

Review of Box Hill Metropolitan Activity Centre

3

3.4 Emerging Urban Character

3.4.1 Topography

Box Hill is, as suggested by its name, characterised by its location at a high point in the local topography. The highest point within the activity centre boundary is the rail station site between Main Street and Carrington Road. The land to the north of the railway line slopes down gently to Whitehorse Road, then more steeply further north towards Box Hill Gardens. Whitehorse Road slopes gently as far west as Nelson Road, before falling more steeply between Nelson Road and Elgar Road.

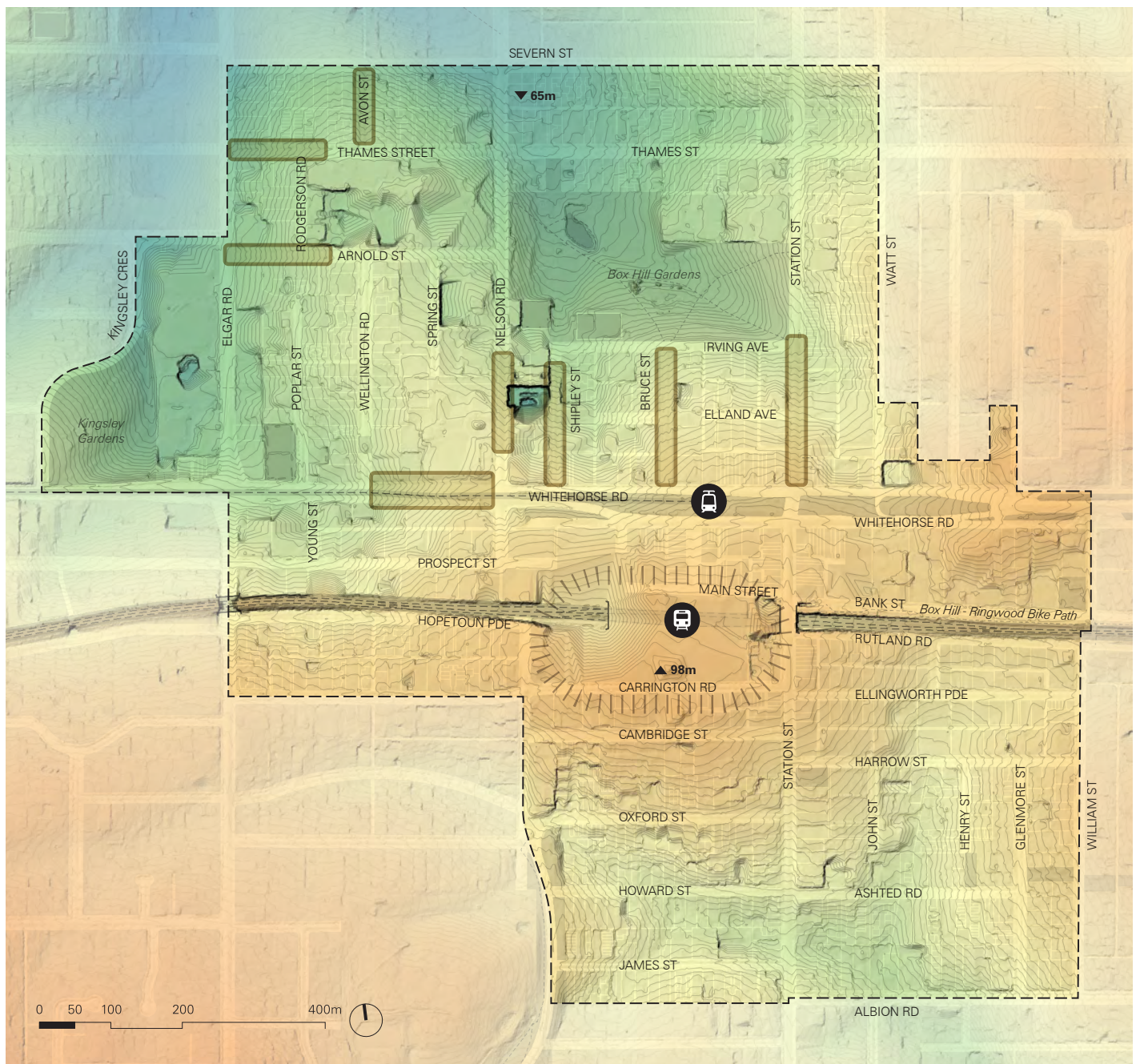


Figure 3.7 Topography of Box Hill

Legend

- Structure Plan boundary
- ▲ High point (98m)
- ▼ Low point (65m)
- Plateau
- Steep street

3.4.2 Street and block characteristics

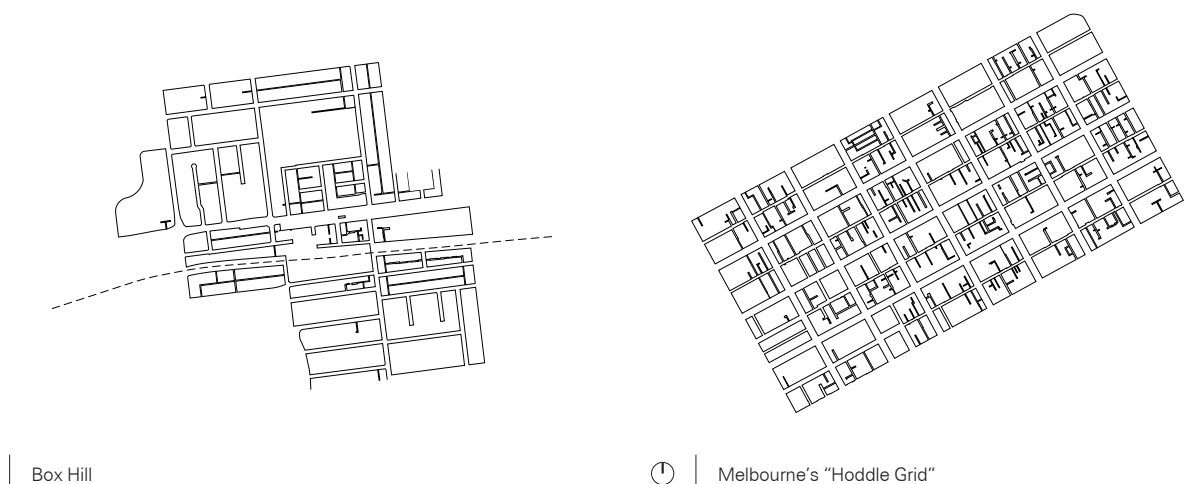
The streets of Box Hill are distinct from many other centres in Melbourne. Box Hill's street grid is defined by two parallel transport corridors of Whitehorse Road and heavy rail. Box Hill's streets are few, narrow and suburban in character and form comparatively large urban blocks — these are not CBD-type characteristics which typically have smaller urban blocks coupled with an extensive network of streets.

Box Hill characteristics include:

- Two large transport corridors - Whitehorse Road (60 metres wide) and heavy rail (30 metres wide).
- Narrow suburban streets of 15 and 20 metres wide, including the two major north-south streets of Elgar and Station Streets which are 20 metres wide.
- Large urban blocks with limited permeability with the exception of the traditional town centre and the area bounded by Shipley Street and Station Street north of Whitehorse Road.
- South of Box Hill Central largely consists of horizontal urban blocks 300-400 metres in length. The lack of north-south laneways results in poor levels of permeability.
- North of Whitehorse Road features a mixture of substantially large blocks (except for Shipley and Station Streets) and narrow suburban streets.

Figure 3.9 compares Box Hill with Melbourne's CBD at the same scale, illustrating the clear difference in street and block typology. The street grid of Melbourne's CBD has a clearly defined and legible geometry with generous 30 metre wide streets that are complemented by smaller parallel east-west 10 metre wide streets and an intricate and predominately north-south network of laneways. By contrast, Box Hill's street grid has an irregular geometry with fewer and narrower streets and a comparatively limited network of laneways. These characteristics inevitably create tension for road space allocation between modes of transport and their capacity, the public realm and their amenity. As Box Hill grows, so will this tension, which highlights the need for their deliberate resolution towards achieving the future vision of Box Hill. This underscores the need for an overall strategy for the activity centre's streets and laneways.

Figure 3.8 Comparison of streets and blocks of Box Hill and Melbourne CBD (shown to same scale)



