018 four architectural practices submitted bids to develop the next phase. Charlie Luxton Design presented the most imaginative and community based interpretation and were unanimously chosen as the project Architectural Design Team.

They have since been involved in intensive consultations with the community and have brought the needs and ideas of the whole project to life. They have managed to fit as many homes as possible onto the site without compromising on design quality so that more members of the community who have shown interest in the homes may get to live in them. The most popular idea for the Community building was a Community Café which they have skilfully combined with other amenities to make maximum use of the space.

The homes combine design and environmental merit and will be built to Passivhaus standard, which by achieving a high level of air-tightness will ensure maximum comfort with low running costs and reduced carbon emissions. The houses are positioned on the site to make the most of renewable energy features like solar photovoltaic panels with an extensive array on each roof and on the community building.

The Low Carbon Hub in Oxford are designing a micro-grid for the project which could provide a decentralised system of locally generated energy and allow the community to be more energy independent and environmentally friendly.

The project aims to be a replicable example of a energy positive and carbon negative project and is also striving to have a carbon neutral construction process, by using local suppliers and installers and by establishing links with local colleges to provide construction apprenticeships where possible.

Cherwell District Council agreed to transfer ownership of the land to Hook Norton Community Land Trust at a price that would enable the homes to be affordable in perpetuity. The Community Land Trust was formally set up in July 2019 with members of the local community and other practitioners with a range of knowledge and expertise to help guide the project through to the next phase.

Charlie Luxton Design, a Hook Norton based practice, have prepared this full planning application. Assuming it is successful the next step is to prepare for a Community Share Offer later in the Spring, another step on our road to making real change to our community and village.

Cathy Ryan

Chair, Hook Norton Community Land Trust

Team

Hook Norton Community Land Trust

Community Land Trusts have become an increasingly popular example of local people taking control and transforming the future of their communities. They are set up by the community for the community and can provide a creative and innovative solution to the growing housing crisis where rapidly increasing house prices far exceed what is affordable for local people.

Hook Norton Community Land Trust (HNCLT) is a not for profit Community Benefit Society that was set up in July 2019 and registered with the Financial Conduct Authority and is part of the National Community Land Trust Network. It was formed to develop a small group of affordable, sustainable homes that will be available to local people on a piece of overgrown land owned by Cherwell District Council (CDC). The homes will be based on the needs of the community already identified through extensive consultation and designed to encourage social contact and community spirit.

The homes will have a carbon positive impact on the environment and will benefit from renewable energy systems and low carbon transport options.

Many local people want to remain in their communities and know their neighbours but have no option but to move away from the area in order to afford somewhere to live. CDC have agreed to transfer ownership of the land for the community led project to Hook Norton Community Land Trust which will ensure that the homes remain affordable in perpetuity.

HNCLT was formed initially with a core group of four directors which has now grown to a Board of eleven members including members from the local community and other practitioners with a range of knowledge and expertise to guide this exciting project through to completion.

The Board members are:

Cathy Ryan (Chair)	Emma Callery (Company Secretary)
Tim Lunel (Treasurer)	Andrew Bowen (Support to Chair)
Diana Barber (Administrator)	Barbara Hammond
Fiona Brown	Gill White
Martine Spalding	Mike Richardson
Justin Bere	

Registered office: The Brewery, Brewery lane, Hook Norton, Oxfordshire, OX15 5NY
Community Benefit Society – Society Number 8145

Charlie Luxton Design - Architect and Project Lead

Charlie Luxton Design creates architecture for the 21st Century: designs that respond to local materials, traditions and climate. We have extensive experience in designing and delivering sustainable buildings. For us this means more than building energy efficient schemes with a low carbon footprint. We believe that true sustainability means creating buildings that are loved, and that only places that are valued in this way will last. Our aim is always to create buildings that look beautiful, age gracefully, and don't cost the earth to construct or maintain.

CLD was established in Hook Norton in 2005 and has grown to a team of eight. We undertake both refurbishment and new build projects, mainly in the residential sector where we aim to achieve high levels of sustainability wherever the budget allows.

Over the years CLD, in conjunction with Charlie's television profile, has built up many contacts within the sustainable building materials and technologies sector allowing us to regularly obtain preferential prices. We have also built up many long term working relationships with timber frame and system build companies. We would seek to bring these contacts and benefits to bear on this project.

We are increasingly looking to bring our sustainability design experience to buildings procured and used by the wider community. To further this ambition CLD has recruited several architects with experience in the educational/public sectors from larger Oxford based practices.

As a practice we try to focus our work on local projects where our time can be spent on design and management rather than travel.

Solid Structures - Structural and Civil Engineers

Solid Structures is a young, friendly structural engineering business based in Chipping Norton, Oxfordshire. It was started in 2005 by Sean Daly, responding to a need for a bespoke engineering service with hands-on director involvement. In 2012, Mark Harris became a director and joined Sean as owner.

Trust and transparency were key values upon which the company was founded. As the business has grown, these values have remained at the heart of everything we do, enabling us to build open and lasting client relationships.

Alan Clarke & Elemental Solutions - PH & MEP Specialists

Alan Clarke started working on Passivhaus buildings in 2007 and has completed around 100 Passivhaus projects. These include new-build and retrofit, affordable housing for social, local authority and co-operative landlords, cohousing, individual housing for self-build and sale. Other building types include schools, village halls and community centres, archives and offices.

He works as both Passivhaus energy consultant and building services designer. He is a writer and teacher of the AECB Passivhaus Designer course, publisher of a number of papers for the International Passivhaus Conference, and contributor to Passivhaus Trust design guidance.

His focus for current Passivhaus housing projects is economy of construction, low cost & low carbon operation with robust and easy to maintain services integrated into the design at the outset.

Nick Grant is a freelance energy consultant working in association with other freelance consultants and larger practices who share his no-nonsense approach to sustainable design.

Most new buildings do not work. They are uncomfortable with poor air quality and require a lot of energy to stay warm. We have earned a reputation for helping to deliver buildings that really do work. Projects to date have included multifamily housing, individual homes, schools, offices, workshops, archives and museums.

The best way we have found to achieve this is by working with the Passivhaus standard and tools such as the PHPP (the energy design software developed by the Passivhaus Institute). We see Passivhaus as a proven approach to achieve high performance, cost effective buildings and not as an end in itself.

Carbon Free Group - Mechanical & Electrical Engineers, Carbon Consulting, PHPP

The Carbon Free Group (CFG) is a registered Community Interest Company (CIC) and social enterprise. Through the spirit of collaboration and interdependence, we provide a platform for innovation to deliver more sustainable, higher performance, lower cost solutions at a deferred risk. The organisation incorporates a core management team coordinating a wide range of businesses and professionals. Together, they represent the forefront of innovation and best practice harnessing expertise in all aspects of healthy, sustainable, circular economy approaches to design and construction. We unite diverse stakeholders at every level to network and seek out the behavioural change needed in our practices of design, management and building to support lifestyles that result in improved carbon management.

Team

Ridge - Planning Consultants

Ridge will secure planning permission through negotiation by delivering and co-ordinating all necessary supporting material to planning authorities and other relevant statutory consultees.

We have considerable experience in the handling of all types of planning applications. We guide our clients through every stage of the planning process from initial site meetings, pre-application advice/discussions, preparation and submission of planning applications and detailed negotiation with planning authorities and other statutory consultees.

Where appropriate, we also liaise with Council Members, key interest groups and the general public to ensure an application receives a smooth and efficient passage through the planning process. As part of this process we also negotiate Section 106 agreements.

We aim to engage with all interested parties to ensure our clients receive a favourable recommendation and the value of their permission is maximised.

Andrew Bird Associates - Quantity Surveyor

Andrew Bird Associates was established in 2013 to provide a truly independent quantity surveying service throughout Southern England. Your project, whether large or small, will be handled on a personal level by Andrew who brings a wealth of professional experience in an approachable and straightforward manner.

Andrew is able to use his wide range of experience to help advise the client from the initial budget, through contract procurement, construction and agreement of the final account. Having worked on many types of buildings from listed property refurbishments to contemporary new builds, Andrew is able to tailor his services to assist clients achieve their objectives.

Andrew can also use his project management experience to coordinate the design team and contractor to help bring your project in on time and budget.

Clews L A - Landscape Architect

Established in 2010, Clews Landscape Architecture is an award winning Landscape Institute registered practice with an impressive portfolio of design and assessment projects across the UK. A small practice, but with big ideas, we offer a personal approach with a focus on high quality design solutions in tune with the local and global environment.

Through imaginative ideas and true collaboration, we create spaces that are not only creative, but tangible, adding real value through landscape. We are firmly committed to establishing and maintaining the design ethos from first concept all the way through to final delivery.

While our practice is based in Banbury, North Oxfordshire, our work takes us all over the UK.

Cotswold Wildlife Surveys

Cotswold Wildlife Surveys was established in 2005 by experienced ecologist, tree surgeon and arboriculturalist Andy Warren.

Based in the North Cotswolds and working throughout England and Wales. Working to high professional standards and conduct, and following industry best practice, Cotswold Wildlife Surveys has a reputation of achieving the best outcome for you and the environment. The principle Andy Warren has been actively involved in managing nature and the landscape since 1982, working for conservation organisations, local authorities and industry, before starting Cotswold Wildlife Surveys. He is a Member of the Chartered Institute of Ecology and Environmental Management, and a Technician Member of the Arboricultural Association.

Origin - Transport Consultant

Origin work throughout the UK on a distributed basis and have a highly experienced and knowledgeable team of specialists offering Highways, Transport and Traffic Consultancy services to all sectors. With a reputation for achieving successful results we provide you with the highest level of service at every stage of your project.

We have a passion for highways and transportation and you can trust us to help you make your project a success. We know the industry, we understand the requirements, we have worked on both sides of the fence and our experience aims to minimise delays related to highways issues throughout the planning process. We are a consultancy that you can rely on.

Each of our consultants has an advanced qualification in their field in addition to years of practical experience. This marriage of theory and practice is critical to our strategic approach. Combined, our consultants have over 96 years of hands-on problem-solving expertise behind them. That's a lot of problems, and even more innovative solutions.

Living Well at Home

Living Well at Home is the brainchild of Emma Luddington, a RIBA Chartered Architect with 25 years' experience in accessible and inclusive design. After speaking to friends and family dealing with the home care services minefield, she realised there weren't easy ways to get personal recommendations aimed at helping people make their properties more accessible. She founded Living Well at Home as a dedicated property adaptation advice service – unique in the UK – and the team of expert assessors now gives fast, practical and tailored advice so people don't have to go on waiting lists, navigate complicated public services or do hours of research for generic solutions related to simplifying care in the home.

Site



Hook Norton – Aerial View

The proposed site is located in the middle of Hook Norton bounded by the 1950's Bourne estate to the south and east, the new Bourne View housing estate to the north and the Sports and Social club to the west.

The site is currently over-grown and has an array of self seeded trees, bushes and plants. They appear of little value and significant removal, cutting back and replanting is proposed by the scheme.

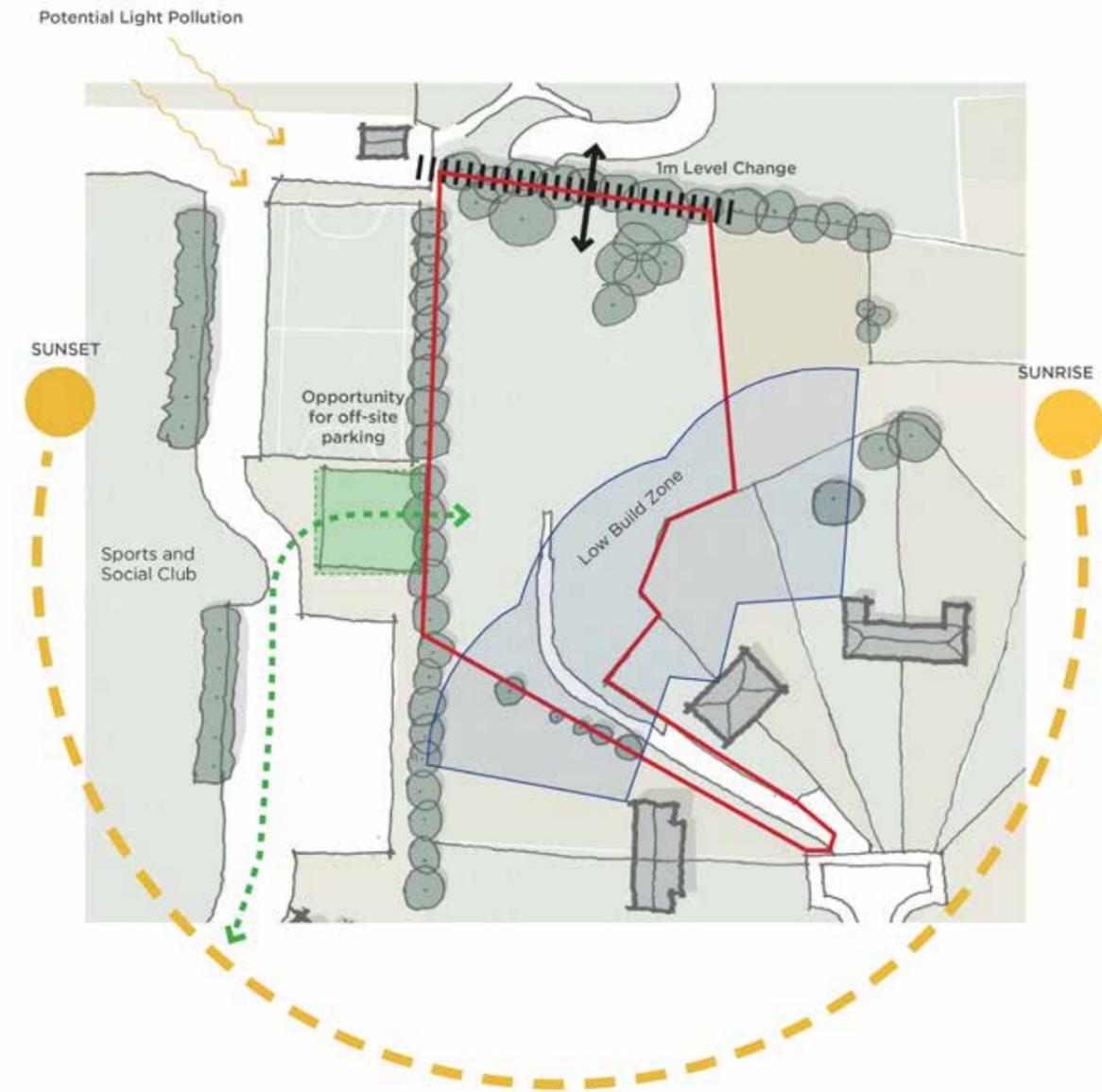
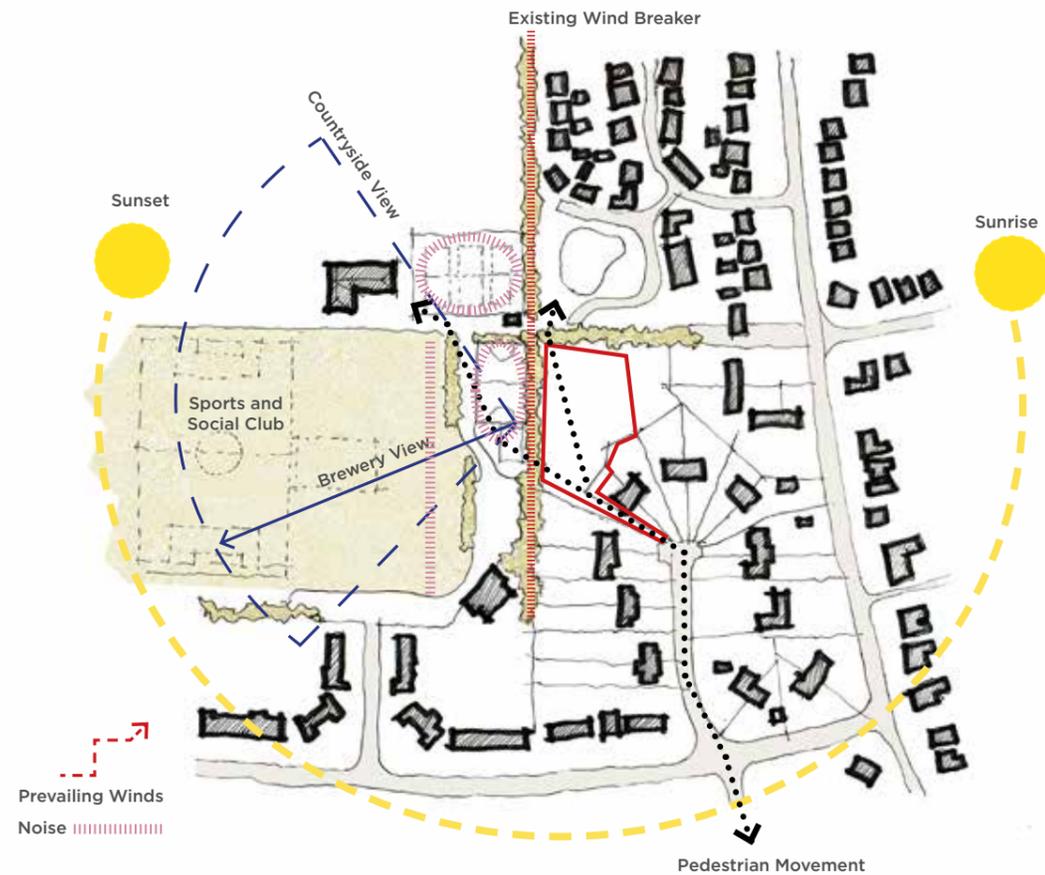


Photos of the site

Site Photos



Site Opportunities and Constraints



The site has limited views at ground level although at first floor there are longer views to the West towards the Brewery and to the newly planted wooded ridge beyond. There is an opportunity to create a new landmark amongst the village's roofscape when viewed from afar; a source of pride for the community.

