

2.1 Proposed built form controls

The purpose of the recommended built form framework is to provide guidance on preferred outcomes that will address the key issues identified in the urban design analysis, implement the vision for each neighbourhood, and respond to the key messages from community and stakeholder consultation.

There was strong support from the community for clearer built form guidance for future development in Box Hill. In particular, the importance of protecting and improving the amenity of the public realm was emphasised. In response, the impacts of taller buildings need to be managed to protect the quality of the public realm, provide clear views to the sky from the street and improve the quality of the building at the ground level.

### How is the distinct character of each precinct defined and delivered?

1. Urban character statements for each precinct are expressed in the Structure Plan and integrated into the precinct objectives in the ACZ, which offers further guidance about the character and built form outcomes sought.

2. The precinct map, objectives and guidelines in the ACZ provide direction about the development outcomes to be achieved in each precinct. These have been developed with specific reference to the vision statements for each precinct.

3. Overshadowing controls form the primary amenity control to ensure that the amenity of key public spaces contributing to the distinct character and quality of each precinct are protected from overshadowing.

4. Preferred building height provisions are expressed for each precinct, which link to an overarching logic for building heights across the centre, and are tailored to respond to the specific character and amenity outcomes sought for each precinct.

### How are built form and amenity outcomes managed?

1. The ACZ includes Centre Wide Design and Development provisions relating to:
   - Overshadowing
   - Street wall height and upper level setbacks (above street wall)
   - Building height
   - Wind effects
   - Ground level setback
   - Building separation, side and rear setbacks
   - Active street frontages
   - Vehicle access, car parking and loading
   - Building services
   - Architecture, articulation, materials and finishes
   - Landscape contributions
   - Pedestrian links

2. Further direction is provided within the precinct objectives and guidelines, as needed, to give effect to precinct specific outcomes that are distinctly different from those otherwise delivered by the Centre Wide provisions.
2.2 Primary controls

1. Overshadowing and wind controls

Overshadowing controls are a key determinant for building height on adjoining sites. These controls override the maximum preferred height specified to ensure that the amenity of the primary pedestrian network and key public spaces are protected from overshadowing. In addition, wind effects controls ensure that taller buildings do not result in unsafe and uncomfortable wind conditions.

2. Street wall height, upper level setbacks

Maximum street wall heights and specification of minimum and preferred upper level setbacks above establishes a base level of height that relates to the width of streets and laneways and defines setbacks above the street wall. This also contributes to a sense of enclosure while ensuring access to sunlight and views to the sky.

3. Building height

Preferred maximum overall building heights are identified in specific areas of the centre and within neighbourhoods and are linked to specific urban character and amenity outcomes sought.
Ground level setbacks and active street frontages

The definition of Ground level setbacks will help improve the quality of the building at the ground and define the types of interfaces. Guidance on the activation of street frontages and interfaces ensures high levels of visual and physical engagement between people within building and those on the street and contributes to the vibrancy of street life in the centre.

Building separation, side and rear setbacks

Ensuring building separation, and side and rear setbacks are provided within developments and provide clear views to the sky from the street and improves the amenity and outlook from within buildings.
### 2.2.1 Overshadowing

**Recommendation**

*Introduce overshadowing controls to key public spaces and streets which determine maximum building heights*

A major contributory factor to the quality and amenity of the public realm for pedestrians is the amount of sunlight they receive during the middle of the day at cooler periods of the year when the sun is lower in the sky. There is a need for clear and explicit overshadowing and solar access controls across the centre and specifically on main streets on the primary pedestrian network and key existing and future public spaces.

These controls will apply at specific times of the day at winter solstice and the spring equinox and will ensure that these areas are protected from overshadowing from future development. Planning permit applicants must provide shadow modelling to demonstrate that relevant overshadowing controls are satisfied.

These controls were developed in response to community concerns that the amenity of key streets and spaces would be impacted by taller built form on adjacent sites. There are numerous approved permits that would not meet these controls if they were constructed, such outcomes are not supported on urban design grounds.

