BUILDINGS

BUILDING PRINCIPLES

The Building Principles would provide coherence, identity, proportion and beauty. In a general way these would be unique to An Camas Mòr giving it an appropriate and distinctive character in Rothiemurchus and the Cairngorms National Park. In a detailed way, they would help make each neighbourhood, street and house special, and provide the sense of shared appreciation, pride and value that leads to successful communities.

This Proposed Masterplan does not detail what buildings would look like, that would be determined following consultations with potential users and builders and the preparation of Detailed Design Guidelines. This report describes the purposes, mass, range of materials and any limits so that their impact can be assessed and it outlines the thought process that would lead to the detail later.

The starting point for designing buildings has to be life: to think about how buildings contribute to the sustainability of the community as a whole as well as their households.

A well-designed house is more than a building for sleeping and eating in. It has the potential to accommodate a wide range of life activities and in so doing can respond to change and growth, economic fluctuations as well as the needs of the environment, in times of climate and other change.

First of all, more than just a home, a house can also accommodate business premises. 'Living above the shop' can take many forms: from a small office within the home to an 'own door office' or shop space with direct access to the street. An outbuilding could also work as an office, studio or workshop and activities could spill out into the courtyard or garden.

The house also has the potential to be a small economic system: letting out part of the building or outbuilding, (for example to a seasonal worker) can make a significant contribution to the household income.

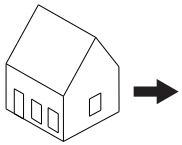
The subdivision of the house into units, which can be separated and have their own access, would allow the accommodation of a micro-community, whether for the extended family, typically the 'granny flat', or a more complex shared 'co-housing' or other tenancy system. This would also allow for generational change, as the family can move around within a building responding to different needs at different phases in life.

The house complex would be able to accommodate many activities and the design would reflect this: large and small rooms, different access arrangements, different standards of finish to allow for different kinds of living arrangements, working, leisure, hobbies, etc. The house would also work as a storage facility, allowing the household to save and store things, such as furniture, toys, or family heirlooms, rather than throw them away, as well as accommodating other useful things for life such as tools and work equipment, bulky sports and outdoors equipment, guest beds, etc. Additionally food and produce storage could be included.

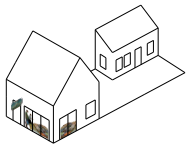
The house and its plot however small can also be seen as an urban farm, with its kitchen garden, fruit trees, or just a deck with herbs in pots. Shelter and enclosure between buildings could allow for better growing conditions than would otherwise be normal. The house and plot can also be seen as a nature reserve, creating natural habitat by maximising their 'green factor', with sedum and turf roofs, particularly on lower buildings, bird boxes, vertical planting on walls etc., supplementing plants and trees in gardens.

The house has the potential to generate as well as store energy. Both passive and active methods can be considered.

The house and plot have the potential to be a water reservoir, collecting water for home use such as watering the garden or flushing the toilet, as well as containing storm water, preventing overloading of drains and flooding in times of extreme weather.

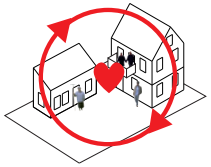


A house can be more than a house

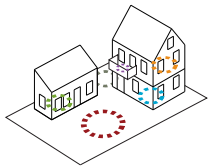


Business premises

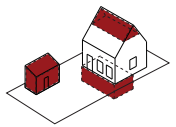
Economic system



Micro community



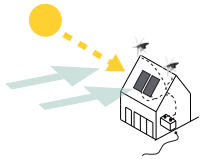
Many activities



Storage

Farm

Nature reserve



Energy source + energy bank

Reservoir

LAYOUT PRINCIPLES

BUILDING LAYOUT AND MASSING PRINCIPLES

Before considering the actual design of the buildings, it is important to establish a logic for the placing of each building on its plot as well as the volume of the building in relation to its surroundings. It is important to establish a discipline, which maintains certain key aspects to maintain the coherence and identity of the place as a whole, while allowing individualism and personalisation, which in turn encourages longer term commitment to the place.

POSITIONING ON THE EDGE OF THE PLOT

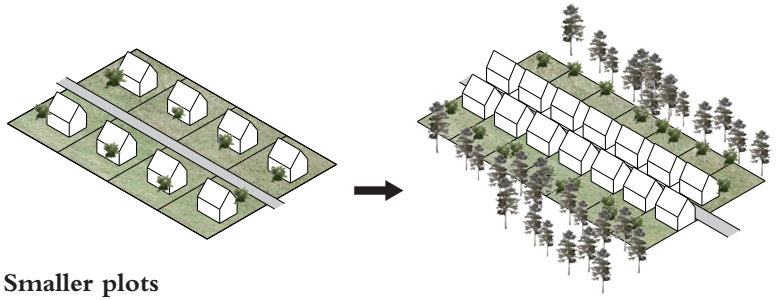
Generally, buildings would be placed close to the street, creating better microclimate and improving surveillance of the public spaces, as well as fostering community feeling with people meeting as they come and go. Additionally this would increase the useful garden area at the back.

DIVERSITY

Plots would range in size, even on the same street to accommodate a range of different building types. The character of different areas and neighbourhoods would be varied, by the massing, street & woodland planting and other means.

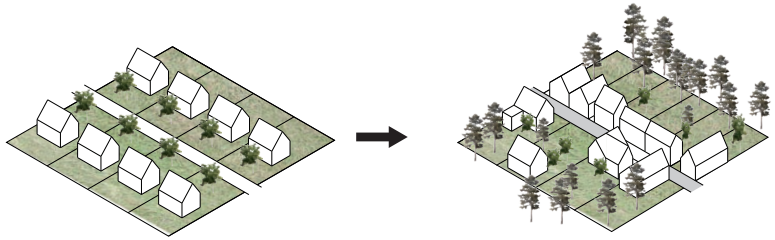
JOINED-UP BUILDINGS

In the higher density areas, buildings would be joined up to maximise the buildable area, as well as for passive solar gain and shelter from the wind.



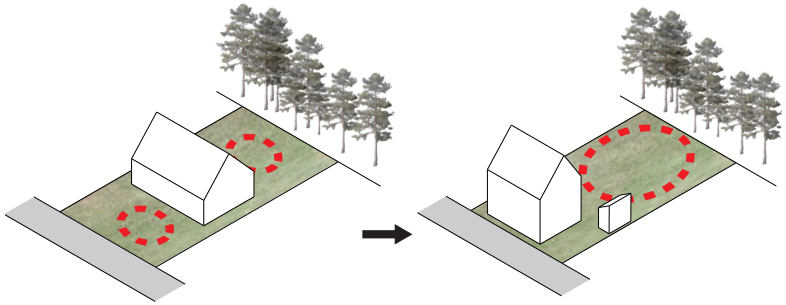
Smaller plots

A key concept in the sustainable design of An Camas Mòr, is the notion of the smaller foot print. Greater density would give many advantages including an improved microclimate, greater proximity for walking and affordability, as narrower plots reduce the cost of infrastructure and so can be more affordable.



Massing

The buildings would generally be low and more compact to provide the best microclimate around the buildings. Pitched roofs perform aerodynamically, minimising wind turbulence whilst enabling maximum sunlight penetration.



Fronts & backs

There would be clear order of disciplined and coherent design of the fronts of buildings while at the backs there would be as much freedom as possible, subject only to any negative effect on neighbours.

LAYOUT PRINCIPLES

CREATING POSITIVE SPACE

Rather than buildings having many appendages, the different volumes would create positive, enclosed space, for usefulness, privacy and microclimate advantage.

OUTBUILDINGS

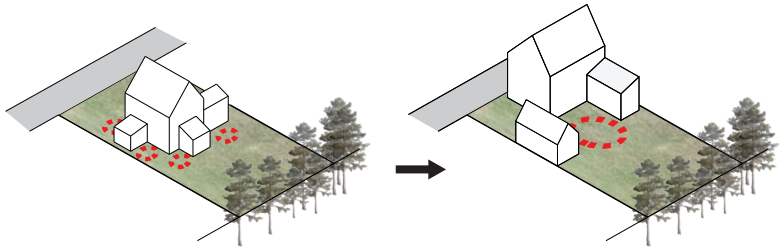
Plots would be able to accommodate not just a principal dwelling, but also outbuildings to allow for growth, additional space and changes of use in time.

