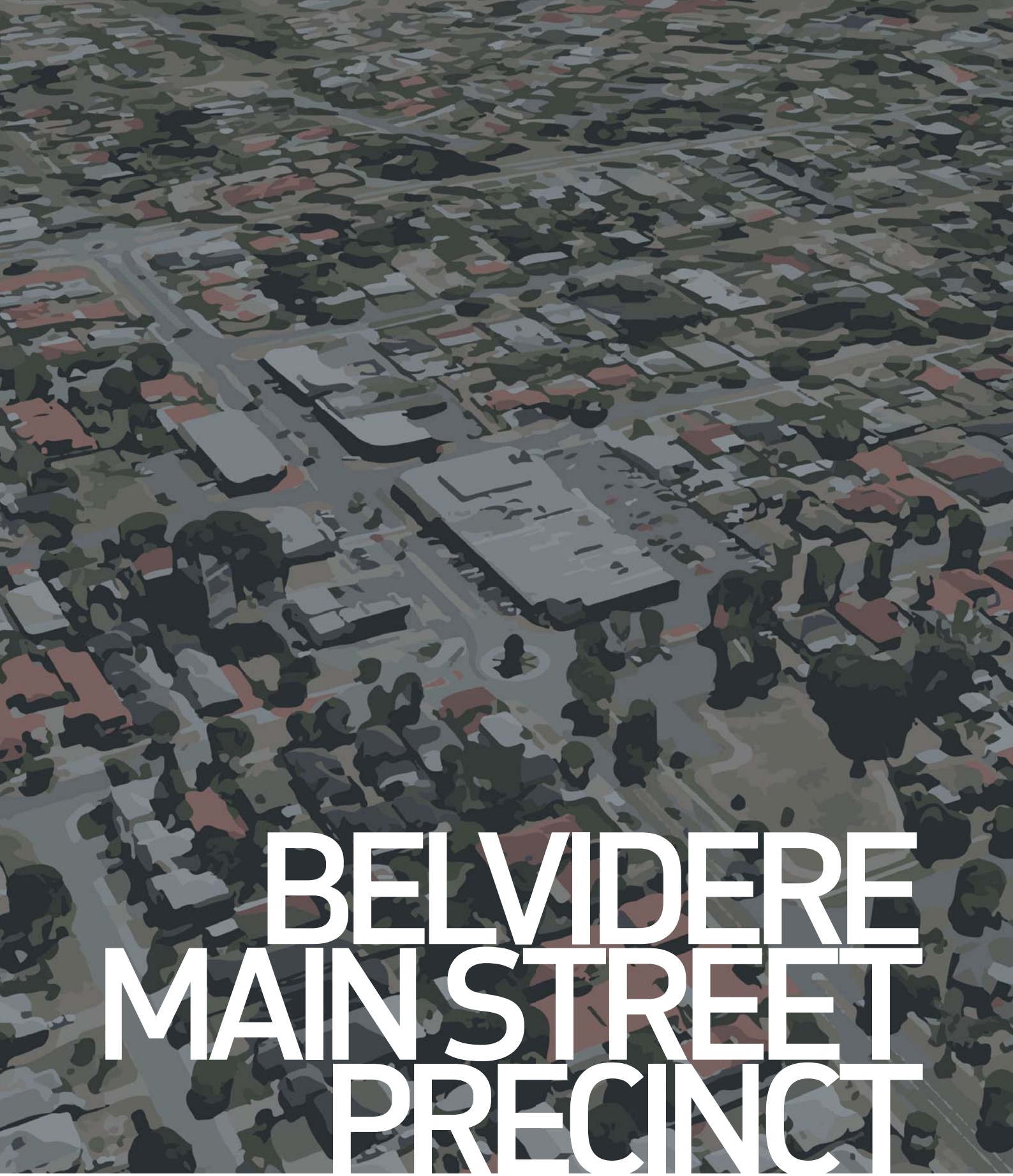

BELVIDERE MAIN STREET PRECINCT

DESIGN GUIDELINES

BELMONT • CITY OF OPPORTUNITY •

MAY 2016

Belvidere Main Street Precinct
Urban Design Guidelines
May 2016

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1	15/09/15	Draft	First Draft BMSP Design Guidelines	SE	SOS
2	12/11/15	Draft	Draft BMSP Design Guidelines	SE	SOS
3	27/11/15	Draft	Draft BMSP Design Guidelines	SE	SOS
4	27/11/15	Final Draft	Final Draft BMSP Design Guidelines	SE	SOS
5	3/5/2016	Final Issue	Final Issue of BMSP Design Guidelines	SE	SOS

contents

1.0 Introduction

1.1 VISION

The vision for the Belvidere Main Street Precinct (BMSP) has been developed in collaboration with the community and local landowners/business owners to ensure that it achieves a balance between the aspirations of both, as well as those of the City (Figure 1). The City has the following Strategic Vision for the future of itself as a thriving community:

"A precinct which is prosperous, liveable and an inclusive community within an attractive main street setting.

The Belmont Main Street Precinct will be characterised as a mixed use, high quality, vibrant neighbourhood centre that capitalises on and provides a sustainable extension of the existing centre."

The vision has a suite of principles that, working together, promote essential qualities for achieving a healthy and vital neighbourhood centre within the Belmont Main Street Precinct:

Physical Principles:

- To promote a safe, attractive and easily accessible environment for local residents and visitors.
- To ensure the buildings promote a transparent and engaging interface between the street and private realm.
- To ensure the creation of a public realm that has the flexibility and capacity to change over time.

Social Principles:

- To deliver a neighbourhood centre which provides a local community hub that is a vibrant place to live, work and visit-promoting a strong sense of place and high quality public amenity.
- Promote walking, cycling and public transport through appropriately designed and easily accessible streets and buildings.
- Provide for a mix of housing opportunities to cater for a diverse community.

Economic Principles:

- Build on the existing retail and services offerings to increase their attractiveness, usability and viability.
- Attract new investment opportunities in response to local aspirations.
- Facilitate a development intensity that complements the existing neighbourhood scale.

Figure 1: *Belvidere Main Street Precinct indicative built form within the surrounding context*

1.0 Introduction

1.2 BELVIDERE MAIN STREET

The quality of the public realm within BMSP will be a key determinant in creating a vibrant, pedestrian friendly, safe and attractive neighbourhood centre. Redevelopment of Belvidere Street will be the main focus of activity within the centre, offering a place for small events, as well as a casual outdoor meeting place for commuters, residents, workers and visitors. The City of Belmont is working towards a vision that includes a unifying landscape design and consistent tree planting aimed at integrating seamlessly with existing streets to ensure strong connectivity to the neighbourhood centre.

Key assumptions summarised for achieving this vision are:

- Upgrade of the main street based on a 29m setback-building to building to allow flexible street layout (Figure 2) .
- Redevelopment of the public realm to be undertaken by the City of Belmont. (Figures 3).
- Power-lines to be underground, commencing the section between Gardiner Street and Keymer Street, by the City of Belmont.
- The number of on-street parking bays will be reduced to increase space for pedestrian movement and outdoor dining.
- Additional parking to be provided to the rear of new developments improving pedestrian experience on Belvidere Street.

Example: Parklets activating main street environments

Example: Public realm integrating alfresco dining and pedestrian access

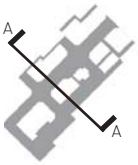


Figure 2: *Cross Section AA - Belvidere Main Street*

1.0 Introduction

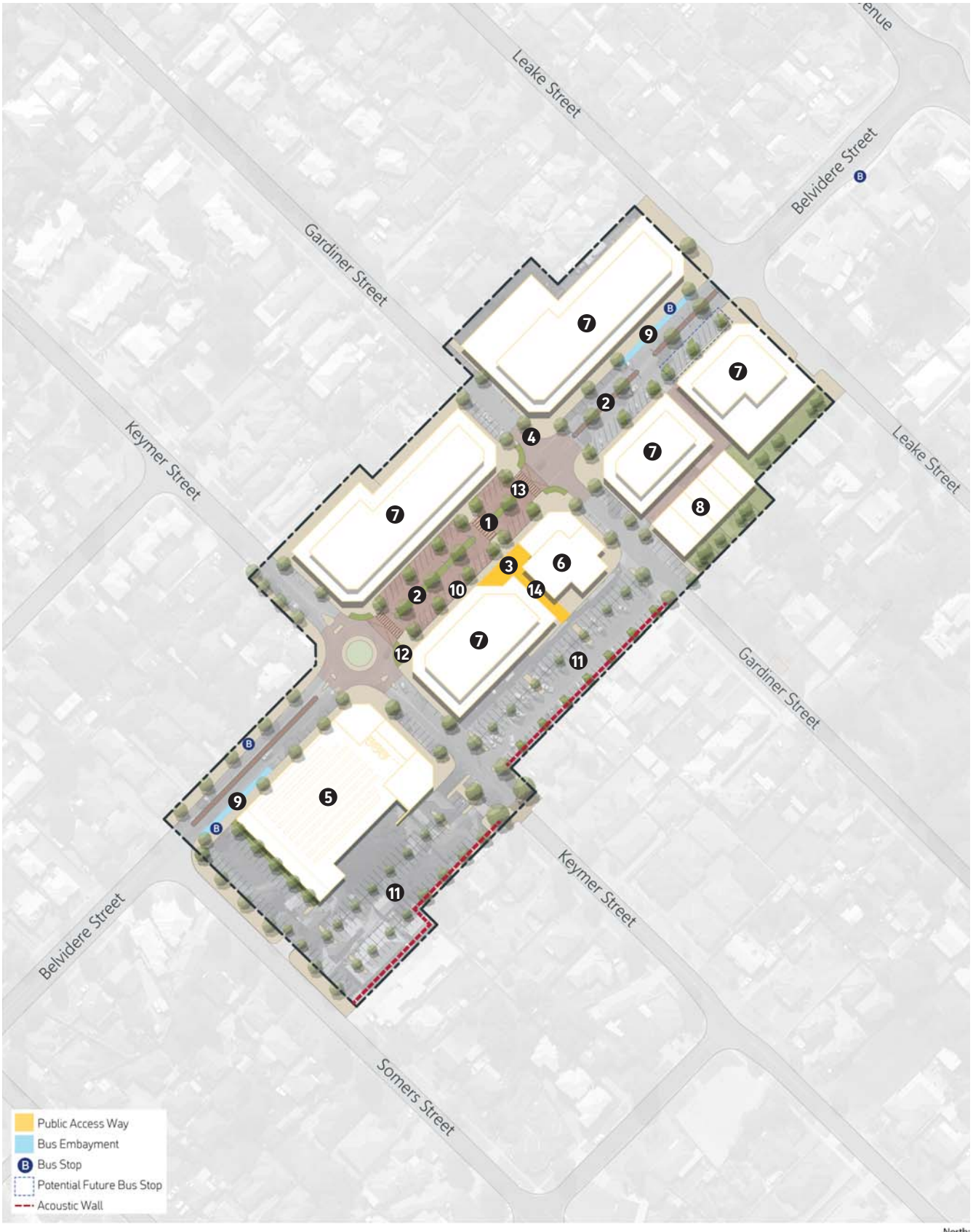


Figure 3: *Belvidere Main Street Precinct - Proposed Master Plan*

1.3 CONCEPT PLAN

The following provides an outline of key features representing an indicative range of activities and land uses within BMSP supported by the redevelopment of the main street environment (Figure 3). These are suggested to make it a sustainable centre incorporating a mix of uses within a vibrant public realm.

1. Continuous high quality shared surface Main Street environment with generous uncluttered footpaths providing sufficient space for alfresco seating and pedestrian movement.
2. Regular tree planting along the median and footpath paving with good canopy coverage providing a continuous line of site down Belvidere Street, as well as mitigating urban heat, improve biodiversity and providing pedestrian shade.
3. Development of a new Community Square creating a central community node linked to rear car parking through a public right of way.
4. Pedestrian and cycle friendly road geometry, including tight radii on corners and crossovers to slow traffic within pedestrian priority main street environment.
5. Relocation of the supermarket defining the southern entry to Belvidere Main Street.
6. Relocation of the Tavern to accommodate outdoor dining wrapping the main street environment.
7. Mixed use development accommodating ground level retail with commercial and multi unit residential dwellings above.
8. Multi unit residential development.
9. Bus stop with shelter and seating located east and west of the Main Street.
10. Rationalisation of on-street car parking.
11. Additional car parking provided to the rear of new developments, surfaced with a permeable interlocking pavement system.
12. Street furniture including seating, cycle racks, public art and bins in convenient locations.
13. Integrated Water Sensitive Urban Design (WSUD) to mitigate stomwater impact and reduce use of potable water for irrigation through use of permeable interlocking pavements and rain gardens.
14. Public Access Way.

1.0 Introduction

1.4 SITE AND CONTEXT

Identified as a key Neighbourhood Activity Centre within the City of Belmont, the 3.9 hectares site is located approximately 10km from Perth CBD, 6km from the developing Burswood entertainment precinct and within 2km of both the Airport and Belmont Forum (Figure 4).

In response to the areas increasing growth and associated retail demand, the application for the Scheme Amendment was submitted by the City in May 2014 for the redevelopment and expansion of the existing Commercial Centre (Gardiner Street - Keymer Street) south towards Somers Street.

