Expression of Interest

Brackens Ridge

Special Housing Area at Arrowtown

December 2014

Housing Accords and Special Housing Areas Act 2013




CONTENTS

OVERVIEW

Brackens Ridge is a 62 lot Special Housing Area development that will provide a range of housing opportunities to address the immediate needs of local families in Arrowtown and the wider Wakatipu Basin.

The key features of Brackens Ridge include:

- A range of section sizes based around a strong integrated urban form
- Unique retention mechanisms – to ensure affordable land and housing occurs quickly
- Warm and energy efficient buildings – designed to be consistent with the Arrowtown Design Guidelines
- Reticulated infrastructure that makes efficient use of the existing networks
- Within easy walking distance of key community infrastructure such as the primary school, pre-school, sports fields, workplaces and convenience shops
- Access to orchard trees throughout the development
- Integrated with the local recreation networks of walking trails and recreation spaces, including a short walk to the golf club
- Within easy walking distance of a good public transport route
- Protection of the key landscape setting of Arrowtown.
- Existing relationships with reliable contractors to guarantee the development is undertaken a timely manner.

The layout and design of Brackens Ridge includes a mixture of smaller affordable sections set amongst a range of larger traditional residential sections.


Reinforced grass parking areas defined by macrocarpa timber
Double vehicle entrances to the housing estate with enhanced landscape planting on both sides of roads
Footpath to Arrowtown, school and rec. ground
Small amenity park
Open lawn with peripheral fruit and ornamental tree planting
Courtyard car park
Curved stone walls at main entrances
CENTENNIAL AVENUE
Main Entrance 1
Main Entrance 2
BRACKENS RIDGE MASTERPLAN
REF:2498-SK11 - SCALE 1:750 AT A1 - 1:1500 AT A3 - 01 DEC 2014
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LOCATION

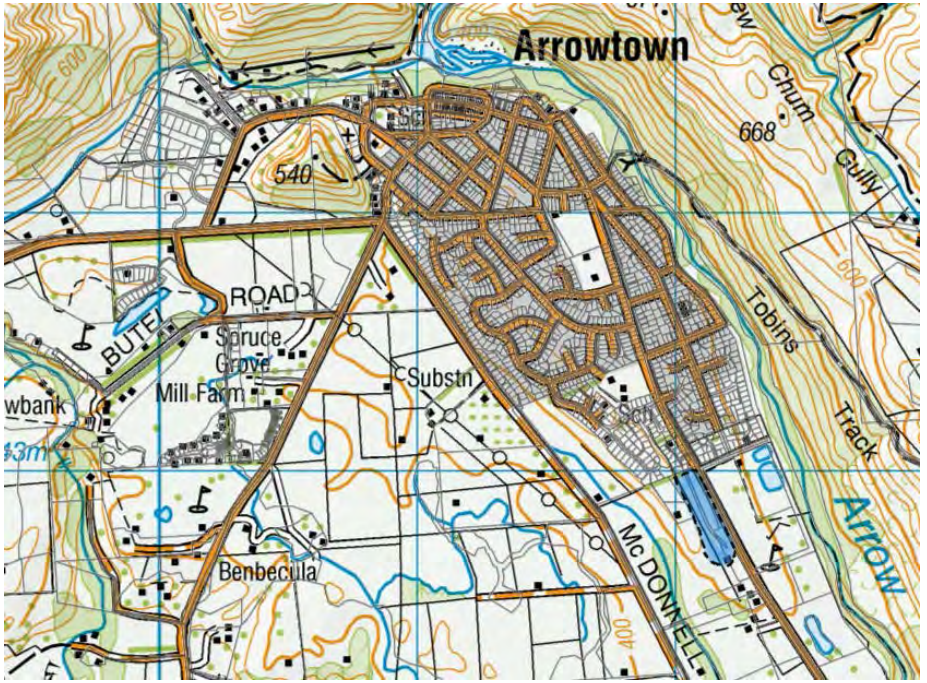
Brackens Ridge comprises approximately 4 hectares of land. The two landowners involved in this proposal are Roger Monk and Don Mahon.

The design provides for 62 residential sections at the southern edge of Arrowtown, located adjacent to the Chartres Green development.

The land is predominantly flat and sits on the Centennial Avenue side of the terrace so that it reads as part of and within the existing contained urban form of Arrowtown.

The land adjoins and only has frontage to Centennial Avenue.

These sections will range between 220m^2 through to 870m^2.



INFRASTRUCTURE

Brackens Ridge will connect to existing reticulated infrastructure, with no need for any off-site upgrades.

The pipe network is located nearby and can be easily extended without any cost implications for local residents or ratepayers.

A full network analysis has been previously undertaken for a more widespread urban development of the land to the south of Arrowtown, and that reporting established that all networks have capacity to cope with the additional demands.

Water

Water lines extend along and past the Centennial Avenue frontage of the land (separate 25mm and 50mm Alkathene water lines) to the Golf Club and the small existing cluster of housing that is to the south of Brackens Ridge.

Sewerage

Sewerage from Arrowtown is pumped (from the Norfolk Street pumping station) to the Shotover ponds. The Brackens Ridge land can connect to the main (150mm UPVC) in Centennial Avenue and via the existing gravity network to the pumping station at Norfolk Street.

Stormwater

Stormwater in Arrowtown is collected and disposed via treatment to the Arrow River. The closest point of connection to the network is at the corner of Centennial Avenue and Jopp Street (450mm Polyvinyl)

The image indicates the nearest point of water, stormwater and sewerage connections.

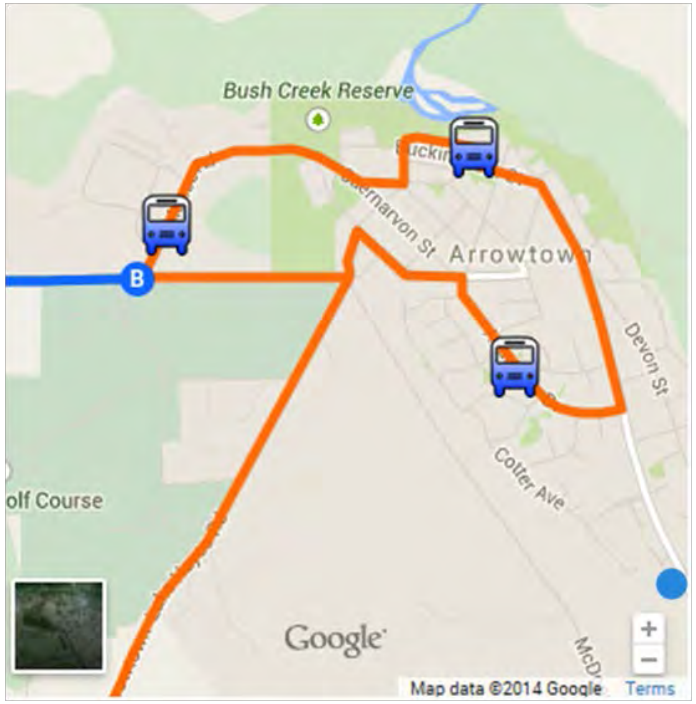
Transport

The plan for Brackens Ridge provides for a maximum of two intersections with Centennial Avenue; through which all traffic will be managed. This minimises the potential for a series of individual crossings, which has other urban design benefits.

As part of a previous more intensive urban proposal, Traffic Design Group assessed the impact of additional traffic movements upon the amenity and efficient of the local road network. That report concluded that high levels of service would be maintained and that there would be no need for any upgrades within the network.

Arrowtown is served by the Connectabus service, that provides an hourly departure schedule from Arrowtown (from 7:05 am to 10:05pm).

The bus route passes down Centennial Avenue as far as Adamson Drive, A distance of 590m from Brackens Ridge, which is closer and more convenient than for many existing residences in Arrowtown.
The Connectabus Route map indicates the relative location of Brackens Ridge



House designs vary, with smaller sites having a single off-street car-parking space, while others will have up to two on-site parks.

Within the affordable housing clusters, additional on-street parking is incorporated into the green-spaces .

DEMAND FOR A QUALIFYING DEVELOPMENT

Brackens Ridge will deliver a range of new residential housing opportunities that support the aims and the 'aspirational targets' that are set out in the Accord in a timely manner.

There are 62 sections within Brackens Ridge, of which 37 sections (59%) are within the 220 to 400 sqm range.

The following retention mechanisms will be applied to these sites – to ensure that they are made available:

1. Houses within the affordable clusters are to be chosen from a palette of pre-approved designs that are consistent with Arrowtown Design Guideline. This provides purchasers with confidence that there are already working house designs available – to reduce the time lag of a building design process (architect briefing, waiting for drawings, amending designs etc). This allows purchasers to make easy decisions, knowing that the house design has already been tested for the particular site.

2. House construction will be required to commence within 6 months of the purchase of any of the sites within the affordable cluster. Again, this commitment to a quick start ensures that housing is quickly established, and the over-arching needs of the Accord are met. This building commitment also ensures that land speculation is discouraged.

Consultation has occurred with the Housing Trust, and they have indicated that they have an extensive list of eligible candidates. They have commented that the layout and design of Brackens Ridge is appropriate to the needs of the Housing Trust.

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BRACKENS RIDGE MASTERPLAN - LOT SIZE SUMMARY

REF:2498-SK12 - SCALE 1:750 @ A1 - 1:1500 @ A3 - 01 DEC 2014

DEMAND FOR RESIDENTIAL HOUSING

There is a very high level of demand to live within Arrowtown.