PRIVACY

Generally, the distance between the rear of buildings between facades is to be at least 20m and the master bedroom would normally be to the rear. The overlooking of back gardens is less of an issue when the main activity area in gardens is closer to the house and protected by the house. Windows are not generally permitted on shared boundaries, but side windows onto a house's garden would be very desirable. Narrower streets and having houses on the street mean that this dimension is less on the front, but the effect of this can be improved by making sure that houses are staggered and do not face each other directly. Privacy in the garden at ground level at the front can be accommodated by sheds, fences and to the rear with hedges and similar.

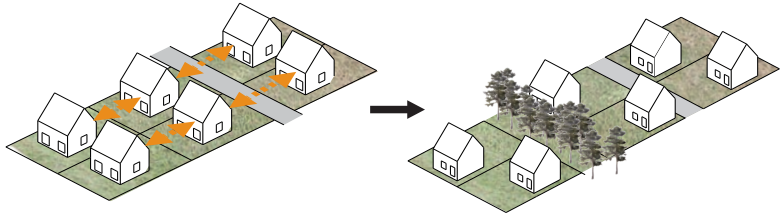
VIEWS

Due to the density of the settlement not many buildings would have views of the Cairngorms. Some of the upper floors would have views of the mountains, while most would have local views of trees.



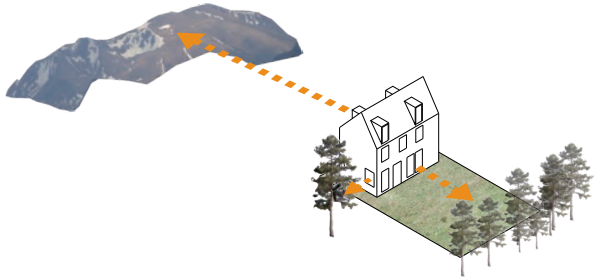
Creating positive space

Where possible, any advantage would be taken to provide secure, physically and aesthetically attractive spaces.

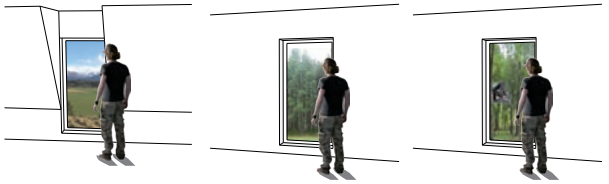


Privacy

Overlooking would be minimised by introducing biostrips and staggering buildings.



3 types of view



Distant **Overlooking** **Close**

ORIENTATION PRINCIPLES

SUN & SOLAR GAIN

South-facing roofs and walls need to be utilised as far as practicable to capture radiant heat, externally in sunny corners as well as for the benefit of heating the buildings themselves. The High Street, running East-West does this, allowing the north side of the street to capture the sun in external spaces during the day. South-facing roof pitches can hold solar collectors and the glazing be designed to get solar gain. The positioning of buildings on side streets would generally also attempt this orientation.

WIND & RAIN

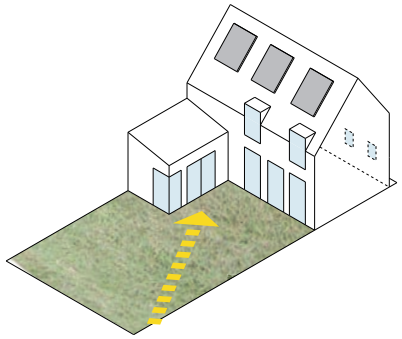
Shelter is a fundamental requirement of buildings, externally as well as internally. In all parts of the settlement the use of pends, porches, overhangs and corners would all be encouraged.

INSIDE-OUTSIDE SPACES

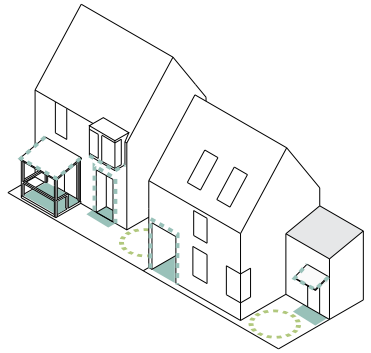
Shelter on the edge of buildings makes for very useful spaces regardless of the weather. Throughout the settlement, porches, pends, overhangs, verandas and covered decks would be encouraged. These provide vital extra living space, especially in smaller homes, giving an extra play space in bad weather, a place to entertain, a place to hang washing, space for temporary storage or even a place to socialise.

GREENER BUILDINGS

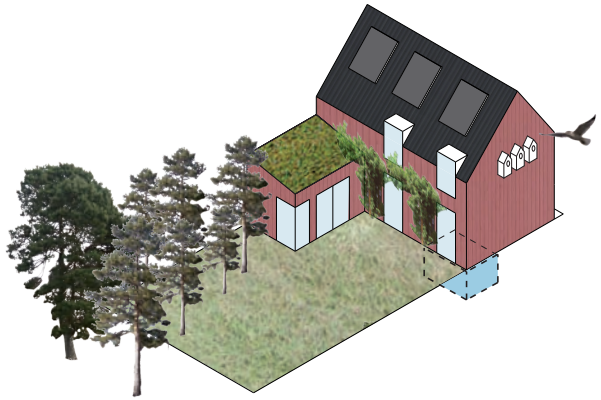
There are many ways to reduce the negative impact of buildings on the environment. The principles at An Camas Mòr would be to preserve and augment existing vegetation, have turf or sedum roofs as well as wall planting, have permeable surfaces and encourage rainwater collection and even include small details like every house having a couple of bird boxes.



Larger windows and solar panels to the backside facing south.



Setbacks, corners, overhangs and porches would provide climatic shelter.



Building environment

Buildings can be designed with places for birds, bats etc., and boxes and other facilities would generally be encouraged, built into the buildings where possible.

DIFFERENT DENSITIES

It has already been established in the brief for An Camas Mòr that the community has to accommodate a wide range of households and activities. These different use requirements also have different massing requirements. Therefore, the site is zoned into three different areas each with its own appropriate massing. Within each density zone there would be a variety of densities, avoiding obvious boundaries between different zones. The density in terms of units per hectare would range from 10 to 50, with an average of 23 for the 72 Hectare core development area. For comparison a city centre would have 70, Coylum Road is 7 and the new planned village at Poundbury in Dorset is 34.

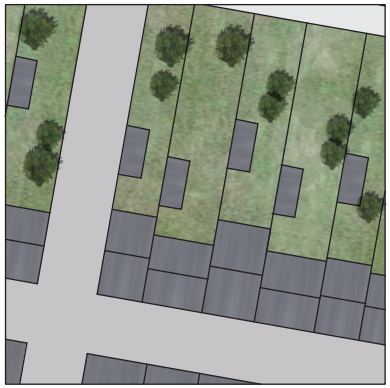
HIGHER DENSITY

The densest zone in An Camas Mòr would be the 'High Street' area. It is here that the widest range of activities would be concentrated: residential buildings in the form of large and small town houses, terraced houses, apartment buildings with large and small flats, as well as cottages, courtyard and mews buildings, shops and offices, other business premises, public buildings, community uses and special buildings such as hotels. All of these would be made up of joined-up buildings, fronting right up to the street, making blocks with an almost continuous and dense edge and with soft landscaping. Building heights would vary between 2-3.5 storeys.

MEDIUM DENSITY

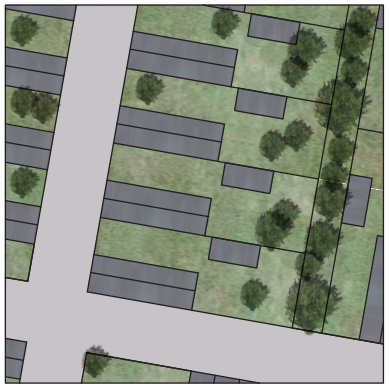
These intermediate zones, immediately adjacent to the High Street would be predominately residential, mostly in the form of houses, though other uses would be possible. There would be some small business premises and possibly a few big sheds for specialised workplaces. The buildings would be mainly detached and semi-detached, with the fronts and sides of buildings right up to the edge of the plots. Building heights would vary between 1½ – 2½ storeys.

HIGHER DENSITY



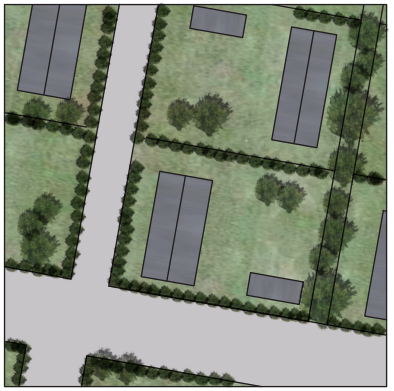
Higher density town houses & apartment buildings with commercial ground floor, 2½-3½ storeys, (10-15m high). Density approx. 40 units/ha (16 units/acre)

MEDIUM DENSITY



Medium density residential, 1½-2½ storeys, (6-10m high). Density approx. 20 units/ha (8 units/acre)

LOWER DENSITY



Lower density detached, 1-2 storeys, (4-8m high). Density approx. 13 units/ha (5.5 units/ acre)

LOWER DENSITY

The areas towards the edge of An Camas Mòr would be almost exclusively residential. There would be a range of plot sizes to allow different kinds of houses, including some very large ones. Home workplaces that do not disturb neighbours would be encouraged.