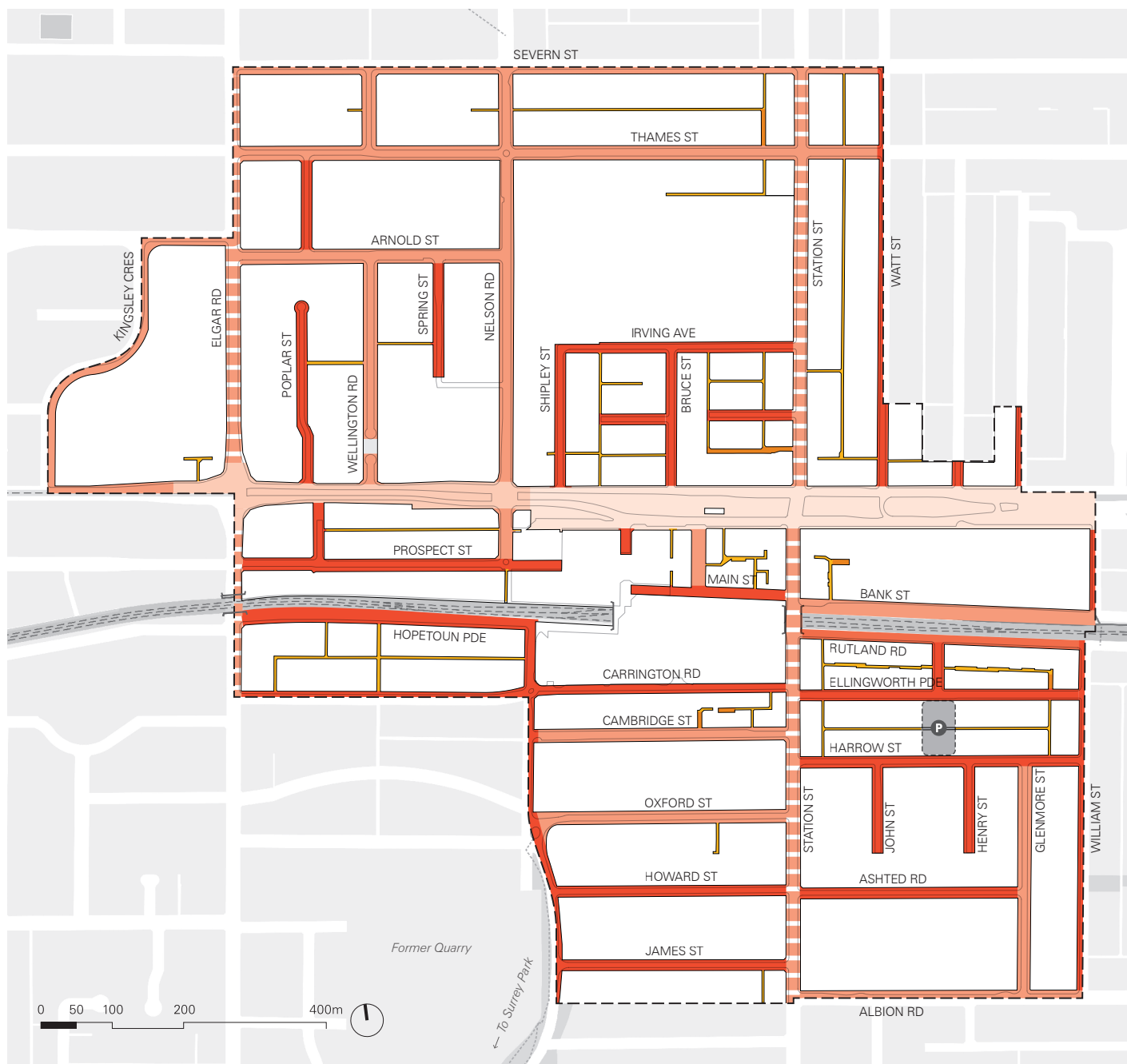


Figure 3.9 Street width

Legend

[- - -] Structure Plan boundary

Street type & width

- Major arterial road | 60m
- Arterial road | 30m
- Key north-south street | 20m
- Local street | 20m
- Local street | 15m
- Wide laneway | 6 - 10m
- Laneway | 3 - 6m
- Street edge | kerb

3.4.3 Lot size

The total area of all lots (including parks and crown land but excluding road reserves) in the Box Hill activity centre is approximately 100 hectares. A substantial amount of land is held by larger institutions such as Box Hill Institute (approximately 7.8ha) and Box Hill Hospital / Epworth Eastern (5.5 ha). The largest single non-institutional landholder is Vicinity, the owner of Box Hill Central (approximately 3.6ha of leasehold VicTrack land and 1.8ha of freehold).

The fabric of land parcels demonstrates some important characteristics that differ by individual neighbourhood.

- A cluster of lots near to the intersection of Station Street and Whitehorse Road, extending as far west as the Market Street Mall and south to Ellingworth Parade, provide a distinctively narrow width subdivision pattern consistent with this area's original role as the town centre. The average size of lots in this area is 380m² but the majority of lots are sized between 200–550m², which is notably different to other parts of Box Hill.
- The commercially zoned land between Rutland Road and Ellingworth Parade provides another cluster of anomalously small lots in a single area. Most lots within this neighbourhood are sized between 450–600m², with quite consistent rhythm of lot dimensions and proportions.
- The subdivision pattern of lots adjoining Prospect Street defines a coherent precinct with consistent lot sizes and depths. The lots in this area are generally a little larger, with a median size of 1200m².
- Apart from the larger institutional landholdings or consolidated sites, most other areas within the activity centre boundary have lot sizes that are typical for suburban house subdivisions across Melbourne, ranging between 700–900m².

3.4.4 Lot access and street frontage width

The type of access to lots has implications on how future development may impact the public realm, streetscapes and the broader movement network. For instance, proposed developments on lots with a narrow single street frontage would necessitate cross over access to car parking within these developments from the street frontage. Wider lots with two or more frontages have increased flexibility in relation to prioritising pedestrian amenity by locating vehicular access away from key pedestrian movements. Figure 3.12 demonstrates how lot access varies across Box Hill due to its street and block characteristics.

Lot access characteristics:

- Poplar Street consists predominately of single-frontage lots. This is similarly reflected in the residential areas south of Cambridge and Harrow Streets.
- Large proportion of lots on Rutland Road, Ellingworth Parade and Prospect Street (Fairbank Lane) are serviced by narrow rear laneways.
- The fine grain of the existing laneway network between Nelson and Station Streets results in the majority of lots having two frontages or more. This is similarly reflected along Station Street and part of Thames Street.

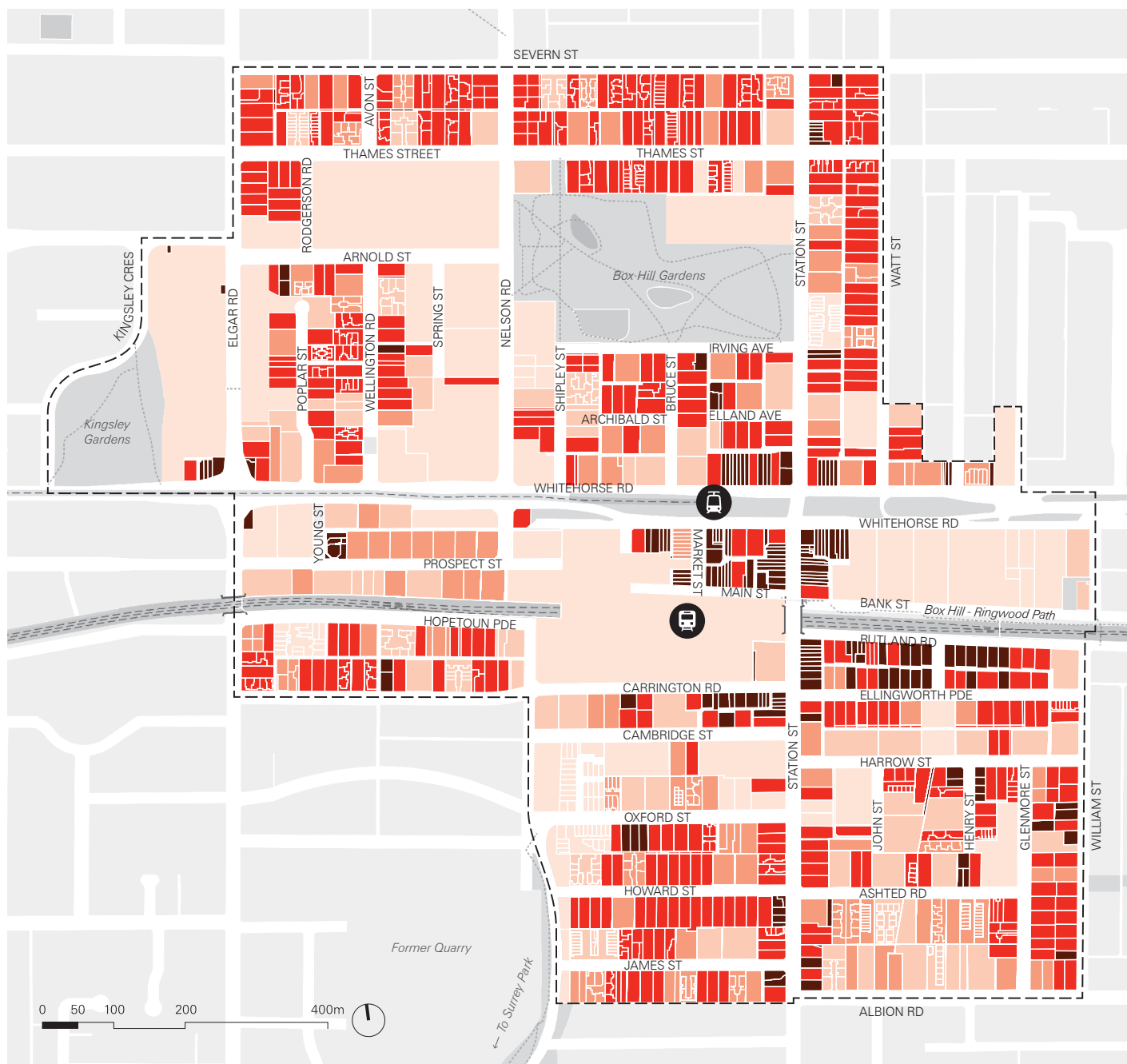


Figure 3.10 Lot size

Legend

[---] Structure Plan boundary

Lot Size (m²)

- 0–500 | very small
- 500–1000 | small
- 1000–1500 | medium
- 1500–3000 | large
- > 3000 | very large

