Huntingfield design guidelines

June 2025

ABOVE: Artist's impression of the view towards North West Bay over apossible rainwater detention pond.
PREVIOUS PAGE: View from lower linear open space north to Kunanyi/Mount Wellington.

Contents

Introduction

Views to North West Bay from the top of the site.

Huntingfield

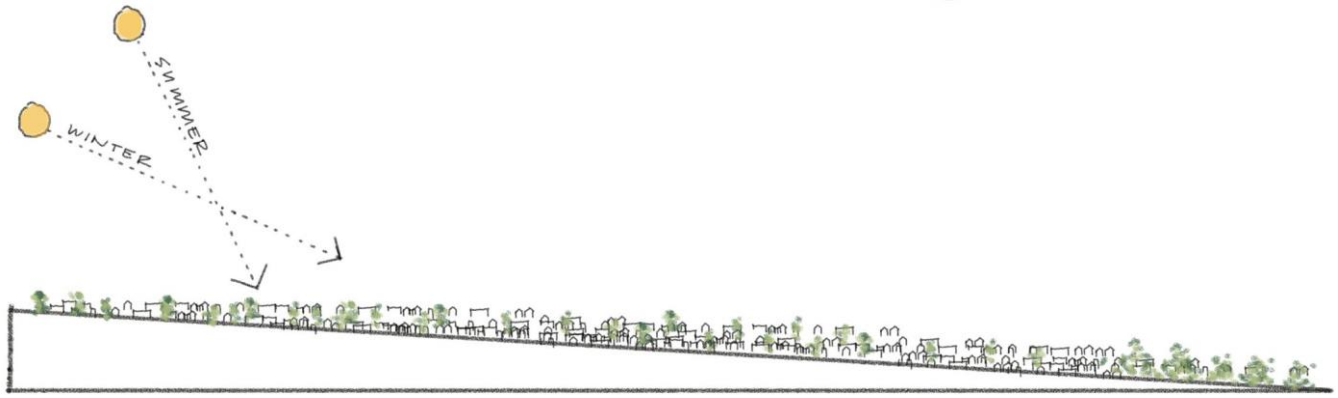
Huntingfield is the first of its kind – an innovative development that will deliver a broad mix of housing options, including dwellings on smaller lots. Providing smaller lot housing is an important step towards improving housing affordability, particularly for young Tasmanians.

Huntingfield's scenic location and proximity to Hobart makes it a logical development site to support Tasmania's growing population. The inclusion of smaller lot housing is important for increasing the density of greenfield development for more sustainable urban growth while maintaining high levels of amenity.

Quality, well-designed smaller dwellings can offer young families, retired couples and single-person households all the amenity they would expect from larger houses on larger lots, but within a compact community which enjoys high-quality public domain.

The site

Huntingfield is located 15km from the Hobart CBD and comprises 65.8 hectares of land, 49.2 of which is open pasture and subject to development while the remaining 16.6 is woodland which is to be protected and used for recreation. The site adjoins the Channel highway to the north west, existing housing to the north east, two schools and Peter Murrell Reserve conservation area to the east, a golf course to the south west and private land to the west. The site slopes gradually towards the south west from an elevation of 98m to an elevation of 32m with an average slope of 6.4%. There are panoramic views from the site towards North West Bay to the south and Kunanyi/ Mount Wellington to the north. The site is currently accessed by Huntingfield Avenue, but primary access will be via a roundabout on the Channel Highway. The site is exposed to northwesterly winds and southerly busters.



Huntingfield is located on a hill with an average fall of approximately 6.4%

The masterplan

The proposed masterplan locates lots of varying sizes, elevations and orientations across the site, accessed by contour-following streets and linking laneways. These streets feed into a central, axial boulevard that terminates at a wetland/retarding basin. Linear parks flank the boulevard and connect housing to the larger outdoor recreation areas.

A site for a small corner-shop/café or for convenience retail is included to reduce trips to Kingston, while an adventure playground overlooking the wetland serves as a central meeting and recreation area for residents.

The development is ringed with landscaped areas and a path network, providing connectivity to the adjacent neighborhood and nature reserves beyond. An abundance of street trees, generous footpath widths and cycle paths further contribute to high levels of amenity in the public domain.

Purpose of this guide

This guide offers general information and broad strategies that will assist designers and stakeholders during the procurement of dwellings on smaller lots. The guide is not intended to be prescriptive, rather, it is intended to present general design principles with illustrative examples.

The guide should be read in conjunction with other planning controls and statutory documents, and considered in the context of detailed site information, procurement policy, financial modeling, stakeholder engagement and other relevant technical guidance and reports.

Technical guidance is intended to be general only. Specific, technical advice should be provided by suitably qualified professionals.

Design studies shown in Section B are also intended to be illustrative rather than prescriptive.

Section A: Principles for better smaller dwellings

Small lot developments are fast becoming an important response to the nationwide issue of housing affordability. For councils, buyers and developers, smaller dwellings on smaller lots offer efficiency and value without compromising amenity.

Smaller dwellings are just like conventionally sized dwellings but use space more thoughtfully and efficiently. Greater skill and care must be applied to the design of smaller dwellings – which leave little room for error. The purpose of this section of the guide is to present five key design principles for better smaller dwellings. These are:

1 Optimising smaller dwellings for privacy, views and sun

2 Clever design to make the most of small spaces

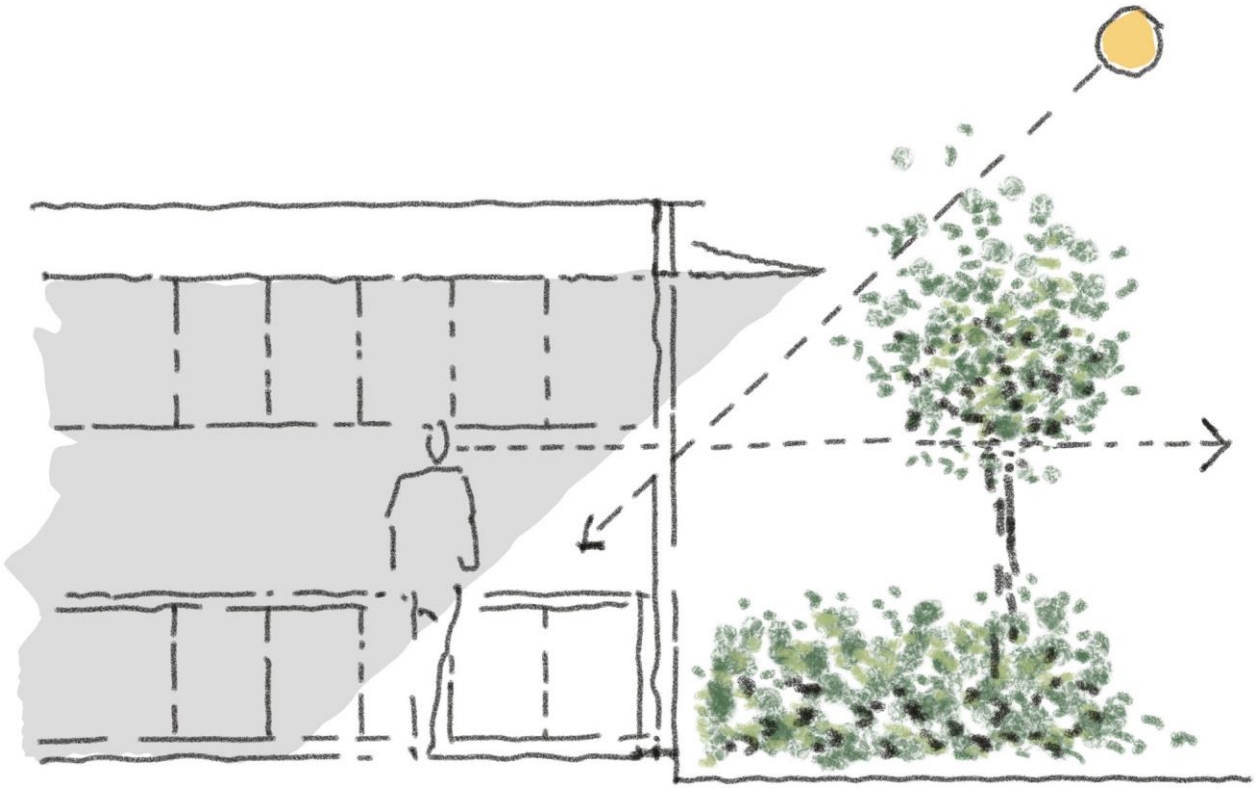
3. Attractive houses for positive local character and desirability

4. Pleasing and productive gardens for leafy courtyards and streets

5. Energy efficient durable and resilient homes for a sustainable future

Street-fronting courtyards create pockets for activity that spills onto the street.

Principle 1. Optimising smaller dwellings for privacy, views and sun



Simple pleasures: sun into the kitchen, a view out into the courtyard.

1.00 Good qualities

Winter sun, pleasant views and privacy are three fundamentally important qualities Tasmanians seek in dwellings. Winter sun provides warmth to living spaces and improves comfort – particularly important in Tasmania. Pleasant views increase a sense of wellbeing and enables weather observations to be made. Good visual and acoustic privacy enables occupants to go about their daily lives peacefully.
These qualities are especially important in smaller houses, by way of compensating for less space, and should be considered at the earliest stages of design.

Building orientation and envelope are key considerations in sharing sun, views and privacy. Getting these considerations right is essential.
On smaller lots, where neighbouring dwellings are either very close or adjoining, it is important that each dwelling is carefully configured to optimise sun, views and privacy for its occupants, as well as for those living in adjoining dwellings.

Nearly all the medium density lots at Huntingfield are different. Each lot varies according to its:

- orientation to north
- lot width and depth
- site cross-fall
- adjacent features (buildings, roads and parks).

This variety means that each dwelling should be specifically designed to suit its lot. Good solar access, views and privacy provisions for each dwelling as well as its immediate neighbours should be verified at concept design stage to ensure good amenity is shared. Verification should involve 3D computer modeling of each proposed dwelling, taking into account the location and size of windows, the design of neighbouring dwellings and should pay particular attention to solar access during winter.

Short views from the living space into an attractive little garden.

1.01 Orientation

Orientation is the positioning of a dwelling and its rooms with respect to:

- the sun's path across the sky during the day
- vistas and view corridors
- the street and other public domain.

In orienting a building, the primary objective is to position the living spaces on the northern side of a dwelling so that they receive plenty of daylight throughout the year, with direct sun into the house in winter. It is good to locate some portion of the living space towards the street for passive surveillance as well as towards scenic vistas. Rarely are the street, views and the sun all found in the same direction and so a balance must be found between these competing objectives. With clever architecture and careful planning, competing interests can be balanced and optimal orientation achieved.

1.02 Building envelope

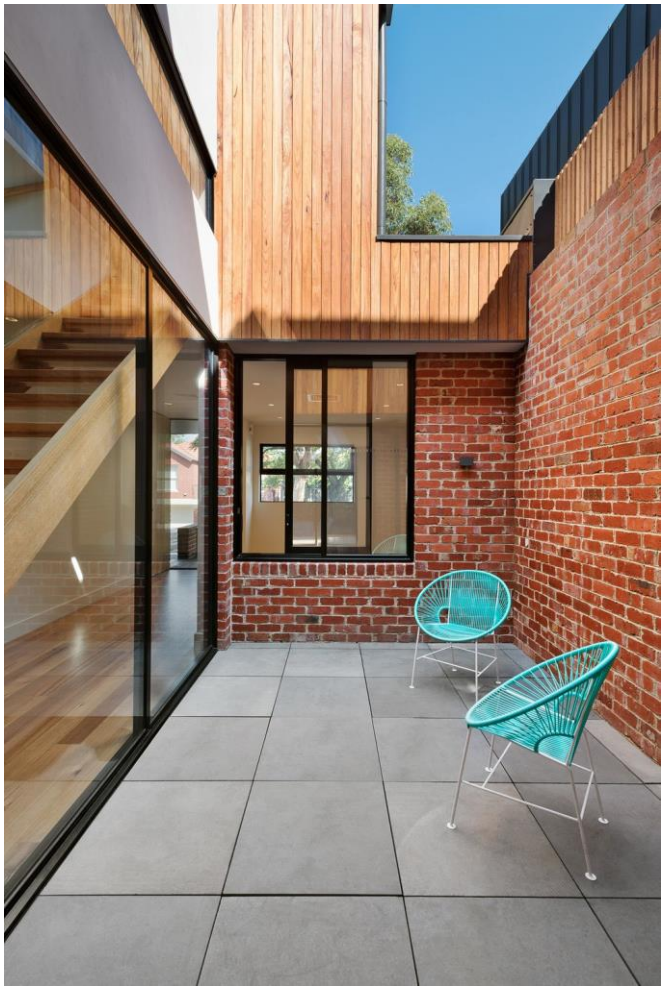
In this context, building envelope refers to the height, width and depth of a building. A building's envelope contributes to its perceived bulk and scale, as it impacts on:

- adjoining dwellings in terms of overshadowing, privacy and views
- the neighbourhood in terms of visual scale and character.

The building envelope is generally a function of:

- the number of stories and ceiling height for each storey
- the type of roof form
- front, rear and side setbacks.

Permitted building envelopes are normally prescribed by the minimum side, front and rear setback, the maximum height of external walls and a raking line, from the maximum wall height upwards and towards the centre of the block, usually at 45°.



Left: a small courtyard created against a boundary wall brings light and air into the centre of a terrace house.

Right, clockwise from top: Built form set back from northern boundary for winter sun penetration; living spaces at the rear of the house for north-south oriented dwellings; for east-west oriented dwellings, living spaces step back for the northern boundary to receive sun.

This method of prescribing a building envelope works best as a general control for development on larger lots. At Huntingfield, where the design of smaller dwellings needs to be more coordinated, a nuanced approach is required where building envelopes are based on performance rather than prescribed envelopes.

Dwellings should be designed to optimise sunlight to living spaces and private outdoor areas. Main living spaces should be oriented towards north and receive a minimum of 3 hours direct sunlight between 9am and 3pm on the winter solstice (June 21).

Huntingfield lies directly on the parallel 43° south. At noon on the winter solstice, the altitude of the sun is only 23.6° from the horizon, meaning a wall casts a shadow 2.3 times its height. While a low winter sun can reach further into living rooms, overshadowing from adjacent dwellings is a greater issue.

Where lots are oriented north-south, overshadowing from neighbouring dwellings is less of a concern. Smaller lots oriented east-west, particularly terraces, risk being unable to access winter sun because of overshadowing from their northern neighbour. This risk is compounded by the fact that the site falls (at an average of 6.5%) towards the south-east.

The following strategies will help east-west oriented gain increased access to winter sun:

a) create L-shaped buildings with northern-facing courtyards.

b) locate any two-storey built form towards the street and reduce building height to one storey at the rear.

c) create shallow, north facing living spaces with skillion roofs that lift towards the north to trap winter sun.