Rezoning of the 'Belvidere Main Street Precinct' to 'Special Development Precinct' is intended to allow for a greater diversity of uses to include retail, office, restaurant and residential uses to facilitate redevelopment of the BMSP as a whole (Figure 5). These guidelines apply only to those lots identified within the proposed Local Planning Scheme Amendment area.

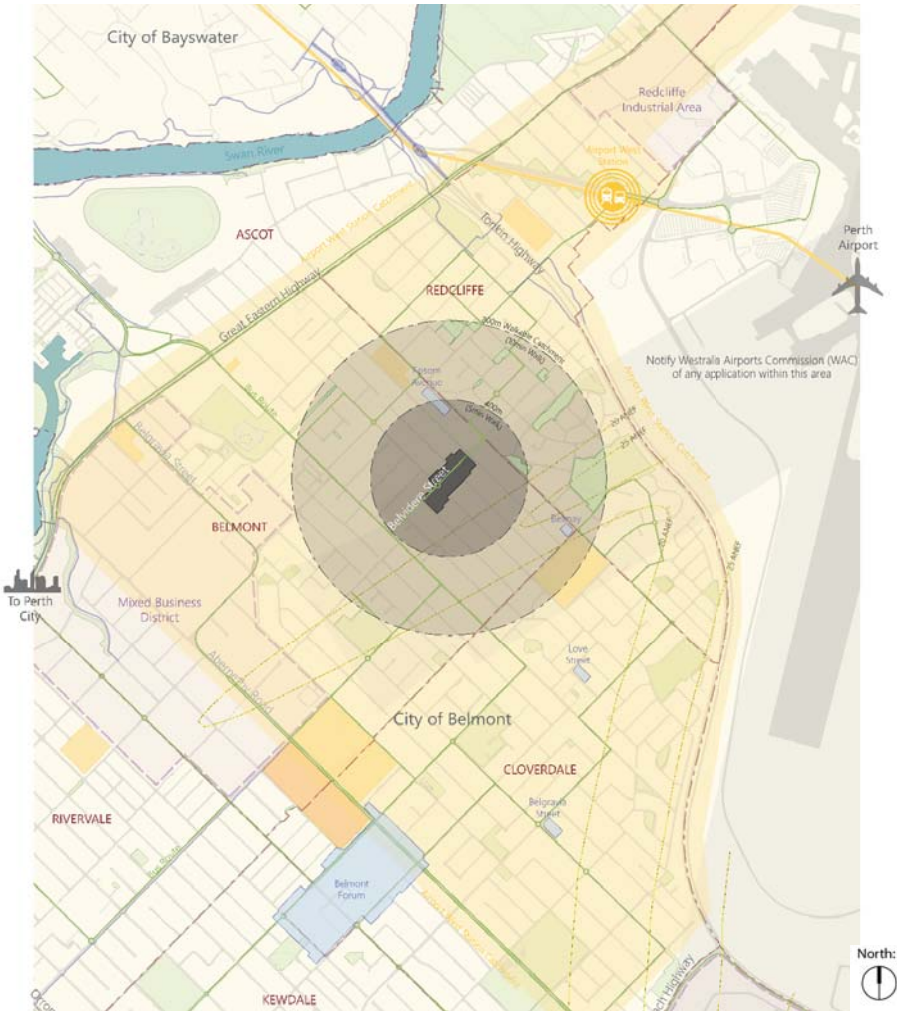


Figure 4: *Site Location Plan*

1.0 Introduction

1.5 PURPOSE

The Belvidere Main Street Precinct Design Guidelines seek to establish the character of the streets, buildings and public spaces facilitating the redevelopment of a mixed use environment that is both welcoming and attractive to locals and visitors alike.

Implemented as part of Local Planning Policy, any development application that varies from the requirements set out in the Guidelines can be approved if the variations are consistent with, or clearly exceed the design objectives.

The objectives of these Design Guidelines are to:

- Encourage a high standard of mixed business development which is attractive, unified, functional and efficient, enhancing the character of the precinct.
- Facilitate sustainable building and site design which maximises functionality and performance.
- Ensure attractive and well planned development outcomes for developers and landowners.

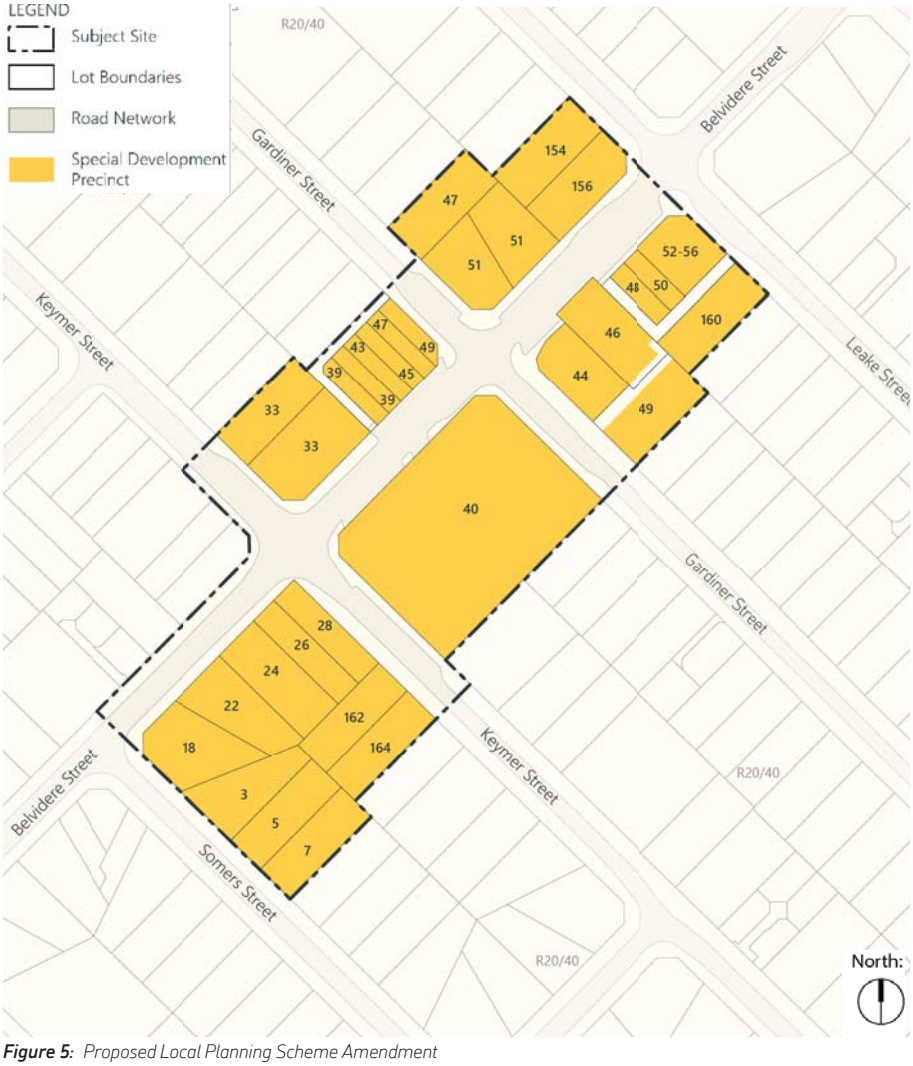


Figure 5: *Proposed Local Planning Scheme Amendment*

1.0 Introduction

1.6 DESIGN GUIDELINES STRUCTURE

The Belvidere Main Street Precinct Design Guidelines have been structured to include the following elements to assist proponents in preparing their designs and development applications.

Part 2 - Urban Context

This section introduces the mix of land uses to inform appropriate site, block and building design response at a strategic level.

Development Aims outline the importance of understanding the context, setting, local character, intended size and configuration of new development within BMSP.

Parts 3-6- Achieving the Aims

Parts 3-6 of the Design Guidelines provide objectives, design controls and design guidance for the siting, design and amenity of new development. Each section is structured to provide users with:

1. DESCRIPTION

A description of the topic and explanation of its role and importance.

2. OBJECTIVES

The Objectives outline the design's intent or philosophy underpinning the best practice criteria and explain the desired outcome to be achieved by them.

3. DEVELOPMENT CONTROLS

The Development Controls are mandatory criteria which must be met in all development proposals. They will collectively ensure that the design Objectives are achieved. Applicants may provide alternative design solutions if it can be demonstrated to the satisfaction of the relevant decision-maker that the design Objectives are clearly met or exceeded.

4. DESIGN GUIDANCE

The Design Guidance section recommends some additional measures by which a building can achieve a higher level of sustainable design, community interaction and/or architectural character.

Appendix A - replicates all Figures referenced (1 - 17) at a larger scale.

1.7 RELATIONSHIP TO OTHER PLANNING DOCUMENTS

The Design Guidelines have been drafted under the provisions of the City of Belmont's Local Planning Scheme Amendment 6 and should be read in conjunction with the City's relevant Local Planning Policies. In case of any discrepancies with the Scheme, the Scheme shall take precedence.

- City of Belmont's Local Planning Scheme 15 (LPS)
- Local Planning Policies
- Residential Design Codes
- Building Codes of Australia
- Belmont on the Move (Integrated Transport Strategy)
- Landscape Master Plan Design Guidelines

1.8 DEVELOPMENT APPROVAL PROCESS

Applicants are encouraged to discuss their proposals with the City of Belmont Planning Department prior to making an application for development approval. This may include submitting a 'preliminary development application' to the City of Belmont for consideration and comment before finalising the formal application. Full details of the process for submitting a preliminary development application can be obtained from the City of Belmont Planning Department.

	STEP	PROCESS	WHO	REQUIRED
DEVELOPMENT APPLICATION	Step 1	a. Preliminary application and meeting to discuss proposal. b. Lodge formal development application with City of Belmont	City of Belmont	Site plan, Floor plans (including any below ground levels), Roof plan, 4 x elevations, 2 x Cross sections, Form 1, Waste management plan, Checklist, Cover letter.
	Step 2	c. Assessment of proposal against the Design Guidelines, LPS and relevant City of Belmont policies. d. Development Assessment Panel (if applicable). e. Determination of Development Application– Amendments - Deferral, Approval, Refusal.	City of Belmont: Subject to proposal value and type delegation for decision may be by COB Development Control Group, Council or a Development Assessment Panel	
BUILDING LICENCE	Step 3	f. Lodge Building Licence application with City of Belmont.	City of Belmont	As per City of Belmont requirements

2.0 Urban Context

This section presents a series of key urban design elements that all proponents must consider when preparing the design and documentation of their proposed project within the BMSP. Several major urban design factors such as appropriate land use and the activation of key frontages are discussed to ensure that the aims and future development of BMSP are conveyed.

2.1 PRECINCT CONTEXT

The BMSP is surrounded by predominantly low to medium density housing and is a combination of single, grouped and multiple grouped dwellings (Figure 6). In recent years there has been an increase in infill development including subdivision of a number of larger residential lots to accommodate new housing stock. Belvidere Street itself has undergone a series of progressive alterations since the 1980's. More recent upgrades have been made in an attempt to improve the walkability of the precinct, with the development of medians and tree planting.

At the heart of the centre, redevelopment of Belvidere Street is proposed to be a leafy Main Street with active edges comprising a mix of retail and local services, providing the opportunity to integrate an active movement network.

AIMS:

+ Ensure each development provides a positive contribution to the precinct as a whole.
+ Provide a cohesive approach to development throughout the precinct, ensuring buildings compliment;
  - the character and attributes of the locality;
  - the landscape theme of the public realm; and
  - existing and adjacent sites.

Figure 6: *Site Context*

2.2 MIX OF LAND USES

BMSP is an important part of Belmont's urban fabric. The regeneration of this precinct will provide residential, retail and commercial offers not yet provided in the surrounding area, building upon the current mixed use development along Belvidere Street.

To encourage sustainable urban development within BMSP a diversity of retail and commercial uses must be embraced. This is essential in promoting a vibrant and active destination by day and night set within a high quality public realm. BMSP will also facilitate the development of more diverse and intensive living options. Apartments and town-houses will address a gap in the current market, providing affordable living options in an active and vibrant centre.

The character sought by the following aims are derived from existing examples of prominent mixed use neighbourhood centres.

AIMS:

- Establish a precinct that includes activities that service and complement the surrounding district and community.
- Encourage a diversity of uses that will activate the precinct during both daytime and evening hours.
- Design for flexibility and adaptability for ground floor uses over time. Building design should consider long term flexibility, such as floor plan dimensions and ceiling heights suitable for residential and commercial uses.
- Support residential living within a a range of apartment sizes and types to establish housing diversity which will cater to a broader demographic (family size, income levels).
- Relocation of the supermarket to the southern entrance of Belvidere Street.
- Relocation of the Tavern to the corner of Gardiner Street and Belvidere Street to maximise opportunity for alfresco dining wrapping the Main Street.

Existing buildings are not precluded from accommodating suitable mix of activities. Applications for change of uses must first be assessed by the City of Belmont and must be compliant with the intent of the Design Guidelines.