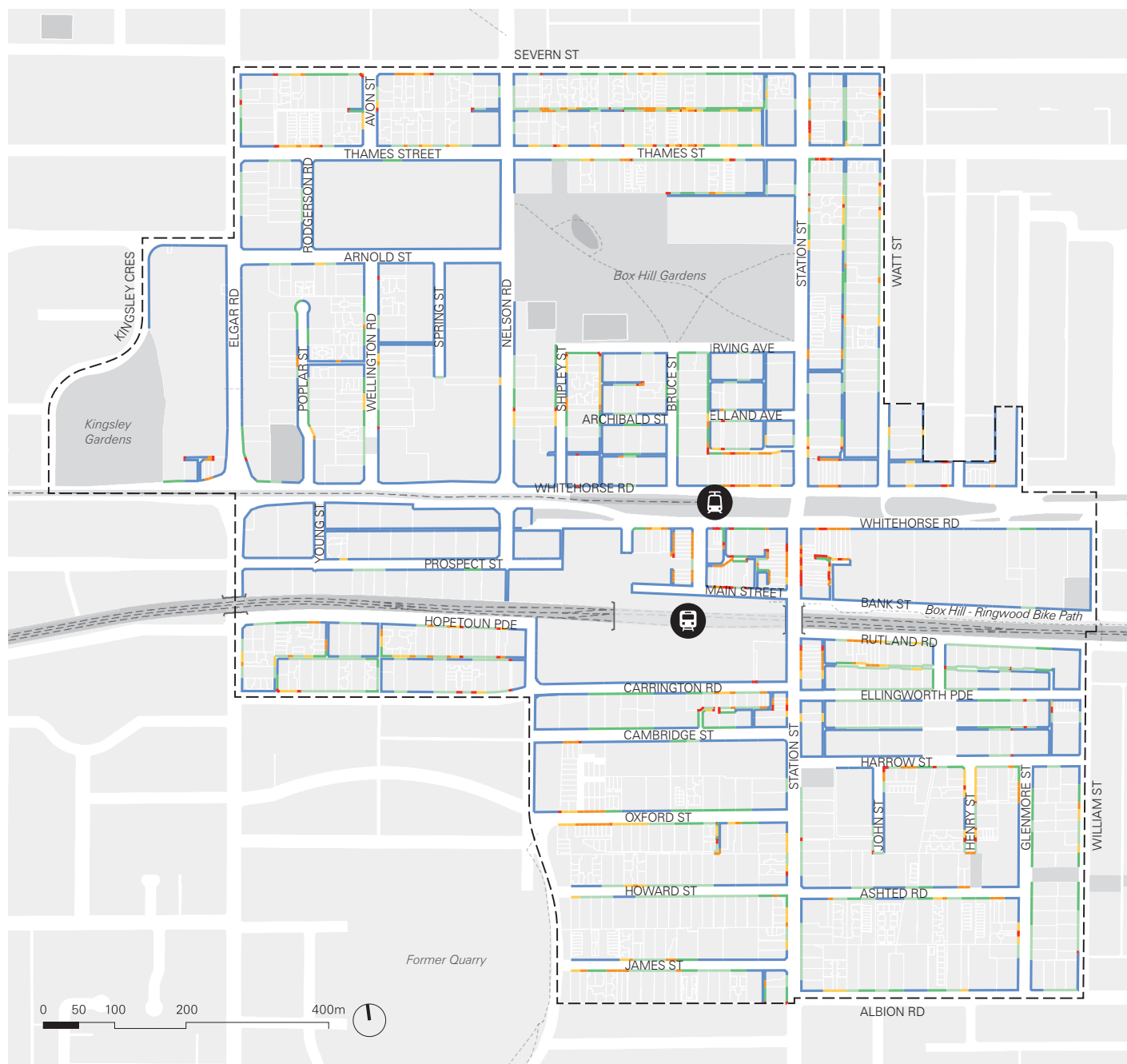


Figure 3.11 Street frontage width

Legend

[- - -] Structure Plan boundary

Street frontage width (metres)

- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- 21 - 30
- > 30

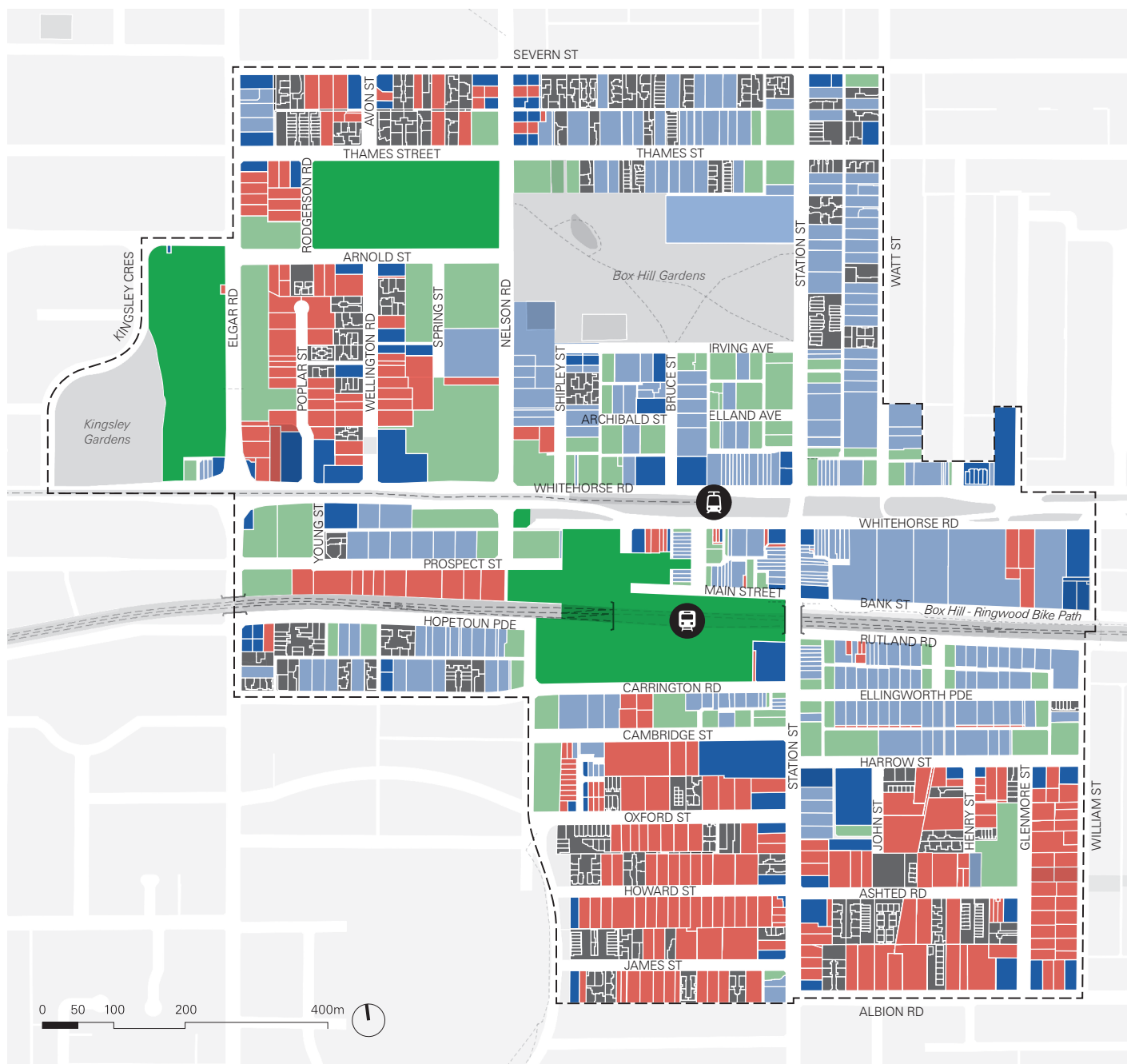


Figure 3.12 Lot access

Legend

[] Structure Plan boundary

Access type

- Single frontage
- Dual frontage
- Corner (dual) frontage
- Three frontages
- Island site | more than three frontages

■ Townhouse or unit lot

3.4.5 Density and floor area

Since 2007, Box Hill has experienced an increase in density and floor space with ongoing development resulting in residential, office, education and health of significantly higher densities. However, Figure 3.14 on page 89, demonstrates how this significant increase in density and floor space has been unevenly scattered across the activity centre with the majority of the increase located on and north of Whitehorse Road on relatively few sites with the exception of the area between Shipley Street and Station Street which has seen a clustering of low to mid-rise residential developments. Elsewhere in Box Hill has seen smaller and gradual increases in density, particularly in transitional residential where low-rise (3-4 storeys) multi-residential developments have occurred along streets such as Thames Street.

Table 3.12 Selected major developments constructed since 2007 or currently under construction

	Completion date	Predominant land use	Total GFA	Maximum storeys	Site size	FAR
ATO (913 Whitehorse Road)	2015	Commercial	35,440m ²	19	1,775m ²	20
Box Hill Hospital redevelopment	2015	Health	approx. 55,000m ² GFA added	10	28,440m ²	3.8*
Whitehorse Towers (850 Whitehorse Road)	2017	Hotel and Residential	42,420m ²	36 and 29	3,315m ²	12.8
SkyOne Box Hill (545 Station Street)	Late 2019	Residential	69,880m ²	36	2,435m ²	28.9
12-14 Nelson Street	Late 2019	Residential	24,300m ²	20	3,315m ²	15.1

Source: MGS Analysis of City of Whitehorse Data

* Total site density including both new and old buildings

Floor Area Ratio

Table 3.11 Area Ratios and Heights of Proposed Development

Permit Status		Precinct A* Box Hill Transport and Retail Precinct	Precinct B Prospect Street Precinct	Precinct C* Civic and Eastern TAFE Precinct	Precinct D Hospital and Western TAFE Precinct	Precinct E Box Hill Gardens Precinct	Precinct F Southern and Eastern Precincts	Precinct H Residential Precincts	All Precincts
Average Floor Area Ratio	Constructed or Under Construction	24.4	12.8		4.5	3.6	2.9	1.8	3.9
	Approved Permit	18.0	17.5	0.6	9.0	4.6	6.0	0.5	8.2
	Under consideration		14.0		15.6	11.5			14.1
Maximum Floor Area Ratio	Constructed or Under Construction	28.9	12.8		15.1	6.4	3.5	2.9	28.9
	Approved Permit	18.0	19.7	0.6	18.5	5.3	7.3	1.1	19.7
	Under consideration		14.0		27.2	13.8			27.2
Average Height of Proposals	Constructed or Under Construction	28 storeys	36 storeys		8 storeys	7 storeys	4 storeys	3 storeys	7 storeys
	Approved Permit	23 storeys	28 storeys	3 storeys	15 storeys	7 storeys	10 storeys	4 storeys	13 storeys
	Under consideration		25 storeys		29 storeys	16 storeys			24 storeys
Maximum Height of Proposals	Constructed or Under Construction	36 storeys	36 storeys		20 storeys	10 storeys	5 storeys	6 storeys	36 storeys
	Approved Permit	23 storeys	30 storeys	3 storeys	37 storeys	9 storeys	18 storeys	5 storeys	37 storeys
	Under consideration		25 storeys		37 storeys	19 storeys			37 storeys
Number of cases analysed	Constructed or Under Construction	2	1		9	15	8	22	57
	Approved Permit	1	3	1	9	2	6	5	27
	Under consideration		1		5	3			9
Overall total cases		3	5	1	23	20	14	27	93

* This analysis of Precinct A & C, and to a lesser extent Precinct B, is inherently limited by small sample sizes for each precinct.