1.03 Visual privacy and connectivity

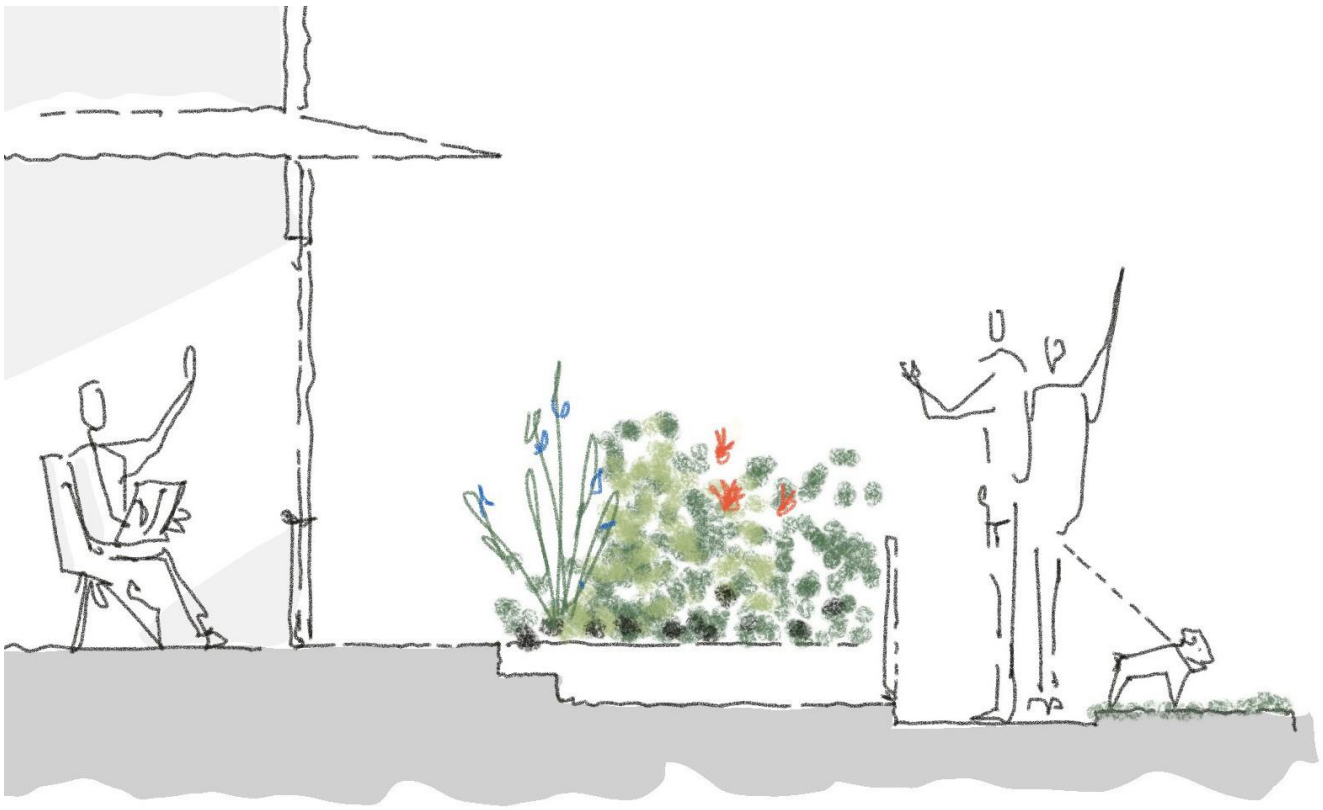
d) locate the southern walls of these living spaces on the southern boundary and keep boundary walls as low as possible. Boundary walls (with no openings) create a pleasant, private courtyard for southern neighbours. Though dwellings will experience overshadowing of their private open space from northern neighbours, they should be able to receive sun indoors, which is more important.

e) avoid parapet roofs as these features increase the bulk and scale of buildings with little benefit.

f) use generous ceiling heights to contribute to a sense of spaciousness and improve daylight penetration and ventilation. Minimum, or close to minimum ceiling heights are acceptable in some parts of small dwellings as a way of mitigating overshadowing, provided windows are large and extend up to the underside of the ceiling and there is good solar access, and the ceiling plane is broken up so as not to be severe.

Privacy enables occupants of a dwelling to go about their lives without being observed or disturbed and is particularly important for smaller dwellings where privacy is harder to achieve. Privacy falls into two categories, visual and acoustic. Visual privacy is achieved by:

- planning dwellings so that private rooms – bedrooms and bathrooms – are furthest away from adjoining neighbours and the public domain
- preventing overlooking into private open space by using dense planting and external screening elements as required
- ensuring horizontal or vertical separation between windows of adjacent dwellings
- using obscure glass to portions of windows (but avoiding a completely obscure window)
- avoiding glazing that goes to floor level to the street or in second floor rooms.



Visual connectivity between from inside dwellings to the street are important for community.

The need for visual privacy should be balanced with the need for visual connectivity between dwellings and the public domain that provides passive surveillance. Passive surveillance is a central principle of crime prevention through environmental design and is the ability for dwelling occupants to see activity in the public domain and for members of the public to discern activity within dwellings. Passive surveillance is not just about preventing crime but is also what enables us to connect with our neighbours for friendly close-knit communities.

The degree of visual privacy required by occupants is naturally a personal preference and may change throughout the day. However being able to see out of and into dwellings during the day and late afternoon enables us to wave to our neighbours, render assistance with unloading shopping and to be reassured that our neighbours, particularly the elderly are OK.

1.04 Acoustic privacy

Acoustic privacy is freedom from intrusive noise infiltration to internal and external private spaces. The importance of acoustic privacy for smaller dwellings cannot be overstated as nothing short of wearing earplugs can prevent disturbance from intrusive noise. Common sources of intrusive noise include:

- building plant and equipment such as heat pump condenser units and mechanical exhaust fans
- human voices and coughing
- home entertainment, appliances, power tools.

The loudness of a noise is not necessarily the primary determinant of its intrusiveness. Intelligible speech heard through a wall at low volume may, to some, cause greater intrusion than a louder clothes dryer. Intrusive noise is carried either through the air or the building structure itself and can be mitigated by the following measures:

Acoustic privacy at night enables good sleep for healthy lives.

i) Separation and orientation

Adequate separation should be created between doors and windows of one dwelling and those of its neighbour. Front doors, car parking and primary living spaces should not face the bedrooms of adjoining dwellings. Dwellings should be oriented such that noise is directed away from neighbouring dwellings.

ii) Walls, floors and ceilings

Buildings should be constructed using acoustically rated building materials, systems and techniques, in accordance with advice given in the ABCB Sound Transmission and Insulation in Buildings Handbook.

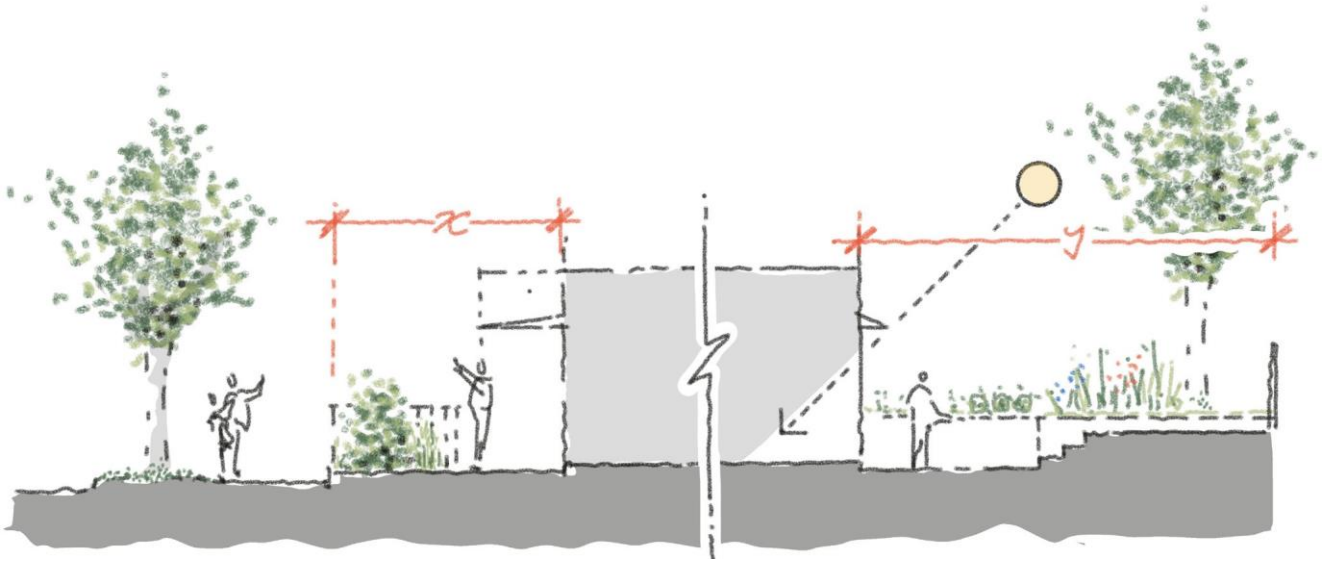
iii) Plant and equipment

Good quality, acoustically rated plant and equipment should be specified, located away from windows and bedrooms, and be installed and maintained in accordance with manufacturers' instructions.

1.05 Sharing views

Pleasant views are usually thought of as panoramic vistas of distant landscape – frequent in Tasmania. However pleasant views can also be of a courtyard garden, tree-lined street, row of charming terraces, or a single deciduous tree as it changes with the seasons. While many dwellings at Huntingfield will be oriented to enjoy panoramic views of North West Bay or Kunanyi/Mt Wellington, others will have to find – and share – closer, but no less attractive views of the street, parks and private open space.

It is particularly important that smaller dwellings be designed to seek out and frame pleasant views as compensation for less space. At early design stage, it should be verified that each dwelling has access to some kind of pleasing vista from the kitchen and primary living space (from a seated position) as well as 'view moments' throughout the house. Where building envelopes can accommodate neighbours' access to views, they should.



Front and rear setbacks should be the same as adjoining houses and generous enough for garden, solar penetration and activity.

1.06 Setbacks

Front setbacks play an important role in establishing street character and, together with rear and side setbacks, impact privacy and amenity.

All terrace lots at Huntingfield and around one-third of medium density lots are provided with rear lane access. Rear lane access frees the street frontage from needing to accommodate off-street parking and associated lay-backs and paving.

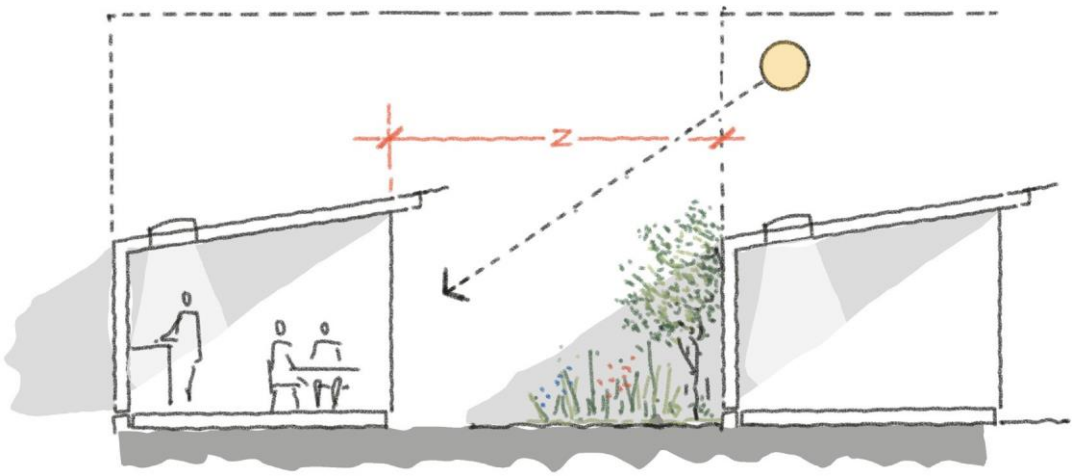
i) Front setbacks

For lots with rear lane access, street setbacks should be as generous as possible, providing space for a leafy front garden. A leafy front garden creates a privacy buffer between dwellings and the street, creates pleasing and attractive streetscapes and encourages semi-public activity and community interaction. Where lots are oriented with north-facing street frontages, street setbacks should be greater and allow for a generous garden and external, paved living area or small patch of lawn if preferred. For east-west oriented lots, particularly narrow ones, it may be more important to provide open space to the rear of the dwelling, adjacent to living areas, rather than the front.

Lots without rear lane access will need to provide off-street parking in addition to space for a garden and, if north facing, a place to sit. Street setbacks should allow for an external off-street parking spot, which should be provided either as stand-alone parking or in conjunction with a single-car garage.

ii) Rear setbacks

For lots oriented north-south and with their rear to the north, a generous rear setback should be provided to maximise sunny open space. Where rear lane access is provided, any parking structure or garage should be built to the rear boundary. For lots oriented north-south but with a northern frontage,



Rear building envelopes should ensure good winter sun penetration to southern neighbours.

the rear setback should allow some winter sun to private open spaces, but otherwise prioritise street-facing open space.

Where the rear property boundary adjoins another lot rather than a rear lane, a narrow ancillary building the length of the rear boundary may be a good use of space and improve visual and acoustic privacy to opposite dwellings. The inclusion of this structure in effect, creates an enclosed private courtyard and provides separation between the main dwelling and guest accommodation, or a home office.

iii) Side setbacks

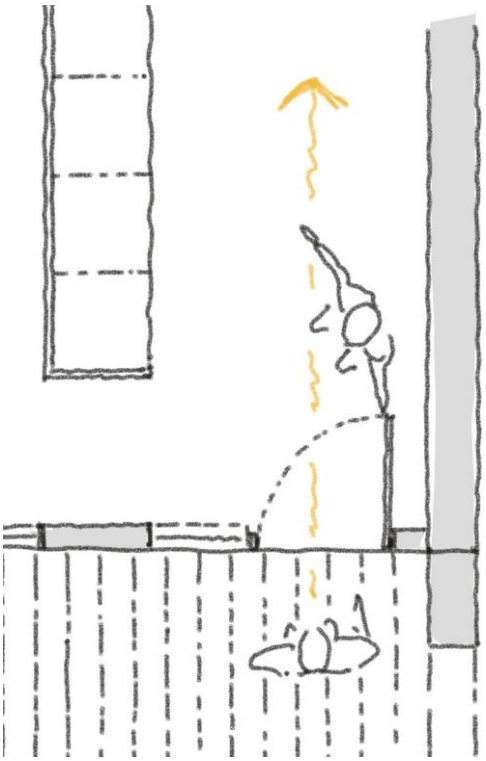
On smaller, narrower lots, side setbacks offer little more than access to rear gardens and separation between dwellings for outward facing windows. Where side setbacks are reduced to 0.9m and standard eave projections of 600mm are used, an uncomfortable condition occurs where the gutters of neighbouring houses are only 0.6m apart - almost touching over the side fence.