All buildings would be detached and staggered to give the feeling of more space, some closer to the street, others set further back. Whilst the landscape assessment is based on these being 2½ storeys high, it would be expected that building heights would be generally lower.

BUILDING SUSTAINABILITY PRINCIPLES

Only an untouched natural cave is a truly sustainable structure; all structures disturb the earth and have some effect on nature. It is the aim to minimise this effect in the construction of the buildings in a practical and holistic manner by the careful use of energy in all its forms. The principles that apply to buildings would be also applied to the infrastructure as far as possible.

GENERAL

In terms of design and construction the settlement would make maximum use of local materials and modern technologies, to minimise the use of energy both in construction and in use. BREEAM (environmental assessment method for buildings) standards would apply, generally implying high levels of insulation, well controlled ventilation.

LAYOUT

To maximise solar gain, wherever practical the orientation would be east-west, with the south-facing elevations having a lot more glass than the north, as well as solar collectors on the roof. North-facing elevations would generally have smaller windows. In addition, to minimise heat loss from exposure, shelter by trees and other buildings would be a consideration. Use of daylight would be maximised in non-residential as well as residential buildings.

HEATING

Maximum benefit would be obtained from passive solar gain, using suitable glazing, as well as solar collectors where practicable. Higher density areas would be suitable for district heating. Combined heat and power generation would also be considered. In lower density areas individual multi-fuel stoves would be appropriate.

MATERIALS

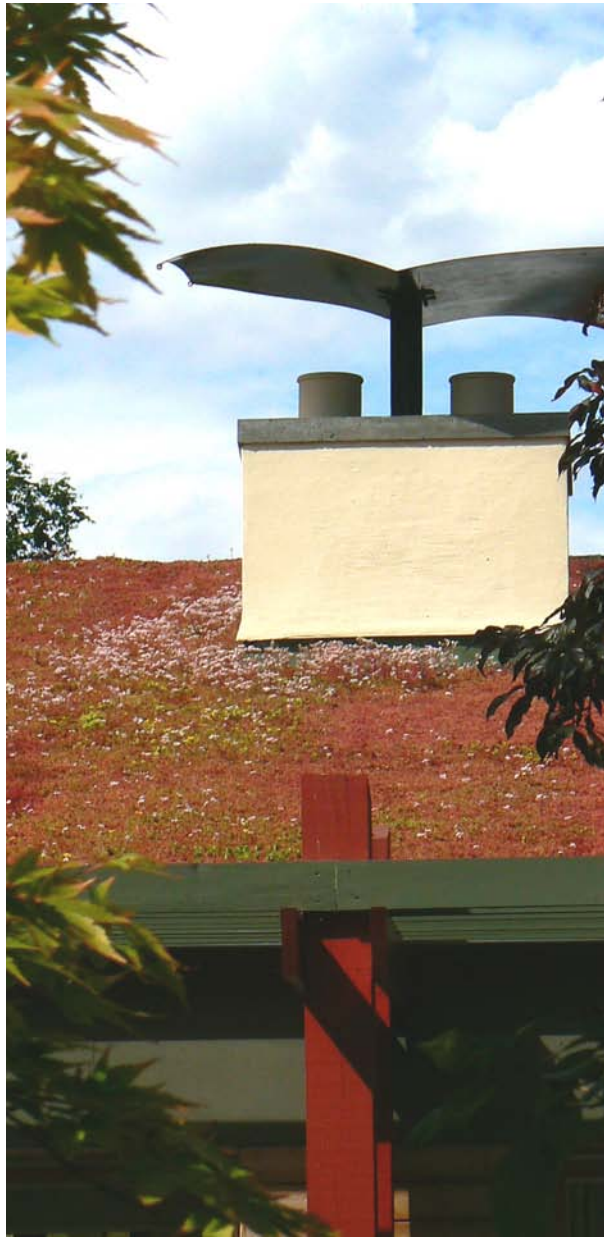
The use of renewable timber would be maximised and the use of fossil fuel-based plastics and chemicals minimised where practicable, including paints. Stone, turf, earth, recycled and other local materials would be encouraged. Lime would be used instead of cement where practicable.

CONSTRUCTION

The amount of ground that would be disturbed would be minimised and likewise the amount removed from site. Where possible excess soil or spoil would be used in the landscaping, as banks or screens. For foundations, the amount of concrete would be minimised and where feasible low-energy concrete would be used. Walls and roofs would be highly insulated, breathable and well sealed. Roofs would generally be of timber construction, using a variety of surface finishes. Ventilation, vents and flues are co-ordinated into special ridge fittings. Where practicable, the construction would suit self-build and local contractors, not just to benefit the local economy, but also to ease future adaptions and maintenance.

FITTINGS & EQUIPMENT

Where possible, supplied fittings would be low-energy or intelligent, minimise CO^2 emissions and the use of water. Rainwater collection would be carried out where possible.



DESIGN GUIDELINES

GENERAL

Following the granting of Outline Consent, an appropriate general 'style' of the public face/fronts of buildings would be developed to give a distinctive identity to the settlement. The detail would vary with the location, eg., on the High Street and higher density areas the fronts would be fairly constrained in siting, style and materials. Work on developing guidelines remains to be done, however for the purpose of testing the Proposed Masterplan the following have been considered:

CREATING CONFIDENCE

Guidelines are intended to assist the short and longer term marketability of the properties, easing social interaction and maintaining the value of the properties within the settlement. Whilst circumstances change, e.g. with regard to alternative energy generation, it is envisaged that the Guidelines would be based on sufficiently fundamental principles and general enough to last for a very long time. Any alterations to the Guidelines would need to go through a thorough consultative process. Within the general guidelines more detailed guidance might be promoted on a street or neighbourhood basis.

FREEDOMS

The Guidelines would allow people to know where they can do whatever they wish, within the constraints of Technical Standards. This is seen as a considerable attraction, to builders of all kinds, including self-builders, and users. In general there would be very limited control of the rear of buildings in the Higher & Medium Density areas except with regard to overlooking and less in the Lower Density areas. Variation and individual responses would be encouraged.

APPLICATION

Guidelines would apply to all the construction, public and private, residential and non-residential, to bring an air of cohesion and a distinctive style to An Camas Mòr as a whole.

MANAGEMENT & MAINTENANCE

As part of the ethos of An Camas Mòr, the good management of the place is necessary to protect the environment, everyone's investments and maintain good relations. This would be done by consultation with a specially established Community Association of which all properties, residents and businesses would be a member. The guidelines would be written to ease good maintenance.

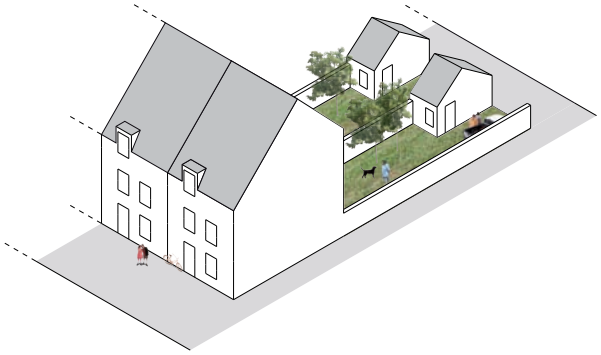
Edinburgh New Town.
Strict guidelines on the layout, design, materials and details have given the New Town an enduring value, whilst allowing for some informality to the rear and internal flexibility. Built environments that people find most attractive generally have a high degree of underlying order.

Coylum Road
The Guidelines used at Coylum Road have given a degree of order to the development, whilst allowing a wide variety of solutions, particularly to the rear.

Cramond
Traditional construction generally did not need guidelines to maintain simplicity as there were a limited range of materials available. Most of the materials were obtained locally or transported by water.

DESIGN GUIDELINES
BOUNDARIES

HIGHER DENSITY



Higher density backgardens to backgardens and side streets to backgardens would be separated by walls the same as the building walls or a hedge (including a post and wire fence or double fence).

