

Appendix 7

Johnsonville

Medium Density Residential Area

Design Guide

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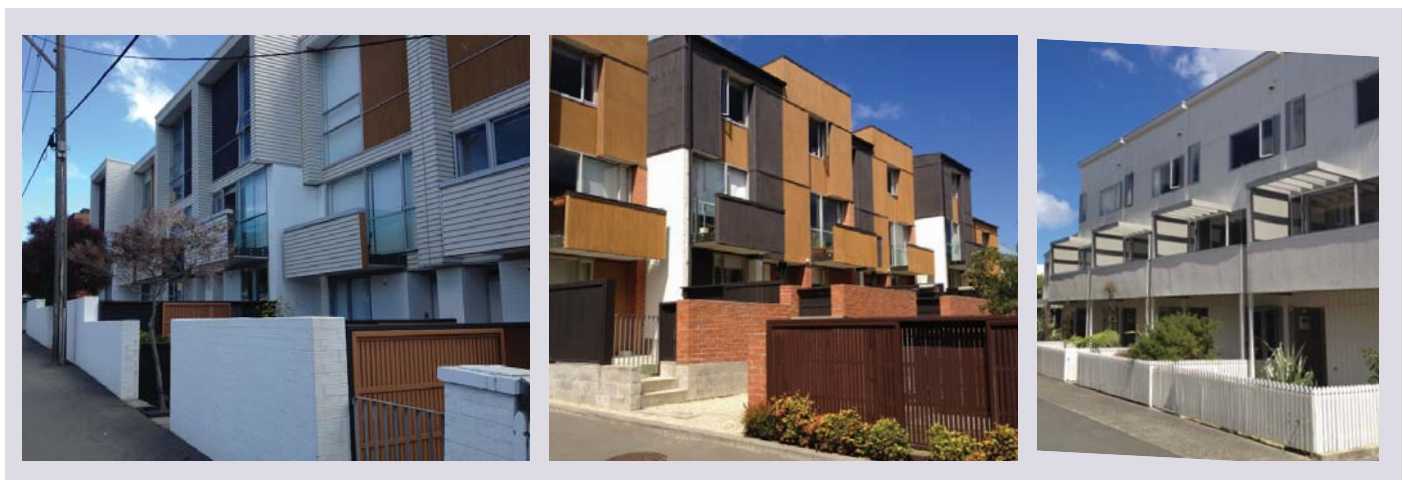
Medium density housing types



Examples of semi-detached houses



Examples of terraced or town houses



Examples of apartments

PART 1 - Introduction

7.1.1 Application

This Design Guide provides guidance on the siting, design and landscaping of new multi-unit (2 or more dwellings) residential developments within the Johnsonville Medium Density Residential Area (MDRA). It forms an appendix to the city-wide Residential Design Guide.

The city-wide Residential Design Guide provides guidance on site planning, building design and open space design. The Johnsonville Design Guide focuses on the characteristics of the streets within the Johnsonville MDRA and on ensuring that the design of new developments responds to those characteristics and contributes to the enhancement of the streets.

Resource Consent applications for multi-unit developments within the Johnsonville MDRA will be assessed against both the Residential Design Guide and this Johnsonville Medium Density Residential Area Design Guide.

7.1.2 What are Medium Density Residential Areas

Policies 4.2.1.2 to 4.2.1.4 of the District Plan and associated explanation state that:

“Medium Density Residential Areas are tightly defined residential areas where high quality medium density housing will be actively encouraged. These areas are located surrounding the existing town centres of Johnsonville and Kilbirnie where the benefits of higher density residential development will be greatest. Intensification within these areas will allow efficient use of existing infrastructure, support existing services and facilities, and allow people to live close to jobs and close to public transport.

Within Medium Density Residential Areas, the District Plan seeks to achieve:

- *Medium density residential development*
- *High levels of amenity for occupants of new residential developments*
- *High quality development, both in terms of building design and townscape character*
- *Variety in the built form (including variations in style, type and scale of buildings)*
- *Variety in household type (1, 2, 3, 3+ bedroom units)*
- *Appropriate levels of protection for neighbouring property’s amenity”*

7.1.3 What is medium density housing?

Housing density is usually defined in terms of the number of dwellings per hectare of land. In New Zealand, medium density housing is considered to be between 30 and 65 dwellings per hectare.