#### Table 2
**Winter solstice control, 11:00am to 2:00pm, 21 June (mandatory requirement)**

<table>
<thead>
<tr>
<th>Overshadowing Control Area as shown in Figure 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box Hill Gardens (measured 30m from property boundaries to the north)</td>
</tr>
<tr>
<td>Harrow Street future open space</td>
</tr>
<tr>
<td>Market Street (north of Main Street) and Main Street mall</td>
</tr>
<tr>
<td>Poplar Street open space</td>
</tr>
<tr>
<td>Station Street/Harrow Street open space</td>
</tr>
<tr>
<td>Whitehorse Road Southern Public Space (measured 30m from property boundaries to south)</td>
</tr>
</tbody>
</table>

#### Table 3
**Spring equinox control, 11:00am to 2:00pm, 22 September (Mandatory requirement)**

<table>
<thead>
<tr>
<th>Overshadowing Control Area as shown in Figure 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box Hill Gardens (measured 30m from property boundaries to the north)</td>
</tr>
<tr>
<td>Bruce Street (west side) - between Whitehorse Road and Irving Avenue</td>
</tr>
<tr>
<td>Carrington Road (south side)</td>
</tr>
<tr>
<td>Elgar Road (West side) – between Whitehorse Road and Victoria Crescent</td>
</tr>
<tr>
<td>Hopetown Parade (south side)</td>
</tr>
<tr>
<td>Nelson Road (west side) – between Whitehorse Road and Nelson Road</td>
</tr>
<tr>
<td>Nelson Road extension (west side)</td>
</tr>
<tr>
<td>Poplar Street (both sides) – north of Whitehorse Road</td>
</tr>
<tr>
<td>Rutland Road (south side)</td>
</tr>
<tr>
<td>Shipley Street (both sides) - between Whitehorse Road and Irving Avenue</td>
</tr>
<tr>
<td>Station Street (both sides) – between Whitehorse Road and Irving Avenue</td>
</tr>
<tr>
<td>Wellington Road (both sides)</td>
</tr>
<tr>
<td>Whitehorse Road (south side footpath on northern edge of Southern Public Open Space) – between Elgar Road and Kangerong Street</td>
</tr>
<tr>
<td>Young Street and Young St extension (west side)</td>
</tr>
</tbody>
</table>


**Figure 4** Overshadowing control areas

- Structure Plan boundary
- Belgrave/Lilydale railway line
- Tram line

Overshadowing protection areas
- Spring equinox | existing areas
- Spring equinox | future open space
- Winter solstice | existing areas
- Winter solstice | future open space
**Figure 5** Section A: Wellington Road 20m north/south street demonstrating no additional overshadowing above the street wall height between 11am and 2pm on 22 September.

**Figure 6** Section B: Whitehorse Road (west of Nelson Road) 30m east/west alignment street demonstrating no additional overshadowing above the street wall height between 11am and 2pm on 22 September.

**Figure 7** Section C: Whitehorse Road (east of Bruce Street) 30m east/west alignment street demonstrating no additional overshadowing above the street wall height between 11am and 2pm on 21 June.
2.2.2 Street wall height and upper level setbacks

Recommendation

Introduce preferred maximum street wall heights that relate to the width of streets and laneways

Controls that guide the height of the street wall, or the height of built form at the interface with the public realm, help deliver inviting, human-scaled public spaces that encourage pedestrian movement. An appropriately scaled wall height that relates to the width of the street contributes to creating a sense of enclosure without overwhelming the public realm and provides access to sunlight and views to the sky. Currently, there is no clear guidance on preferred street wall heights in the activity centre.

Typically, most streets within Box Hill are approximately 20 metres wide. Applying a 1:1 ratio of street width to wall height suggests 20 metres is an appropriate baseline measure for wall height across the centre. However, there are a number of specific contexts where the preferred maximum street wall height varies from this ratio.

— Within the traditional town centre the established wall heights that define the character of the precinct should be retained. These are typically 2 storeys high, or up to 11 metres. Where there is a missing frontage or lower individual frontage the preferred height should be set in proportion to the adjoining frontages.

— Whitehorse Road is the focus for more substantial built form (outside of the traditional town centre) and the street wall requires emphasis in proportion to this role. The road reserve width varies from 30 to 60 metres. However, a 60 metre street wall would be wholly inappropriate for the section between Nelson Road and Kangerong Road, not only because of its overwhelming scale but this would result in the overshadowing of the proposed urban space on the southern carriageway of Whitehorse Road. As a result, a street wall height of 30 metres would be consistent with existing width of Whitehorse Road west of Nelson Road and the reconfigured width of the carriageway east of Nelson Road. This 1:1 ratio would provide an appropriate balance between enclosure and pedestrian amenity adjacent to the buildings.