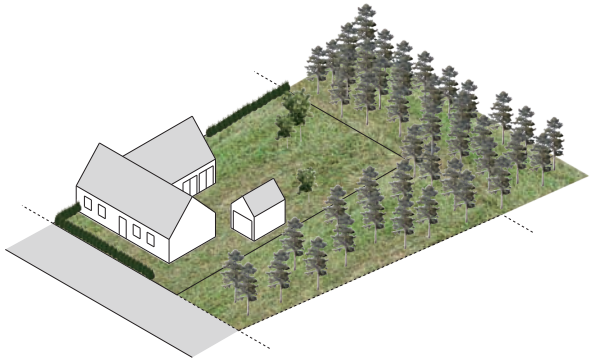
Max 3.5 stories, 18 m to ridge.

MEDIUM DENSITY

Medium density backgardens would be sheltered from the streets by hedges with high post and wire fences or walls the same as building walls. The plots would be separated at the rear by hedges and biostrips.

Max 2.5 stories, 15 m to ridge.

LOWER DENSITY



Lower density plots would be separated from each other by post and wire fences with hedges or remain open. The interface with the landscape would be a woodland edge which in some places expands into wedges between the plots, bringing the forest into the built fabric.

Max 2 stories, 10 m to ridge.

DESIGN GUIDELINES

ROOFS

HIGHER DENSITY

The roofs would be the most prominent feature of the buildings from nearby hills and would be designed to help minimise their impact on the surroundings.

SHAPE

To minimise air turbulence and make best use of space, roofs of buildings >1½ storeys high would be pitched and at an angle greater than 47½°. Large buildings would appear to have similar roofs, in pitch and width, to keep the scale the same at a distance. Flat or lower pitched roofs would be acceptable to the rear.

MATERIALS

In the densest areas the roofs over 1½ storeys and rainwater goods would be of non-reflective metal, of a dark grey colour and many south-facing pitches would have solar heat collectors. The finish would be matt to minimise glare and reflection.

VENTILATION STACKS

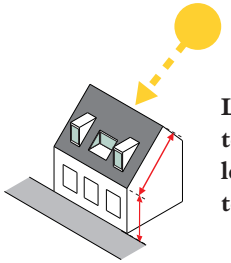
Flues and vents would generally be gathered into individual stacks positioned on the ridge, creating a tidier roof surface and a regular visual break.

ROOF VARIATIONS

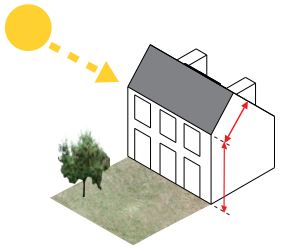
Half and three-quarter floors make roofs inhabitable while building height would be perceived as low.

A lower building to the street side ensures good lighting conditions on street level and makes the perceived building height lower.

Please see pages 70 & 73 for building heights.



Larger roof surface towards the street, letting more light down to street level.



Smaller roof surface towards the backyard, enabling larger windows to the private side.

DESIGN GUIDELINES

WALLS

GENERAL

At this stage the Design Guidelines are very preliminary and would be developed following Outline Planning Consent. The illustrations are only intended to illustrate the general points being made but are not proposals for An Camas Mòr.

HIGHER DENSITY

As suits a woodland setting and the sustainability criteria the predominant finish material may be timber, especially for the front elevations of the High Street and other dense areas. Traditional lime harling and local stone would also be appropriate.

GROUND FLOORS

For some special buildings, e.g. some public buildings, or those at The Cross, offices and shops, a masonry ground floor may be appropriate, ideally made of local granite, or perhaps with local granite detailing. A masonry base course, approximately 300mm high, would generally be required, or stone or a dark-coloured render.

ELEVATIONS

Front elevations would be kept simple, with a pattern of vertically proportioned windows on the upper floors and doors, windows and pends on ground floors. Rear elevations would not be regulated, except with regard to neighbouring privacy. Side elevations would not be left blank and would include windows.

DETAILING

The detailing of timber cladding would follow best practice, especially with regard to ventilation and fire-stopping, to ensure durability and ease of maintenance.

COLOUR

Colours have not been considered in detail at this stage, but to help merge with the woodland setting white would be avoided. Natural earth colours would be considered. There are very effective natural preservatives and colour which can be specified in a wide range of red shades and would be most appropriate, especially on the High Street and other dense areas where a degree of harmony is desirable.

Local river stones used as a facade material

Walls painted with Swedish Falu rödfärg.

Granite masonry base with red painted timber above.

Vertical windows on front and side elevations.

DESIGN GUIDELINES
WALL OPENINGS

GENERAL
At this stage the Design Guidelines are very preliminary and would be developed following Outline Planning Consent. The illustrations are only intended to illustrate the general points being made but are not proposals for An Camas Mòr.

WINDOWS
High efficiency windows would be essential to achieve energy conservation standards. The proportions of windows on Fronts in dense areas would be vertical. The colour would be immaterial. The size of windows would vary with circumstances and on the Ground Floor they may be smaller on the street elevations to preserve privacy.

BAYS/ORIELS/BALCONIES/ LOGGIAS/VERANDAHS
Sheltered, covered open spaces would be encouraged to take maximum advantage of the sun and views, especially on prominent sites, where there is a good view or where some natural surveillance would be desirable.

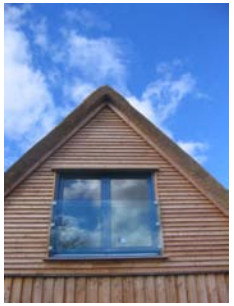
FRENCH DOORS
The opening up of Ground Floor rooms to the spaces around and the garden would be encouraged, connecting internal and external environments where possible.

DOORS
Main doors would be expected to be part of a decorative design, clearly marking the principal entrance to a property. The precise design and colour would be immaterial. Whilst steps are generally desirable, level access is also required and this would have to be considered in detail for each property; perhaps enabled to the rear.

CANOPIES/PORCHES
Canopies and porches would be encouraged, to give shelter and help signify the door.

THRESHOLDS
The design of the doorway includes the paving to it. Sometimes steps would be required, in which case level access would have to be provided elsewhere. A platt or landing as a suitable place for personalisation and meeting people would be encouraged.






DESIGN GUIDELINES
DETAILS

For a settlement based on walking it is particularly important that there is good detail at eye and hand level, to help make walking an easy and pleasurable experience for all, old and young, able and less able. Such detail needs to be deliberately and carefully designed, in ways that successfully expresses character or usefulness.

Whilst walking, the texture of the paving is significant and it would not be monotonous, but help mark crossings and important places. In some special places it might be completely different, or arranged to assist particular activities such as marking out a court or pitch. Handrails can usefully protect buildings and objects, as well as provide safety and be attractive in their own right, to the eye as well as to the hand. Whilst sitting, looking and chatting, not only is the view important, but more important is the amount of activity, as well as the comfort of a seat or bench.

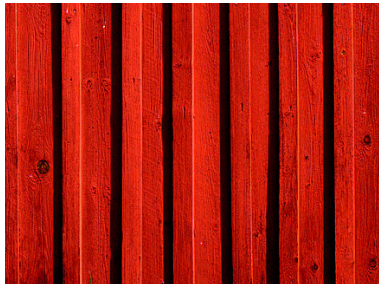
Pride in a property can result in displays all sorts, showing off personality and giving pleasure to passers-by. Sometimes this is simply plants and flowers etc., but also decorations to front doors and windows. Pride in public fixtures and fittings is a sign of a community that cares. In the woods and parks, creative design, good materials and good workmanship add value in just the same way.

Individual detail is best provided at eye level and in the very least would include special numbers, carvings and/or glass. 'Bolt-on' features would generally be avoided.

DESIGN GUIDELINES
MATERIALS AND COLOUR

The choice and use of materials would be considered in detail after an In Principle Consent is given, but sustainability would be an important starting point and this would give an emphasis on local materials. The 'native' materials of the site, which historically would have come from within 400m, are granite, glacial and river borne boulders, pebbles, gravel and sand soil, turf, grass and heather, birch, pine and other trees and all the products that can be made from these materials. To sustain contemporary life, other materials and products would be required too, eg. glass, metal roofing, solar collectors, etc. How the materials are used, with good design and workmanship, is important for durability as well as aesthetic satisfaction. The scales and textures that can be obtained vary greatly and need careful consideration.

In nature, colour does not normally last long, soon changing or fading with the power of the sun, wind and rain. However, decorative coatings prolong the durability of well designed structures, as well as providing richness, meaning and interest. Colour is one of the easiest ways of giving distinctive identity. Colour can also help make a place fit into, or stand out from, its setting. In places, especially in the Higher Density areas, it may be sensible to limit the variety of colour to bring cohesion and order, whereas in other places, such as commercial shopfronts etc., some lively chaos of personal expression may be best encouraged.