Currently the site has limited links to the rest of the village but there are opportunities to create a strong connection from the heart of the village, through the site to both the Sports and Social Club and Bourne View. A real potential benefit for the 'walkability' of the village.

There have been concerns raised about potential localised flooding on the site. This occurs on the western edge of the site around the existing drainage ditch. Further research into the issue has shown that robust detailing and a drainage maintenance strategy will overcome any issues. The flood risk assessment by JBA Consulting stated that there was a low risk of flooding on the site.

There is a potential issue of sound and light pollution from the SSC tennis courts, MUGA and playing field. Careful consideration in developing the design has taken place to negate these issues.

The site has good solar access and with the right building form will allow for an extensive Photovoltaic array on the roofs.

Hook Norton Analysis

The design has been conceived after careful analysis of the unique qualities of Hook Norton. It is a village with a tightly packed core where houses sit shoulder to shoulder creating fascinating streetscapes with a web of cut throughs and canyons of stone pierced with windows all topped by a jumble of roofs.

This density and the spacial quality it creates helps makes Hook Norton unique. It encourages interaction and a street life in the older heart of the village that is not found in the newer, lower density, developments on the outskirts of the village.

The brewery creates a stunning centrepiece for the village and is a fascinating precedent for the housing scheme. Standing tall in the countryside the brewery is a landmark which the new development should seek to complement.

Its courtyards and buildings have been adapted over 150 years; from stables to store, office, cafe, museum and visitor centre. The robust adaptable structure has allowed it to remain relevant to the community, a great exemplar for any new development in the village.

Our proposal seeks to draw upon the very best of Hook Norton and re-imagine it for the 21st century. Achieved not by aping but by learning from and re-imagining the existing village character to provide a template for what its future housing could be.



Site Survey Summaries

Contamination

A Environmental desk study and preliminary risk assessment was undertaken in February 2018 which is an addendum to this statement.

The report found that:

‘There is no known specific use of the site, however it would appear to largely exist as a piece of waste land; and may well have been treated as such. More specifically it was noted that the ground surface is undulating and there was evidence of partially buried material, presumed to be construction waste. In view of this it must be considered that waste soil and/or other materials could have been deposited or buried here at some point in time.’

The report suggested further investigation prior to construction and the suggested requirements for this are included in the report. Should planning be granted these recommendations would be followed and a suitable mitigation strategy created accordingly.

Arboricultural

During January 2020, an Arboricultural Implication Assessment on the likely impact and effect regarding the construction of community housing on land off Cascade Road, Hook Norton was carried out in accordance with British Standard 5837:2012 ‘Trees in relation to Design, Demolition and Construction- Recommendations’ and good arboricultural practice.

The trees surveyed are growing predominantly adjacent to the northern and western boundaries of the site. An existing hedgerow is growing along the western boundary which has been regularly managed. Growing adjacent to the northern boundary is an unmanaged hedgerow that has become disconnected with several ivy-covered specimens. The site is overgrown with an area consisting of self-seeded Ash, Hawthorn and Elder species present centrally within the site. The full report has been submitted with this application.

Acoustic

Noise levels from the MUGA directly west of the proposed site have been assessed in both proposed garden spaces behind the proposed dwellings and on amenity areas/balconies on the front-facing façade of proposed dwellings. With the inclusion of a 1.8m solid garden fence along the northern garden boundary, nearly all proposed receptors fall below the BS 8233 LAeq Upper Guideline Limit for amenity areas of 55 dB(A).

Ecology

An ecology report was carried out in August 2012 with a second in December 2019 which have been submitted with this application. Both concluded that the site was of low wildlife interest.

The 2019 report summarised the site as follows:

‘The small area of grassland was not diverse and of poor quality, although it would hold some limited value for invertebrates, small mammals, and foraging birds.’

‘None of the trees on the site supported features suitable for roosting and/or hibernating bats, as they were all too young and/or smooth-barked, whilst the majority of the site was thought to be of low value to foraging or commuting bats, as it was limited in extent and there was little cover or vegetation to attract prey items.’

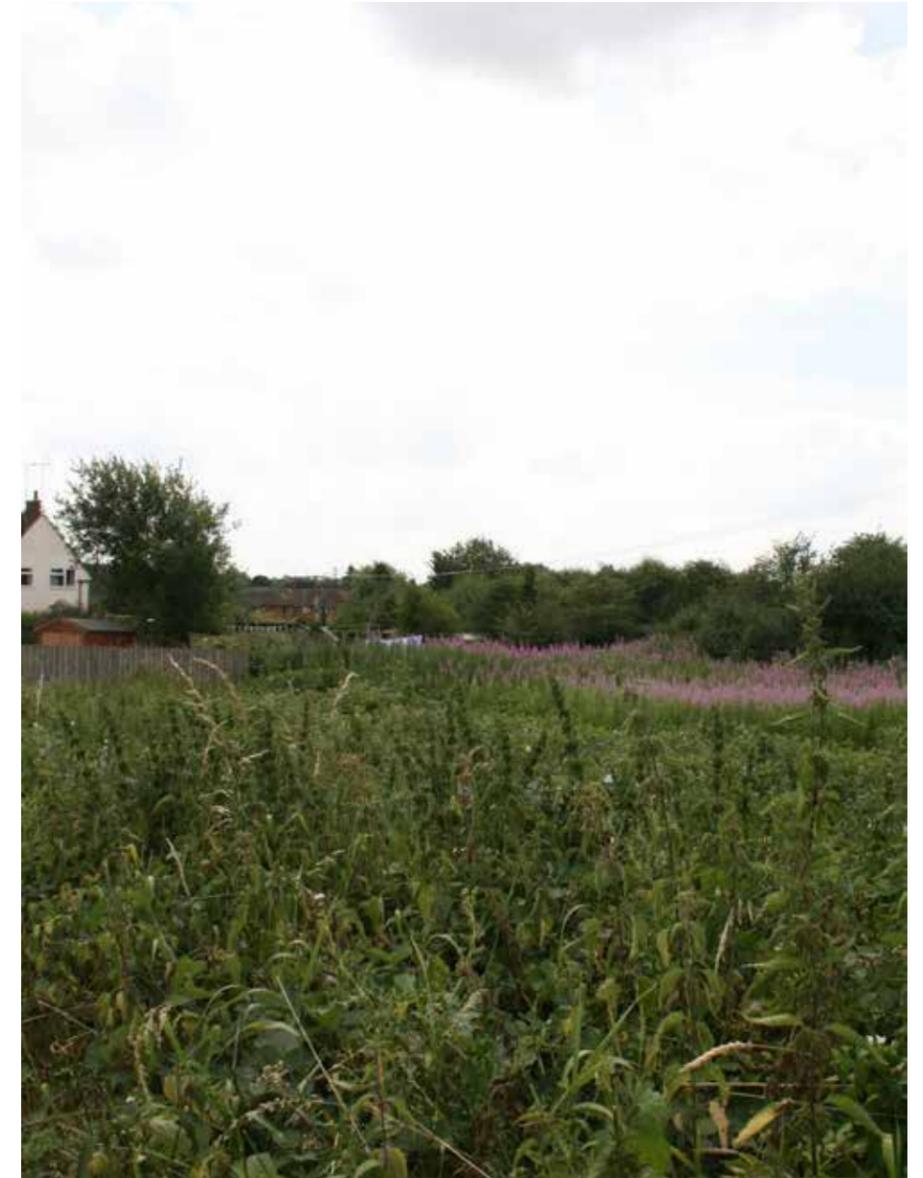
‘There were no signs of otters or water voles and no evidence of badgers. A single old birds’ nest was found within the northern hedgerow, and the scrub also provided suitable habitat for nesting. The site was considered unsuitable for Great Crested Newts, and the species is thought to be absent on the land.’

‘The site was considered to be of negligible interest to reptiles for the same reason that it is unlikely to be used by amphibians, i.e. the scrub was becoming dense and there were limited basking areas, with no obvious refugia or hibernacula.’

Given the low level of bio-diversity on the site this project offers an opportunity to increase bio-diversity and create new habitats on the site, actions very much in line with the ambitions of the entire scheme.

Lighting

Lighting from the adjacent MUGA has been monitored and with the retained vegetation between the development and the MUGA in place, light levels at the proposed dwellings will be below the ILP pre-curfew levels of 5 lux. Lighting onsite has been designed to industry best practice using low-level bollards and wall-mounted luminaires.



Site

Community Engagement Process

This housing project started as a community venture with the needs of the community at its core in an effort to make sure that the outcome reflects their needs and ideas, rather than being driven by profit. Extensive community consultation has shaped the project throughout its development.

A suitable piece of land owned by CDC was identified and an option on an adjoining site, at a favourable rate, was obtained. Using grant funding from The Low Carbon Hub in Oxford, from both their community benefit fund and the OxFutures programme, a Community Engagement Project manager was appointed on a part time basis in January 2018. The following engagement time-line sets out the steps that have been taken since then.

February 2018

In order to find out directly what people in Hook Norton thought about the need for affordable and sustainable housing members of the community were interviewed in the street and a short film of their responses made. Filming took place on Saturday February 3rd outside the village shop, church and Memorial Hall.

Everyone interviewed felt strongly about the current housing crisis and expressed overwhelming concern about the negative impact the lack of affordable homes for young and older people would have on the village.

In advance of sending a survey out to the whole village to obtain the views of the wider community on the need for community led housing, two open meetings were held to provide information and stimulate discussion about the project. One in the evening at Hook Norton Brewery on 20th February and one the following Saturday 24th February in the afternoon in order to make it possible for as many people to attend as possible.

The meetings were titled “What’s Your Vision for Hook Norton?” and advertised widely through:

- The Hook Norton newsletter with an accompanying piece to introduce the aims of the project
- A poster campaign in key places around the village
- Flyers distributed at key venues such as shop, library and notice boards
- Posting on HNLC and village web sites
- Visiting and talking to individual groups and societies in the village such as Incredible Edibles, Still Waters support group, History Society, Play-group and church cafe
- HN Primary School agreed to send a copy of the poster home in each child’s school bag

A Hook Norton Parish Council meeting was attended on February 8th to provide information on the scope of the project and forthcoming meetings and survey. The PC was enthusiastic about the project and both PC and ward councillors confirmed they would attend meetings.

A presentation exploring the possibilities of the project and similar existing schemes was given. It also explored; the gap in understanding between big housing developers and the needs of a community, gave an explanation of Community Land Trust’s, possibilities of shared or individual spaces, communal or private facilities, broad options of rental and shared ownership, options for a shared transport hub based on the existing HNLC car club and possibilities of a micro grid and renewable energy features.

Three independent survey companies were approached and Lemondrizzle Consultants were appointed to develop the village-wide survey and to facilitate a vision workshop element at the open meetings in order to encourage discussion.

In the second half of each meeting the community were asked to gather into groups and write down their responses to 3 questions:

- What does Hooky mean to you?
- What’s the dream ? - ideal things in a housing community
- What could possibly go wrong?

The answers were read out by each group and stimulated lively debate and by asking “What could go wrong?” allowed important ideas and issues to surface openly without confrontation. The response sheets were photographed and used to inform the survey questions.

March 2018

Working with Doug Stewart from Lemondrizzle on composing questions for the survey and agreed to make it look friendly and inviting. We decided it was important to issue two surveys to each household to capture difference of opinion, in particular that of younger people who may still be living with their parents due to lack of affordable housing.

A village wide survey was hand delivered by HNLC Board members to each home in Hook Norton, with options to complete online, deposit in a specially designed house-shaped box at the village shop or be collected by hand. The HNLC Board collected most of the surveys in person which involved lots of discussion on the door steps and led to a high return. 533 completed surveys were returned from 1000 homes.

April 2018

The results of the surveys were independently analysed by Lemondrizzle and showed wide support for a housing project. 74% of respondents felt that the current housing situation in the village needed addressing, whilst 26% felt that the present housing mix was adequate. Some respondents from this group expressed concerns that the village had already reached capacity and the existing infrastructure would be stretched.

Elements that emerged with strong support included:

- Mixed age groups living side by side
- Sustainable homes with low running costs
- Homes that relate to the existing architecture of Hook Norton
- Provision of smaller affordable homes

Thirty seven respondents indicated that they would be interested in living in one of the proposed homes on completion and their details were kept to inform future consultations.

June /July 2018

Working with the Cherwell District Housing Strategy Team a second, more detailed survey, was developed to send to the 37 people interested in living in the homes. This sort to ascertain their current and future housing needs and initial financial situation to assess eligibility for the affordable homes.



Community Engagement Process

August 2018

The results from the second, detailed survey were collected and analysed by CDC Housing team with independent evaluation provided by Midlands Rural Housing. The information provided the evidence needed by CDC that Hook Norton has a proven need for affordable community led housing, a requirement before CDC could agree to release the land for community led housing.

The information regarding housing requirements has also been used by the project architects to determine the layout of the site and design of the homes.

Four local architectural practices were invited to submit bids to take the project forward and produce designs for the feasibility stage of the project. The four architects were interviewed at the Low Carbon Hub and Charlie Luxton Design (CLD) were unanimously appointed as the Architectural Design Team. They presented an imaginative bid and had thoroughly researched the sustainable and communal aspects of the build. They also took into account the possibility of changes in life's circumstances by incorporating an element of flexibility into the design.

September 2018

The 37 people interested in living in the homes were invited to take part in a Community Housing Vision and Design workshop with architects from CLD. They began by asking the question "What do we need?" in contrast to "What would we like?" There was enthusiastic feedback from those present who found the question thought provoking and stimulating. It was a creative and lively evening where the community and the designers collaborated on ideas that have informed the on-going design and layout of the site. The idea of a community meeting space and shared plant growing areas began to emerge as popular and CLD went away to interpret the information and develop different options for the site.

October 2018

A pathway on the overgrown site needed to be cleared to allow access for contamination and flood surveys to take place. In another example of community activity the local Green Gym, a community group that provides activities and exercise for older people, responded to the challenge and opened up an entire footpath through the brambles.

November / December 2018

The project team continue to meet regularly with the new Housing Strategy Team at CDC who demonstrated their support for the project. They provided advice and responded positively to an invitation to visit the site and help prepare a detailed report to take to their senior executives. This helped decide the terms of the transfer of the CDC owned land to a newly set up Community Land Trust (HNCLT) to deliver and run the project.

February 2019

An Open Meeting was held at the Brewery on February 26th for the whole community, as well as the 37 interested group to discuss the design proposals. Local stakeholders such as local councillors, Parish Council, CDC, members of LCH were also invited to attend.

The project took a significant step forward when CLD presented three Community Housing proposals to a packed Open Meeting at the Brewery. Many of the 37 interested group who took part in the earlier meetings were present and keen to see the results.

The meeting was interactive so that those on each table could write down their responses and a list of questions on large sheets of paper. This method ensured that everyone had the chance to air their views.

There were exciting suggestions from those present for the communal meeting space such as community café and work hub with gallery space for exhibitions of local work.

A journalist from the Banbury Guardian who attended, wrote an enthusiastic piece in the paper for the following week.

June / July 2019

In order to keep the community engaged whilst waiting for the CDC executive decision, HNLC and CLD promoted the community housing project at events in Hook Norton by showing the most recent plans and discussing with interested members of the public. The project generated lots of interest and people were increasingly interested by a Community Land Trust's potential as a way to deliver new houses for the village.

Hook Norton Community Land Trust was formally set up and registered with four initial board members.

The Executive Group on CDC met and formally approved the transfer of ownership of the land to the newly formed Hook Norton CLT, subject to obtaining planning permission and demonstrating financial viability of the project. The price of the land was yet to be finalised but it will be in a range that will enable the project to provide affordable housing in perpetuity.

An advertisement was placed in the newsletter to recruit other board members for HNCLT.

August / September 2019

CLD further developed the housing plans and submitted a pre-planning application based on the ideas agreed at February's village wide meeting.

Several interested people with a range of local knowledge and expertise came forward to consider joining the CLT board.