— Laneways and new pedestrian links require a lower street wall to provide access to light and sky views, however a 1:1 ratio (6–8 metres) would be disproportionately low and would result in a poorly defined building base. This would be disproportional to the overall maximum height of the building. The preferred wall height for laneways and new pedestrian links is 11 metres to accommodate a scale of 2-3 storeys at these interfaces. Importantly, this lower street wall would provide laneways and new pedestrian links with good levels of day light during the day. A taller street wall height would compromise this key amenity outcome.

— In minor streets in peripheral areas a preferred street wall of 15 metres applies, consistent with the lower overall preferred heights in these locations.

— Transition zone control for corner sites with varying maximum street wall heights, see Figure 9 (overleaf).

— In no location should the street wall height be more than twice the width of the adjoining street.
The setbacks for upper level built form should be sufficient to create a visual distinction between upper and lower forms. As buildings increase in height, this upper level setback should be larger, as set out in the table below. The traditional town centre will require a larger upper level setback whilst retaining the existing street wall height. This ensures that developments in this area responds to heritage and does not detract from the fine-grain urban character of traditional town centre.

### Table 4 Upper level setbacks (for all built form above street wall height)

<table>
<thead>
<tr>
<th>Overall building height</th>
<th>Mandatory</th>
<th>Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional town centre</td>
<td>Retain existing street wall height</td>
<td></td>
</tr>
<tr>
<td>&lt;17.5m (5 storeys or less)</td>
<td>5m</td>
<td>10m</td>
</tr>
<tr>
<td>All other areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;28m (8 storeys or less)</td>
<td>3m</td>
<td>5m</td>
</tr>
<tr>
<td>28m-52m (8–15 storeys)</td>
<td>5m</td>
<td>10m</td>
</tr>
<tr>
<td>≥52m (greater than 15 storeys)</td>
<td>10m</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Figure 8** Indicative section demonstrating 20m street wall height in relation to a 20m street and the application of mandatory and preferred upper level setbacks for a building with an overall height of 28m.

**Figure 9** Transition zone provisions For corner sites with differing street walls on each side of the street, a transition zone applies to half the depth along the side with the lower street wall height. The higher street wall height is allowed within the green zone, however, the lower street wall applies beyond this zone.
Figure 10 Preferred maximum street wall heights

- Structure Plan boundary
- Belgrave/Lilydale railway line
- Existing open space
- Street blocks

Street wall height (metres)

- 30m
- 20m
- 15m
- 11m

Traditional town centre
Retain existing street wall height
2.2.3 Preferred maximum building height

Recommendation

Introduce preferred maximum building heights that respond to the vision and preferred character and amenity outcomes of each neighbourhood.

It is proposed that clearly specified maximum building heights are introduced to ensure that building heights respond to the vision and preferred character and amenity outcomes of each neighbourhood. The vision statements contained in the neighbourhood plans outline preferred building typologies that are aligned with the preferred land use outcomes of each neighbourhood.

Furthermore, maximum building heights were informed by the need to protect key public spaces and the primary pedestrian network from overshadowing. As a result, the overshadowing requirements override the preferred maximum height in every case. Similarly, the building height should stay in proportion with the surrounding development to provide an appropriate transition, particularly to adjoining heritage places when viewed from the street, for example in the traditional town centre or the town hall context.

As an example of the general underlying rationale in establishing heights, in the Central Neighbourhood, where the historical scale of the traditional town centre and key adjoining public spaces on Market and Main Streets are highly valued, it is proposed that the existing fine-grain and scale of 2 storeys are retained. There is an opportunity to provide for additional height above this scale where it provides an appropriate response to heritage and the surrounding development. This would require the incorporation of a mandatory upper level setback of 5m above this 2 storey scale. Elsewhere in the core, taller mixed-use podium towers are encouraged on both Box Hill Central sites where off-site impacts (such as overshadowing, wind effects, views to the sky) are appropriately managed. Similarly, a stepping down to mid-rise mixed use scale on Carrington Road ensures an appropriate transition is achieved to residential areas to the south of Cambridge Street.
Figure 11 Preferred building heights

Note: The estimated maximum number of storeys are based on a minimum floor to floor height of 4 metres at ground level, 3.5 metres for commercial levels and 3.2 metres for residential levels. A greater floor to floor height than the minimum will reduce the overall number of storeys.
2.2.4 Wind effects

Recommendation

Introduce wind effects controls

As with sunlight, comfortable and safe wind conditions are also a key contributory factor to the quality of the public realm. There is a need to ensure that taller buildings do not result in windy conditions that would impact on the comfort of key public spaces and streets. This is particularly important for urban spaces and open spaces where sitting are provided. Similarly, there is a need to ensure comfortable wind conditions for standing on streets with higher levels of pedestrian activity. The specification of wind maximum wind speeds for sitting, standing and walking areas will provide clear and measurable guidelines for comfortable wind conditions.