Source: MGS Analysis of City of Whitehorse Data, PSMA Geoscape

Note: the lower number of applications identified here (93 out of 95) reflects gaps in the available data.

Note on methodology used to estimate FAR:

Unless otherwise noted, all Floor Area Ratio (FAR) calculations use the same broad approach as used in the Central City Built Form Guidelines (C270). Importantly, these gross figures include all built form above ground level, including for example car parking. The actual 'habitable' or 'saleable' gross floor area (GFA as defined by the Property Council of Australia) will be lower than this planning related figure.

Floor Area Ratio estimates were based on three separate datasets. Firstly, VicCLUE data from 2011 containing floor space and lot size were used to generate a baseline FAR for Box Hill in 2011. Secondly, planning approvals data from 2003 supplied by the City of Whitehorse was cross-checked with architectural plan drawings from planning permit applications to gather data on land use, Gross Floor Area (GFA), number of dwellings and car park spaces. This data was integrated to provide a base dataset on what has changed since 2011. Thirdly, Geoscape (PSMA) building dataset was used to partially validate both datasets to identify outliers and errors - however, this dataset has the following limitations: the capture date is 2016/2017 and GFA is calculated crudely from LiDAR-derived height data and building footprints. As a result, the FAR estimate has inherent limitations that rely on a degree of manual coding and analysis.

3.4.6 Sites available for future development

A substantial degree of change has already occurred within Box Hill. Figure 3.13 illustrates the location of sites within Box Hill that remain available for future change, in comparison to sites that are less likely to change in the near future.

There are a range of reasons that future change might be constrained.

- Where there have been multi-residential developments constructed less than fifteen years ago it is unlikely that these will be redeveloped again within the next ten to fifteen years.
- Strata subdivisions, townhouse, unit and multi-parcel lots with shared common property are potentially constrained due to the fragmented ownership of these sites that slow down the process of lot consolidation. Some of these sites may already be in single ownership but many will be owned by multiple parties.
- While sites may appear to be available for development, they may not be developed due to preferences of owner-occupiers, such as long-term residents who desire to age in place and do not wish to relocate. This can slow the process of lot consolidation.
- Land held by larger institutions such as the Box Hill Institute (BHI), Box Hill Hospital, Epworth Eastern and City of Whitehorse is not explicitly encumbered and in some cases is likely to be further developed in the future. In addition, the redevelopment of these sites may be reliant on competitive government funding which may affect the expediency of redevelopment. However, the use of these sites is likely to remain for the purposes of the institution, while the existing uses may be intensified it is less likely that they will be redeveloped for a totally different use.

In general terms it is notable that the area south of Oxford Street and Harrow Street (to the south of the activity centre) and north of Thames Street (in the north of the centre) have a significant number of strata and subdivided parcels. The opportunities for significant change in these areas are modest and will proceed more slowly than on less encumbered sites.

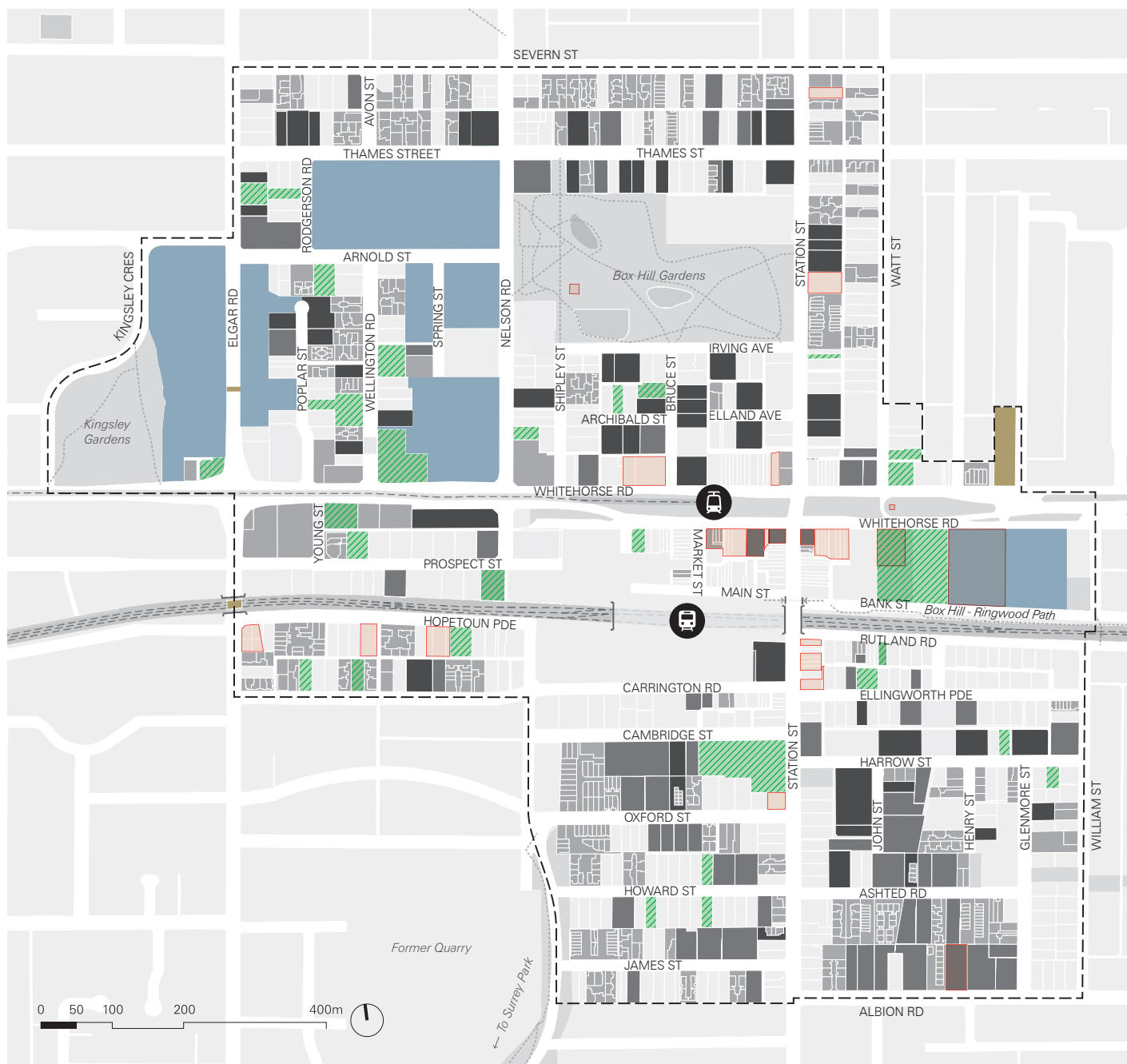


Figure 3.13 Development limitations

Legend

[- - -] Structure Plan boundary

Encumbrances & constraints

- Developed <15 years
- Strata parcels
- Subdivided & unit parcels
- Crown Land

Other development considerations

- Large institutional sites
- Approved permit
- Heritage overlay

Figure 3.14 Estimated FAR of development of valid & pending permits.

3.4.7 Cumulative built form outcomes

Legend

Structure Plan boundary

Floor Area Ratio (FAR)