Community Engagement Process

November / December 2019

CLD and a Community Engagement manager worked closely together on a series of intensive consultation evenings. The meetings are informative, lively and vibrant and have defined the look and feel of the site. The pre-app indicated constraints on some areas of the site. These consultation events allowed the community, CLD and the HNCLT board to work together to adapt to these constraints without compromising on design quality. Ideas explored through this open process were;

- The main site masterplan, especially the relationship to cars on the site.
- Landscape design ideas were explored identifying the type and scale of facilities needed; play spaces, growing beds, orchard etc.
- Consultation around the need for a community building produced ideas for a multi-purpose spacer that could mainly be used as a community run café, along with a communal laundry and a 'Library of Things'. The provision of workshops was also popular as no such thing currently exists in the village, as was the provision of small self-contained overflow guest bedrooms that could be booked by visitors to facilitate smaller houses.

Visual Minutes of this process were produced to capture the vibrant process covered in those few hectic weeks.

Drop in sessions were also arranged at weekends for those who could not make the evening meetings, at the offices of CLD. These were successful as small groups could view the plans and ask questions in a relaxed and informal way.

The interested group of 37, now grown to nearly 50, were invited to participate in a survey monkey to vote for the most popular housing design from a choice of three concepts. The results were very close so CLD incorporated elements of the two most popular ideas into the final scheme.



Key masterplan layout review and vote, consolidated parking yard was a clear winner.

Massing for terraces. Three design options were sent out over the Christmas break for a virtual vote.



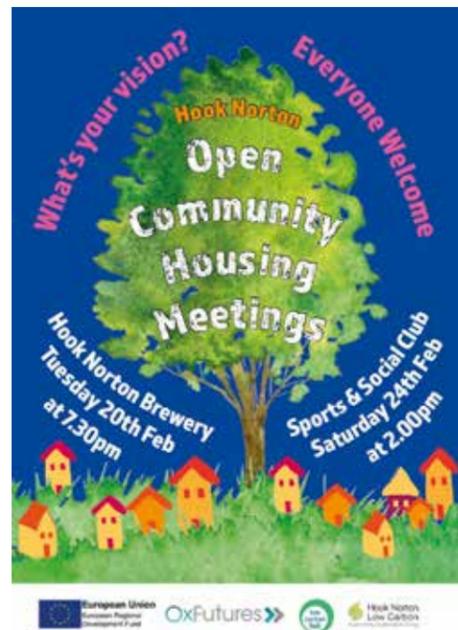
Community Engagement Process

January 2020

Following the board sign off on the final scheme design a wider village drop in session to show the Community Housing Plans to the whole community was organised ahead of the planning submission. The event was incredibly well attended with a constant stream of visitors, we estimate over 150 people visited over the course of 5 hours. CLD and members of HNCLT were on hand to discuss matters and answer questions. Some came from curiosity, some were interested in living in the homes and some came to express concerns. One of the main concerns was that the project could become an enclave so it was a great opportunity to explain that the community facilities would be open to the whole village.

People were invited to write their comments down which were hung on a washing line where they could be easily viewed by everyone.

An exhaustive consultation has driven the decision making behind this project all the way to this point. It demonstrates that with real commitment the thoughts and ambitions of a whole community can be used to shape the housing for those same people.



Architectural and Sustainability Strategy

This project has set itself the ambitious target of achieving carbon neutrality both during construction and occupation. Translating this and the other sustainability concepts identified and supported by the community into a reality is best achieved by considering the built form and its systems as an ecosystem with flows and interdependence.

Waste and by-products in the form of hot air, heat, compost, electricity and water become the resources for other necessary processes. The following diagram captures the initial ideas for achieving this and if implemented will massively reduce the impact of the development on the planet. Not only reducing the demand for heating, lighting and electrical energy but also transport, food and waste.

An ambitious scheme that will require investment and careful management but if achieved would provide an exemplar for a new way of living.

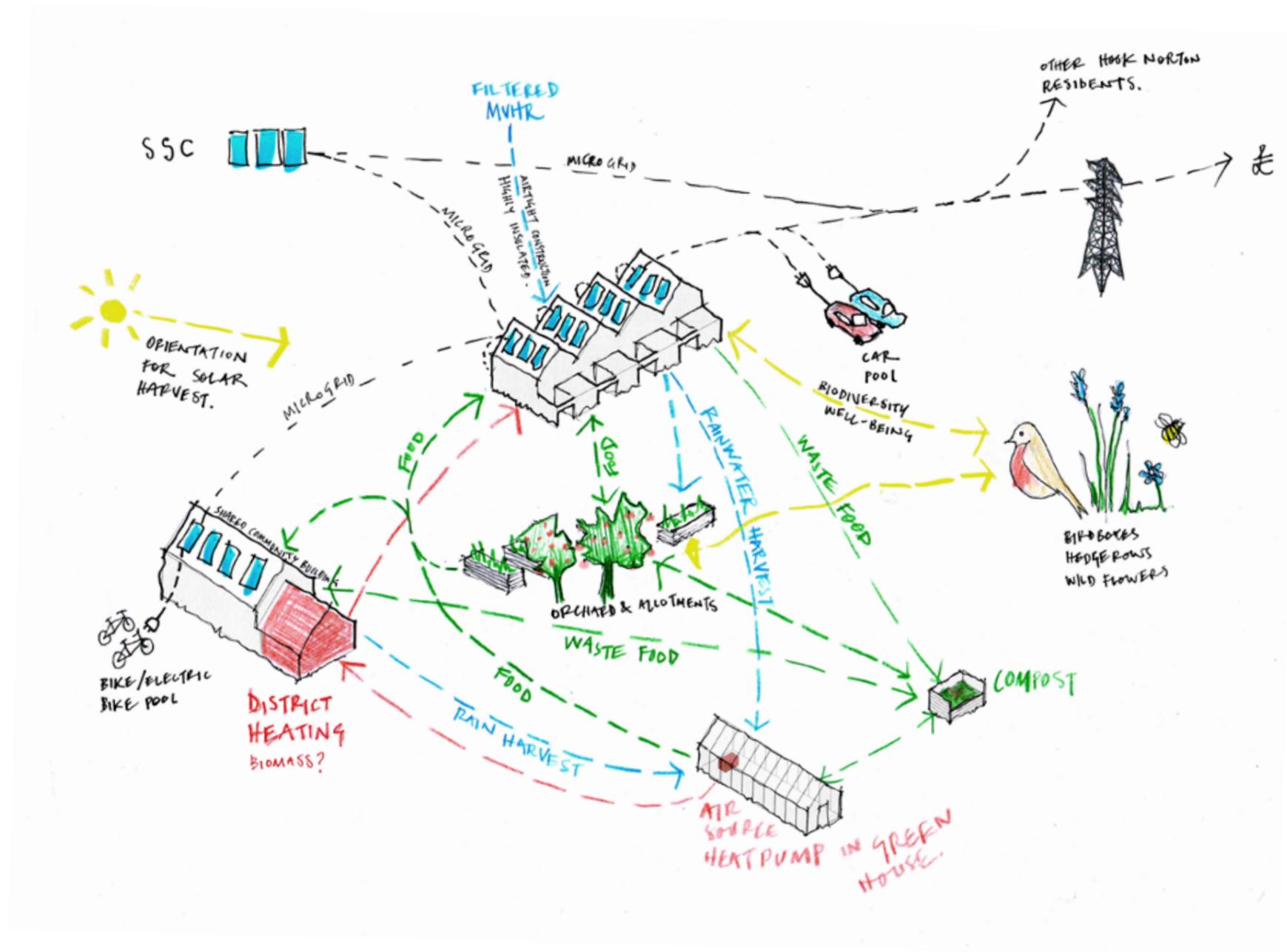
In order to meet the high sustainability ambitions, the following key elements have been included:

- Passivhaus or Passivhaus equivalent.
- Solar arrays.
- Micro grid.
- Air Source Heat Pumps (ASHP). Low Temperature District Heating.
- Mechanical Ventilation Heat Recovery (MVHR).
- Low embodied energy and CO₂ materials.
- Carbon offsetting through local tree planting.
- Shared growing space and greenhouse.

It is envisaged that the heating and hot water will be provided by a district heating system. This connects the houses to a centralised heating system via highly insulated buried pipes. Each unit then has a much smaller buffer tank for hot water and no localised boiler. This has the following benefits:

- Larger heating units have higher efficiencies.
- Centralised units with reduced maintenance requirements as fewer larger units rather than multiple smaller units.
- Allows for homes to be smaller as the need for a plant room/cupboard is removed.
- Reduces redundancy in equipment as it is shared between more properties.

One of the biggest sources of CO₂ emissions for any larger construction site is emissions associated with getting the workforce to and from site. The proposal for this scheme is to use local trades and suppliers to reduce these emissions and keep as much of the construction spend in the local economy as possible.



Pre-application Advice

Pre-application advice was sought in October 2019. A response was received in mid-November from James Kirkham alongside a couple of meetings to further discuss the scheme and its development. A summary of the pre-app response is outlined below:

- No major impediments to the development were identified even at a high density of 15 homes on the site. A need to clearly demonstrate the value of the scheme to the community to justify this was set out. The accessibility/affordability of the houses has been demonstrated in this document. In addition the provision of community facilities, the need for which was identified through the community consultation, provides clear value for the community.
- Trees and wildlife were identified as an area for focus. The scheme has evolved to retain more of the existing trees and hedges on the site following an arboricultural survey. Furthermore a 10% biodiversity gain has been provided by the landscape proposal with provision of different types of habitats.
- There was clear suggestion that vehicular access should be via Bourne View not SSC, which has been incorporated.
- CDC indicated that they would consider parking on the SSC land for users of the community building to allow for minimal parking on the site. An agreement to this end has been obtained and a letter outlining this has been attached to this document.
- Noise and sound pollution from the MUGA was identified as a real issue with the site. The design has been significantly altered since the pre-app to respond to this issue. Furthermore an acoustic report has been prepared that shows how this issue has been dealt with.

- For the 15 homes in the pre-app design, the 22 car parking spaces were proposed. This was deemed as insufficient. The altered scheme with this application provides 17 spaces for the 12 units which meets OCC requirements for unallocated parking spaces.
- A proposal for flexibility in the units was proposed, allowing them to be 2 bed units that could be combined to form 4 bed houses. This approach while welcomed in principle presented issues around planning process and contributions. It was decided not to pursue this idea in the full planning application.
- A need for windows in habitable rooms on first floors to be 7m from boundaries was stated. In response the design has been altered to achieve this.
- CDC wanted the open drainage ditch on the western edge of the site to remain as it is, above ground. The proposal enlarges and/or deepens the ditch to provide a wildlife habitat and point of interest to the scheme.
- A need to engage with the Strategic Housing Market Assessment was highlighted. This indicated a demand for 1 and 2 bed flats that has been reflected in the schemes design and provision of 8 x 2 bed and 2 x 1 bed flats. Added to this there was a clear demand for a least 2 x 3 bed flats was identified through the community consultation process. The process for establishing the final house type and mix is set out in a following section.

The feedback from Pre-app and the proceeding meeting with James Kirkham have been central to the development of the scheme.

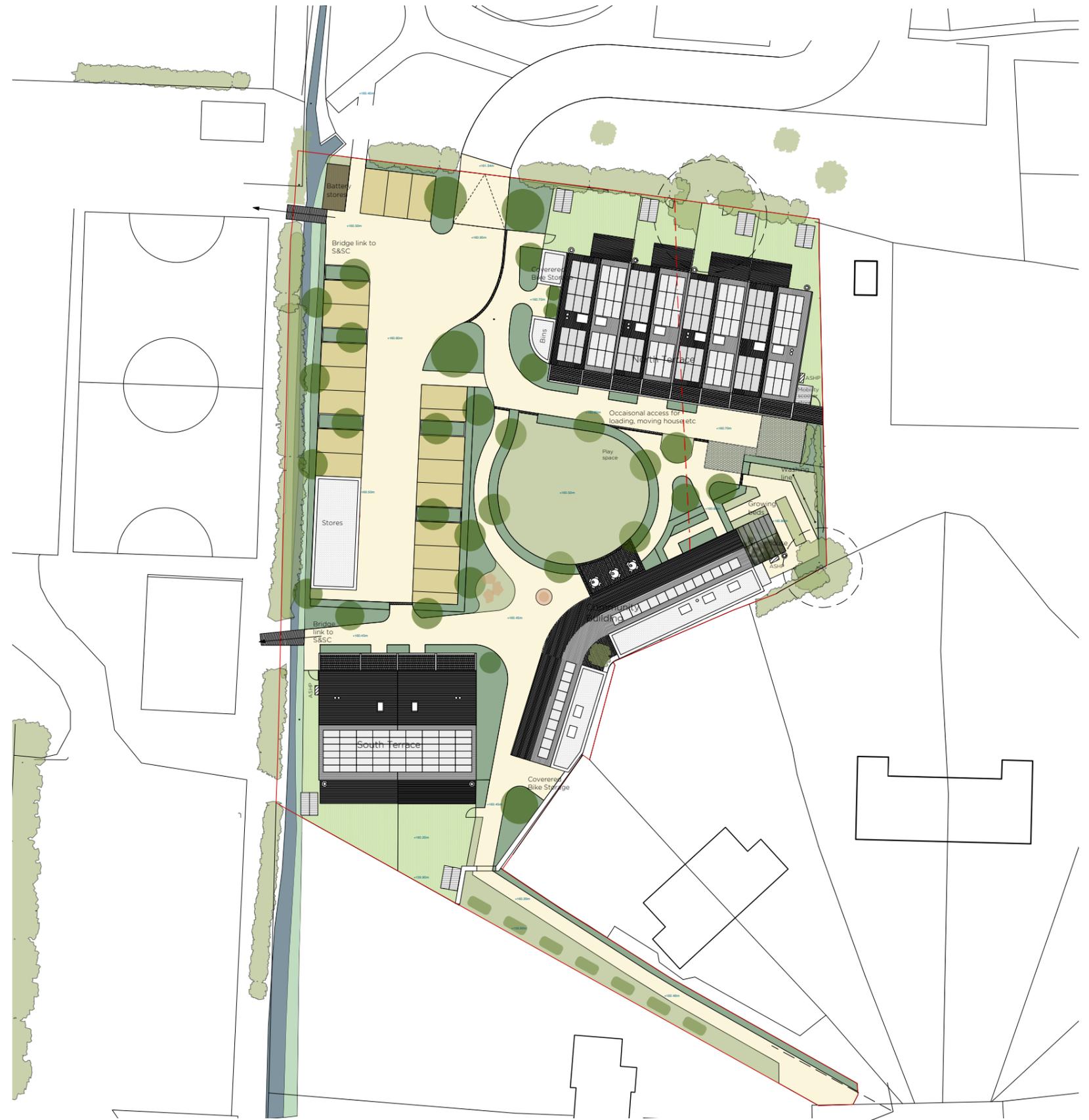


Proposal

Masterplan

Through multiple consultation sessions a masterplan has been developed and approved by the Hook Norton community and HNCLT board. This final design has the following key features:

- 12 dwellings; 2 x 1 bed flats, 8 x 2 bed flat and 2 x 3 bed flats the tenure of these units is covered in the HNH - Housing Mix Tenure Statement submitted with this application.
- Car parking concentrated on the western edge of the site to provide buffering to the adjacent MUGA.
- A shared landscape dominates the centre of the site providing high quality, surveilled space to be enjoyed by the residents and wider village. This is intended to become a new pedestrian heart to the village.
- A community building forms the southern boundary of the site as a buffer to the adjacent houses and facilities that the village lacks.
- At the north of the site access for loading, bin collection and disabled parking via a shared surface in the heart of the scheme.
- Two terrace blocks offer efficiencies in construction and thermal performance.
- Whilst the two terraces differ to provide visual interest, each one uses a repeating plan for efficiency in construction.
- All units have external space, either with gardens or good sized terraces that look on to the shared communal space.
- Shared surface with planters, benches and bin stores. Fruit trees are to be planted throughout the site to provide a community orchard.
- Good solar access to allow for extensive PV arrays connected to a micro-grid.
- The new structures have been pulled away from the adjacent properties to reduce impact on the neighbours and allow for first floor living areas.



Public / Private & Surveillance

Public/Private

The houses and landscape have been designed to create a relaxed, supervised, secure environment balancing the needs of residents for private space with the needs of the wider village to enjoy the site and its facilities. Guided by the architecture and planting, subtle boundaries will be established that allow both groups to co-exist in one space.

The heart of the site is a circular grass area surrounded by trees. This feature was arrived at following community consultation that resulted in the idea of a car-free open-space 'green' used by the whole village for events and gatherings. The terrace frontages engage and overlook this space whilst the balcony/shading structures provide semi private terraces on the ground and first floors, further promoting interaction, occupation and natural surveillance. Rather than create barriers with walls and fences changes in floor finishes, planting boxes and planted buffers are used to sensitively control these different zones.

The community building further provides animation and occupation of the site. The workshop has a large window that overlooks the southern entry point to the site, providing visual interest, activity and surveillance. The multi-purpose space in the centre of the buildings engage with the circular 'green' allowing it to be used in conjunction with the multi-use space and to provide further surveillance. A covered external area reinforces this and provides an extension to the internal space in suitable weather.