Table 6 Wind conditions and requirements

<table>
<thead>
<tr>
<th>Wind condition</th>
<th>Mandatory Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsafe wind conditions</td>
<td>The hourly maximum 3 second gust from any wind direction (considering at least 16 wind directions) with a corresponding probability of exceedance percentage greater than 20 metres per second.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wind condition</th>
<th>Preferred Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfortable wind conditions</td>
<td>The Hourly mean wind speed from all wind directions combined with a probability of exceedance of 20 per cent, is less than or equal to:</td>
</tr>
<tr>
<td></td>
<td>— 3 metres/second for sitting areas.</td>
</tr>
<tr>
<td></td>
<td>— 4 metres/second for standing areas.</td>
</tr>
<tr>
<td></td>
<td>— 5 metres/second for walking areas.</td>
</tr>
<tr>
<td></td>
<td>Hourly mean wind speed is the maximum of:</td>
</tr>
<tr>
<td></td>
<td>— The hourly mean wind speed.</td>
</tr>
<tr>
<td></td>
<td>— The gust equivalent mean speed (3 second gust wind speed divided by 1.85).</td>
</tr>
</tbody>
</table>

To achieve this amenity outcome, planning permit applicants for a building with a total building height exceeding 40 metres would need to provide a wind report demonstrating that the building would not create unsafe and uncomfortable wind conditions within distances shown in Figure 12.
Figure 13 Comfortable wind conditions areas

- Structure Plan boundary
- Belgrave/Lilydale railway line
- Street blocks

Wind effects criteria areas:
- Walking areas (5m/s)
- Standing areas (4m/s)
- Sitting areas (3m/s)
- Future/proposed sitting areas (3m/s)
2.2.5 Side and rear setbacks, and building separation within a site

**Recommendation**

Introduce controls on side and rear setbacks, and building separation within a site to provide clear views to the sky.

Lack of, or insufficient distances, between the upper levels of taller buildings will obstruct views to the sky. In addition, enforcing minimum building separation distances through the specification of setbacks below and above the street wall will also ensure adequate sunlight and privacy to habitable rooms, private open space, and assists in providing visual and acoustic privacy, improves the quality and extent of outlook from within the building while ensuring equitable development of adjacent sites.

For larger developments with multiple buildings, there is also a need to consider building separation controls within the site to ensure that these concerns are also met on single sites.

As a principle, buildings must incorporate a single upper level setback above the street wall on the street frontage. This would avoid the creation of buildings with a tiered wedding cake form and ensure the formation of podium and tower form.

Table 7 Side and rear setback requirements

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Overall Building height</th>
<th>Minimum setback</th>
<th>Preferred setback</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Side and rear setbacks below the street wall</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If the building is not built on the boundary (not within 300mm of a side or rear boundary)</td>
<td>≤ 21m (6 storeys or less)</td>
<td>3m</td>
<td>4.5m</td>
</tr>
<tr>
<td></td>
<td>Above 21m to and including 52m (15 storeys or less)</td>
<td>5m</td>
<td>10m</td>
</tr>
<tr>
<td></td>
<td>≥ 52m (greater than 15 storeys)</td>
<td>10m</td>
<td>10m</td>
</tr>
<tr>
<td><strong>Side and rear setbacks above the street wall</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If the building is built to the boundary</td>
<td>≤ 52m (15 storeys or less)</td>
<td>5m</td>
<td>10m</td>
</tr>
<tr>
<td></td>
<td>≥ 52m (greater than 15 storeys)</td>
<td>10m</td>
<td>10m</td>
</tr>
</tbody>
</table>

Figure 14 Side and rear setbacks below the street wall. These side and rear setbacks apply if the new building is not built on or within 300mm of a side or rear boundary.
Table 8 Requirements on building separation within a site