- 0 - 1
- 1 - 2
- 2 - 4
- 4 - 6
- 6 - 8
- 8 - 10
- 10 - 20
- > 20

2019

Constructed & permits under construction

Approved permits

Approved permits & permits under consideration

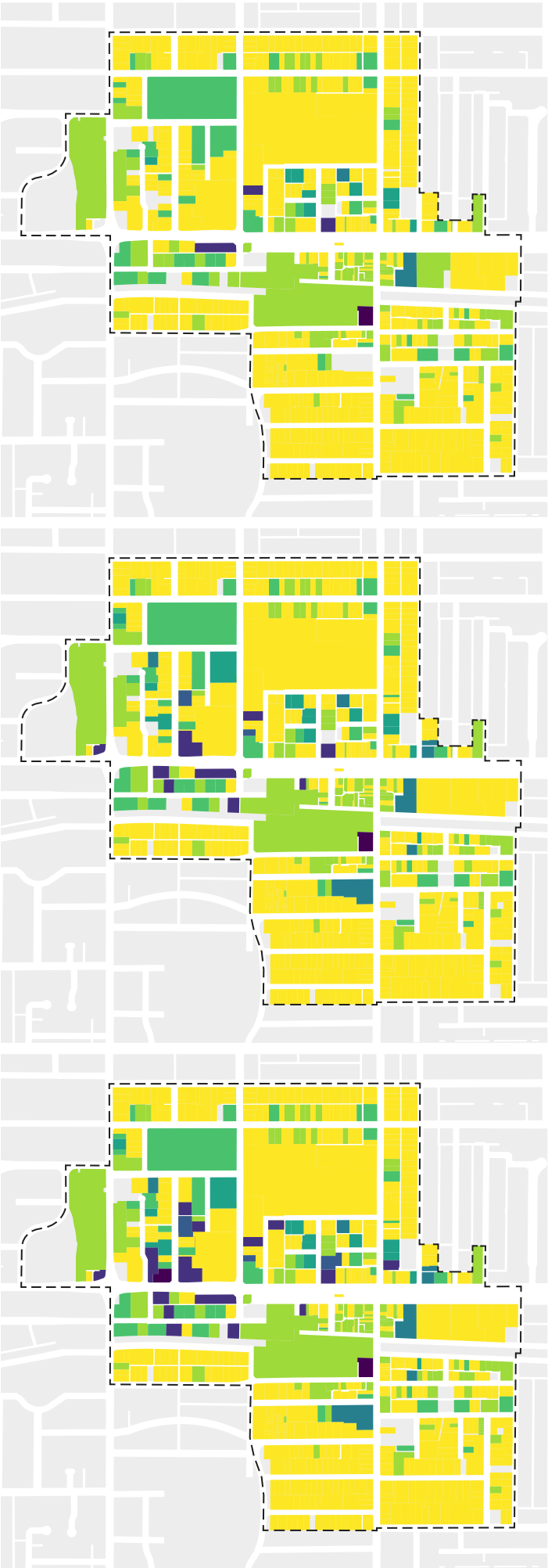
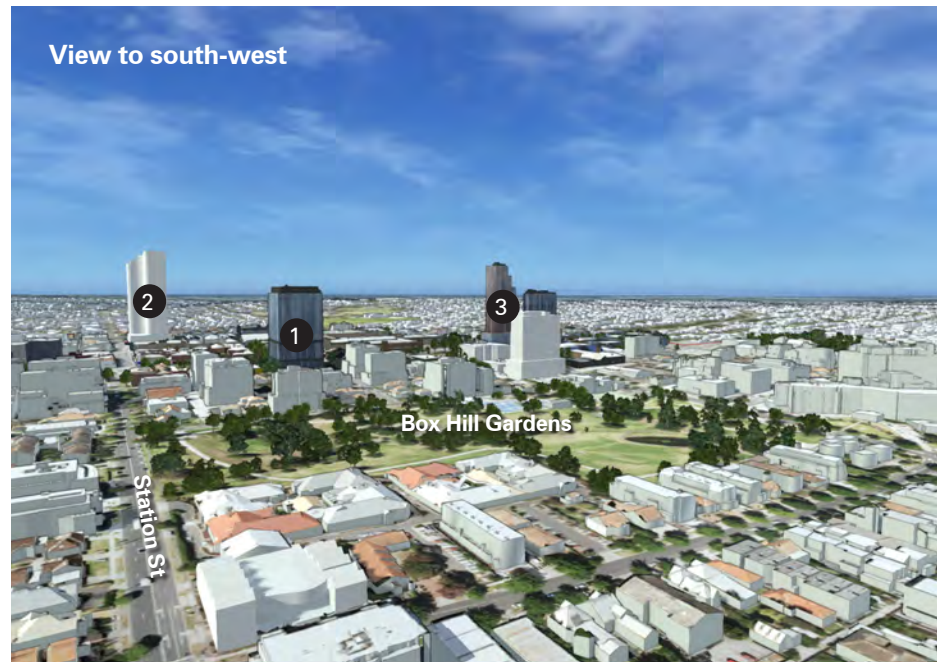


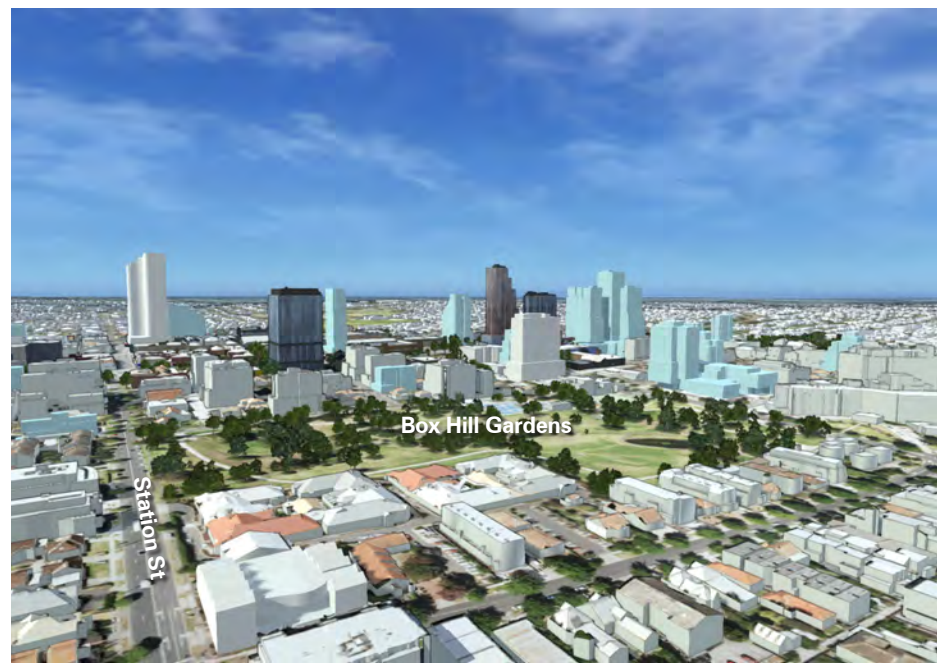
Figure 3.15 View of cumulative impact of development of valid and pending permits.

2019
Constructed & permits under construction

ATO | 913 Whitehorse Road **1**
SkyOne | 545 Station Street **2**
Whitehorse Towers | 850 Whitehorse Road **3**



Approved permits



Approved & pending permits

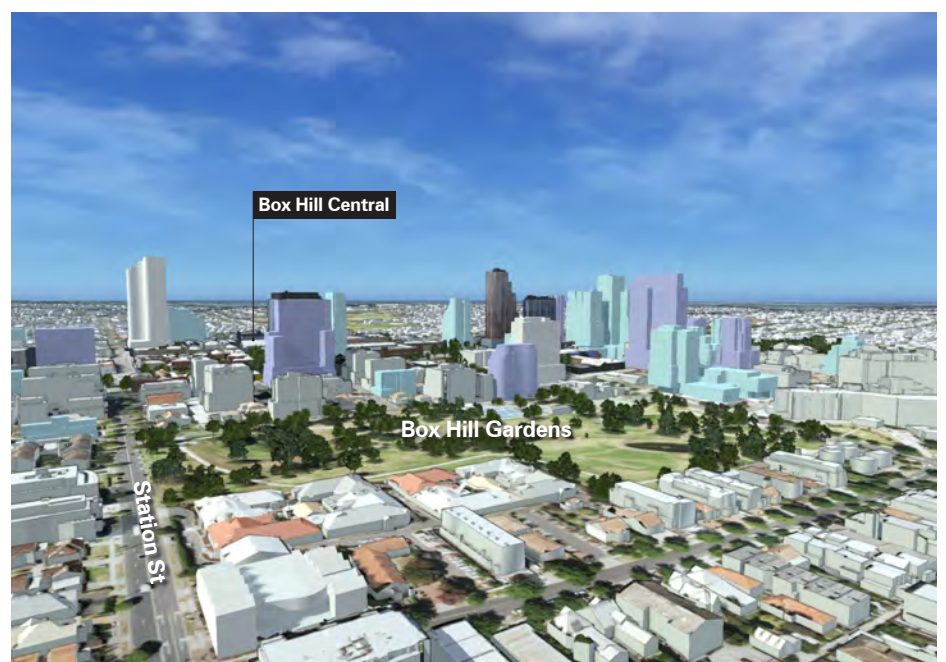


Figure 3.16 Cumulative impact of development in Precinct A: Box Hill Transport and Retail Precinct