Example: Supermarket


Example: Residential development


Example: Mixed use development

2.0 Urban Context

2.3 ACTIVE EDGES

Belvidere Street will be the main focus of activity within the redeveloped centre, offering a place for small events, as well as a casual outdoor meeting place for commuters, residents, workers and visitors. Creating a sense of liveliness and vitality is key to establishing an interesting and safe main street environment within BMSP.

Making frontages 'active' (Figure 7), adding interest, life and vitality to the public realm means:

- frequent doors and windows, with few blank walls;
- narrow frontage buildings, giving vertical rhythm to the street scene;
- high quality materials and refined details;
- strong visual connection between internal spaces and the adjacent public realm; and, on occasion,
- accommodating lively internal uses visible from the outside, or spilling out onto the street.

Where frontages are defined as 'semi-active', which includes residential frontage, this means:

- A few blind or passive facades;
- some depth and modelling in the building facade; and
- good quality materials and refined details.

Example: Activated street facades

AIMS:

- Ensure buildings address Belvidere Street and the adjacent public realm.
- Ensure ground level uses facilitate street level activity and surveillance of the adjacent public realm.
- Consider appropriate levels of activation to address the adjacent public realm that correlates to the overall character and sense of place
- Ensure Alfresco dining is incorporated to provide an outlook and vibrancy along active edges - maximising views through to the public realm.
- Establish a sense of shared ownership and accessibility to public spaces centred around a new Belvidere Square.

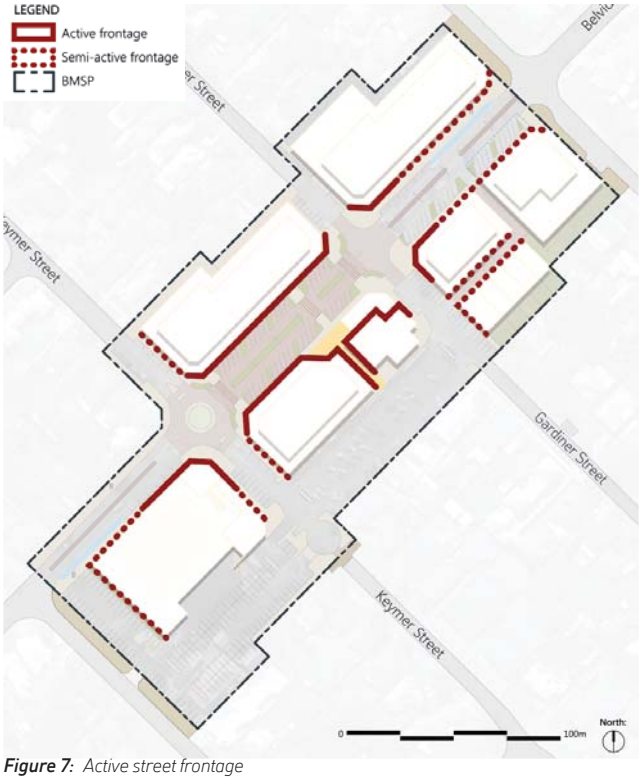


Figure 7: *Active street frontage*

2.4 SAFETY AND SURVEILLANCE

Improving the perception of safety through the built environment is a key consideration for BMSP. Crime Prevention through Environmental Design (CPTED) principles should be applied in the design of public spaces, providing a response to improving the safety of the urban environment.

AIMS:

- Encourage passive surveillance of the public realm and pedestrian links, through active street frontages and the location of balconies and major openings.
- Maintain open sight lines at eye level throughout BMSP.
- Enhance the perceived sense of safety of public spaces through positive passive surveillance and lighting.
- Provide opportunities for safe monitoring of entry and egress points to all building and adjacent public thoroughfares.

Example: Overlooking of public space

Example: Activation of pedestrian laneway

3.0 Movement

The vision for BMSP is to develop a multi functional, social and vibrant centre with a highly connected pedestrian, cycle, vehicular and public transport network. This section outlines how it aims to achieve this with future redevelopment of the precinct.

3.1 VEHICLE ACCESS

Vehicle circulation, infrastructure, and servicing requires careful management to limit negative impacts it can have on the public realm. Establishing a balance between pedestrian and vehicle movements is imperative to provide for pedestrian safety and effective vehicle access, while also contributing to both the functionality and visual quality of the precinct.

Central to achieving this is the redesign of Belvidere Street to accommodate greater pedestrian activity, slow moving traffic, a rich mix of uses and comfortable sheltered footpaths where people can gather (Figure 8).

OBJECTIVE:

+ Provide convenient, efficient, safe access and parking for vehicles (including deliveries), pedestrians and cyclists.

DEVELOPMENT CONTROLS:

+ Pedestrian and vehicle entry points shall be defined and separated from one another.
+ Footpaths are to be maintained as the priority movement network within BMSP. Crossovers and driveways shall be terminated at the footpath.
+ Redevelopment of Belvidere Main Street between Keymer and Gardiner Street as continuous shared space with focus on pedestrian priority.

DESIGN GUIDANCE:

+ The location of crossovers, driveways and access points should be carefully considered in relation to vehicular and pedestrian traffic. Drive through uses across street frontages are discouraged.
+ The visual impact of car park entrances should be minimised.
+ Narrowing of roads is encouraged to calm traffic within the precinct.
+ The road geometry should be pedestrian and cyclist friendly.
+ Keymer Street, south of Belvidere Street, will be restricted to through traffic to improve the pedestrian environment within BMSP.

Figure 8: *Cross Section BB - Belvidere Main Street and Community Square*

3.2 VEHICLE PARKING

Good design of car parking is essential to both functionality and good visual quality throughout BMSP. Realignment of on-street car parking integrated within a newly landscaped environment is designed to improve the pedestrian experience and maintain convenient access to the local shops and facilities.

OBJECTIVES:

- Ensure on site vehicle parking and access are appropriately located maintaining strong pedestrian connectivity, whilst minimising adverse visual impacts on the streetscape.
- Provide safe access to car parking at the rear of developments.

DEVELOPMENT CONTROLS:

- Vehicle parking shall be provided in accordance with the requirements of the Scheme and relevant Local Planning Policy and Residential Design Codes.
- Permeable interlocking pavements shall be used for all car parking. Tree cells to be used for all new tree planting to car parking and medians.
- Car parking shall not dominate the street frontage.
- Enclosed at grade or upper level decked parking may be acceptable as part of a mixed use development on confined sites. Enclosed car parking must be sleeved with lettable floorspace, adequately screened from public view and not impact on the activation of streets or public spaces.
- A 2-3m high acoustic wall is required along the south-eastern boundary (Figure 9) to mitigate noise from adjoining vehicle parking and commercial activities on adjacent residential dwellings.

DESIGN GUIDANCE:

- Parking should occur to the rear of buildings with well defined pedestrian links via streets and lane-ways connecting through to Belvidere Street (Figure 9).
- Provision of high quality bus stops within the town centre will be integrated with the streetscape design and easily accessible to pedestrians.
- The provision of an acoustic wall is subject to consultation with adjacent local residents.
- It is recommended that the acoustic wall be of high aesthetic quality, with artistic components incorporated.

Example: Acoustic wall with artistic screening.

Example: Interactive, landscaped acoustic wall.

Figure 9: *Vehicle parking and pedestrian links*

3.0 Movement

3.3 PEDESTRIAN LINKAGES

Encouraging people to walk and cycle is a key objective for BMSP. A centre that is designed for pedestrians is more vibrant, economically stronger and socially safer. A priority for BMSP is to establish an attractive main street environment enabling convenient, attractive and safe pedestrian access and connection to parking, retail and commercial activities.

As a minimum, pedestrian linkages should be provided in accordance with Figure 10. Additional links are encouraged and exact alignments are subject to refinement at the development application stage.

Public Access Ways (PAW) are preferred over arcade style links. This enables multi-storey developments that flank a laneway to accommodate retail/commercial activity at ground level with residential above. Open for public access 24 hours a day provides good security for people using the laneway with surveillance provided by residents living above. The main difference between a PAW and an arcade is that an arcade is closed to the public after business hours.

OBJECTIVES:

- Ensure pedestrian safety is a priority consideration of new developments.
- Provide pedestrian links through the BMSP that are convenient, open and safe 24 hours a day.
- Promote active building frontages at ground level, and strong visual connection between pedestrian paths, car parking and new buildings.
- Make pedestrian access along Belvidere Street more pedestrian friendly.

DEVELOPMENT CONTROLS:

- Arcade links should provide for a walkway width of 3 metres minimum, whilst Public Access Ways (PAW) should allow for a 6 metre minimum width.
- Links through arcades or PAW are to permit a through-view to the end to enhance security.
- Arcade or PAW are to be accessible during normal retail hours, with public links being permanently open.
- No building 'back of house' facilities, such as waste storage, air conditioning units or extraction fans, shall be oriented along defined pedestrian routes.

DESIGN GUIDANCE:

- Primary pedestrian linkages and PAW should be of a design that incorporates visual interest and activity, maintaining a desirable human scale.
- Verandas and awnings should be provided for any development fronting a street or primary pedestrian link to provide shelter and shade for pedestrians.
- Strong pedestrian connections are encouraged from the south-eastern parking through to Belvidere Street.
- Provide comfortable seating along primary pedestrian routes.

Figure 10: *Vehicle parking and pedestrian links*

3.4 CYCLE END OF TRIP FACILITIES

Creating links to existing cycle networks has been identified as a key area of improvement for the City of Belmont in their 'Belmont on the Move' integrated transport strategy. Providing end of trip facilities such as showers, change rooms and storage within new developments is essential to support active modes of transport such as cycling, running and walking.

OBJECTIVES:

- Promote active transport as a viable mode of transport throughout the City of Belmont.
- Bicycle parking for employees should be accompanied by the appropriate provision of end of trip facilities such as lockers and showers.
- Developments should provide adequate bicycle parking spaces.

DEVELOPMENT CONTROLS:

- All new development shall provide an adequate supply of lockable bike storage.
- Bicycle parking provisions shall be in accordance with the R-Codes.
  - Residential tenant – 1 private secure storage bay designed to accommodate bicycle/ scooter/ motorcycle, together with car parking facilities.
  - Residential visitor – 1 secure bicycle parking space provided in a publicly accessible and sheltered location for every 8 residential units.
- Building that includes any non-residential development shall include end of trip facilities to support active transport.

DESIGN GUIDANCE:

- Ensure cycle parking spaces are integrated within the streetscape, within easy access and clear view of adjacent uses to facilitate passive surveillance.
- Ensure bicycle accessibility is maintained in paving design.

Example: Street bike parking

Example: End of trip facilities within new development

3.4 DELIVERY ACCESS

BMSP aims to be a compact neighbourhood centre that encourages pedestrian activity. Careful consideration of delivery access is to ensure that amenity is not compromised for residents, visitors and local businesses.

OBJECTIVE:

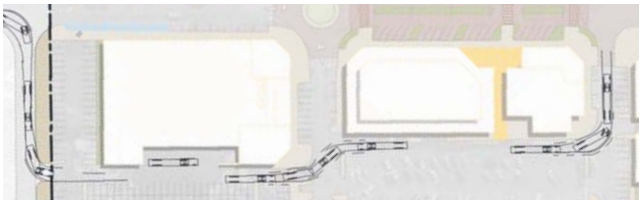
- Support local commerce with efficient servicing whilst minimising the adverse visual impacts and amenity of the public realm.

DEVELOPMENT CONTROL:

- A servicing management strategy is to be prepared for all retail and commercial development in conjunction with the City of Belmont. This may include specific time constraints for deliveries and servicing.

DESIGN GUIDANCE:

- To ensure efficient movement of service vehicles to the rear of developments south-east of Belvidere Street, a service route is proposed through the rear car park, entering from Somers Street and existing off Gardiner Street (Figure 11).



Proposed Primary Service Route.

Figure 11: *Proposed Primary service route*

4.0 Built Form Design

This section presents detailed design guidance and controls for built form that all proponents must consider when preparing the design and documentation of their proposed project within the BMSP.

Development controls, such as building height and setback, architectural character and building services are included to ensure clear guidance to building design within the BMSP is conveyed.

4.1 PRIMARY BUILDING CONTROLS

4.1.1 BUILDING HEIGHT

Height is an important control for the built environment because it can have a major impact on the physical and visual amenity of a place. It is intended that the composition of building heights provide an appropriate transition from the residential edge to then frame the main street environment ensuring a vibrant and economically sustainable centre.

Building heights have been defined as maximum heights in accordance with Figure 12. These have been determined to ensure sunlight access for adjoining lots, and to create a sense of scale in line with the overall design intent of the precinct.

OBJECTIVES:

- Establish building heights and built form which provides an urban response to existing and future development in the locality and establishes an appropriately scaled interface with the Main Street.
- Ensure buildings limit overshadowing of the public realm and optimise access to sun, breeze, views and privacy.
- Consider the development of 'landmark' sites to allow for iconic developments.
- Optimise density without compromising the urban and architectural quality.

DEVELOPMENT CONTROLS:

- Buildings must be a maximum of 3 storeys at the street edge.
- The maximum podium building height is 12m (3 storeys).
- Buildings shall be no higher than 5 storeys.

DESIGN GUIDANCE.