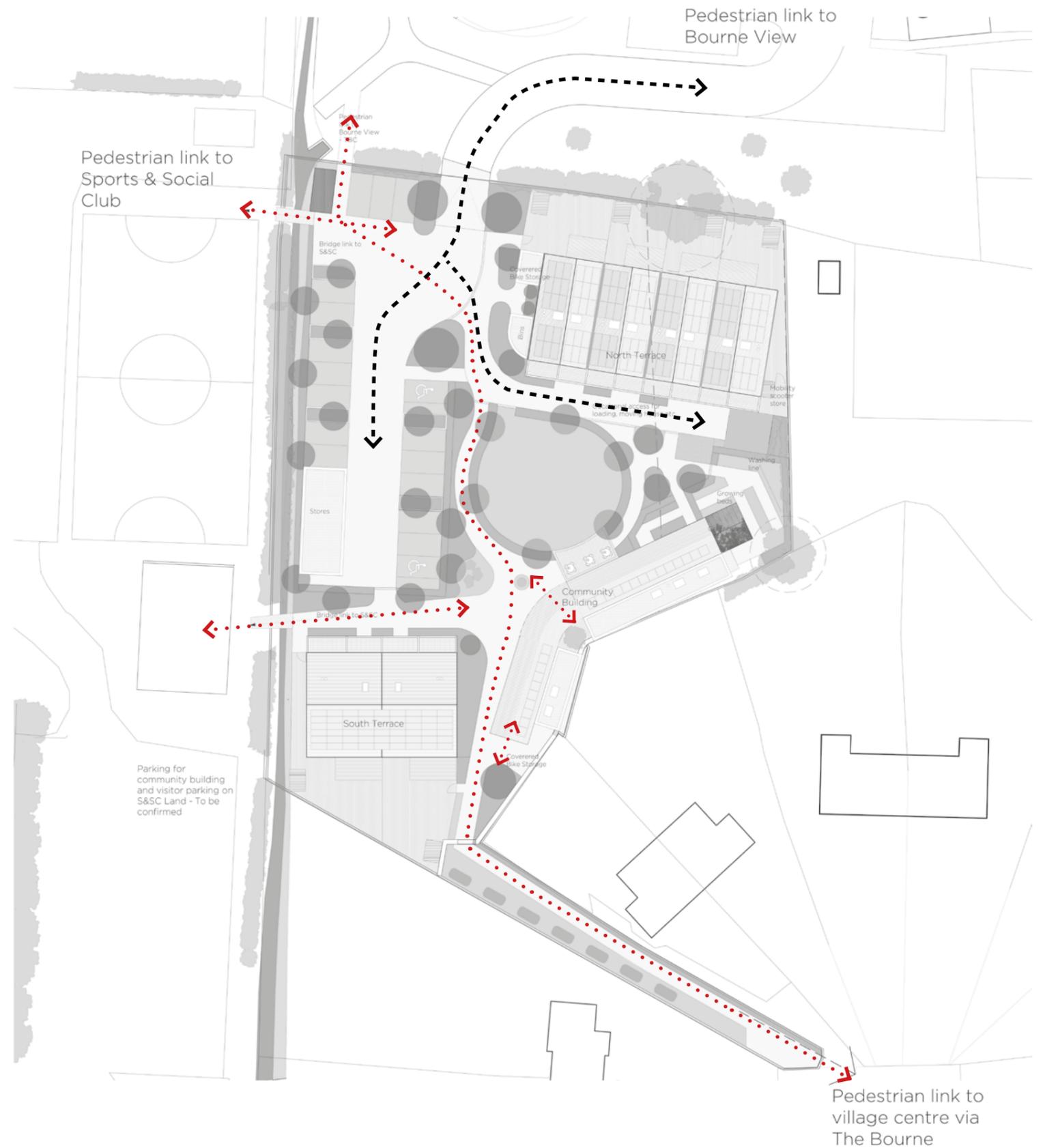
The ground floor flats have private gardens to the rear, separated from the public areas by fences, screened by planting, to soften their appearance. Where screening of solid fences is not possible, post rail and agricultural mesh fencing will be used to minimise any sense of enclosure or exclusion and to reference the rural location of the village.



Routes and Connections

To encourage connections to the wider village new pedestrian links will be established; south to the Bourne and the village beyond, north to the Bourne View estate helping connect this new addition to the village, and west in two places to the Sports and Social Club. These new pedestrian routes will bind the new development into the fabric of the village ensuring it becomes a vibrant new public space for Hook Norton.

The principle pedestrian approach from the village to the south will pass through a break in an ironstone wall across a threshold. This is to indicate entry into a community space, a welcoming safe place, that needs to be treated with respect. A change in floor finish, lighting and surroundings are intended to encourage positive behaviour. Hedges along the east, west and northern boundaries, again with specific defined entry points, reinforce the identity of the site.



Pedestrian routes



Vehicle routes



Materiality

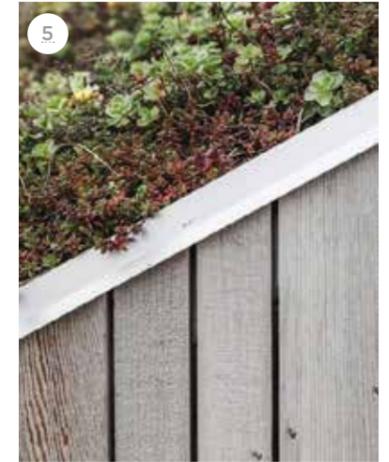
The design process for the scheme has been focused on providing a high quality sustainable development. The orientation and shape of the buildings as well as window locations and sizes have all been optimised with PHPP (Passivhaus Planning Package) thermal modelling to minimise heating and electricity requirements.

Further to this the material and build method choices have also been shaped by considerations of embodied energy/carbon, toxicity and proximity. Embodied energy/carbon analysis has started and will be on going through the design and detailing stage to ensure a low carbon 'in construction' exemplar as well as 'in occupation'.

The proposed construction method is low CO₂ foundations with a passive slab using high GGBS content concrete. A timber I-beam frame filled with recycled newspaper will form the highly insulated superstructure. Aluminium clad triple glazed timber windows, gypsum free dry lining and untreated timberwork internally will continue the sustainable choices.

The exterior will mix high quality, long lasting, sustainable material choices. Locally quarried and processed ironstone will form the base of the buildings with stained treated softwood cladding above and reclaimed welsh slate on the roofs. The metal framework for the balconies and shading will be formed from galvanised upcycled steel sections sourced from local recycling/salvage companies combined with thermally treated softwood.

Guttering and flashings will also be galvanised to ensure longevity and to tie into the wider palette of materials on the site.



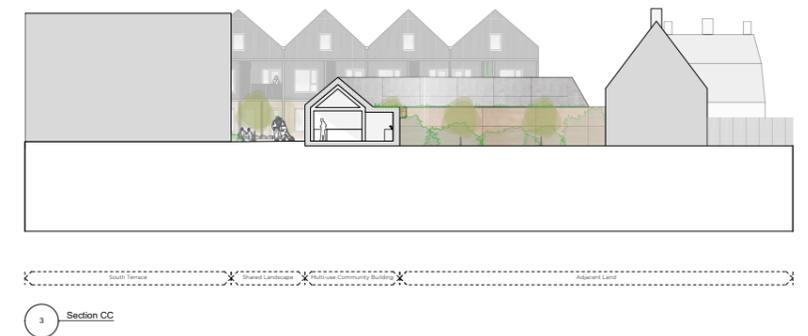
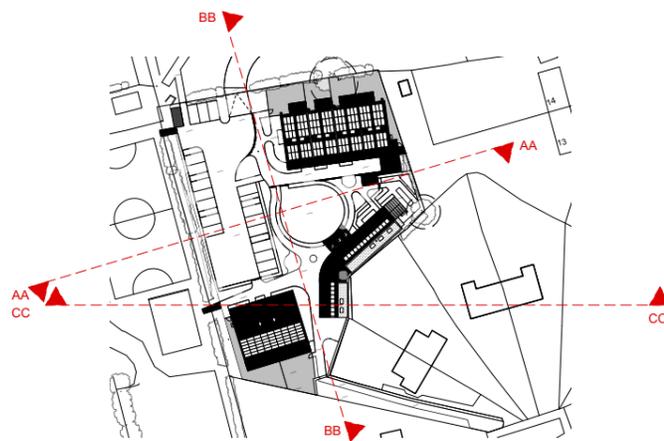
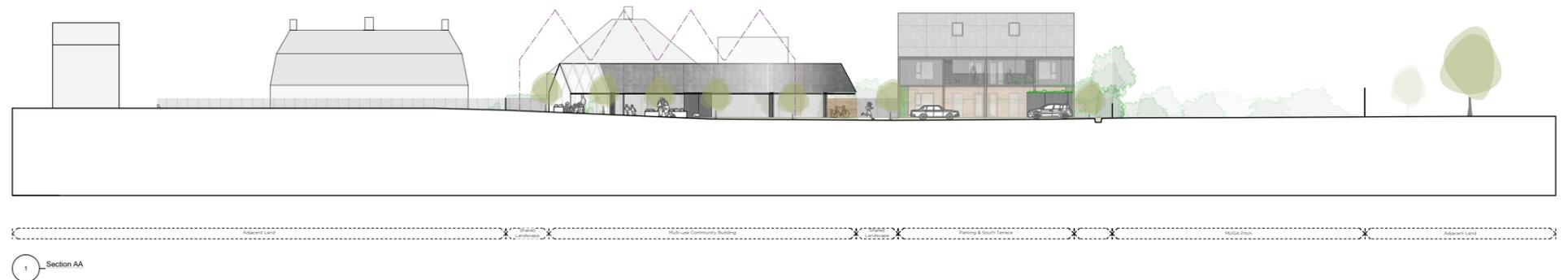
- 1) Stained black timber cladding
- 2) Reclaimed welsh slate roofing
- 3) Intensive green roofs on the storage buildings
- 4) Iron stone walling
- 5) Sedum green roof on the community building

Site Sections

The two terraces have been designed with pitched rooves to reference the surrounding buildings and local vernacular. In order to make efficient use of this volume the buildings are 2 story with rooms in the roof. This creates a good form factor, (surface to volume ratio) which is positive for both energy consumption and efficient use of materials to provide usable floor space. In tandem with this it was decided to lift the floor levels of the buildings by 400mm clear of the existing ground level to ensure that flooding never becomes an issue especially given climate change and increasing extreme weather events. The result is ridges that are 600mm higher than the surrounding properties, however the nearest properties are over 22m away and relatively low in terms of the wider village.

The massing of the terraces has been conceived to ensure that eaves, therefore the lowest part of the roof is adjacent to the neighbouring properties. This will reduce any sense of overbearing whilst ensuring the highest number of affordable sustainable homes can be provided for the community by the community.

The community building is sited on the south east boundary of the scheme. The rear stone wall of the building, built on HNCLT land, provides a high quality new garden wall to the neighbouring property. Less than 3m high, the ironstone wall has been designed with a dropped section in the middle, that has a tree planted behind. In addition the pitched roof of the building is offset by 3m from the boundary by a flat sedum roof, all to reduce any sense of enclosure and massing. The residents of the properties that the community building sits adjacent to have been consulted directly by HNCLT and were amenable and comfortable with the proposal.



Terrace Design



Overview

The housing is provided in two terrace blocks; one to the north of the site and one to the south, and named accordingly. They are orientated north/south with massing and design to reference the simple form of the outbuildings at the brewery, and barns found in the adjacent, open countryside.

The simple forms are efficient in terms of surface area to volume ratio which makes for lower energy consumption and build costs. The roof shapes have been designed to maximise and provide a mix of solar orientation to generate PV power all through the day, especially in the mornings and evenings when local demand will be highest.

The balcony/shading structures on the front of the two housing blocks soften the form and provide the opportunity for planting, and visual interest. Each housing module will have a mix of; a balcony, privacy screening, balustrades and steel planting boxes with training wires to encourage greening of the facades.

The lower section of the buildings are to be ironstone wall with stained black timber above and reclaimed welsh slate with inset PV panels on the roof. Simple crisp detailing will provide high quality, robust buildings that will age gracefully.

Structural summary

The superstructure of both the North and South Terrace dwelling units will be timber-framed comprising two-story with room-in-roof. An outer leaf of local natural stone will clad both buildings up to first floor level. Above first floor level, both buildings will be clad with timber. As a result of the timber framing, the superstructure will be relatively lightweight and afford an efficient foundation design. It is anticipated that a reinforced concrete raft foundation will be employed to act both as the ground floor slab and foundation in one element. A raft foundation significantly reduces the volume of substructure concrete and hence, the carbon footprint. In addition, any concrete used will be specified with a high proportion of recycled materials i.e. GGBS as cement replacement, to further reduce the embodied carbon. The external balcony/trellis structure will be constructed in a simple steel post and beam arrangement tied to the main building.

North Terrace

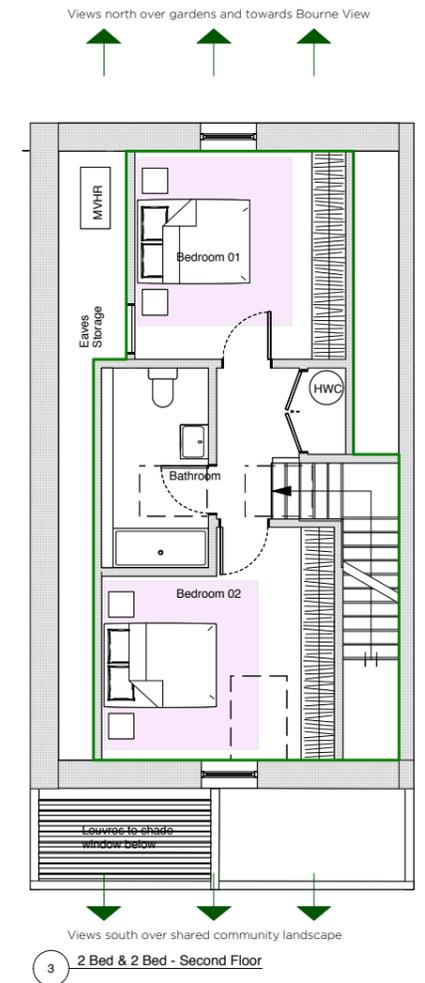
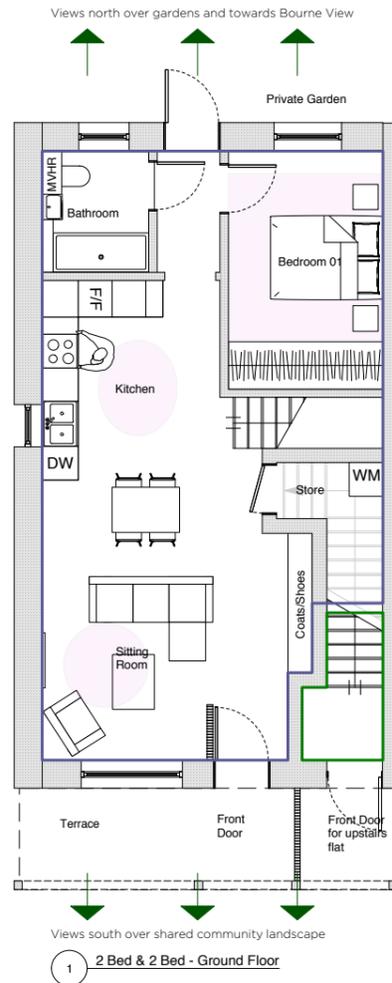


North Terrace

The north terrace is made up of 8 x 2 bed units. The length of this terrace has resulted in the roof form being turned east/west to reduce the visual massing and keep the ridge height down. This roof orientation also ensures that the eaves are adjacent to the neighbouring properties to reduce any sense of overbearing.

The multiple gable form references the iconic Almshouses in Chipping Norton and was chosen by the community from a number of design options during the consultation process. The shape provides 2 bedrooms in the roof allowing for the provision of much needed 2 bed flats.

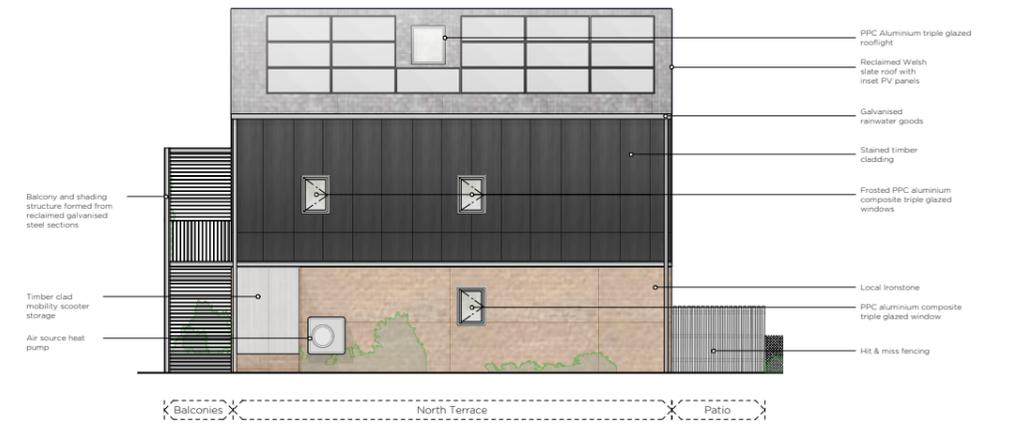
All the flats have been designed using the principles from the now defunct Lifetimes Homes standard, and exceeds part M4 (2) standards of the building regulations to be adaptable and accessible.