Anecdotal evidence suggests that housing supply has become a real issue of concern, with very scarce supply reflected in ever increasing house and land prices.

In 2010 Market Economics Ltd were commissioned to report on the future supply and demand for residential land in Arrowtown.

They concluded that:

> *Demand for dwellings over the 20 years to 2031 is much higher than capacity, in the order of 730 dwellings.*
>
> *Demand for dwellings in Arrowtown has been steady over the past two decades.*
>
> *The substantial shortfall of available housing will see Arrowtown's residential capacity fully used up by around 2016, unless there is provision for additional capacity. One likely outcome of such a shortfall in capacity is that a share of the unsatisfied demand for dwellings in Arrowtown would generate considerable pressure for redevelopment and intensification of the established residential areas of Arrowtown (outside the Arrowtown Historic zoning).*

AFFORDABILITY

Brackens Ridge provides a range of section sizes, with over 50% targeted as smaller sections (208m^2 – 400m^2) with a defined housing solution. These house sites are centrally located in several clusters interspersed with green spaces and connections.

The remaining sections in Brackens Ridge range up to 857m^2 consistent with the established Low Density Residential neighbourhoods in the vicinity.

BRACKENS RIDGE LOT SIZE SCHEDULE

LOT NO.	AREA (sqm)
1	328
2	294
3	341
4	429
5	333
6	549
7	624
8	569
9	565
10	645
11	857
12	805
13	268
14	257
15	294
16	254
17	260
18	292
19	316
20	351

LOT NO.	AREA (sqm)
21	275
22	522
23	594
24	648
25	649
26	694
27	647
28	261
29	516
30	463
31	208
32	558
33	683
34	595
35	579
36	752
37	357
38	337
39	487
40	394

LOT NO.	AREA (sqm)
41	257
42	379
43	436
44	229
45	266
46	302
47	347
48	292
49	348
50	305
51	244
52	578
53	256
54	320
55	372
56	333
57	372
58	387
59	398
60	410

LOT NO.	AREA (sqm)
61	733
62	380

PREDOMINANTLY RESIDENTIAL

Brackens Ridge is a residential community.

Appropriately sized and centrally located reserve areas are included within the layout. These reserve areas would be vested in the Council.

In addition to the existing Centennial Ave footpath connection and to ensure that Brackens Ridge is well connected with the wider Arrowtown community; a new walkway connection is proposed to be formed to allow residents and visitors the opportunity to connect between McDonnell and Centennial Avenue.

BUILDING HEIGHT

It is proposed that building height within the Brackens Ridge area will be consistent with the existing style and character of buildings within Arrowtown, with buildings ranging between 5 to 7.5 metres.

To enable efficient use of the and the smaller lots within the affordable housing precinct will be up to 2 levels, while the houses on the hill-slope behind will typically no more than 6m.

RESIDENTIAL DEVELOPMENT QUALITY

The following sections respond to the Appendix B of the Request for Expressions of Interest, in particular the 'Residential Development Expectations'.

Integrated into the Neighbourhood

Connections

Brackens Ridge is centrally located amongst a range of trails that are utilised by the Arrowtown community.

An off-road trail that links to the wider Wakatipu trial network extends along both Centennial Avenue and McDonnell Road. This provides local residents with a circuit, that can also connect up with the nearby River Trail. Brackens Ridge provides an inter-connection between these two trails, as well as internal paths and walkways.

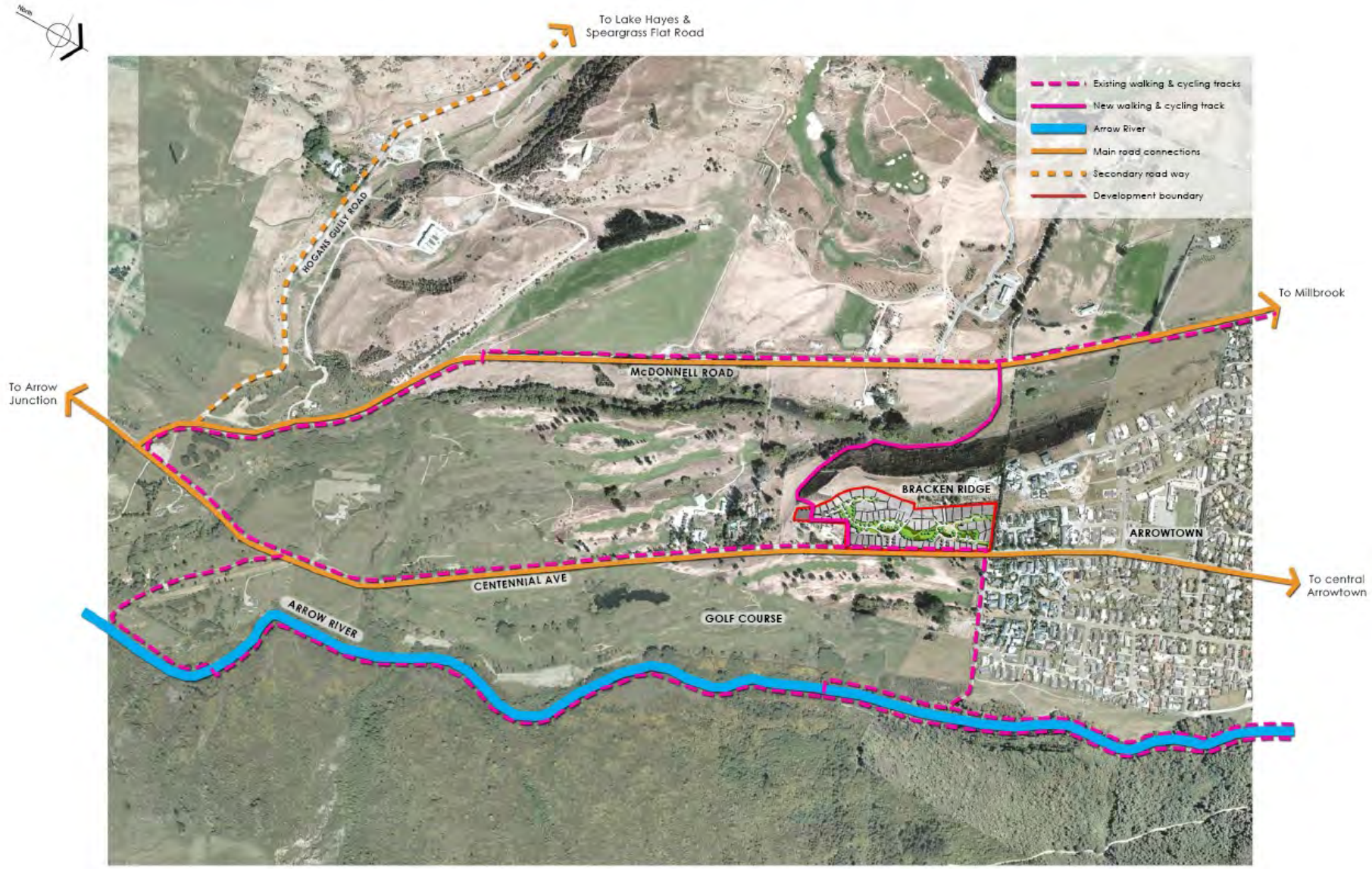
Facilities and Services

Arrowtown provides a full range of facilities and services that make it a desirable place to live for a range of people; from young families to retirees. Access to convenience stores in Frankton and administrative functions in Queenstown are only a short drive.

The Brackens Ridge area is close to the early education centre in Cotter Avenue, as well as the adjoining Primary School . Both are only a safe short walk away.

A range of recreational activities and facilities are also nearby with the golf cub only 400m to the south, while the tennis club and sports fields are 1km to the north.

The Adamson Drive dairy is the nearest shop (1km), while Arrowtown's town centre is 1.7km to the north.



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BRACKENS RIDGE - LANDSCAPE CONNECTIONS

REF: 2498-SK18 - 1:6000 @ A3 - 04 DEC 2014

Creating a Place

Articulation and Design

Bracken Ridge is based around a central core of open space, that in turn becomes the heart of the local community. This creates spaces that where there are slow internal traffic speeds which allows a pedestrian friendly environment where kids can safely play.

A variety of sections sizes with subtle differentiation of property boundaries ensures that architectural responses will add interest to passers by.

All buildings, whether part of the affordable housing precinct or in the adjoining areas, will be required to be consistent with the Arrowtown Design Guidelines. This will be a private design approval process that the developer of the land will administer with the assistance of local architects and urban designers.

Working with the Site and its Context

The design of Brackens Ridge utilises the topography of the land, with the ridgeline defining the western edge.

The objective is to establish a legible pocket of residential land that is contained by the ridge line. The key is to ensure that buildings are not visible from McDonnell Road.

Creating Well Defined Streets and Places

Brackens Ridge includes several affordable housing precincts where there is a higher density/ smaller section size. Surrounding these areas are a range of larger lots – consistent with the traditional low density pattern.

A range of seven building designs are proposed within the affordable housing precincts, that purchasers will have the option of choosing from. These designs have all been tested by Walker Architects against the Arrowtown Design Guideline – to ensure that they achieve the appropriate scale, proportion and materiality of buildings in older Arrowtown.

Easy to Find your Way Around

The Brackens Ridge land connects logically to the Arrowtown pedestrian network, with the primary school and pre-school a short 300 metre walk alongside Centennial Avenue .

The Brackens Ridge proposal includes additional internal pedestrian connections, together with a new trail connecting Centennial Avenue through to McDonnell Road. This would be a publicly accessible trail.