Medium density housing provides a different choice of housing to single detached houses on large sections.

Medium density housing types include semi-detached houses, terraced or town houses and apartments. These types are defined below.

Semi-detached houses

Semi-detached houses consist of pairs of houses built side by side and sharing a party wall. Usually each house is a mirror image of its twin.

Semi-detached housing can be thought of as being a half-way state between terraced housing and single-family detached houses. Semi-detached houses have yards to the front, rear and one side.

Terraced and town houses

Terraced houses are connected in groups forming a row of houses. They have front gardens and private open space to the rear. These are built in a similar style and have common party walls.

Town houses are also attached to adjacent houses but in different configurations to terraced houses which usually form a ‘row’. Town houses are sometimes laid out around a courtyard or shared space.

Apartments

An apartment is a self-contained housing unit that occupies only part of a building. Such a building may be called an apartment building or block of flats. Apartment residents may share common areas such as corridors, lobbies, stairwells and open spaces. Ground floor apartments may have attached private open space whereas upper floor apartments generally have access to a balcony.



Extent of Johnsonville MDRA 1 and 2

7.1.4 MDRA sub-areas 1 and 2

Policy 4.2.3.2 of the District Plan and associated explanation identify sub-areas within the Johnsonville MDRA for the purpose of delivering different development intensities.

MDRA 1 includes two areas adjacent to the Johnsonville town centre. These areas offer very convenient access to the adjacent town centre, and contain a significant number of smaller infill and multi-units creating a relatively intensive urban character. The provisions that apply to these areas seek to facilitate the continuation of these existing patterns.

MDRA 2 provides for a slightly less intense, more suburban style of development. This area includes land that is slightly further removed from the town centre, with more existing open space.

The extent of the two MDRA sub-areas is shown on the plan opposite.

space in recognition that these areas are already relatively intensely developed. In this area the emphasis will be on providing quality multi-use areas that can double as both vehicle manoeuvring spaces and useable outdoor space."

In the MDRA 2, "requiring minimum lot dimensions will provide additional flexibility as to how buildings are massed on site and provides scope for different building forms and layouts. It will also help ensure that buildings can be oriented to face the street and will reduce the number of driveways required."

"In Medium Density Residential Area 2 ground level open space is required in order to provide space for green planting, helping to integrate new development into the wider suburban setting.

Front yards are also required in all Medium Density Residential Areas. It is considered important to provide space for greening at the front of the site to help 'soften' the impact of the higher density development. In areas with existing street trees or when it can be demonstrated that the softening effect of vegetation can be achieved in another manner, it may be possible to waive the front yard requirement."

"Site coverage is the key mechanism used to manage the density of new development. The site coverage permitted in Medium Density Residential Areas seeks to strike a balance between the proportion of the site occupied by buildings, vehicle parking and manoeuvring spaces, and open space and landscaping. Any proposal that seeks to increase total site coverage will need to demonstrate that the resulting buildings can integrate appropriately into the surrounding townscape, and that the development is not unduly dominated by hard surfacing."

The table overleaf provides a summary of the key District Plan rules and standards applying to MDRA 1 and 2.

7.1.5 District Plan provisions

Policy 4.2.3.2 of the District Plan and associated explanation set out requirements for developments in the MDRA. These state:

"All new multi-unit developments in Medium Density Residential Areas will be assessed against the content of the Residential Design Guide to ensure that the proposed buildings (and associated spaces) make a positive contribution to the local townscape.

Council has also put in place a number of planning mechanisms to help ensure quality outcomes in Medium Density Residential Areas of Johnsonville and Kilbirnie. These include a minimum lot dimension, site coverage, specific front yards, area specific building recession planes and open space requirements."