A more efficient use of narrow lots is to build dwellings to one or both of their side boundaries – so long as rooms are able to receive adequate light and cross ventilation and there is rear lane access. Where there is no rear lane access, dwellings should maintain one side offset for access, preferably on the northern side for lots oriented east-west.

Rooms adjoining boundary walls should not be more than 6m deep (measured from front or rear window to internal wall) and should be cross-ventilated. This means that the portion of a dwelling built to both boundaries should be no greater than 12.5m deep. Where a greater depth is sought, a light well should be introduced to bring light and air into the centre of the dwelling. Light wells can be open to a neighbour's boundary wall provided there are no window openings in that wall.

Principle 2: Clever design to make the most of small spaces

A compact kitchen with island bench, view to the garden and good quality solid timber floors.



Generous entry area to greet guests, places to dump shopping and store sports equipment.

2.00 Quality over quantity

Smaller dwellings can be more difficult to design than larger dwellings; every inch of space needs to be thoughtfully considered. There is growing interest in compact and efficient dwellings led by the tiny-house movement where the quality of a dwelling is prioritised over the quantity of space it provides. When designing smaller dwellings, it is important to consider the features needed to support the lives of their occupants and how these dwellings contribute to a sense of wellbeing. Smaller dwellings should be generous and that generosity typically results in higher costs per square metre than larger dwellings. More joinery, larger windows, quality finishes and better-planned spaces compensate for less space. Rather than being considered simply in plan, smaller dwellings should be designed spatially, in three dimensions, with thought given to sun, circulation paths, furniture and joinery layout, views, privacy, storage and 'moments of joy'.

2.01 Dwelling layout and space planning

The layout of a dwelling establishes the location of rooms within the desired building envelope and how the rooms are accessed and interrelate. Space planning considers how each room is likely to be used and arranges windows, doors, joinery, fixtures and fittings accordingly.

Dwelling layout should be the outcome of a more fundamental strategy that takes into account:

- site conditions (cross-fall, solar orientation, views, adjoining buildings, street conditions
- the anticipated needs of the occupants
- the best part of the site (this should be used for the living/kitchen space)
- the least amenable part of the site (this should be for the cars and laundry)
- how to achieve efficient flow through the dwelling
- how to achieve good daylight, privacy, cross-ventilation and visual connectivity.

A compact kitchen with generous pantry is located in the centre of a combined living, kitchen dining area.

Dwelling layout and space planning is an art more than science, however the following principles are good starting points.

i) Arrival and entry

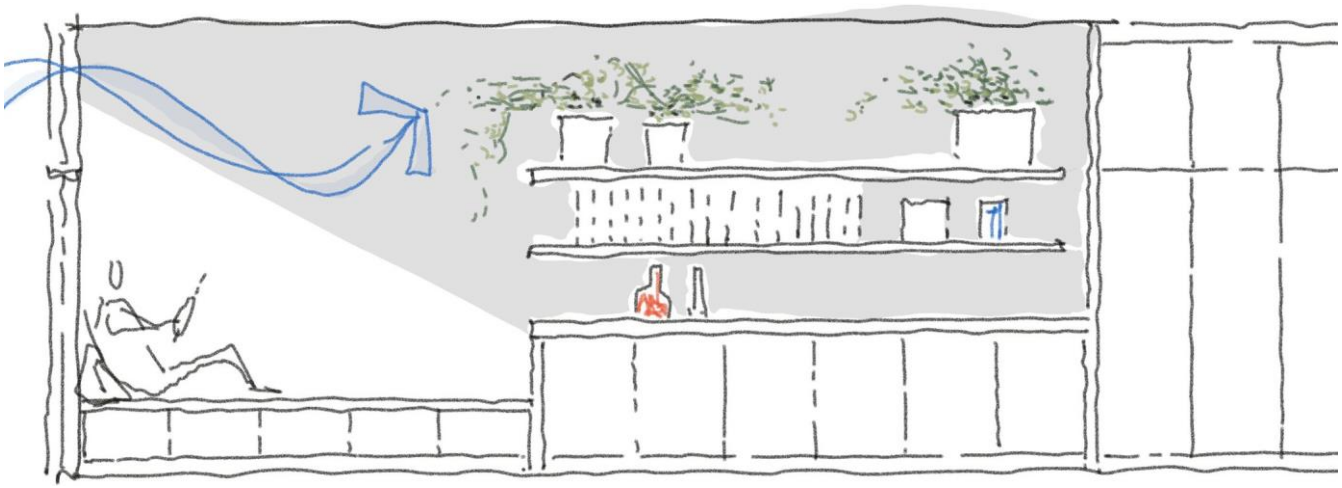
Create a buffer from the street and an entry sequence with plenty of space to dump things on the way in. The main entry should provide a pleasant sense of arrival, both for occupants and guests.

ii) Living space

Put the main living space and kitchen on the northern side of the dwelling adjacent to private open space. Seating under a sunny window with a view outdoors, even onto a small, sunny courtyard is heaven. If there is the choice between locating the living space near the view or in the sun, it should be in the sun. Make sure the living space is generous, with ample room for a variety of furniture to accommodate small and large groups. Views from primary sitting spaces out to the garden and into the kitchen are just as important as the view of the television. Where the primary living space is away from the street, consider a secondary living space with windows onto the street for good visual connectivity.

iii) Kitchen

The kitchen is the heart of the home and should be generous and located adjacent to the primary living space, with easy access to the garden. There should be good flow with no dead ends. Provide plenty of work surfaces for cooking and homework. Give the kitchen morning sun and a view outdoors. Family can gather around an island bench and is preferable to a galley kitchen. A small walk-in pantry next to the kitchen makes it easy to find things and is preferable to relying on cupboards alone.



Joinery can serve both as storage and as a place to sit.

iv) Private open space

Smaller dwellings do not need lots of private open space, however available space needs to be private, useful and sunny. Good flow from the kitchen and living spaces to private open space is important but in the Tasmanian climate does not require large door openings.

v) Utility spaces

A combined or adjacent toilet, laundry and utility room should be provided downstairs with plenty of storage. This room should receive natural light and lockable natural ventilation. It should be located close to access to the clothesline and car parking.

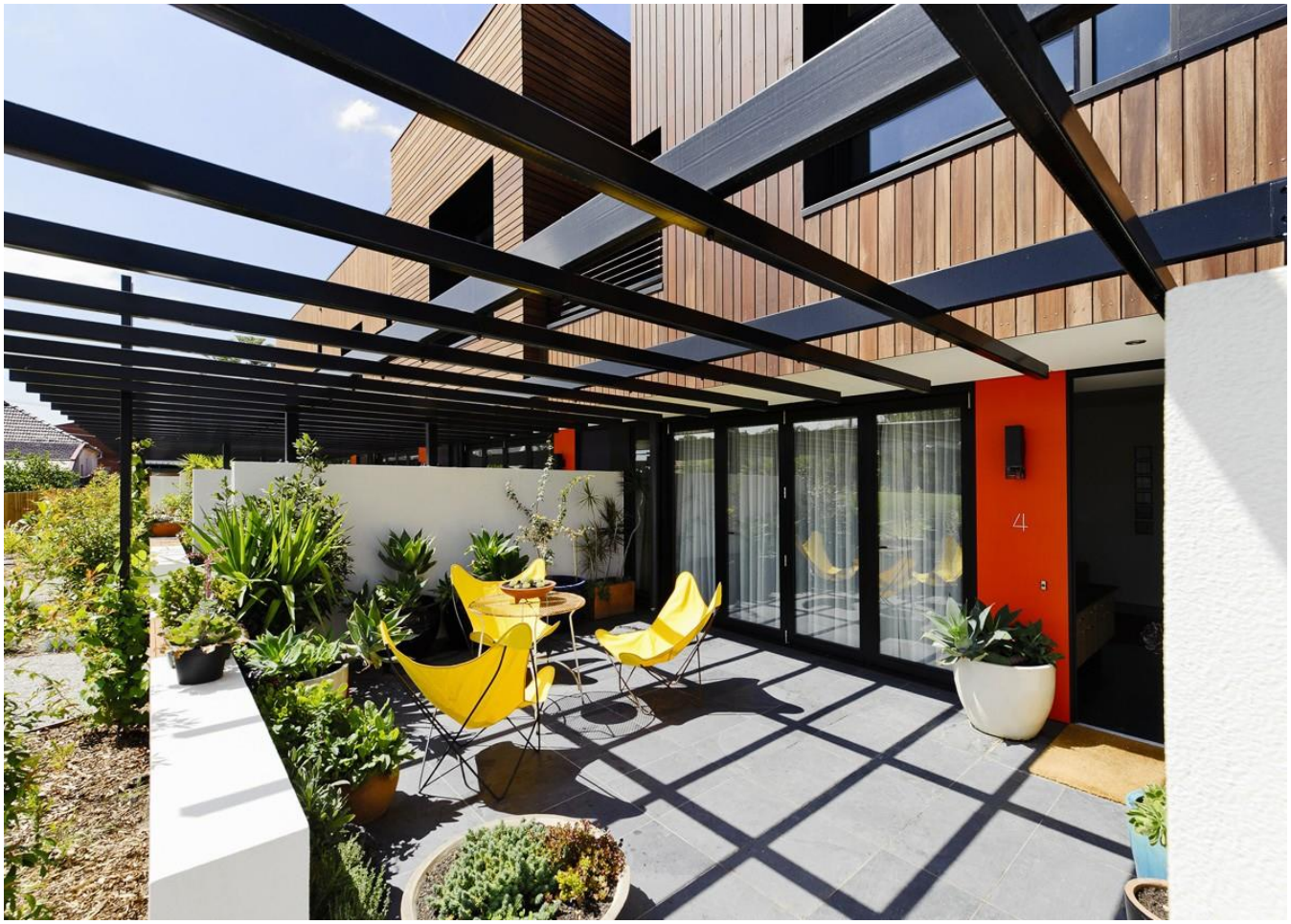
vi) Circulation space

Circulation spaces is area inside the dwelling set aside for movement. Hallways and stairs are the most recognisable circulation areas, however in more open-plan dwellings, circulation areas tend to become subsumed into living spaces. It is important to maintain defined and clear circulation paths in open-plan dwellings that are clear of activity spaces rather than cutting through them. This can be achieved, by introducing low joinery units to a space to create storage accessible to the circulation area, for instance.

Circulation through dwellings should be intuitive, direct and ideally straight. Where hall areas are appropriate, they should be widened to incorporate storage rather than simply being for circulation.

vii) Stairs and upstairs.

Many smaller dwellings at Huntingfield will likely comprise two storeys, other than those which offer level access. Upstairs is generally the best place to put bedrooms, using the stair as a transitional device between public and private space. It may make



Sunny outdoor terraces with views out onto the public domain.

sense to locate the living spaces on some sites on the second floor, however this has implications for privacy for adjacent dwellings.

Stairs take up a significant amount of space and though necessary, are often a challenge to plan around. Stairs should ideally be configured as a straight run - with an intermediate landing if required, have a generous width and gentle gradient. Stairs should be located in the part of the dwelling that has the least amenity and are a good use of boundary walls. The space beneath stairs should be well used for deep, pull-out storage.

viii) Bathrooms

While luxurious and popular, ensuite bathrooms do not represent particularly good use of space or budget in smaller dwellings. Ensuites are only accessible from the bedroom to which they belong and are typically very tight. A better use of space is to offer one, very well-appointed bathroom with toilet, bath, shower and a two person vanity to service up to three bedrooms on the first floor, then offer a shower and toilet as part of a utility room on the lower floor.

ix) Bedrooms

Bedrooms should be quiet, well ventilated and with generous built-in storage, but do not need to be large. A centrally located quiet study area may be preferable to desks in bedrooms for children. Ideally, bedrooms would have east-facing windows that enable first light to enter the room and wake occupants naturally.

x) Garages

Garages should be generous enough for storage and internal circulation. Internal doors between garages and living spaces should be avoided to prevent vehicle exhaust fumes from entering the home.

Plenty of storage, in-built desks and places to sit enables the most to be gotten out of small spaces.

2.02 Storage and joinery

In smaller dwellings where space is at a premium, built-in storage is essential for utility and maintaining order. Kitchens, bathrooms and bedrooms of speculatively built dwellings usually include built-in joinery, however occupants tend to need to supplement existing storage with loose storage furniture. While loose storage furniture has the benefit of being mobile, spaces are often not well designed for the bulk of wardrobes, sideboards and open storage shelving.

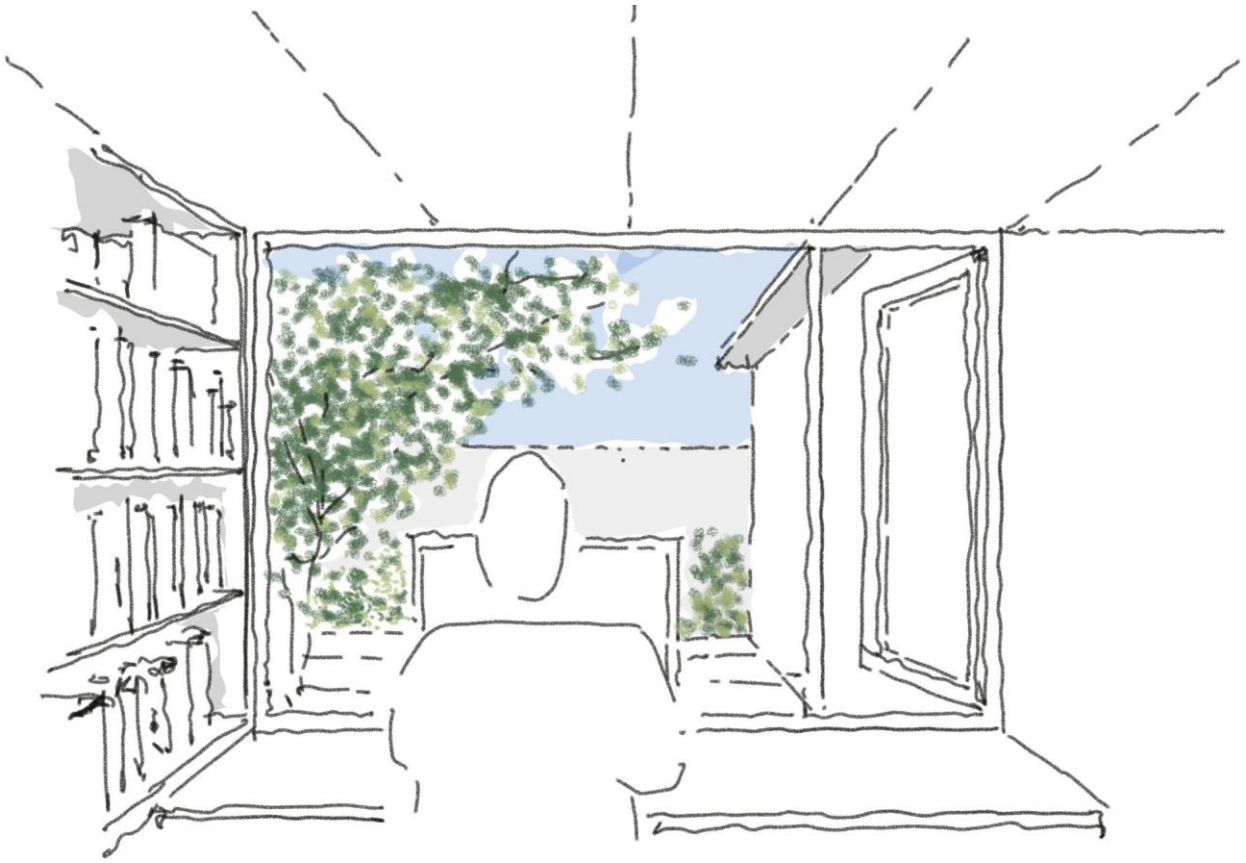
Smaller dwellings should include more built-in storage than would otherwise be found in larger dwellings. Storage should be integrated in the design of the house such that it appears as 'storage walls' rather than units inserted into spaces. Joinery should be constructed of durable and repairable materials with good quality hardware. In addition to storage, built-in display shelving and a credenza under a sunny window would be welcome features of new dwellings.