Street and Home

<u>Carparking and Access</u>

While on-site parking is provided within all sites, there are also additional visitor parking areas that have been integrated into the landscaped street reserve.

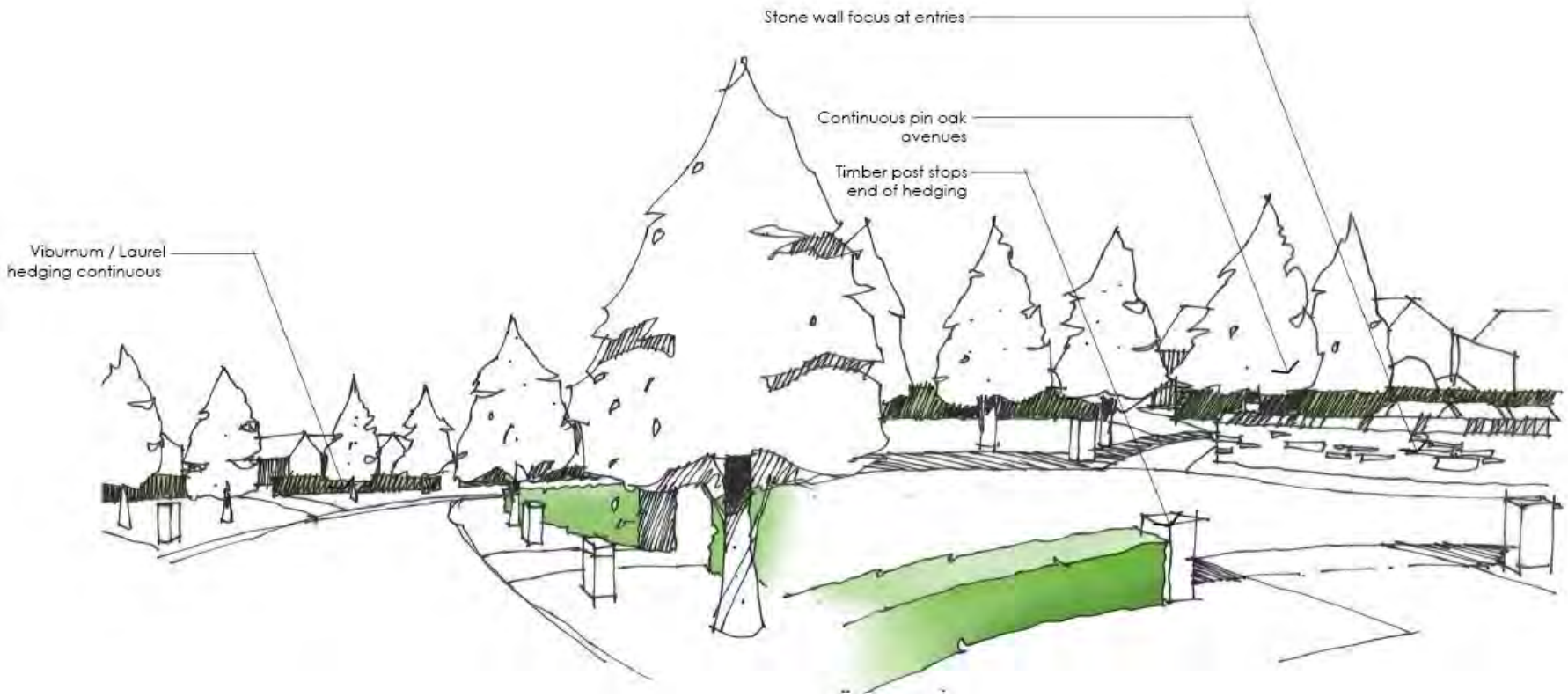
The efficient use and development of smaller residential sites sometimes necessitates communal facilities such as shared parking.

The reserve areas are proposed to include local fruit trees, so that residents can collect a variety of seasonal fruit.

There is also an option of a community garden area to be established within land immediately adjoining the southern edge of Brackens Ridge, so that people living on smaller land holdings can still have a vegetable garden area.

Public and Private Spaces

Arrowtown is characterised by a series of wonderful interconnected pedestrian connections. This theme is continues through Brackens Ridge with stone walls, hedging and consistent use of street trees.



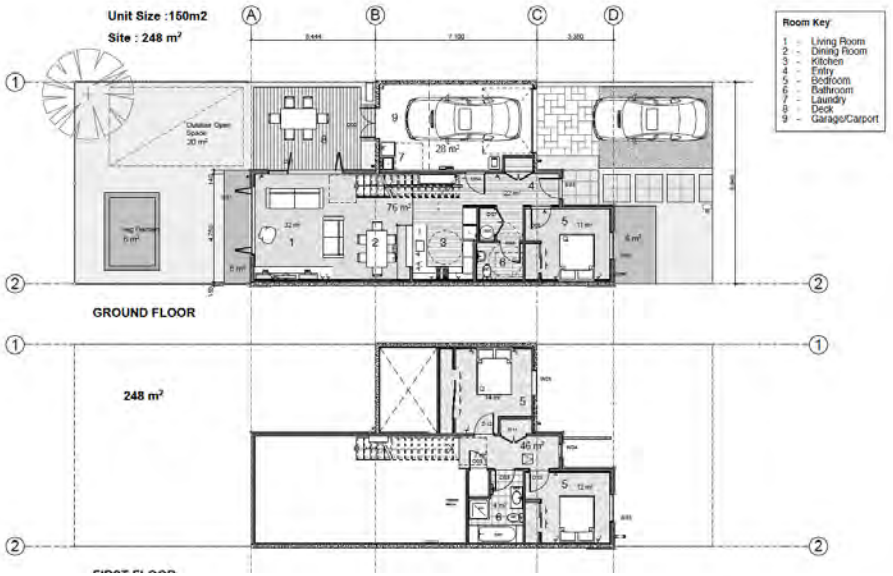
Good Quality Homes

To help test the lot sizes for the affordable homes we have developed seven concept designs. Ranging in size between 2-3 bedrooms and 1-2 levels.

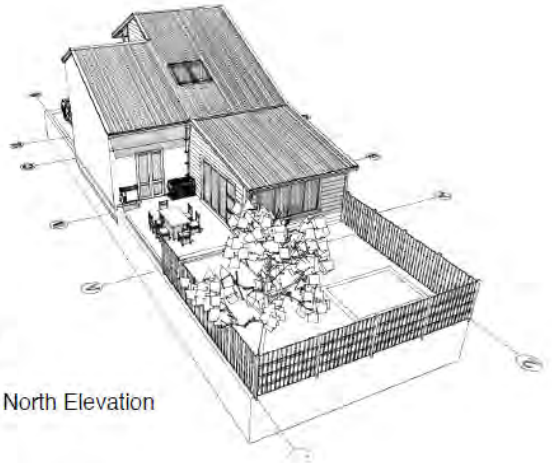
All designs are being reviewed against the Lifemark and Homestar guidelines, outlined in the following set of images.

The first principal for all the designs is the relationship to the sun and site contours. House forms have then been developed using the Arrowtown Design Guidelines. The architectural forms follow the hierarchy for the traditional gable volume, with secondary volumes using lean-to forms. Materials and paint colours will also be used to reinforce this hierarchy.

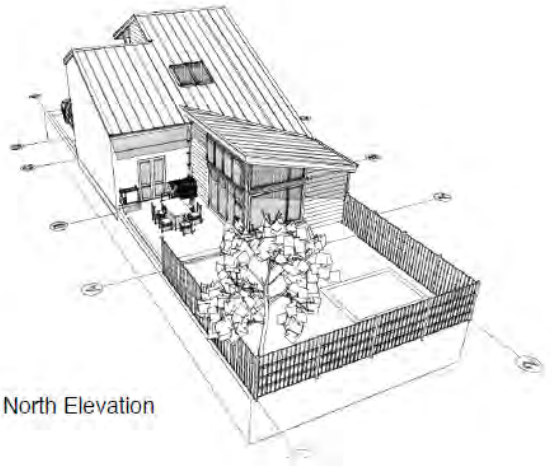
Some of the smaller houses will allow for future extension of living spaces or bedrooms. By allowing for this at the design stage we can offer homes within an affordable price bracket, while allowing the home to expand as family needs change and budgets allow.