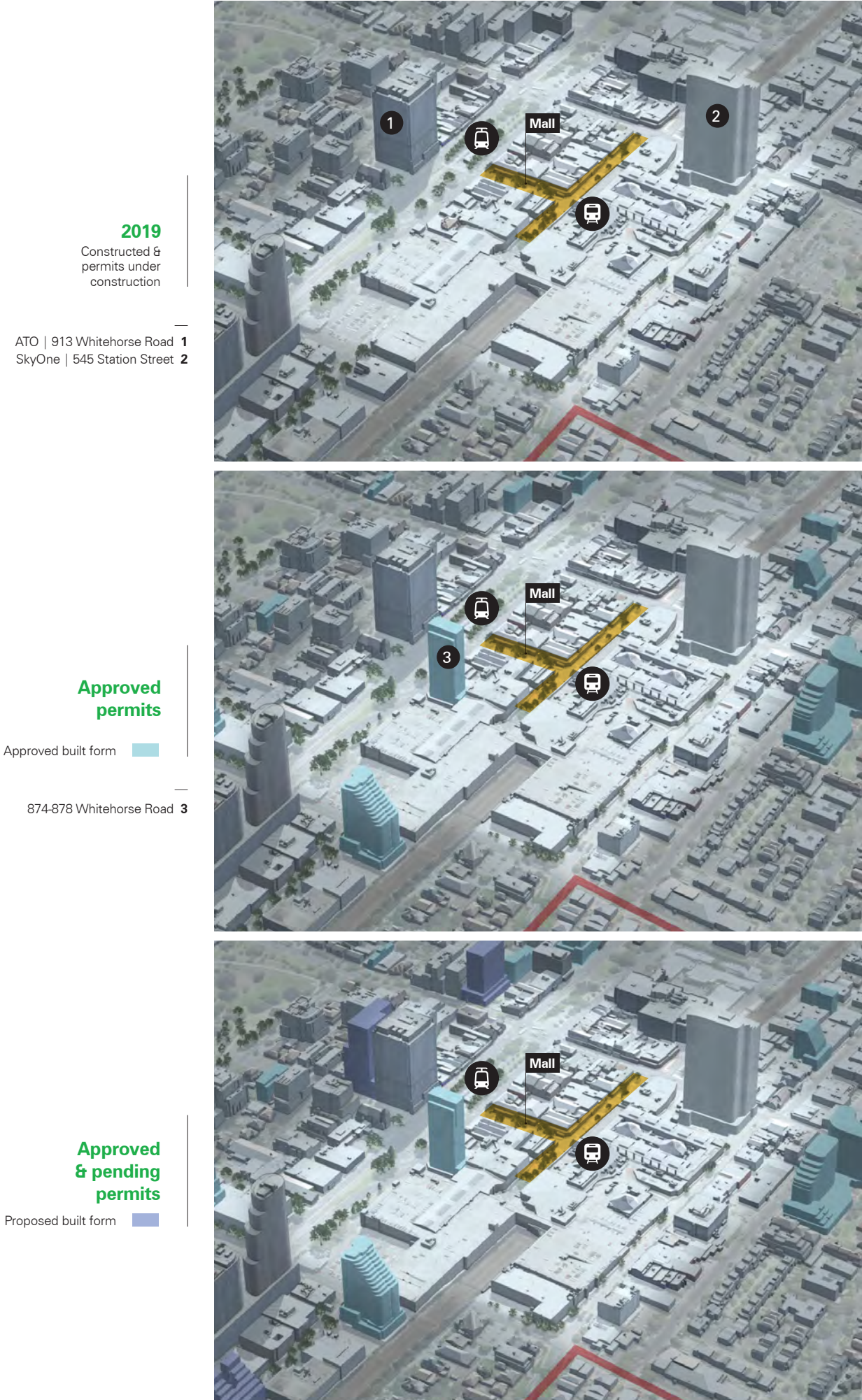
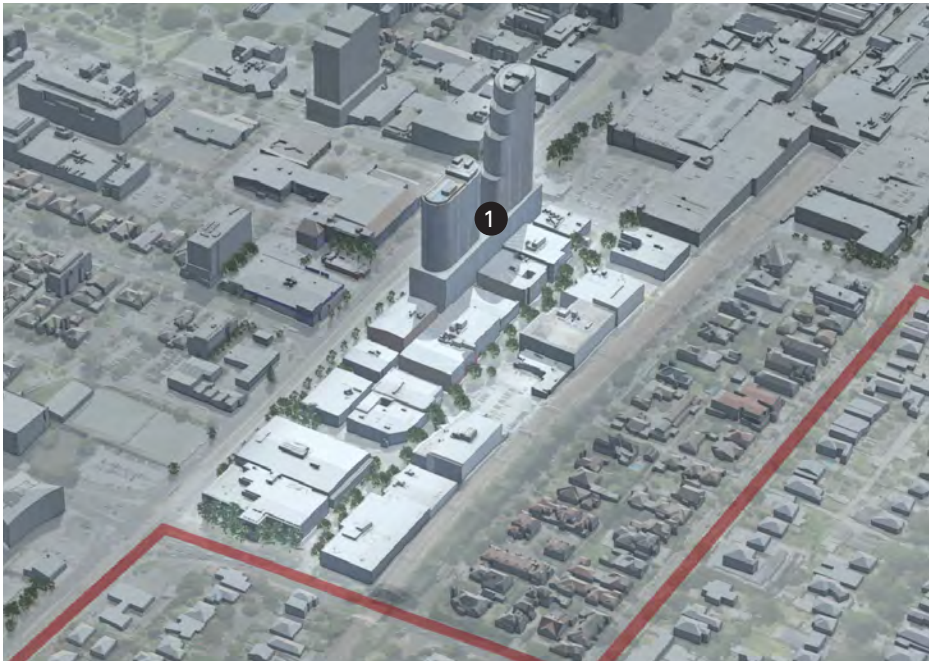


Figure 3.17 Cumulative impact of development in Precinct B: Prospect Street Precinct.

2019
Constructed & permits under construction

Whitehorse Towers | 850 Whitehorse Road **1**



Approved permits

Approved built form

9-11 Prospect Street **2**
34-36 Prospect Street **3**
820-824 Whitehorse Road **4**



Approved & pending permits

Proposed built form

31-35 Prospect Street **5**



Figure 3.18 Cumulative impact of development in Precinct C: Civic and Eastern TAFE Precinct and Precinct F: Southern & Eastern Precinct

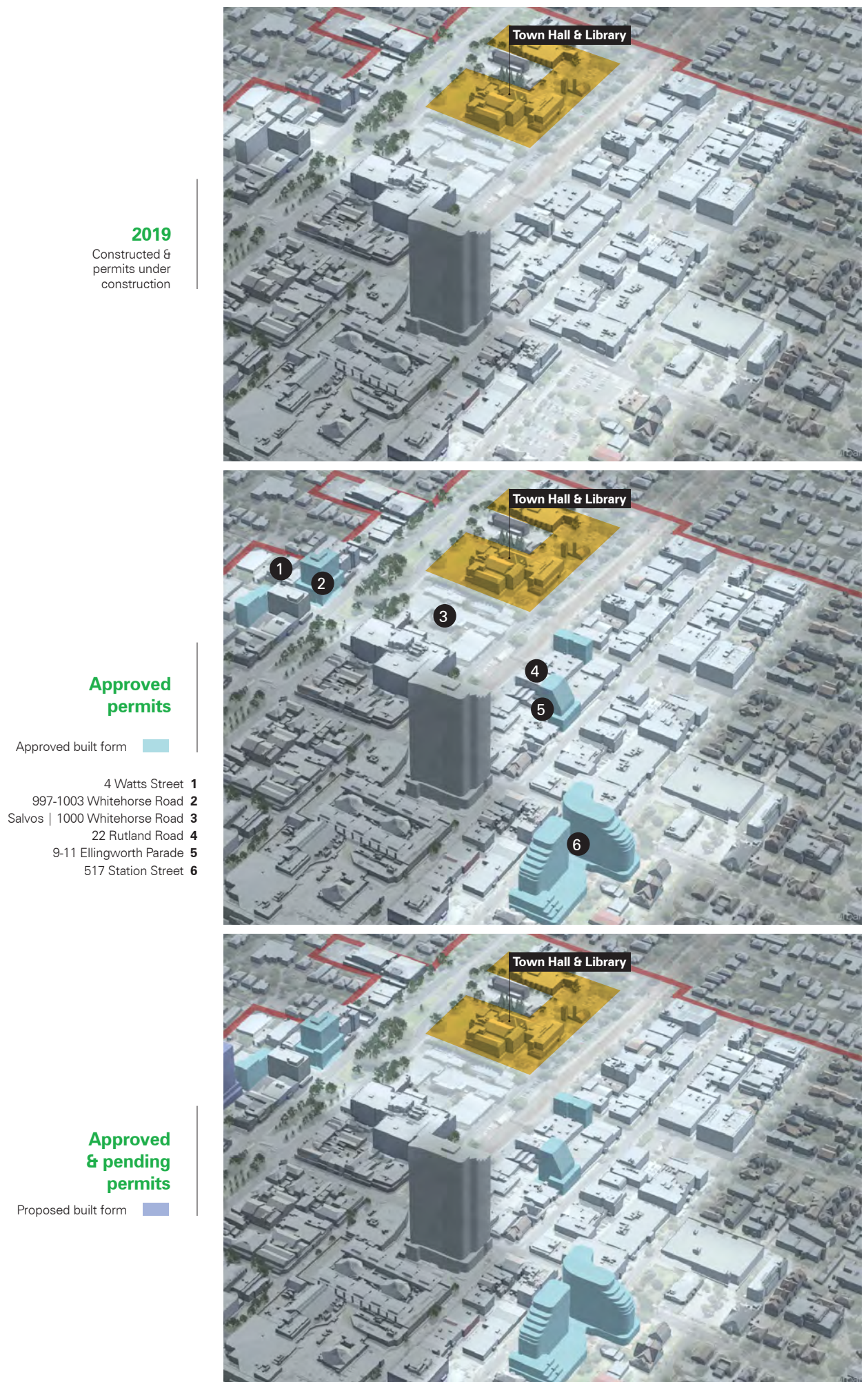


Figure 3.19 Cumulative impact of development in Precinct D: Hospital and Western TAFE Precinct.