- Building designs should consider the potential for future flexibility and adaptability for different ground floor uses over time.
- Maintaining a minimum ceiling height of 4m for ground floor retail and commercial uses within mixed use buildings will allow for maximum flexibility of use.

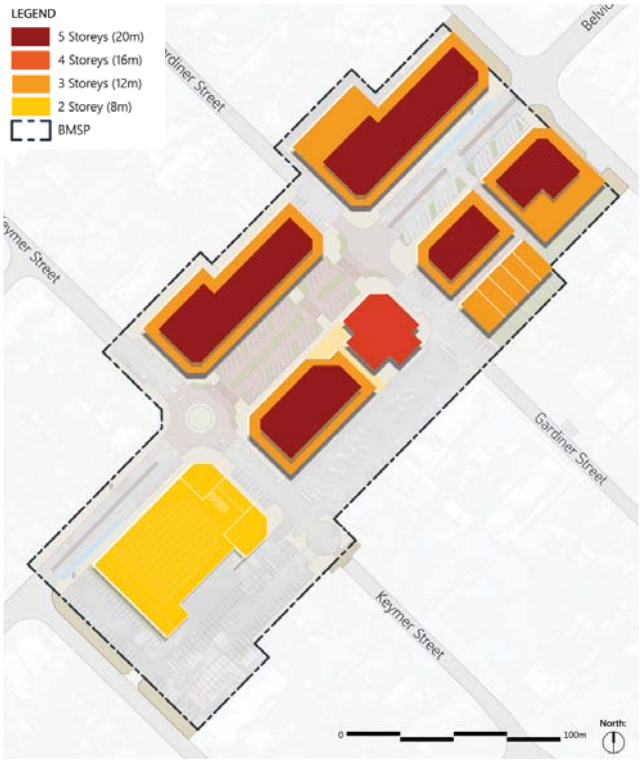


Figure 12: *Building height*

4.0 Built Form Design

4.1.2 BUILDING SETBACKS

Setbacks directly influence the environmental performance of buildings and street presence of development, such as is found in town centres.

At BMSP, setbacks are intended to provide some variety to create a visually appealing and diverse built environment. These setback requirements are intended to allow for the introduction of a pedestrian friendly Main Street environment in which alfresco dining and landscaped areas are strongly encouraged. They are intended to contribute to the public domain by enhancing streetscape character and the continuity of street facades.

OBJECTIVES:

- Provide strong urban spaces that create a sense of place and attract people to the centre.
- Provide minimal setbacks to allow buildings to maximise their development opportunity and integration with the public realm.
- Minimise the impact of developments on light, air, sun, privacy, views and outlook for neighbouring properties, including future buildings.
- Ensure that buildings respect the traditional built form of the street.

DEVELOPMENT CONTROLS:

- Lot boundaries are to be in accordance with realigned BMSP lot boundaries shown in Figure 13 to ensure the upgrade of a 29 metre road reserve between Keymer Street and Gardiner Street.
- Setback areas affecting Lots identified in Figure 13 will be ceded free of cost or provided through other mechanisms agreed to by the City of Belmont.
- Building setbacks shall be in accordance with Figure 16.
- All portions of built form and above ground structure must be accommodated within the property boundary-aside from awnings at ground level required to project over building entrances and along key pedestrian pathways.
- A minimum 3m setback is required above the podium height 12m (3 storeys).
- Buildings on corner sites (where there are no road truncations or truncations are less then 3 metres by 3 metres) shall define the corner by providing a 3m x 3m truncation void of any building but may include awnings, balconies etc.

DESIGN GUIDANCE.

- Whilst the ceded area cannot be developed in, the area of ceded land will still form part of the calculation for aspects such as plot ratio, open space etc. as agreed with the City of Belmont.
- 0-1.5m ground floor building setback along the Main Street allows for minor variations to provide a forecourt, building articulation, alfresco dining or other feature that add amenity and interest to the streetscape.
- Buildings framing the community square should accommodate space for alfresco dining.
- Rear setbacks should give consideration to R-codes where development sites adjoin residential lots.

Figure 13: *Revised Lot Boundaries*

4.0 Built Form Design

Examples: Setback of supermarket activating street frontages

Figure 14: *Cross Section CC - Relocated Supermarket fronting Belvidere Main Street*

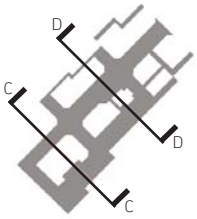


Figure 15: *Cross Section DD - Relocated Tavern fronting Belvidere Main Street*

Example: Setback framing community square

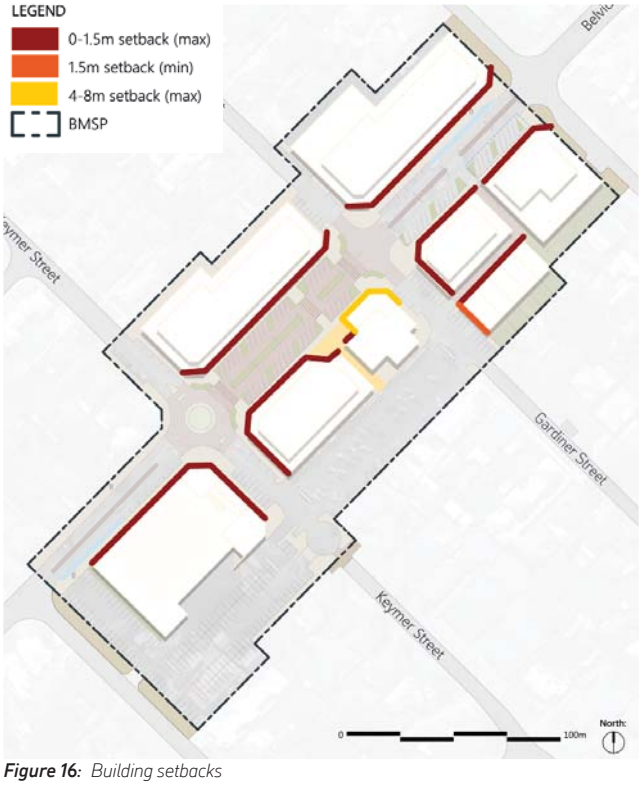


Figure 16: *Building setbacks*

4.0 Built Form Design

4.2 ARCHITECTURAL CHARACTER

4.2.1 BUILDING FACADES

The architectural quality of building façades enabling a continuous frontage of activity is beneficial in creating the atmosphere required for a 'Main Street'. If gaps between buildings are too large, the street enclosure is compromised and the intimacy of the environment is lost. To achieve this, buildings require the appropriate composition of elements and textures allowing pedestrians to intuitively understand the intended purpose and function of each building.

Clear glazing at ground level plays an important role in creating a visually interesting pedestrian environment. For cafés and restaurants, it gives passers-by a sense of the activity and atmosphere within. Excessive window signage inhibits these important visual links.

OBJECTIVES:

- Ensure individual buildings contribute to pedestrian friendly streets and well designed developments that provide a sense of activity and community at ground level.
- Ensure building facades and entrances at BMSP are of a high architectural quality, appropriate to the 'main street' location enhancing the overall character and sense of place.
- Provide entrances that read intuitively as the public interface of a building and describe the particular use or activity.

DEVELOPMENT CONTROLS:

- Blanks walls addressing the public domain are not permitted.
- The building frontage of developments facing the street and public open space must be comprised of at least 60% openings/glazing at ground level.
- Buildings must be easily read as to their function and purpose.
- Services and vehicle access shall not be permitted along building edges designated as active (Figure 7) - ensuring pedestrian and vehicle entry points are separate and well defined.

DESIGN GUIDANCE.

- A high level of fine grain design is required for the ground plane, to establish a human scale and ensure a positive pedestrian experience.
- Materials and colours should be well considered, creating interest and complementing the public realm.
- Lighting, signage, materials and landscape elements should be utilised to highlight building usage and entrances.
- If walls without glazed penetrations are unavoidable, other design features must be incorporated, such as colour and texture variation.
- Windows and major opening should optimise safety and passive surveillance of the public realm through careful location, orientation and lighting design.

Example: Ground floor facade

Example: Building facade

Example: Building facade

4.2.2 BUILDING CORNERS

BMSP incorporates several sites with exposed corners in prominent locations. Buildings on corner have the potential to become urban landmarks assisting with place identity whilst also being useful way finding markers through the precinct. .

OBJECTIVES:

- Address and activate street corners to create landmarks that assist in defining the local character.
- Promote architectural excellence and quality with appropriate detailing, material, and scale.

DEVELOPMENT CONTROLS:

- Corner buildings must address both street and/or public realm frontages.
- Corner buildings shall include strong architectural expression.

DESIGN GUIDANCE:

- Special treatment is encouraged to mark corners and link streets.
- Care should be taken to ensure the design of corner elements are not simply corner towers or ill-considered 'feature' elements.

Example: Building corner


Example: Building corner


Example: Mixed use development

4.0 Built Form Design

4.2.3 ROOF FORM

Design and articulation of a roof form is an important contributor to the character and expression of individual buildings. The creativity of their design should not be restricted, but there should be a degree of integration throughout the precinct in order to establish the architectural character.

OBJECTIVE:

+ Promote a high standard of roof form and design quality that enhances the individual expression of buildings and precinct as a whole.

DEVELOPMENT CONTROLS:

+ Roof structures shall be designed to conceal roof plant and equipment from public view.
+ Roof design must facilitate adequate access to light, air and shade for the building occupants.
+ Residential roof terraces or loft spaces are permissible within the roof space without extending beyond the maximum building height.

DESIGN GUIDANCE:

+ Roof forms should be designed to consider the impact at street level.
+ Liveable roof spaces such as roof terraces and roof gardens are strongly encouraged.
+ Roof forms should not be relied upon to provide the primary architectural definition of the building.
+ There should be appropriate consideration of roof material and colour in regards to the impact of the public realm.

Example: Roof Form

Example: Roof form

Example: Roof form

4.2.4 AWNINGS

Continuous awnings encourage pedestrian activity along streets, and in conjunction with active frontages, support and enhance the vitality of the local area. Together with building entries and awnings provide a public address, thereby contributing to the identity of the development.

OBJECTIVES:

- Provide a variety of awning types that are well located and integrated with the building design.
- Provide weather protection to building edges for visitors and occupants.

DEVELOPMENT CONTROLS:

- A covered continuous pedestrian walkway is to be provided along all active frontages with high pedestrian activity (refer section 2.3).
- Awnings are permitted to extend into the street space (footpath or verge) between 2-3.5m and must be structurally cantilevered.
- The minimum height clearance for an awning is 3.5m (Figure 17).
- Weather protection shall be provided to all entrances of ground floor mixed use and residential buildings.

DESIGN GUIDANCE:

- Awnings with large overhangs should be provided over significant opening on the north, east and west to shade outdoor areas.
- Awnings should inform the architecture in both form and materiality.
- Awnings should be detailed to appear as lightweight elements.
- Lighting under awnings should be provided for pedestrian safety.
- Awnings should wrap around secondary frontages of corner sites.

Example: Awning and shaded balconies

Example: Courtyard

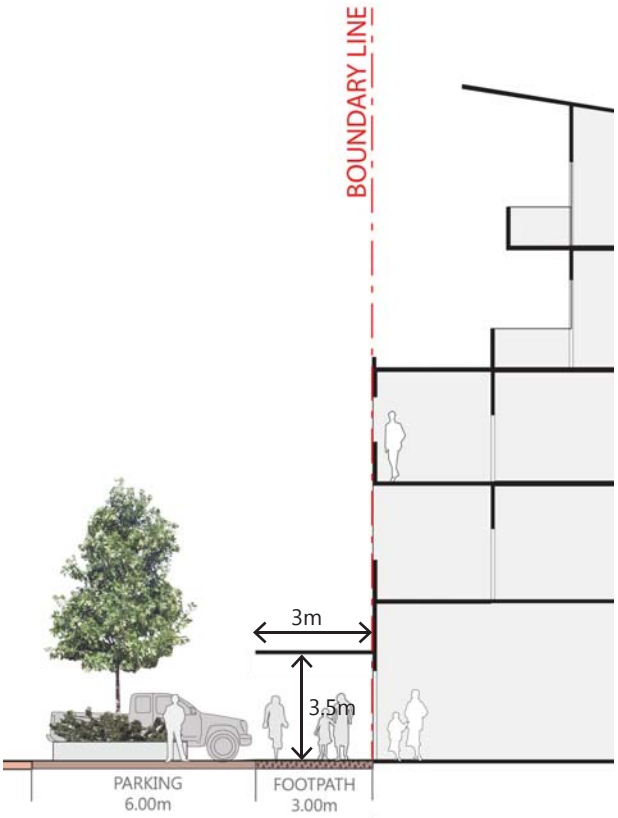


Figure 17: *Awning Design*

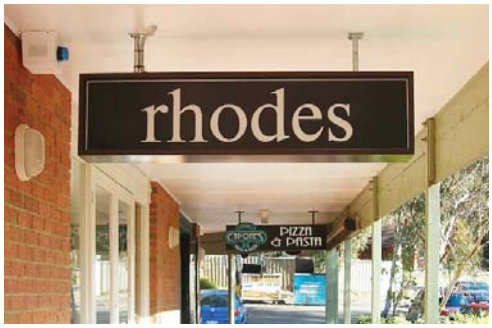
4.0 Built Form Design

4.2.5 SIGNAGE

Signage is an important component for navigation and business operation throughout BMSP. However, an excess of signage can impinge on visual amenity. The form and type of signage will need to be carefully managed on new developments so as to not overwhelm the visual quality of the public realm.