<table>
<thead>
<tr>
<th>Part of building</th>
<th>Overall Building height</th>
<th>Minimum building separation</th>
<th>Preferred building separation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below the maximum street wall height</td>
<td>None specified</td>
<td>6m</td>
<td>10m</td>
</tr>
<tr>
<td>Above the maximum street wall height</td>
<td>&lt; 15 storeys</td>
<td>10m</td>
<td>20m</td>
</tr>
<tr>
<td></td>
<td>≥ 15 storeys</td>
<td>20m</td>
<td>20m</td>
</tr>
</tbody>
</table>

Figure 15 Side and rear setbacks above the street wall. These side and rear setbacks apply if the building below the street wall is built to the boundary.
2.2.6  Ground level setback

**Recommendation**

Define setbacks at ground level to improve the quality of the building at the ground level and the amenity of the adjoining public realm

In Box Hill, there are specific segments of the primary pedestrian network where the width of footpaths are inadequate for its role as a primary movement corridor for pedestrians. In addition to this, there is a need to provide inadequate space for the planting of street canopy trees to improve the amenity of the public realm in particular segments. As a result, there is a need to co-ordinate development along these segments to incorporate setbacks at ground level from the boundary line to provide for footpath widening and landscaping, including canopy trees.

In principle, areas within the urban core with higher levels of activation (such as retail, hospitality), buildings should be built to the boundary. In areas where setbacks need to respond to heritage, setbacks should be set to ensure that existing heritage places can be viewed from the street. Similarly, where there is a generous existing landscape setback, new development should retain this outcome.

![Figure 16 Indicative sections of Ground level setback (Types A to D)](image-url)
Figure 17  Ground level setback.
2.2.7 **Active street frontages**

**Recommendation**

Provide guidance on preferred outcomes for active street frontages and public realm interfaces

Active street frontages and interfaces provide high levels of visual engagement between people in the public realm and those at ground level and upper floors of buildings. Active interfaces contribute to the vibrancy, appearance and sense of safety within a mixed-use centre. Activation can be achieved by:

— Creating a clear street address with appropriate levels of clear glazing and legible building entries for higher levels of permeability and visibility from the street.
— Sleevng podium level car parking with active uses.
— Providing canopies over footpaths where retail and hospitality uses are proposed. This should offer continuous and functional weather protection.
— Consolidation of services within the sites and within buildings and ensure that any externally accessible services are integrated into the building facade design in a carefully resolved and unobtrusive manner.
— Avoid incorporating external steps or pronounced level changes at ground level that visually and physically separate the building from the street.
— Providing openable windows and balconies within the street wall, and orienting habitable rooms towards the street to increase passive surveillance opportunities.
— Ensuring that building indents, including integrated seating, are at a depth that remains visible from the street to avoid creating unsafe entrapment spaces.
— Where practicable, direct individual entries to dwellings or home offices at ground level should be encouraged to create a clear sense of address at ground level.

**Specific glazing requirements**

Buildings with frontages to Urban Core Street, Urban Activity Street and Active Laneway should deliver the clear glazing specified in Table 9 below.

**Open space interfaces**

New buildings within sites directly abutting open spaces should provide habitable rooms orientated towards the open space to maximise interaction and opportunities for passive surveillance.

**Institutional interfaces**

Institutional buildings should, where practicable, create activated façades to increase the degree of visual and physical interaction between people in the street and those within.

**Heritage interfaces**

Note that it may be difficult to achieve the interface types on sites where there is a heritage overlay. In these locations the heritage requirements take precedence over the activation requirements.

**Table 9 Active street frontages — clear glazing requirements**

<table>
<thead>
<tr>
<th>Description</th>
<th>Glazing</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Urban Core Street</td>
<td>At least 80 per cent clear glazing along the ground level frontage to a height of 2.5 metres, excluding any solid plinth or base. Encourage openable windows and detailing that engages with the street. Security grilles or mesh must be transparent.</td>
</tr>
<tr>
<td>B Urban Activity Street</td>
<td>At least 30 per cent clear glazing along the ground level frontage to a height of 2.5 metres, excluding any solid plinth or base.</td>
</tr>
<tr>
<td>C Active Laneway</td>
<td>Provide clear glazing along the ground level frontage to a height of 2.5 metres, excluding any solid plinth or base and should be maximised where it is practicable. Encourage openable windows and detailing that engages with the street</td>
</tr>
</tbody>
</table>
Figure 18: Active street frontages

Note: The classification of active street frontage types are intended to be consistent with the urban realm terminology used in BHURTG. Only key frontages with design and development requirements are identified.
2.2.8 Vehicle access, car parking and loading

**Recommendation**

**Provide guidance on the design of vehicle access and car parking**

The provision of car parking at podium levels results in a poor street interface that does not provide any activation or visual interest. Parking should be located at full basement levels of the building and be sleeved with active uses if it is located at podium levels, see Figure 19. This will help provide adequate passive surveillance to the public realm and provide visual interest to the public realm.