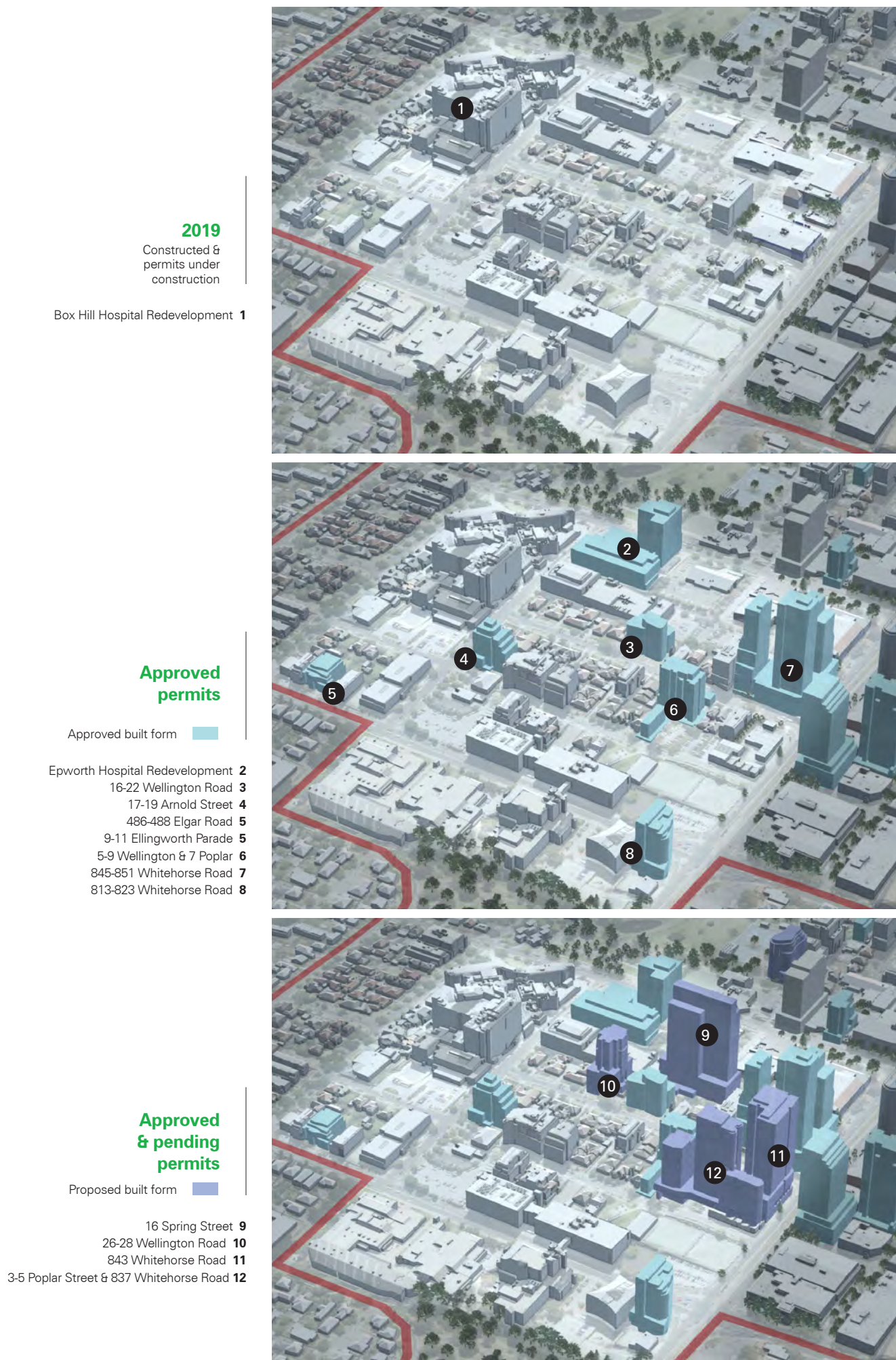
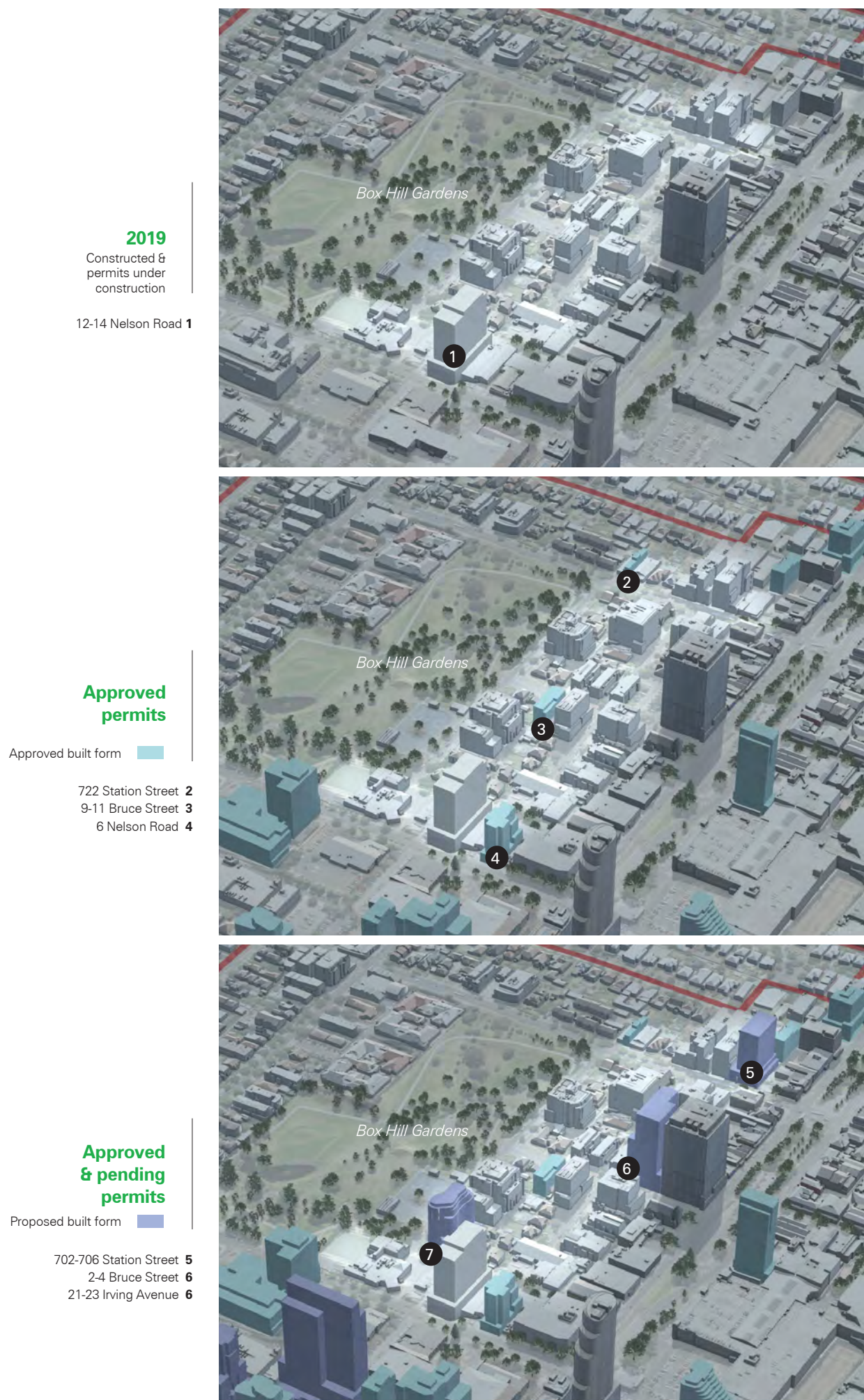


Figure 3.20 Cumulative impact of development in Precinct E: Box Hill Gardens Precinct





3.5 Key institutions and strategic sites

3.5.1 Whitehorse City Council

Whitehorse City Council is the largest land owner within the activity centre, having responsibility for the local roads, public parking and public spaces. Council also controls multiple key sites across the centre, including:

- Box Hill Town Hall is the largest single council building and contains the primary civic presence in Box Hill. In addition to customer service, the Town Hall has meeting and function rooms, an art gallery, and provides space for community groups. The major heritage asset remains a key strategic site due to its civic purpose.
- Box Hill Library is a large two storey building located to the east of the Town Hall. This building provides library services and runs programs for the community.
- Council controls multiple car parks across the centre. Some have been redeveloped (see key changes below), others retain their car parking use for now.
- Ellingworth Parade Carpark (111 car park spaces) was identified within the 2007 structure plan as an opportunity for a new public park with activated public spaces but this has not occurred.
- Council retains an interest in the Prospect Street car park adjoining Nelson Road. The use of this site should be reconsidered as part of any redevelopment and masterplanning for the Box Hill Central site.
- Whitehorse City Council retains ownership of the former Box Hill Bowls Club land, at 835 Whitehorse Road. This site is not actively used at the moment.
- Box Hill Community Arts Centre is located outside of the activity centre boundary, approximately 150m to the south on Station Street. The well-used facility is housed in a single storey building with adjacent community gardens.
- Surrey Park and Aqualink Box Hill provide a major sports and recreation resource for the region. The Council-owned facility is located just to the south of the activity centre boundary.

Key changes since 2007 include:

- Cambridge Street Carpark and Children's Service Centre: Sold by Council in August 2016. There is a Ministerial issued permit for a 18 storey development at 517 and 519-521 Station Street (Golden Age). This outcome is consistent with the vision and objectives contained within the *2007 Structure Plan* which resulted in the rezoning of previously PUZ6 land to MUZ.
- Harrow Street Carpark: Currently under development by Council to transform an old at-grade carpark to a multi-deck carpark comprising of 562 car spaces, bicycle parking, a cafe and an indoor community meeting space adjoining the existing Pioneer Park.
- Bruce Street Carpark (adjacent to ATO building to the north): Sold by Council in late 2017. A permit has been granted for the use and development of the land for a 10 & 19 storey development at 2-4 Bruce Street (WH/2018/193) incorporating an affordable housing component. Elland Avenue and the former Bruce Street is in an area identified as a "Priority Pedestrian Corridor". It is noted that the current application makes provision for a public pedestrian link, in its current form it is partially enclosed and has a width of 2.4 metres for the majority of its length.

3.5.2 Box Hill Institute

Box Hill Institute has two of its largest campuses within Box Hill, on Elgar Road and Nelson Road. Each has had investment over recent years to enhance the facilities and increase the floor area available for the organisation.

Key recent changes include:

- The land at 1000 Whitehorse Road was sold by Box Hill Institute (BHI) to the Salvation Army for the use and construction of land for a 3 storey Salvation Army facility (Amendment C197). Presently, the heritage-listed Former Girls Technical School remains on the existing site fronting Whitehorse Road but the remainder of buildings on the site have been demolished. The future role of BHI at this remaining portion of land is still to be determined.