OBJECTIVES:

- Ensure signage responds to the context and desired streetscape character without dominating the streetscape and adversely affect visual amenity.
- Provide appropriate exposure for local businesses, activities and services.
- Ensure signage is integrated into building design and improves the overall appearance and legibility for residents and visitors.



Example: Signage

DEVELOPMENT CONTROLS:

- Signage shall be in accordance with the City's Signage Local Planning Policy.

DESIGN GUIDANCE:

- Signage should be of a scale and character that complements the pedestrian experience.
- Signage should be well designed, complementing the business and it's location.
- Opportunities should be provided to integrate signage with the built form.

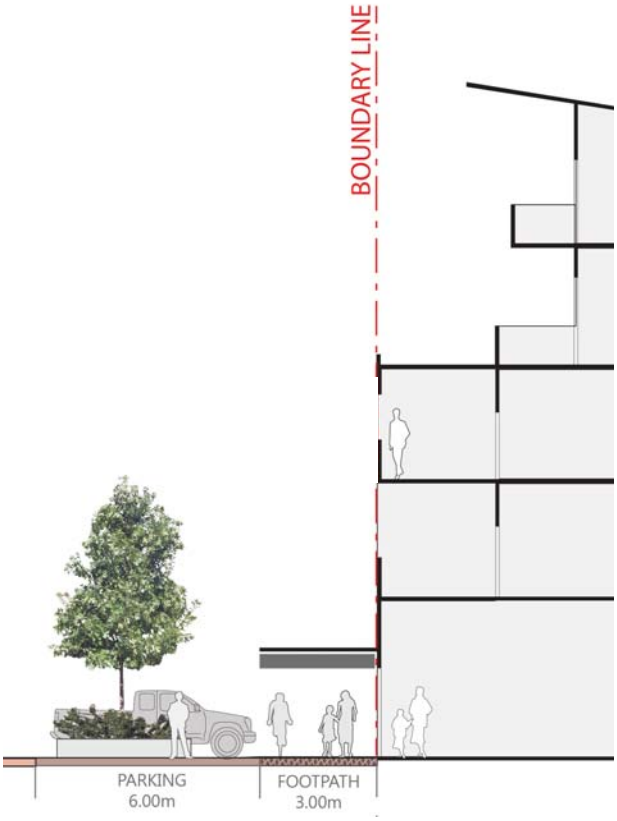


Figure 18: *Signage below awning*

4.2.6 MATERIALS

Materials, colour and texture are key factors in expressing the design qualities within an urban environment and accentuating the form and detail of individual buildings. Whilst these Design Guidelines do not prescribe a schedule of materials and colours, the intent of this section is to provide a visual palette to inspire and inform design direction within the centre.

OBJECTIVE:

+ Ensure materials contribute positively to the main street environment and quality of the public realm.

DEVELOPMENT CONTROL:

+ The colours and textures of materials shall reflect the local character and be appropriate for a 'main street' development.

DESIGN GUIDANCE:

+ The use of sustainable materials is encouraged.
+ Fine grain design of the ground plane which effectively uses materials and colour is promoted to add interest and character.
+ Materials and colours should be responsive to the environment and enhance passive solar design.
+ Durable materials and anti graffiti treatment should be considered within the retail environment.

Example: Mix of materials

Example: Mix of materials

4.0 Built Form Design

4.3 PUBLIC ART

The successful integration of art into public spaces and developments will assist in fostering a unique sense of character and identity for BMSP. Public art can add value to the community both aesthetically and economically.

OBJECTIVES:

- Enhance the urban environment and complement the existing character, contributing to BMSP's sense of place and identity.
- Create adaptable spaces within the public realm to facilitate temporary and interchangeable forms of art. This could include opportunities to integrate public art on facades, within community squares, wide junctions and temporary parklets along Belviidere Street.
- Improve legibility by introducing public art which assists in making streets, open spaces and buildings more identifiable.

DEVELOPMENT CONTROLS:

- The City of Belmont requires all development proposals within BMSP of a value greater than $4.5 million to provide public art in accordance with the described method for determining Public Art contributions detailed in the City of Belmont Public Art Masterplan. Alternatively, when requested by Council a cash-in-lieu payment will be accepted.
- The value of public art shall be no less than 1% of the value of the construction costs.
- Public Art provided in-kind shall be provided on site, or on crown land immediately adjacent to the site.

DESIGN GUIDANCE:

- Public Art, where provided on a development site in fulfilment of a condition of Planning Approval, shall not require a further Development Approval.
- Materials that will age well and are resilient to vandalism, accidental damage and theft should be used.
- The streetscape should allow for interchangeable public art of all shapes and forms.
- Public art is not confined to sedentary sculptures and should allow for human interaction and manipulation when appropriate.
- Public art should be integrated into the design of buildings from their inception.
- For the purpose of the City's Masterplan, public art does not include:
  - Business logos.
  - Directional elements such as supergraphics, signage or colour coding.
  - 'Art objects' which are mass produced such as fountains, statuary or playground equipment.
  - most art reproductions.
  - landscaping or generic hardscaping elements which would normally be associated with the project.
  - services or utilities necessary to operate or maintain artworks.

Example: Temporary art

Example: Public art within entry landscape

4.4 BUILDING SERVICES

4.4.1 PLANT SERVICES AND WASTE MANAGEMENT

Careful consideration is required when determining the location of plant services and waste management services. It is important to minimise the visual impact these can have on the character of an area, particularly when adjacent to the public realm.

Effective recycling measures should be promoted as the minimisation and management of waste can also contribute to the visual and physical amenity of buildings.

OBJECTIVES:

- Ensure the screening of building services is considered within the building design.
- Ensure the location of air-conditioning and plant services have a minimum impact on the overall built form and public realm.
- Minimise the potential impact of waste management infrastructure on the public realm, building design and local residents.

DEVELOPMENT CONTROLS:

- A waste management plan must be submitted with Development Applications for approval by the City of Belmont.
- Adequately sized services and waste storage areas are to be designed and located where they are not visible from the street and must be screened from view.
- Waste and recycling storage must be well ventilated.
- Solar panels are to be on the same plane as the roof and part of the design.
- Waste storage shall be located within the property boundary.
- Plant equipment must be visually and acoustically screened.

DESIGN GUIDANCE:

- The integration of plant services, solar panels and waste management within the building design should be adaptable for future uses.
- Service areas should be well-lit to facilitate safe use after hours.

Example: Metal screening device

Example: Shielding waste from public view

Example: Waste collection screened from public realm

5.0 Environmental Design

Whilst statutory environmental design requirements are covered by the provision of the National Construction code, the following section outlines additional opportunities for improved performance and creation of climate responsive built environments.

5.1 ENERGY EFFICIENCY

Passive environmental and energy efficient design is about the ability of a building to manage thermal performance (thermal comfort) and daylight access, providing increased amenity to occupants and reducing energy costs.

Consideration of prevailing winds (Figure 19), site orientation, building materials and design elements are all principles that should be kept in mind with the development of BMSP.

Example: Integration of solar panels within building design

OBJECTIVES:

- Integrate innovative design, technology and material into the design of buildings to establish high standards of energy efficiency and sustainability of new buildings.
- Ensure that the design and layout of the buildings enhances the thermal comfort of the occupants with direct access to fresh air.
- Enhance passive cooling, reducing the reliance on mechanical ventilation and supporting sustainable design.

DEVELOPMENT CONTROLS:

- Building design to allow access to cross ventilation and south-westerly breezes.
- Doors and windows must have good draft seals and be open-able where possible.
- All habitable rooms must have access to natural daylight.

DESIGN GUIDANCE:

- Particular attention should be given to the principles of passive solar design to ensure natural cross ventilation to all habitable rooms and as many non-habitable rooms.
- Consolidated heating and cooling infrastructure should be located in a central location.
- Ceiling spaces should be ventilated to assist passive cooling.

Figure 19: *Prevailing south-westerly winds*

5.2 SOLAR ACCESS AND SHADING

Building design throughout BMSP should respond to the local environment and conditions to offer protection from the sun and wind and to create a comfortable micro-climate within the precinct. Passive solar design can be utilised throughout the public realm and should be implemented throughout residential development.

OBJECTIVES:

- Encourage building designs that capitalise on solar access for passive heating and natural light to maintain thermal comfort.
- Encourage building design with envelopes that provide access to good airflow, taking advantage of breezes for passive cooling and natural ventilation.
- Reduce overall carbon/ greenhouse gas emissions and overall cost from heating and cooling derived from non-renewable energy.

Example: Adaptable solar screening

DEVELOPMENT CONTROLS:

- Building design must maximise access to winter sun and protect from the summer sun through the use of awnings, louvres and other shading devices.
- All habitable rooms and private open spaces must receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter.

DESIGN GUIDANCE:

- Building design should maximise north facing aspect (Figure 20).
- Single aspect apartments should have a northerly or easterly aspect.
- Selection and location of thermal mass materials should be considered to contribute to the efficiency of a buildings performance.
- Double glazing should be considered for larger areas of glass to limit heat transmission.
- Deciduous trees should be located on the northern side of buildings to provide shade in summer and allow sun in winter.

Figure 20: *North facing aspect*

5.3 WATER MANAGEMENT AND CONSERVATION

Water Sensitive Urban Design (WSUD) principles integrated within the built form and landscape design provides the opportunity to manage water collection, storage and re-use throughout the precinct.

Initiatives to aid water management, such as permeable pavement, green walls and rain gardens provides the opportunity to add to the aesthetics and reduce the heat island effect.

OBJECTIVES:

- Demonstrate an efficient approach to water management by reducing water demand, maximising water reuse and incorporating water management principles.
- Improve storm water quality entering waterways through the integration of WSUD.
- Minimise the impacts of storm water on site and the environment.
- Improve the micro-climate and enhance visual amenity through reduced hard surfacing.
- Ensure the most water efficient facilities and fixtures are installed for maximum water conservation.

DEVELOPMENT CONTROLS:

- Plant and tree species must be suitable for the climate and for the location.
- Water Sensitive Urban Design (WSUD) shall be employed within the development.

DESIGN GUIDANCE:

- Stormwater should be treated on site before being discharged to receiving waters.
- Maximise the percentage of pervious surfaces to allow percolation of stormwater into the ground, such as within swales and planting.
- Reduce the consumption of potable water through the installation of waterwise fixtures and fittings.
- Consider the integration of green roofs and green/living walls to capture, detain and treat rainwater before it enters the drainage system.
- Incorporate permeable pavement systems in upgraded roads and car parking.

Example: Green wall

Example: Permeable concrete interlocking pavements

Example: Swale/ street tree planting

Example: Swales/ street tree planting

6.0 Submission Guide

DESIGN GUIDELINE CHECKLIST

To be included when lodging a Development Application with the City of Belmont Council.

	The applicant is to note whether their design complies (tick) or does not comply (cross) with the design guidelines checklist below.	APPLICANT Y/N	CoB Y/N	COMMENTS
3.0	**MOVEMENT**			
3.1	**Vehicle Access**			
	Pedestrian and vehicle entry points are well defined and separated from one another.			
	Footpaths are to be maintained as the priority movement network within BMSP. Crossovers and driveways shall be terminated at the footpath.			
	Redevelopment of Belvidere Main Street between Keymer and Gardiner Street as continuous shared space with focus on pedestrian priority.			
3.2	**Vehicle Parking**			
	Vehicle parking shall be provided in accordance with the requirements of the Scheme and relevant Local Planning Policy and Residential Design Codes.			
	Permeable interlocking pavements shall be used for all car parking. Tree cells to be used for all new tree planting to car parking and medians.			
	Car parking shall not dominate the street frontage.			
	Enclosed at grade or upper level decked parking may be acceptable as part of a mixed use development on confined sites. Enclosed car parking must be sleeved with lettable floorspace, adequately screened from public view and not impact on the activation of streets or public spaces.			
	A 2-3m high acoustic wall is required along the south-eastern boundary (Figure 9) to mitigate noise from adjoining vehicle parking and commercial activities on adjacent residential dwellings.			
3.3	**Pedestrian Linkages**			
	Arcade links should provide for a walkway width of 3 metres minimum, whilst public links (PAW) should allow for a 6 metre minimum width.			
	Links through arcades or PAW are to permit a throughview to the end to enhance security.			
	Arcade or PAW are to be accessible during normal retail hours, with public links being permanently open.			
	No building 'back of house' facilities shall be oriented along defined pedestrian routes.			
3.4	**End of Trip Facilities**			
	All new development shall provide an adequate supply of lockable bike storage.			

DESIGN GUIDELINE CHECKLIST

To be included when lodging for Design Approval with the City of Belmont Council.