Timber wall painted with Swedish Falu Rödfärg

Local river stones used as paving and wall material

Shingle roof

Timber wall without paint

French granite could be used as ground floor wall material and for paving.

Zinc roof

DESIGN GUIDELINES
JOY AND BEAUTY

This Masterplan Report would have given life to the broad outlines of the Proposed Land Use Plan, but it would only have hinted at the importance of the community being a beautiful and pleasurable place to 'work, rest and play'.

An Camas Mòr as a village would be designed to fit with the Rothiemurchus settlement pattern of communities within the forest. Individual buildings fit into the landscape; they would not be seen from a distance and would not dominate.

At the detailed scale much of this would come from the careful thought of sensitive designers drawing on the materials and tradition of the area.

At the scale of 'fine grain', it is many of the small details which are often neglected that give the community and visitors the greatest pleasure. Some of these might be part of the original design and well integrated into the buildings and some would be added by users, 'personalising' the place. As far as practicable all buildings would have to have some unique detail/details to give them some individual personality.

Work created by artists adds very special qualities to a place, but by its nature art is a complex subject. Generally the most satisfactory work comes out of and is thoroughly integrated into the place, rather than acquired and placed in or on it. It is easy to envisage how this could add yet a further dimension to the richness of An Camas Mòr but it is also a wide subject that would generate intense debate in the community.

Carefully designed pavings and meetings between different materials

Individual housing with unique details

Allowing for personalising entrances

Landscape art

Beautiful built structures as part of the landscape

Carefully designed public seating

DESIGN GUIDELINES
WORKPLACES

As an important part of the sustainability brief includes local employment, a wide range of possibilities for incorporating workplaces has been considered.

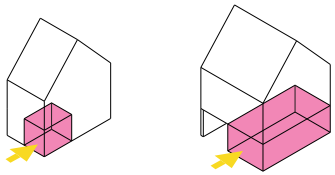
FRONT ROOM OFFICES
The smallest and simplest would be 'front room' home offices in terraced houses.

LIVING ABOVE THE SHOP
The ground floor of the larger town houses would be designed with higher ceiling height to allow use as a shop, workshop or office premises.

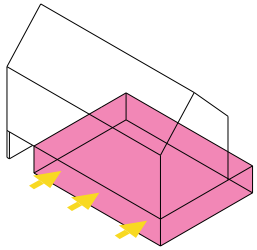
GROUND FLOOR PREMISES
The ground floor of apartment buildings would also include higher ceilings and free floor plans to allow multiple business premises.

BARNS AND BIG SHEDS
To allow more specialised businesses, possibly including some manufacturing or larger retail premises, larger shed or barn-type buildings would be planned. These could contain large internal volumes, while in massing terms would not be out of scale with surrounding domestic architecture.

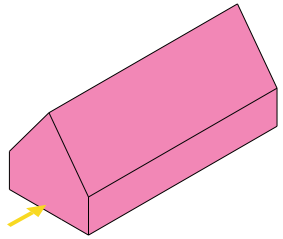
OUTBUILDINGS
Outbuildings behind houses or apartments could accommodate offices, studios or workshops. These could be accessed either through pends or from the rear.



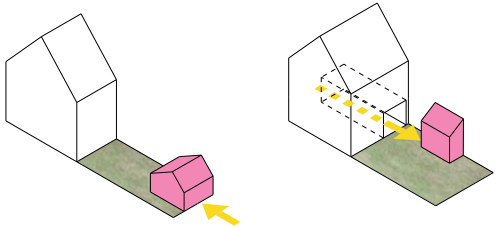
Home office as part of terraced house or townhouse.



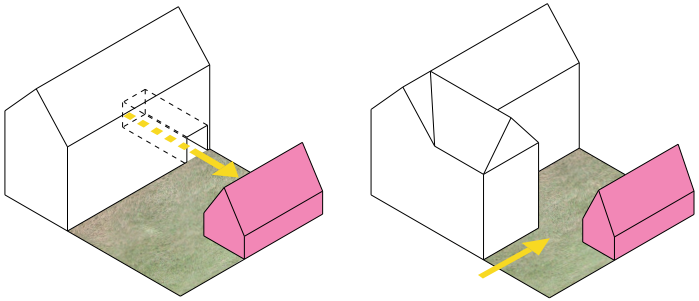
Office or retail use at ground floor of apartment building.



Large shed for more space demanding workplaces.



Workshops in the backyard of terraced houses with access through pend or from the rear.



Workshops in the backyard of apartment building with access through pend or from the side.

DESIGN GUIDELINES

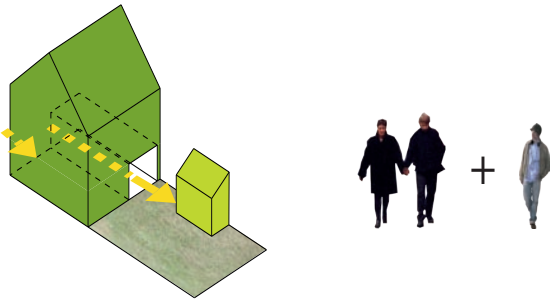
MULTIPLE DWELLINGS ON THE SAME PLOT

As part of the brief for social and economic sustainability, more efficient use of the plots creating complex multiple dwelling arrangements have been considered. These solutions would address issues of growth and change, affordability and economic flexibility, changes in use, sub-letting, as well as the requirements of generational living.

Different needs and incomes could be accommodated on the same site. For some, ease of access (no stairs) would be paramount, for others it would be contact with the garden, for others it might be better light, views and privacy.

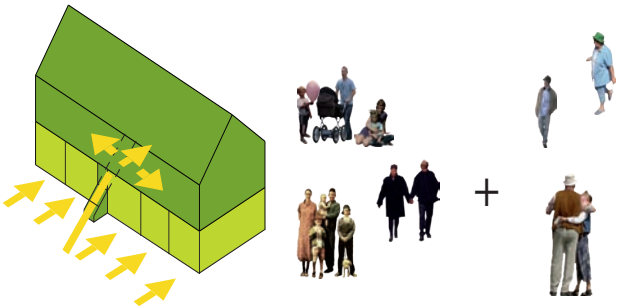
Some examples of multiple dwellings are illustrated here.

Townhouse with two residential units: one on the ground floor and a larger two storey unit above.



Townhouse with entrance on street plus outbuilding residential unit accessed through pend.

Terraced house with entrance on street plus outbuilding residential unit accessed from the rear.



Apartment building with ground level duplex apartments (like small terraced houses) with apartments above.

Well Court, Edinburgh. An example of many flats in one building structure.

HIGHER DENSITY
PUBLIC BUILDINGS

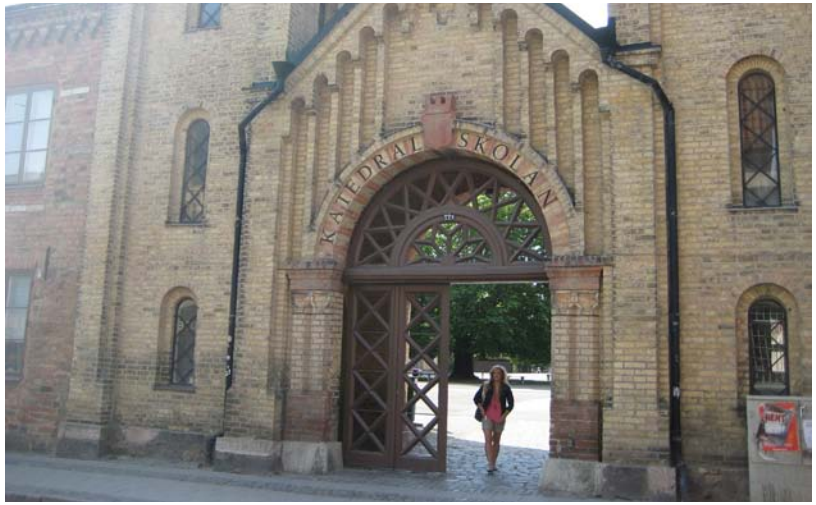
Public buildings would be of a high standard of design and construction, in keeping with their status as civic landmarks. They would relate to residential buildings with similar design guidelines.