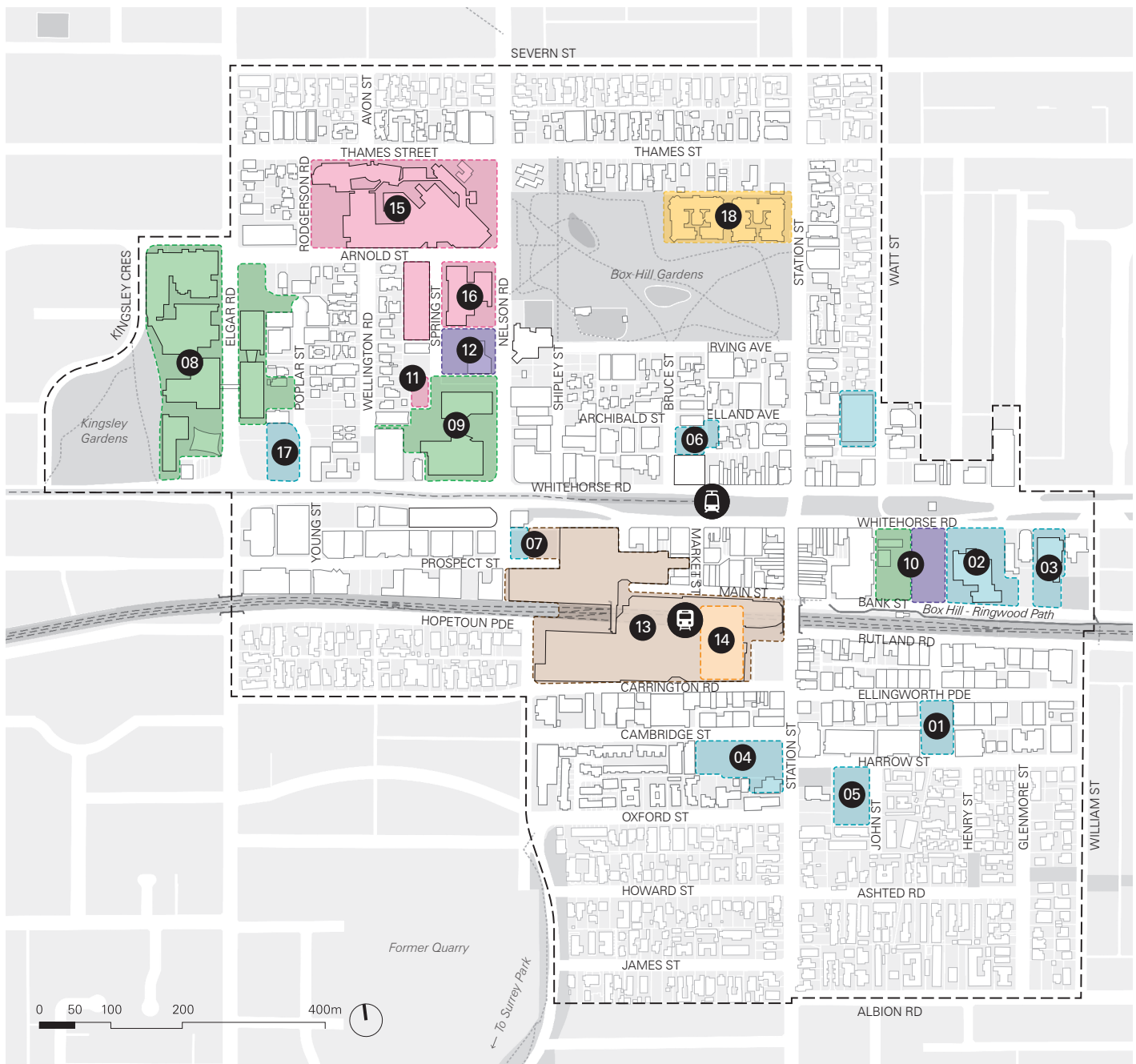


Figure 3.21 Strategic sites

Legend

[- -] Structure Plan boundary

Strategic sites

- Whitehorse City Council
- Box Hill Institute
- Vicinity Centres
- Box Hill Health Precinct
- Box Hill Transport Interchange

- 01** Ellingworth Parade Carpark
- 02** Box Hill Town Hall
- 03** Box Hill Library
- 04** Cambridge St Carpark | sold

- 06** Bruce St Carpark | sold
- 07** Ace Parking | 31-35 Prospect Street
- 08** BHI | Elgar Rd Campus
- 09** BHI | Nelson Campus
- 10** BHI | Former Whitehorse Campus
- 11** 16 Spring Street
- 12** The Salvation Army Box Hill Corps
- 13** Box Hill Central
- 14** Box Hill Transport Interchange
- 15** Box Hill Hospital
- 16** Epworth Eastern
- 17** Box Hill Bowls Club
- 18** Uniting AgeWell Box Hill Community

- In a land swap, land at 16-18 Spring Street was sold by Salvation Army to Epworth Eastern who now seek use and development of the land for a 29 & 24 storey building containing a nurse training facility and complementary land uses in partnership with BHI.

3.5.3 Box Hill Health Precinct

The Box Hill Health Precinct formally consists of Box Hill Hospital (part of Eastern Health) and Epworth Eastern, which collectively provides a very broad range of clinical and research health services including both publicly funded and private health providers. Collectively the Box Hill Precinct represents the largest grouping of tertiary health and research facilities in the City of Whitehorse and serves a very wide catchment extending far across the Eastern Metropolitan Region.

Key Changes:

- Box Hill Hospital underwent a major redevelopment in 2015, funded by the Victorian State Government (\$447.5m), which delivered a new ten-storey (52,000m² approx.) building with a two level basement carpark alongside the refurbishment of the existing adjoining building. This increased the number of beds from 400 to 621. The building was configured to allow for further extensions in the future.
- In addition, Eastern Health and Monash University is undertaking planning for a new Eastern Clinical Trials and Research Centre at Box Hill Hospital which would accommodate over 600 staff.
- Epworth Eastern has grown to provide 223 existing beds within its facilities in Arnold Street. In 2016 the hospital received planning approval for a 15 storey (32,000m² approx.) extension at 25 Nelson Road, providing at least another 52 beds plus new operating theatres and consulting suites.
- Epworth Eastern has indicated an interest in further expansions in the future. The operating model for all extensions is to ensure that new buildings are interconnected with existing facilities through bridge connections. There is a desire to allow for similar bridge connections with Box Hill Hospital.

- Eastern Health, Epworth Eastern and Box Hill Institute signed a memorandum of understanding in 2016 to develop partnership projects, providing opportunities for growth in training and shared facilities within the precinct.

3.5.4 Vicinity Centres

Box Hill Central was constructed in the early 1980s as part of the Box Hill Transport Interchange (discussed below). It performs particularly well in the fresh food sector and counts over 60-80,000 visitors per day, this figure includes 5,200 passengers accessing the station by foot per day according to 2013-2014 Transport for Victoria data. However, 56% of visitors come from over 10km away and relatively fewer come from between 2 to 10km away. The food court area, supermarket and other speciality stores form more of a supporting role to the fresh food market. Immediately to the north is a second retail mall, constructed in the 1990s but now in need of renewal. While functionally independent, both centres are now owned by a single landowner, Vicinity Centres

Vicinity Centres has publicly declared an interest in better leveraging the potential of its key sites in its portfolio in Victoria, which includes Box Hill as one of 3 identified for major redevelopment. Vicinity's mission is "enriching community experiences" and supports mixed-use redevelopment of its centres, but with a primary focus on supporting the performance of the core retail operations. The Glen (Glen Waverley) forms a precedent for this kind of redevelopment, integrating housing and accommodation while supporting the further growth of retail floor space.

The current built form arrangement of the Vicinity landholding represents a large low-rise "pancake" amongst emerging taller built form that surrounds it. Early investigations suggest there is an undersupply of retail floor area within the wider area. In the context of redevelopment, Vicinity Centres would look to substantially increase the current gross leasable retail floor area with space for further growth within the planning envelope available in the longer term. This would be complimented by substantial expansion of supporting uses in a mixed use precinct.

The key issue to resolve is the complex land tenure arrangement with VicTrack in the southern site (currently leasehold). Additionally, the separation of the two existing shopping centre parcels and the topographic differences between the north and south of the rail line are major technical issues to resolve in an integrated masterplan. Clearly this would need to resolve the long term operations of the interchange at the same time.

The long term operations are constrained in the short term by uncertainty surrounding public transport arrangements and major changes such as the proposed Suburban Rail Loop. An opportunity exists to leverage uplift from the redevelopment of Box Hill Central and increase in jobs towards building the case for transport upgrades.

3.5.5 Box Hill Transport Interchange

Box Hill Transit Interchange (BHTI) was designed in the 1970's when parcel delivery by train was a key role for V/Line. Accordingly, there are four bays for V/Line parcel delivery vans. It is unlikely that all have been used at once. These have a direct elevator connection to platforms 2 and 3.

The interchange was designed with a clear emphasis on operational efficiency, as a result there was minimal attention to customer needs. It was then considered then the placement of the bus deck on top of the shopping centre would be better than other alternative options. There has been numerous complaints from passengers regarding the interchange since its opening in 1983. The BHTI quickly became dated and serves its purpose only in an utilitarian manner.

Over the past decade, there have been multiple reviews of the Box Hill Transit Interchange, most of which have recommended short term minor improvements while a longer-term full rebuild option can be developed. In May 2018, the Victorian Government established the Box Hill Transit Interchange Steering Committee which will continue the work on the Ministerial Advisory Group to improve the interchange.

On-going and continued growth in population and employment in Box Hill has raised questions on the suitability of a single interchange location for all transit routes into Box Hill. The first transit route

to depart from this notion of a singular interchange location was Tram Route 109 in 2003. The "Box Hill Transit Interchange" now technically spreads over a 250 metre distance from Whitehorse Road to Carrington Road. Bus Route 966 is the second route to move to the Whitehorse Road section of the interchange as it operates over night on weekends and Whitehorse Road is regarded as a safer place for people to wait at that time.

It should be noted that the current situation represents an improvement on how the interchange operated in 1980, with buses dominating the streetscape on both the northern and southern sides of the railway station and occupied large areas of premium space in Carrington Road and Main Street.

This Structure Plan update will not attempt to solve the Box Hill Transit Interchange situation, but it does recognise that with the development of the strategic role of the centre and the Suburban Rail Loop (SRL) there will be a need to rethink how buses operate through Box Hill to meet the needs of customers, particularly those whose destination is Box Hill (rather than the train station).

3.5.6 Uniting Church

The Uniting Church has a significant parcel of land (1.2 hectares) which is currently occupied by 120-bed aged care facility, Uniting AgeWell, contained in eight single-story buildings. The location of this site has particular interface sensitivities that require a carefully considered response for its redevelopment. The interface to the Box Hill Gardens requires sensitive consideration, allowing for an active address to the open space as well as ensuring new built form does not excessively overshadow the northern side of the park. The prominent frontage to Station Street, near the corner of Thames Street, warrants further strategic consideration as to interface with a key street within the activity centre and the 5 storey childcare centre under construction to the north at 757 Station Street. Furthermore, there is potential for future redevelopment to reconfigure public access to the park by providing new paths or laneways.