North Terrace



1 South Elevation



3 East Elevation



2 North Elevation



4 West Elevation

South Terrace

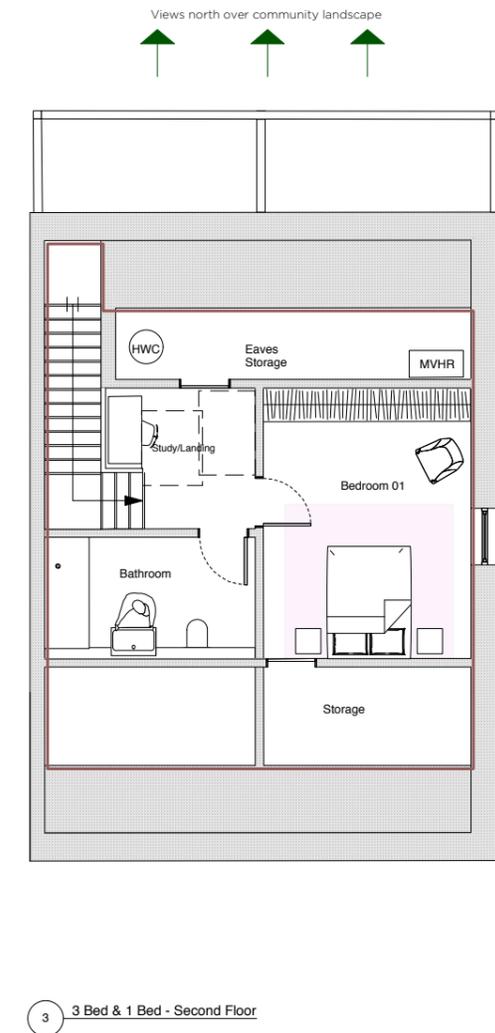
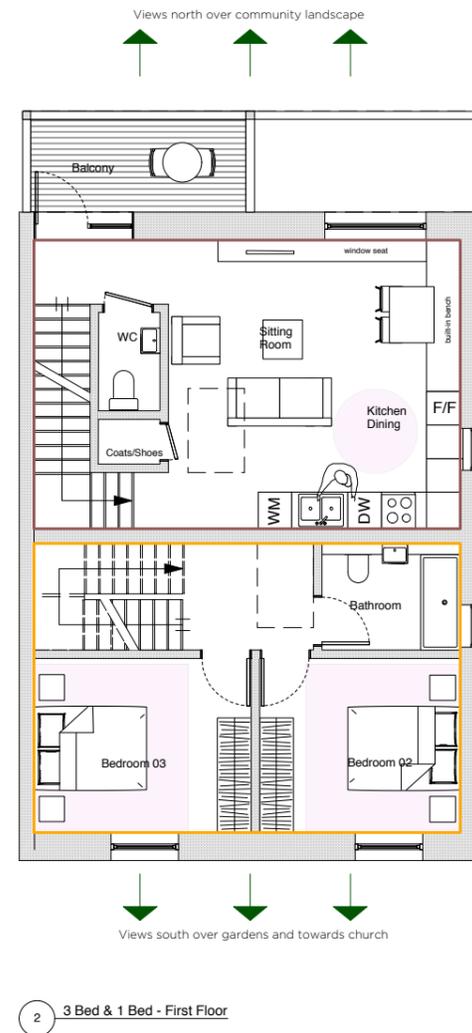
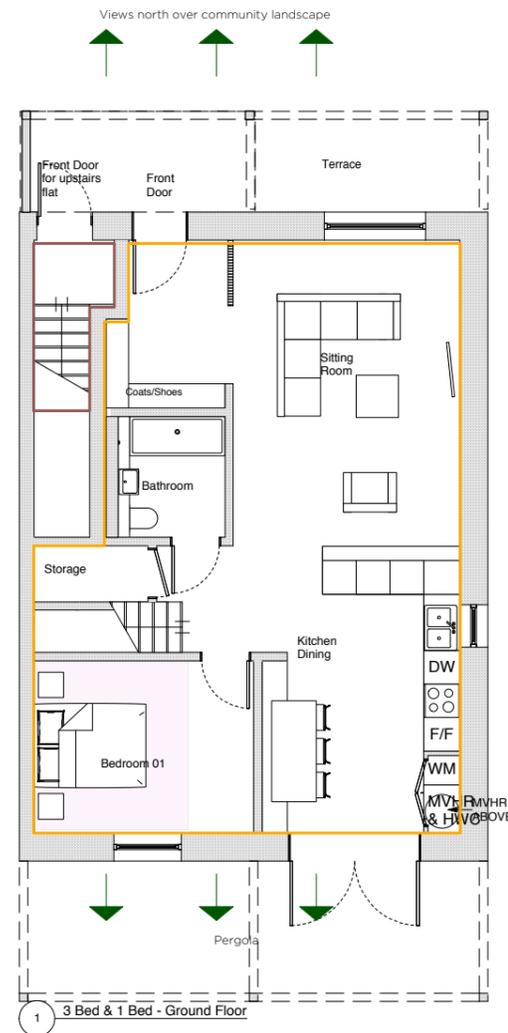


South Terrace

The south terrace comprises of 2 x 3 bed and 2 x 1 bed flats. The form is a simple pitched volume that creates a large south facing roof, ideal for PV panels. The roof form provides a bedroom in the roof which allows for the mix of 3 and 1 bed flats, requirements established through community consultation. The north side of the terrace has a balcony and planting structure to provide outdoor space for the upper flat.

The views from this upper living space and terrace have been carefully consider in the landscape design. Trees will be planted between the parking bays breaking up and disguising the cars, whilst retaining the view over the shared communal space.

All the flats have been designed using the principles from the now defunct Lifetimes Homes standard, and exceed part M4 (2) standards of the building regulations to be adaptable and accessible.



South Terrace



1 South Elevation



3 West Elevation



2 North Elevation



4 East Elevation

Community Building



Overview

The requirements for a community building on the site have been extensively explored through multiple community consultations. A need has been identified for a community building that is accessible and open all the time. It should be a domestic scale and easy to heat, to complement the large halls that already exist in the village. Workshop space, a library of things, laundry and overflow bedrooms were also seen as valuable additions to the community.

The main multi-use space has been conceived to allow for many uses from small dance classes to a regular community run café with crèche and 40 seat party space. Catering space will be provided to facilitate the flexibility of the building.

The workshop space will be available to Hook Norton residents to rent out for DIY/art/making projects on a non-commercial basis. The library of things will replicate successful similar ventures around the country that loan tools, garden equipment, in fact anything that the community decide which results in fewer underused items being bought.

The overflow bedrooms would be for the residents of the 12 flats so that should they need an additional bedroom, rather than living in a larger home with bedrooms empty for most of the year, they can live in a smaller flat and have friends and family stay in the overflow bedrooms. This idea resonated strongly with many potential residents.

Finally the building will have a shared greenhouse and growing beds to allow the residents and other Hook Norton villagers access to a protected growing space to reduce reliance on shop bought food.

The form of the building references the pitched form of the terraces but does so in a way that reduces its massing and bulk. A 2.9m high ironstone wall provides a new boundary to the south of the site, these residents have been consulted on the design and were happy with the proposal. Behind this wall is a 2.5m wide flat sedum roofed section that contains the support spaces for the building. Beyond this the roof lifts at 40° to create a 4.5m wide pitched zone of principle spaces along the front edge of the building, engaging with the public realm. This design ensures minimal overbearing on the adjacent gardens whilst giving privacy and separation to these houses. It also

creates an strong iconic form that contains the southern boundary. Large windows provide connection and surveillance of the shared spaces whilst planting and landscape provide privacy for the overflow bedrooms.

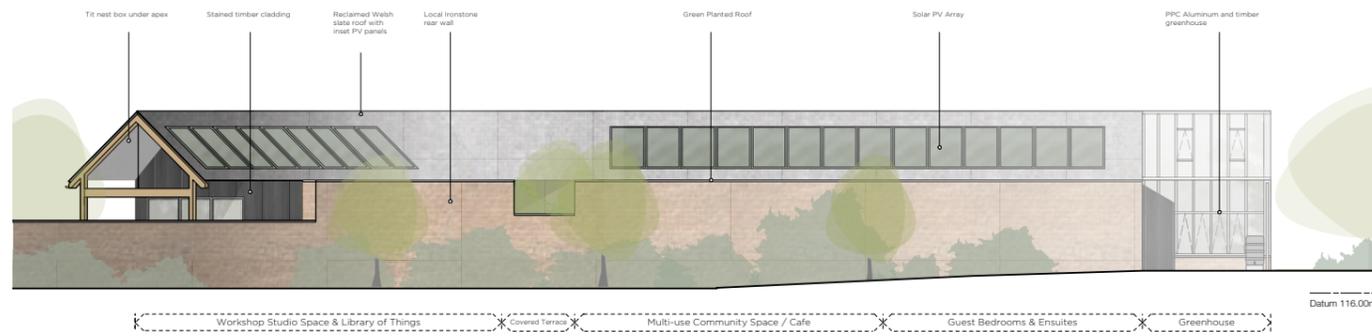
Structural summary

The superstructure of the community building will be similar to that of the North and South Terrace dwelling units being timber-framed but comprising only a single storey structure. The café and workshop will be open to the roof with exposed softwood trusses and purlins on a softwood post and beam structure. The front facing wall of the community building will be timber clad and the rear wall will be clad in local natural stone. Again, it is anticipated that a raft foundation will be employed to act as both the ground floor and foundation in one element for the relatively lightweight structure.

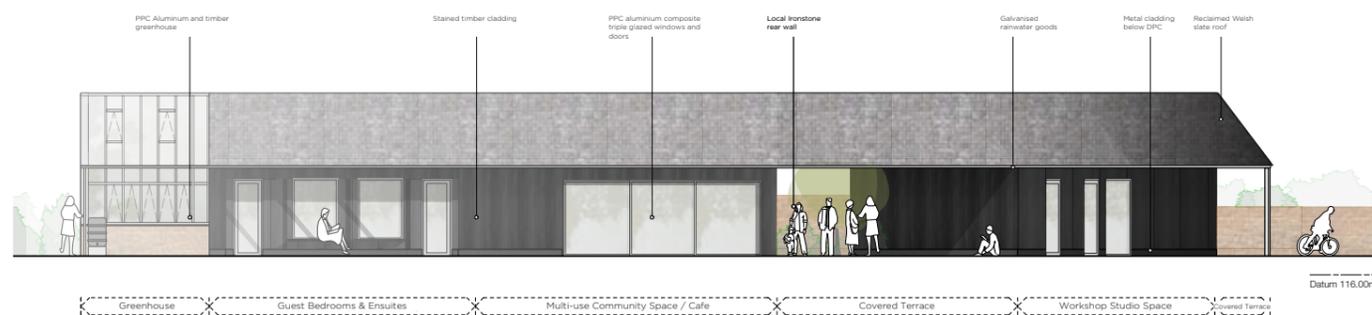
Community Building



Community Building



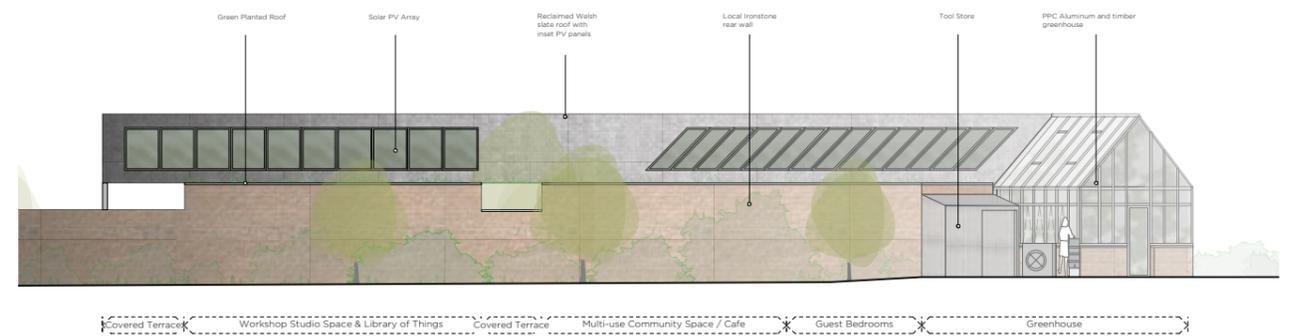
1 South Elevation



3 North Elevation



2 West Elevation



4 East Elevation

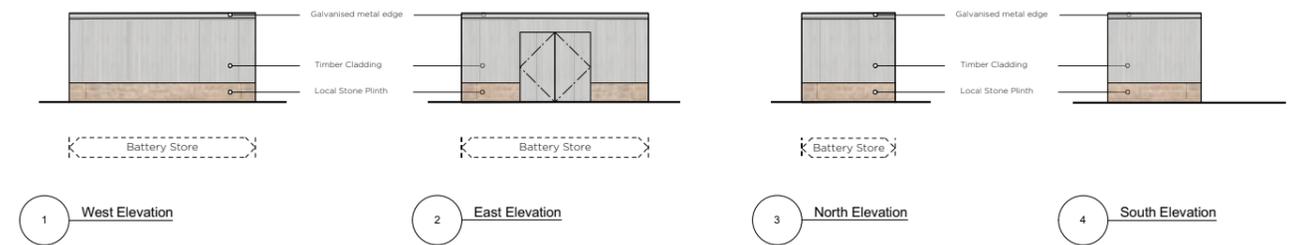
Storage Buildings / Bike Store

A sedum roofed structure sits on the western boundary of the site. This contains bins, bikes and mobility scooter storage as well as 8 secure storage areas for the 8 upper floor flats. An extensive green roof will provide valuable habitat and reduce the visual impact of the structure whilst the walls will be silvered timber with galvanised flashings and base.

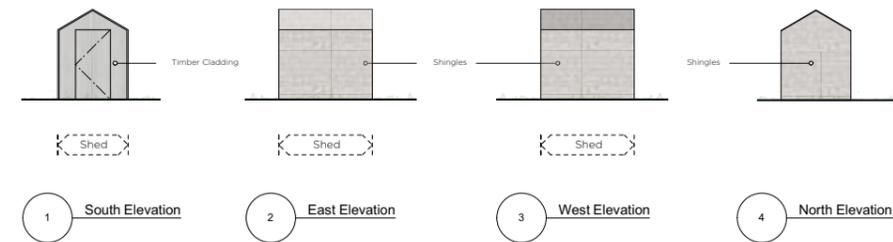
At the north west corner of the site is a the Micro-grid hub and battery store. Detailing the same way as the main storage building this will house the equipment to allow the PV energy to be used locally before exporting and to be stored in batteries to further reduce demand from the grid.

Each ground floor flat will have a small shed for bike and general household storage. These are proposed as small pitched volumes with cedar shingles on the walls and roof with silvered timber end gables.

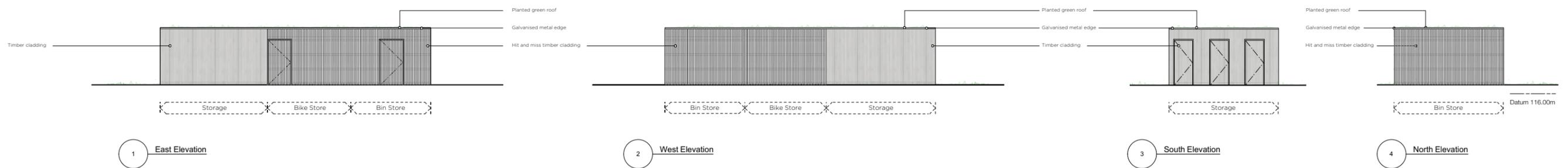
Battery Store



Sheds



Bins Store, Bike Store & Storage



Landscape Design

From the outset the landscape design has been shaped by extensive consultation which has established the philosophy and needs of this community led scheme. This consultation created a clear desire for a predominantly car-free site with cars confined to a parking court. This has allowed for the creation of a large central public area, envisaged to be a new shared space for the entire village. The houses are accessed via this space with the ground floor flats having small back gardens, the focus of the scheme has been to maximise public shared space over private gardens. It is envisaged that this will promote communal use and social interactions between the residents and the village as a whole.