SCHOOL

The school has great potential to be a significant civic focus. Rather than placing the school in the middle of a green field, it would be proposed that the school has an urban front right onto the High Street with courtyards (inspired by St Andrew's College) and open space behind. The courtyard space would be a good meeting place and give good shelter to allow outside activities and events throughout most of the year.
The comings and goings from school would be civic events and parents waiting for the children would spend time in the centre of the town (with opportunities for multi-tasking), rather than on the edge of campus.
To maximise the use of the school facilities, it is hoped that the school hall, library, dining hall and kitchens could be used as community facilities in the evening, weekends and in the holidays.

COMMUNITY HALL

At a later date it is hoped there would be a community hall, centrally located in the village. Again this building would present an urban front with an arcade or a loggia to the main public space.



Street entrance to school courtyard.
Lund, Sweden

School courtyard.
Lund, Sweden

HIGHER DENSITY

NON/RESIDENTIAL PRIVATE BUILDINGS

OFFICES/SHOPS/STUDIOS

To fulfil the sustainability criteria, spaces for employment would be provided within the community, approximately equal to the working adult population. Many of these would be on the High Street, incorporated within other buildings and they would be distinguished by higher ceiling heights and separate entrances etc. In less dense areas they would be within or adjacent to the property, for live/work lifestyles.

MARKET

Facilities for a market are envisaged at The Cross. This may entail storage arrangements and even eventually a Market Hall.

WORKSHOPS

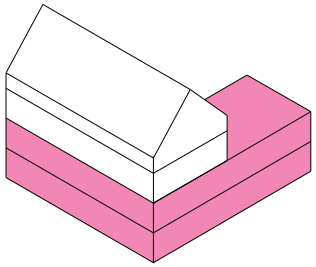
Provision for workshops would be made on and behind the High Street and elsewhere as necessary. In places some 'lock-up' facilities would be useful too. It is not envisaged that these would be places generating a lot of traffic, such facilities would be more suitable elsewhere.

SUPERMARKET(S)

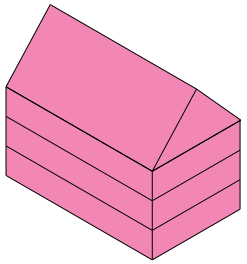
Later, when a few small shops would not suffice, a supermarket is envisaged, arranged with good access for deliveries and collection of recycled materials.

HOTELS

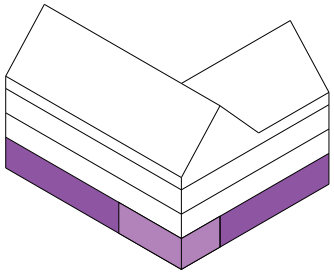
Initially a hotel would be a good way to provide a social centre, small shop, pub, etc. as well as employment. Later, additional hotel(s) are envisaged.



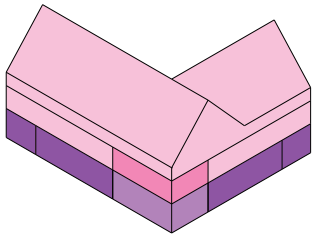
Office + dwellings



Office



Supermarket + corner shop + dwellings



Restaurant + pub + reception room + hotel rooms

HIGHER DENSITY
RESIDENTIAL BUILDINGS

APARTMENT BUILDINGS

3-3½ storey apartment buildings would be the norm in the centre of the settlement, with non-residential uses on the ground floor according to demand. Some of the parking would be in the back, through a pend or via a wynd, some of it may be remote. Standards of sound and fire insulation would be to the highest appropriate standard. It is envisaged that there would be many different designs, with varying numbers and sizes of rooms. There would be a limited amount of yard or back green.

Some apartment buildings might be arranged around a courtyard or gardens to increase the numbers to a point where concierge and other services can be provided. Again, these may have other uses on the ground floor.

TOWN HOUSES

2 or 2½ storey individual town houses would be appropriate, with gardens/yards to the back, possibly connected to the front with a pend. The plots would be sufficiently sized to allow the construction of sheds or workspaces in the back.

TERRACE HOUSES

Further from the centre, lower, 2 to 2½ storey terrace houses are envisaged, perhaps with small gardens to the front, especially in sunny situations. Parking would be off wynds to the rear.

Front side of higher density residential typologies

Back side of higher density residential typologies

HIGHER DENSITY
APARTMENT BUILDINGS

These would be 3½ storey buildings fronting directly onto the street. There would be pend access to the rear where there is a landscaped space, the 'Back Green', suitable for play, sitting out and other outdoor activities. Also at the rear would be space for parking on a permeable surface such as gravel, and the possibility of having shared carports with green roofs.

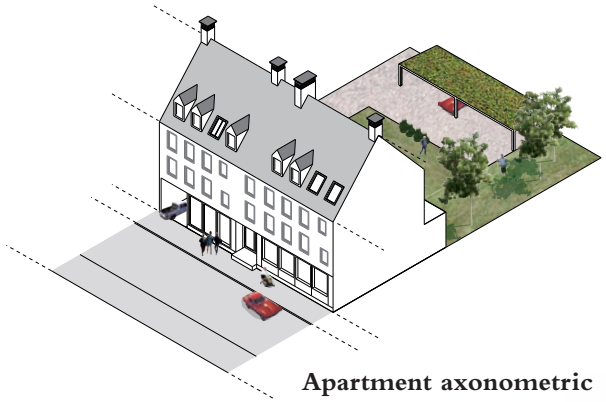
There would be business premises at ground floor level with entrances to the street. These would have appropriately high ceilings (min 3.5m) to allow for office, shop or hospitality uses. The businesses might have access to and use of the rear of the building if required.

The apartments on the other floors areas might be accessed from a common stair with a front door to the street and back door to the street. Open plan living spaces would be encouraged to give better natural light as well as cross ventilation. There would be very few single aspect apartments.

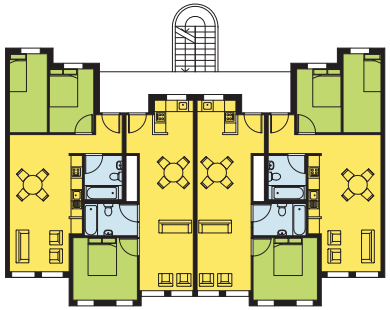
There would be a range of flat types - larger flats at two per stair core, up to four or five smaller studio flats with traditional gallery access.

Generally public rooms would be orientated to the front and bedrooms to the rear. Bay windows would be encouraged. Balconies if positioned on the front of the building would be recessed for shelter and privacy.

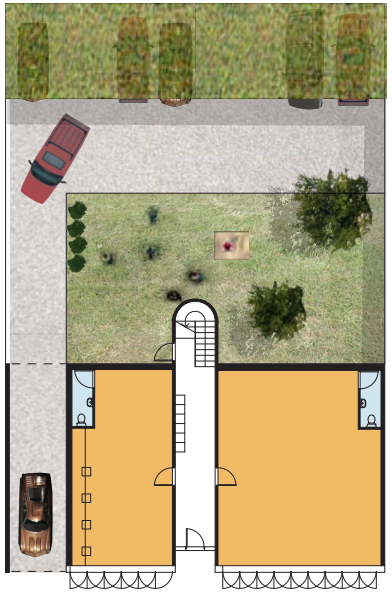
There would also be the possibility of having smaller outbuildings (dwellings or business premises) within the back green.



Apartment axonometric



Floors 1-3



Ground floor

Section variations

HIGHER DENSITY
CORNER APARTMENT BUILDINGS

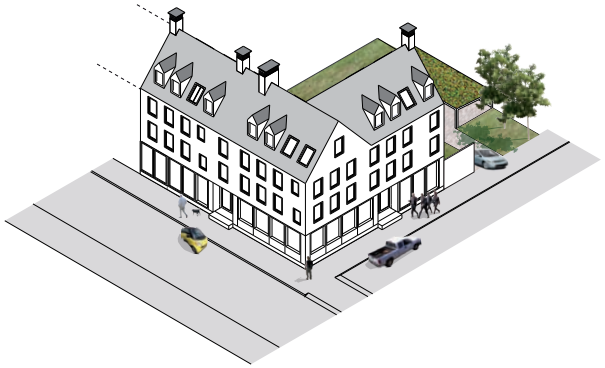
Similar to the straight apartment buildings, this is also based on a traditional Scottish building type. These would be 3½ storey buildings fronting directly onto two streets making a corner.

There would be access through a gate off the side street to the rear where like the standard apartment building there would be a landscaped space, the 'Back Green', suitable for play, sitting out and other outdoor activities.

There would be a range of flat types: larger flats at two or three per stair core and up to five or six smaller studio flats with traditional gallery access.