In the MDRA 1, "no minimum lot dimensions are required in recognition of the character of existing development and the fragmented subdivision patterns which would inhibit site amalgamation. Similarly there is no request for ground level open

Key District Plan provisions applying to Johnsonville MDRA 1 and 2

Activity status	MDRA 1		MDRA 2	
	Permitted	Discretionary Restricted	Permitted	Discretionary Restricted
<i>Rule</i>				
<i>Number of units permitted on a site 'as of right'</i>	1		1	
<i>Building height - maximum</i>	8m	10.4m	8m	10.4m
<i>Site coverage - maximum</i>	50%	60%	50%	60%
<i>Front Yards – minimum depth</i>	3m		3m	
<i>Side & rear yards – minimum depth</i>	None		None	
<i>Vehicle parking - minimum</i>	1 space per unit		1 space per unit	
<i>Width of accessory buildings in front yard - max</i>	4m		4m	
<i>Recession planes</i>	2.5m + 56 or 63 degrees depending on the orientation of the boundary		2.5m + 56 or 63 degrees depending on the orientation of the boundary	
<i>Ground level open space</i>	None		20m ² per unit, none of which can be used for vehicle parking / manoeuvring	
<i>Minimum site dimension for multi-unit development</i>	None		Accommodate a radius of 11m	
<i>Width of vehicular crossing - maximum</i>	3.7m		3.7m	
<i>Building orientation</i>	First unit – must be oriented to face the street		First unit – must be oriented to face the street	
<i>Separation between first building & buildings to the rear</i>	7m		7m	

Note: The above table is a summary of key provisions applying to the Johnsonville MDRA 1 and 2. Chapter 5 of the District Plan contains a full list of rules and standards applying to all residential developments.



View towards Johnsonville MDRA (in the foreground) from Haumia Street.

PART 2 - Street types

7.2.1 Creating good streets

This section provides guidance on how new development will be integrated with the character of the adjacent street in order to enhance the quality of local neighbourhoods.

The following guidelines should inform the design of new developments throughout the MDRA:

- a. Careful site planning should be undertaken to ensure that new dwellings integrate with their surroundings.
- b. Steep topography is an important aspect of Johnsonville's character. Developments should fit into rather than drastically alter the landform.
- c. Existing trees and vegetation which contribute to the character of the street should be retained where practical, or replaced.
- d. The right combination of building height and building set back from the street edge should be selected to respond to the character of the street.
- e. Variation in building alignment and form should be used to achieve a scale relationship between larger multi-unit development and neighbouring small scale dwellings.
- f. The first dwelling(s) back from the street edge should be oriented to face the street, with pedestrian entrance and windows facing the street.
- g. Driveways, car parking and garage doors should not dominate the street edge.
- h. Open parking or vehicle manoeuvring areas should cater for pedestrian access and activity and create attractive spaces.
- i. Front fence height and design should enable residents to see what is happening on the street from their dwelling to facilitate passive surveillance of the street, which in turn helps make the neighbourhood safer.
- j. Landscaping is an important part of creating an attractive street. Private landscaping should make a positive contribution to both the dwelling(s) and to the street.
- k. Outdoor storage space for rubbish and recycling bins should be screened to create a tidy and attractive street edge.



View towards Johnsonville MDRA (in the foreground) from Creswell Place.

7.2.2 Street types

Each street in the MDRA has been categorised as one of three types based on its existing character and its desired future character. The street types also reflect the hierarchy of roads from busier and wider main arteries to quieter and narrower local streets.

In the following pages are guidelines specific to each street type. The guidelines will help shape new developments so they support the desired future character of their street.

The MDRA street types and locations are as follows:

Connecting Streets

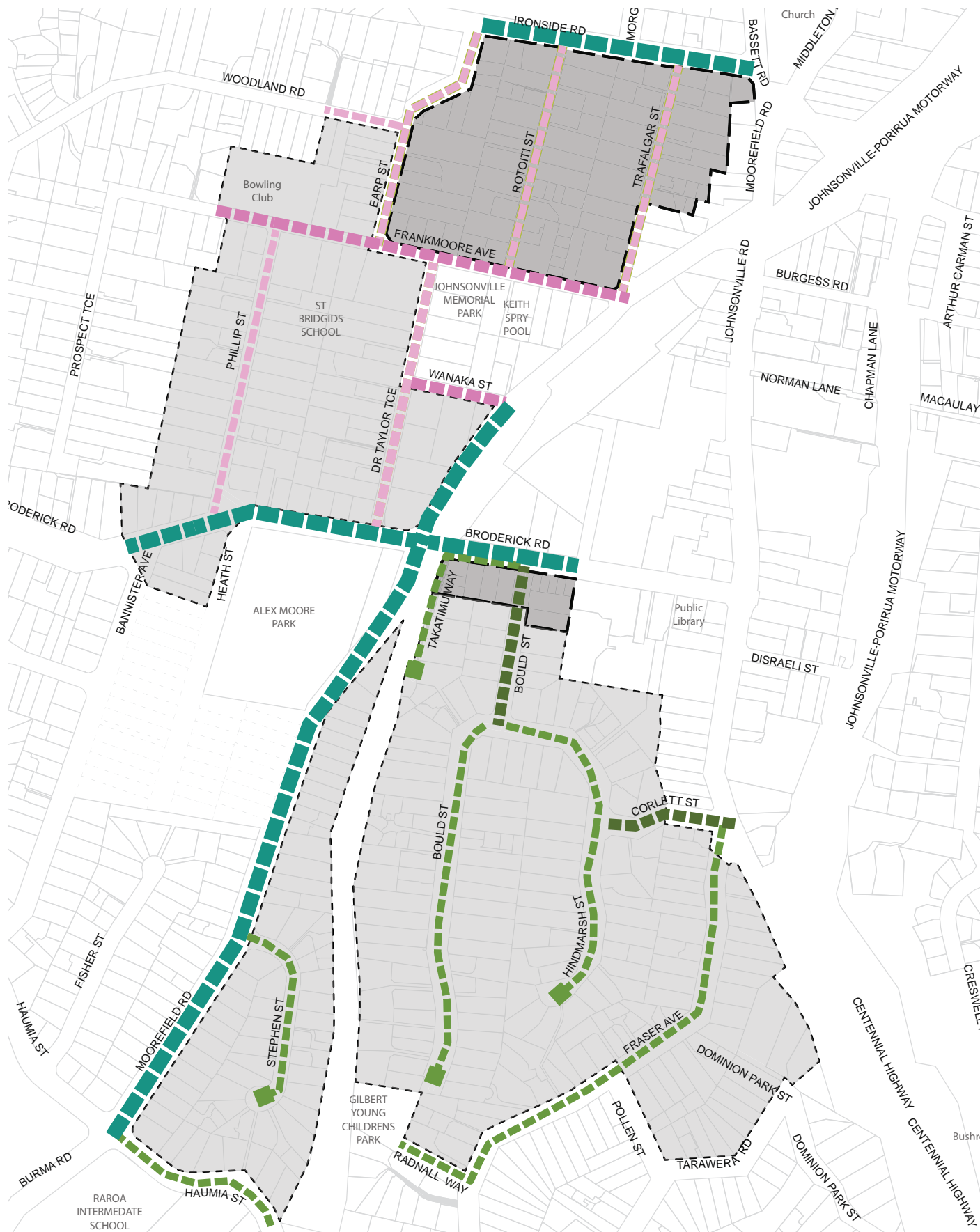
- Moorefield Road
- Broderick Road
- Ironside Road

Residential Streets North

- Frankmoore Street (Gateway)
- Wanaka Street (Gateway)
- Trafalgar Street
- Rotoiti Street
- Earp Street
- Woodland Road
- Dr Taylor Terrace
- Phillip Street

Residential Streets South

- Bould Street - north (Gateway)
- Corlett Street (Gateway)
- Haumia Street
- Stephen Street
- Takatimu Way
- Bould Street (south)
- Hindmarsh Street
- Radnall Way
- Fraser Avenue
- Pollen Street
- Tarawera Road



Street Types

- Connecting Streets
- Residential Streets North
- Residential Streets South

Connecting Streets

7.2.3.1 Existing character

Connecting Streets are the highest ranking streets within the local road hierarchy in that they carry the greatest volumes of vehicular and pedestrian traffic. They are important main routes into the town centre from the surrounding areas, collecting traffic from the residential streets that connect onto them. In addition to providing access to the town centre, they also provide access to other important facilities such as the train station and library. Due to their high levels of traffic and as key entry points into the town centre, *Connecting Streets* have high visibility.

Connecting Streets are wider than other streets within the MDRA. They generally have footpaths on both sides with parallel parking on one side and formal pedestrian crossings such as zebra or signalised crossings.