The key requirements for this shared space were identified as:

- The creation of a large open inviting space flexible in use able to accommodate community events such as festivals, fetes, and feasts
- To create a focus on the community building allowing it to expand to incorporate the outdoor space in fine weather
- A dedicated space for a working allotment garden with greenhouse.

In developing the scheme various options were discussed where a preference for an organic layout which encouraged people to interact/dwell rather than 'travel through' was identified. A simple circular layout was tabled which allowed the community to gain a sense of scale by pacing out the circle and standing apart to show the space. There was definite surprise at its scale and a desire to balance the openness with planting and trees to wrap around the main area.

There was a strong desire to have trees throughout the site, which would encourage wildlife and green the space. Small-Medium sized native trees have been proposed with blossom, fruit/ berries and vibrant autumn colour. Three large broadleaf trees have been located at the site entrance to the north with Oak trees framing the entrance. Directly to the south is proposed a focal Hop Hornbeam tree, referring to the village brewing tradition. Trees have also been proposed in gaps between the parking bays to break up the mass of parked cars and reduce their visibility from the balconies of the upper flats. Espalier fruit trees are proposed for the main pedestrian access to the south of the site. This will provide subtle screening to the adjacent gardens without creating a 'tunnel'.

The approach to the aesthetic is more wild than ornamental so a mix of native hedges and shrub/herbaceous borders have been proposed to create structural planting areas that screen the car-park, boundary fences and allotment garden.

Green Sedum roofs are proposed on the flat section of the community building and the storage buildings. These will soften the visually appearance of these buildings and provide valuable habitat for insects.



Landscape Design

Hard Landscape

The hard landscape is primarily a porous resin bound gravel, which is an attractive shared surface suitable for both vehicles and pedestrians alike.

Garden patios will be paved with a textured concrete slab with recycled aggregate.

Community spaces and house frontages will be surfaces in a blue clay paviour which will complement the local ironstone used in the buildings and create an attractive hard-wearing surface.

Boundary Treatments

Post and wire fence: 1m high timber post and wire stock-proof (dog-proof) mesh fence.

Ivy screen: 1.8m pre-grown evergreen Ivy screen on steel mesh panel, installed with steel posts set in concrete foundation.

Fencing: 1.8m Hit-and-miss fence with gravel board base, installed with timber posts and top rail.

Native Hawthorn Hedge: The hedge will be planted alongside a 1m high post and wire, dog proof fence to aide establishment.

Garden Subdivisions: Separating the private gardens will be a hardwood timber hit and miss privacy screen 1.8m high for the initial section separating the patios. Beyond this a 1m high post and wire fence will run down to the site boundary.



Hit and miss fencing



Post and wire fencing



Ivy Screen



Porous resin bound gravel



Blue clay paviour



Permeable Parking



Hawthorne hedging at time of planting



Mature Hawthorne Hedging



Hawthorne hedging in blossom

Landscape Design

Play & Furniture



Village Green

The central village green space is right at the heart of the development. A circular open grass lawn, for use by all, can also host a small natural doorstep-play feature, using locally sourced materials such as tree stumps, trunks or boulders. Features boulders of local iron stone will provide additional play opportunities and visual interest.

Encircling the lawn a ring of native cherry trees will create a slight sense of enclosure with a seemingly wild flowering perennial bed also providing interest and biodiversity at ground level.

Allotment Garden

This active grow-zone space will be subdivided by the community into beds/allotments with use of the greenhouse. The area is hedges off with a picket gate and will include a large communal compost facility.



Landscape Design

Planting & Soft Landscape

All planting has been designed to be native, productive and to make a positive contribution to the local wildlife.

Blossom, fruits and berries will be present throughout notably in the trees (Cherry, Crab Apple, Mountain Ash, Mulberry) hedges and throughout the planting beds.

Orchard walk: A line of espalier fruit trees will run along the path, these will be pre-formed ex-nursery stock. Shrubby herbs (Lavender, Sage, Rosemary) will be planted at the base to add colour, scent and texture.

Village Green: the central lawn will be encircled by a naturalistic bed, planted with swathes of grasses, perennials and bulbs. The bed will include mass planting of plants with strong seasonal floral displays such as;

Spring: Acanthus, Alliums, Daffodils, Veronica,

Summer: Crocosmia, Cornflower, Echinacea, Lavender, Sage

Autumn: Sedum, Rudbeckia, Eryngium

Winter: Hellebores, Seed heads and Grasses

Shrub thickets: Structural planting beds will be filled with a variety of native and ornamental shrubs chosen to add both biodiversity and visual interest.

Species to include:

- Large Shrubs between 3-6m (10-20ft) at maturity
- *Cornus sanguinea* (dogwood): 3m, attractive winter stems
- *Euonymus europaeus* (spindle): 3m, good on chalk, attractive fruits
- *Juniperus communis* (juniper): 6m, grows in any well-drained soil
- *Ligustrum vulgare* (wild privet): 3m, useful for hedging
- *Rosa canina* (dog rose): 4m, fragrant flowers and red hips
- *Rosa stylosa* (short-styled field rose): 3m, single flowers and red hips, not readily available
- *Viburnum lantana* (wayfaring tree): 5m, attractive flowers and fruit
- *Viburnum opulus* (guelder rose): 5m, attractive fruit and autumn colour
- Medium Shrubs 1.5-2.5m (5-8ft) at maturity
- *Cytisus scoparius* (broom): 1.5m, thrives in poor, acid soil
- *Rosa arvensis* (field rose): 2m, fragrant flowers and red hips



Multi-stem Amelanchier



Multi-stem Amelanchier



Crab Apple



Wild Flower Meadow



Rowan



Wild Cherry



Grasses



Hop Hornbeam



Pear Tree



Sedum and Grasses



Pleached Fruit Trees



Echinacea

Landscape Design

Ecology & Biodiversity

The sustainability ambitions of this project extend to the bio-diversity and ecology of the site. As established by two ecological surveys the site is of limited bio-diversity despite its overgrown state. The ambition is to exceed the minimum required 10% increase in biodiversity through the development of the site. The principle elements to achieve this are:

- Swift nest bricks will be installed in each gable apex of the north elevation of the north terrace, i.e. right near the apex above the windows. Bat bricks will be installed in the south elevation gables, again right near the apex.
- In the south terrace a Starling nest box will be installed in the east facing gable apex and a bat roost tube in the west facing gable apex.
- Swallow nest cups will be installed in the bin store and bike stores as they are open sided or open-ended structures.
- Under the roof overhang in the community building tit nest boxes will be installed, right in the apex.
- In the grounds there will be Hedgehog holes in corners of the boundary fences/walls to allow the hogs, and other small animals, to move freely around the area or cross through the site on their nightly excursions. Insect boxes (insect hotels) will be installed in the north and west boundary hedgerows, and some of the larger trees along these hedgerows will accommodate bird nest boxes – two tit boxes and two open-fronted.
- The flat roofs of the storage buildings and the rear of the community building will be insect and 'bee-friendly' sedum/wildflower.
- The trees are native varieties, chosen for their native prominence and rich bio-diversity.
- General structural planting will be native floral and fruiting varieties for the benefit of local wildlife.
- The productive gardens will encourage wildlife with wild corners to further provide habitat.

Cotswold Wildlife Surveys have undertaken a formal bio-diversity assessment which has been submitted with this report.



Wild Flowers



Sedum Roof



Bees



Intensive Green Roof



Swallows in caves

Landscape Design

Sylva Consultancy undertook a full arboricultural analysis of the existing trees and proposed scheme. The associated report (submitted with this application) highlighted the following points;

‘In order to implement the scheme it is proposed to remove 9 category ‘C’ trees (T1, T2, T3, T4, T6, T7, T8, T9 & T10) and 2 category ‘C’ groups (G2 & G3). Category ‘C’ trees, groups and hedges are assessed as being either of low quality, limited merit, low landscape benefits, no material cultural or conservation value, or only limited or short-term potential; or young trees with trunk diameter below 150mm; or a combination of these.’

‘It is acknowledged that 1 category ‘B’ trees (T11, Ash) will also be removed to implement the scheme. The tree survey has identified the tree as a ‘coppiced’ specimen that has not been under any recent tree management. The Ash tree has been highlighted as being at the lower end of its category grading due to the tree’s current form. It is considered that the constraint this tree places on the proposal is unrealistic and as such it is proposed to remove this tree and to undertake appropriate tree planting mitigation that will complement the sites development.’

‘The arboricultural impact assessment plan illustrates that the proposed footprint of the northern terrace falls within close proximity to the outer edge of the root protection area of tree T12. Ground protection measures for this tree will be required and, in this instance, it is recommended that the ground protection consists of ‘Duradek Mats’ or similar product that is compliant with British Standard 5837:2012 (Appendix 6).’

‘Careful consideration has been given regarding the buildability of the proposals. The arboricultural impact assessment plan illustrates that sufficient room exists to locate the site compound and contractor parking outside the RPA’s of the retained trees.’

‘A comprehensive landscape plan has been developed which provides an enhanced environment and compliments the development of the site. New tree planting is proposed whereby suitable species for the site and for climate change will be chosen.’

The proposed tree removals and planned planting to replace them result in a sensible and well considered scheme consistent with the core ambition of improving the bio-diversity and ecology of the site.



Rowan



Wild Cherry



Hop Hornbeam



Pear Tree

Landscape Design

Drainage

The sustainable drainage design aims to mimic the site's natural flow paths and to manage rainfall close to buildings while reducing the impact of flooding. The surface water strategy follows the principles of the CIRIA report C753. The strategy is as follows:

1. Rainfall onto building roofs is collected and directed to the sub-base of the external surfaces.
2. Water is retained within the sub base before being released to the local ditch in a controlled manner at Greenfield rate.
3. Water harvesting tanks will be located outside buildings. This water will be used to irrigate gardens and green spaces within the development.

The Sustainable Drainage System provides sufficient storage volume to efficiently and sustainably drain surface water, while minimising pollution and managing the impact on water quality of a local ditch running parallel to the development. Refer to Drainage strategy in the appendix.



Sustainability

Overview

Sustainability is at the core of this housing project. It started as an initiative by Hook Norton Low Carbon (HNLC) which for the last 10 years has sought to improve the energy efficiency and reduce the carbon footprint of the community. Since then Hook Norton Community Land Trust (HNCLT) was formed to take the project on.

Right from the beginning it was envisaged as an exemplar of holistic sustainable development seeking to tackle not only housing, but transport, energy generation, food production and strengthening community. The wider ambitions for this element of the project are set out in the Architectural and Sustainability Strategy section. The specific energy ambitions of the project are set out in the Hook Norton Housing Energy Statement submitted with this application.

The key architectural ambition is to create buildings that will be low energy in occupation and construction. It also seeks to provide a bio-diverse environment and employ pioneering ideas in PV energy generation and use with a micro-grid covering the site and the adjacent Sports and Social Club.

The design of the houses and community building have been designed using Passivhaus principles and modelled using Passivhaus Planning Package (PHPP) to ensure that at this stage they comply with the stringent requirements of the Passivhaus standard.

What is Passivhaus?

Passivhaus is basically a world leading standard for energy efficient buildings. As such it can be defined in terms of various energy consumption figures, which look impressive to those interested in technical details. However these numbers aren't why Passivhaus is popular. Instead we see the main attractions are comfort, and guaranteed low energy performance. The quality assurance needed to attain the Passivhaus standard also closes the performance gap that often occurs when energy targets are tightened.

Passivhaus focusses on the thermal performance of building fabric—insulation and airtightness. The results can be measured by researchers and Passivhaus buildings stand out as far and away the best, and hardly deviate from the design figures. This is why we can guarantee that the energy performance promised will be delivered.

The other main benefit of a high performance building fabric is comfort. Elimination of cold spots in the house, draughts, and condensation free windows all lead to a healthy and comfortable internal environment. Airtight construction and triple glazing provide excellent sound insulation so a Passivhaus is quiet inside.

In draught-free building you still need fresh air, and therefore Passivhaus requires well designed ventilation systems. Despite being the most airtight of houses they also have the best internal air quality. Passivhaus ventilation systems incorporate heat recovery so that little heat is lost from the building however much you ventilate, and the incoming air is at room temperature, not a cold draught. In addition the Passivhaus standard requires a high standard of noise control built into the ventilation system, so you will normally not be able to hear it running.

Overall the combination of easy comfort, at very low energy cost, excellent internal air quality and a quiet environment makes a Passivhaus a healthy house, as well as a low energy house.

Sustainability

Hook Norton Passivhaus

The houses in this project are grouped into two blocks, a north terrace and a south terrace, with dwellings formed as split level maisonettes. Combining small units into larger blocks is a classic Passivhaus strategy to reduce the external, heat loss area, and so reduce the energy needed for heating.

The construction proposed is common for Passivhaus buildings – a lightweight timber frame with deep I-section timbers holds insulation 300mm thick around the external walls and the roof. The floor is a concrete slab but resting on and wrapped round by a thick layer of load bearing EPS insulation. This joins up with the wall insulation so we have a full wrap of thick insulation around the building.

Windows are triple glazed and airtight, but are open-able – you can always open the windows in a Passivhaus if you want. Airtightness of the building is reached through the use of specialist boards and tapes, but more basically through the design of a simple continuous surface which joins up floor, walls, windows and roof into one air-tight barrier.

Passivhaus design is not the same as passive solar design, so windows are the size they are for daylight and views, and not to grab extra solar energy.

PHPP – The Passivhaus Energy Model

The two terraces have been modelled in the Passivhaus “PHPP” software to check that the design meets the Passivhaus standard.

The verification sheets show the various criteria for certification. Note that each terrace is modelled, and certified, as a whole rather than each dwelling individually.

As well as heating energy the program also models summer conditions. For both blocks the model shows no overheating, which is internal temperatures above 25 C. This performance is thanks to reasonably modest levels of glazing, shading where necessary, and the ability of continuous mechanical ventilation to bring cool air in during night time and keep warm air out in the day. It is possible, that with higher heat generation within a dwelling (more cooking, computers and so on) or an extreme heat wave, that the 25 C limit will be exceeded but the model indicates to us that these are not overheating-prone designs.

Passive House Verification



Building: North terrace
 Street: Hook Norton
 Postcode/City: GB-United Kingdom/ Britain
 Building type: Terrace
 Climate data set: GB002a-Silsoe
 Climate zone: 3: Cool-temperate Altitude of location: 166 m

Home owner / Client:
 Street:
 Postcode/City:
 Province/Country:

Architecture: Charlie Luxton Design
 Street:
 Postcode/City:
 Province/Country: GB-United Kingdom/ Britain

Energy consultancy: Alan Clarke, Nick Grant
 Street: Woodland, Woodland Close
 Postcode/City: GL15 4PL Lydney
 Province/Country: Glouce

Mechanical engineer:
 Street:
 Postcode/City:
 Province/Country:

Certification:
 Street:
 Postcode/City:
 Province/Country:

Year of construction: 2020 Interior temperature winter [°C]: 20.0 Interior temp. summer [°C]: 25.0
 No. of dwelling units: 8 Internal heat gains (IHG) heating case [W/m²]: 2.8 IHG cooling case [W/m²]: 2.8
 No. of occupants: 14.7 Specific capacity [Wh/K per m² TFA]: 72 Mechanical cooling:

Specific building characteristics with reference to the treated floor area		Criteria	Alternative criteria	Fulfilled?
Space heating	Treated floor area m²	563.2		
	Heating demand kWh/(m²a)	15	15	yes
Space cooling	Heating load W/m²	10	-	yes
	Cooling & dehum. demand kWh/(m²a)	-	-	-
Airtightness	Cooling load W/m²	-	-	-
	Pressurization test result n ₅₀ 1/h	0.6	0.6	yes
Non-renewable Primary Energy (PE)	Frequency of overheating (> 25 °C) %	0	10	yes
	PER demand kWh/(m²a)	142	-	-
Primary Energy Renewable (PER)	Frequency of excessively high humidity (> 12 g/kg) %	0	20	yes
	PER demand kWh/(m²a)	59	45	59
Primary Energy Renewable (PER)	Generation of renewable energy (in relation to pro- kWh/(m²a) (netted building footprint area)	92	80	86
	PER demand kWh/(m²a)	51	45	51

I confirm that the values given herein have been determined following the PHPP methodology and based on the characteristic values of the building. The PHPP calculations are attached to this verification.