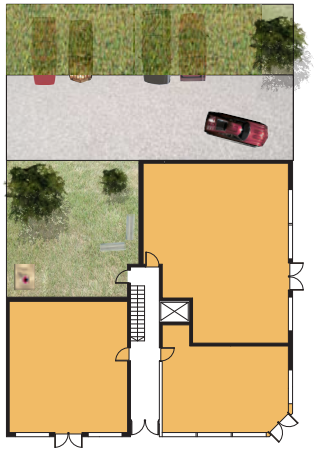
Generally public rooms would be orientated to the front and bedrooms to the rear. Bay windows would be encouraged. Balconies if positioned on the front of the building would be recessed for shelter and privacy or designed to provide shelter for pedestrians below.

There would also be the possibility of having smaller outbuildings (dwellings or business premises) within the back green.



Apartment corner building axonometric

Floors 1-3

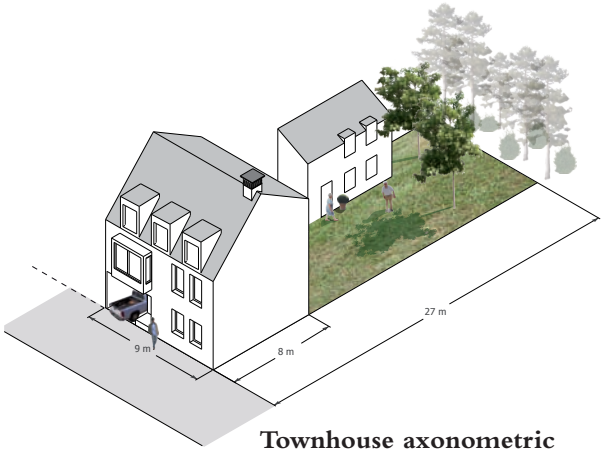


Ground floor

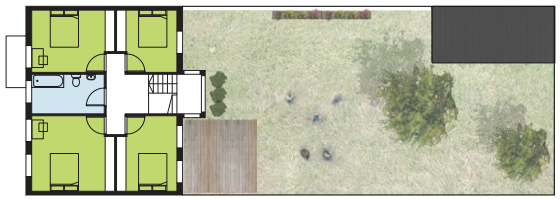
Section variations

HIGHER DENSITY
TOWN HOUSES

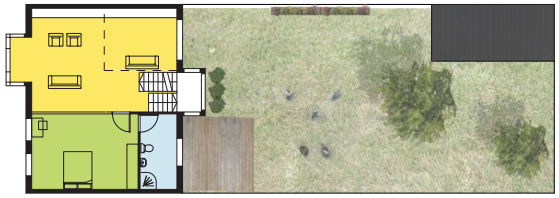
As an example of a building on the High Street and other streets in the village centre, the 2½ storey town house with its thin plan would allow lots of light into the rooms. The traditional long plot (inspired from the Scottish rig) allows for outbuildings as well as various activities in the walled garden. The pend would allow vehicle access to the back as well as garaging for several cars.



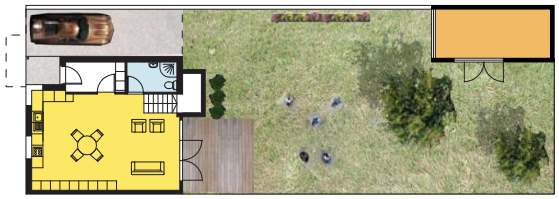
Townhouse axonometric



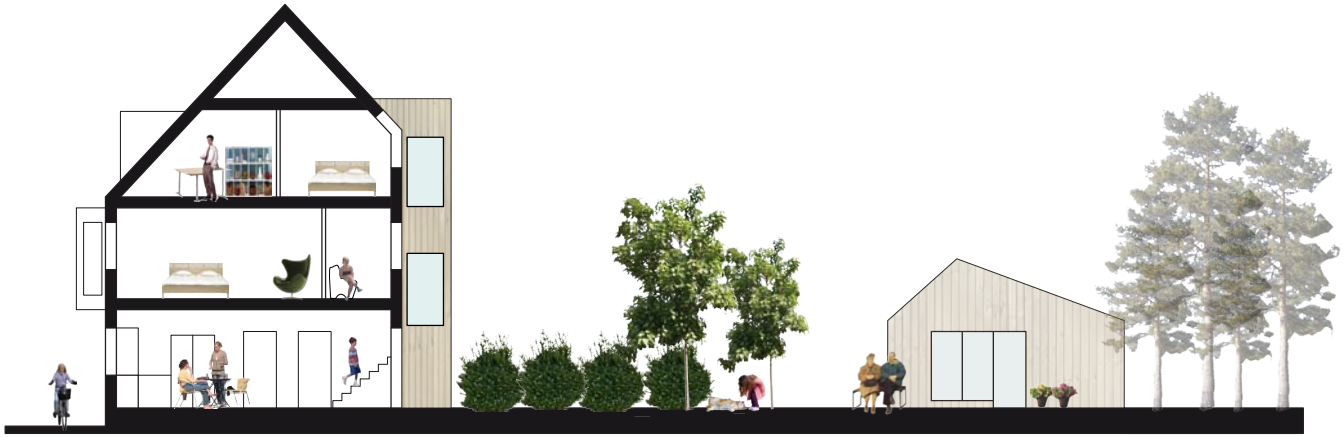
2nd floor



1st floor



Ground floor



Section

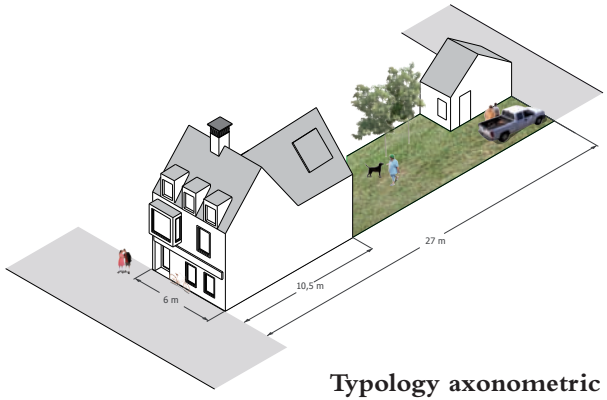
HIGHER DENSITY
TERRACED HOUSES

The terraced house offers greater affordability by having a small, narrow plot. Smaller in area, the plot would cost less and its narrow form would minimise the infrastructure cost.

The terraced house would front directly onto the street, or sometimes have a small front garden. There would be a front door to the street, which might be recessed or have a porch or veranda attached, as well as backdoor access to the back garden. The plot would be accessible from the rear (via a mews-type lane) and here there would be the possibility for parking on a permeable surface, carport, garage or outbuilding.

The plan demonstrates efficient use of the site. There would be a generous hallway buffer space, kitchen to the front (for surveillance, watching children play, etc.) and living room to the back for privacy (usually the living spaces have bigger windows) and to enjoy the garden. Upstairs could have additional living space orientated to the sun and or views, as well as bedrooms.

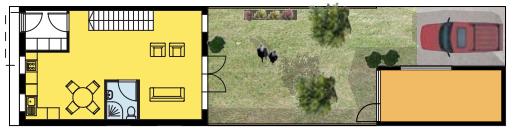
It is envisaged there could be considerable variation in this house type.



Typology axonometric

2nd floor

1st floor



Ground floor

Section

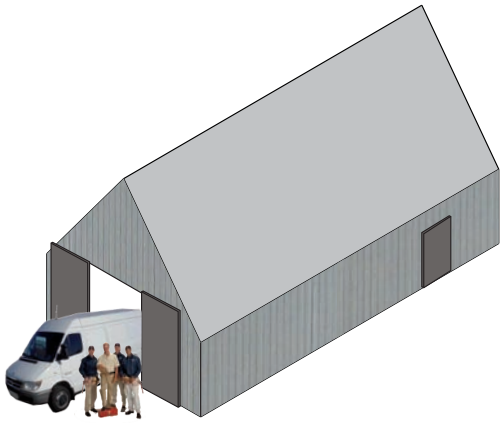
MEDIUM DENSITY
WORKSHOPS

Certain business activities would require larger spaces and greater flexibility than that offered by the ground floor of the apartment buildings. There might be some manufacturing involved, or a requirement for greater ceiling height, or there might just be a need for cheaper premises.