Buildings along *Connecting Streets* are generally set behind a small front yard with a low fence, allowing for the overlooking of the street from the main door and windows. Where the ground slopes, buildings are set above or below landscaped banks.

The streets identified as *Connecting Streets* are:

- Moorefield Road
- Broderick Road
- Ironside Road

7.2.3.2 Future character

Connecting Streets will continue to be important vehicular and pedestrian routes in the future and be the most visible streets in the neighbourhood. They will act as the 'boulevards' of Johnsonville i.e. roads which integrate high traffic volumes with high pedestrian amenity and strong building form. *Connecting Streets* will have a strong urban character which will contrast with the more suburban streets forming the remainder of the MDRA.

To create this future urban character, new buildings along *Connecting Streets* may be allowed to go up to the maximum height provided for in the District Plan under the Discretionary Restricted activity status (10.4m, which represents a 3 storey building). A resource consent will be required to build to this height. Higher density residential types such as apartment buildings may be suited to the character of these streets and help create a transition in building scale between the large-scale commercial and community buildings of the town centre and the smaller houses found on the residential streets behind the *Connecting Streets*.

New buildings along *Connecting Streets* may also be set back by less than the minimum 3m front yard required in the District Plan to create a strong built edge along these streets and a high level of visibility between the buildings and activities on the street. This will also contribute to safe pedestrian routes.



Broderick Road west of Moorefield Road



Broderick Road east of Moorefield Road

7.2.3.3 Guidelines

New development on *Connecting Streets* should reflect the following guidance:

Built Form

- a. Buildings should create a strong built edge along *Connecting Streets*, by building to the maximum building height provided for in the District Plan.
- b. Higher density residential developments, such as apartments, are appropriate given the proximity to the town centre and to larger scale buildings.
- c. Street corners are important contributors to the character of *Connecting Streets*. Buildings on street corners should have facades with windows facing both street frontages.

Frontage setbacks

- d. Support the urban character of *Connecting Streets* by siting buildings near the street edge. Departures from the minimum 3m front yard depth stipulated in the District Plan will generally be supported along *Connecting Streets*. (See Diagram 1)

Boundary treatment

- e. *Connecting Streets* are main pedestrian routes. A clear visual connection between the house, front entrance and the street should be created by keeping front fences low (<1.2m high). This will enhance amenity and personal safety along these streets.
- f. Side fences should be lowered towards the street (approx. 3m back from the front fence) to match the height of the front fence and open up visibility between the dwelling and the street.
- g. Where buildings are located high above the street level, tall retaining walls should be avoided. Preferred designs include landscaped slopes and low stepped retaining walls with landscaping to create a green environment for pedestrians along the public footpath. (See Diagram 2)

Landscape Treatment

- h. Front yards should have low level planting (ground cover and shrubs) to create an attractive street edge.
- i. Tall solid hedges which obstruct the view between the street and dwellings should be avoided.

Vehicle parking and access

- j. Garages and parking spaces should be sited behind dwellings so that facades with doors and windows are the dominant feature along the streets. Where this is not possible, garages should be located to the side of the dwellings or at least recessed behind the front building facade.
- k. Areas of hard paving for vehicle manoeuvring between the street edge and the dwellings should be avoided. Where such areas cannot be avoided, they should be edged with landscape planting and have an attractive finish.



Diagram 1: Small building setbacks are appropriate along the wide *Connecting Streets*.



Diagram 2: Where buildings sit above the *Connecting Streets*, landscaped slopes create a green interface with the public footpath.

Residential Streets North

7.2.4.1 Existing character

The area north of Broderick Road and west of Moorefield Road is the oldest part of Johnsonville town centre. The historical subdivision pattern is still clearly evident with a grid of narrow, straight streets and dense urban form.

This area has seen incremental transformation from a consistent streetscape of older villas and smaller scale houses to a diverse neighbourhood.

The narrow street corridors have no green verges with the footpath running right up to the property boundary and no space for planting between the road and the footpath. For this reason, greening on private properties makes an important contribution to the character of the Residential Streets North.

Buildings along *Residential Streets North* have an immediate relationship to the street due to the lack of street trees and other planting within in the public realm. Buildings are generally set back behind shallow front yards with low fences, further enhancing the visibility between the buildings and activities on the street.