Task: _____ First name: _____ Surname: _____
 Issued on: _____ City: _____

Passive House Plus? **yes**

Passive House Verification



Building: South Terrace
 Street: Hook Norton
 Postcode/City: GB-United Kingdom/ Britain
 Building type: Terrace
 Climate data set: GB002a-Silsoe
 Climate zone: 3: Cool-temperate Altitude of location: 166 m

Home owner / Client:
 Street:
 Postcode/City:
 Province/Country:

Architecture: Charlie Luxton Design
 Street:
 Postcode/City:
 Province/Country: GB-United Kingdom/ Britain

Energy consultancy: Alan Clarke, Nick Grant
 Street: Woodland, Woodland Close
 Postcode/City: GL15 4PL Lydney
 Province/Country: Glouce

Mechanical engineer:
 Street:
 Postcode/City:
 Province/Country:

Certification:
 Street:
 Postcode/City:
 Province/Country:

Year of construction: 2020 Interior temperature winter [°C]: 20.0 Interior temp. summer [°C]: 25.0
 No. of dwelling units: 4 Internal heat gains (IHG) heating case [W/m²]: 2.7 IHG cooling case [W/m²]: 2.7
 No. of occupants: 8.3 Specific capacity [Wh/K per m² TFA]: 72 Mechanical cooling:

Specific building characteristics with reference to the treated floor area		Criteria	Alternative criteria	Fulfilled?
Space heating	Treated floor area m²	327.0		
	Heating demand kWh/(m²a)	15	15	yes
Space cooling	Heating load W/m²	9	-	yes
	Cooling & dehum. demand kWh/(m²a)	-	-	-
Airtightness	Cooling load W/m²	-	-	-
	Pressurization test result n ₅₀ 1/h	0.6	0.6	yes
Non-renewable Primary Energy (PE)	Frequency of overheating (> 25 °C) %	0	10	yes
	PER demand kWh/(m²a)	124	-	-
Primary Energy Renewable (PER)	Frequency of excessively high humidity (> 12 g/kg) %	0	20	yes
	PER demand kWh/(m²a)	51	45	51
Primary Energy Renewable (PER)	Generation of renewable energy (in relation to pro- kWh/(m²a) (netted building footprint area)	75	60	70
	PER demand kWh/(m²a)	75	60	70

I confirm that the values given herein have been determined following the PHPP methodology and based on the characteristic values of the building. The PHPP calculations are attached to this verification.

Task: _____ First name: _____ Surname: _____
 Issued on: _____ City: _____

Passive House Plus? **yes**

Sustainability

“Plus energy” & Passivhaus Plus

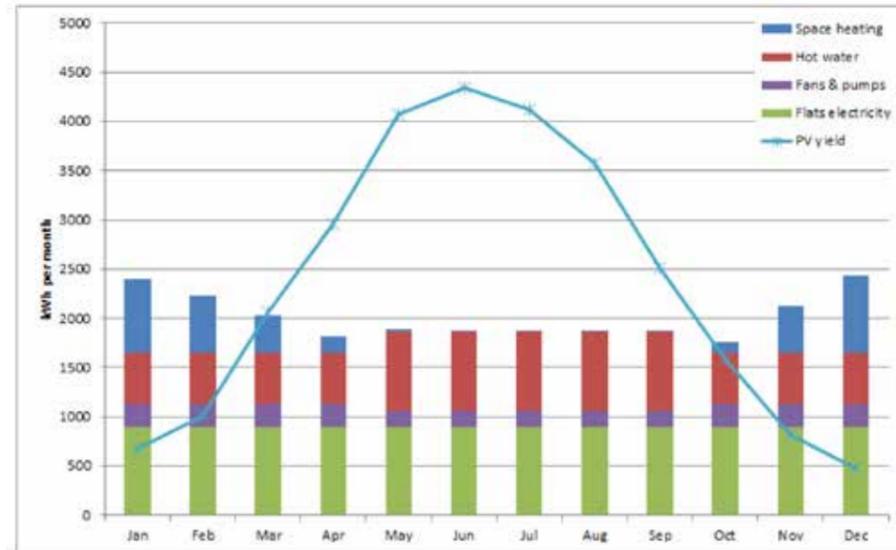
As described elsewhere the photovoltaic generation is making these houses net exporters of energy over the year. The Passivhaus model includes energy use from lighting, cooking, and other electrical equipment typical for a dwelling as well as the heating and hot water demand. Under the standard assumptions of the model the total electrical use of all these over the year is less than the total annual generation of the photovoltaic panels on the roof.

With extensive PV panels proposed for the site, initial energy generation verses consumption has been modelled. The results (figs. 1 & 2) show that the South and north terraces will be energy positive.

The Passivhaus standard recognises this as “Passivhaus Plus”, an enhanced standard. In the Passivhaus assessment there is in fact some leeway for 3 storey buildings having the same roof area as 1 and 2 storey buildings, but anyway the model is showing that both terraces are reaching the Passivhaus plus standard.

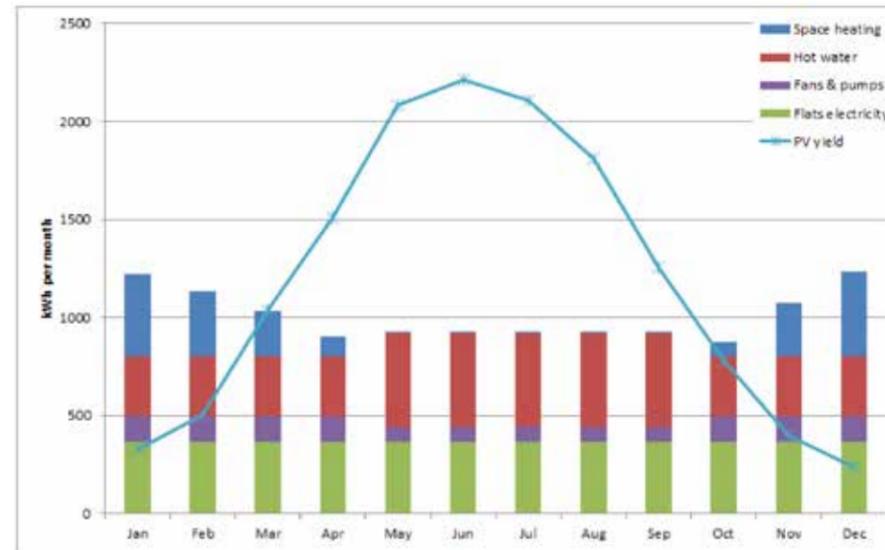
The community building is much harder to model due to the unknown occupation and electricity demand associated with these activities. However this buildings will be constructed to Passivhaus or Passivhaus equivalent standards. Combined with an 8.2kWp solar array on its roof and the predicted 6200 kWh/a energy export from the two terraces it is envisaged that even with fairly heavy energy demand the whole site will meet its ambition of being energy positive, a net exporter of electricity over the year.

Fig 1



North Terrace - import 6400 kWh/a, export 10400 kWh/a, net ex 4000 kWh/a

Fig 2



South Terrace - import 3300 kWh/a, export 5500 kWh/a, net ex 2200 kWh/a

Sustainability

Building services

The limited space heating required for the buildings will be provided by an air source heat pump (ASHP) for each terrace and the community centre. The proposed system will use an innovative approach to meet the very low heating demands of the dwellings in an efficient manner, and also provide for utilisation and storage of surplus solar electricity during the summer.

To minimise electricity use during the winter the dwellings will be heated by heat pumps, however their heating needs are very small and will only need one heat pump per terrace. This will supply low temperature radiators in each flat, and will have conventional heating controls.

Whilst the heat pump is running in winter it will also preheat the hot water, but full temperature will be achieved with an electric element. This will be controlled to make the most of PV generation, and in summer will be the sole source of energy for the hot water.

Each maisonette will have its own independent ventilation system. This will use an efficient, quiet, Passivhaus certified heat recovery unit with silencers and distribution ductwork. Fresh air will be supplied to living rooms and bedrooms, and stale air extracted from kitchens and bathrooms.

Occupants will have control over the unit, able to adjust flow rate through low, medium and high pre-sets, and set the summer comfort temperature to suit themselves.

Ventilation units will be fitted into kitchens or other easily accessible places so that regular filter changes are easy to carry out:

Thermal bridges

Thermal bridges are areas of higher than normal heat loss through the building fabric, i.e. additional to the product of area and U-value.

Thermal bridges have not been included in the PHPP model at junctions between walls, roof and floor. We have assumed that with the proposed construction these junctions can be made thermal bridge free.

An internal soil vent pipe would be a thermal bridge, we propose an external vent pipe is used to avoid this heat loss (soil pipes with air admittance valves do not incur heat loss).

The ground floor: wall junction thermal bridge is a source of additional heat loss, here the Isoquick underfloor insulation has an upstand to meet the insulated wall panels and minimise the heat loss. Beneath door thresholds the Isoquick is replaced by Compacfoam insulation – this is a dense load bearing insulation designed to support the door threshold.

There are always thermal bridges around windows, to minimise these it is best to sit the windows within the depth of the timber frame and overlap the window frames with insulation externally. Boarded cladding returns naturally within the reveals to meet the window frames.

Airtightness

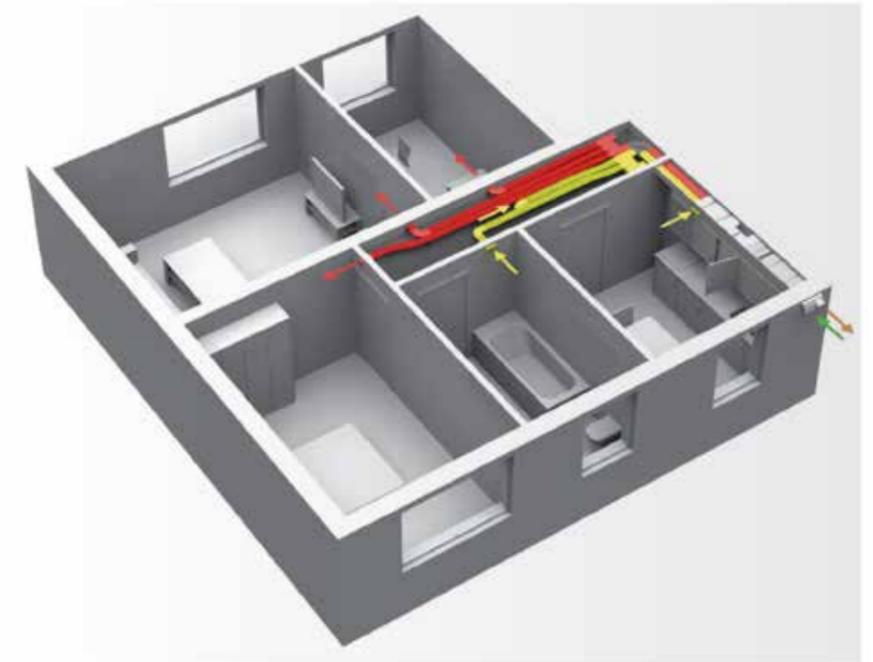
Passivhaus uses an airtight construction with ventilation provided by mechanical ventilation. Achieving airtightness requires design of a specific air barrier which is a continuous surface around the building. Normally this encloses each terrace house unit separately in which case wind barriers are needed to prevent outside air flowing through the party wall cavities.

The air barrier comprises vapour block board to roof and walls, with taped joints and taped connections to windows, door and floor slab. The slab completes the air barrier. The internal party floor and wall in each terrace unit require consideration – it will be harder to keep these airtight from each other, though this would be beneficial in terms of acoustics and also make airtightness testing easier.

For the PHPP model an airtightness of 0.6ach @50Pa was assumed, this is the requirement for Passivhaus.

In this example below the red ducts are providing fresh air and the yellow ducts removing stale air.

A single domestic heat pump is needed for each terrace and the community building.



Sustainability

Embodied Energy in Construction

In accordance with HNCLT’s project objective the project ambition is to achieve carbon neutrality in Life Cycle Analysis (LCA). The scheme is therefore being modelled to ascertain the potential for carbon neutrality in construction in addition to operational energy and where practicable whole life carbon. This is important as the construction embodied energy emission can contribute to over 50% of the whole of life for residential building emissions. The UK Green Building Council refers to Net Zero Carbon in construction through the net zero carbon framework and defines this as:

“When the amount of carbon emissions associated with a building’s production and construction stages up to practical completion is zero or negative, through the use of offsets or the net export of on-site renewable energy.”

To reduce construction carbon impacts and development:

- A whole life carbon assessment should be undertaken and disclosed for all construction projects to drive carbon reductions.
- The embodied carbon impacts from the product and construction stages should be measured and offset at practical completion.

The full framework is illustrated in Figure 1.

Methodology

The Hook Norton scheme is using LCA software which utilises the Royal Institute of Chartered Surveyors (RICS) ‘New Rules of Measurement’ classifications. The software being used is One Click LCA software. (<https://www.oneclicklca.com/construction/>). The software has the largest verified data set of EPDs and LCA impacts in the world.

A detailed breakdown of elements that make up the buildings are enabling the team to make informed decisions, from the very first design moves and as the assessment is ongoing, that result in reducing the carbon impact of construction. The outline specifications form a baseline model through which optioneering based on reducing impact can then be conducted. The assessment starts at the elemental level and then with a further breakdown to a component level following a review of the plot, schedule and masterplan including the areas for each dwelling. Other key aspects include wall construction, foundations, services and utilities.

Guiding principles to ensure the building element details are developed to be low embodied energy include:

- The use of natural raw materials including; timber, cork and bamboo and natural insulation materials including wool and alternatives to plasterboard lining.
- Replacing high embodied energy materials such as Portland Cement in concrete with alternatives including: fly ash and ground granulated blast furnace slag (GGBS).
- Using less cement first and foremost, reducing content, aggregates and water content.
- Specifying recycled steel and avoiding virgin steel which by weight has a greater embodied impact than concrete. (World Steel Association, 2019).

A whole life carbon assessment addresses a building’s entire carbon impacts throughout its life cycle with the whole life/future development aspects estimated based on accessible and available data.

Currently no agreed framework exists for this element in the UK, so in order for the scheme to achieve a net zero carbon measurement and mitigation of carbon impacts across all stage’s, estimates will need to be made and agreed with the project team. The whole life carbon assessment will therefore concentrate on construction emissions and be carried out in three phases:

1. Initial review of concept ideas to identify embodied energy/carbon impacts of key design moves. Selection of low embodied energy/carbon build techniques and ensure scheme design allows for these. This ensures the assessment has the greatest potential to drive carbon reductions in all future stages of the project’s delivery.
2. The first full assessment to be completed during technical design (RIBA Stage 4).
3. A further assessment will be undertaken at practical completion (end of RIBA stage 5) and will measure the as-built outcome, in place of modelled assumptions. This final as- built assessment should be used to determine the extent of carbon impacts needing to be offset to achieve net zero carbon for construction.

A review of the initial construction type and specification used in the PHPP modelling shows that the buildings are on track to be LCA exemplars.

Offsets

Where all feasible measures for reducing carbon impacts have been reasonably exhausted, through the assessment, offsets will be used to cover any residual carbon where practicable. The energy positive nature of the scheme means that over time these energy exports will offset construction carbon. Should this require augmentation, offsets will be purchased commensurate with any outstanding carbon in order for the scheme to achieve its ambition of a net zero carbon balance. It should be noted that whilst the ambition is set out, the applicant does not want these imposed via conditions as offsetting may be subject to available funding.

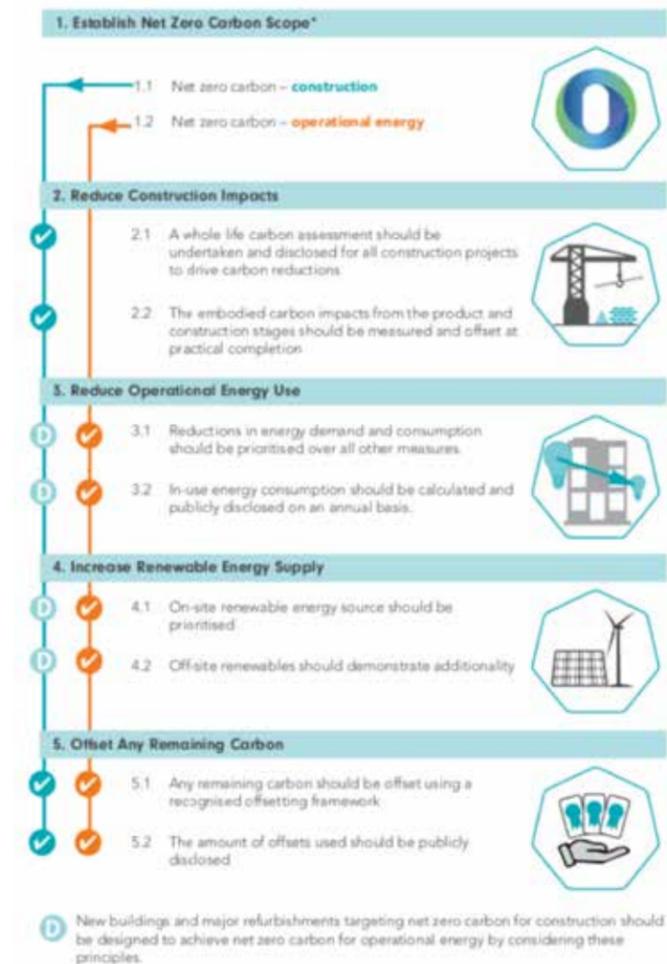


Figure 1: Steps to Achieving a Net Zero Carbon Building

Mobility & Access

Access

The following documents from the Policy Framework of Cherwell District Council have been central to designing the scheme's access strategy;

- Residential Design Guide Supplementary Planning Document (SPD) (July 2018)
- Hook Norton – Neighbourhood Plan (2015) which states:
 - 1.1 High quality design supports a positive legacy, leaving successful places which are both functional and beautiful, which engender a sense of community, are long lasting and age well

These policies refer out to National guidance including - Building for Life 12, Design for Homes (2012) and Manual for Streets.