	The applicant is to note whether their design complies (tick) or does not comply (cross) with the design guidelines checklist below.	**APPLICANT Y/N**	**CoB Y/N**	**COMMENTS**
	Bicycle parking provisions shall be in accordance with the R-Codes.			
	Building that includes any non-residential development shall include end of trip facilities to support active transport.			
3.5	**Delivery Services**			
	A servicing management strategy is to be prepared for all retail and commercial development			
4.0	**BUILDING FORM DESIGN**			
4.1	**Primary Building Controls**			
4.1.1	**Building Height**			
	Buildings must be a maximum of 3 storeys at the street edge.			
	The maximum podium building height is 12m (3 storeys).			
	Buildings shall be no higher than 5 storeys.			
4.1.2	**Building Setbacks**			
	Lot boundaries are to be in accordance with realigned BMSP lot boundaries - Figure 15			
	Building setbacks shall be in accordance with Figure 16.			
	All portions of built form and above ground structure must be accommodated within the property boundary-			
	A minimum 3m setback is required above the podium height 12m (3 storeys).			
	Buildings on corner sites (where there are no road truncations or truncations are less then 3 metres by 3 metres) shall define the corner by providing a 3m x 3m truncation void of any building but may include awnings, balconies etc.			
4.2	**Architectural Character**			
4.2.1	**Building Facades**			
	Blanks walls addressing the public domain are not permitted.			
	The building frontage of developments facing the street and public open space must be comprised of at least 60% openings/glazing at ground level.			
	Buildings are easily read as to their function and purpose.			
	Service and vehicle access are not along building edges designated as 'active frontages' (Figure 7) - pedestrian and vehicle entry points are separate and well defined.			

6.0 Submission Guide

DESIGN GUIDELINE CHECKLIST

To be included when lodging for Design Approval with the City of Belmont Council.

	The applicant is to note whether their design complies (tick) or does not comply (cross) with the design guidelines checklist below.	**APPLICANT Y/N**	**CoB Y/N**	**COMMENTS**
4.2.2	**Building Corners**			
	Corner buildings address both street and/or public realm frontages.			
	Corner buildings include strong architectural expression.			
4.2.3	**Roof Form**			
	Roof structures are designed to conceal roof plant and equipment from public view.			
	Roof design facilitate adequate access to light, air and shade for the building occupants.			
	Residential roof terraces or loft spaces within the roof space do no extend beyond the maximum building height.			
4.2.4	**Awnings**			
	A covered continuous pedestrian walkway is provided along all 'active frontages' with high pedestrian activity.			
	Awnings extend into the street space (footpath or verge) between 2-3.5m and are structurally cantilevered.			
	Awnings have a minimum height clearance of 3.5m			
	Weather protection is provided to all entrances of ground floor mixed use and residential buildings.			
4.2.5	**Signage**			
	Signage suspended beneath a canopy have a minimum clearance of 2.7m.			
	Signage is limited to being on awnings and a single facade sign on the primary street frontage.			
	Signage is in accordance with LPP No. 12.			
	All signage has been submitted to Council for planning approval prior to construction.			
4.2.6	**Materials**			
	The colours and textures of materials reflect the local character and are appropriate for a 'main street' development.			
4.3	**Public Art**			
	Development proposals is of a value greater than $4.5 million requiring public art to be provided in accordance with the Public Art contributions			
	The value of public art is no less than 1% of the value of the construction costs.			

DESIGN GUIDELINE CHECKLIST

To be included when lodging for Design Approval with the City of Belmont Council.

	The applicant is to note whether their design complies (tick) or does not comply (cross) with the design guidelines checklist below.	APPLICANT Y/N	CoB Y/N	COMMENTS
	Public Art provided in-kind is provided on site, or on crown land immediately adjacent to the site.			
4.4	**Building Services**			
4.4.1	**Plant Services and Waste Management**			
	A waste management plan has been submitted with Development Applications for approval by the City of Belmont.			
	Adequately sized services and waste storage areas are designed and located where they are not visible from the street and screened from view.			
	Waste and recycling storage is well ventilated.			
	Solar panels are on the same plane as the roof and part of the design.			
	Waste storage is located within the property boundary.			
	Plant equipment is visually and acoustically screened.			
5.0	**ENVIRONMENTAL DESIGN**			
5.1	**Energy Efficiency**			
	Building design allows access to cross ventilation and south-westerly breezes.			
	Doors and windows have good draft seals and are open-able where possible.			
	All habitable rooms have access to natural daylight.			
5.2	**Solar Access and Shading**			
	Building design maximise access to winter sun and protect from the summer sun through the use of awnings, louvres and other shading devices.			
	All habitable rooms and private open spaces receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter.			
5.3	**Water Management and Conservation**			
	Plant and tree species are suitable for the climate and for the location.			
	Water Sensitive Urban Design (WSUD) have been employed within the development.			

Appendix A

Figure 2: *Cross Section AA: Belvidere Main Street*

Figure 1: *Belvidere Main Street Precinct indicative built form within the surrounding context.*