Vehicular access to car parking should be located away from main streets, and the primary and local pedestrian network, to ensure high levels of amenity and safety of these streets for pedestrians, see Figure 20.
Figure 20  Vehicular access to car parking and loading areas

- Structure Plan boundary
- Belgrave/Lilydale railway line
- Existing open space

Vehicular access to car parking and loading areas
- Service laneway – preferred access
- No crossovers permitted
- Crossovers strongly discouraged
- Shared crossovers strongly encouraged
2.2.9 Building services

**Recommendation**

*Provide guidance on the design of building services*

The design and configuration of building services, including waste and loading, is a key consideration towards creating high-quality and safe interfaces between the building and the public realm. This can be achieved by minimising the amount of space occupied by services at ground level, consolidating and integrating services within the building and facade design in an unobtrusive manner to maximise active street frontages. This could be achieved by:

- Locating services away from main street frontages where possible.
- Consolidation of vehicular access entries for parking and loading.
- Locating substations above or below ground level to reduce the footprint of building services at ground level.
- Distributing separate service elements along the street frontage to reduce the creation of large blank walls.
- Integrating externally accessible service elements into the building facade design. This could include exposing some service elements and/or reducing the height of cabinets to maximise glazing to ground floor uses.

*Figure 21* 2-4 Bruce Street, Box Hill | Service cabinets and vehicular access dominate the street frontage.

*Figure 22* Nightingale 1, Brunswick | Breathe Architecture Building service elements are partially exposed to maximise clear glazing at ground level (Photo: Bonnie Herring)

*Figure 23* Harrow St Carpark, Box Hill | MGS Architects Building service cabinets are integrated into the building facade design.
2.2.10 Architecture, articulation and materials & finishes

Recommendation

Provide guidance on building materials, finishes and articulation

There is a need to ensure high quality, well-considered architecture that demonstrates design excellence, careful articulation and design detailing. The quality and resolution of materials and finishes deployed and the design and articulation of the building expression has a range of impacts on the public realm and for owners and occupiers of these buildings.

The use of robust materials improves the durability of buildings which is increasingly important in Box Hill with taller, strata titled buildings where maintenance is a key concern. Similarly, the use of appropriate materials, glazing systems and finishes is needed to ensure both durability and road safety (glare).

Encourage taller built form above street wall height to be designed ‘in the round’ – meaning that the intended design should wrap around corners and be seen from all sides. Blank or unarticulated walls are an inappropriate response for taller built forms.

Table 10 Materials, finishes and articulation guidelines

<table>
<thead>
<tr>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Materials and finishes</strong></td>
</tr>
<tr>
<td>— Buildings with frontages to major and arterial roads should use materials and finishes with a perpendicular reflectivity less than 20 per cent, measured at 90 degrees to the façade surface.</td>
</tr>
<tr>
<td><strong>Articulation</strong></td>
</tr>
<tr>
<td>— Buildings should be detailed to provide visual interest to streets and public spaces.</td>
</tr>
<tr>
<td>— Buildings should avoid blank walls or façades.</td>
</tr>
<tr>
<td>— Sites with multiple buildings should be designed and detailed to create distinctive families of building elements (including building entrances, balconies and balustrades, awnings, planters, pergolas, boundary walls and fences).</td>
</tr>
<tr>
<td>— Buildings should be detailed to:</td>
</tr>
<tr>
<td>— establish a fine-grain rhythm and scale within the façade.</td>
</tr>
<tr>
<td>— be detailed to provide visual interest to streets and public spaces</td>
</tr>
<tr>
<td>— integrate landscape opportunities</td>
</tr>
<tr>
<td>— Buildings with a frontage of more than 45m should be massed and modulated to create two or more building components with distinct architectural expressions as follows (see Figure 24):</td>
</tr>
<tr>
<td>— The frontage length of each architectural component should not exceed the height of the street wall</td>
</tr>
<tr>
<td>— The minimum separation between these expressions should be no less than 6 metres for the full height of the building</td>
</tr>
<tr>
<td>— The depth of the separation should be no less than the upper level setback for the full height of the building.</td>
</tr>
</tbody>
</table>