2.03 Windows, doors and thresholds

Windows and doors are arguably the most important parts of dwellings which occupants tend to interact with subconsciously. Doors and windows facilitate entry and exit of people, light and air; the quality of this transfer is important.

The placement of windows on a facade is often the result of an exercise in composition undertaken by an architect as they think from the outside in. Windows should, however, be considered from the inside out, in terms of how the window will be experienced from inside the room. Windows should be used to frame views (excluding things we don't want to see), admit winter sun and exclude summer sun, direct passive airflow in a certain direction and let occupants see out without being seen.

Similarly, internal and external doors should be thought of as thresholds, marking arrival, departure, and transition from public to private, and should be located thoughtfully and built solidly.



Watching the tree blossom from your desk is a moment of joy.

2.04 Moments of joy

'Moments of joy' might best be described as those occasions when occupants of dwellings become aware of a particularly pleasing experience, brought to them in part by some aspect of the dwelling.

Examples of moments of joy might include:

- sitting comfortably under a sunny window in the middle of winter, reading a book
- arriving home in the dark after a stressful day at work and opening the door to find a warm, gently lit house
- bringing food to friends and family as they sit around a large table in the courtyard, enjoying a BBQ in the late summer sun
- sinking into a hot bath in a quiet bathroom with the window opened a crack to let the wind whip in
- watching the tree blossom through the window in the study
- giving your neighbour flowers cut from your front yard because they previously admired them.

The perfect dwelling doesn't exist. Design compromises are inevitable and architects can only do the best they can to design dwellings that maximise enjoyment and amenity, and minimise sources of friction and frustration.

Contemplating the desires of future occupants of smaller dwellings is important, as is anticipating how they might want to inhabit their homes. Empathy and thoughtfulness are crucial when designing for unknown clients, who come to appreciate the generosity, intelligence and effort of their architect, whom they are unlikely to ever meet. Designing for moments of joy is as important as designing for statutory compliance or energy efficiency.

Principle 3: Attractive houses for positive local character and desirability

3.00 Good environment, good community

So far, this guide has looked at principles that contribute to dwellings having privacy, access to winter sun and more cleverly designed internal spaces. Later sections consider landscape and energy efficiency. This section looks at how dwellings can contribute to the desired future character of Huntingfield.

It is reasonable to suggest that if smaller dwellings at Huntingfield are energy efficient, surrounded by quality landscape and feel good to live in, then it shouldn't particularly matter what they look like from the street. After all, houses are for living in not looking at and construction budgets should be directed towards features that provide measurable benefits to occupants. If the two were discrete considerations, the function of a dwelling would be more important than its appearance – at least by the standards of prevailing modernist theory. However, how a dwelling looks is inextricably linked to how it performs. Good looking, aesthetically pleasing dwellings are often good dwellings to live in and good dwellings to live in generally look good from the street. It further follows that a suburb full of good dwellings to live in is likely to be considered to have good character and therefore develop a reputation for being a desirable place to live.

A dwelling's external appearance should offer promise of what is to be found inside. Large, well-proportioned windows suggest good access to daylight, a leafy front garden probably means good privacy and good quality cladding materials are likely to indicate the presence of good quality internal finishes. A dwelling that is embellished with decorative cladding and overwrought facade articulations on the other hand, might be compensating for average livability.

Wide, tree-lined streets, articulated building facades, softened with planting.

3.01 Strategic narrative and future character

Huntingfield's strategic narrative tells the story of why Huntingfield is being created, who will live there and what its desired future character and community are intended to be. A clear strategic narrative and a vision of the desired future character will inform decisions about the design of individual dwellings that together form the character of the place and help fulfill the strategic narrative.

Huntingfield is intended to be a diverse, sustainable, intergenerational community, providing homes for a broad range of different households. Smaller lots will enable affordable houses for young first home buyers as well as single-person households and social housing. The Huntingfield masterplan offers high levels of urban amenity to smaller lots, with good vehicular and pedestrian access, and close proximity to recreation areas, parkland, shops and cafes. A future public transport hub will offer fast and frequent trips to Hobart.

The desired future character of Huntingfield might include:

- leafy, garden-filled streets filled with a sense of life and activity in and around dwellings
- movement of people on bikes and foot on their way to and from parks and bush reserves
- a sense of community, familiarity and conviviality among neighbours, a general sense of equity and egalitarianism, optimism for the future, and care for self and others
- attractive, well-kept houses with healthy gardens, set consistently back from the street
- consistency to bulk and scale out of respect for neighbours' solar access, lightness and openness
- subtle variation in form, generosity, and good proportion, quality materials, and built to last.

Articulated and varied building forms add visual interest. Trees enhance street and soften visual impact of dwellings.

3.02 Front gardens, entries and fences

Generous front gardens are important for softening the visual impact of rows of terrace and townhouses and should be provided for each dwelling.

The entry to each dwelling is for receiving guests or returning home and should be easily identified and somehow made special. Entries can be expressed by a portal or porch, being recessed, having nicer or softer timber cladding, a visually contrasting front door or a step up from the ground onto decking.

The garage should not dominate the street elevation and is ideally limited to a single-car capacity. Garages should ideally be set back from the primary building elevation and treated in a way that reduces their visual prominence.

Fences should be open, no higher than 1.2m, and made from either painted steel bar or timber, with minimal masonry.

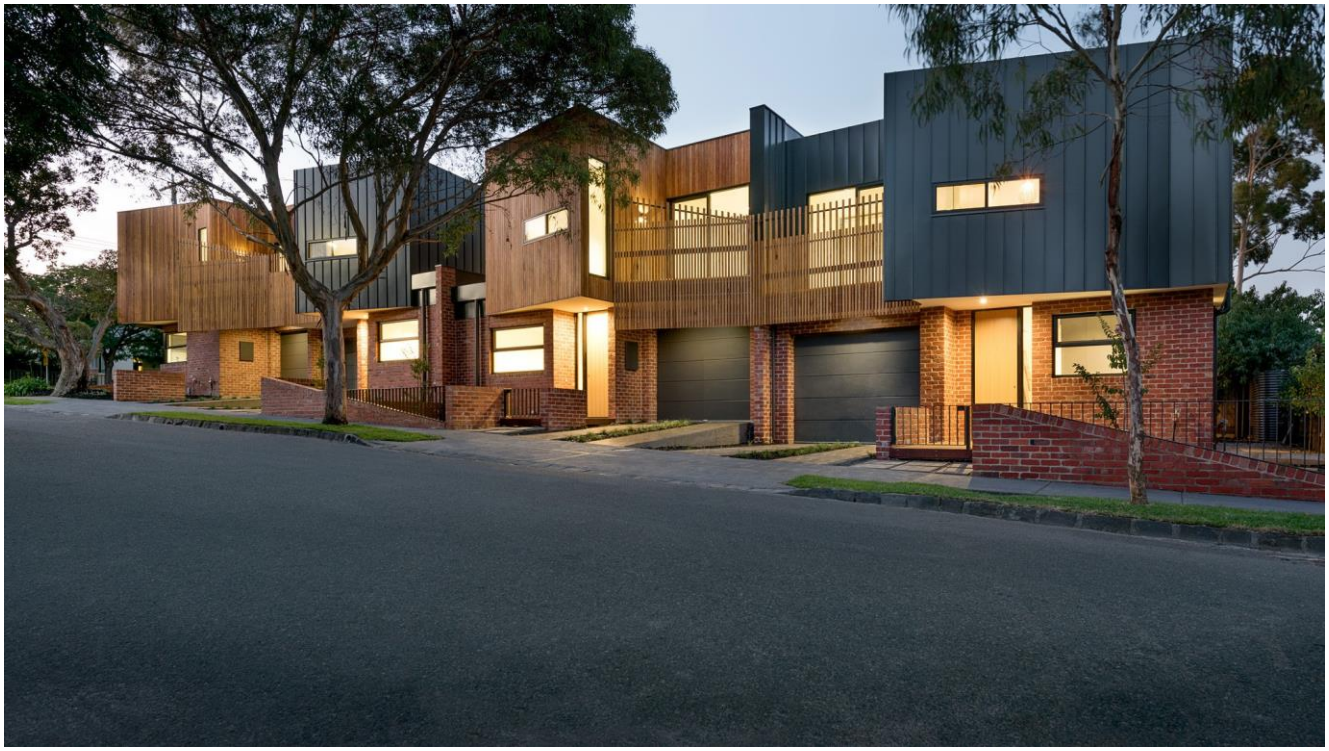
3.03 Built form and articulation

'Built form' refers to the shape, proportion and composition of a building when viewed from the outside. Built form is influenced by:

- the height, width and depth of the building
- the proportion of windows and their location on the facade
- the construction system used (for example, masonry, timber or steel-framed)
- the shape and composition of the roof.

'Articulation' refers to the way in which the building elements (roof, windows, awnings, sills, doors, gutters, eaves, etc.) have been expressed, particularly where each element connects to or adjoins another.

Pleasing built form and articulation follows a logic based on providing amenity for occupants and neighbours. Principles that inform the design of pleasing dwellings include:



A simple materials palette. Alternating timber and metal cladding differentiates dwellings with consistent masonry podium.

i) The fewest number of elements, simply expressed

Less is more. Dwellings with the fewest number of different elements are often the calmest to look at and are easier to build than complex ones.

ii) Clear and logical composition with pleasing elements that draw the eye

Dwellings should possess architectural order and compositional logic. Ground floor masonry will ground a building, while light-weight cladding to the second floor with an expressed roof form with deep eaves will seem to float. A flash of colour incorporated in a deep window reveal or projecting window bay will draw the eye and establish that element as being important. The boundary between dwellings should be expressed in some considered way. Party or boundary walls could be expressed as 'blade' elements, visible to the street, for instance.

iii) Boxes versus expressed roof forms

Box-like or cubic building forms are increasingly being used for dwellings. These are characterised by parapet roofs, continuous cladding in one plane (usually a metal or fibre cement sheet) and windows 'punched' into the external walls. While this type of built form is popular, there are associated design challenges which should be considered. Box-form dwellings do not have eaves to offer protection to windows or cladding from the rain or sun, making the dwelling susceptible to overheating in summer and creates the risk of premature degradation of cladding material. Box gutters used behind parapet walls also increase the risk of water leakage into the house, particularly where there is a build-up of leaf material.

Expressed roof forms are those which can be seen from the street, and which commonly extend beyond external walls. They are more common in Tasmania and may be more useful at Huntingfield.

Smaller, two-storey dwellings create a visually appealing edge to public park and offer passive surveillance.

Expressed roofs offer weather protection to windows and cladding and give dwellings a sense of gentle, familiar domesticity. Expressed roofs are likely to be considered more traditional, however this is not a bad thing, and they can be used in a contemporary way.

Skillion roofs angled north catch low winter sun through high level windows. Gable roofs with a pitch of around 30 degrees, oriented gable towards the street are charming and reduce the building height to neighbouring dwellings.

iv) Stepped form

'Stepping' is a way of creating articulation to a building's form by breaking facades into smaller elements that 'step' away from the boundary either in plan or elevation. One example of stepping form is a projecting window box, another is a recessed garage opening. Where the dwelling is two storeys, Stepping the second storey back serves to reduce the bulk and scale of the dwelling when viewed from the street or adjoining dwellings. Houses with stepped elements make for a more interesting and varied streetscape, particularly when trees and shrubs are interspersed in voids

v) Awnings and projections

Awnings to protect doors and windows from rain and sun are an important aspect of the built form and should be well-integrated in the design.

Good composition of timber elements with window openings, projecting beyond a masonry wall.

3.04 Subtle variation

Variety in built form naturally creates a sense of diversity and an interesting and engaging streetscape. Variety is usually the result of different types of dwellings being built at different times for people with different tastes. A common scale, front setback and fence height usually creates a pleasing consistency to a street full of different types of houses.

For architects designing a whole block or precinct at the same time, the challenge is to create variety in an authentic and honest way. Variation in built form should be the result of buildings being different internally as well as externally, and for a purpose other than simply creating variation. Thoughtless variation for its own sake leads to eerie 'toytown' places. A beautiful, optimised dwelling type should be allowed to be repeated along a street with only the subtlest variation needed.

3.05 External materials and joints

External materials should be chosen for their durability and ability to be maintained over the long lives of these dwellings. Traditional materials commonly found in Tasmania such as dry-pressed brick and painted timber weatherboard are familiar to Tasmanians, well-liked and should be considered. While modern, sheet-based cladding systems are cost-effective and quick to install, thought must be given to how they will be able to be maintained, repaired and replaced over time. For example, replacement components may not be available for proprietary systems, and pre-finished, panelised facade systems may not always possess the durability and colourfastness they are supposed to. Joints between building components should be well detailed; set joints, and large areas of render are prone to cracking and failure and should be avoided. Neutral and natural colour palettes should be considered over bright on-trend colours for a sense of calm and timelessness.

Principle 04: Pleasing and productive gardens for leafy courtyards and streets

Gardens can be a bit wild, particularly as a means of creating privacy for smaller dwellings.