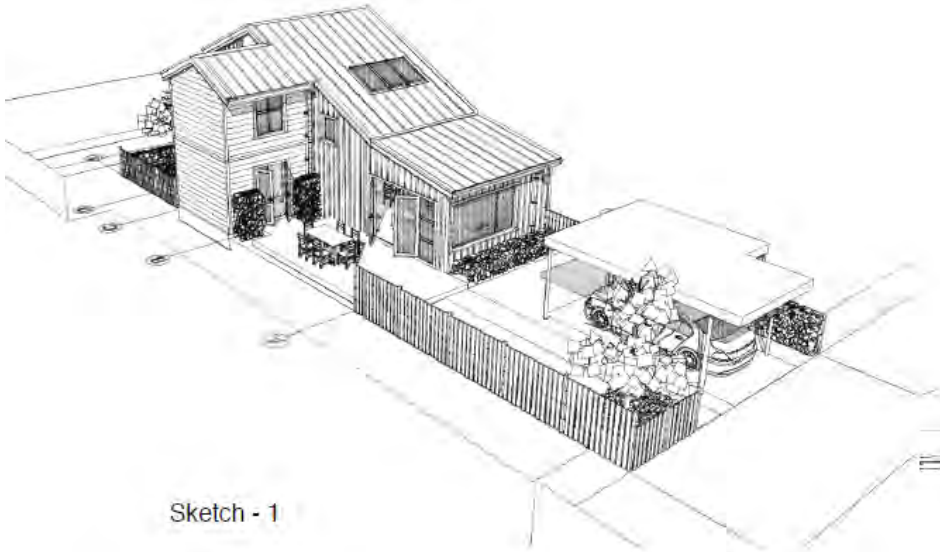
Sketch - 1



Sketch - 2
Type A
Front Yard - North Elevation

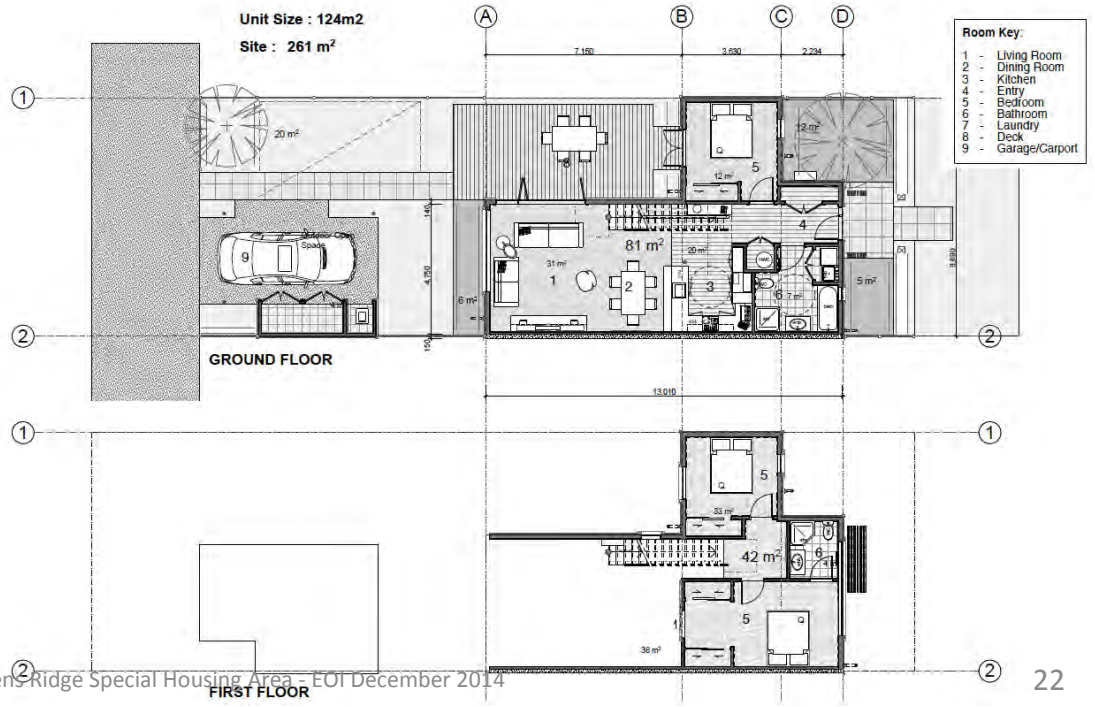


Sketch - 3
Type A.2
Front Yard - North Elevation

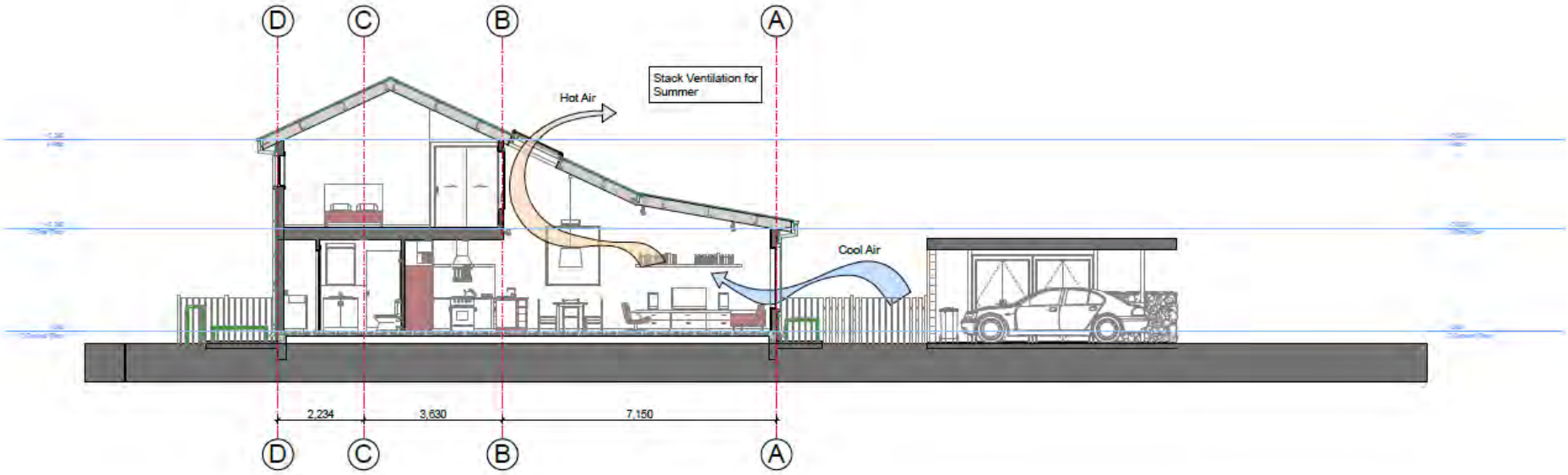


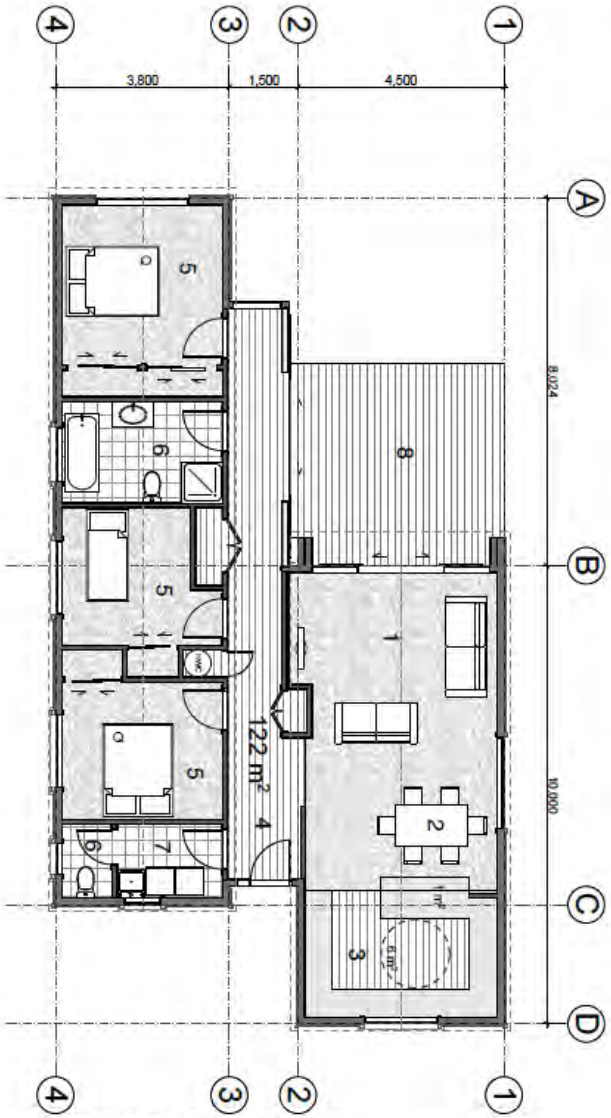
Sketch - 1

Sketch - 2




Ensuite
Master Bedroom behind
Kitchen
Lounge
Entry


D
C
B
A
Stack Ventilation for Summer
Hot Air
Cool Air
2,234
3,630
7,150
D
C
B
A



FLOOR PLAN - Opt. 1

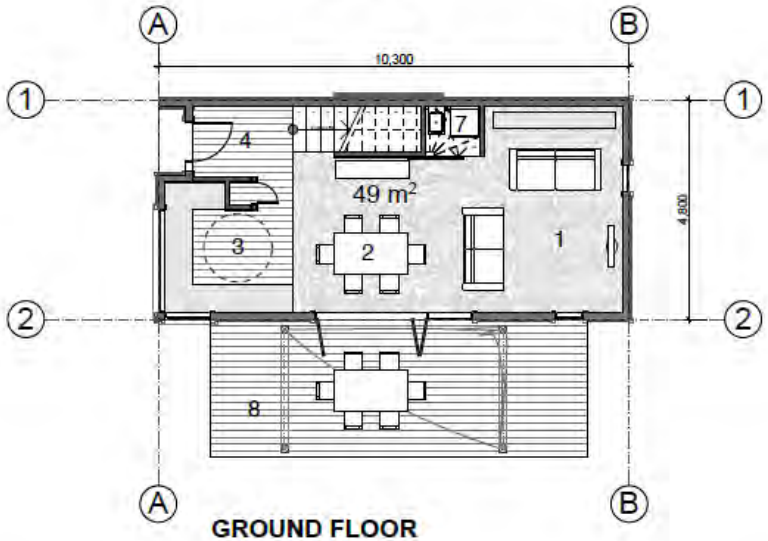
FLOOR PLAN - Opt. 2 Unit Size 122m2

Sketch - 1

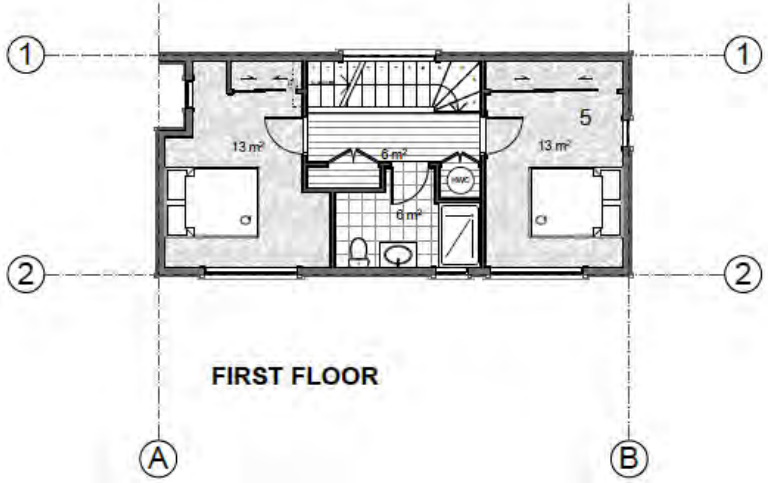
Room Key:

1 - Living Room
2 - Dining Room
3 - Kitchen
4 - Entry
5 - Bedroom
6 - Bathroom
7 - Laundry
8 - Deck
9 - Garage/Carport

Unit Size : 98m2



GROUND FLOOR

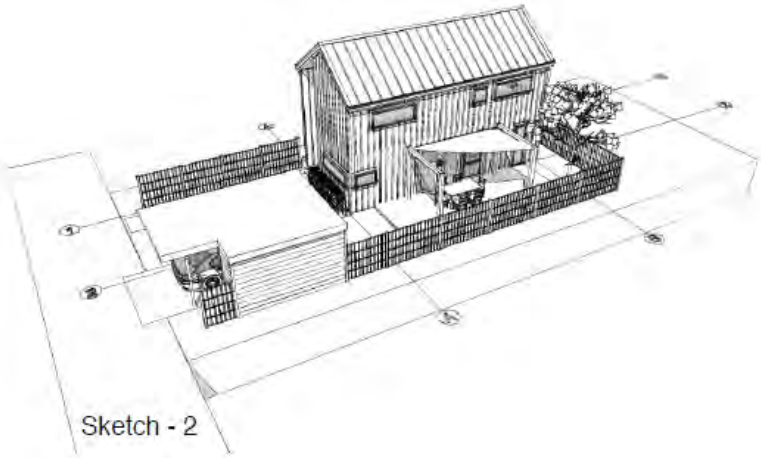


FIRST FLOOR

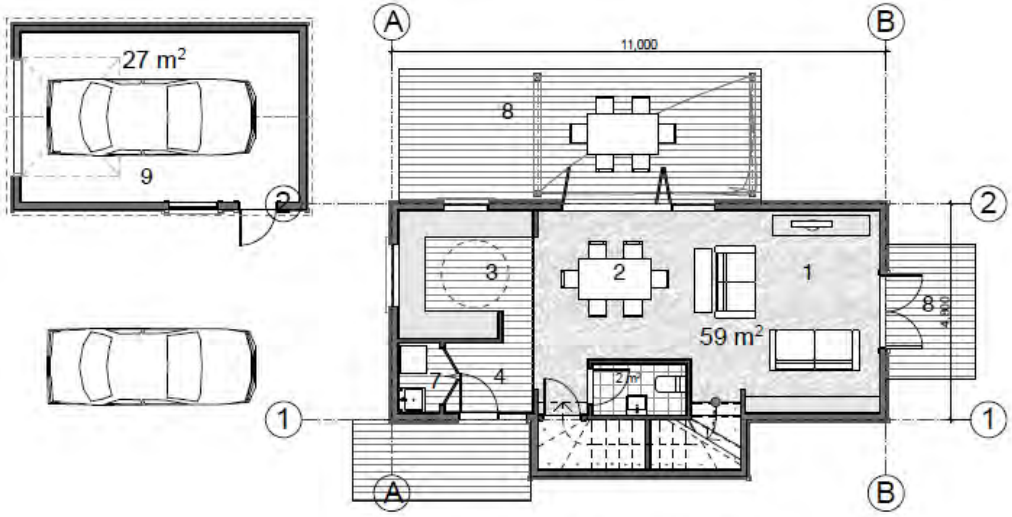
Room Key:

1 - Living Room
2 - Dining Room
3 - Kitchen
4 - Entry
5 - Bedroom
6 - Bathroom
7 - Laundry
8 - Deck
9 - Garage/Carport

Sketch - 1



Sketch - 2

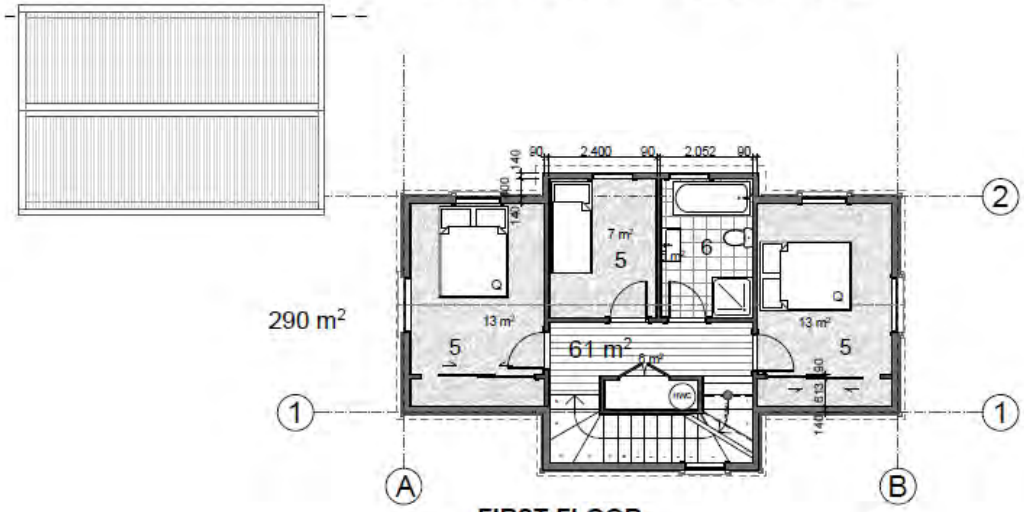


GROUND FLOOR **Unit Size : 120m2**

Room Key:

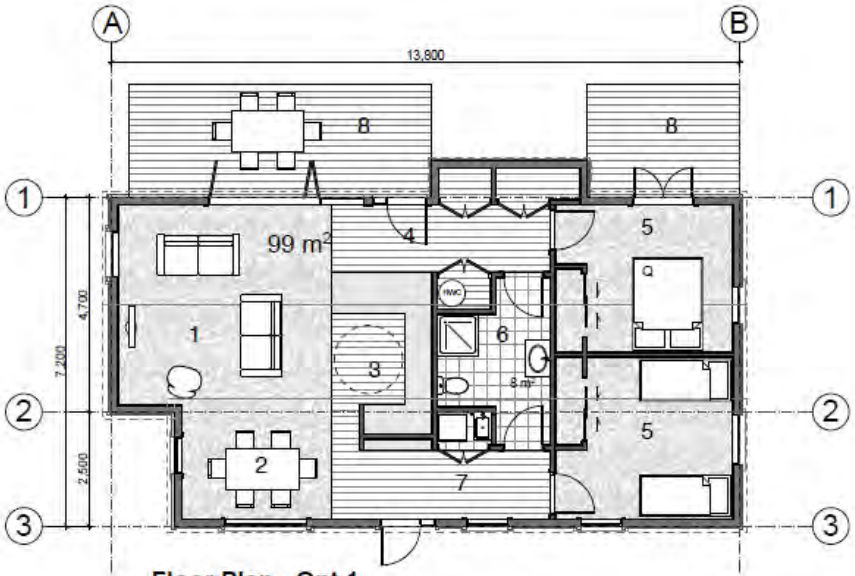
1 - Living Room
2 - Dining Room
3 - Kitchen
4 - Entry
5 - Bedroom
6 - Bathroom
7 - Laundry
8 - Deck
9 - Garage/Carport

Sketch - 1

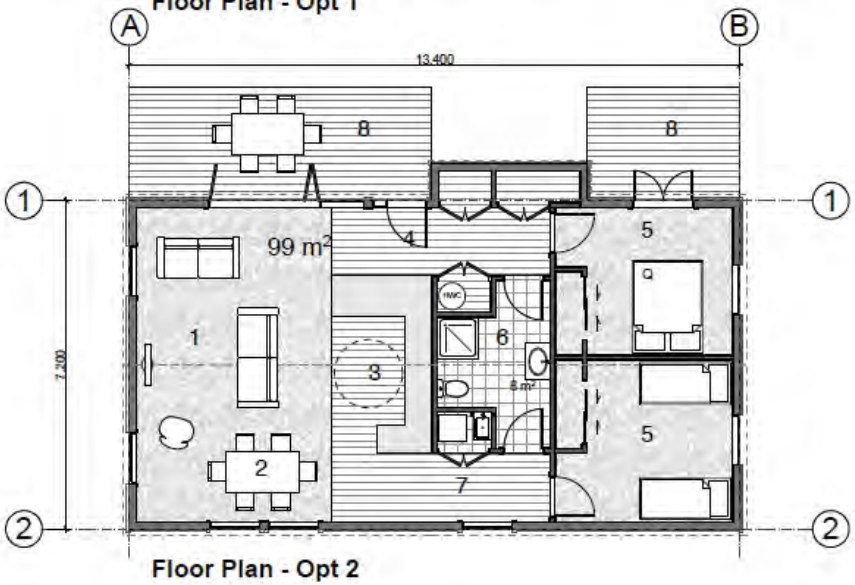


FIRST FLOOR

Sketch - 2



Floor Plan - Opt 1



Floor Plan - Opt 2

Room Key:

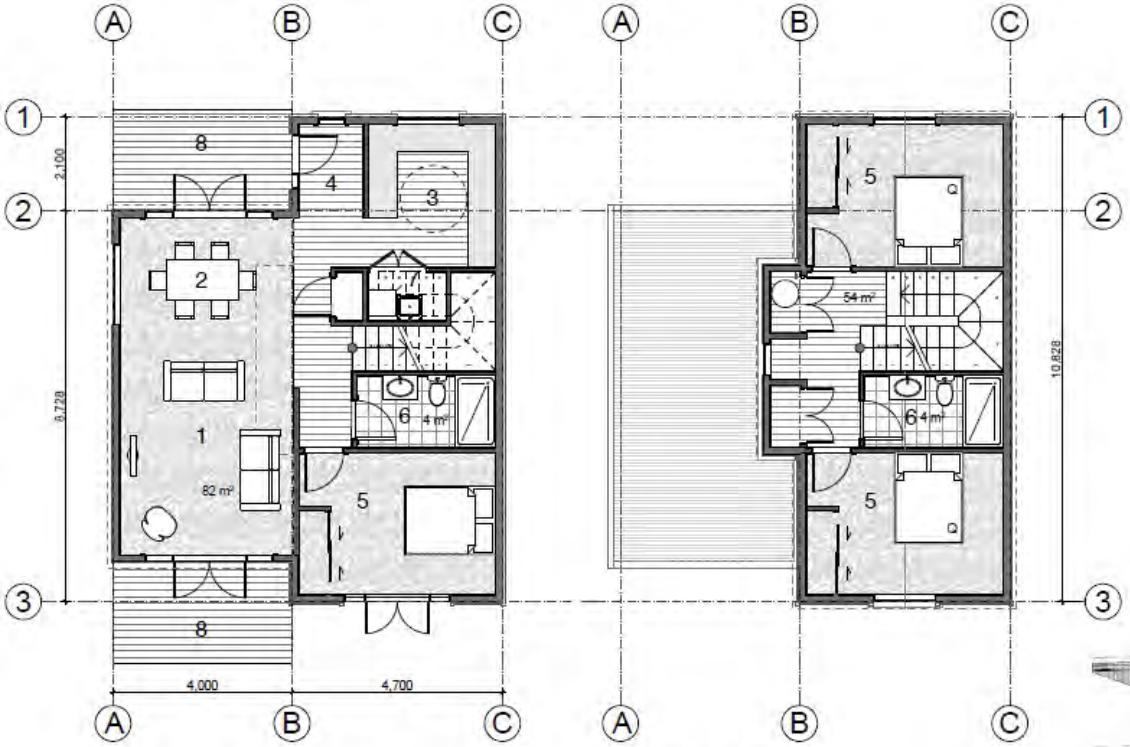
1 - Living Room
2 - Dining Room
3 - Kitchen
4 - Entry
5 - Bedroom
6 - Bathroom
7 - Laundry
8 - Deck
9 - Garage/Carport

Sketch - 1

Sketch - 2

Room Key:

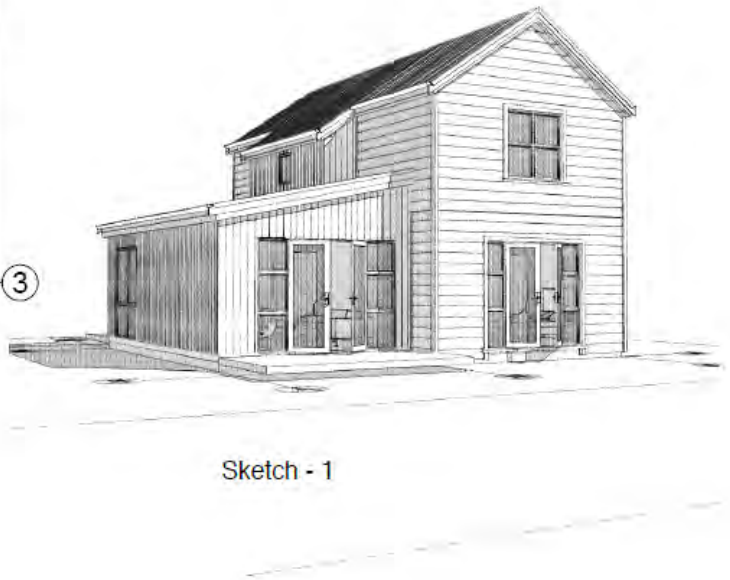
1 - Living Room
2 - Dining Room
3 - Kitchen
4 - Entry
5 - Bedroom
6 - Bathroom
7 - Laundry
8 - Deck
9 - Garage/Carport



GROUND FLOOR

FIRST FLOOR

Unit Size : 136m2



Sketch - 1

Environmental Responsibility

Reducing Environmental Footprint

The Brackens Ridge proposal will require the Lifemark certification system to be adopted within the affordable homes precinct, while enabling that opportunity for the remaining houses.

Similarly, the Homestar rating system will also be used, with a minimum rating of 4 within the affordable homes precinct. Homeowners will have the option of designing to a higher standard, at additional cost.

What is Lifemark?

All over the world people are changing the way they are designing their homes so that they will work for everyone. There is a global movement focused on developing home design features for our changing and ageing population.

A Lifemark certified home is a home that includes smart and intelligent design features that meet the needs of people of different ages and abilities and that avoids barriers that may discriminate against people living in or visiting the home. Lifemark homes are designed to be usable by most people over their lifetime without the need for major adaptation in the future.

The Lifemark 5 Star Certification System

The Lifemark 5 star rating system provides consumers with information about usability, adaptability, accessibility and safety. The entry-level 3 star Lifemark certification is achieved by meeting the minimum standards. There are 25 miniumum standards. Additional points are then accumulated to achieve a 4 or 5 star level. A 5 star rating is achieved when virtually all requirements are in place and operational at time of build and the accumulated points reflect this level of performance.

The resulting Lifemark seal helps the home buyer choose between homes based on how appropriate they are for their current and future needs. The Product Partner program helps identify products and services that align to the Lifemark principles.

The Lifemark Principles

A usable home is a dwelling that has thoughtful design features that meet the needs of people of different ages and abilities over time. A Lifemark certified home has features that make home life easier including reachable power points and easy to use taps, window latches and light switches.

An adaptable home is a dwelling with design features that can be easily adapted to the changing needs of the occupants as they progress through life. An adaptable home is one in which a change in a person's circumstances does not require an expensive retrofit in order for them to continue to live easily, safely and independently in the home. By including bathroom and kitchen features which may not be noticeable but will facilitate adaption at a later stage for low/no cost.

An accessible home is one that enables an occupant or visitors to the home to be able to access it easily, safely and independently. Nobody is excluded from participating in home life because they are ageing or have a disability. This includes level entry, wider doorways and corridors, a kitchen, bathroom and laundry that are designed to be easier to use.

A safe home is one that uses intelligent design features that are proven to prevent injuries in the home, especially from slips, trips and falls. Improved lighting, non-slip surfaces in wet areas, better designed stairs, appropriate alarm systems and window latches are some of the features that prevent injuries yet can be easily integrated into your home. A Lifemark certified home is a safe home for everyone.

A Lifemark Certified home is not intended to be complicated or expensive for designers to design, builders to build or most importantly for people to live in. The Lifemark Principles have been carefully considered so that they can be easily incorporated into a dwelling's design and construction early on with only a small, if any, cost.

Lifemark Review Example

The following two sheets show a worked up example of the Type B terrace house. It demonstrates what is required to achieve a 5 star rating

LIFEMARK DESIGN STANDARDS ASSESSMENT FORM

The Lifemark Design Standards have been created to achieve a design solution based on the Lifetime Design Principles of Usability, Adaptability, Accessibility, Safety and Lifetime Value. The rating system below determines whether a design will achieve the 3-Star, 4-Star or 5-Star Lifemark. Scores are based on specific design features that illustrate a design standard is currently being met, OR is provisioned to be easily adapted so it can be met in the future. For example, 'able to be adapted' scores lower points than 'actually has'. A design can only accrue points that meet one option of each standard, for example, one cannot get points for achieving 1.1a and 1.1b.

The Lifemark "Entry Level" is a 3-STAR RATING which requires certain minimum mandatory standards be met earning 140 points out of a possible 300 points for a single storey dwelling, or 165 points out of a possible 350 points for a multi-storey dwelling. Mandatory standards are indicated below in the BLUE PANEL COLOUR you see here.

For the 4-Star rating designs must meet the 3-Star standards and earn a further 40 points (single storey) or 45 points (multi-storey).
For the 5-Star rating designs must meet the 3-Star standards and earn a further 100 points (single storey) or 110 points (multi-storey).