The design of the interface between the street and the private properties, including boundary fencing, garages and front yards is very important to create pleasant, safe and attractive streets.

Amongst *Residential Streets North* are two east-west streets which lead directly to the town centre and provide an interface between the town centre and the wider residential area. These 'gateway' streets are Wanaka Street and Frankmoore Avenue. These 'gateways' are important routes for pedestrians reaching facilities such as the the shopping mall, train station, swimming pool, recreation centre and Memorial Park. The junctions of Wanaka Street and Frankmoore Avenue with Moorefield Road form important corners which have high visibility in the neighbourhood.

The streets identified as *Residential Streets North* are:

- Frankmoore Avenue (Gateway)
- Wanaka Street (Gateway)
- Trafalgar Street
- Rotoiti Street
- Earp Street
- Woodland Road
- Dr Taylor Terrace
- Phillip Street

7.2.4.2 Future character

Residential Streets North will continue the tradition of compact streets and dense built form. New development will enhance the historical street pattern through using compact architectural forms with a strong street presence. Terraced houses may be particularly suitable to continue the historical pattern of narrow buildings closely laid out next to one another and overlooking the street.

In these narrow streets, the private front yards will contribute the only green elements of the streets so private landscape planting will be very important.

Given the narrowness of the street, the minimum front yard depth of 3m will generally be maintained to protect privacy between facing dwellings and maintain space for landscape planting.

On the corners of the two 'gateway' streets (Frankmoore Avenue and Wanaka Street) with Moorefield Road, buildings of greater scale may be suitable to reflect their location opposite the town centre. In these locations, buildings may be built to the maximum height provided for in the District Plan under the Discretionary Restricted activity status (10.4m, which represents a 3 storey building), subject to an assessment of environmental effects as part of a resource consent application.



Earp Street



Frankmoore Avenue

7.2.4.2 Guidelines

New development on *Residential Streets North* should reflect the following guidance:

Built Form

- a. Higher buildings (up to 10.4m) are generally appropriate opposite the town centre, for example around the junctions of Frankmoore Avenue and Wanaka Street with Moorefield Road.
- b. Buildings on street corners should have facades with windows facing both street frontages. (See Diagram 3)

Frontage setbacks

- c. Front yard depth along *Residential Streets North* should be 3m minimum (as per the permitted activity standard) and contain landscape planting.

Boundary treatment

- d. Fences should be kept low (<1.2m high) along the street edge. This will enhance amenity and personal safety along *Residential Streets North*.
- e. Side fences should be lowered towards the street (approx. 3m back from the front fence) to match the height of the front fence and open up visibility between the dwelling and the street.

Landscape Treatment

- f. Front yards should have a significant proportion of landscape planting including ground cover, shrubs and trees to create an attractive street edge.
- g. Areas of hard paving within the front yard should be minimised.
- h. Tall solid hedges which obstruct the view between the street and dwellings should be avoided.

Vehicle parking and access

- i. Car parking areas within the front yard should be avoided as the yard should be mostly landscaped.
- j. Garages and parking spaces should be sited behind dwellings so that facades with doors and windows are the dominant feature along the streets. Where this is not possible, garages should be located to the side of the dwellings or at least recessed behind the front building facade.
- k. Areas of hard paving for vehicle manoeuvring between the street edge and the dwellings should be avoided. Where such areas cannot be avoided, they should be edged with landscape planting and have an attractive finish.



Diagram 3: Where buildings are located at a street corner, they should address both street frontages with windows.

Residential Streets South

7.2.5.1 Existing character

The area south of Broderick Road is typical of post-war developments with curvy cul-de-sacs and large lots. The area was originally developed for state housing in the 1940s and 50s. The steeper slopes towards Fraser Avenue were developed later on. Many of the original large lots have since been subdivided so there is now a mix of building styles and ages.

The area is characterised by wide road reserves, large lots and steep topography. This topography makes some sites challenging to develop resulting in more greenery in this area than in the older part of Johnsonville. The railway corridor and Gilbert Young Children's Park form an important green corridor through the area.