4.00 Green spaces

Well-designed landscape spaces contribute significantly to the quality of smaller dwellings, particularly as a valuable supplement to smaller interior spaces. The approach of 'quality over quantity' should apply to landscaping in the same way it does to the internal spaces of dwellings. Most dwellings have two primary external areas: a semi-public garden facing the street, and a private yard or courtyard to the rear.

As previously discussed, street-facing gardens enhance the street scape, create a leafy buffer between the street and dwellings and encourage social engagement between neighbours. A generous front setback allows for a decent-sized garden.

Private open space located at the rear is unlikely to be large enough to support a traditional turfed backyard and should instead be thought of as a courtyard living space with generous perimeter planting.

4.01 Planning external spaces

Well-planned external spaces can feel bigger than they are and offer plenty of amenity to households.

i) Privacy, layout and level changes

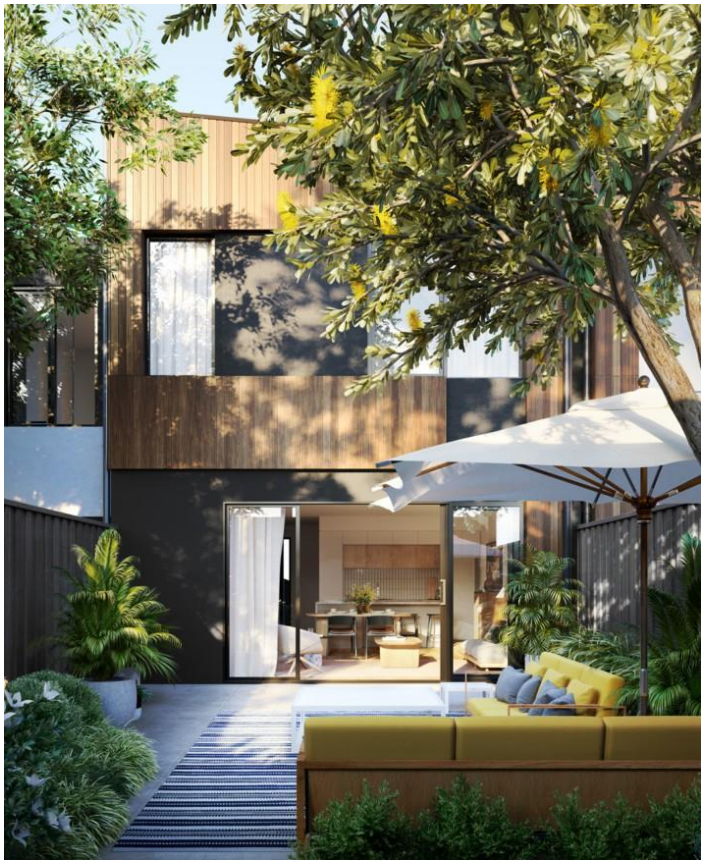
Landscape areas should be laid out logically, with thought given to privacy, views, sun and access for maintenance. Changes in level should be well thought-out and integrated in the overall design.

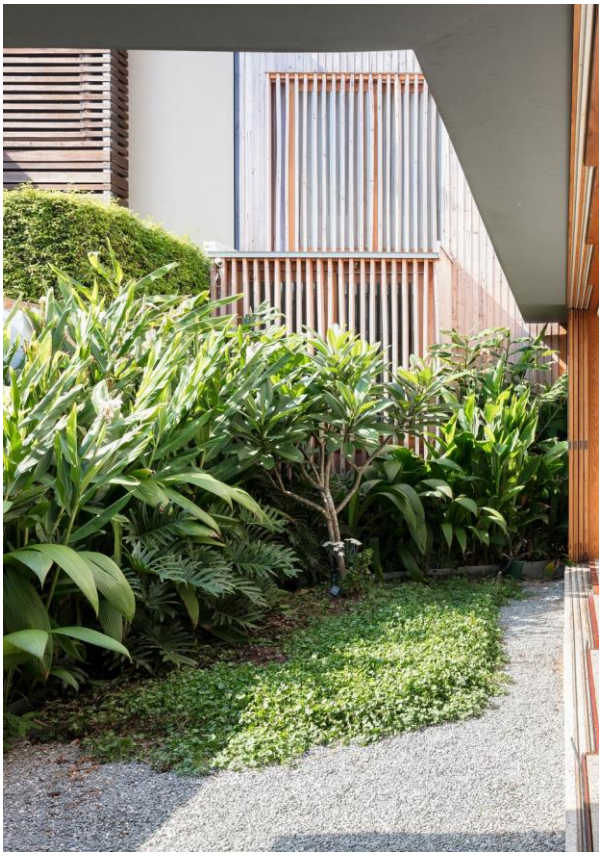
ii) Good access

Primary access to dwellings and secondary circulation paths should be easily navigated and well laid out. Steps should be compliant with good top and bottom landings and handrails as required.

iii) Places to sit

Sunny spaces should incorporate flat, paved areas large enough to accommodate outdoor furniture. Low walls and landscape steps can incorporate timber slats as warm, dry surfaces for sitting.





Smaller private outdoor spaces make for great courtyards.

4.02 Soil, plants and planting

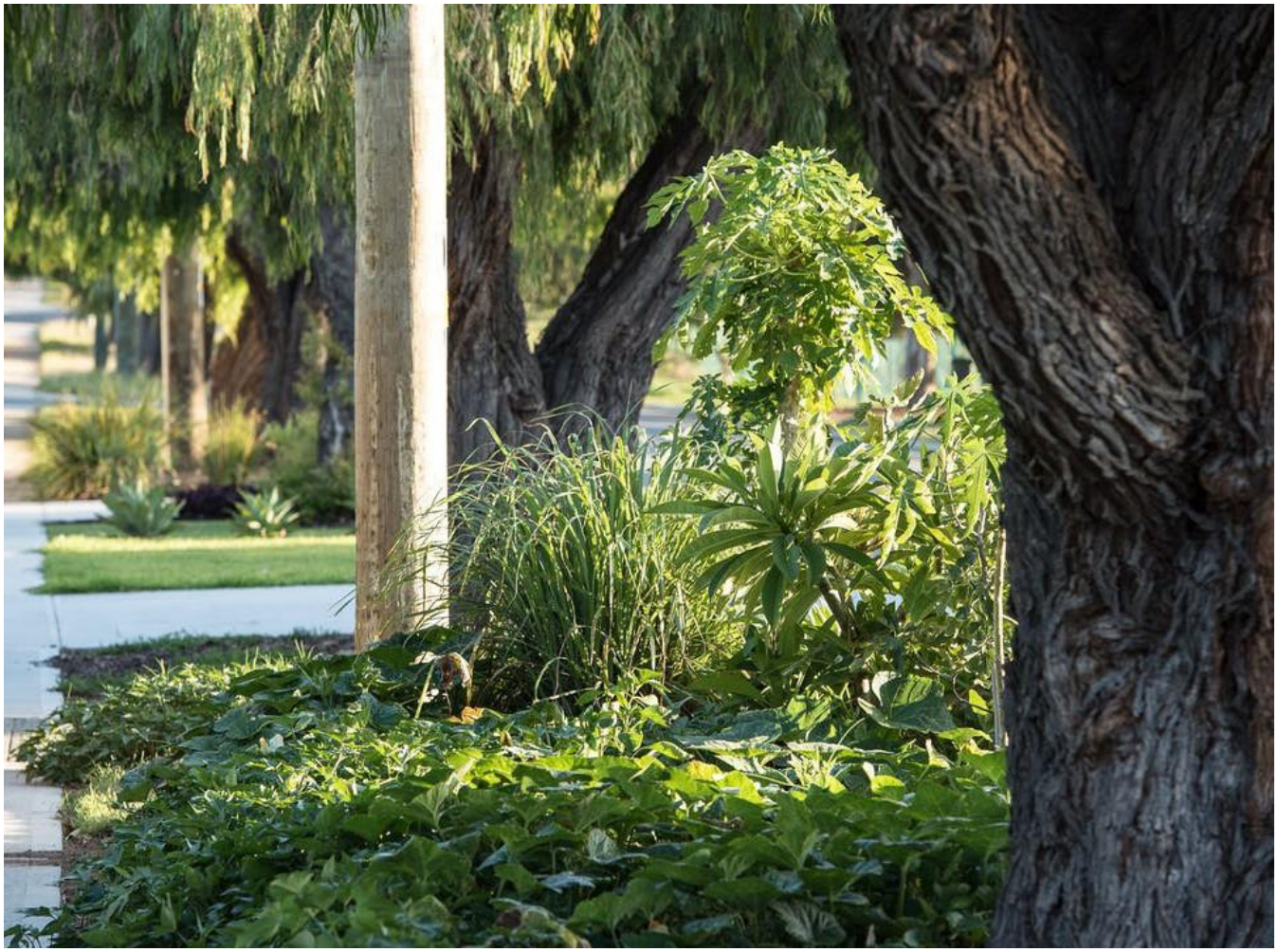
The type and quality of soil provided is important. During early civil works, topsoil should be stockpiled and later redistributed to gardens. Compacted soil should be ameliorated and building debris including mortar removed. Soil composition should be appropriate to the types of gardens planned for smaller lots and be well-drained.

Tree and shrub species should be carefully selected with thought given to:

- location with respect to solar orientation and desired sun penetration
- maximum growth height and diameter
- soil type and drainage
- root impact on surrounding structure
- habitat creation for birds and insects
- desired privacy effects
- drought resistance.

Clonal varieties of trees and shrubs with known characteristics are preferable to wild species. Cultivars known for their hardiness, toughness and adaptability should be selected, particularly those tolerant to a range of soil types and shaded areas. A blend of exotic and native plant types should be used with space provided for productive gardens.

Trees and shrubs are important providers of privacy. Foundation plants known to be tough and long-lived should be selected to provide privacy. Fastigiate trees –- ones that grow vertically with little sideways growth – are good for small gardens and should be considered. Deciduous trees can be used to regulate solar penetration throughout the year, letting light into dwellings in winter, and providing shade in summer. Similarly, deciduous ornamental vines grown across pergolas are also effective.



Public nature strips should be given over to neighbourhood gardening efforts.

4.03 Hard landscaping

'Hard landscaping' describes areas of paving, paths, retaining walls, driveways and fences. Areas of hard paving should be included for a specific purpose - for access or outdoor living, rather than as a low maintenance alternative to vegetation. Paved areas should be softened/concealed by perimeter garden beds. Semi-permeable paving that provides spaces for suckering plants to grow in are attractive, improves storm water absorption are good options for driveways.

Terraced garden beds are an attractive way of managing level changes across a falling site and should be incorporated, with raised beds making access to productive gardens easier.

Exposed pre-cast concrete products can be rendered; however, paint finishes for retaining walls should be avoided. Natural materials are encouraged.

4.04 Water capture and storage

Rainwater capture and storage is important for irrigation and site-wide storm water management. As discussed again as part of Principle 5, water collected off the roof should be held in a rainwater tank located externally and made available for toilet flushing and garden irrigation.

Good subsoil drainage is important for small gardens and should be incorporated in their design. Rainwater run-off from hard surfaces can be directed into sub-surface retention areas that form part of wicking garden beds, which are particularly useful for productive gardens, but can also be used for ornamental gardens. Where runoff leaves properties and is captured as part of a storm water management system, 'rain gardens' should form the initial part of that system, enabling storm water to be used to irrigate flood-tolerant plant species and street trees.

Integrated slimline storage sheds for bin storage and garden equipment.

4.05 Composting, storage & washing lines

Composting facilities are useful for managing organic waste and improving soil and plant growth. Space should be set aside for on-site composting of garden clippings and kitchen waste. Newly developed in-ground worm farms incorporate a permeable plastic waste-collecting chamber buried in a garden bed, with only its lid visible. Worms are free to move into and out of the chamber. Space for conventional compost bins/worm farms should otherwise be provided.

Good garden storage, for bins, garden tools, barbecues, sporting equipment, potting mix etc. should be provided. While a conventional garden shed would be sufficient, a linear set of 'garden cupboards' with an awning to protect them from weather may be a more efficient way of using space.

Fixed or retractable washing lines should be provided to reduce the reliance on clothes dryers.

4.06 Raised and vertical gardens

Where space is limited, raised planter boxes, vertical gardens and green roofs are good ways of introducing plants to dwellings, however, are more involved than ground-level landscape.

Planter-boxes can be located on ground level or on second-floor areas of dwellings and are good for growing herbaceous plants and succulents.

Proprietary vertical gardens are effective at greening boundary walls, however, have fairly high initial costs and often require involved maintenance.

Green roofs can be introduced to improve privacy and views from second storey windows. While low-maintenance ground cover and grass species can be selected, access provision, waterproofing requirements and increased structural loading often make green roofs unfeasibly expensive.

Principle 5: Energy efficient, durable and resilient homes for a sustainable future.

High quality glazing saves energy and improves comfort.

5.00 Sustainability for the future

Huntingfield has the potential to become a leading example of sustainable, energy efficient, durable and climate-resilient dwellings. Such dwellings:

- require less electricity to heat and cool than conventional homes
- are more easily maintained, have an extended service life and retain their value
- are more resilient and less affected by the impacts of climate change.

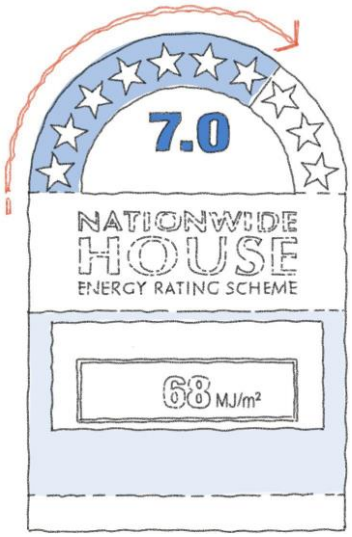
Even seemingly small initiatives to increase a dwelling's performance, durability and resilience will have a significant impact on running costs, comfort and security of its occupants over the lifetime of the dwelling. Smaller dwellings are less able to be renovated or retrofitted and so should be built to the highest possible standard to ensure they meet the needs of generations of residents at Huntingfield.

5.01 Thermal performance

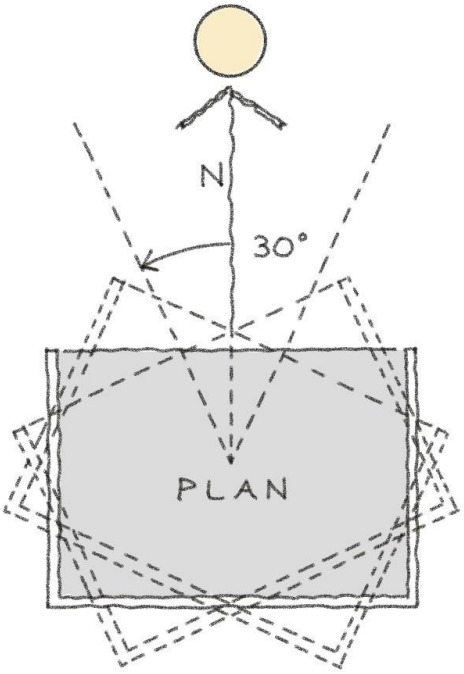
Huntingfield is exposed to north-westerly winter winds, resulting in average minimum temperatures often below 6°C. Measures to improve thermal efficiency will make the most significant contributions to overall energy efficiency. These measures include the following:

- performance modeling and certification
- northern orientation for solar gain
- thermal mass
- insulation
- airtightness
- high performance glazing
- heating systems, heat recovery and dampers
- controlling summer heat gain.