ACCESSING THE DWELLING

		POINTS AVAILABLE	POINTS GAINED
1	**CAR PARKING** Where the parking space forms part of the dwelling access it shall allow a person to open their car doors fully and easily move around the vehicle		
1.1a	At least one car parking space is **able to be adapted** to a minimum width of 3500mm;	4	10
1.1b	At least one car parking space **actually has** a minimum width of 3500mm;	7	
1.1c	At least one car parking space **actually has** a minimum width of 3500mm and length of 5000mm.	10	
1.2a	At least one car parking space is **able to be adapted** to have a level, firm, slip resistant flat surface with a slope not exceeding 1:20;	3	5
1.2b	At least one car parking space **actually has** a level, firm, slip resistant flat surface with a slope not exceeding 1:20.	5	
2	**PATHWAYS** Occupants can easily and safely access the dwelling entrance	POINTS AVAILABLE	POINTS GAINED
2.1a	A pathway from EITHER the front boundary of the property OR a car parking space to a dwelling entrance is **able to be installed** with a minimum clear width of 1200mm;	3	6
2.1b	A pathway from EITHER the front boundary of the property OR a car parking space to a dwelling entrance **is installed** with a minimum clear width of 1200mm.	6	
2.2a	A pathway from EITHER the front boundary of the property OR a car parking space to a dwelling entrance is **able to be installed** with a level, firm, slip resistant surface with a maximum slope of 1:20 and a crossfall of not more than 1:50;	5	10
2.2b	A pathway from EITHER the front boundary of the property OR a car parking space to a dwelling entrance **is installed** with a level, firm, slip resistant surface with a maximum slope of 1:20 and a crossfall of not more than 1:50.	10	
2.3	A pathway from EITHER the front boundary of the property OR a car parking space to a dwelling entrance **is installed** with a light switch at the dwelling entrance for pathway lighting.	1	
2.4	A pathway from EITHER the front boundary of the property OR a car parking space to a dwelling entrance **is installed** with sensor lighting for the pathway.	3	3
3	**THE ENTRANCE** Occupants can easily and safely enter and exit the dwelling	POINTS AVAILABLE	POINTS GAINED
3.1	The dwelling entrance **shall provide** an entrance door with a minimum clear opening width of 810mm (door leaf 860mm).	10	10
3.2a	The dwelling entrance **shall provide** an entrance door with a maximum threshold of 20mm;	5	5
3.2b	The dwelling entrance **shall provide** an entrance door with a level transition.	15	
3.3	The dwelling entrance **shall include** an external landing area measuring 1200mm x 1200mm.	2	2
3.4	The dwelling entrance **shall include** an external landing area that is level with a 1:50 fall or shallower.	2	2
3.5	The dwelling entrance **shall include** an external landing area that provides shelter from the weather.	2	2
3.6	The dwelling entrance **shall include** an external landing area that is slip resistant.	3	3
3.7a	The dwelling entrance **shall include** an external landing area with switch operated lighting;	1	3
3.7b	The dwelling entrance **shall include** a landing area with sensor lighting.	3	
	Required for 3-Star	35	
	Subtotal Accessing the Dwelling Score	72	61

GETTING AROUND

		POINTS AVAILABLE	POINTS GAINED
4	**INTERNAL DOORS** Facilitating comfortable and unimpeded movement between spaces	POINTS AVAILABLE	POINTS GAINED
4.1	ALL doorways to ALL rooms on the primary living level **shall provide** a minimum clear opening width of 810mm (door leaf 860mm).	15	15
4.2	ALL doorways to ALL rooms on the primary living level **shall provide** a level transition and threshold. This accepts difference in floor materials either side of the doorway.	8	8
4.3	ALL doorways to ALL rooms on the primary living level **shall provide** a 300mm return wall on the door handle edge of the door facing the side the door swings towards.	5	5
5	**CORRIDORS** Facilitating comfortable and unimpeded movement between spaces	POINTS AVAILABLE	POINTS GAINED
5.1	ALL internal corridors or passageways **shall provide** a minimum clear width of 1050mm;	15	15
5.2a	ALL internal corridors or passageways **shall provide** light switches at both ends of any corridors;	3	3
5.2b	ALL internal corridors or passageways **shall provide** sensors to automatically turn lights on at night.	5	
	Required for 3-Star	38	
	Subtotal Getting Around Score	48	46

FITTINGS AND FIXTURES

		POINTS AVAILABLE	POINTS GAINED
6	**LIGHT SWITCHES** Light switches are located at heights that are easy to reach for all occupants	POINTS AVAILABLE	POINTS GAINED
6.1	Light switches and other service controls (eg. security systems, intercommunication systems, air-conditioning controls) **shall be** horizontally aligned with door handles at 900-1200mm above finished floor level.	10	10
6.2	Light switches and other switches (eg. security systems, intercommunication systems, air-conditioning controls) **shall be** toggle, rocker, push pad, or push button in design.	2	2
7	**POWERPOINTS** Powerpoints are located at heights that are easy to reach for all occupants	POINTS AVAILABLE	POINTS GAINED
7.1a	Powerpoints, TV, phone and computer outlets **are installed** at a consistent height not lower than 300mm above the finished floor level;	2	2
7.1b	Powerpoints, TV, phone and computer outlets **are installed** at a consistent height between 500-1200mm above the finished floor level.	8	
7.2	Powerpoints, TV, phone and computer outlets **are installed** at least 500mm from an internal corner.	2	2
8	**WINDOWS** Window controls and sills are installed at a height that enables home occupants to operate the window and view the outdoor space from either a seated or standing position	POINTS AVAILABLE	POINTS GAINED
8.1	Window controls **shall be** lever handles and be able to be operated with one hand.	5	5
8.2a	Window controls and sills in the primary living areas **shall be** no higher than 1200mm above the floor;	5	5
8.2b	ALL window controls ON ALL LEVELS **shall be** no higher than 1200mm above the floor.	7	
8.3	Fit security stays on windows to prevent them from obstructing paths or walkways outside.	2	2
8.4	Fit security stays on windows that are lower than 900mm where it is possible to fall one metre or more.	2	2
9	**DOOR HARDWARE** Occupants are able to easily and independently open and close doors	POINTS AVAILABLE	POINTS GAINED
9.1	All door handles **shall have** a lever action.	5	5
9.2	All door handles **shall be** horizontally aligned with light switches at between 900-1200mm above finished floor level.	5	5
10	**TAP FIXTURES** Occupants are able to easily and independently use plumbing controls	POINTS AVAILABLE	POINTS GAINED
10.1	All plumbing controls **shall be** lever, push button or electronic.	5	5
10.2	All plumbing controls **shall have** a single spout.	2	2
11	**ALARMS** A smoke alarm system is installed	POINTS AVAILABLE	POINTS GAINED
11.1a	A smoke alarm system **is installed** that enables future adaptation to both audible and visual warnings;	2	2
11.1b	A smoke alarm system **is installed** that is hard wired to provide both audible and visual warnings.	5	
	Required for 3-Star	32	
	Subtotal Fixtures & Fittings Score	60	49

BEDROOMS

		POINTS AVAILABLE	POINTS GAINED
12	**BEDROOMS** Bed space and bedrooms support ease of movement around the bed by occupants		
12.1a	There is space on the primary living level where a standard single bed (measuring 900mm x 1900mm) can fit with a minimum 800mm clear space available around one side and the foot of the bed. A clear minimum 800mm wide path is also required from the door to the side of the bed;	5	10
12.1b	There is space on the primary living level where a standard double bed (1350mm x 1900mm) can fit with a minimum 800mm clear space available around both sides and the foot of the bed. A clear minimum 800mm wide path is also required from the door to the side of the bed;	10	
12.1c	There is at least one bedroom on the primary living level where a standard double bed (1350mm x 1900mm) can fit with a minimum 900mm clear space available around both sides and the foot of the bed. A clear minimum 900mm wide path is also required from the door to the two sides of the bed. This path also must accommodate a 1550mm turning circle.	15	
12.2	Light switches are provided at the entry door and on both sides of the bed in the case of the master bedroom.	5	5
	Required for 3-Star	5	
	Subtotal Bedrooms Score	20	15

DWELLING FACILITIES

		POINTS AVAILABLE	POINTS GAINED
13	**LAUNDRY SPACE** The laundry space is designed to support ease of movement and ease of use of laundry appliances and storage space		
13.1a	The laundry space or room **shall be** large enough to provide at least 1050mm clearance in front of fixed benches and appliances;	2	4
13.1b	The laundry space or room **shall be** large enough to provide at least 1200mm clearance in front of fixed benches and appliances.	4	
13.2	The laundry space or room **shall be** large enough to accommodate appliances at ground level.	2	
13.3	The laundry **shall include** slip resistant flooring.	5	5
14	**KITCHEN SPACE** The kitchen space is designed to support ease of movement between fixed benches and ease of use of appliances and storage space	POINTS AVAILABLE	POINTS GAINED
14.1	The kitchen space is not a main thoroughfare in the home.	3	3
14.2	The kitchen space is located next to the dining area.	3	3
14.3a	The kitchen space includes at least a 1200mm clearance provided in front of fixed benches, major appliances and fittings;	5	10
14.3b	The kitchen space includes at least a 1200mm clearance provided in front of fixed benches, major appliances and fittings which extends to a 1500mm turning circle measured up to at least 250mm above the floor.	10	
14.4	The kitchen space **shall have** slip resistant flooring.	5	5
14.5	The kitchen space **shall have** task lighting above workspaces.	2	2
14.6	The kitchen space **shall have** easy to use handles on doors and drawers.	2	2
14.7	The kitchen space **shall have** at least half of the storage space below the bench tops consisting of drawers and not cupboards. Bottom drawers shall be a minimum of 250mm from the floor.	2	
14.8	The kitchen space **shall be** designed with appliances located at least 300mm from internal corners of bench units.	2	2
	Required for 3-Star	5	
	Subtotal Dwelling Facilities Score	40	36