Figure 3: *Belvidere Main Street Precinct Stage 2 - Indicative Development Plan*

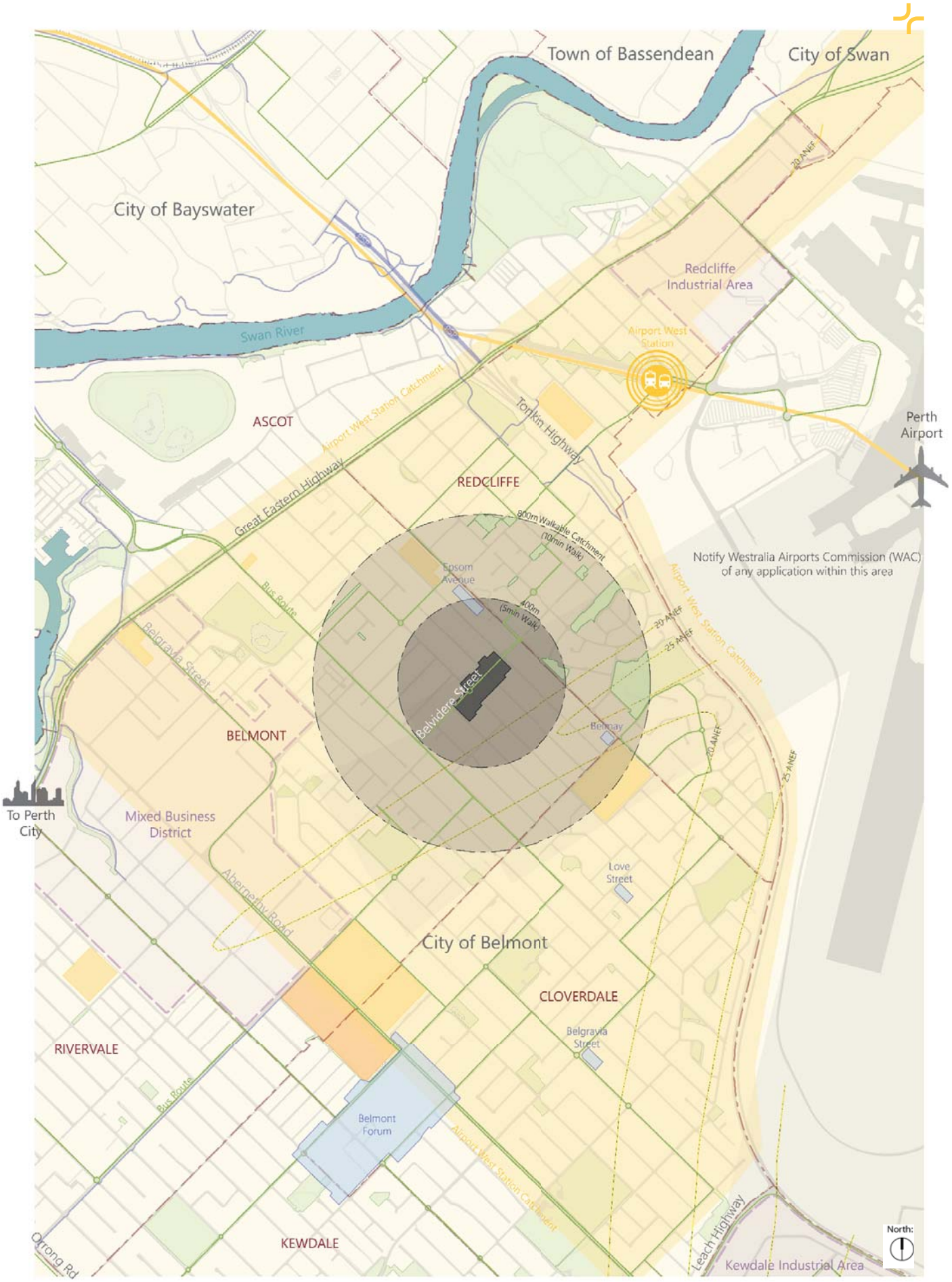


Figure 4: *Site Location Plan*

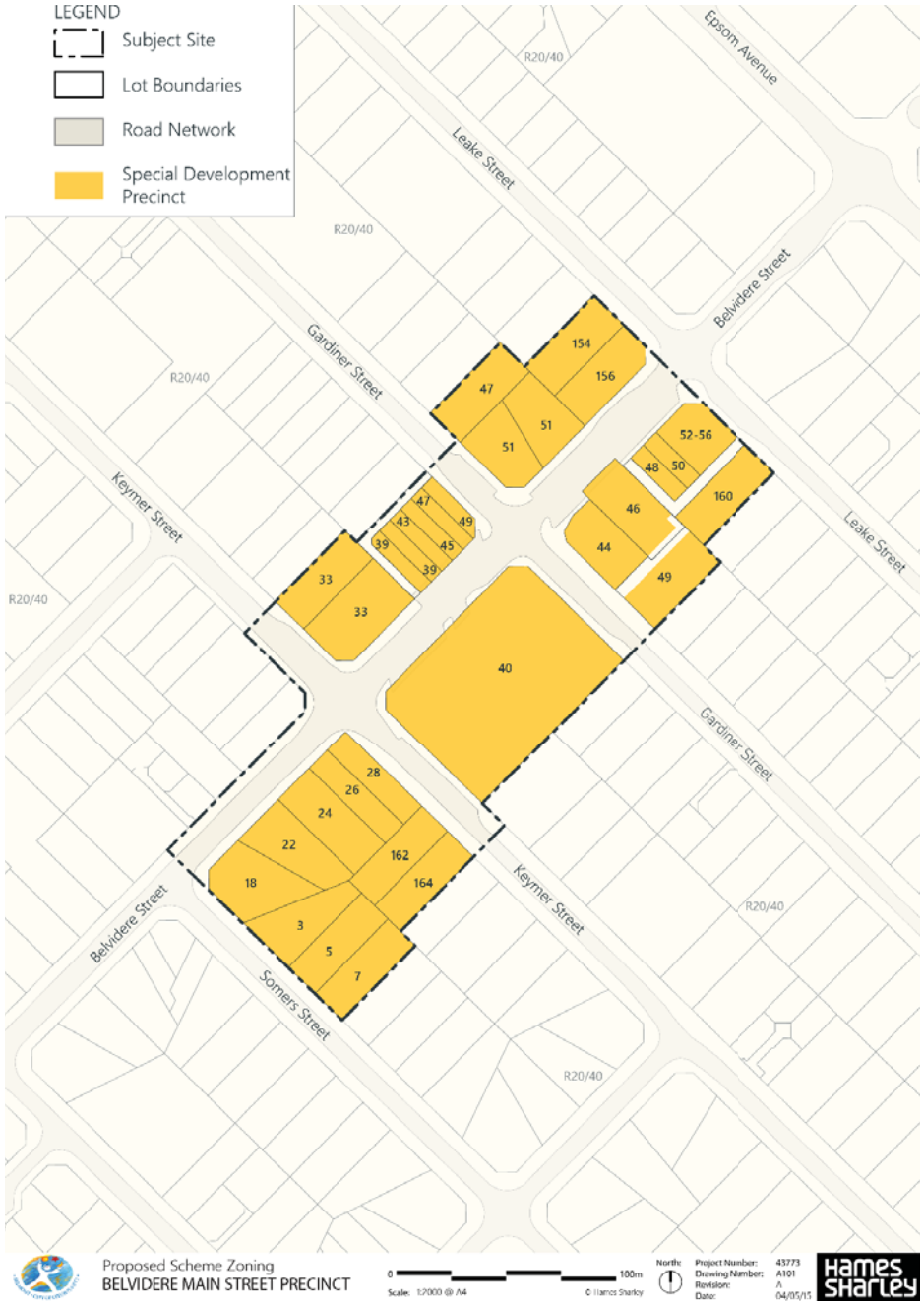


Figure 5: *Proposed Local Planning Scheme Amendment*

Figure 6: *Site Context*

Figure 8: *Cross Section BB: Belvidere Main Street*

Figure 7: *Active Street Frontage*

Figure 9: *Parking*

Figure 10: *Vehicle parking and pedestrian links*

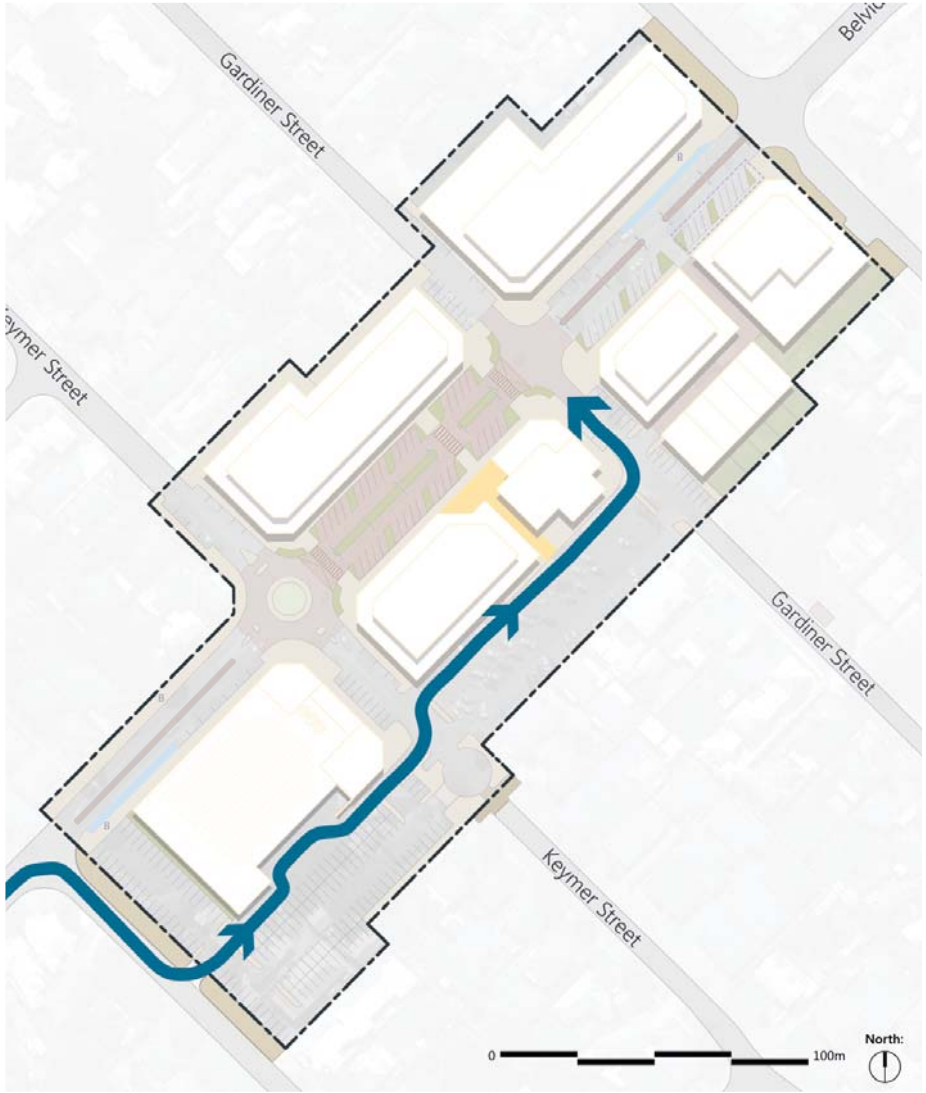


Figure11: *Proposed Primary Service Route*

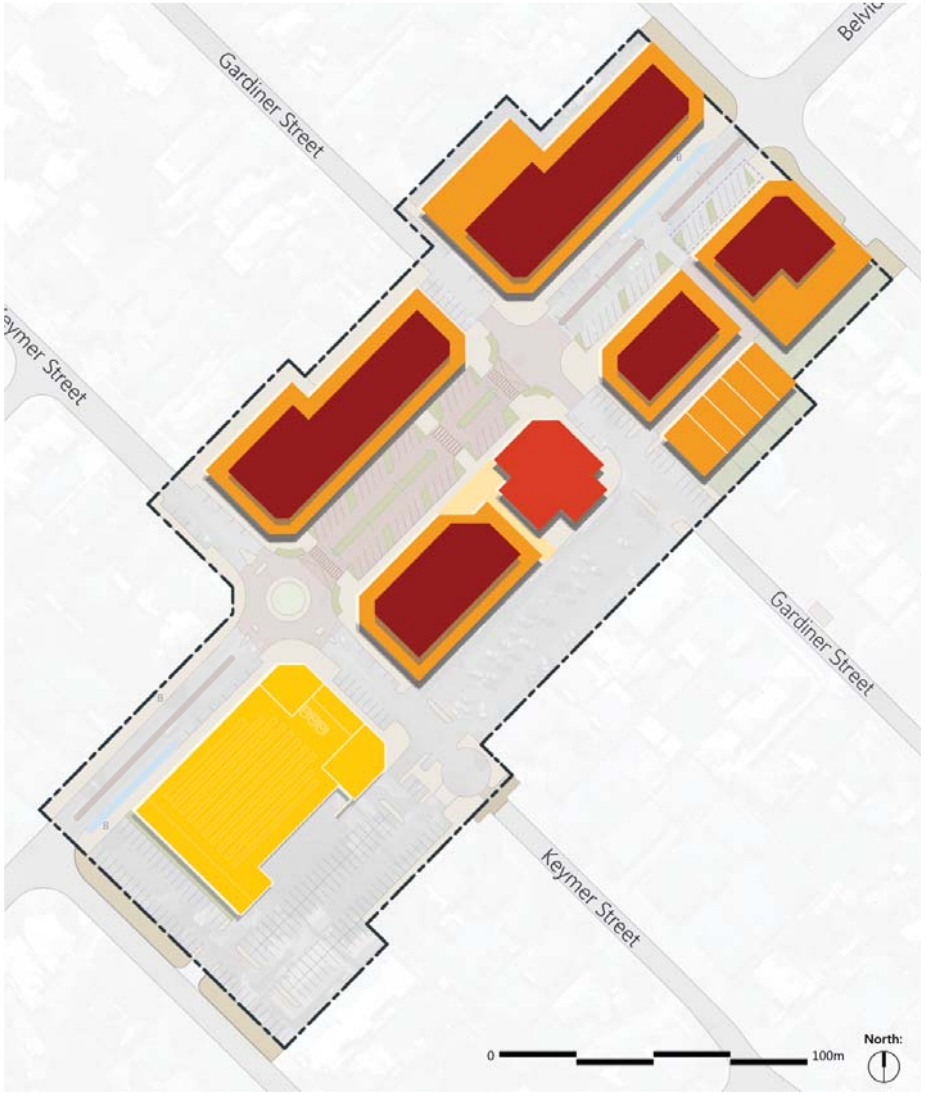


Figure 12: *Building Heights*

Figure 14: *Cross Section CC - Relocated Supermarket fronting Belvidere Main Street*