The ambition of the project is to create a new neighbourhood that not only promotes sustainable living and sustainable transport as per the wider ambitions of HNLC, but also promotes healthy lifestyles, inclusion by design and community cohesion. Accessible and inclusive design has been at the heart of the scheme's development. HNCLT's brief to the design team is to achieve a multi-generational, new community within the existing community of Hook Norton. To achieve this goal and respond to the local context, two key activities have taken place:

- 1 Local residents have been extensively consulted throughout to identify local housing and community needs
- 2 Specialist Housing and Neighbourhood Design consultancy 'Living Well at Home Ltd' has provided advice and support on the delivery of the inclusive design components of the scheme.

Throughout, careful consideration has been given to the relationship between the buildings and the public realm to promote community cohesion and neighbourliness, the core of which is the public car-free open space and the resultant reduction in the predominance of vehicles on the site. Early consultation with the community led to a decision to concentrate all parking in a parking court in the north east corner of the site. The north terrace has a controlled access that will allow for occasional loading and emergency vehicle access. Whilst the distance from the homes to the parking is well below Lifetime Homes Standard the potential for disability vehicle parking in front of the north terrace has been considered should it be necessary. The design for this area will ensure that the space reads as a pedestrian priority area, and will control vehicular movements by means of a retractable bollard or similar device.

The principles of Building for Life 12 (2016) and Manual for Streets have been considered when developing the Inclusive Design strategy for the site, in particular:

- Strong connectivity with the adjacent neighbourhoods by prioritising pedestrian routes through the site linking the local shops to the South and new housing to the North, promoting passing footfall through this new hub for the community.
- Promoting activity by design by placing a green, playful car-free public space in the heart of the scheme and locating car and cycle storage to the edge of the site (still within appropriate walking distances of the unit entrance doors.)

Masterplan – Prioritising Walkability and Activity

At its heart, the scheme is designed to promote community cohesion through the incorporation of a large communal garden. The space includes opportunities to grow food, rest, play and dry washing as well as enjoy the sun or shade as required. This garden will serve as a focal point for the immediate development and the wider community.

The site is step-free and will be gently sloping (>1:20) in some areas to accommodate the slight fall of 1 metre across the site. The logically arranged footpaths connect to the wider settlement of Hook Norton in three, convenient directions. This will allow easy and safe access to the shops and facilities of the village, encouraging walking rather than car use. The intention is that the design combination of gardens and footpaths will draw footfall from many directions, bringing animation and increased interaction to the space.

Extensive bike storage is available for those visiting the site (14 spaces) and lockable bike storage is provided for all residents (24 spaces) exceeding CDC guidelines. Secure covered storage for mobility scooters has been provided in the main storage building. In addition each ground floor flat has a 1.8m wide covered terrace adjacent to its front door. These have also been designed to provide additional close proximity parking for mobility scooters, should they be needed.

The site has been designed with level access and thresholds throughout.

Public Transport

The bus route through Hook Norton is 0.3 miles along quiet roads through the village. This allows the potential for sustainable public transport to both Chipping Norton and Banbury.

Parking and Car Use

Policy HN-T1 (Access and Parking) of the Neighbourhood Plan requires new developments to provide sufficient off-road car parking taking account of Oxfordshire County Council's (OCC) parking standards. Policy HN-T1 goes on to note that applications for planning permission must clearly set out the proposed level of parking provision in relation to objectively assessed needs at the time and show how future needs have been considered. It is adjudged by the access appraisal produced by Origin Transport Consultants that Cascade Road and Goldings Road are suitable to accommodate the additional traffic generated by the development.

The proposal will provide the provision of 17 unallocated car parking spaces for the site with 2 of the spaces having increased width to allow 1.2m clear along one side. As such the proposal accords with Policy HN-T1 and the OCC parking standards.

In line with the sustainable development principles in this development HNCLT will be looking to provide low carbon transport options for the residents. In particular,

through discussion with HNCLT, the project is proposing to offer use of the car club without having to pay the usual annual fees in exchange for being able to station the cars on the site. This will allow residents to have priority access to between 3-5 community electric pool car vehicles. The electric vehicles selected will be "vehicle-to-grid" compatible so that in this way they can act as a component of the microgrid for the site. When plugged in and on site the cars will in effect be mobile batteries adding to the battery capacity of the microgrid within pre-determined limits that mean the cars are still available for their primary transport purpose. Hooky Car Club is a well-established service for the community that has been running successfully over the last 9 years. It has reduced the number of cars owned by the members, so over 75% of the regular users over the last 12 months have either not replaced a car that had come to the end of its useful life, or have sold an existing car, or have joined the car club rather than purchasing a second car. They have also significantly reduced the emissions per km given they are low carbon emission vehicles (a combination of electric and biodiesel-powered) <https://www.hn-lc.org.uk/hooky-car-club>.

The 17 unallocated spaces will remain under the control of HNCLT at all times so that in the event of the car club cars no longer being available on the site, or HNCLT deciding that the use of pool cars is not meeting the transport needs of the residents on the site, there is no reduction in the number of parking spaces to meet the overall transport needs of the residents.

There will not be any parking available on site for the proposed community building. Pedestrian access will be actively promoted as the route to reach the community building and the access onto the site and into the building will be wheelchair friendly as the site as a whole is designed to meet Lifetime Homes Standard. Where access by vehicle is necessary HNCLT have come to an understanding with Hook Norton Sports and Social Club (HNSSC) that parking is permissible on the car park area of HNSSC which is immediately adjacent to the pedestrian access from the south west of the site. A letter setting out this agreement and the Transport Statement from Origin. Consultants have been submitted with this application. The transport statement from Origin Transport Consultants has been submitted as a part of this application.

Mobility & Access

Homes – Flexible and Adaptable for Generations to come

In support of the local policy framework and the creation of a cohesive new neighbourhood within Hook Norton the following design elements have been incorporated:

- All housing has been developed to the Lifetime Homes principles of flexible and adaptable housing to suit all ages, and all ground floor units meet the enhanced requirements of Category 2 of the Approved Document to Part M: Volume 1 – Dwellings.
- The housing units are generous in size, with approximately 10% greater floor area than the Nationally Described Space Standards. These enhanced unit sizes help to deliver even greater flexibility of use for future generations and also incorporate the flexibility to adapt to changes in the future: As the occupants' needs change, the homes can accommodate a range of life stages such as play space for children, work-from-home or hobby spaces for adults, or additional space to circulate for people with additional mobility needs. Through careful design and specification, the properties can flex and adjust to meet these needs.
- Provision of adequate storage per unit, including scope for communal cycle and mobility scooter storage and an accessible communal bin store to promote incidental moment of interaction.
- The principal frontage includes front doors and large windows or doors overlooking the public realm from all living spaces (in the homes) and the principal community rooms. This creates a sense of belonging, safety and by promoting interaction can reduce loneliness.
- The design is tenure-blind – there is a mix of affordable rented and shared ownership units alongside private market housing all identical in appearance and specification.

Community Space

The accessibility of the community building includes step-free access, suitable width doors, accessible WC provision and supplementary provision of guest overnight accommodation to encourage households to have guests visit. The most active parts of the community space open onto the central garden, with large glazed doors allowing the activity to 'spill' out onto the sheltered / covered terrace and the gardens beyond.

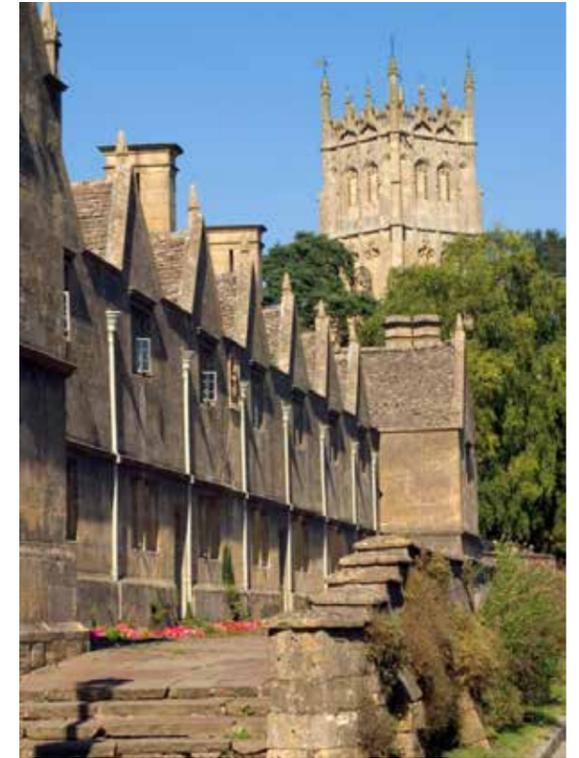
Next Steps

The inclusive design features for both the community centre, the gardens and the homes will continue to be developed through to completion on site.



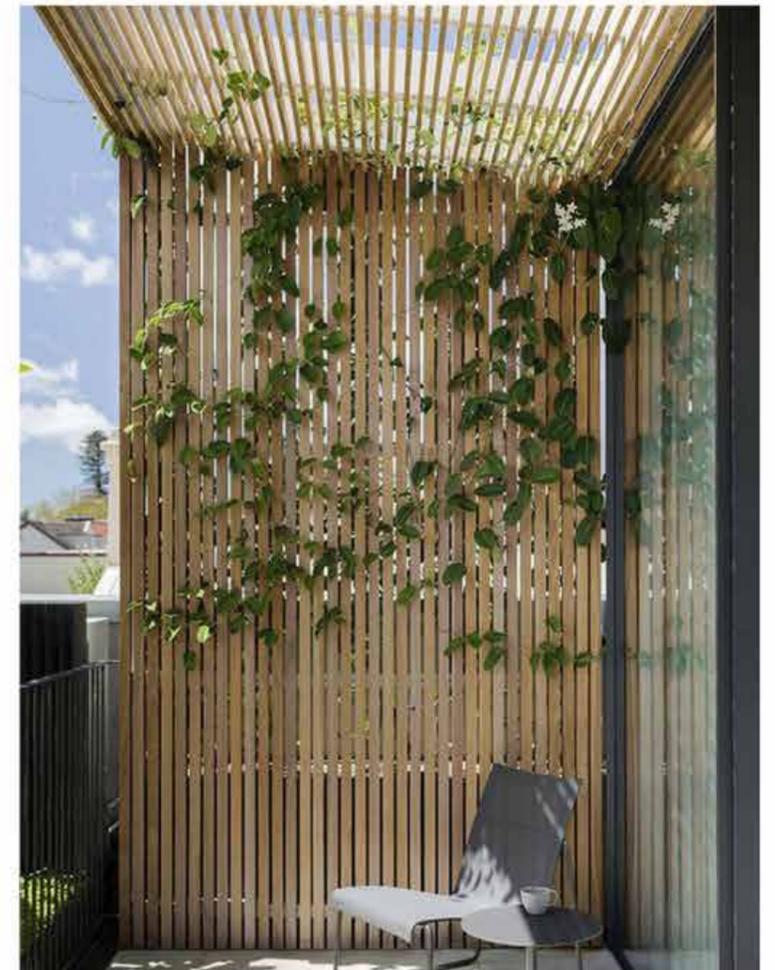
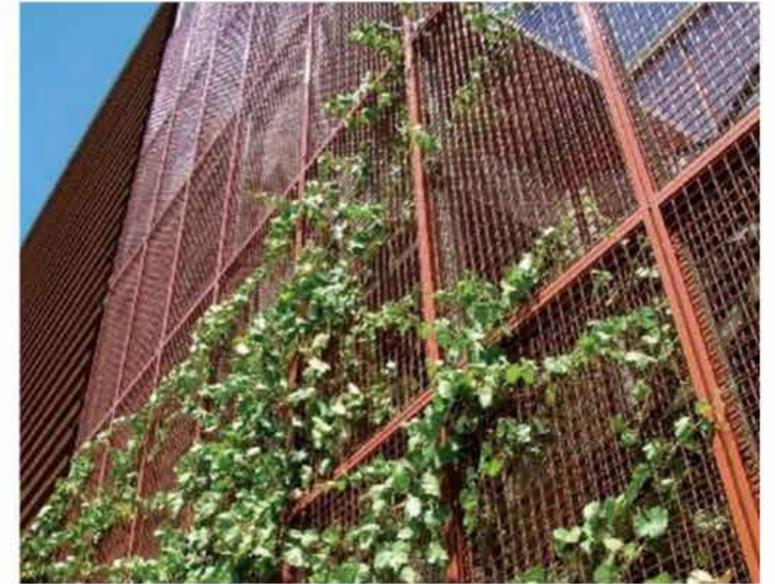
Precedents

Houses & Community Building



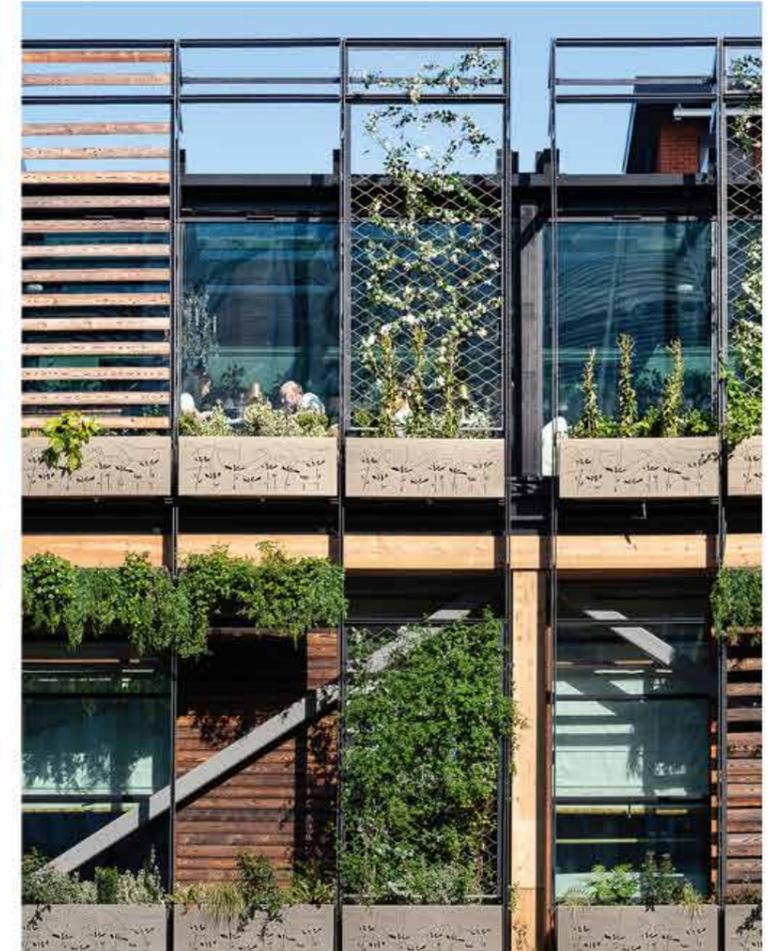
Precedents

Balconies & Vertical Planting



Precedents

Material Composition



Precedents

Landscape



Addendum List

Supporting Documents

HNH – Design and Access Statement
HNH – Flood Risk Assessment
HNH – Arboricultural Report
HNH – Contamination Report
HNH – Preliminary Ecological Appraisal
HNH – SSC letter of support
HNH – Sustainability and Energy Statement
HNH – Foul Water Flows Calculations
HNH – Pumping Stations for Adoption
HNH – Drainage Strategy
HNH – Bio-Diversity Audit
HNH – Acoustic and Light Survey
HNH – Planning Statement
HNH – Transport and Access Appraisal
HNH – Housing Mix and Tenure Statement

Drawing List

220_01_100_P2 Site Location Plan.pdf
220_03_100_P2 Existing Site Plan.pdf
220_03_151_P7 Proposed Site Plan.pdf
220_03_200_P3 Proposed - Unit types.pdf
220_03_311_P5 Proposed Plans - 3 & 1 Bed .pdf
220_03_312_P5 Proposed Plans - 2 & 2 Bed .pdf
220_03_314_P4 Proposed Plans - Community Building.pdf
220_03_320_P4 Proposed Ground Floor Plan.pdf
220_03_321_P3 Proposed First Floor Plan.pdf
220_03_322_P3 Proposed Second Floor Plan.pdf
220_03_323_P2 Proposed Roof Plan.pdf
220_04_300_P1 Proposed Site Sections.pdf
220_04_301_P1 Proposed Sections - North & South Terraces.pdf
220_05_300_P1 Proposed Elevations - North Terrace .pdf
220_05_301_P1 Proposed Elevations - South Terrace .pdf
220_05_302_P1 Proposed Elevations - Community Building & Stores.pdf
220_06_300_P1 Proposed External Lighting.pdf
19_204_D101D Landscape masterplan