Figure 24 Articulation requirement
2.2.11 Landscaping

Recommendation

Provide guidance on landscaping

Increasing densities within Box Hill over the next 20 years needs to be serviced by an increase in public open space. In this regard individual lots will need to contribute towards increased greenery and landscape character, particularly in specific areas where there is a clear deficit in landscape quality and provision. On very large sites, development should provide a significant landscape contribution to the amenity of the public realm. In addition, the character sought in each neighbourhood defines the type of landscaping required. For instance, in streets where a garden suburban character is preferred, developments should allow for rear landscape breaks.

In the urban core, this contribution could come in the form of high quality hard landscapes such as a square or plaza that provides a connection to the street but where greening does not necessarily dominate. The provision of landscaping on private land should support and supplement the outcomes sought in the Box Hill Open Space Strategy (BH OSS).

Table 11 Landscaping guidelines

Requirements

General requirements
— Where practical, provide landscaping consistent with the preferred landscape character for each Neighbourhood as indicated in the Structure Plan. This should be consistent with the urban realm treatments specified in Box Hill Urban Realm Treatment Guidelines (BHUR TG).

Strategic development sites
— Areas identified as ‘investigation area – development’ in the Structure Plan, or larger sites enabled through aggregation, should provide landscaping commensurate with the scale and scope of the development proposal.
Figure 25 Landscape contribution areas

Legend

- Structure Plan boundary
- Landscaping areas
  - Side breaks | side setback planting
  - Rear breaks | rear setback planting
  - Increase street canopy trees
  - Future open space investigation areas (BHOSS)
  - Investigation area | development major landscaping opportunities
2.2.12 Pedestrian links

Recommendation
Provide guidance to co-ordinate new pedestrian links with future development in preferred locations

A major challenge for Box Hill is to deliver new and high-quality through block pedestrian links towards creating a CBD-like network of primary and local streets for walking. There are key gaps in the primary pedestrian network that require co-ordination (negotiated outcomes) with future development in these areas. It is proposed that this be implemented through subdivision provisions and decision guidelines in the ACZ. This would require proponents to make provisions for the delivery of new primary and links generally in accordance with the Figure 24. This may include the use of section 173 agreements to deliver these outcomes. Section 173 agreements is a negotiated agreement between the Responsible Authority with a landowner to achieve planning objectives in relation to the land.

Key moves include the following:

— New priority pedestrian and cycle link from Nelson Road to Thurston Street
— Completion of the east-west corridor north of Whitehorse Road between:
  • Archibald Street and Shipley Street
  • Shipley Street and Nelson Road
  • Nelson Road and Spring Street (in alignment with existing easement)
  • Elland Avenue and Bruce Street
— Extension of Market Street to Carrington Road, and extension of Main Street to Prospect Street in co-ordination with redevelopment of the major shopping centre. In addition to these key gaps, there is a need to provide new local through-block links that increases the overall permeability of the network.

<table>
<thead>
<tr>
<th>Table 12 Pedestrian Links – key definitions</th>
</tr>
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<tbody>
<tr>
<td><strong>Definition</strong></td>
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<tr>
<td><strong>Primary pedestrian link</strong></td>
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<tr>
<td>A continuous route designed to encourage pedestrian access, which is publicly accessible across the entire day without gates, doorways or blockages and is open to the sky for its entire width.</td>
</tr>
<tr>
<td><strong>Local pedestrian link</strong></td>
</tr>
<tr>
<td>A continuous route designed to encourage pedestrian access, which is publicly accessible across the entire day or by agreement to the satisfaction of the Responsible Authority.</td>
</tr>
</tbody>
</table>
Figure 26 Preferred locations of future primary and local links on the Primary Pedestrian Network and Local Pedestrian Network.

- Structure Plan boundary
- Priority pedestrian and cycle link from Nelson Rd to Thurston St, including new crossing over the rail corridor

Preferred locations for future pedestrian links:
- Primary pedestrian link | desirable
- Local pedestrian link | desirable
- Existing open space