Figure 13: *Revised Lot Boundaries*

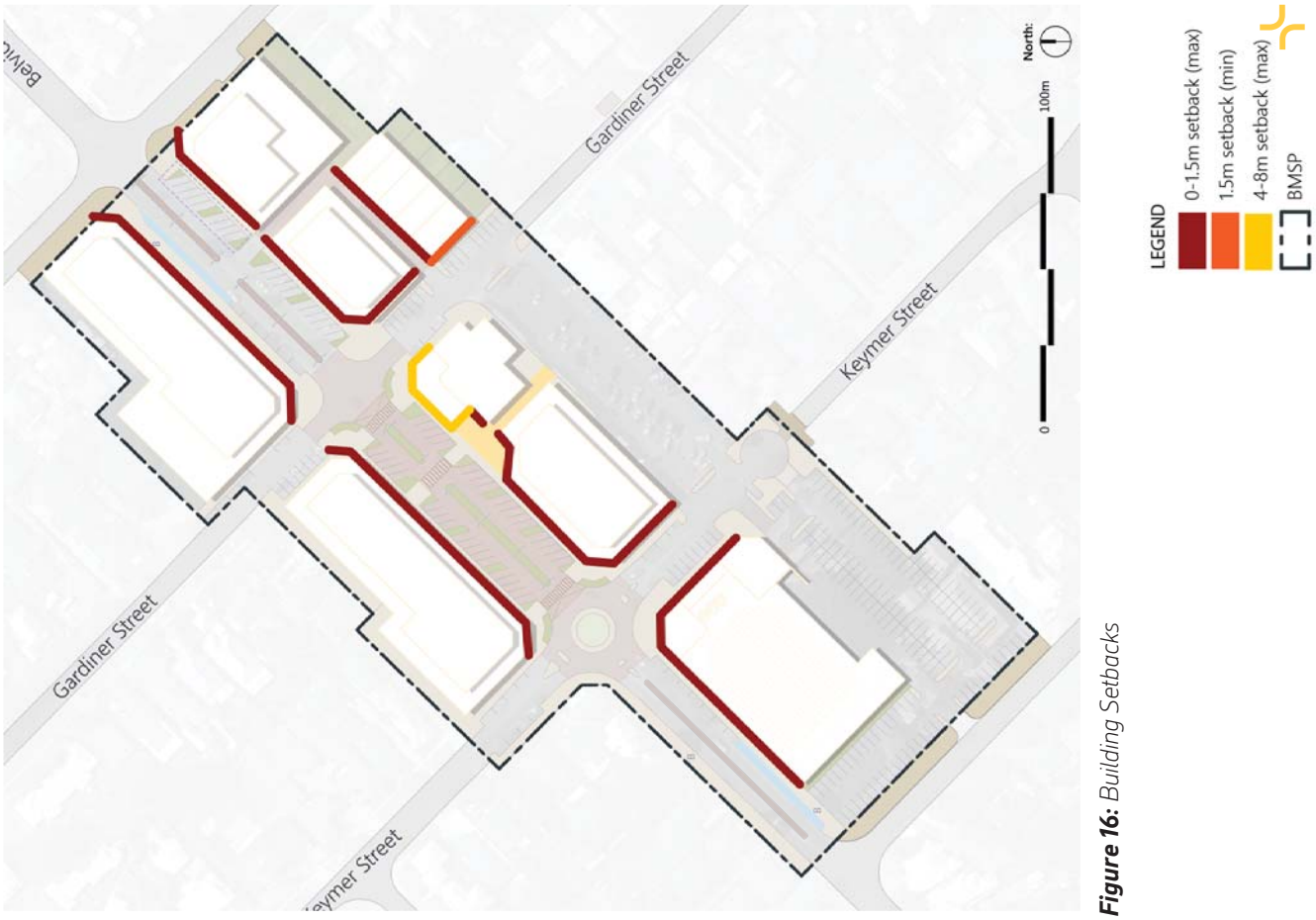


Figure 16: *Building Setbacks*

Figure 15: *Cross Section DD - Relocated Tavern fronting Belvidere Main Street*

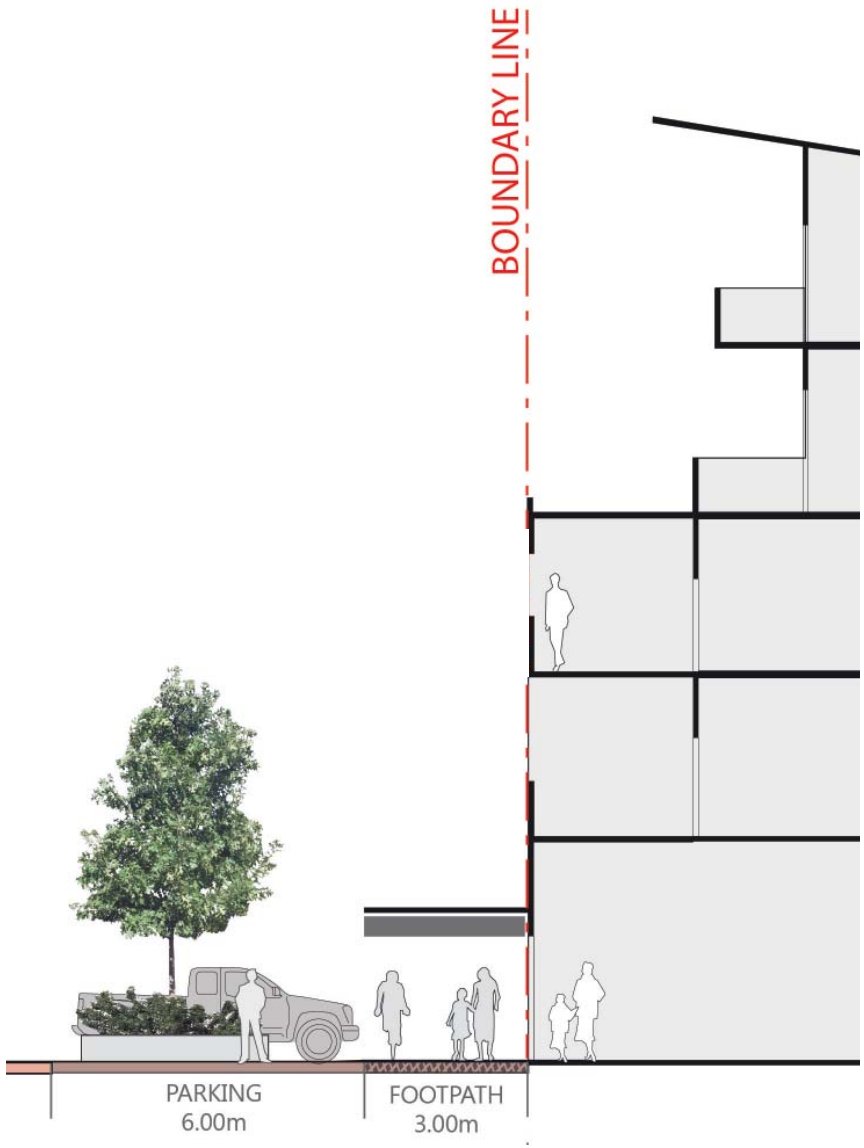


Figure 17: *Awnings*

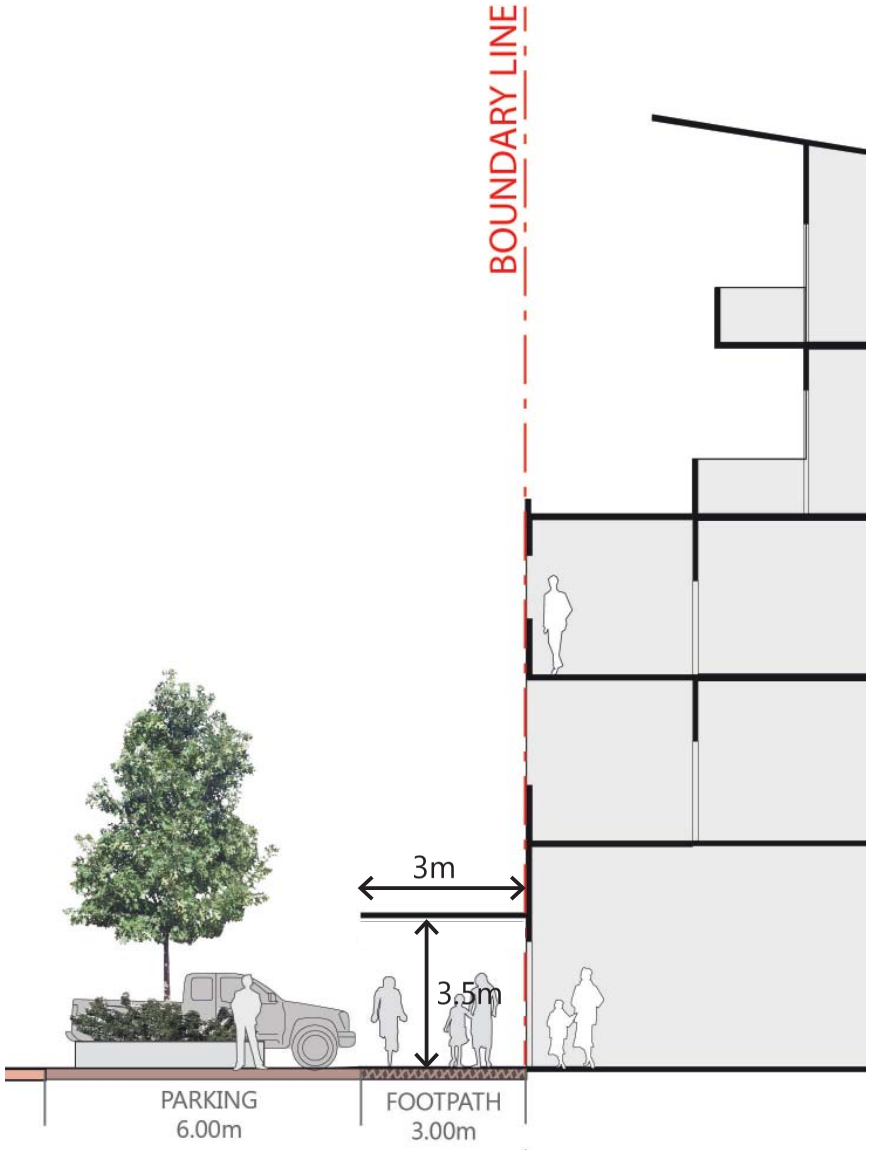


Figure 18: *Signage below awning*

Figure 19: *Primary Wind-Flow*

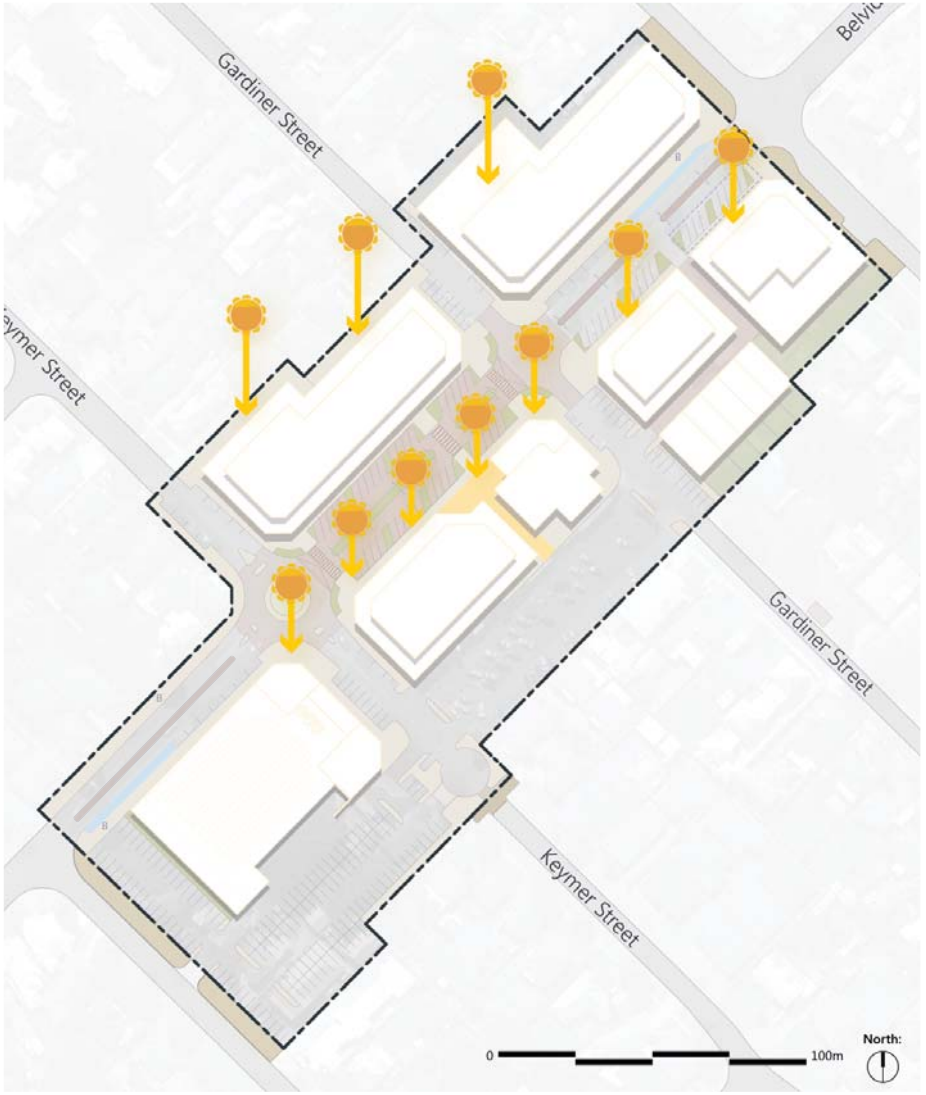


Figure 20: *Primary Sun Exposure*

Glossary

ACOUSTIC PRIVACY
A measure of sound insulation between buildings, apartments and communal areas, and between external and internal spaces.

ACTIVE FRONTAGES
A building frontage that adds interest, life and vitality to the public realm. This is achieved via articulation and/or accommodating lively internal uses visible from the adjacent public realm that may spill onto the street.

ADAPTIVE REUSE
The conversion of an existing building or structure from one use to another, or from one configuration to another.

AMENITY
The 'liveability', comfort or quality of a place which makes it pleasant and agreeable to be in for individuals and the community. Amenity is important in the public, communal and private domains and includes the enjoyment of sunlight, views, privacy and quiet. It also includes protection from pollution and odours.

BACK OF HOUSE
Facilities located to the rear of buildings, away from primary pedestrian pathways, inclusive of waste storage, air conditioning units and extractor fans.

BUILDING LINE
The predominant line formed by the main external face of the building. Balconies or bay window projections may or may not be included depending on desired streetscape.

BUILDING HEIGHT
Maximum building envelop heights as defined in the Building Heights Plan.

BUILDING DEPTH
The overall cross section dimensions of a building envelope. It includes the internal floor plate, external walls, balconies, external circulation and articulation such as recesses and steps in plan and section.

CADASTRE
The current sub divisional patter of a locality on the ground e.g. boundaries, roads, waterways, parcel identifiers and names.

CLERESTORY
High level windows that can be part of a wall above a lower roof.

COMMUNAL OPEN SPACE
Outdoor space located within the site at ground level or on a structure that is within common ownership and for the recreational use of residents of the development. Communal open space may be accessible to residents only, or to the public.

CORE
Vertical circulation (lift and/or stair) within a building.

COURTYARD
Communal space at ground level or on a structure (podium or roof) that is open to the sky, formed by the building and enclosed on 3 or more sides.

DAYLIGHT
Consists of both skylight (diffuse light from the sky) and sunlight (direct beam radiation from the sun). Daylight changes with the time of day, season, and weather conditions.

DUAL ASPECT APARTMENT
Cross ventilating apartments which have at least two major external walls facing in different directions, including corner, cross-over and cross-through apartments.

FACADE
The external face of a building, generally the principle face, facing a public street of space.

GREEN ROOF
A roof surface that supports the growth of vegetation, comprised of a waterproofing membrane, drainage layer, organic growing medium (soil) and vegetation. Green roofs can be classified as either extensive or intensive, depending on the depth or substrate used and the level of maintenance required.

GREEN WALL
A wall with fixtures to facilitate climbing plants. It can also be a cladded structure with growing medium to facilitate plant growth.

HABITABLE ROOM
A room used for normal domestic activities, and includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room and sunroom; but excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods, as defined by the BCA.

MID-WINTER
The 21st June (winter solstice), when the sun is at the lowest point in the sky.

MIXED USE DEVELOPMENT
Defined in the LPP 11

MULTI DWELLING HOUSING
Defined in the R-Codes

NATURAL CROSS VENTILATION
Natural ventilation which allows air to flow between positive pressure on the windward side of the building to the negative pressure on the leeward side of the building providing a greater degree of comfort and amenity for occupants. The connection between these windows must provide a clear, unobstructed air flow path. For an apartment to be considered cross ventilated, the majority of the primary living space and n-1 bedrooms (where n is the number of bedrooms) should be on a ventilation path.

NON-HABITABLE ROOM
A space of a specialised nature not occupied frequently or for extended periods, including a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, clothes-drying room, as defined in the BCA.

ON-GRADE
On ground level.

OPERABLE SCREENING DEVICE
Sliding, folding or retractable elements on a building designed to provide shade, privacy, and protection from natural elements.

OPERABLE WALLS
Sliding, folding or retractable elements on a building designed to provide shade, privacy, and protection from natural elements.

PERIMETER BLOCK
Developments where buildings generally define the street edge and enclose or partially enclose an area in the middle of the block.

PODIUM
The base of a building upon which taller elements are positioned.

POTABLE WATER
Water which conforms to Australian Standards for drinking quality.

PRIVATE OPEN SPACE
Outdoor space located at ground level or on a structure that is within private ownership and provides for the recreational use of residents of the associated apartment.

PUBLIC OPEN SPACE
Public land for the purpose of open space and vested in or under the control of a public authority.

SEMI ACTIVE FRONTAGES
May include a few blind or passive facades but is composed of quality materials and refined detail. This includes residential frontages.

SILHOUETTE
A building outline viewed against the sky.

SOLAR ACCESS
The ability of a building to continue to receive direct sunlight without obstruction from other buildings or impediment, not including trees.

STREET SETBACK
The space along the street frontage between the property boundary and the building. Refer to the building line or setback as defined in the Lot Boundary Plan and Building Setback Plan.

STUDIO APARTMENT
An apartment consisting of one habitable room that combines kitchen, living and sleeping space.

SUNLIGHT
Direct beam radiation from the sun.

UNIVERSAL DESIGN
International design philosophy that enables people to carry on living in the same home by ensuring apartments are able to change with the needs of the occupants.

GOVERNANCE REFERENCES

Statutory Compliance	*Planning and Development Act 2005* *Planning and Development (Local Planning Schemes) Regulations 2015* Local Planning Scheme No. 15
Industry Compliance	State Planning Policy 4.2 – Activity Centres for Perth and Peel State Planning Policy 7.0 – Design of the Built Environment State Planning Policy 7.3 – Residential Design Codes
Organisational Compliance	Local Planning Policy No. 11 – Public Art Contribution Local Planning Policy No. 12 – Advertisement Signs
Process Links	

LOCAL PLANNING POLICY ADMINISTRATION

Directorate	**Officer Title**	**Contact**
Development & Communities	Manager Planning Services	9477 7222

Version Date	13/10/2020	**Review Cycle**	Triennial	**Next Due**	13/10/2023

Version	**Decision to Advertise**	**Decision to Adopt**	**Synopsis**
1	15/12/2015 OCM (Item 12.3)	24/05/2016 OCM (Item 12.2)	Adopt policy to provide development standards to ensure suitable quality design outcomes, improving the amenity of the area.