The use of boundary and common walls in terrace or semi-detached dwellings improves thermal performance.



Dwellings at Huntingfield should be certified to achieve a NatHERS 7.0 star rating or higher.



Buildings should ideally be oriented towards north, +/- 15 degrees for good solar access.

i) Performance modeling, inspection and certification

All dwellings at Huntingfield should be built to the highest performance standard possible. The Nationwide House Energy Rating Scheme (NatHERS) is based on the efficiency of a dwelling in terms of the predicted annual energy load for heating and cooling measured in megajoules per square metre per year. While the National Construction Code (NCC) currently requires a minimum NatHERS energy rating of 6.0 stars for Class 1 buildings, a 7.0 star rating or higher is recommended.

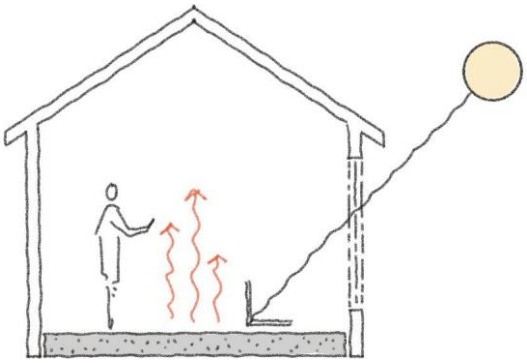
Software based thermal analysis should form part of the initial design stage and be used to certify the thermal performance of dwellings prior to construction. During construction, dwellings should be regularly inspected by an energy efficiency specialist to ensure correct installation of insulation and membranes. A 'blower door' test conducted by the specialist at lock-up and completion should confirm target airtightness has been achieved.

ii) Northern orientation for solar gain

Buildings should be oriented towards the north, +/- 15°, to maximise thermal gain. Windows to the south should be minimised or avoided, while glazing to the east and west should be tinted or shaded to reduce the risk of overheating in the morning and afternoon during summer.

iii) Thermal mass

Thermal mass is the capacity of a material to absorb, store then release heat energy. Bricks, blockwork and concrete have good thermal mass and should be used as building components; exposed internally and insulated from the outside. Thermal mass helps stabilise internal temperatures and should ideally receive direct sunlight during the day in winter for release at night. An insulated dark oxide-tinted concrete slab outside is a great example of thermal mass.



Solar gain through north facing windows. Heat stored in exposed slab and released at night.

Good insulation to ceiling, walls and floors. vapour-permeable membranes prevent condensation.

iv) Insulation and condensation

Bulk insulation creates air pockets that trap warm air that would otherwise escape from the inside of a building through its walls, roof and floor. Bulk insulation takes several different forms though all more or less do the same thing. The space required within walls, below floors or above ceilings to install bulk insulation depends on the mass of the insulation product.

Insulation should be used in conjunction with vapour-permeable membranes and adequate airgaps to minimise the risk of condensation forming where humid internal air comes into contact with cold surfaces such as the underside of metal roofs.

The key measure of insulation's efficacy is its resistance to the flow of heat or R value. The higher the R value, the better the performance.

To target a 7-star NatHERS rating, insulation in dwellings at Huntingfield should have the following R values[1]:

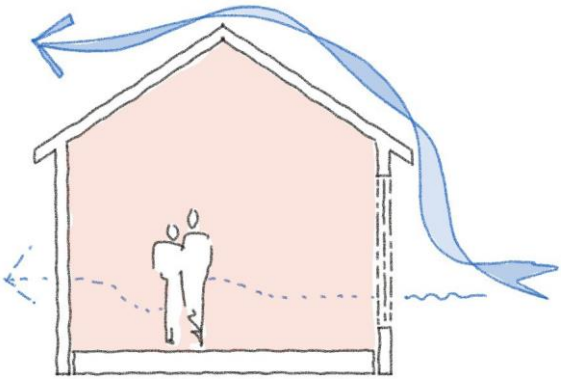
	6 Star (min.)	7 Star (target)
– Walls	R 2 [(a)]	R 2.7 [(b)]
– Ceiling	R4.0	R7.0
– Floor	R2.8	R3.5
– Slab	R1.8 [(c)]	R1.8 [(c)]

Notes:

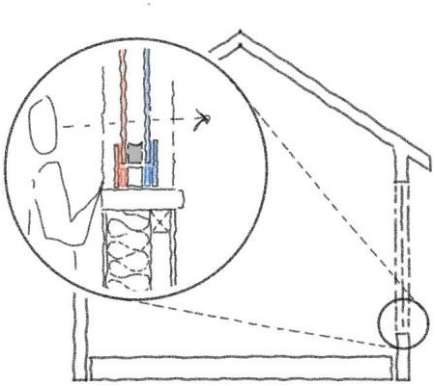
a) achievable within a 90mm stud wall cavity.

b) achieved either using high density wall insulation within a 90mm wall cavity. Higher levels of insulation can be achieved if a 140mm stud wall cavity is used[3]

c) achieved using 50mm extruded polystyrene foam beneath the slab and against slab edges exposed to atmosphere[4].



Taped and inspected building wrap for airtightness to retain heat, prevent wind-driven leakage.



Argon filled double glazing units within thermally broken aluminium or PVC frames.

v) Airtightness

Airtightness is degree to which uncontrolled air movement into and out of a building is prevented. Air leakage occurs through gaps, cracks and porous building materials and is the result of wind or thermally driven differences in air pressure between inside and outdoors. Airtightness is commonly measured in air-changes per hour at 50 Pascals pressure (ACH50) using a 'blower door test' administered by an expert. The average airtightness of Australian homes is 15 ACH50. In Tasmania, this should be kept below 5 ACH50 although this can be as low as 0.6 for dwellings with Passive House certification.

Airtightness is greatly improved with the use of an appropriate external building wrap with all penetrations and edges properly taped and inspected.

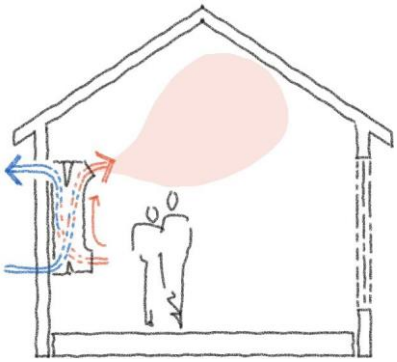
vi) High performance glazing

High-performing European triple-glazed doors and windows are becoming more common in Tasmania. However, a more cost-effective alternative is argon-filled double glazing with thermally broken window frames. These provide significant improvements on more common air-filled double glazing in thermally-unbroken aluminium frames or PVC

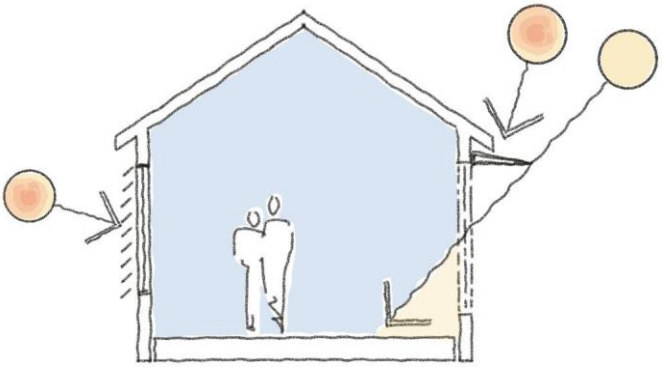
The thermal performance of windows is usually expressed in terms of:

- solar heat-gain coefficient (SHGC) – the amount of solar radiation admitted
- U value – the rate of heat conduction or loss.

Dwellings at Huntingfield should have windows with a U value of less than 3.5 for thermally broken aluminium frames or less than 2.7 for timber or PVC frames. SHGC should be above 0.55 for northern windows.



Heat recovery units enable ventilation while minimising heat loss to atmosphere.



External screening to western windows and fixed awnings to northern windows reduce risk of overheating in summer.

vii) Heating systems, heat recovery and dampers

Heat pumps remain the most efficient source of heating for dwellings. The most efficient heat pumps currently on the market have a Coefficient of Performance (COP) of 6, meaning that 6 units of thermal energy are put into a living space for everyone unit of electrical energy used in the process.

Electric radiators or fan heaters using electrical resistance to generate heat should not be used. Where multiple zones require heating, fan-coil units should be used in each zone rather than ducted systems, which lose energy to cavities through ducting.

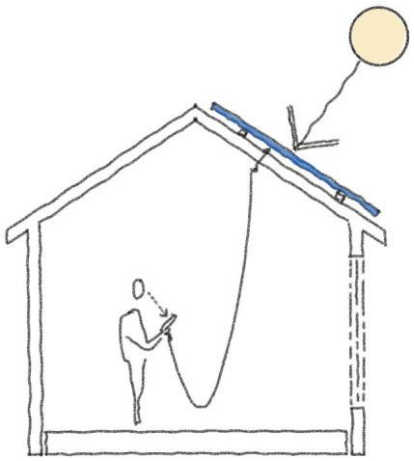
Heat recovery units should be considered for fresh-air supply, while solenoid-actuated dampers should be fitted to reduce air leakage from mechanical exhaust systems in kitchens and bathrooms, as passive dampers often fail.

viii) Controlling summer heat gain

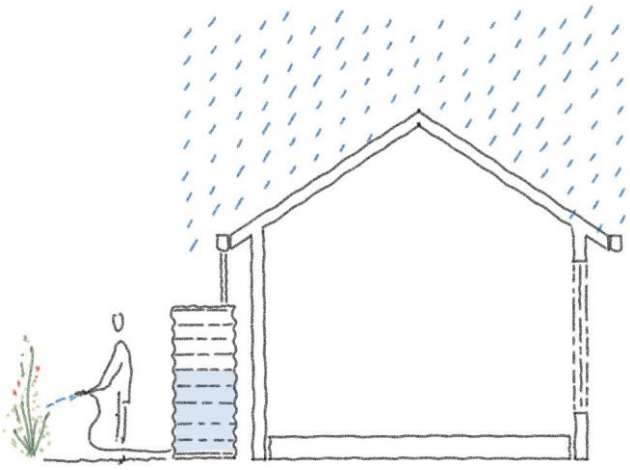
Dwellings in Tasmania generally do not require mechanical cooling unless solar heat gain is not adequately controlled. Heat gain can be controlled by:

- limiting areas of glazing on west-facing facades
- incorporating operable external louvres to west and east facing windows that are likely to experience overheating
- incorporating fixed, horizontal sun shading on northern windows, deep enough to block sun during summer (between October and April) but shallow enough to admit sun for the rest of year.

When houses do need to be cooled, this should be achievable with cross-ventilation rather than mechanically. There should be good air-paths across all living spaces and secure, operable windows available.



3-5 kW photovoltaic system with provision for future battery storage installation.



3-5kL rainwater storage provided by a slimline tank, used for irrigation and toilet flushing.

5.02 Solar energy collection

Photovoltaics (PV) have become an integral part of domestic energy systems and should be installed on all dwellings at Huntingfield. Separate solar hot water systems should also be considered; however, with efficiency gains in heat-pump hot water systems, these may become more practical and efficient. PV systems should be sized according to the energy requirements of each dwelling.

Where practicable, roof design should consider the requirements of PV installation. The optimum tilt angle for PV installation in Hobart is 37° to 42°, pointing as close to north as possible.

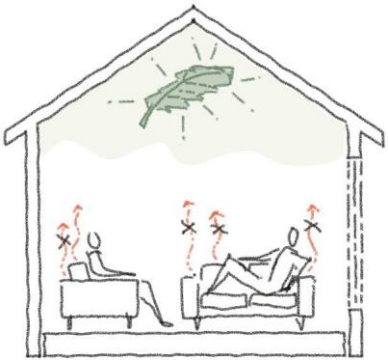
At a minimum, provision for future installation of on-site batteries should be made, in anticipation of domestic batteries becoming economically viable (if they aren't already at the time construction commences at Huntingfield).

5.03 Rainwater capture and storage

Tasmania has experienced a gradual decline in rainfall over the last 40 years while household demand for water in Hobart and surrounding regions has increased. Rainwater capture and storage improves the resilience of households during weather extremes and service interruptions and reduces demand on infrastructure.

Rainwater capture and storage should be incorporated in the design of all dwellings at Huntingfield. Hydraulic installations should enable rainwater to be used to flush toilets as well as for irrigation. A 5,000L 'slimline' tank can be accommodated within an area 0.8m wide, 3.3m long and 2.02m high while a 3,000L version requires an area of 0.6m in width.

Rainwater capture and storage will also have a positive impact on stormwater management across the site by providing on-site stormwater detention.



Good indoor air quality from low VOC products.

Durable houses should be robust and always look as good new.

5.04 Indoor air quality

Indoor air quality is an important but often overlooked design consideration with implications for health and wellbeing. While Australia currently has no specific controls on indoor air quality, the Australian Building Codes Board (ABCB) publishes the Indoor Air Quality Handbook which provides information to assist in the design of dwellings with better indoor air quality.

Indoor air contaminants come from a range of sources; some are released by building materials and furnishings while others are the result of mould and the use of household chemicals. Simple measures to ensure good indoor air quality include:

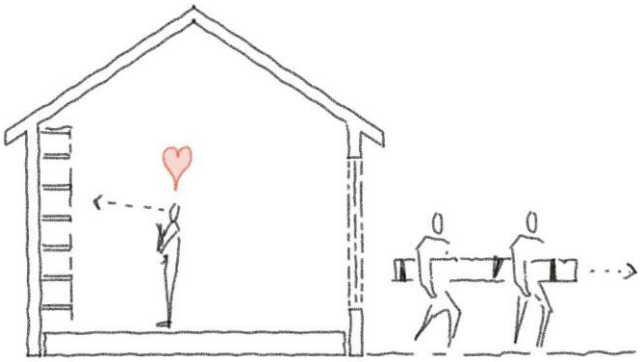
- select low-emission materials for buildings
- measures to prevent condensation forming
- good passive ventilation and mechanical ventilation for bathrooms, kitchen and clothes dryers.