BATHROOMS

		POINTS AVAILABLE	POINTS GAINED
15	**TOILET** The primary living level has a toilet to support easy and independent use for occupants and visitors		
15.1a	Dwellings **shall have** the plumbing and drainage space for the future installation of a toilet on the primary living level that includes a minimum 900mm clear space beside the toilet and a centre line of the toilet pan that is 450mm from the wall;	5	20
15.1b	Dwellings **shall have** a toilet on the primary living level that includes a minimum 800mm clear space beside the toilet and a centre line of the toilet pan that is 450mm from the wall;	10	
15.1c	Dwellings **shall have** at least one toilet on the primary living level that is compliant with "accessible toilet" dimensions.	20	
15.2	Toilet walls are reinforced to provide a fixing surface for grab rails to be safely and economically installed in the future.	5	5

BATHROOMS continued

		POINTS AVAILABLE	POINTS GAINED
16	**SHOWER** The primary living level has a bathroom with a shower that supports easy and independent use for all occupants and visitors		
16.1a	Dwellings **shall have** the space for the future installation of a shower on the primary living level that includes a level entry shower recess with minimum dimensions of 1200x1200mm, drainage for the shower recess located in the corner of the room, a clear space that provides for a 1500mm turning circle and 800mm clear space beside the shower seat;	5	20
16.1b	Dwellings **shall have** a shower on the primary living level that includes a level entry shower recess with minimum dimensions of 1200x1200mm, drainage for the shower recess located in the corner of the room, a clear space that provides for a 1500mm turning circle and 800mm clear space beside a shower seat;	20	
16.1c	A bathroom on the primary living level shall have a code compliant accessible shower.	25	
16.2	Dwellings shall have reinforced shower walls on the primary living level for the future installation of grab rails and a shower seat.	5	5
16.3	Dwellings shall have slip resistant flooring in all bathrooms.	5	5
	Required for 3-Star	25	
	Subtotal Bathroom Score	60	55
	Total Possible Score Single Storey	300	262
	Total Required for Single Storey 3-Star	140	
	Total Required for Single Storey 4-Star	180	
	Total Required for Single Storey 5-Star	240	

MULTI-STOREY ACCESS

		POINTS AVAILABLE	POINTS GAINED
17	**STAIR LIFT OR PLATFORM LIFT** Enable access to multi-storey dwellings above or below the entrance level now or in the future		
17.1a	Multi-storey dwellings shall have reinforced stairway walls for the future installation of a stair lift;	4	8
17.1b	Multi-storey dwellings shall have the space to provide for the future installation of a 1200mm x 1200mm platform lift;	8	
17.1c	Multi-storey dwellings **shall have** a stair lift installed;	12	
17.1d	Multi-storey dwellings **shall have** a minimum 1200mm x 1200mm platform lift installed.	15	
18	**INTERNAL STAIRWAYS** Where installed, stairways are designed to reduce the likelihood of injury	POINTS AVAILABLE	POINTS GAINED
18.1	Stairways shall provide a minimum clear width of 900mm.	4	4
18.2	Stairways shall be straight in design and not have winder treads or spiral design.	4	4
18.3	Stairways shall have consistent tread depth and riser height with a maximum riser height of 190mm and minimum tread depth of 310mm, with no open risers.	4	4
18.4	Stairways shall be slip resistant and have a suitable non-slip tread.	4	
18.5a	Stairways shall have reinforced walls to provide for future installation of code-compliant accessible handrails on both sides;	5	7
18.5b	Stairways shall have a code-compliant accessible handrail installed on at least one side;	7	
18.5c	Stairways shall have code compliant accessible handrails installed on both sides.	12	
18.6a	Stairways shall have a 1200mm x 1200mm unobstructed landing at the bottom of the stairs;	2	3
18.6b	Stairways shall have a 1200mm x 1200mm unobstructed landing at the top and bottom of the stairs.	3	
18.7	Stairways shall have light switches at the top and bottom of the stairs.	4	4
	Required for 3-Star	25	
	Subtotal Multi-Storey Access Score	50	34
	Total Possible Score Multi-Storey	360	296
	Total Required for Multi-Storey 3-Star	155	
	Total Required for Multi-Storey 4-Star	210	
	Total Required for Multi-Storey 5-Star	275	296

homestar™
Know your home

What is Homestar?

Homestar™ helps you improve the performance of your home – making it better. Better to live in, better for the planet and better value in the market.

By using the Homestar™ tools we can make New Zealand homes – more comfortable, warmer in winter, cooler in summer and healthier, while using less energy and water.

Homestar™ is a Joint Venture partnership between BRANZ and the New Zealand Green Building Council. Led by these two organisations, industry professionals across the entire building and construction sector including from government, contributed time and expertise in order to develop a single residential rating tool for New Zealand's new and existing homes.

Homestar gives you an independent rating of your home and unbiased advice based on reliable information.

It all starts with the basic structure of your home and how much sunshine it gets, but there are lots of factors that make it better or worse than the next home. Below are the six main areas for evaluation.

Homestar Rating System

How we intend using Homestar.

To keep our designs as affordable as possible the baseline specification will meet the current New Zealand Building Code requirements with an expected Homestar rating of 4 Stars.

Each house design will have a list of additional options, that can be added to improve its performance. This will be based on the star rating system as explained on the Homestar website.

Option 1 - Required specification to meet 5 Stars along with the expected costs involved.

Option 2 - Required specification to meet 6 Stars along with the expected costs involved.

By offering these chooses we are helping the land purchases make informed decisions regarding initial increased capital cost of a 5 or 6 Star home verses the on going costs of high utilities and services for a 4 Star home.

Our Goal.

Our goal is to have all the new homes within the subdivision built to a higher specification than the current New Zealand Building Code, ideally achieving a minimum of 5 stars.

Homestar Review Example

The following three sheets show a worked up example of the Type B terrace house. It demonstrates what is required to achieve a 6 star rating

6

A 6 Homestar™ rating house will already be very well insulated, so focus on ways you can consume less energy and water, and instead conserve it (using water efficiency measures such as a dual flush toilets and a water efficient shower).

For a renovation or new build ensure all materials like cladding, lining, paints and sealants, and flooring have low or no likelihood of toxic emissions. Look for products that are pre-dried, breathable, use water as the solvent and are classed as zero or low VOCs. Consider orientation to maximise north-facing windows and select high mass materials such as brick walls and floor for passive heating.

1 2 3 4 5 6 7 8 9 10

Health & Comfort

Health and comfort assesses how easy it is to keep the warmth in and the moisture out of your home.

- Ceiling and floor insulation should be in good condition without gaps, holes or tucks visible
- Eliminate all window and door draughts
- Traditional, wooden floors require damp proofing
- Install an extractor fan in kitchen and bathrooms
- No more than 5 ceiling downlights
- Retrofit double glazing, or install quality thermal curtains throughout the house
- Provide a covered washing line

Energy

Water

Waste

Site

Management

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Know your home

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1 2 3 4 5 6 7 8 9 10

Health & Comfort

Energy

The number and efficiency of appliances and products in the home that use power, plus any on-site generation contribute to this section.

- Use an efficient heat pump, log burner or pellet fire as the main source of heating in the home
- All lighting should be efficient bulbs, either compact fluorescent or LEDs
- Select an Energy Star fridge or freezer
- Accessible hot water cylinders and hot water pipes should be wrapped and insulated
- Hot water cylinder should be no older than 1997
- Consider installing a heat pump water heater or ENERGY STAR qualified solar water heating system

Water

Waste

Site

Management

6

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1 2 3 4 5 6 7 8 9 10

Health & Comfort

Energy

Water

The efficiency of taps, showers and toilets contribute to how much water we use. Collecting rainwater and reusing greywater are also important in high performing homes.

- Install dual flush toilets
- Reduce water use by installing an efficient shower that uses less than 9 litres per minute
- Choose a water efficient dishwasher and washing machine
- Consider installing a barrel or tank to collect rain water for the garden

Waste

Site

Management

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1 2 3 4 5 6 7 8 9 10

Health & Comfort

Energy

Water

Waste

How easy is it to manage and reduce waste in the house and during construction?

- Include adequate space to separate and collect recyclable materials for council collection and compost green waste
- When building a new home, look at ways to reduce construction waste

Site

Management

6

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1 2 3 4 5 6 7 8 9 10

Health & Comfort

Energy

Water

Waste

Site

Where your home is located and how you use space around the outside of the house are important to overall sustainability.

- Include space to grow vegetables and fruit trees
- Include hardy native plants, adapted to local conditions
- Your house will rate more highly if it is close to a park, supermarket, dairy or public transport

Management

6

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1 2 3 4 5 6 7 8 9 10

Health & Comfort

Energy

Water

Waste

Site

Management

The section includes material selection, guidance for general use and if you keep track of maintenance on your home.

- No problem issues like mould, carpet in wet areas, leaky taps, draughty windows, unvented dryers or unflued gas heating
- Install smoke alarms close to sleeping areas
- Name or number of house to be easily visible from the road in case of emergency
- Improve security by adding external lighting fitted with motion and daylight sensors
- For new buildings choose Environmental Choice NZ (ECNZ) building products

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