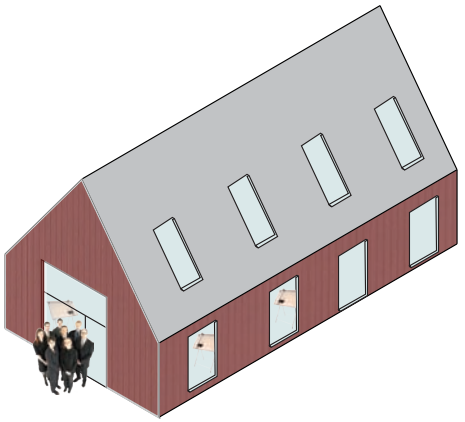
Large sheds, reminiscent to barns and buildings typical for the backlands of Scottish towns, could be very economical buildings, built of timber with tin roofs.

The scale is appropriate to domestic surroundings, as they have a low eaves height despite containing a large volume inside.

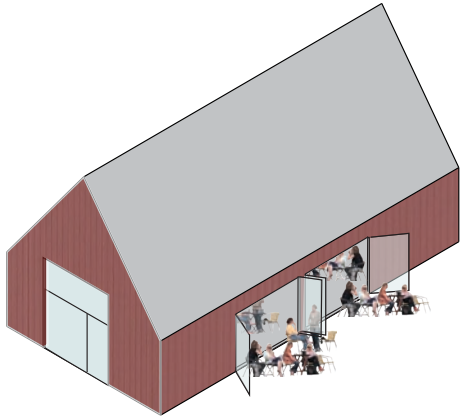
These buildings could accommodate open-plan office space, light manufacturing, restaurants or larger retail.



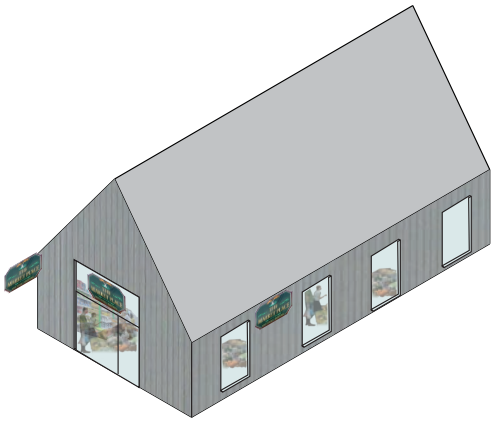
Workshop



Office



Restaurant



Shop

MEDIUM DENSITY
RESIDENTIAL BUILDINGS

An important goal of the community for An Camas Mòr, especially at the initial stage, is to deliver lower cost homes. The medium density area would offer the possibility for detached and semi-detached homes with gardens with the economy of a smaller plot and the advantageous location close to the High Street. Key to these designs would be having the house in one corner of the site, close to the street and right up to the site boundary at the side.

The following are studies for house types with opportunities for expansion, flexibility and change. The studies recognise the aspiration for a detached house, the possibility of home working, and incorporate on-site parking for one or two cars as well as out-buildings and space for outdoor activities.

Front side of medium density residential typologies

Back side of medium density residential typologies

MEDIUM DENSITY
T-SHAPED HOUSES

The T-shaped plan makes it possible to have windows on two sides of each room, giving a light and airy feel. There would be no windows to the north.

The T-shape would create a forecourt towards the street (which could also be used for parking cars) and a more private patio/deck space to the rear, connected to the kitchen and living room. There would be neutral room to the front which could work as home work place or even as a small flat which could be rented out. Bedrooms would be upstairs.

T-shaped house axonometric

1st floor

Ground floor

Section

MEDIUM DENSITY
SIDE-BY-SIDE HOUSES

A plan for a larger and a smaller house placed side by side with a narrow passage in between. There would be a forecourt space in front of the smaller building which could be used for parking. The smaller building could be a garage, a workspace or a granny flat.

The narrow plan, facing the sun, would allow light on two sides of every room. There would be no windows to the north.

Depending on orientation this type could work as a semi-detached plan.

Side-by-side house axonometric

1st floor

Ground floor

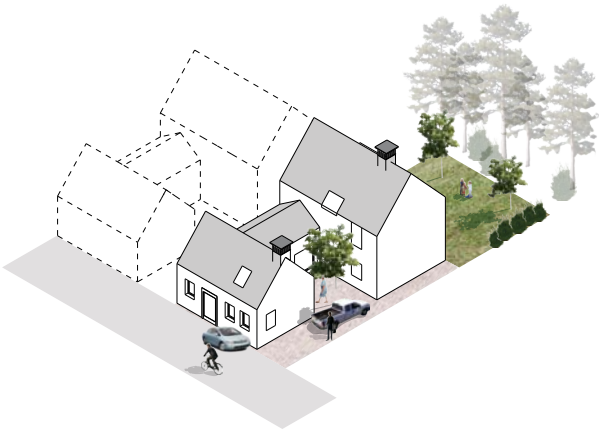
Section

MEDIUM DENSITY
COURTYARD HOUSES

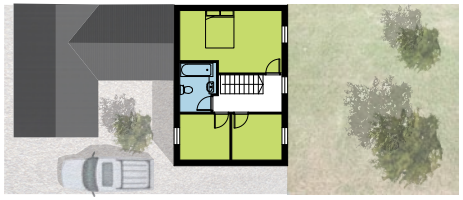
Two volumes, one smaller 'cottage' scale to the street and one larger to the rear and the garden, with a courtyard space in-between.

This typology would offer a great deal of flexibility, allowing for one large dwelling, or two dwellings, one small and one medium-sized, or one business premises and one dwelling. The layout would allow for independent access to each part, and allow for different activities to co-exist without disturbing each other.

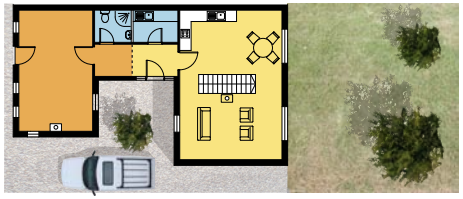
The courtyard could be a useful private space, with a sheltered microclimate.



Courtyard house axonometric



1st floor

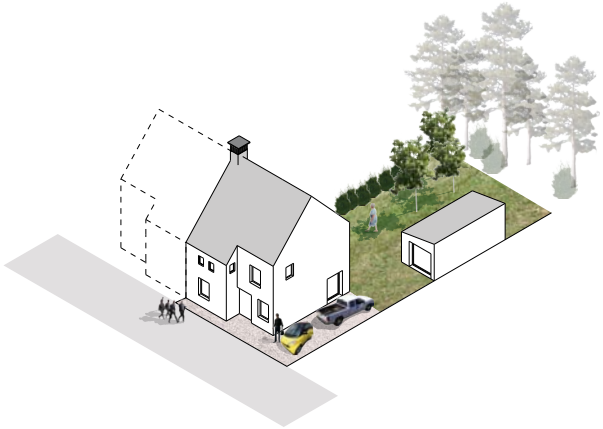


Ground floor

Section

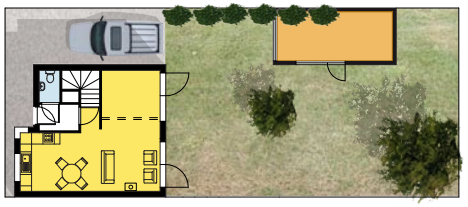
MEDIUM DENSITY
CONVENTIONAL HOUSES

To illustrate the flexibility of the plan, a more standard house type could be placed on the medium density plot. As with the other typologies the house would be placed towards the front of the plot, closer to the street and right up to one side of the plot. This could be a detached or semi-detached house.



Conventional house axonometric

1st floor



Ground floor

Section

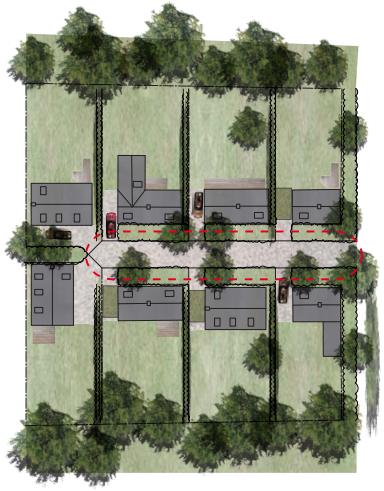
LOWER DENSITY
RESIDENTIAL BUILDINGS

DETACHED HOUSES

Houses would generally be sited near the edge of their plots to maximise privacy and the woodland setting. They would generally be 1½-2 storeys high, with restrictions on width to preserve scale.

LOWER DENSITY BUILDING IN CUL-DE-SACS

Coherent streetscapes would be required; to be achieved by design guides that can be amended from a standard, to allow a wide choice of solutions for different neighbourhoods.



Buildings shaping the street space

Buildings creating backyard spaces

Staggered buildings for maximum light and minimal overlooking

Well defined private and public spaces