5.05 Durability and serviceability

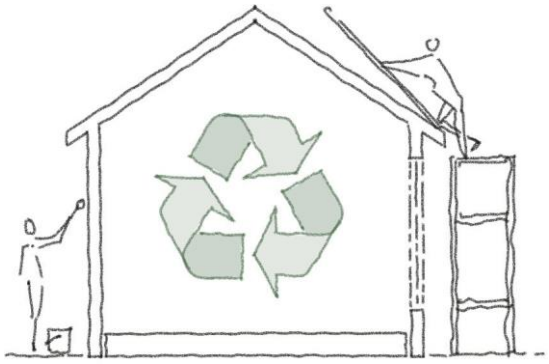
The building industry is under significant pressure to deliver projects with ever-increasing levels of efficiency and productivity. While much of the innovation driving these efficiency gains is beneficial, it is important that cost savings in the short-term are not at the expense of the long-term performance or viability of dwellings.

Dwellings at Huntingfield should be carefully designed and constructed using durable and quality materials to ensure a long service life for generations of happy residents. Systems, components, materials and building techniques should be chosen for their durability and capacity to be maintained, serviced and replaced easily and economically. It is particularly important that smaller dwellings at Huntingfield be designed to be able to be modified and adapted over time in response to the changing needs of occupants.

Principle 5: Energy efficient, durable and resilient homes for a sustainable future.



Internal reconfigurability for changing needs is important.



Design for easy maintenance and repairability extends the service life of dwellings.

i) Sturdiness

The primary structure should be sturdy and capable of enabling the buildings to be modified internally and externally over time.

ii) Accessible services and envelope for maintenance and repair

Electrical and hydraulic services, plant and equipment, roofs, gutters and building envelope should all be easily accessible for servicing and repair. Access hatches enable access to services and plant within walls and ceilings while level ground enables ladder access and scaffolding.

iii) Adaptable interiors

The interior of each dwelling should be able to be modified with relative ease according to the needs of new occupants. Fitted joinery, finishes, and window coverings should be able to be removed and replaced.

iv) Hard-wearing surfaces

Consider using solid timber floors that can be sanded and refinished, rather than pre-finished laminate flooring that cannot be economically repaired once the wearing surface has been damaged. Solid timber door frames and architraves, robust stair nosings and sturdy steel fences all contribute to a sense of quality and durability.

v) Durable, repairable cladding and joints

Avoid pre-finished cladding that cannot be refinished. Painted timber and fibre cement and unfinished masonry last longest. Avoid set joints externally where cracking occurs.

vi) Manuals and spare parts

Provide a service manual and spare parts for new dwellings and their equipment, fixtures and fittings.

SECTION B: Lot typologies at Huntingfield

Even as the open, gently sloping field that Huntingfield is today, it clearly offers potential for a range of different precincts, each with unique orientation, aspect, quality and potential. The Huntingfield masterplan has been formulated in a way that responds to these precincts. It follows the topography carefully and places roads, parks and housing lots where they make most sense. It is intended that future dwellings will respond to these different precincts with unique house typologies that reflect a common approach to the qualities and potential of their site.

For this section, five site typologies for medium density lots have been identified and given a working description, in order to explore some of the key design considerations for dwellings on each. Each typology responds to a unique site condition. These typologies are broadly representative of the different types of lots located within the masterplan however are not definitive or exhaustive.

This section presents simple sketches of site considerations which are not intended to be prescriptive or representative of an architectural form. For each site, there are several different approaches to dwelling design that could be taken. Design experimentation and optimisation is encouraged.

1. North-south terraces

North facing,
dual lot access.

2. East-west terraces

East facing,
dual lot access

3. Laneway townhouses

Wider medium density lots,
with rear lane access

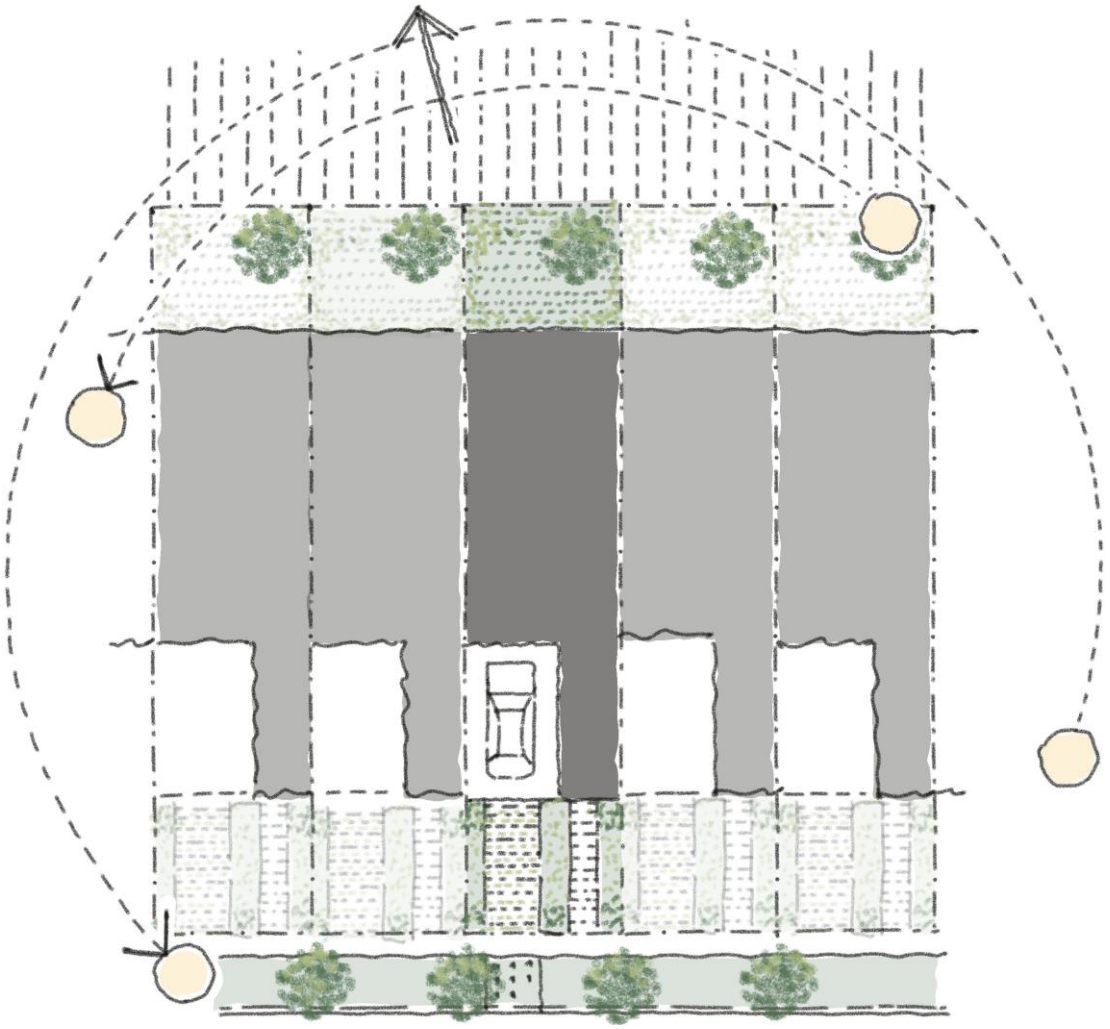
4. Inner block townhouses

Good solar orientation, oblique views,
no rear lane access.

5. Corner blocks

Located throughout the site. Great dual aspect and opportunity for two dwellings.

Type 1: North-south terraces



North-south terraces - Plan

The north-south terraces are generally oriented west-north-west and are grouped in blocks of lots. Each lot is 6m wide, and typically 25-m deep and has an area of less than 200m^2.

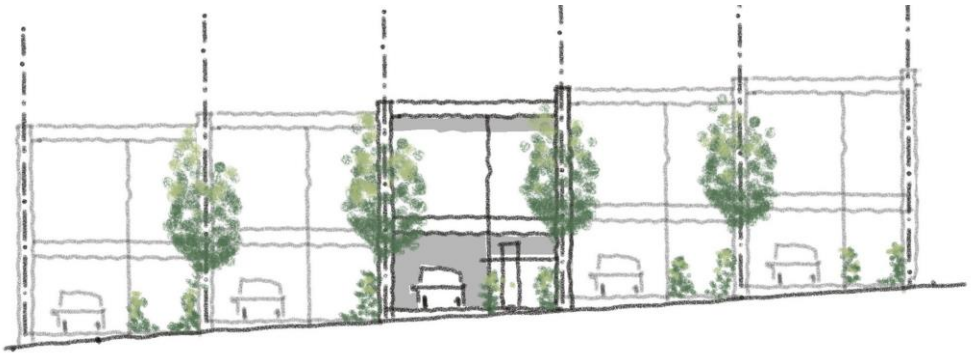
The blocks adjoin a central paved shared zone accessed from a secondary road. The orientation of these lots is optimal for receiving sun.

These lots typically have a cross-fall of 0.5m to 2m metres from front to back. Terracing will need to be introduced at the front and rear of these dwellings to deal with the cross-fall.

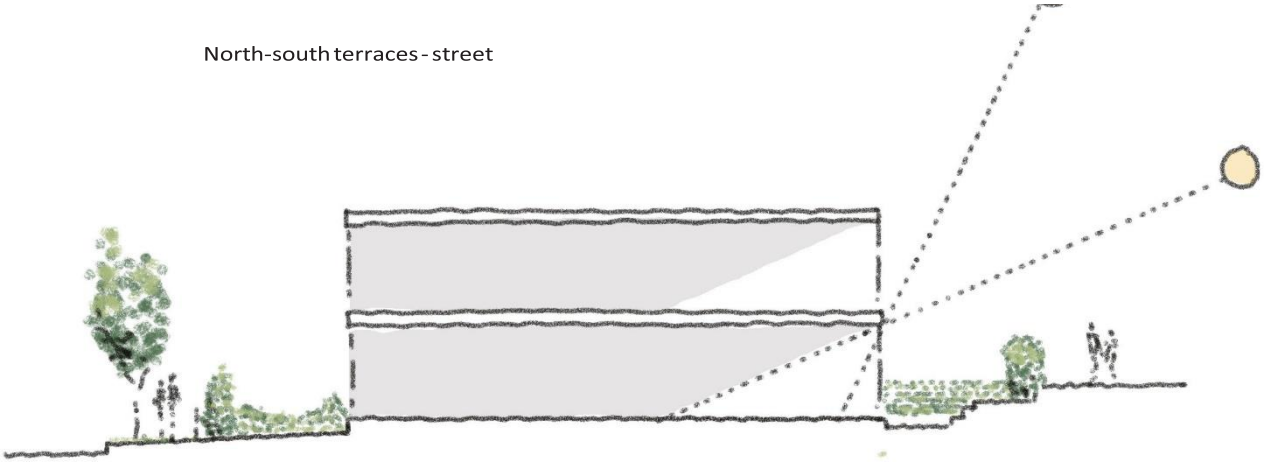
Primary living spaces should be located towards the north of each dwelling with a sunny private courtyard as a privacy buffer to the shard zone or common landscaping.

Two second floor bedrooms can be accommodated – and a third, if adequate light and cross-ventilation can be achieved – with a light well or second floor side setback. End terraces benefit from being able to gain additional windows or side openings.

If off-street parking is required, this should be provided on the southern end of each lot. A southern setback sufficient for a second vehicle to park within the lot should be considered. If this is not required or desired, terraces should be moved southward to provide additional northern outdoor space.



North-south terraces - street



North-south terraces - site section

Type 2: East-west townhouses

East-west townhouses - plan

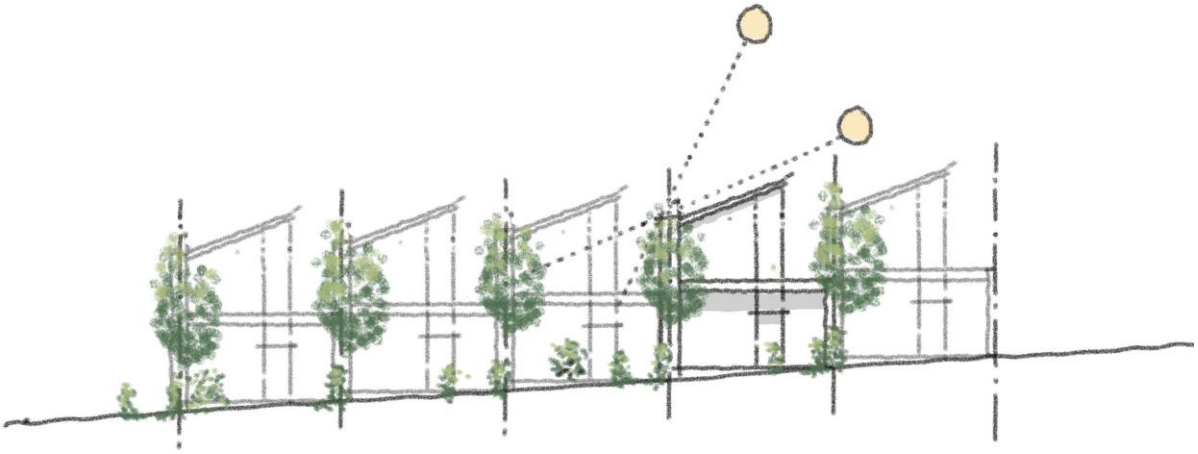
There are clusters of east-west terraces at Huntingfield around linear parks. These terraces are good examples of smaller dwellings 'outsourcing' their open space to an adjacent area of public parkland. Locating the smallest dwellings around the nicest parts of the site is particularly egalitarian – those with the least space have greatest access to some offset or compensation for their smaller dwellings.

Smaller terrace houses with pleasant little front gardens tend to make for better looking streetscapes – these terraces will contribute to a village feel around the parks.

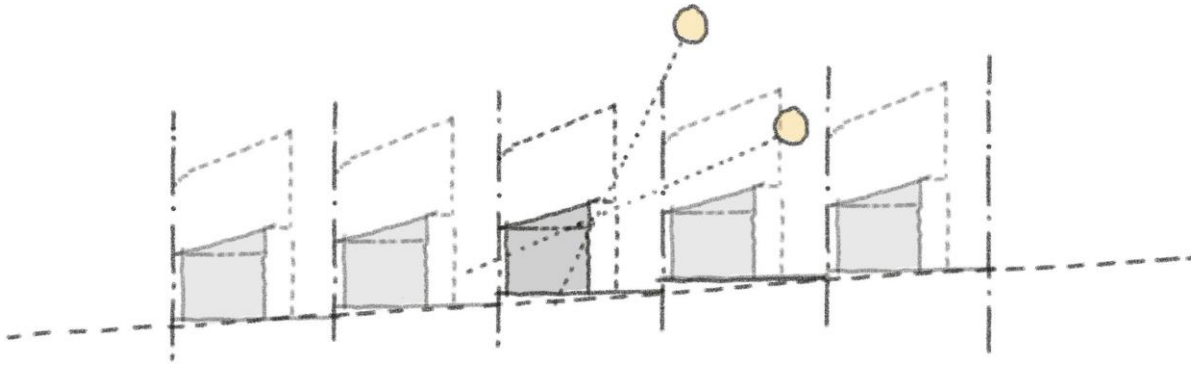
East-west terraces are 6m wide and 25m-30m deep, offering a lot area of less than 200m^2, often with a cross-fall of 0.5m. Rear lane access means that a full-width double garage would be suitable, leaving the primary elevation for living spaces.