The steep topography means that many buildings are located either above or below the street with sloping front yards absorbing the level difference. Front yards and steep banks along the streets are generally vegetated with few high retaining walls or fences visible. Privacy is protected through building setbacks and vegetation rather than extensive fencing. The state houses usually have open front yards with either no fences at all or knee-height fences which maintain the open feel of the street.

The placement of buildings and design of the front yard, including the height of fences and retaining walls are important aspects of the character of the *Residential Streets South*.

Amongst *Residential Streets South* are two streets which act as gateways connecting the neighbourhood with the town centre. These 'gateway' streets are Bould Street (north of Hindmarsh St) and Corlett Street. These streets are important routes for pedestrians reaching the town centre. The junctions of Bould Street with Broderick Road and Corlett Street with Johnsonville Road form important corners which have high visibility in the neighbourhood.

The streets identified as *Residential Streets South* are:

- Bould Street - north (Gateway)
- Corlett Street (Gateway)
- Haumia Street
- Stephen Street
- Takatimu Way
- Bould Street (south)

- Hindmarsh Street
- Radnall Way
- Fraser Avenue
- Pollen Street
- Tarawera Road

7.2.5.2 Future character

Residential Streets South will continue to have a more suburban character than *Residential Streets North* with wider road corridors and more space for landscape planting. The undulating topography and requirement for a minimum site dimension in the MDRA 2 area will result in lower densities than in the MDRA 1 and maintain the green character of these streets.

To support this character, the siting of new buildings will need to integrate within the landform and large earthworks be minimised. Where they are required, retaining walls will need to be carefully designed to reduce adverse visual effects. Vegetation removal should also be minimised.

Bould Street (section north of Hindmarsh Street) will provide a transition in both scale and character between the town centre and the residential area to the south. Given this transition or gateway role and the generous width of berms along this street which are capable of accommodating street planting, the requirement for minimum front yard depth of 3m may be waived. The siting of new buildings closer to the street edge will be encouraged.

Corlett Street also acts as a gateway towards the urban environment of Johnsonville Road. Along this street, and particularly at the corner of Corlett Street and Johnsonville Road, buildings of greater scale may be suitable to reflect their location next to the town centre.

Along both Bould Street (north) and Corlett Street, buildings may be built to the maximum height provided for in the District Plan under the Discretionary Restricted activity status (10.4m, which represents a 3 storey building), subject to an assessment of environmental effects as part of a resource consent application.

7.2.5.3 Guidelines

New development on *Residential Streets South* should reflect the following guidance:

Built Form

- a. Higher buildings (up to 10.4m) may be appropriate along Bould Street (north) and Corlett Street.
- b. Buildings on street corners should have facades with windows facing both street frontages.
- c. The mass of large buildings should be broken up and staggered to integrate with the topography.

Frontage setbacks

- d. Front yard depth should be 3m minimum (except for Bould Street north) and contain landscape planting.
- e. Along Bould Street (north), front yard depth should be minimised and buildings brought forward to create a strong building line along the street edge. (See Diagram 4)

Boundary treatment

- f. Fences should be kept low (<1.2m high) along the street edge. This will enhance amenity and personal safety along Residential Streets South.
- g. Side fences should be lowered towards the street (approx. 3m back from the front fence) to match the height of the front fence and open up visibility between the dwelling and the street.
- h. Where buildings are located high above the street level, tall retaining walls should be avoided. Preferred designs include landscaped slopes and low stepped retaining walls with landscaping to create a green environment for pedestrians along the public footpath.

Landscape Treatment

- i. Seek to maintain the existing landform, minimise the need for large retaining walls and design any required earthworks and retaining walls as positive landscape feature.
- j. Mature trees and significant vegetation should be retained where practicable.
- k. Front yards should have landscape planting to create an attractive street edge.

Vehicle parking and access

- l. Garages and parking spaces should be sited behind dwellings so that facades with doors and windows are the dominant feature along the streets. Where this is not possible, garages should be located to the side of the dwellings or at least recessed behind the front building facade.
- m. Areas of hard paving for vehicle manoeuvring between the street edge and the dwellings should be minimised. Such areas should be edged with landscape planting and have an attractive finish.



Existing character of Bould Street (north of Hindmarsh Street)



Diagram 4 - Future character of Bould Street (north) with higher buildings creating a transition towards the town centre.