Given their east-west orientation and narrow lot width, these terraces are likely to receive significant overshadowing from their northern neighbour and receive little winter sun. With a greater reliance on mechanical heating, these terraces should achieve particularly high levels of thermal efficiency.

Careful building envelope design should maximise opportunities for solar penetration. Skillion roofs that raise north may capture sun, while low, single storey rear walls and deciduous planting will assist to reduce overshadowing.

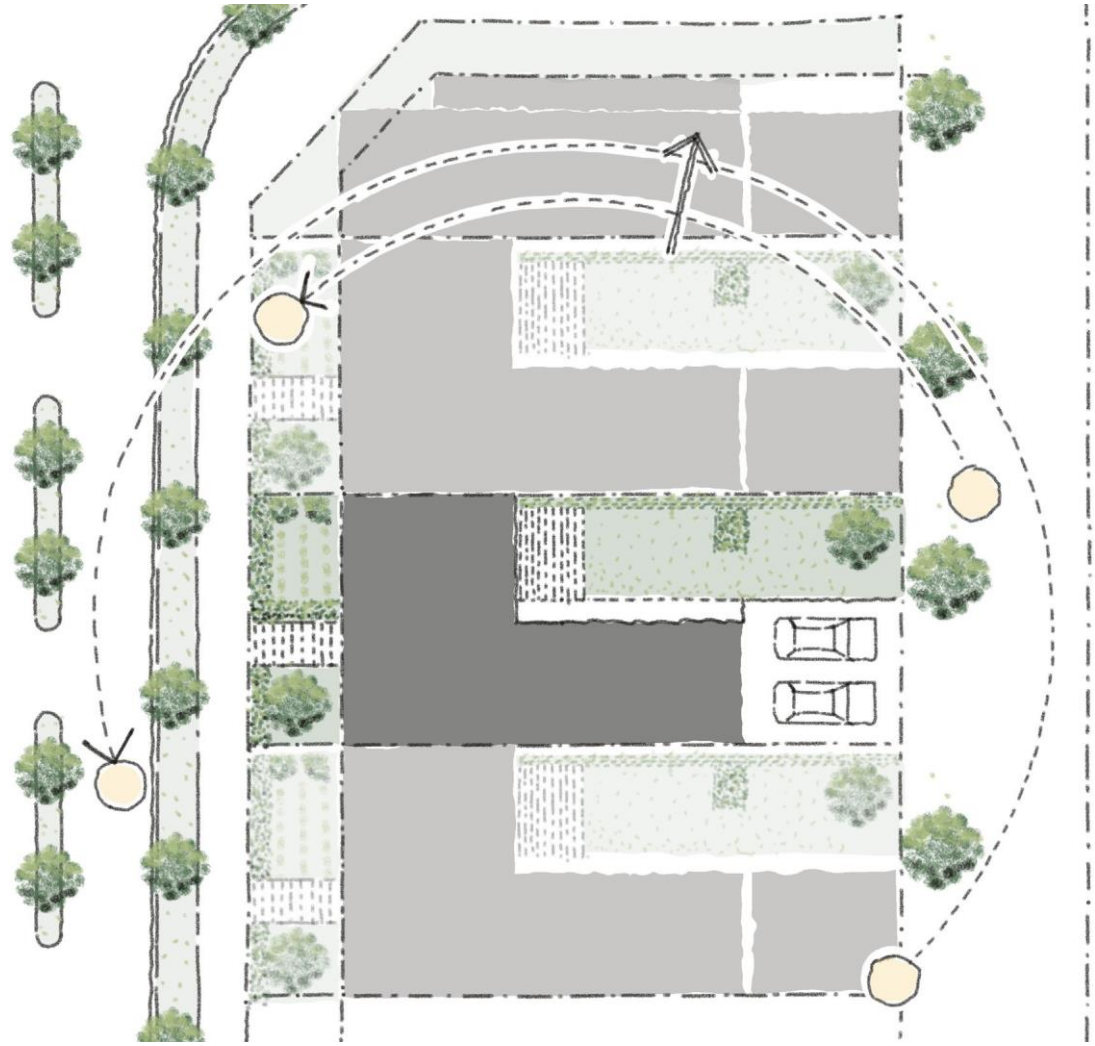


East-west terraces - street elevation



East-west terraces - site section

Type 3: Laneway townhouses



Laneway townhouses - Plan

Laneway townhouse lots typically have a west or south-west street and are generally 10-15m wide.

These lots benefit from generous street width and rear lane access which can comfortably accommodate two-car garages, with wider lots also enabling direct access to the lane from private open space. The size and shape of laneway terrace lots varies according to curving road and laneway alignments which may create some unusual shapes.

The width also means that dwellings do not need to be built to both side boundaries at the front and can instead be pulled back from the northern boundary for additional light and cross-ventilation. This side offset could occur on the southern side of the lot, however the quality of space created may not be as good.

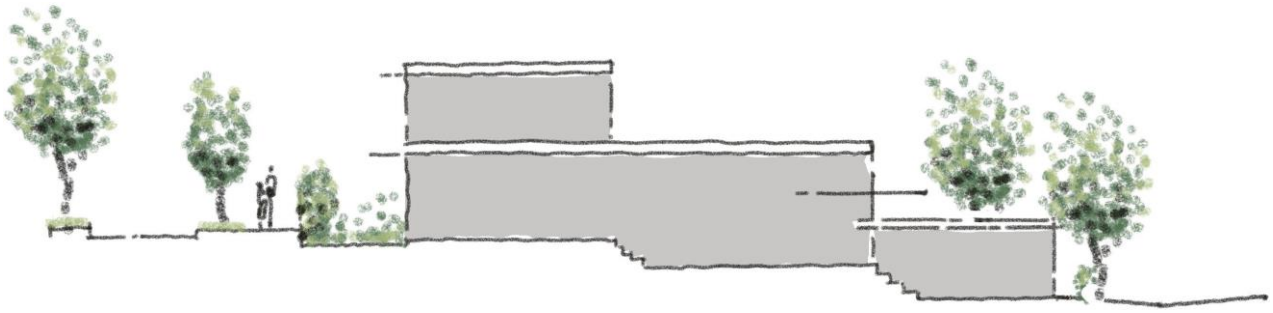
Like Type 1: North-south terrace, the primary living spaces of north-south laneway townhouse lots should be located towards the north.

East-west orientated laneway townhouse lots creates inherent overshadowing from northern neighbours, however, and L-shaped ground floor plan will enable as much winter sun as possible. The L shape should be formed around a north facing courtyard, enclosed on two sides by large windows and the third, to the north, by the northern neighbour's single storey southern boundary wall.

A rearward L-shaped building form on the ground floor maximises sunlight into rear-facing living spaces, while a second-floor mass to the front of the dwelling offers space for bedrooms and aims to avoid overshadowing southern neighbours private outdoor spaces.

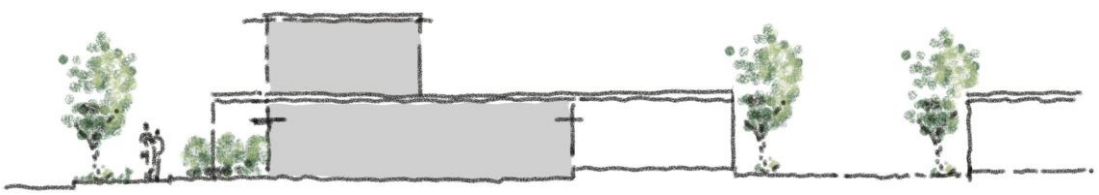
Generous front garden space provides separation from the public domain and enhances the appearance of dwellings from the street.

Laneway townhouses without a side setback - Street elevation



Laneway townhouses without a side setback - Site section

Laneway townhouses with a side setback - Street elevation



Laneway townhouses with a side setback - Site section

Type 4: Inner block townhouses

Inner block townhouse - plan

Inner-block townhouse lots is the name given to medium density lots without rear-lane access. While these lots appear to have less amenity than better connected lots elsewhere at Huntingfield, they benefit from good solar access and private courtyards, with bushland a short walk away.

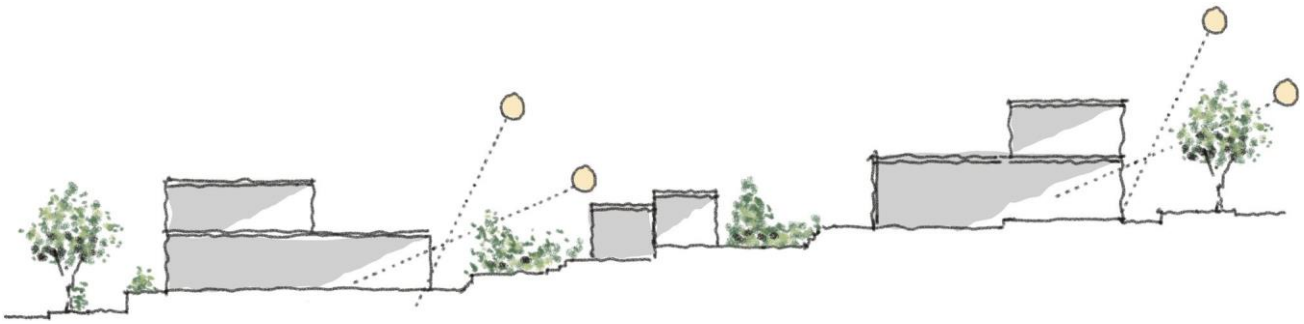
These lots typically have a north to south or north-east to south-west orientation, around half with northern street frontages and half with south.

Without rear lane access, these dwellings are required to accommodate any off-street parking in the front of the dwelling, and this should be limited to a single-car garage. These dwellings should be offset from one boundary, to permit side access to rear gardens for wheelbarrows.

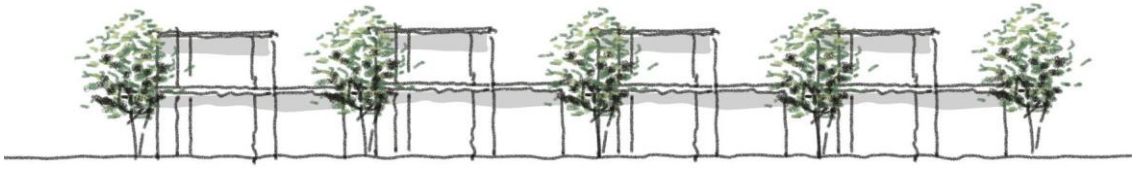
Second-storey built form should be located towards the street, where it does not overshadow private outdoor space. A small light well or courtyard could be introduced on the side of the dwelling already offset. From the boundary. this light well would improve light penetration and cross-ventilation.

Falls from front to back or back to front are typically between 1.5m and 2.5m, creating an opportunity for attractive terraced garden beds planted with screening vegetation and garden herbs.

To improve privacy to rear-facing open areas and to create more living and working space, small garden studios could be built at the end of the garden with zero or close to zero offsets to rear and side boundaries. Where dwellings have south-facing rear living spaces, these studio structures would face north and offer a sunny place to read a book or work from home.



Inner block terraces - Site section



Inner block terraces - Street elevation

Type 5: Corner blocks

Corner blocks - plan

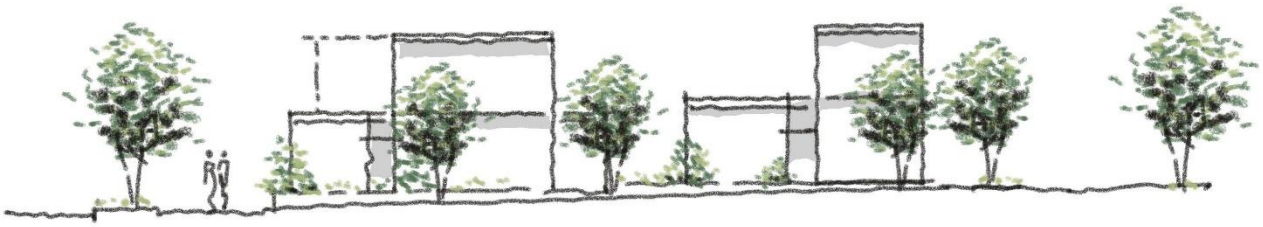
Corner block lots are those with frontages to two streets and one laneway. These are intended for medium density development and are distributed throughout the site.

Corner lots play an important role at Huntingfield. They are highly visible from multiple angles and serve to bookend rows of terrace houses. Because these lots have street frontages effectively on three sides, they are appropriate to be used either for a larger, two storey townhouse or two, smaller dual occupancy dwellings.

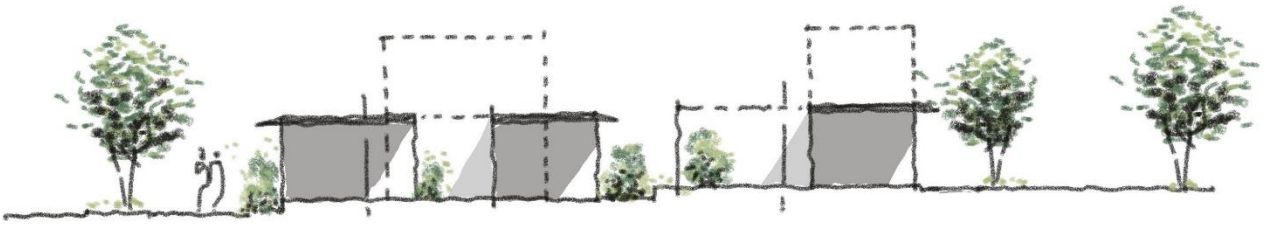
The orientation of these lots varies greatly and cross-falls range from 1m to more than 2m. Accordingly, each corner lot should be considered three in the context of its individual site constraints and conditions.

As well as being highly visible, these sites have good visibility to the street. Because of their prominence, corner townhouses offer great opportunity for visually interesting architecture. Highly articulated building forms with good quality windows and cladding materials can set the tone for the rest of the block. Pockets of street-facing garden soften the built form and creates screening for privacy to rooms otherwise visible to the street.

Off-street parking should be limited to single-car garages on two rather than three frontages, ideally on the laneway where a laneway frontage exists. Second storeys should be located in way that minimises overshadowing to neighbours. Some stepping back from the street may also be appropriate to support clear site lines for passing pedestrians, cars and bicycles.



Corner blocks - street elevation



Corner blocks - cross section

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19.06.2025	Final Issue (Revision C)

A place to sit and enjoy the view.